

Operating/Service Instructions

SELF-PROPELLED ROTARY MOWER

Model No.
123-640

IMPORTANT

SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

TRAINING

1. Read the Operating and Service Instruction Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
2. Never allow children to operate a power mower.
3. Keep the area of operation clear of all persons, particularly small children, and pets.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Check the fuel before starting the engine. Do not fill the gasoline tank indoors, when the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine.
4. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine (motor).
5. Never attempt to make a wheel adjustment while the engine (motor) is running.
6. Mow only in daylight or in good artificial light.
7. Never operate the equipment in wet grass. Always be sure of your footing; keep a firm hold on the handle and walk, never run.
5. If the equipment should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
6. Stop the engine (motor) whenever you leave the equipment, before cleaning the mower housing, and when making any repairs or inspections.
7. When cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
8. Do not run the engine indoors.
9. Shut the engine (motor) off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging chute.
10. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
11. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
12. Never operate mower without proper guards, plates or other safety protective devices in place.
13. Keep washout ports and other mower-housing service openings closed when mowing.

OPERATION

1. Do not change the engine governor settings or overspeed the engine.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
3. Stop the blade(s) when crossing gravel drive, walks or roads.
4. After striking a foreign object, stop the engine (motor), remove the wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

MAINTENANCE AND STORAGE

1. Check the blade and the engine mounting bolts at frequent intervals for proper tightness.
2. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
3. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
4. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
5. Check the grass catcher bags frequently for wear or deterioration. Replace with new bags for safety protection.

ASSEMBLY INSTRUCTIONS

HANDLE ASSEMBLY FOR RECOIL UNITS

1. Remove the loose hardware from the assembly pack. You will need a screw driver and a 5/16" wrench, either a socket as shown in figure 1 or an open end wrench.
2. Assemble the lower handle to the handle brackets as shown in figure 2.
3. Secure the handle with cotter hairpins on both sides. See figure 2.
4. Place the handle panel over the lower handle and fasten with the handle panel screw using a 5/16" wrench. See figure 3.
5. Place the upper handle over the lower handle and line up the holes as shown in figure 4.
6. Insert the curved head bolt from the inside and tighten the knob by hand. See figure 4.
7. Place the throttle control in the handle panel and assemble it with the two throttle screws using a screw driver. See figure 5.
8. Use the cable clip to fasten the throttle control wire to the lower handle.

