TORO

1956

OWNER'S OPERATING AND PARTS MANUAL



TORO—18" WHIRLWIND

SERIES V – SERIAL NOS. 21016–101 AND UP (4 CYCLE)
SERIES V – SERIAL NOS. 21116–101 AND UP (2 CYCLE)

Price 25 cents

TORO
1956

To The TORO Owner

This Owner Manual has been especially prepared for your information and guidance in the operation and care of your new 18" Rotary.

Properly operated and maintained, this 18" Rotary will respond quickly and easily to every reasonable demand and give years of reliable service.

Toro 18" mowers are manufactured by an organization of mowing machinery specialists. Each machine is carefully inspected and tested before leaving the factory. For best performance from your 18" Rotary mower, study this manual for regular maintenance procedures.



Warranty

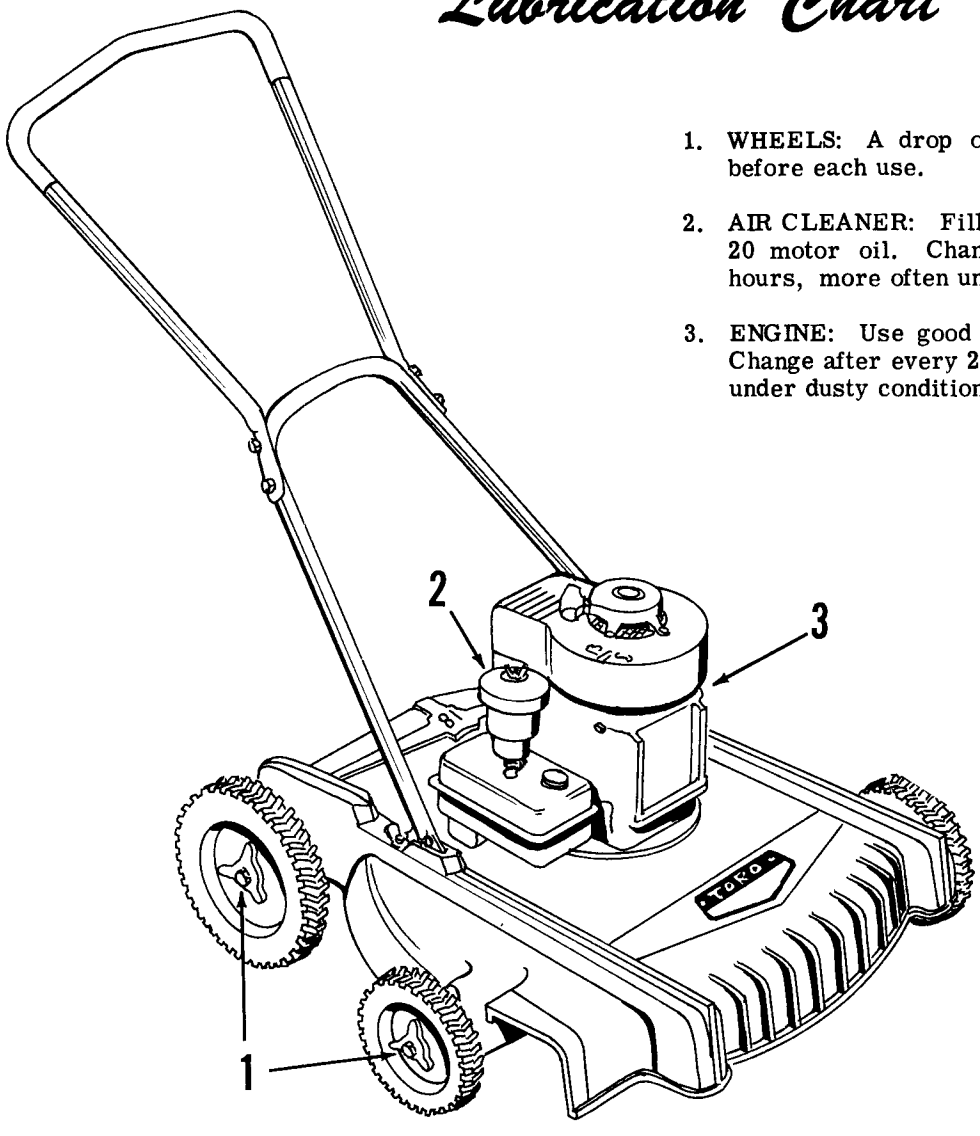
Every piece of equipment is in perfect working condition before leaving the factory and will, when properly operated, perform the work for which it has been recommended.

