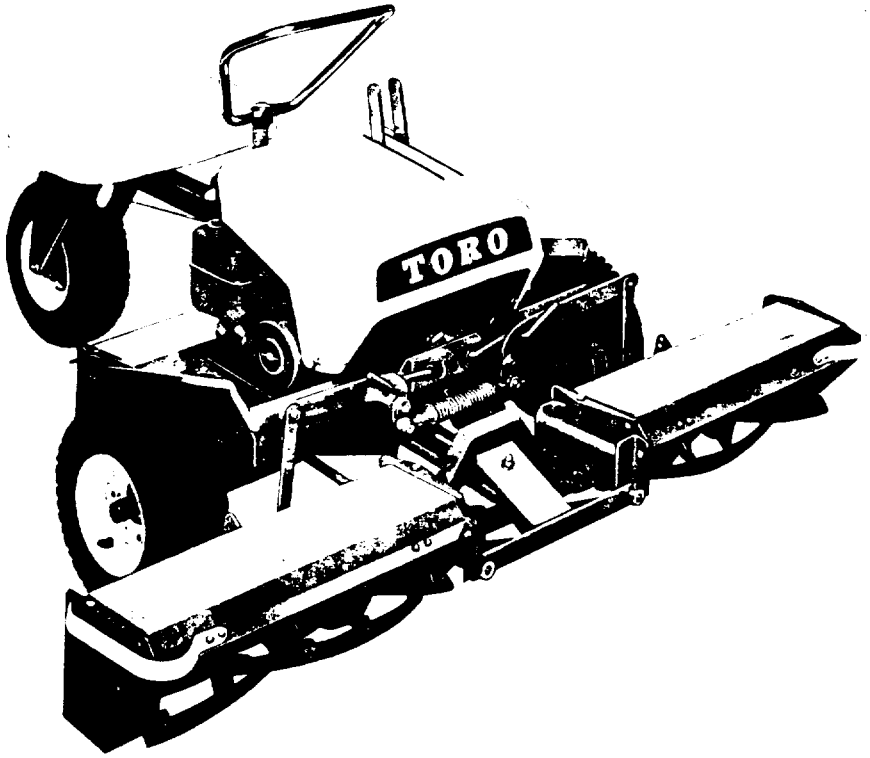
TORO

OWNER'S OPERATING AND PARTS MANUAL



58'' PROFESSIONAL

MODEL NO. 03100–60001 & UP
ELECTRIC MODEL NO. 03110–60001 & 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 mower.

Properly adjusted, operated and maintained, this Toro mower 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 for over fifty years. Each machine is carefully inspected and tested before leaving the factory. For best performance from your Toro mower, study this manual for regular maintenance procedures.

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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 Owner's Operating and Parts Manual, 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.

Warranty

The Manufacturer warrants each new piece of equipment sold to be free of defects in material and workmanship. For one year from the purchase date of consumer line equipment or 45 days if sold for commercial use, 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, Minnesota, to be defective under normal use and service. All institutional equipment is warranted for ninety (90) days from the purchase date.

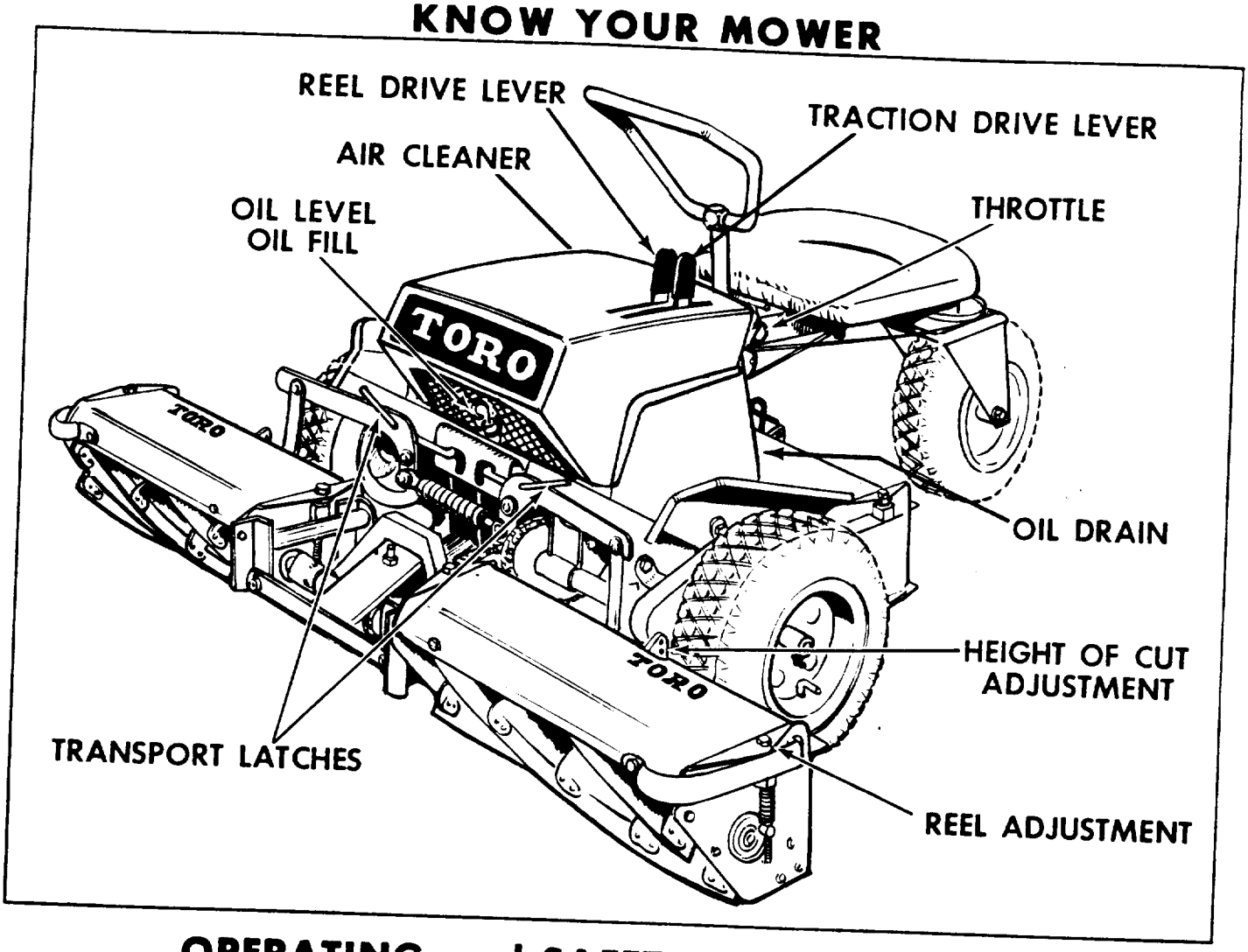
This Warranty does not obligate the Manufacturer to bear the cost of transportation charges in connection with the replacement or repair of defective parts -- nor shall it apply to a machine upon which repairs or alterations have been made, unless authorized by the manufacturer.

This Warranty does not include nor cover standard accessories produced by other manufacturers. Such 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.

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TORO MANUFACTURING CORPORATION
MINNEAPOLIS 20, MINNESOTA-U.S.A.

KNOW YOUR MOWER



OPERATING and SAFETY INSTRUCTIONS

BEFORE YOU READ THIS MANUAL, OR ASSEMBLE, ADJUST AND OPERATE THE 58" PROFESSIONAL, READ THESE IMPORTANT PRECAUTIONS

BEFORE STARTING -

1. Thoroughly inspect the area where the equipment is to be used and remove all stones, wire, bones, pieces of metal and other foreign objects.
2. Wipe up any gasoline spilled, and avoid spilling on hot engine.
3. Know how to stop equipment and engine quickly.

DURING OPERATIONS -

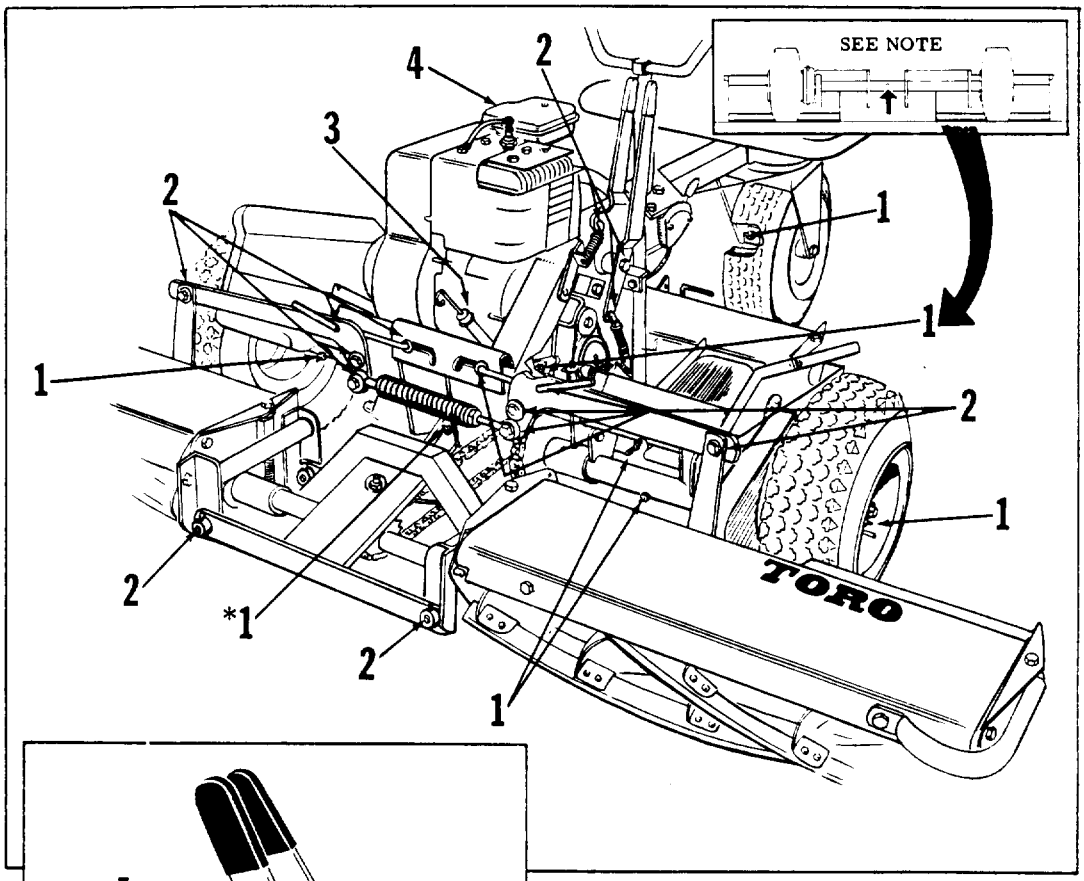
4. NEVER have children or pets near the equipment while engine is running.
5. NEVER leave equipment unattended while engine is running.
6. NEVER fill gasoline tank while engine is running.
7. NEVER remove any foreign objects next to or in the path of the equipment while engine is running.
8. NEVER put hands or feet under or in rotating parts or hidden areas, use special caution to keep hands and feet out of and away from cutter elements, belts, pulleys, gears, etc. while engine is running.
9. NEVER work on equipment while engine is running.
10. NEVER operate equipment in wet grass.
11. NEVER operate equipment when dark or hard to see.
12. NEVER operate equipment when barefooted or wearing open sandals.
13. NEVER ride double on riding mowers.
14. NEVER remove belt guards while engine is running.

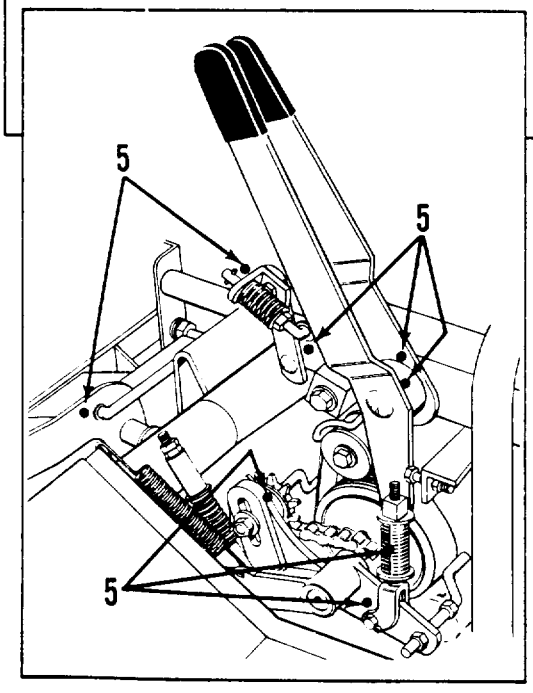
MISCELLANEOUS -

15. Disconnect spark plug wire before working on equipment.
16. Maintain a solid and firm footing while mowing.
17. Slopes should be worked from side to side, not up and down.
18. Never run engine indoors.
19. Read manual thoroughly.

THESE SAFETY SUGGESTIONS ARE RECOMMENDED BY OUTDOOR POWER EQUIPMENT INSITITUTE AND TORO MANUFACTURING CORP.

LUBRICATION





1. Zerk fitting - use good grade of gun grease every eight hours of operation. There are seven zerk fittings in all.

   NOTE: This zerk fitting is located behind and in the center of the main frame (see inset) and can be serviced by filting the mower forward.

   * Four-inch block required under wheel.

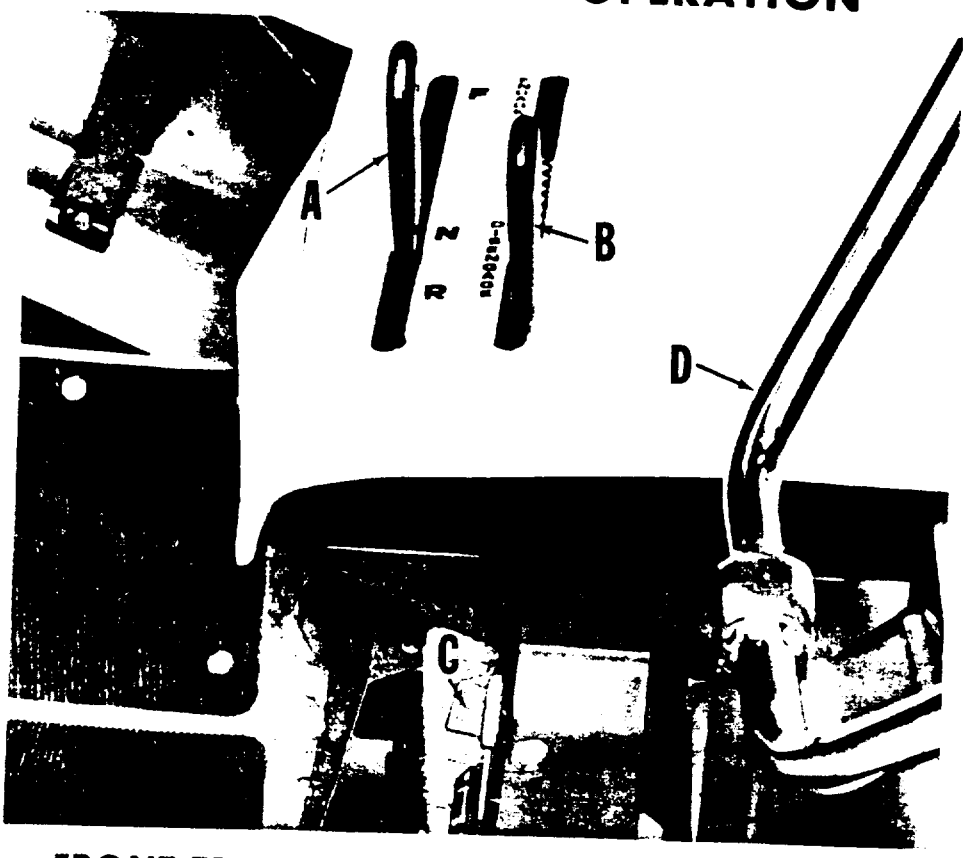
2. Linkage - apply a few drops of a good grade of lubricating oil every eight hours of operation.