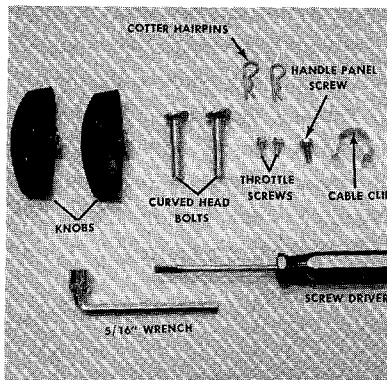


FIGURE 1. LOOSE HARDWARE AND TOOLS

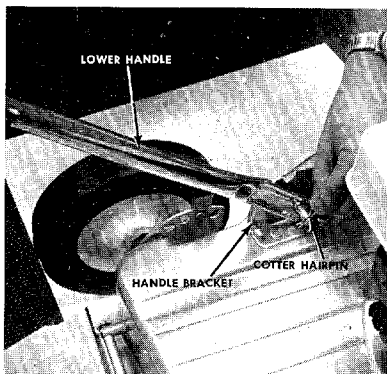


FIGURE 2. LOWER HANDLE ASSEMBLY

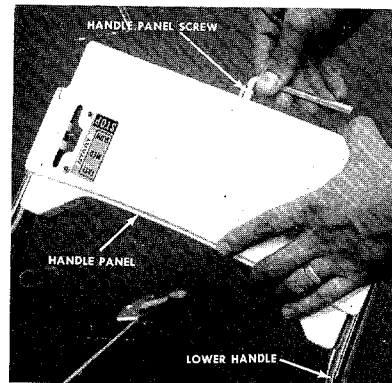


FIGURE 3. HANDLE PANEL ASSEMBLY

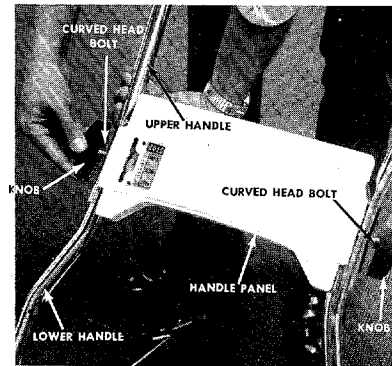


FIGURE 4. UPPER HANDLE ASSEMBLY

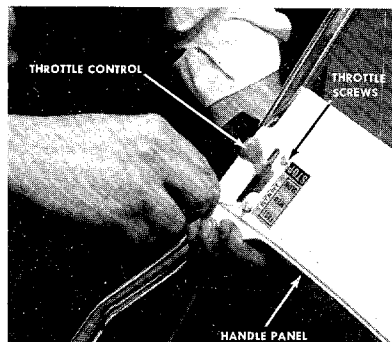


FIGURE 5. THROTTLE CONTROL ASSEMBLY

9. Place adjustment rod with ferrule through hole in lower right hand handle. (See figure 6.) NOTE: Ferrule and adjustment rod must be to the outside of handle as shown in figure 6.
10. Secure ferrule in position with hairpin cotter from screw pack. NOTE: The ferrule position is preset at the factory. (For adjustment instructions see Belt Adjustment on page 7.)

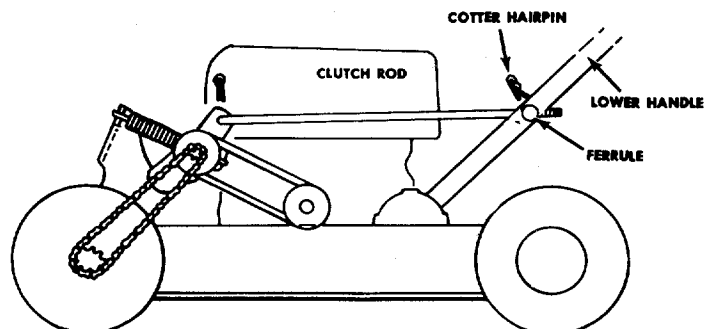


FIGURE 6.

This mower should be broken in following the procedure described in the break-in instructions. The added effort here will double the service life of the unit. Particular attention should be paid to the notes on alignment.

When operating this mower, unnecessary or excessive engaging of the drive pinions with the wheels should be avoided. This is achieved by minimizing the raising and lowering of the handle during the mowing operation. Failure to observe this operating rule can reduce the service life of the front tires and drive pinions substantially. When engaging the self-propelled mechanism, a slight forward push on the mower as the drive pinions and the gear tread tires mesh will add to smoother and quieter operation. In addition to a smoother operation, it will add substantially to the service life of both the tires and the drive pinions.

HANDLE ASSEMBLY PRECAUTIONS

Although the handle is of simple design, difficulty has been encountered in its assembly. Certain precautions concerning its assembly must be heeded. The handle must be assembled as shown in the diagram on page 2. Trouble arises when certain parts are put together improperly.

BREAK-IN INSTRUCTIONS

1. Before starting the engine, lubricate all the bronze bearings on the drive shaft. The same oil which is used for the engine may be used for this.
2. Check drive assembly alignment. When the handle is lifted the clutch rod is moved to the self-propelled position. The black nylon drive pinions should mesh simultaneously with the gear tread tires.

OPERATION

1. Service engine with gas and oil. See Engine Maintenance for complete instructions for care and maintenance of engine. **READ DIRECTIONS CAREFULLY.**
2. Lubricate bronze bearings on drive shaft.
3. Check drive assembly for correct alignment (See Break-in Instructions).
4. When ready to start engine, be sure handle is all the way back into free wheeling position. Start engine, after engine starts, move throttle control lever on handle to the desired engine speed.
5. When the handle is moved forward for self-propelled operation, the drive pinions engage with the gear tread tires and forward drive results.
6. Temporary free wheeling is achieved by depressing the handle and raising front wheels slightly off the ground. Self-propelled drive is resumed when handle is raised. Engine is stopped by placing control lever on handle into STOP position.

LUBRICATION

IMPORTANT: Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn mower.

Wheels—Lubricate periodically bearings on front and rear wheels with light engine oil for ease of operation.

Throttle—Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil SAE No. 10 or 20 for ease of operations.