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.

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Lubrication Chart



1. WHEELS: A drop of oil on wheel axle bearings before each use.
2. AIR CLEANER: Fill to level mark using S. A. E. 20 motor oil. Change after every 25 operating hours, more often under dusty conditions.
3. ENGINE: Use good grade S. A. E. 20 motor oil. Change after every 25 operating hours, more often under dusty conditions.

SPECIFICATIONS

(2 CYCLE)

ENGINE: Clinton AVS-200
FUEL TANK CAPACITY: 2 quarts.
CUTTER BLADE: 17-7/8" long. Hardened high carbon steel. Attached with slip clutch.
WHEELS: #18 Ga. Steel discs w/oil impregnated bronze bearings.
TIRES: Front-Semi-pneumatic, 6 x 1. 50 Chevron tread.
Rear-Semi-pneumatic, 8 x 1. 75 Chevron tread.
HEIGHT OF CUT: 1" to 3" by moving wheels.
WIDTH OF CUT: 18".
HOUSING: Die cast aluminum alloy, front right hand discharge.
HANDLE: 3/4" O. D. x #16 Ga. welded steel tubing in separable halves. Plastic tubing grips.
DIMENSIONS: Width 20-3/4
Length 27
Height 13-3/4
WEIGHT: 42½ pounds
STANDARD EQUIPMENT: Leaf Mulcher
OPTIONAL EQUIPMENT: 8" Front wheel kit

(4 CYCLE)

ENGINE: Briggs & Stratton Model 6 BHS, or Clinton VS-2100.
FUEL TANK CAPACITY: 1 quart.
CUTTER BLADE: 17-7/8" long. Hardened high carbon steel. Attached with slip clutch.
WHEELS: #18 Ga. Steel discs w/oil impregnated bronze bearings.
TIRES: Front-Semi-pneumatic, 6 x 1. 50 Chevron tread
Rear-Semi-pneumatic, 8 x 1. 75 Chevron tread
HEIGHT OF CUT: 1" to 3" by moving wheels.
WIDTH OF CUT: 18".
HOUSING: Die cast aluminum alloy, front right hand discharge.
HANDLE: 3/4" O. D. x #16 Ga. welded steel tubing in separable halves. Plastic tubing grips.
DIMENSIONS: Width 20-3/4
Length 27 w/o handle, wheels at 2" cut
Height 15
WEIGHT: 47 pounds w/ Briggs & Stratton
47½ pounds w/ Clinton
STANDARD EQUIPMENT: Leaf Mulcher
OPTIONAL EQUIPMENT: 8" Front Wheel Kit

Operating Instructions

ATTACHING THE HANDLE

The handle is shipped in two halves, an upper half (Ref. 19) and a lower half (Ref. 20). (See schematic drawing on page 6.) Before mounting handle to the mower, join the halves securely with the bolts and nuts (Ref. 21 and 22) found in the envelope. Next install the handle quadrants (Ref. 10) in the mower frame and fasten with the clevis pin (Ref. 11) and hairpin cotter (Ref. 12). Then mount the handle in position loosely with the handle quadrants on the outside. Adjust the handle to the most convenient height by raising or lowering it. Then tighten all mounting bolts securely.

Be sure that handle is tightened securely on both sides, so that there is an equal amount of pressure on both handle quadrants.

HEIGHT OF CUT

The height of cut is determined by the position of the wheels on the main frame. There are, in the main frame, five threaded holes provided for each wheel corresponding to the following mowing height (starting from the top): 1", 1-1/2", 2", 2-1/2" and 3". The mower is shipped with the wheels set for a 2" cut, and we recommend this as the best for average lawn conditions. We suggest that you use this height until you become familiar with the mower. To change the cutting height, remove the wheel screw (Item 25) and move it to the hole corresponding to the desired setting. All wheels must be attached in the same relative hole. Be sure to tighten the axle screws securely.