3. Engine - use a good grade of SAE 30 engine oil. (Capacity is $1\frac{1}{4}$ pints). Check engine oil level periodically and change oil every 25 hours of operation.

4. Clean and re-oil the air cleaner frequently (every few hours under extremely dusty conditions). Clean and re-oil at least every 25 hours under normal conditions.

5. The illustration at the left with shroud removed, indicates areas that should move freely to insure smooth operation. A few drops of good lubricating oil at these points every eight operating hours is essential.

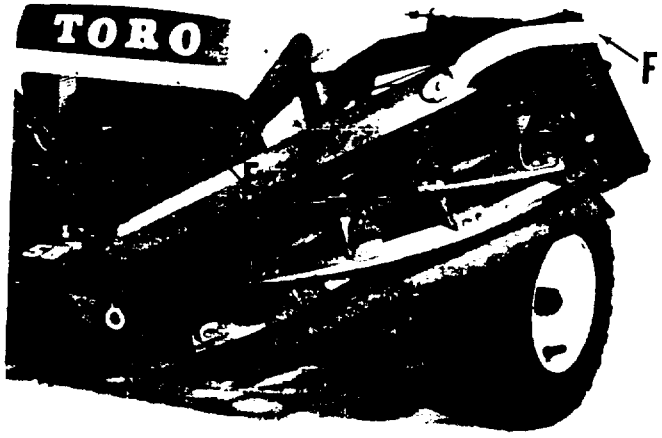
OPERATION



CONTROLS

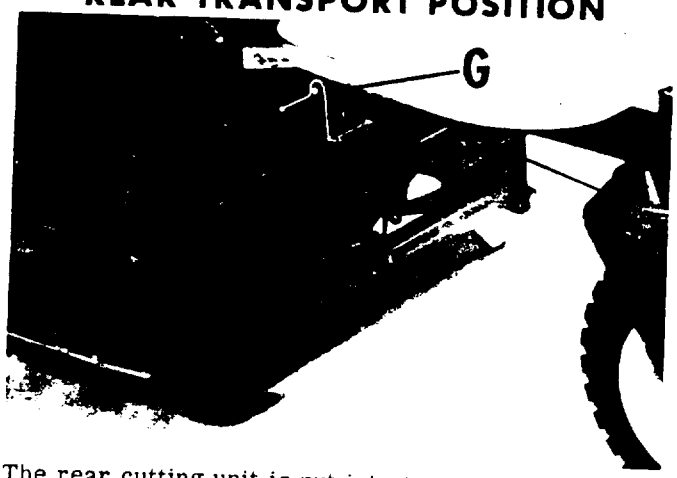
The controls of this mower have been carefully placed to make operation easy and pleasant. The traction drive lever 'A' (see photo at left) puts the mower into motion, either full forward or full reverse. The reel drive lever 'B' controls the cutting unit reels, forward to engage, back to disengage. The speed of the mower is controlled by the throttle control 'C'. The choke position is used when starting (see starting instructions) and when throttle lever is pulled to the extreme back of throttle control the engine will stop. The steering wheel 'D' will guide the mower quickly and easily in any direction the operator chooses.

FRONT TRANSPORT POSITION



The front cutting units are put into transport position or returned to mowing position by pressing transport lever 'E' while lifting on reel guard 'F'.

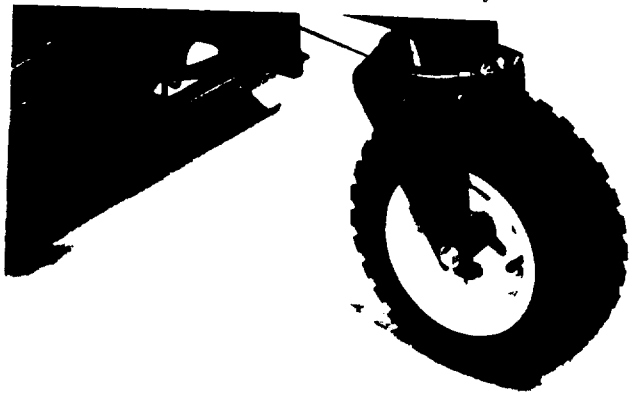
REAR TRANSPORT POSITION



The rear cutting unit is put into transport position by lifting the cutting unit and hooking the hanger assembly 'G' over rod or lower plate of the sulky.

TIRE INFORMATION

Tire pressure should be maintained at 12 pounds. Electric start model of this mower utilizes calcium chloride in the sulky tire as a counter-balance.
CAUTION: DO NOT CHECK TIRE PRESSURE ON THE GRASS. ROTATE VALVE STEM TO TOP WHEN CHECKING TIRE PRESSURE.



OPERATION



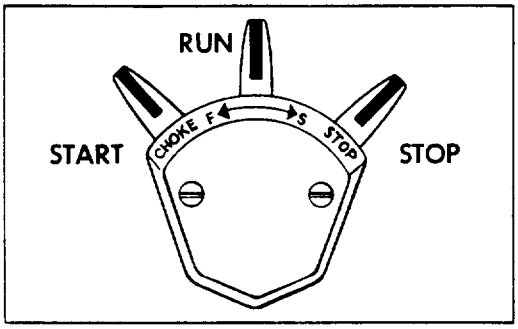
With the 58" Professional on a level surface, remove the oil filler cap, (see photo above.) Fill crankcase to the full mark (F) on the dipstick. Fill engine to proper level with S. A. E. 30.



regular grade oil. For a smoother running engine change oil every 25 operating hours. More often under dusty conditions. Check oil level periodically.



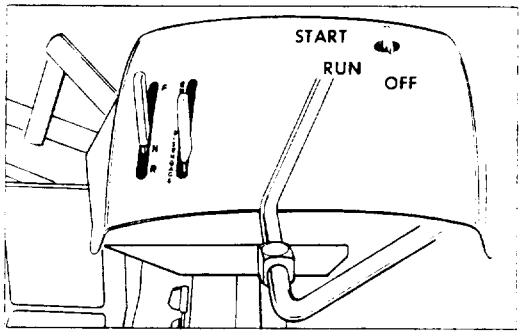
Carefully fill the fuel tank with a good grade of regular, fresh gasoline. Never use gasoline that has been standing for months. Do not mix oil with gas for this engine. Turn in a counterclockwise direction to open, clockwise to close. Keep fuel tank full for maximum power. Tank capacity 3 quarts.



After filling with the proper oil and gasoline, your Toro 58" Professional is ready for operation. The engine is controlled by the throttle control lever mounted on the left side of the frame. (See Illustration)



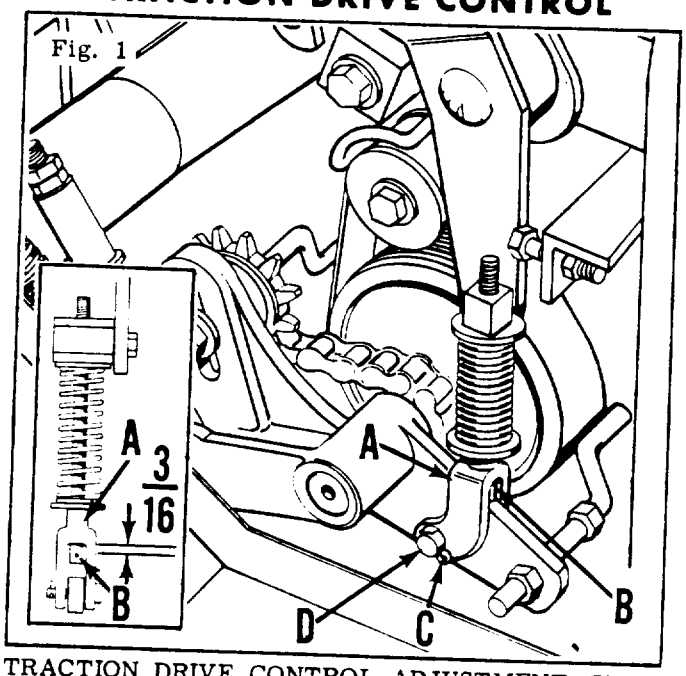
Put the throttle control lever in choke position and pull starter rope with a quick full arm stroke to start engine. When engine starts place throttle lever in the run position.



ELECTRIC START MODEL ONLY: Put the throttle control lever in choke position and turn switch to start position. When engine starts, release switch and move throttle lever to run position. Mower may be started by use of recoil starter rope if battery is discharged and will not crank engine. The key may be removed to prevent unauthorized use of this machine.

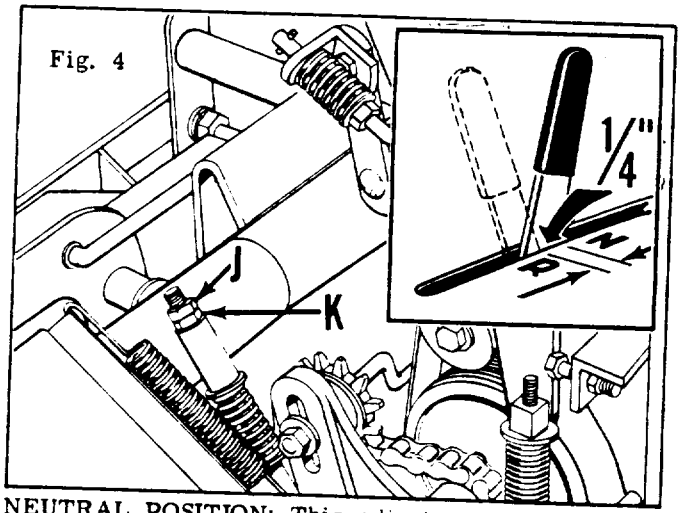
ADJUSTMENTS

TRACTION DRIVE CONTROL



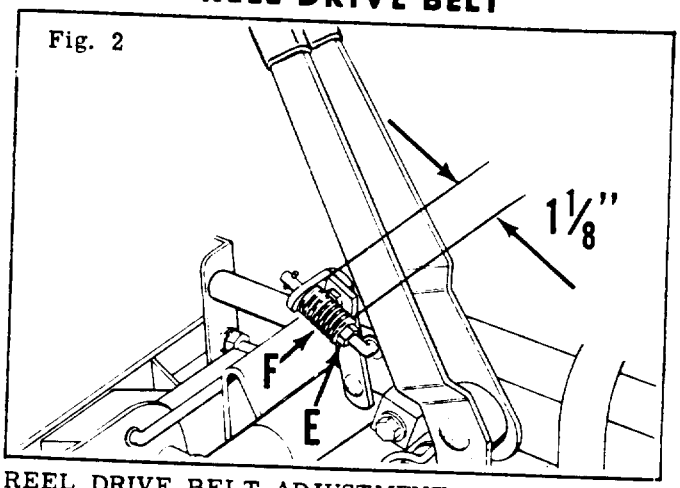
TRACTION DRIVE CONTROL ADJUSTMENT: Clevis yoke 'A' has been adjusted for proper position when belts and pulleys are new. As these wear after a prolonged period, the clevis yoke 'A' will position itself closer to roll pin 'B'. Contact between the inner surface of clevis 'A' and roll pin 'B' in the engaged position, will result in loss of traction. When this occurs, remove cotter key 'C' and clevis pin 'D', then swing clevis 'A' backward to disengage from casting. Turn clevis 'A' counterclockwise three turns. Reinstall clevis and fasten with clevis pin and cotter key. This will provide the original 3/16" clearance (see inset) with fraction control lever in forward position.

NEUTRAL POSITION



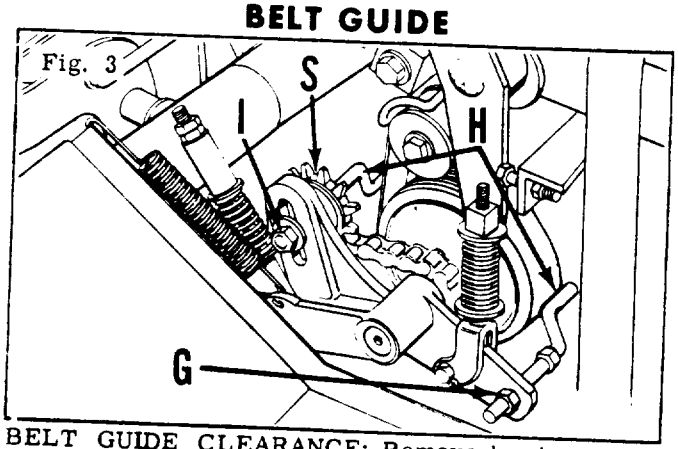
NEUTRAL POSITION: This adjustment is set at the factory and normally will not need adjusting. But if the traction lever movement from neutral to reverse exceeds 1/4"(measured at hood line, see inset) loosen nut 'J' and tighten nut 'K'. Do not reduce traction lever movement under 1/8". Retighten nut 'J' after adjustment has been made.

REEL DRIVE BELT



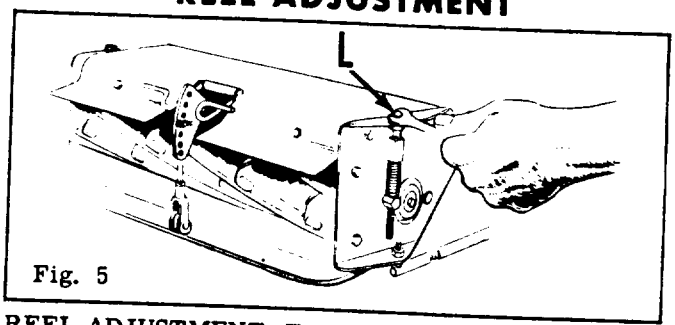
REEL DRIVE BELT ADJUSTMENT: With reel drive control lever in the engaged position, adjust nut 'E' to compress spring 'F' to a total height of 1-1/8".

BELT GUIDE



BELT GUIDE CLEARANCE: Remove hood and heat shield. Belt guides must be set a minimum clearance to prevent belt from becoming mis-aligned. These guides should be set between .050" and .070" for proper clearance. (Thin dime). To adjust belt guides, place traction lever in engaged position. Loosen nut 'G'. Move guide 'H' into proper setting and hold while re-tightening nut 'G'. Repeat same procedure with nut 'I', however sprocket 'S' should be maintained in place so as not to alter chain adjustment.

REEL ADJUSTMENT



REEL ADJUSTMENT: To adjust reel toward bed knife for proper cutting, turn hex bolt head 'L' on each end of cutting unit, counter-clockwise 1/6 turn. Smartly tap on head 'L' to insure seating of bolt head against side plate flange.

ADJUSTMENTS

HEIGHT OF CUT

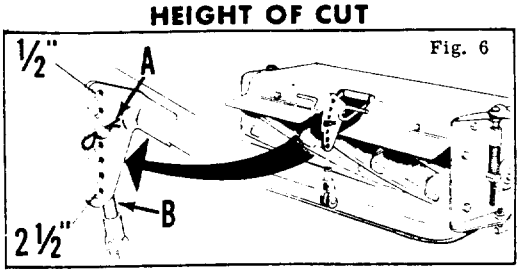


Fig. 6

HEIGHT OF CUT ADJUSTMENT: Mowers are shipped from the factory set at 1-1/2 inch height of cut. If another setting is desired, remove hair pin cotter 'A' and move link 'B' to appropriate hole; up for lower cut and down for higher cut. Be sure all reels are set in the same relative height-of-cut position.