Bronze Bearings—Periodically lubricate all bronze bearings with a few drops of light oil SAE No. 10 or 20 to minimize friction.

Protective Shield—The pivot points on the protective shield should be lubricated periodically with light oil to prevent any rust or binding.

Chute Deflector—The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding. Deflector must work freely.

Engine—See Engine Maintenance for lubrication instructions.

ADJUSTMENTS

CAUTION: Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

Chain Adjustment—

1. Loosen (do not remove) two hex head cap screws (See illustration below.)
2. Pull pivot plate forward.
3. Tighten cap screws and check chain tension. Repeat adjustment if necessary.

CUTTING HEIGHT—An adjusting plate and thumb lever at each wheel position provides cutting height adjustment. Each adjusting plate has five holes. Height of cut will be changed when the thumb lever is moved from one hole to another. Simply depress thumb lever towards wheel and move wheel and lever assembly to desired position. All wheels must be positioned in relative height of cut positions.

Throttle—If adjustment becomes necessary, the throttle control wire assembly can be reset as follows:

1. Loosen, but do not remove, screw securing throttle control wire assembly at engine.
2. Move throttle control lever on handle to FAST position.
3. Move lever, to which control wire is fastened at engine, to full open position and retighten screw to secure throttle control wire assembly.

CLUTCH ROD ADJUSTMENT

If adjustment becomes necessary, or if the cutting height is changed from the lowest setting to the highest setting the clutch rod must be reset as follows:

1. Remove the cotter pin. See figure A.
2. Pull the clutch rod and ferrule out of the lower handle. See figure B.
3. Thread the ferrule on or off the rod one turn and check for alignment.
4. Place ferrule back in position and secure with cotter pin. If the engagement is still not correct, repeat the above steps.
5. The drive pinion should be about $\frac{1}{8}$ " from the drive wheels. See figure C.

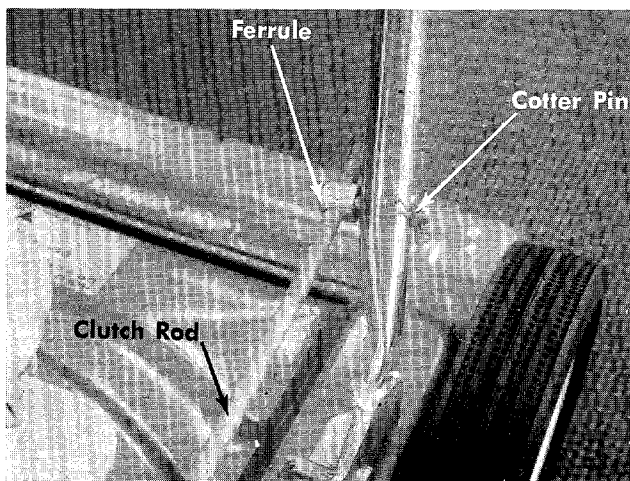


FIGURE A

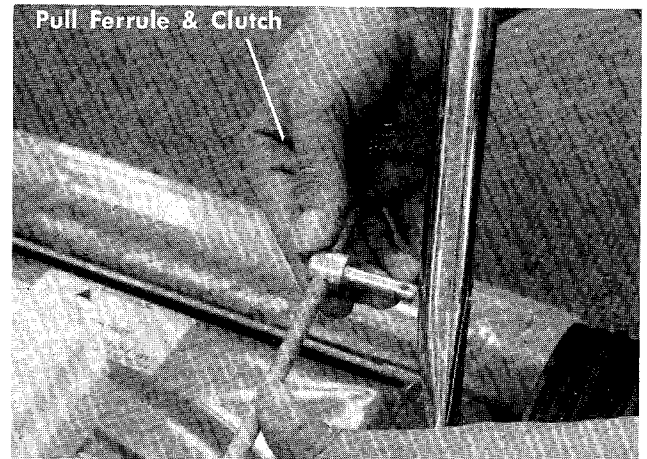


FIGURE B.