MOWING SUGGESTIONS

A little practice with the mower will soon show you the best way to use it to obtain the most efficient results.

The following suggestions are offered to help you get acquainted more quickly with the many possibilities of this very versatile machine.

The Toro Mower cuts on either forward or backward travel, so it is not necessary to turn it around when mowing in corners. Simply move it back and forth, changing its direction as necessary to cover the area to be cut. In cutting along the edge of a flower bed, approach the edge head-on and, keeping the mower level, allow it to project a little beyond the edge. The suction of the blades will lift the overhanging grass up into the path of the blades. When cutting around a post, tree, or other similar obstruction, bring the left side of the mower up to the object and follow contour of the object being trimmed.

If mowing is to be done on unfamiliar terrain, rough ground, or for cutting weeds, it is generally better to use 2" or 3" for the first cut. For subsequent cuts, a lower height can be used as desired.

When mowing open lawn areas cut in areas 10 or 12 feet wide, if possible, completing each one before starting another. Avoid straddling ridges or humps. This applies especially to the ridge or crown at the top of a terrace. It is generally best to mow a terrace up from the bottom at right angles to the crown, allowing the mower to roll back down the slope to the starting position. When mowing uneven terrain be sure that the front and rear wheels of one side pass over the high point of the undulation. By doing so, you avoid "scalping". A little experimenting will soon show which method is best suited to your particular lawn.

When cutting heavy growth or on rough ground, raise front wheels off ground by bearing down on handle. This will make pushing easier.

CARE OF THE CUTTER BAR

If the cutter bar should hit a stone or any immovable object, shut off the engine and examine the ends for possible injury to the edges, and resharpen them if necessary.

After sharpening the cutter bar, reassemble the various parts in the order shown in the illustration.

As the bulk of the mowing is done by the outer portion of the cutter bar, it is best to pay special attention to this part of the edge and keep it in good mowing condition at all times. Remember that the sharper the cutter bar, the better the cutting will be.

To remove Cutter Bar (Item 43) for sharpening, loosen cutter bar screw (Item 38) and remove from shaft. All the various cutter bar parts are loose on shaft and can be easily removed. However when reassembling after cutter bar has been sharpened, be sure to install parts in proper sequence (See schematic drawing).

To assist in removing the cutter bar insert a nail or other similar rod through the hub washer (Ref. 41) in the holes provided, allowing it to bear against the cutter bar for easier removal.

For sharpening the cutter bar, a good quality 10 inch mill-bastard file is recommended. In filing the ends of the bar, maintain the original bevel as closely as possible. It is not necessary to file out all the nicks that may have appeared in the cutting edge as long as a general sharpness of the edge is obtained. TO PREVENT UNBALANCE, BOTH ENDS MUST BE SHARPENED BY REMOVING SAME AMOUNT OF METAL FROM EACH.

The Toro 18" is equipped with a heat treated cutter bar designed to produce the most satisfactory results. IMPORTANT: Use no substitute cutter bars as they are dangerous. Use only GENUINE TORO CUTTER BARS for perfect balance and safety.

Service Instructions

ENGINE

(4 CYCLE)

The engine comes to you tested and adjusted to the proper speed. Follow carefully the instructions as to the kind of oil to use and also the frequency of changing it. These instructions will be found on a plate attached to the engine. Keep oil up to the indicated level in the oil cleaner. When the cleaner becomes dirty, remove and wash in kerosene and put in fresh oil. For further engine information, see maintenance manual supplied with the mower.

The cooling fan will suck in cut grass and some will become lodged between cooling fins. This must be removed to prevent damage to engine from overheating.

(2 CYCLE)

The engine comes to you tested and adjusted to the proper speed. Before starting engine, study the following instructions carefully. Mix $\frac{1}{2}$ pint of a good grade of S. A. E. 30 motor oil to each gallon of regular gasoline. We recommend that you mix the gas and oil in a separate clean container.

When the air cleaner becomes dirty, remove and wash it out in clean gas.