PIVOT FRAME

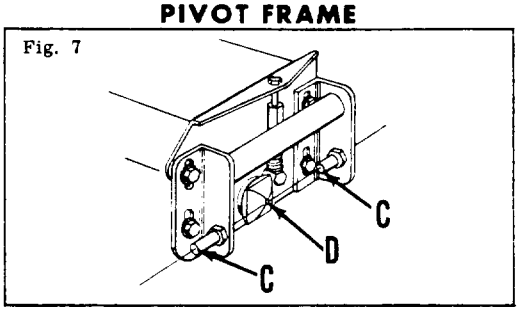


Fig. 7

PIVOT FRAME ADJUSTMENT: If pivot frame is removed or reel is ground or replaced, readjust the pivot frame so that the center line of pivot pins 'C' pass through the center line of reel shaft 'D'.

FRONT COUNTER BALANCE

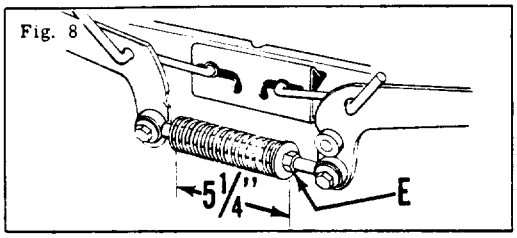


Fig. 8

REAR COUNTER BALANCE

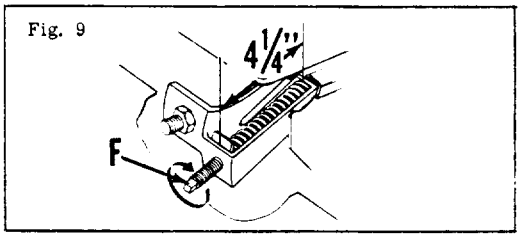


Fig. 9

COUNTER BALANCE ADJUSTMENTS: The counterbalance of the cutting units is accomplished by compression springs attached to the lift arms of each mower. Proper counter balancing has been set at the factory for cutting at $1\frac{1}{2}$". When a different height of cut is desired, it may be necessary to reset the counter balance springs. With the mower set at the desired height of cut, move mower on to grass. Front counterbalance spring should be adjusted to a total length of five and one quarter inches ($5\frac{1}{4}$"). This is accomplished by loosening or tightening nut 'E' on front cutting units and loosening or tightening square end of rod 'F' on rear units. Counterbalance spring on rear units should be maintained at four and one quarter inches ($4\frac{1}{4}$").

TRACTION BELT

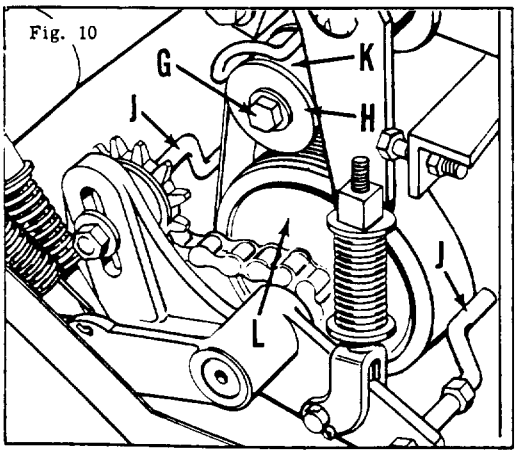


Fig. 10

TRACTION BELT REPLACEMENT: With traction lever in neutral position, remove capscrew 'G' and washer 'H'. Loosen belt guides 'J'. Work belt off end of engine crankshaft by sliding belt alternately outward on grooves of engine pulley 'K' and traction drive pulley 'L'. Remove from traction pulley by sliding belt edgewise between traction pulley and reel drive pulley. Reverse process to install new belt.

GENERATOR BELT

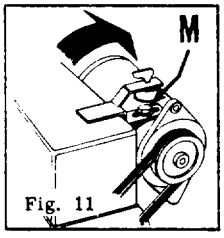


Fig. 11

GENERATOR BELT ADJUSTMENT (Electric model only). Loosen capscrew 'M' and rotate generator forward until proper belt tension is obtained. Hold in position, then retighten screw 'M' securely.

REPLACING REEL DRIVE BELT

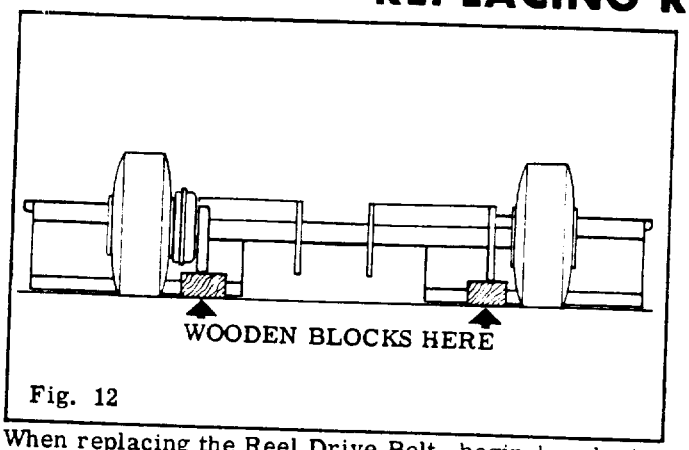


Fig. 12

When replacing the Reel Drive Belt, begin by placing wooden blocks under frame members at points shown in Figure 12. A piece of 4" x 4" or equivilent should be sufficient. Remove Traction Belt per Figure 10, Page 9.

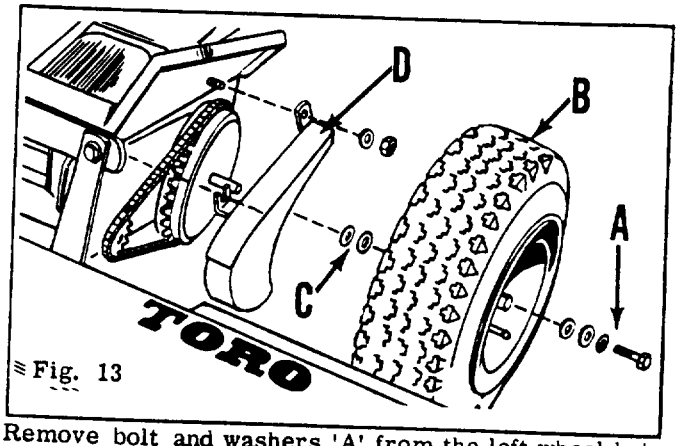


Fig. 13

Remove bolt and washers 'A' from the left wheel hub; pull the left wheel assembly 'B' from the axle, being careful to remove washers 'C' along with the wheel assembly. Remove chain guard 'D'.

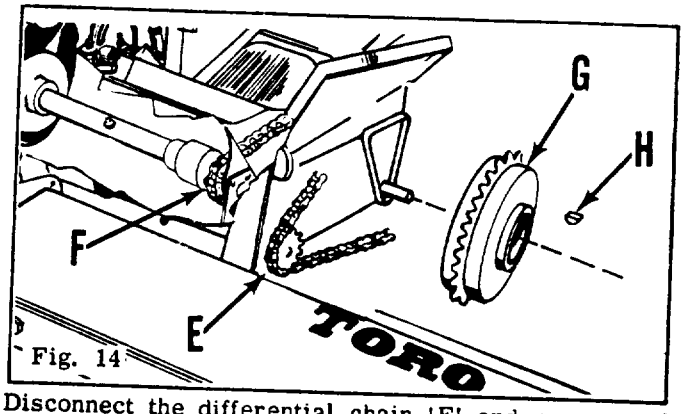


Fig. 14

Disconnect the differential chain 'E' and rear reel drive chain 'F' by removing the master link on each chain. Pull the differential 'G' from the axle. Remove axle key 'H' from the axle keyway.

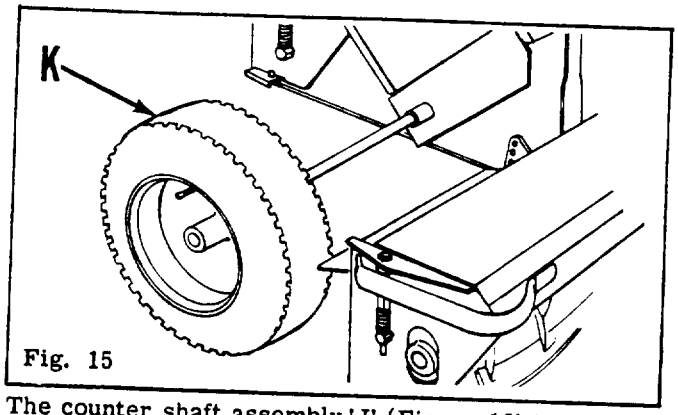


Fig. 15

The counter shaft assembly 'J' (Figure 16' is removed by pulling on the right wheel and axle assembly 'K' until counter shaft assembly falls free (approximately halfway).

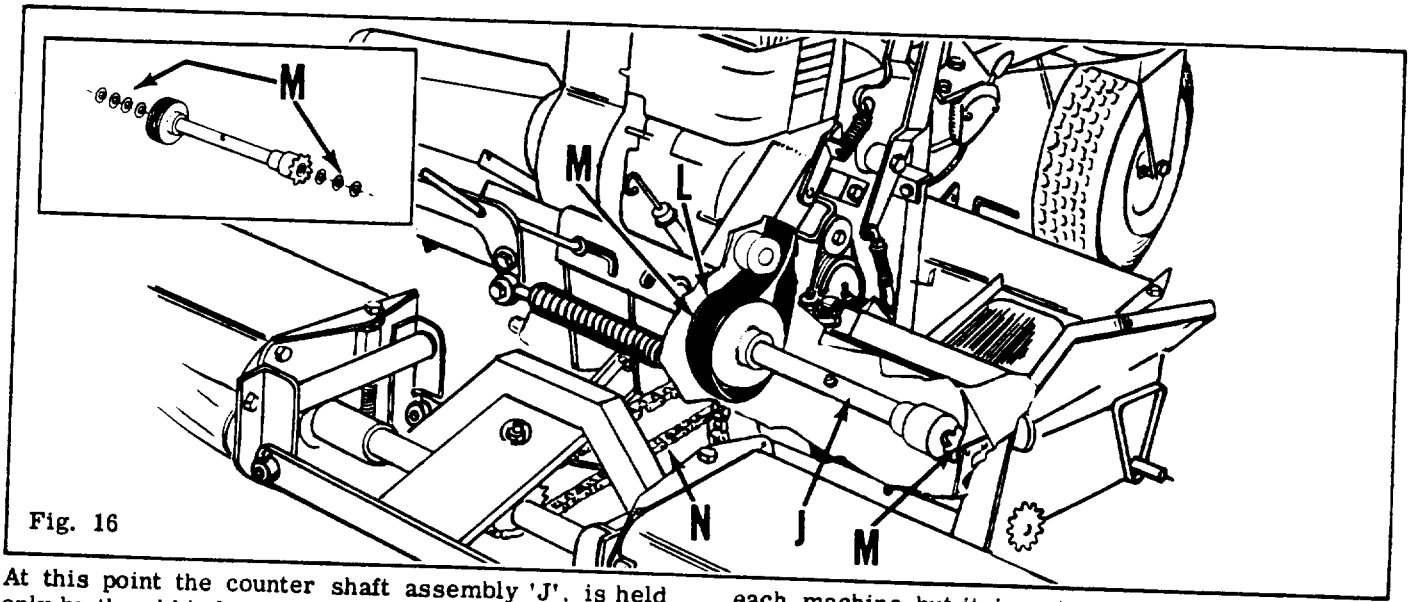


Fig. 16

At this point the counter shaft assembly 'J', is held only by the old belt 'L', and front reel drive chain 'N'. Disconnect chain by removing master link, then remove belt 'L' and replace. At either end of the counter shaft assembly are spacer washers 'M' (see inset). The number of spacer washers used may vary with each machine but it is extremely important that the same spacers are reinstalled and at the same ends of the counter shaft assembly. Proper belt and chain alignment can only be achieved by having these spacer washers in their proper place. Reverse the above procedure to assemble the mower.

CHAIN ADJUSTMENTS

Whenever a chain adjustment is made on this machine, the attitude of the cutting units is also effected. Attitude is the relationship of the cutting unit to a level surface. Proper attitude occurs when all three cutting units are level at the outboard edges with reels 'Y'. Be sure distance 'Z' is equal on both front cutting units so that the reels are positioned at a right angle to the main frame of the riding unit.