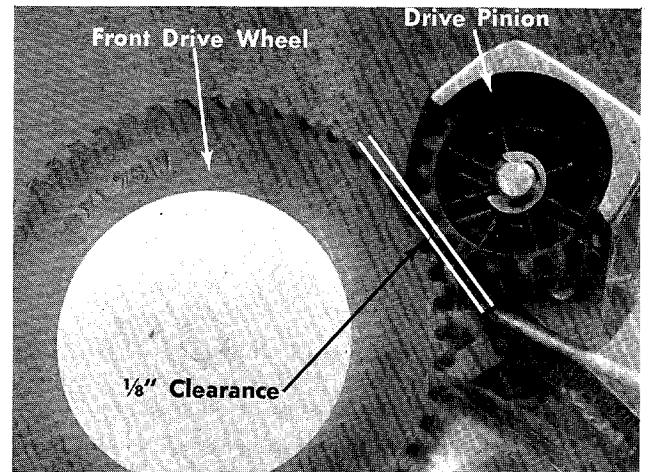


FIGURE C.

MAINTENANCE

Cutting Blade—The blade may easily be removed for grinding or replacement as follows:

1. Remove bolt and lockwasher holding blade and blade adapter to engine crankshaft.
2. Remove blade and blade adapter from engine crankshaft.
3. Remove two bolts, lockwashers and nuts holding blade to blade adapter (if necessary).

When sharpening blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

Upon reassembly, make certain all parts are assembled properly and tightened securely.

Deck—The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite corrosion and cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its left side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.

CAUTION: Do not direct the stream of water at a hot engine as damage to the engine may result.

Storage—The following steps should be taken to prepare lawn mower for storage.

1. Clean and lubricate mower thoroughly as described in the preceding instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.

4. Place blocks under deck to raise tires clear of floor.

5. Store mower in a dry, clean area.

USING YOUR ROTARY MOWER

For best results do not cut wet grass because it tends to stick to the underside of the mower thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce engine speed and walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing.

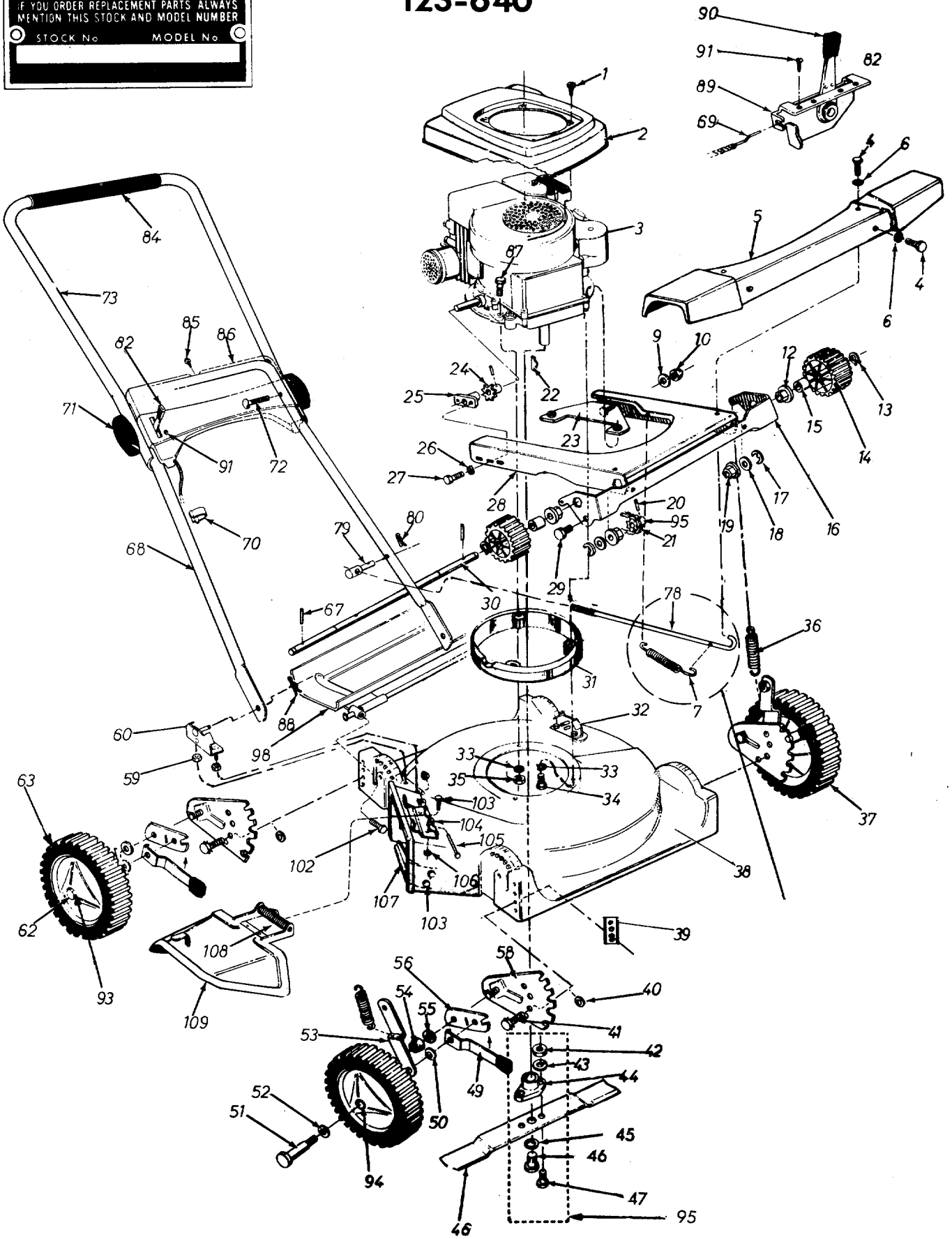
The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion then recut at right angles to first direction.