For further information on your engine, see the engine manual supplied with your mower.

STORING MOWER

When mower is to be stored over winter or any long period of time, it should be blocked up to remove weight from the tires.

Loosen screw (Item 38) to release tension on pressure pad (Item 44).

LEAF MULCHER

To install the 18" Leaf Mulcher to your mower, please study the following instructions:

1. Insert the mulcher in the mower frame, by lining it up in the two slots and hole in the discharge opening.
2. Fasten the mulcher with the wing nut and washers provided in the cloth bag attached to the mulcher.
3. Before starting engine, check mulcher clearance by turning cutter bar by hand to see if bar clears the mulcher. When this has been accomplished mulcher is properly installed and ready for use.
4. The height of cut recommended for use with the mulcher is 2" or more, depending on the amount of leaves and height of grass. Using a cut of less than 2" tends to clog the mulcher and reduces its efficiency.

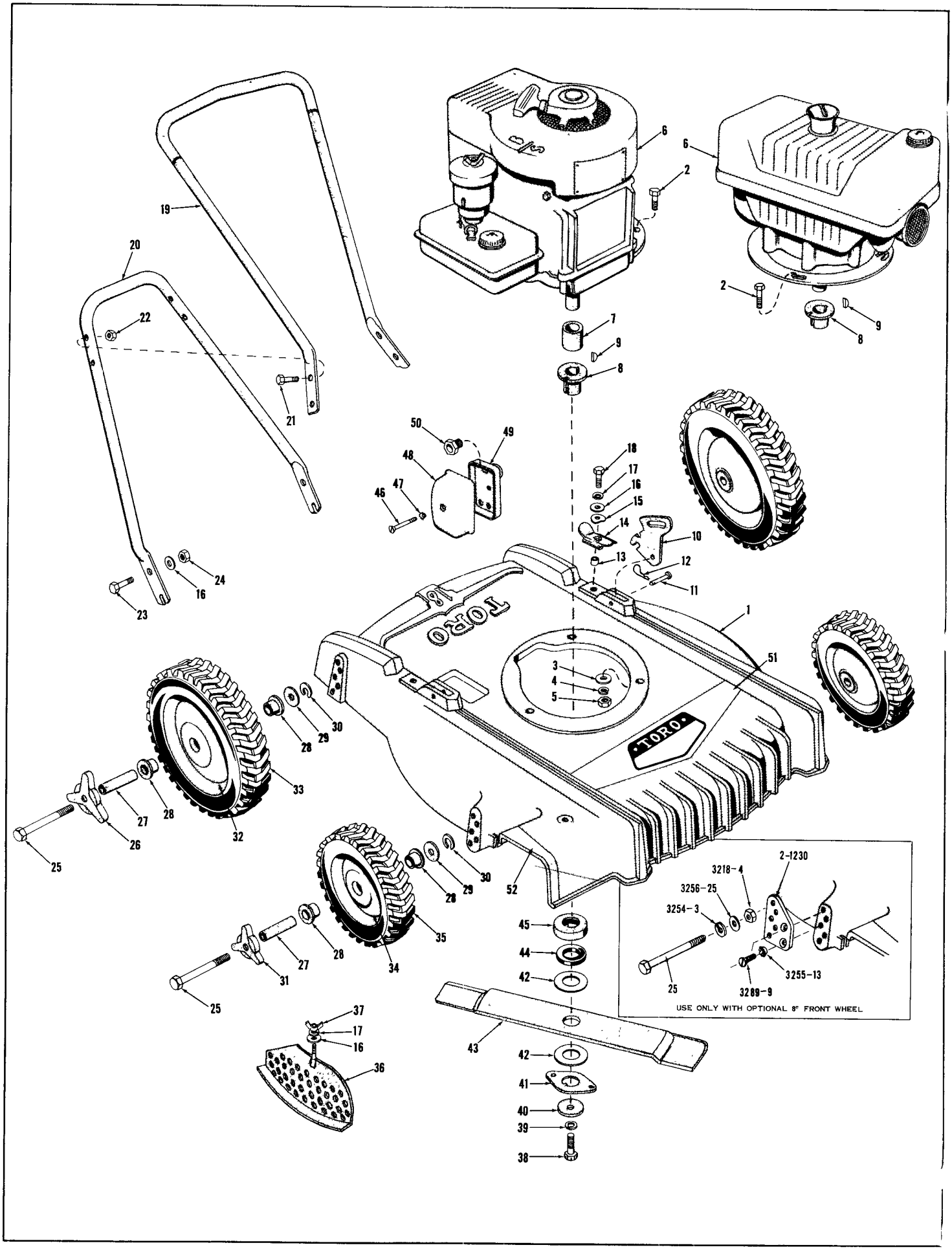
CAUTION: Do not attempt to work on machine while engine is running. We also recommend that you disconnect spark plug lead wire when changing or working on the cutter bar.