FRONT REEL DRIVE

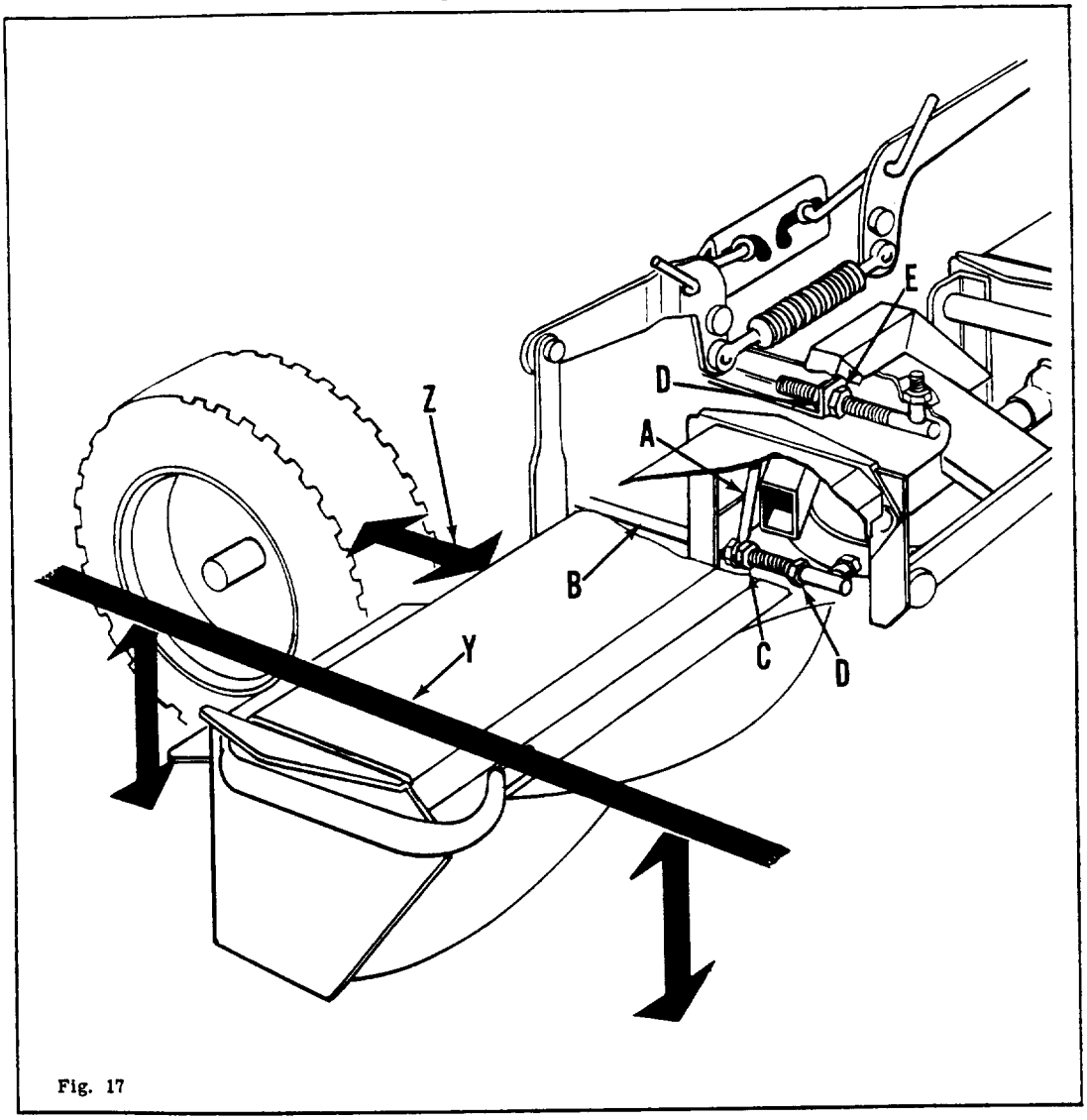


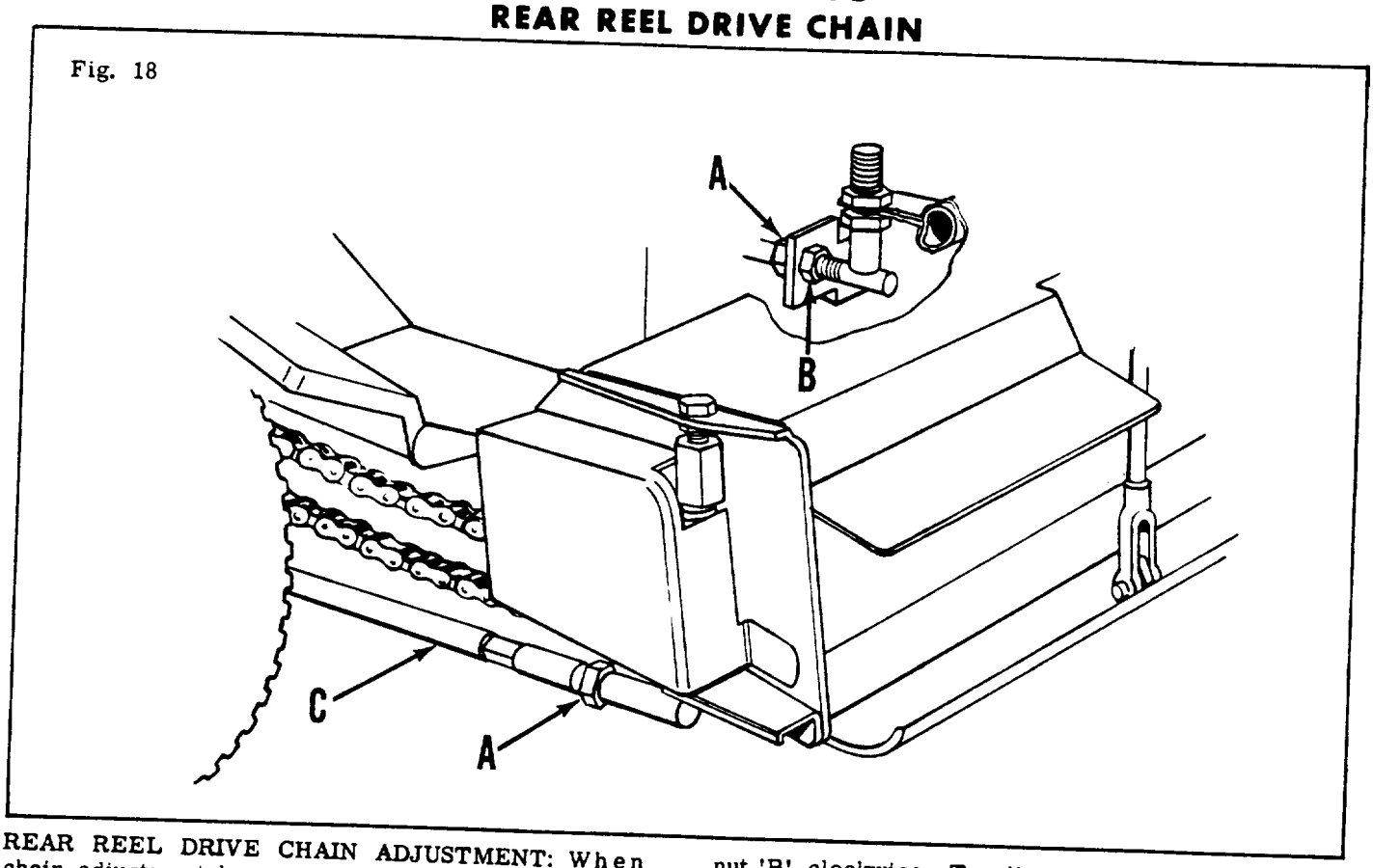
Fig. 17

FRONT REEL DRIVE CHAIN ADJUSTMENT: First loosen stabilizer spring 'A' from side adjusting rods 'B' by loosening nuts 'C'. Next loosen nuts 'D' on (3) three adjusting rods. Rotate nut 'E' clockwise to adjust upper rod and tighten chain, Rotate rods 'B' clockwise to adjust lower rods and tighten chain. Retighten nuts 'C' and 'D' securely. CAUTION: BE SURE STABILIZER SPRING IS SECURELY FASTENED ON BOTH ENDS WHEN MOWER UNITS ARE RESTING ON A FLAT SURFACE.

ADJUSTMENTS

REAR REEL DRIVE CHAIN

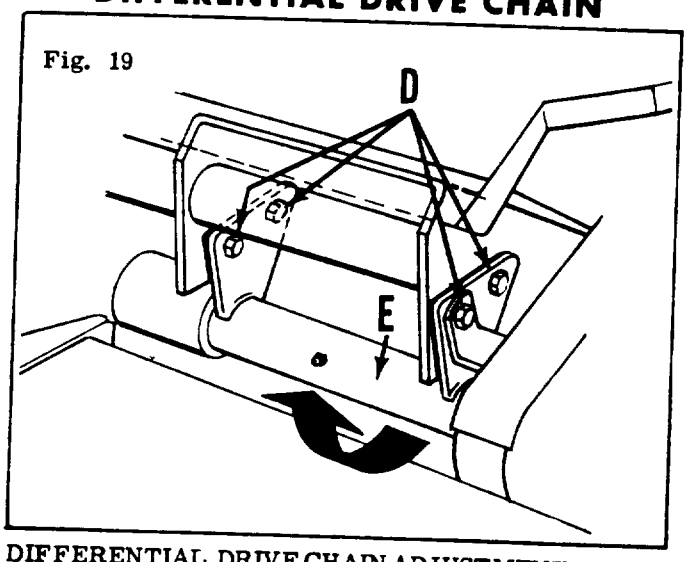
Fig. 18



REAR REEL DRIVE CHAIN ADJUSTMENT: When chain adjustment becomes necessary care must be taken to maintain horizontal attitude of mower unit. There are three (3) rods which must be adjusted to the same relative position. Loosen nuts 'A' on upper and the two end adjusting rods. To adjust upper rod turn nut 'B' clockwise. To adjust end rods rotate rod 'C' (on each end of cutting unit) clockwise, until chain is snug when mower is in cutting position. Adjust rods 'C' to the same length. DO NOT MAKE THIS ADJUSTMENT WHEN MOWERS ARE IN THE TRANSPORT POSITION.

DIFFERENTIAL DRIVE CHAIN

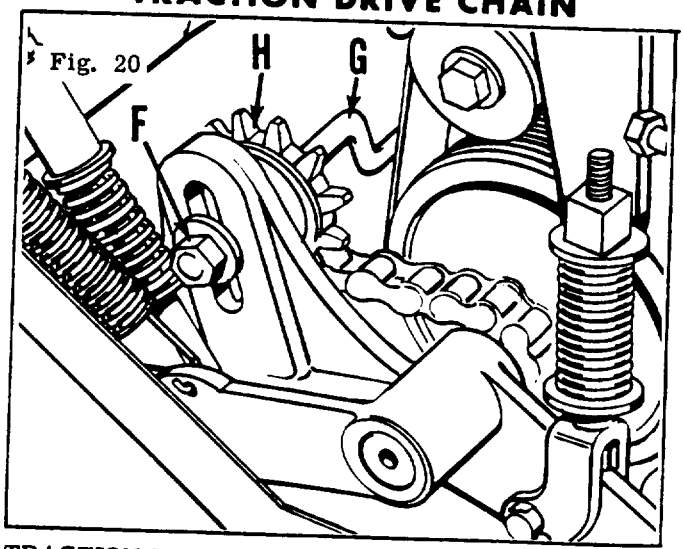
Fig. 19



DIFFERENTIAL DRIVE CHAIN ADJUSTMENT: Loosen fasteners 'D' and rotate shaft and housing assembly 'E' as shown until chain is snug - but not taut. Care should be taken to assure alignment of shaft assembly before retightening fasteners 'D'. Alignment is correct when grooves of traction pulley mesh with grooves of engine pulley.

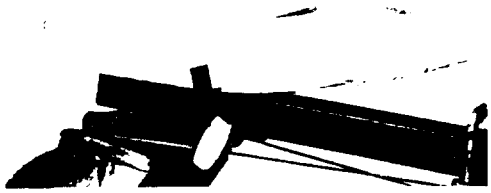
TRACTION DRIVE CHAIN

Fig. 20



TRACTION DRIVE CHAIN ADJUSTMENT: Loosen nut 'F' on belt guide 'G', and slide sprocket 'H' down in slot until chain is snug. Hold sprocket in this position while retightening nut 'F'. CAUTION - BE SURE BELT GUIDE IS IN PROPER POSITION AS DESCRIBED IN FIGURE 3.

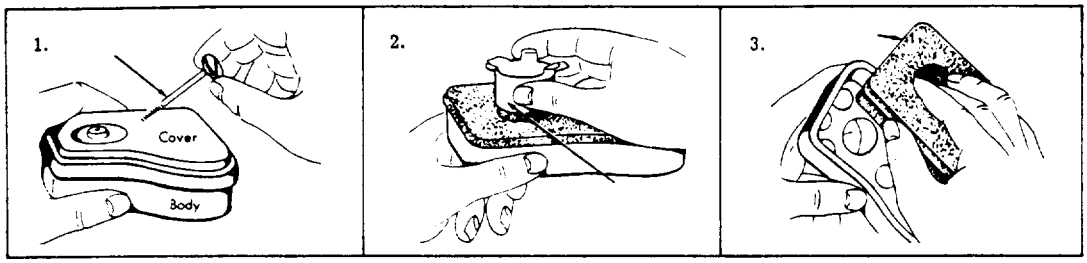
ADJUSTMENTS



SEAT ADJUSTMENT

SEAT ADJUSTMENT: The seat can be adjusted fore and aft by loosening white handle adjusting screw, (see arrow on photo at left).

SERVICING OIL-FOAM AIR CLEANER



(1) Remove screw and lift air cleaner from carburetor.
(2) Take off cover and lift support-cup out of foam element.
(3) Remove foam element.
(4) A. Wash element in a solvent such as kerosene.
B. Squeeze it dry, and re-oil with 3 tablespoons of engine oil. Squeeze again to spread oil through foam.
C. Reverse steps 1 - 2 - 3 and assemble to carburetor with screw.

This element should be removed and cleaned at least every 25 operating hours. Clean more often under dusty operating conditions.

EVALUATING QUALITY OF CUT

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. If excessive clippings be removed at one mowing. The plant is "shocked" and will not grow properly until it recovers.

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.

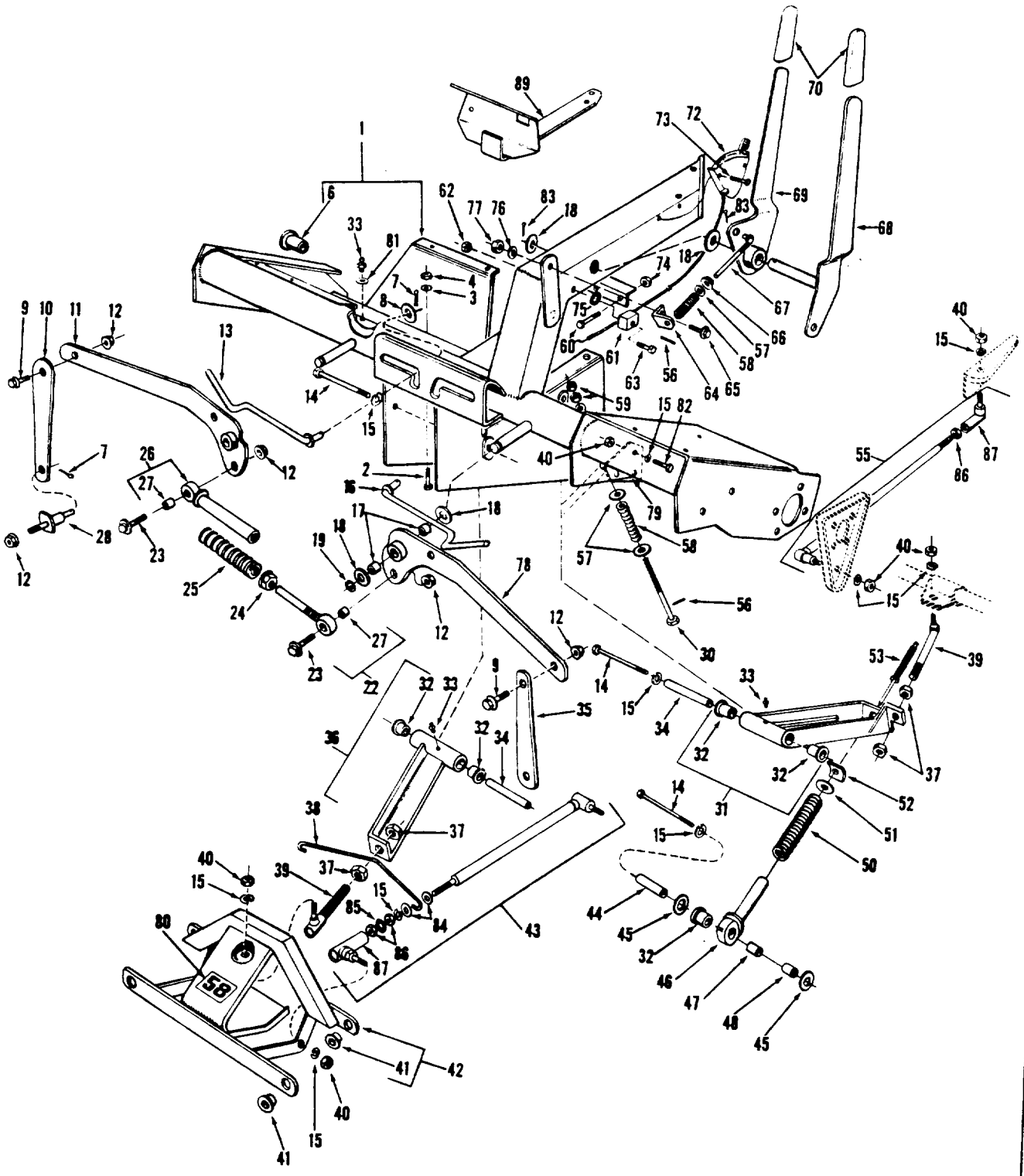
1. Examine cutting units for the following:
   a. Blades and bed bars sharp
   b. Skids adjusted to same hole, mounting clips not bent, adjusting links same length
   c. Pivot points free, no binding, proper lubrication
   d. Reels properly adjusted
   Correct any deficiencies.