Lawn should be cut in the fall as long as there is growth.

WRITE TO US ABOUT THIS ARTICLE OR
 IF YOU ORDER REPLACEMENT PARTS ALWAYS
 MENTION THIS STOCK AND MODEL NUMBER

STOCK No. _____ MODEL No. _____

123-640



PARTS LIST FOR MOWER MODEL NO. 123-640


REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	710-407		Slotted Hex Washer Hd. Ext. Scr. #32 x 1/2" Lg.*		48	742-124		Blade 21"	
2	10612		Shroud		49	10530		Spring Lever Ass'y w/ Knob	
3	—		Engine		50	736-105		Belleville Washer	
4	710-289		Hex Hd. Cap Scr. 1/4-20 x .50" Lg.*		51	711-144		Axle Bolt	
5	10913—463		Drive Cover		52	736-160		Flat Washer	
6	736-222		External Lockwasher 1/4" Scr.*		53	10918		Link Assembly	
7	732-433		Tension Spring		54	712-116		Elastic Locknut 3/9-24 Thd.*	
9	736-300		Flat Washer		55	736-300		Flat Washer 3/8 Scr.	
10	712-116		Elastic Locknut 3/8-24 Thd.*		56	10375		Wheel Pivot Bar	
12	748-227		Hex Bearing		58	10376		Index Plate	
13	716-106		E-Ring 5/8 Shaft		59	712-107		Hex Center Locknut 1/4-20 Thd.*	
14	10914		Drive Pinion		60	8388		Handle Mounting Brkt.—R.H.	
15	2265		Sleeve		62	711-102		Axle Bolt	
16	10372		Drive Support		63	9383-513		Wheel—Rear	
17	716-106		E-Ring 5/8 Shaft		67	715-110		Roll Pin 3/16 Dia. x 1 1/4" Lg.*	
18	736-860		Flat Washer		68	11616		Handle—Lower	
19	748-227		Hex Bearing		70	746-145		Cable Clip	
20	715-247		Roll Pin 3/16 Dia. x 1" Lg.*		71	7470		Knob	
21	713-135		Chain w/Master Link #48 x 26" Lg.		72	710-106		Hex Hd. Cap Scr. 1/4-20 x 1 1/2" Lg.*	
22	714-365		Hi-Pro-Key		73	10011		Handle—Upper	
23	10381		Engine Bracket Assembly		78	11819		Clutch Rod	N
24	10377		Sprocket Assembly		79	711-570		Engagement Ferrule	
25	748-183		Bearing Support		80	714-101		Internal Cotter Pin 1/2" Dia.	
26	736-222		External Lockwasher 1/4" Scr.*		82	11611		Throttle Control	
27	710-441		Hex Hd. Cap Scr. 1/4-28 x 1/2" Lg.*		84	718-144		Grip	
28	10370		Pivot Plate		85	710-407		Slotted Hex Washer Hd. Ext. Scr. No. 8—32 x 1/2" Lg.	
29	711-110		Shoulder Bolt—Special		86	11606		Handle Panel	
30	711-435		Shaft		87	710-176		Hex Hd. Cap Scr. 5/16-18 x 2 3/4" Lg.	
31	11207—463		Spacer Assembly		88	714-507		Cotter Pin*	
32	8389		Handle Mounting Brkt.—L.H.		89	11603		Throttle Control Bracket	
33	736-119		Lockwasher 5/16 Scr.*		90	7470		Knob—Throttle Control	
34	710-176		Hex Hd. Cap Scr. 5/16-18 x 2 3/4" Lg.		91	710-407		Slotted Hex Washer Hd. Ext. Scr. #8-32 x 1/2"	
35	712-123		Hex Nut 5/16-24 Thd.*		93	748-125		Sintered Bearing	
36	732-181		Extension Spring		94	748-125		Sintered Bearing	
37	9392-503		Wheel—Front		95	10378		Sprocket Assembly	
38	11673—463		Deck Assembly		96	10769		Blade Adapter Kit	
39	7002		Wheel Pad (4 Req'd.)		98	11185		Protective Shield Ass'y. Comp.	N
40	736-300		Flat Washer 3/8 Screw*		102	710-513		Hex Hd. Cap Scr. 1/4-28 x .62" Lg. (Nylock)	
41	710-322		Hex Hd. Cap Scr. 3/8-16 x 1" Lg.*		103	710-289		Hex Hd. Cap Scr. 1/4-20 x .75" Lg.*	
42	712-123		Hex Nut 5/16-24 Thd.*		104	11130		Adapter Plate	
43	736-119		Spring Lockwasher 5/16 Scr.*		105	711-555		Pivot Pin	
44	10769		Blade Adapter Kit		106	712-107		Hex Center Locknut 1/4-20 Thd.	
45	736-217		Spring Lockwasher 3/8 Scr. H.D.*		107	11156		Internal Bar	
46	710-459		Hex Hd. Cap Scr. 3/8-24 x 1 1/2" Lg. H.T.		108	732-253		Torsion Spring	
47	710-117		Hex Hd. Cap Scr. 5/16-24 x 1" Lg. H.T.		109	11182		Chute Deflector Ass'y. Comp.	