IMPORTANT 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.


TORO
2-1230
3218-4
3256-25
3254-3
3255-13
3289-9
25
USE ONLY WITH OPTIONAL 8" FRONT WHEEL

PARTS LIST

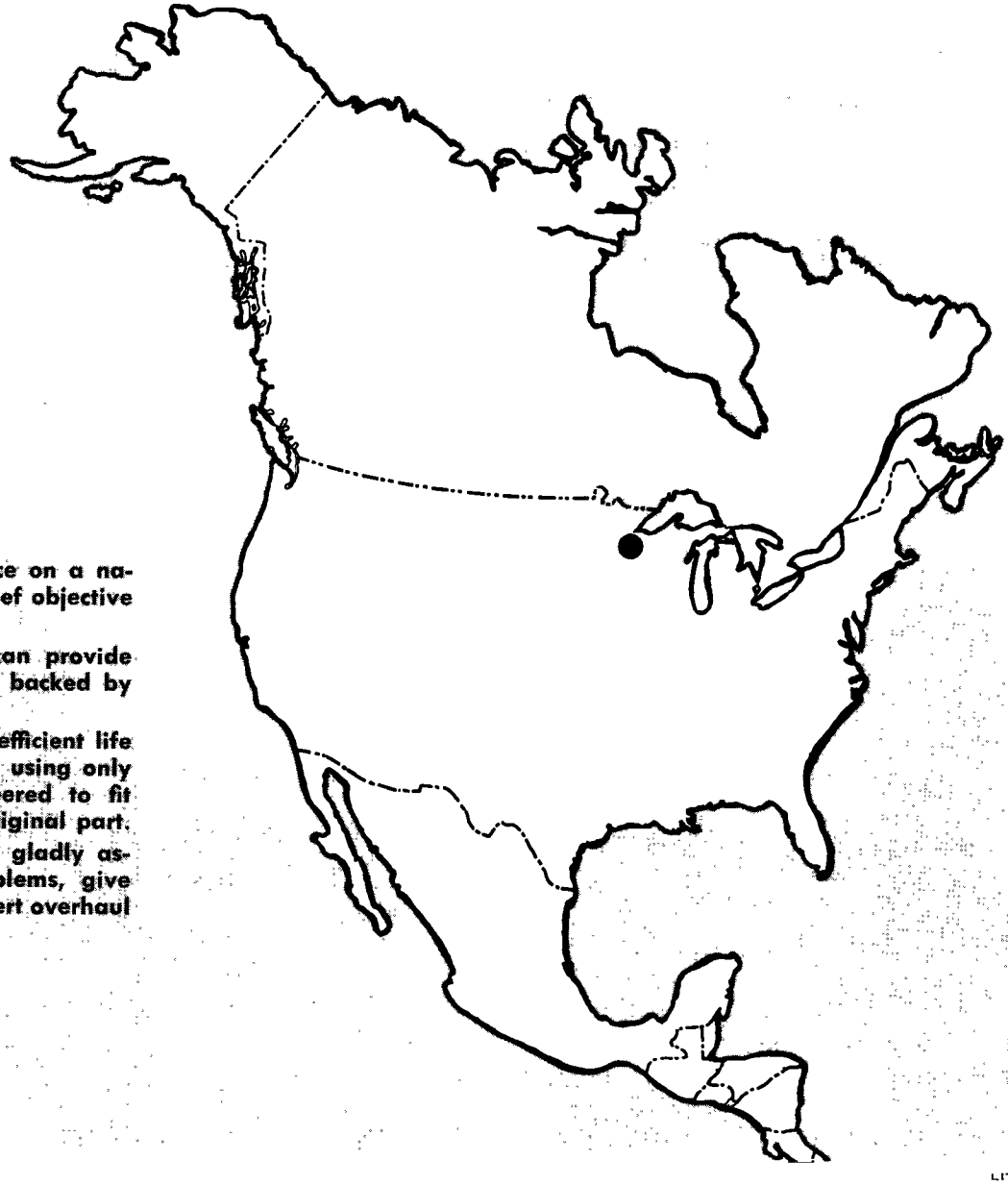
Ref. No.	Part No.	Description	No. Used
1	2-1000	Housing (Use w/Briggs & Stratton 4 Cycle Eng.)	1
*	2-1220	Housing (Use w/Clinton 2 Cycle Eng.)	1
2	3210-8	Screw, 5/16"N.F. x 1½" (Briggs & Stratton)	3
2	3210-4	Screw, 5/16"N.F. x 1" (Clinton)	3
3	3256-23	Washer, 5/16" S. A. E.	3
4	3253-4	Lockwasher, 5/16" Reg.	3
5	3219-2	Nut, 5/16" N. F. Full	3
6	221-76	Engine, Briggs & Stratton 6BHS	1
6	221-85	Engine, Clinton AVS-200	1
*	221-70	Engine, Clinton VS-2100	1
7	WB-116A	Crankshaft Guard (Use w/ Briggs & Stratton Eng. Only)	1
8	2-1010	Blade Hub	1
9	3257-3	Key	1
10	WA-103	Quadrant, Handle	1
11	2-1380	Clevis Pin	2
12	3290-255	Hair Pin Cotter	2
13	WA-102	Spacer	2
14	WA-104	Lever, Handle Stop	2
15	3290-213	Spring Washer	2
16	3256-2	Washer, 1/4" Cut	5
17	3253-4	Lockwasher, 1/4" Reg.	3
18	32104-23	Screw, 5/16" x 1" Type 23	2
19	WBK-350	Upper Handle	1
20	WA-106	Lower Handle	1
21	329-7	Screw, ¼" N. F. x 1¼"	4
22	3296-3	Nut, ¼" N.F. Elastic Stop	4
23	3210-3	Screw, 5/16"N.F. x 3/4"	2
24	3296-4	Nut, 5/16"N.F. Elastic Stop	2