2. Place mower on a hard, level surface with cutting units in cutting position. Check the following:
   a. Attitude of mowers - top flange of side plates parallel to ground
   b. Both ends of cutting units on ground
   c. Counter balance springs properly adjusted
   d. Height of cut of each unit approximately the same - within 1/16 inch
   e. Chain Tightness (see Fig. 17 & 18).
   f. Axes of cutting units parallel to axle
   g. Check push rods and frame for bent or broken parts and correct any deficiencies.

3. Make trial cut in the grass on a level area and examine for the following:
   a. Each unit cutting clean. A few stragglers are not uncommon - look for bruised grass as evidence of improper cutting. See Fig.5 for method of adjusting reels.
   b. units cutting same height on each end. If there is evidence that one end of a unit is cutting higher than the other end, re-examine skid for damage - if none, re-check pivots for free motion - if all right, re-check length of counter-balance spring. Increased compression on front spring will raise the inside end of units and lower outside ends. Reducing the compression has opposite effect. Increasing compression on rear spring will raise left end of unit and lower right end. Reducing compression has opposite effect.

4. If an adjustment has been made in paragraphs above, make new trial run. Adjust minor variations in cutting height of units by turning adjusting link in shackle-shorten to lower cut and lengthen to raise cut.

MAIN FRAME and COUNTER BALANCE ASSEMBLY



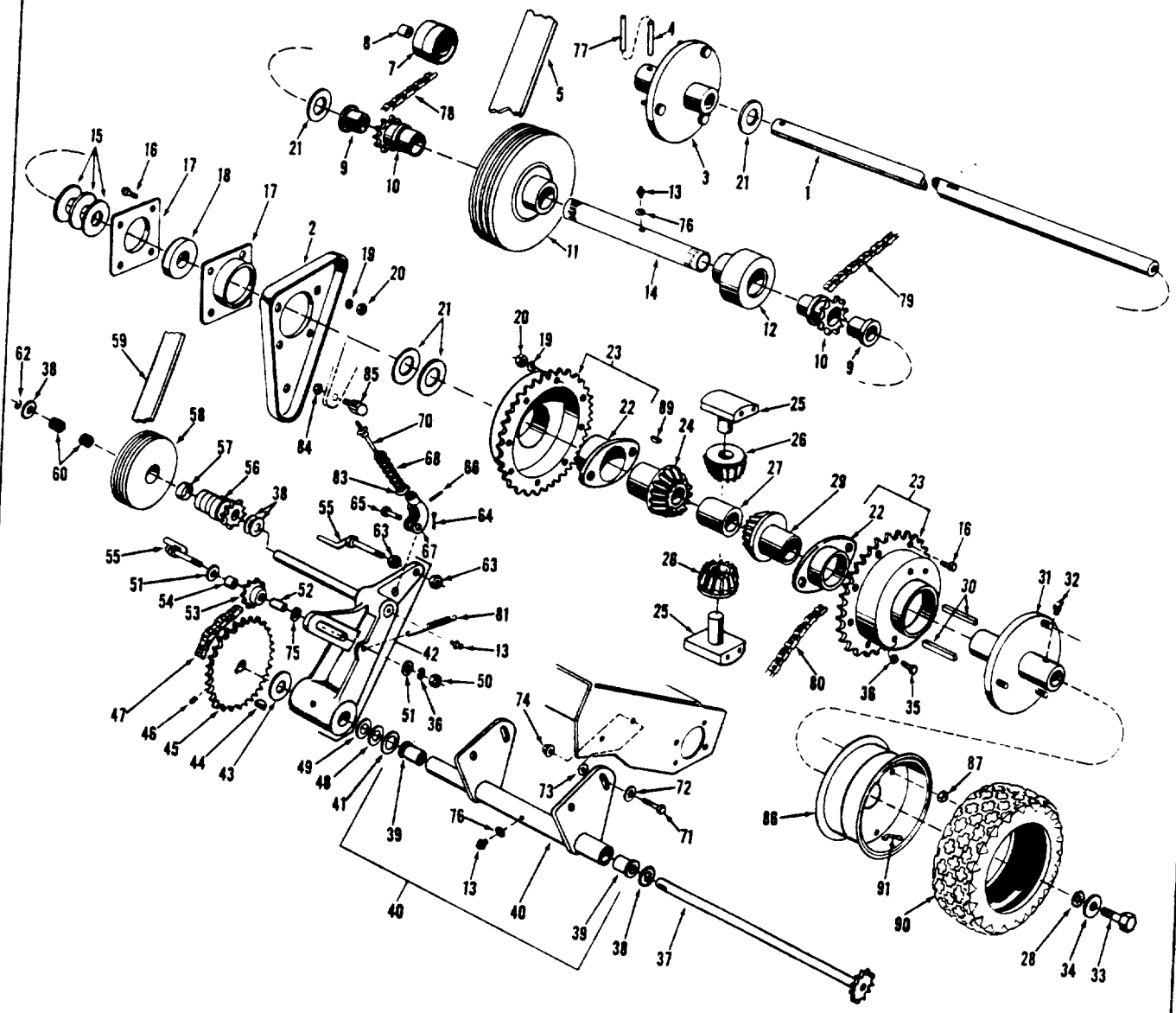
MAIN FRAME and COUNTER BALANCE ASSEMBLY

PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	3-7111	Main Frame w/Bushings	1
2	3210-8	Screw, Engine Mounting	4
3	3253-4	Lockwasher	4
4	3219-2	Nut	4
6	256-136	Bushing	2
7	3272-10	Cotter Pin	4
8	3256-24	Washer	2
9	3-7157	Shoulder Bolt	2
10	3-7155	Link, Right Hand	1
11	3-7153	Arm w/Bushings (2) Ref. 17	1
12	32149-5	Nut	6
13	3-7321	Link, Transport, Right Hand	1
14	3211-15	Screw	3
15	3253-21	Washer, Lock	17
16	3-7322	Link, Transport, Left Hand	1
17	256-1	Bushing	4
18	3256-26	Washer	6-10
19	32120-47	"E" Ring	2
22	3-1029	Yoke w/Bushing Ref. 27	1
23	3-7136	Shoulder Bolt	2
24	32128-15	Nut, Flanged	1
25	3-7152	Spring	1
26	3-7147	Yoke w/Bushing Ref. 27	1
27	256-154	Bushing	2
28	3-7158	Pin, Link	2
30	3-7246	Screw	1
31	3-0989	Mount Counter Bal. w/Bshg.	1
32	256-155	Bushing	5
33	302-5	Zerk Fitting	3
34	3-6695	Spacer	2
35	3-7131	Link, Left Hand	1
36	3-1009	Hitch-Yoke w/Bushing (2) Ref. 32	1
37	3220-6	Nut, Jam	4
38	3-6716	Spring, Stabilizer	1
39	3-6687	Joint, Ball	2
40	3219-3	Nut	12
41	256-156	Bushing	4
42	3-1019	Intermediate Frame w/(4) Ref. 41 Bushing	1
43	3-6707	Ball Joint - Mower Hitch	2
44	3-6704	Spacer	1
45	3256-24	Washer	2

Ref. No.	Part No.	Description	No. Used
46	3-7368	Guide, Spring Counterbalance	1
47	3-6705	Spacer	1
48	3-6703	Spacer	1
50	3-6692	Spring	1
51	3-6715	Washer	1
52	3-6708	Nut, Adjustment	1
53	3-7145	Anchor, - Spring Counterbalance	1
55	3-6706	Ball Joint, Mower Hitch	2
56	32121-7	Roll Pin	2
57	3256-23	Washer	2
58	3-6685	Spring	2
59	3220-2	Nut, Jam	2
60	329-6	Screw	1
61	3-7168	Stop - Reel Control	1
62	32127-45	Nut	1
63	322-14	Screw	1
64	3-6725	Bracket	1
65	3-7166	Shoulder Bolt	1
66	32128-16	Nut, Flanged	1
67	3-6718	Rod	1
68	3-7164	Control, Traction	1
69	3-7162	Control, Reel	1
70	5-1022	Grip	2
72	3-7257	Throttle Control Assembly	1
73	32104-72	Screw	2
74	3219-1	Nut	1
75	3290-244	Lockwasher, Internal - Ext.	1
76	3253-3	Lockwasher	1
77	3220-1	Nut, Jam	1
78	3-7132	Arm w/Bushings (2) Reference 17	1
79	3-6711	Anchor Plate	1
80	3-7768	Decal	1
81	3254-8	S. P. Washer	1
82	3211-4	Capscrew	2
83	3272-6	Cotter Pin	2
84	3256-24	Washer	4
85	3254-6	S. P. Washer	2
86	3220-3	Jam Nut	6
87	2411-17	Ball Joint End	4
89	5-1013	Mounting Plate W. A.	1

DIFFERENTIAL and COUNTER SHAFT ASSEMBLY



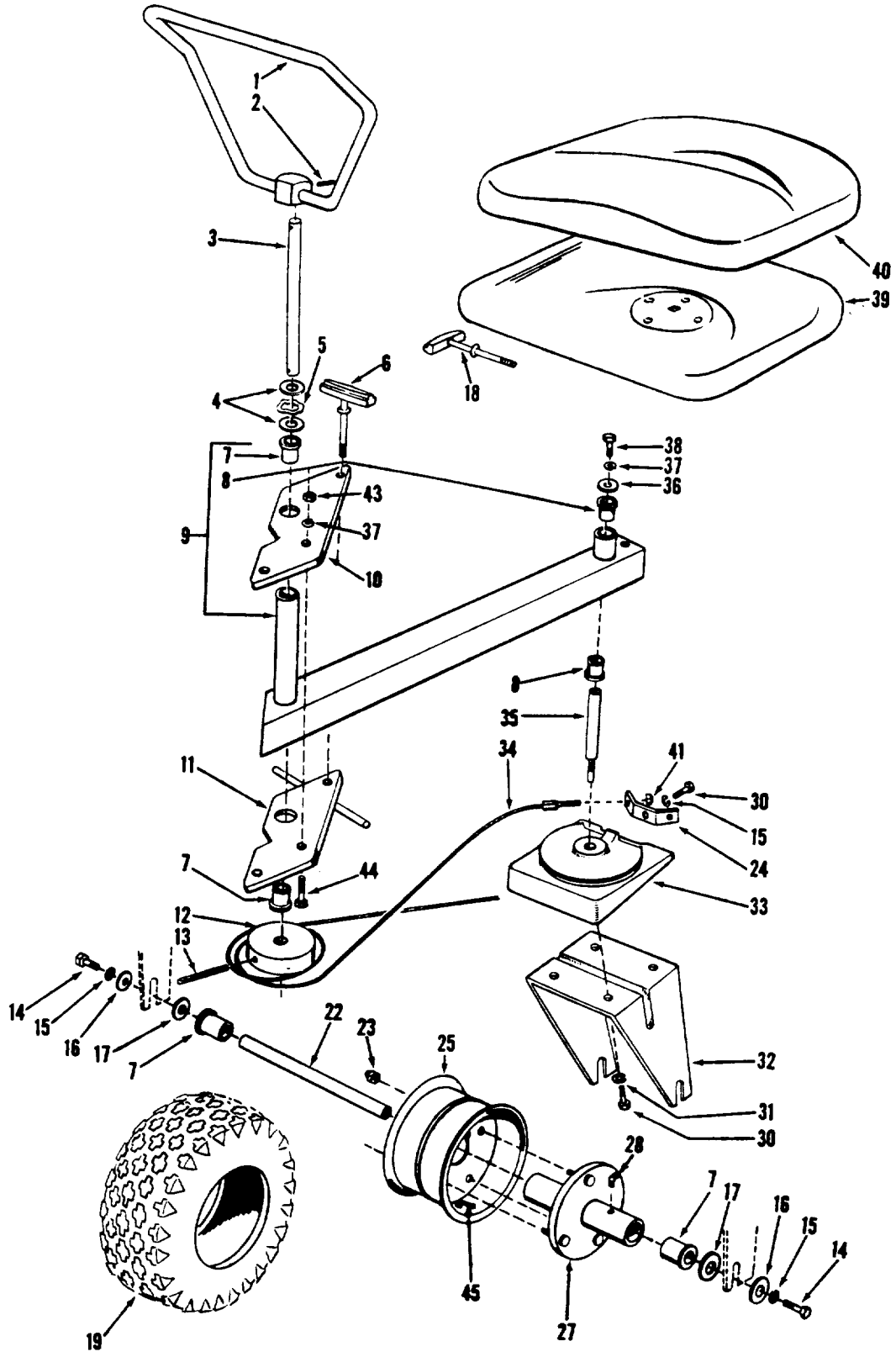
DIFFERENTIAL and COUNTER SHAFT ASSEMBLY

PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	3-6563	Axle	1
2	3-6572	Bracket	1
3	2-9739	Hub, Right Side	1
4	32121-9	Pin	1
5	3-6587	Belt, Reel Drive	1
7	3-7167	Idler, Reel	1
8	3290-245	Ring, Tolerance	1
9	256-136	Bushing	2
10	3-1429	Sprocket w/Bushing Ref. 9	2
11	3-6527	Pulley, only	1
12	3-6528	Hub	1
13	302-5	Zerk Fitting	3
14	3-6531	Tube, Reel Drive	1
15	3-6498	Thrust Washer, Thin	3-6
16	329-3	Screw	12
17	3-5403	Retainer, Bearing	2
18	251-172	Bearing	1
19	3253-3	Lockwasher	12
20	3219-1	Nut	12
21	3-6514	Thrust Washer, Thick	4-6
22	3-2290	Bushing	2
23	2-0069	Sprocket Case, Diff. w/Bshg.	2
24	3-6571	Side Gear, Diff.	1
25	3-2293	Carrier, Diff. Pinion	2
26	3-2294	Pinion	2
27	3-6568	Spacer	1
28	3254-6	Lockwasher, Internal	1
29	3-2296	Side Gear, Diff.	1
30	32150-1	Key	2
31	2-9729	Hub, Left Side	1
32	302-11	Zerk Fitting	1
33	3211-2	Screw	1
34	3256-4	Washer	1
35	322-1	Screw	8
36	3253-4	Lockwasher	9
37	3-6555	Countershaft & Sprocket	1
38	3-6543	Thrust Washer	4
39	256-149	Bushing	2
40	3-6552	Countershaft Tube Assy. w/Bushing	1
41	32120-41	Ring, Snap	1
42	3-6049	Bell Crank Assy. (Incl. Ref. 13)	1
43	3-6557	Thrust Washer	1
44	3257-5	Key	1
45	3-6536	Sprocket	1
46	3294-11	Set Screw	2
47	3-6535	Chain	1
*	2710-6	Connecting Link	1
48	3-6558	Thrust Washer	0-1
49	3-6561	Thrust Washer	0-5
50	3219-2	Nut	1
51	3256-23	Washer	2
52	3-7386	Spindle	1
53	2-9279	Sprocket, Idler w/Bearing	1
54	252-62	Bearing, Needle	1
55	3-6547	Guide, Belt	2
56	3-6544	Sprocket	1
57	3290-241	Ring, Tolerance	1
58	3-6534	Pulley	1
59	3-6702	Belt, Traction Drive	1
60	252-64	Bearing, Needle	2
62	32120-41	Ring, Snap	1
63	3220-2	Nut, Jam	2
64	3272-6	Cotter Pin	1
65	283-1	Pin, Clevis	1
66	32121-7	Pin, Roll	1
67	3-8325	Clevis	1
68	3-8284	Spring	1
70	3-8285	Rod	1
71	3210-4	Screw	3
72	3256-3	Washer	3
73	3290-244	Lockwasher, Int. - Ext.	4
74	32149-5	Nut, Keps	4
75	4-2390	Washer	1
76	3254-8	Washer	2
77	32121-51	Pin	1
78	3-6701	Chain, Reel Drive, Front	1
*	2710-6	Connecting Link	1
79	3-6698	Chain, Reel Drive, Rear	1
*	2710-6	Connecting Link	1
80	3-7786	Chain, Differential	1
*	2710-6	Connecting Link	1
81	3-7243	Spring	1
83	3256-25	Washer	1
84	3296-29	Stop Nut	1
85	5-1018	Pivot Rod	1
86	242-38	Wheel Disc Assy.	2
87	242-32	Nut	6
88	4-2390	Washer	1
89	3257-5	Key	1
90	231-38	Tire	2
91	232-21	Valve Stem	2