*For faster service obtain standard nuts and bolts locally. If these items cannot be obtained locally, order by part number and size as shown on the parts list.

(463—Top Flite Red) When ordering parts if color or finish is important, use the appropriate color code shown at left (e.g. Top Flite Red Finish—11673 (463).)

The engine is not under warranty by the mower manufacturer... If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."

**Find It Fast
In The
"Yellow Pages"**



IMPORTANT

After striking a foreign object, stop the engine (motor), remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

GRASS CATCHER Model No. 193-006 is available as optional equipment for the mower shown in this manual.

WARNING:

1. The mower should not be operated without the entire grass catcher or chute deflector in place.
2. The mower should not be operated without the protective shield on the rear of the deck in place.

NOTE:

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations. For replacement bags, use only factory authorized replacement bag NO. 764-119.

WARRANTY

For one year from date of purchase, MTD Products Inc will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. **UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.**

PARTS INFORMATION

DEFECTIVE OR MISSING PARTS must be reported to the factory immediately. Such claims must include your model number and date of purchase.

MOWER, TILLER, SNOW THROWER, TRACTOR, TRAIL BIKE AND MUD BUG PARTS

Mower, tiller, snow thrower, tractor, trail bike and mud bug parts are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts numbers, de-

scription of parts and the quantity of each part required.

BRIGGS & STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing *Engines — Gasoline*, Briggs & Stratton or Tecumseh Lauson — Power Products.

A 1 Engine & Mower Co.
327 East 9th Street
Salt Lake City, Utah 84102

American Electric Ignition Co.
124 N. W. 8th Street
Oklahoma City, Oklahoma 73102

Auto Electric & Carburetor Co.
2625 4th Avenue, S.
P. O. Box 1948
Birmingham, Alabama 35233