Ref. No.	Part No.	Description	No. Used
25	2-1150	Wheel Screw	4
26	2-1140	Hub Cap 8", Rear Wheel	2
27	2-1120	Wheel Spindle	4
28	256-73	Bushing	8
29	3256-4	Washer, 3/8" Cut	4
30	32120-23	Snap Ring	4
31	2-1130	Hub Cap 6", Front Wheel	2
32	WBK-380	8" Rear Wheel Assy., Includes 2-Ref. 28 Bushings	2
33	234-13	Tire, Rear 8"	2
34	WBK-375	6" Front Wheel Assy., Includes 2-Ref. 28 Bushings	2
35	234-12	Tire, Front 6"	2
36	2-1180	Leaf Mulcher	1
37	32103-2	Wing Nut	1
38	WB-238	Special Capscrew	1
39	3253-6	Lockwasher, 7/16" Reg.	1
40	WA-15A	Washer	1
41	WA-11	Hub Washer	1
42	WA-12	Friction Disc	2
43	2-1020	Cutter Bar	1
44	WA-13A	Pressure Pad	1
45	WB-247	Cup	1
46	32108-29	Screw, 5/16"-18 x 2 1/2" Flat Hd. Mach.	1
47	3255-12	Lockwasher, 5/16" Shakeproof, Ctsk.	1
48	2-1250	Muffler, Free Side	1
49	2-1260	Muffler, Engine Side	1
50	304-49	Muffler Nipple	1
51	2-1190	Name Plate Decal	1
52	2-1200	Chute Decal	1

*Not illustrated

TORO

America's Leading builders of Power Mowers



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.



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