* Not Illustrated

SULKY ASSEMBLY



58" PROFESSIONAL SULKY ASSEMBLY

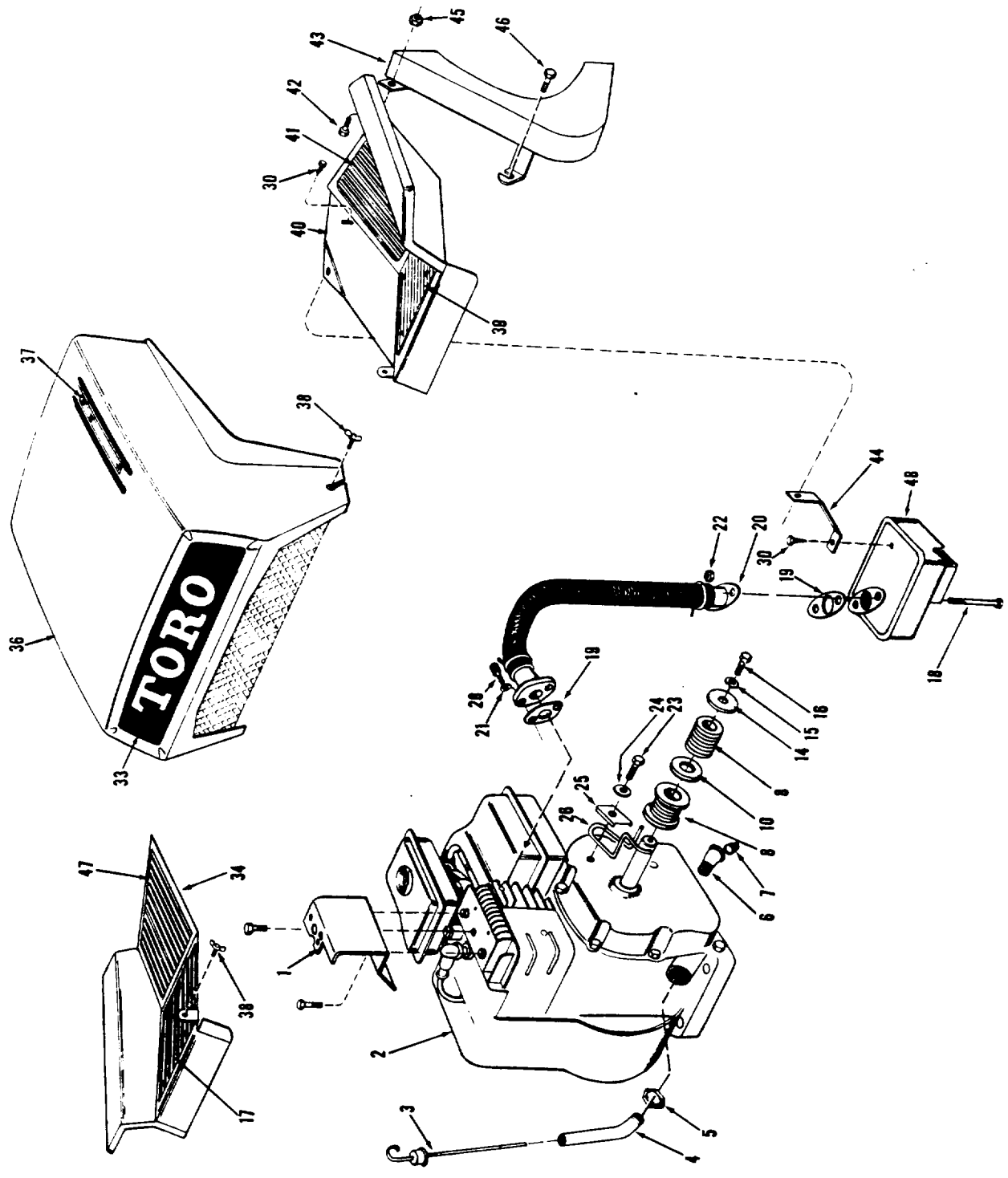
PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	5-0470	Steering Wheel	1
2	32121-6	Pin	1
3	3-6501	Shaft, Steering	1
4	3-6498	Washer, Thrust	2
5	3290-239	Spring Washer	1
6	3-7138	Clamp Assembly	1
7	256-136	Bushing	4
8	256-148	Bushing	2
9	5-0480	Rear Frame w/Bushings Ref. Nos 7 & 8	1
10	3-6495	Plate, Upper Hinge	1
11	3-7093	Plate, Lower Hinge	1
12	3-6493	Pulley, Steering	1
13	32121-54	Pin	1
14	3211-4	Screw	2
15	3253-21	Lockwasher	3
16	3256-4	Washer	2
17	3-6514	Washer, Thrust	2
18	3-7142	Handle Assembly	1
19	231-38	Tire	1
22	3-6515	Shaft	1

Ref. No.	Part No.	Description	No. Used
23	242-32	Nut	3
24	3-6506	Bracket	1
25	242-38	Wheel Disc Assembly	1
27	2-9939	Hub w/Bushing	1
28	302-11	Zerk Fitting	1
30	323-6	Screw	5
31	3255-9	Lockwasher	4
32	3-6507	Wheel Fork	1
33	3-6516	Pivot, Caster	1
34	5-0460	Steering Cable	1
35	3-6505	Shaft, Caster	1
36	4-2320	Washer	1
37	3253-4	Lockwasher	3
38	3210-3	Screw	1
39	3-6604	Seat Assembly	1
40	351-24	Seat Pad	1
41	3296-3	Locknut	2
43	3219-2	Nut	2
44	3210-16	Capscrew	2
45	232-21	Valve Stem, Recoil	1
*	232-25	Valve Stem, Electric	1

* Not Illustrated

ENGINE ASSEMBLY



58" PROFESSIONAL ENGINE ASSEMBLY

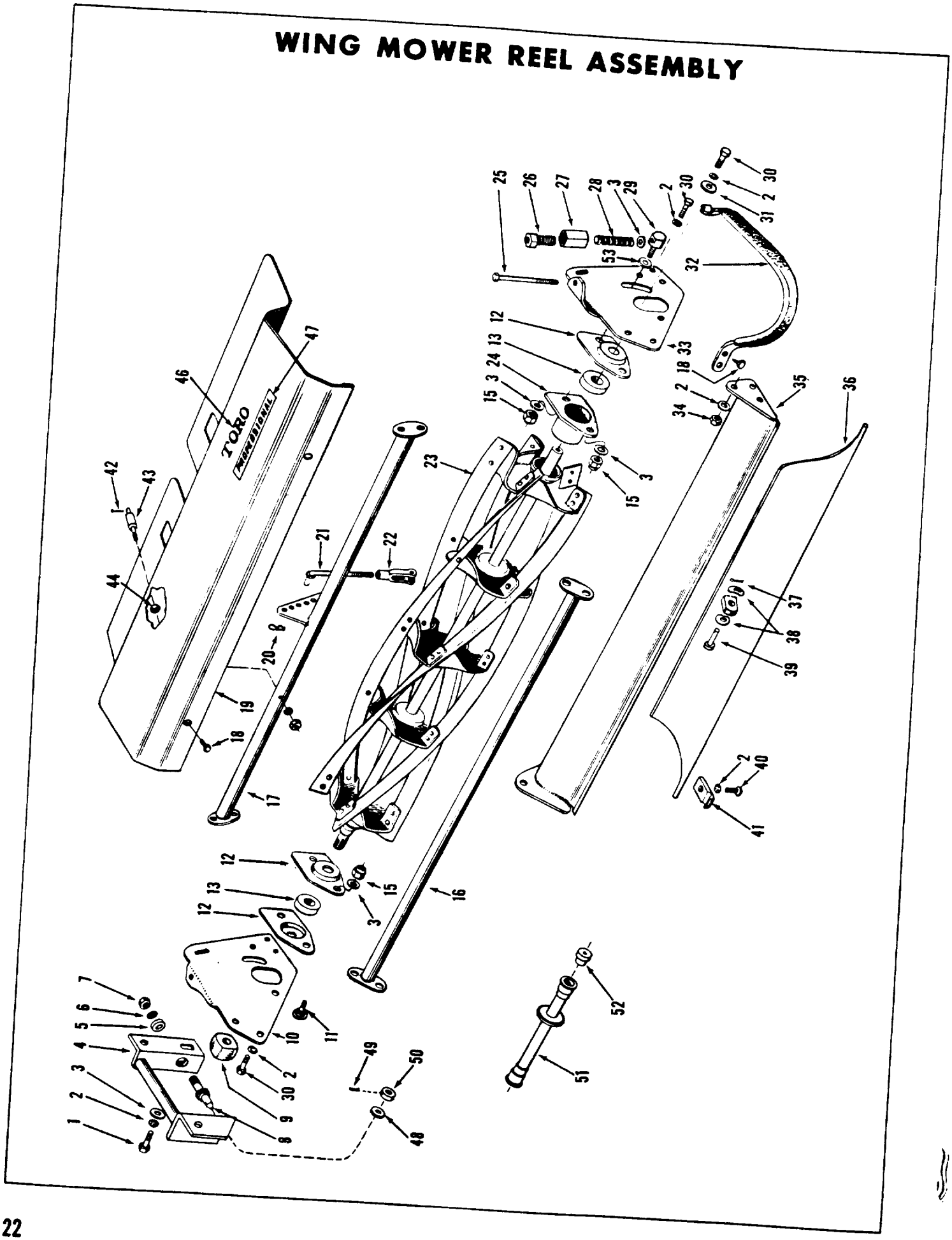
PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	5-1005	Deflector W. A.	1
2	221-244	Engine	1
3	3-7196	Dip Stick Assembly	1
4	3-7731	Pipe, Filler Assembly	1
5	3290-246	Pal Nut	1
6	2811-1	Elbow, Strut	1
7	281-1	Plug, Pipe	1
8	5-1004	Pulley, Engine Reel	2
10	3-8448	Roller Drum Thrust Washer	1
14	5-0592	Washer	1
15	3253-4	Lockwasher	1
16	3210-3	Capscrew	1
17	3-7224	Pad, Foot Rest	1
18	321-11	Capscrew	2
19	3-7188	Gasket	2
20	5-1000	Exhaust Pipe Assembly	1
21	3253-3	Lockwasher	2
22	32149-2	Keps Nut	2
23	3-8326	Capscrew	1
24	3256-26	Washer	1

Ref. No.	Part No.	Description	No. Used
25	3-7464	Clip	1
26	3-7187	Guide	1
28	3274-15	Socket Head Capscrew	2
30	32104-76	Self Tapping Screw	9
33	5-1021	Decal	1
34	3-6079	Fender	1
36	5-1010	Shroud	1
37	5-1020	Decal	1
38	5-0680	Thumb Screw	2
39	3-7223	Pad, Foot Rest	1
40	3-6039	Fender & Insulation	1
+	3-7226	Insulation	
41	3-7264	Pad, Foot Rest	1
42	32122-38	Truss Head Screw	1
43	3-7175	Chain Guard	1
44	5-1017	Muffler Support Bracket	1
45	32149-5	Nut	1
46	3210-7	Capscrew	1
47	3-7258	Pad, Foot Rest	1
48*	297274	Muffler	1

* Obtain from Briggs & Stratton Dealer
\+ Not Illustrated

WING MOWER REEL ASSEMBLY



58" PROFESSIONAL WING MOWER REEL ASSEMBLY

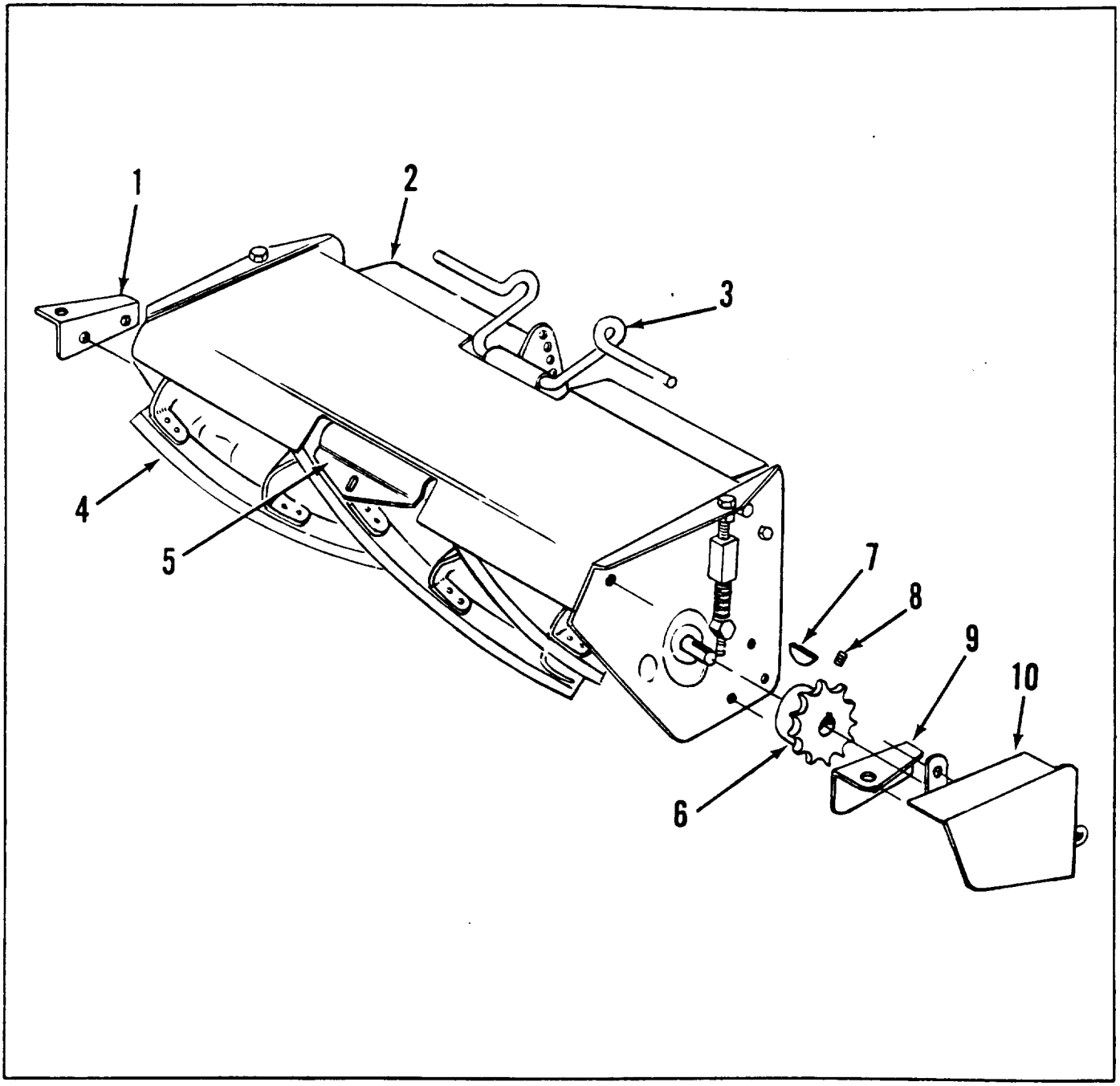
PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	3210-4	Screw	3
2	3254-2	Lockwasher	17
3	3256-23	Washer	9
4	3-6671	Hitch, Left Hand	1
*	3-6678	Hitch, Right Hand	1
5	3-6677	Spacer	2
6	3253-7	Lockwasher	2
7	3219-5	Nut	2
8	3-6676	Stud	2
9	3-7173	Drive Ball	1
10	3-7795	Side Plate	1
11	3-6665	Bolt	2
12	3-6637	Cup, Bearing	3
13	251-5	Bearing	2
15	3296-4	Nut, Lock	4
16	3-6675	Tube, Reel	1
17	3-6668	Tube, Reel	1
18	32104-76	Screw	6
19	3-7202	Grass Shield	1
20	3290-250	Cotter, Hairpin	1
21	3-6651	Rod, Adjusting	1
22	282-2	Yoke	1
23	3-7737	Reel Assembly, Right Wing	1
*	3-7738	Reel Assembly, Left Wing	1
24	3-6638	Cup, Bearing	1
25	3-6627	Screw, Adjusting	2
26	3-6626	Bolt, Adjusting	2

* Not Illustrated.