Automotive Equipment Service Co.
3117 Holmes Street
Kansas City, Missouri 64109

Bailey's Rebuild Inc.
1325 E. Madison Street
Seattle, Washington 98102

Brown Equipment Distributor Inc.
110 Beech Street
Corydon, Indiana 47112

Bullard Supply
2409 Commerce Street
Houston, Texas 77003

Catto & Putty, Inc.
P. O. Box 2408
510 Soledad Street
San Antonio, Texas 78205

Center Supply Company
6867 New Hampshire Avenue
Takoma Park, Maryland 20012

Charles B. Wright Co.
309 4th Avenue, South
Nashville, Tennessee 37201

W. B. Clements
400 Salem Avenue
Roanoke, Virginia 24016

Morton B. Collins Co.
300 Birnie Avenue
Springfield, Massachusetts 01107

Dixie Sales Company
P. O. Box 1408
327 Battleground Avenue
Greensboro, North Carolina 27402

East Point Cycle & Key Shop
1617 Whiteway
East Point, Georgia 30044

Gamble Distributors
West End Avenue
Carthage, New York 13619

Garden Equipment Co., Inc.
6600 Cherry Avenue
Long Beach, California 90805

Henzler, Inc.
2015 Lemay Ferry Road
St. Louis, Missouri 63125

Frank E. Ives & Son
1101 Lincoln Avenue
Prospect Park, Pennsylvania 19076

J. W. Jewett Co.
981 Folsom Street
San Francisco, California 94107

Kenton Supply
8216 North Denver Avenue
Portland, Oregon 97217

Kimber's Inc.
115 W. Geddes St.
Syracuse, New York 13204

The Lawnmower Shop
1340 El Camino Real
San Carlos, California 94070

Marr Brothers
423 E. Jefferson
Dallas, Texas 75203

Mathews Auto Electric Co.
420 East 2nd Street
Tulsa Oklahoma 74120

McClure Lawn & Garden Supply
1114 Lexington Avenue
Mansfield, Ohio 44907

Memphis Cycle & Supply Co.
421 Monroe Avenue
Memphis Tennessee 38103

Moz-All of Florida, Inc.
365 Greco Avenue
Coral Gables, Florida 33146

National Central, Div. of Joe Sterling, Inc.
Drawer "D" 687 Seville Rd.
Wadsworth, Ohio 44281

Power Equipment Distributor
36463 So. Gratiot Avenue
Mt. Clemons, Michigan 48043

Parts & Sales Inc.
2101 Industrial Pkwy.
Elkhart, Indiana 46514

Parts & Sales Inc.
335 West St. Charles Road
Villa Park, Illinois 60181

Power Lawn & Garden Equip. Co.
2551-2571 J. F. Kennedy Road
Dubuque, Iowa 52001

Raub Supply Company,
James & Mulberry Sts.
Lancaster, Pennsylvania 17604

Radco Distributors
2403 Market Street
P. O. Box 3216
Jacksonville, Florida 32206

Richmond Battery & Ignition
P. O. Box 25369 — 957 Myers St.
Richmond, Virginia 23260

Smith Hardware Company
515 N. George Street
Goldsboro, North Carolina 27530

South Denver Lawn Equip. Co.
527 West Evans
Denver, Colorado 80223

Suhren Engine
8330 Earhart Blvd.
New Orleans, Louisiana 70118

Sutton's Lawn Mower Shop
Route 4, Box 343
North Little Rock, Arkansas 72117

Warner Equipment
7520 Lyndale Avenue, So.
Minneapolis, Minnesota 55423

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in material and workmanship, defects which are not detected at the time of manufacture.

Our aim is to build into our product quality and reliability. Considerable emphasis is placed on quality control in order to assure our customer of satisfactory product performance. To achieve this goal, it is necessary to gain the cooperation of all concerned, MTD, our sales force and our customers.

MTD's responsibility is to build a quality product and to back up that product. MTD must build this quality product at a competitive price. This cannot be achieved without production in quantity. Quantity production is mass production. In mass production it is always possible for undetected defects to be present when the product reaches the customer. Our warranty is extended to assure the customer that any such defects will be corrected.

Use and maintenance are the responsibility of the customer. MTD cannot assume responsibility for conditions over which it has no control. MTD's responsibility does not cover misuse, excessive use, accident neglect, improper maintenance or alterations by unauthorized persons. Satisfactory product performance can only result when a manufacturer provides and backs up a quality product and the customer follows through with proper use and proper maintenance of that product. When both the manufacturer and the customer recognizes and assumes his responsibility, satisfactory product performance and customer satisfaction are assured.