Ref. No.	Part No.	Description	No. Used
27	3-6625	Block, Adjusting	2
28	3-6624	Spring	2
29	3-6623	Screw, Reel Bearing	2
30	3210-2	Screw	12
31	3256-3	Washer	1
32	3-7174	Guard, Reel	2
33	3-7794	Side Plate	1
34	3219-2	Nut	4
35	3-7797	Bed Knife	1
36	3-6653	Skid	1
37	3272-6	Cotter Pin	1
38	3290-212	Spring Washer	2
39	283-1	Pin	1
40	32122-38	Screw	2
41	3-6657	Clip	2
42	3272-10	Cotter Pin	1
43	5-0878	Pin, Link	1
44	32149-5	Nut	1
46	3-1058	Decal	2
47	3-7771	Decal	1
48	3-1131	Washer	2
49	3272-17	Cotter Pin	2
50	3-6688	Collar	2
51	3-6607	Shaft, Reel Drive	1
52	3-7463	Pad, Reel Drive	2
53	5-0744	Washer	2

58" PROFESSIONAL REAR MOWER ASSEMBLY



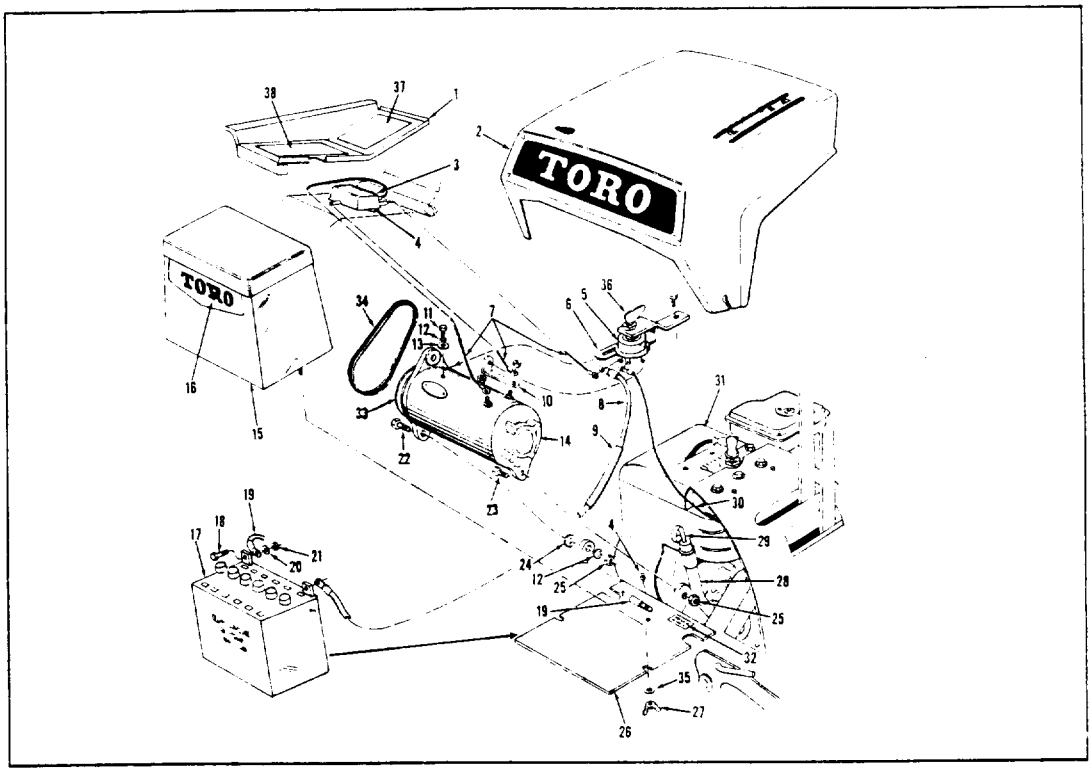
PARTS LIST

The parts list shown below is used on Rear Mower Assembly only, for parts not shown see Wing Mower Drawings.

Ref. No.	Part No.	Description	No. Used
1	3-6648	Hanger, Right Hand	1
2	3-7201	Grass Shield	1
3	3-6628	Tube, w/Hanger Assembly	1
4	3-7741	Reel Assembly	1
5	3-6617	Tube, Reel, Front	1

Ref. No.	Part No.	Description	No. Used
6	3-6635	Sprocket, Reel	1
7	3257-5	Key	1
8	3246-3	Set Screw	2
9	3-6652	Hanger, Left Hand	1
10	3-7192	Chain Guard	1

58" PROFESSIONAL ELECTRICAL SYSTEM ASSEMBLY



PARTS LIST

Ref. No.	Part No.	Description	No. Used
1	5-1184	Fender, Right Hand	1
2	5-1181	Shroud & Insulation Assy.	1
*	3-7427	Pad, Foot Rest	1
3+	1118988	Voltage Regulator	1
4	32104-76	Screw	17
5	218-251	Switch	1
6	3-7433	Bracket - Switch & Gen.	1
7	3-7434	Wire	3
8	3-7432	Wire	1
9	3-7431	Loom, Cable	1
10	3-7436	Bar. Ignition	1
11	322-2	Screw	1
12	3253-4	Lockwasher	2
13	3256-23	Washer	1
14+	1101968	Starter - Generator	1
15	3-7417	Case, Battery	1
16	3-7206	Decal	1
17†+		Battery (See Note)	1
18	329-3	Screw	2
19	3-7428	Wire	1

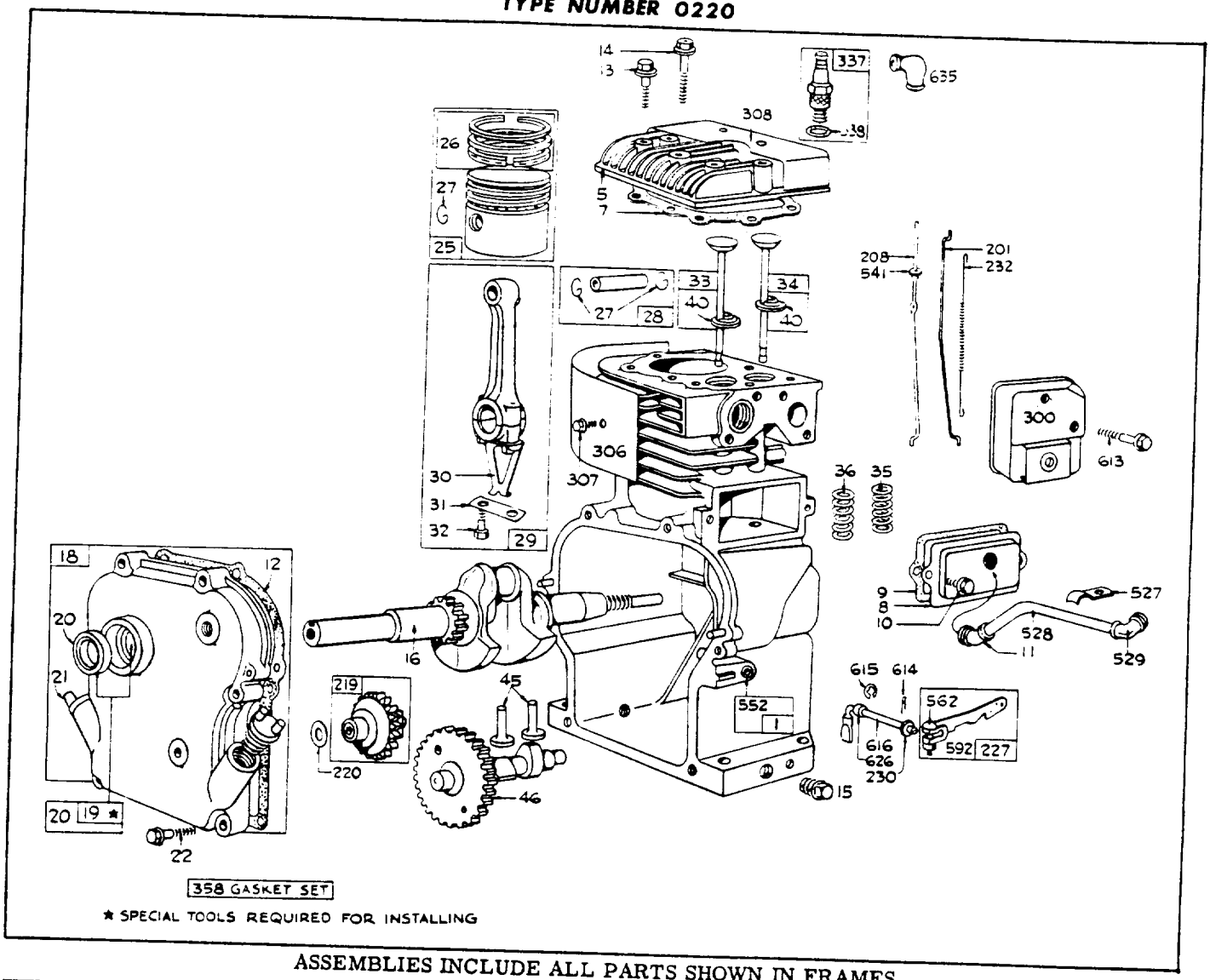
Ref. No.	Part No.	Description	No. Used
20	3256-22	Washer	2
21	3219-1	Nut	2
22	322-6	Screw	1
23	322-5	Screw	1
24	4-2390	Spacer	1
25	3217-6	Nut	2
26	3-7407	Frame w/Bushings	1
27	32103-12	Wing Nut	2
28	3-7734	Oil Fill Extension	1
29	3-7613	Dipstick	1
30	3-7435	Wire	1
31	221-247	Engine (Electric only)	1
32	3-8168	Decal	1
33+	1949358	Pulley	1
34♦	68428	Belt	1
35	3254-8	S. P. Washer	1
36	218-300	Key	2
37	3-7258	Pad, Foot Rest	1
38	5-1186	Pad, Foot Rest	1

* Not Illustrated
\+ Obtain locally from Delco Remy Dealer
♦ Obtain from Briggs & Stratton

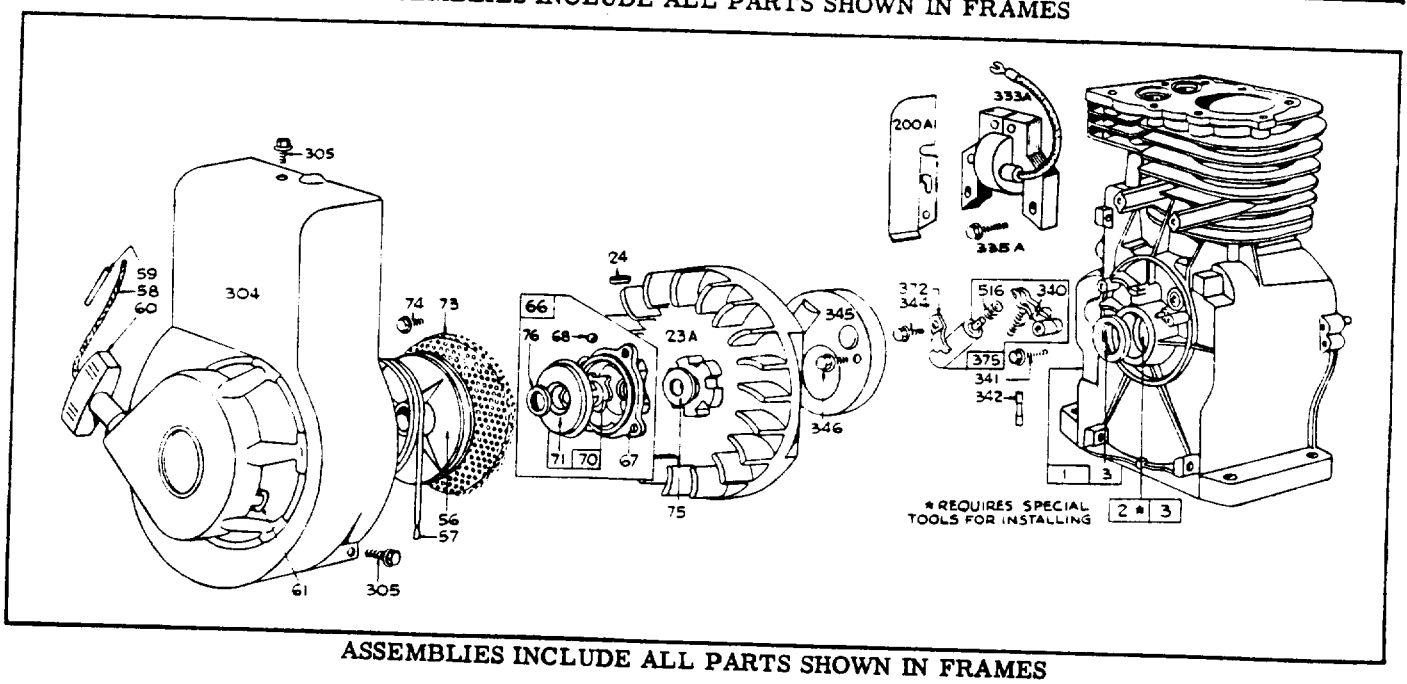
† + Rating 23 amps. per hour, outside dimensions
NOTE: length 7-3/4, width 5-3/16 and height 7-5/16. L type terminals.

ENGINE MODEL 100202

TYPE NUMBER 0220



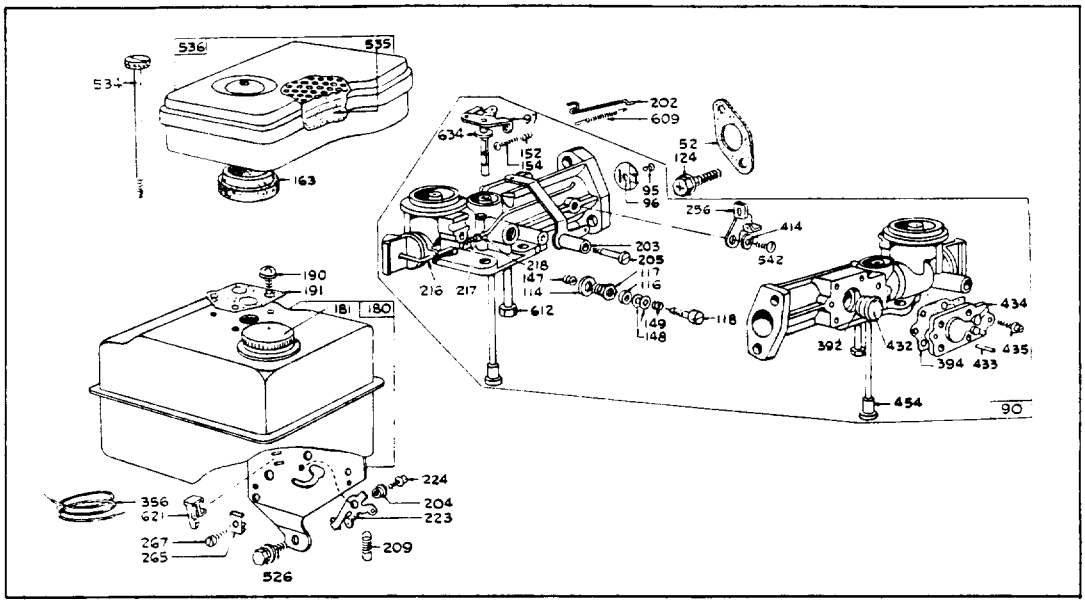
ASSEMBLIES INCLUDE ALL PARTS SHOWN IN FRAMES



ASSEMBLIES INCLUDE ALL PARTS SHOWN IN FRAMES

ENGINE MODEL 100202

TYPE NUMBER 0220



ASSEMBLIES INCLUDE ALL PARTS SHOWN IN FRAMES

ENGINE PARTS LIST

TYPE NUMBER 0220

Ref. No.	Part No.	Description
1	297566	Cylinder Assembly
2	297565	Bushing - Cylinder Note: Requires special tools for installation.
3	89660	Seal - Oil
5	211127	Head - Cylinder
7	*270068	Gasket - Cylinder Head
8	294178	Breather - Valve Chamber
9	*27549	Gasket - Valve Cover
10	93394	Screw - Breather Mounting Sem
11	66578	Grommet - Breather Tube
12	*270080	Gasket - Crankcase - .015" thick (Standard)
	270125	Gasket - Crankcase - .005" thick
	270126	Gasket - Crankcase - .009" thick
13	93368	Screw - Cylinder Hd. (2-3/32" long)
14	93369	Screw - Cylinder Hd. (2-15/32" long)
15	91249	Plug - Pipe, 1/4" std., Square Hd.
16	260719	Crankshaft
18	297602	Cover Assy. - Crankcase
19	297603	Bushing - Crankcase Cover Note: Requires special tools for installation
20	294606	Seal - Oil
21	66768	Plug - Oil Filler
22	93032	Screw - Crankcase Cover Mtg. Sem
23A	297229	Flywheel Assembly
24	61760	Key - Flywheel

Ref. No.	Part No.	Description
25	298168	Piston Assembly - Standard
	298169	Piston Assembly - .010" O.S.
	298170	Piston Assembly - .020" O.S.
	298171	Piston Assembly - .030" O.S.
26	298174	Ring Set - Std. Piston, consists of: 211297 Ring, Piston, Comp., Top 5/64" wide 211298 Ring, Piston, Comppression, Center, 5/64" wide 211299 Ring, Piston, Oil
	298175	Ring Set - .010" O.S. Piston, consists of: 211353 Ring, Piston, Comp., Top, .010" O.S., 5/64" wide 211352 Ring, Piston, Compression, Center, .010" O.S., 5/64" wide 211351 Ring, Piston, Oil, .010" O.S.
	298176	Ring Set - .020" O.S., Piston, consists of: 211357 Ring, Piston, Comp., Top, .020" O.S., 5/64" wide 211356 Ring, Piston, Compression, Center, .020" O.S., 5/64" wide 211355 Ring, Piston, Oil, .020" O.S.

* Included in Gasket Set - Part No. 297615.

ENGINE PARTS LIST

TYPE NUMBER 0220

Ref. No.	Part No.	Description
	298177	Ring Set - .030" O.S. Piston, consists of: 211361 Ring, Piston, Comp., Top, .030" O.S., 5/64" wide 211360 Ring, Piston, Compression, Center, .030" O.S., 5/64" wide 211359 Ring, Piston, Oil, .030" O.S.
27	260645	Lock - Piston Pin
28	297581	Pin Assy. - Piston - Standard
	297582	Pin Assy. - Piston - .005" O.S.
29	297569	Rod Assy. - Connecting
30	221507	Dipper - Connecting Rod
31	221451	Lock - Connecting Rod Screw
32	91162	Screw - Connecting Rod
33	211119	Valve - Exhaust
34	260641	Valve - Intake
35	260552	Spring - Intake Valve
36	26478	Spring - Exhaust Valve
40	93312	Retainer - Valve Spring
45	260642	Tappet - Valve
46	211117	Gear - Cam
52	*27355	Gasket - Carburetor Mtg.
56	294088	Pulley - Rewind Starter
57	294303	Spring - Rewind Starter
58	66384	Rope - Starter
59	230228	Pin - Starter Grip
60	66728	Grip - Starter Rope
61	66528	Bumper - Starter Pulley
66	298310	Clutch Assembly - Rewind Starter
67	211383	Housing - Starter Clutch
68	63770	Ball - Clutch
70	298436	Ratchet - Rewind Starter
71	221653	Washer - Clutch Retainer
73	221661	Screen - Starter Pulley
74	93042	Screw - Rotating Screen Mtg. Sem
75	220865	Washer - Spring
76	68238	Washer - Ratchet Sealing
90	298547	Carburetor Assembly
95	93385	Screw - Throttle Valve to Shaft Sem
96	211203	Throttle - Carburetor
97	297468	Shaft and Lever - Throttle
114	66594	Gasket - Needle Valve Nut
116	65978	Packing - Needle Valve
117	230590	Nut - Needle Valve
118	23433	Valve - Needle
124	93357	Screw - Sem, Phillips Hex Hd.
147	230591	Seat - Needle Valve
148	22235	Washer - Needle Valve
149	26336	Spring - Needle Valve
152	260575	Spring - Throttle Adjustment
154	92634	Screw - Machine, Rd. Hd. - 5-40 x 5/8".
163	*27660	Gasket - Air Cleaner Mounting
180	297600	Tank Assembly - Fuel
181	293270	Cap - Fuel Tank
190	93341	Screw - Fuel Tank Mtg. Sem
191	*27911	Gasket - Fuel Tank Mtg.
200A	221480	Guide - Air
201	260661	Link - Governor

Ref. No.	Part No.	Description
202	260678	Link - Throttle
203	297718	Crank - Bell
204	23688	Bushing - Governor Lever
205	230754	Screw - Bell Crank Mtg.
208	230737	Rod - Control
209	260695	Spring - Governor
216	260689	Link - Choke
217	260189	Spring - Choke Link
218	221198	Washer - Choke Link
219	297656	Gear - Governor
220	221551	Washer - Thrust
223	221517	Lever - Gov. Control
224	93389	Screw - Gov. Control Lever Mounting Sem
227	297601	Lever Assy. - Governor
230	221559	Washer - Governor Lever
232	260478	Spring - Governor Link
256	221539	Crank - Bell
265	221535	Clamp - Casing
267	92715	Screw - Sem
300	297274	Muffler Exhaust
304	297596	Housing - Blower
305	93158	Screw - Blower Housing Mounting
306	221511	Shield - Cylinder
307	93042	Screw - Cylinder Shield Mtg. Sem
308	221512	Cover - Cylinder Head
333A	298316	Armature - Magneto
335A	93414	Screw - Armature Mtg.
337	29693	Plug - Spark (with Gasket)
338	29806	Gasket - Spark Plug
340	26018	Spring - Breaker Arm
341	93381	Screw - Breaker Arm Mtg. Sem
342	65704	Plunger - Breaker Point
344	93042	Screw - Condenser Clamp Mtg. Sem
345	220366	Cover - Breaker Point and Condenser
346	93014	Screw - Dust Cover Mounting Sem
356	297536	Wire - Ground
358	297615	Gasket Set
372	220477	Clamp - Condenser
375	294628	Breaker Points and Condenser Set
392	260455	Spring - Fuel Pump Diaphragm
394	270026	Diaphragm
414	220982	Washer
432	221377	Cap - Spring
433	93265	Pin - Diaphragm Cover
434	210959	Cover - Diaphragm
435	93141	Screw - Diaphragm Cover
454	296178	Housing - Fuel Pipe Screen (for 3/16" O.D. Pipe)
516	260374	Spring - Connector
526	93343	Screw - Tank Bracket Mtg. Sem
527	221514	Clamp - Breather Tube
528	230722	Tube - Breather
529	67838	Grommet - Breather Tube
534	93322	Screw - Air Cleaner
535	27987	Element - Air Cleaner
536	297036	Cleaner Assembly - Air
541	22398	Washer - Control Rod
542	92265	Screw
552	230732	Bushing - Governor

* Included in Gasket Set - Part No. 297615.

ENGINE PARTS LIST

TYPE NUMBER 0220

Ref. No.	Part No.	Description
562	92613	Bolt - Governor Lever
592	90356	Nut - Hex. - 10-24
609	260694	Spring - Throttle Link
612	296811	Pipe - Fuel
613	93377	Screw - Muffler Mtg.
614	93306	Cotter - Hair Pin

Ref. No.	Part No.	Description
615	93307	Retainer - E-Ring
616	230723	Crank - Governor
621	297472	Switch - Stop
626	230749	Spacer - Governor Crank
634	270167	Washer, Throttle Shaft (Felt)
635	66538	Elbow - Spark Plug

CHOKE-A-MATIC CARBURETOR CONTROL ADJUSTMENTS

CHOKE-A-MATIC CARBURETOR

Proper choke and stop switch operation is dependent upon proper adjustment of remote controls on the powered equipment.

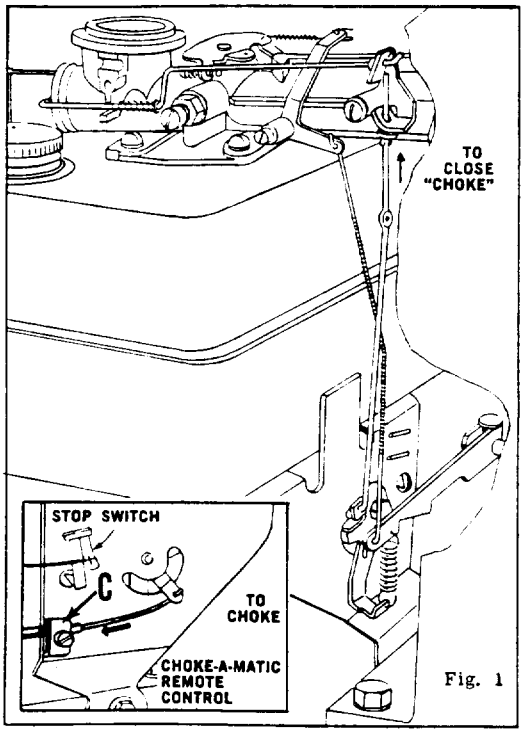


Fig. 1

TO CHECK OPERATION

Remove air cleaner. Move remote control lever to CHOKE POSITION. The choke knob should then be fully extended. Move remote control lever to STOP. Governor control lever on fuel tank bracket should make good contact with stop switch to short out ignition.

TO ADJUST

Place remote control lever on equipment in FAST position. Speed control lever 'A' should be just touching the choke operating link at 'B', (Fig. 2). If it does not, loosen casing clamp 'C' (Fig. 1) and move casing in or out to obtain this condition.

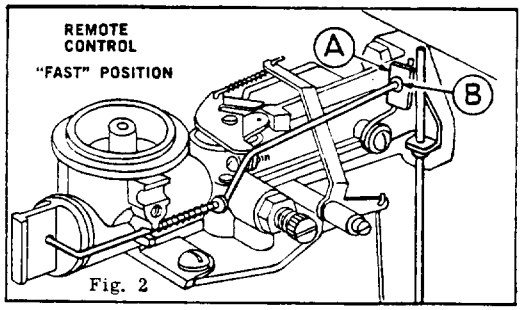


Fig. 2

INITIAL ADJUSTMENT

Close needle valve (turn clockwise) then open $1\frac{1}{2}$ turns (turn counter-clockwise). This initial adjustment will permit the engine to be started and warmed up before making final adjustment.

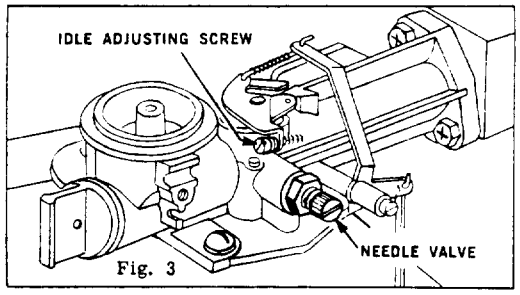


Fig. 3

FINAL ADJUSTMENT

With engine running at normal operating speed (approximately 3000 RPM without load) close the needle valve (turn clockwise) until engine starts to lose speed (lean mixture). Then slowly open needle valve (turn counter-clockwise), past the point of smoothest operation, until engine just begins to run unevenly. This mixture should be rich enough for best performance under load.

Hold throttle in idling position. Turn idle speed adjusting screw until fast idle is obtained (1750 RPM).

Test the engine under full load, If engine tends to stall or die out, it usually indicates that the mixture is slightly lean and it may be necessary to open the needle valve slightly to provide a richer mixture. This richer mixture may cause a slight unevenness in idling.

GENERAL INFORMATION

This machine uses a single-cylinder L-head, air-cooled engine.

MODEL SERIES - 100200

Bore	2-1/2"
Stroke	2-1/8"
Displacement	10.42 cu. in.
Horsepower	4 HP max. @ 3600 RPM
Torque (Ft. -Lbs.)	5.93 max. @ 3200 RPM

Major engine or lawn mowers repairs should not be attempted.

WINTER STORAGE

Engines to be stored over 30 days should be completely drained of fuel to prevent formation of gum deposits.

a. All fuel should be removed from fuel tank, run the engine until it stops from lack of fuel. The small amount of fuel that remains in the bottom of the tank should then be removed by absorbing it with a clean dry cloth.

b. While engine is still warm, drain oil from crankcase. Refill with fresh oil.

c. Remove spark plug, pour 1 ounce of SAE-30 oil into cylinder and crank slowly to distribute oil. Replace spark plug.

d. Clean dirt and chaff from cylinder, cylinder head fins and blower housing.

SEE YOUR AUTHORIZED TORO SERVICE DEALER

This book is intended as an operating and service guide for the average owner. We do not recommend that you attempt to make major engine repairs beyond the necessary adjustments and simple repairs required to keep your mower in good operating condition. For assistance in getting the most out of your mower, and for overhaul and major repair service, we recommend your TORO SERVICE DEALER who is fully equipped to help you.

FORM NO. 920

LITHO IN U.S.A.