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# Owner's Operating Service Instruction Manual

Model Nos. 116-110A 116-120A

- ASSEMBLY
- OPERATION
- REPAIR PARTS

20 & 22" ROTARY MOWERS

# IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

# SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

### **TRAINING**

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

### **PREPARATION**

- Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
- Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
- 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.
- 5. Never attempt to make a wheel adjustment while the engine 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.

### **OPERATION**

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

- 5. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the engine 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 off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging chute.
- Mow across the face of slopes, never up-anddown. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
- 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.

### **MAINTENANCE AND STORAGE**

- 1. Check the blade and engine mounting bolts at frequent intervals for proper tightness.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 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.
- Check the grass catcher bag frequently for wear or deterioration. Replace with new bag for safety protection.

### **ASSEMBLY**

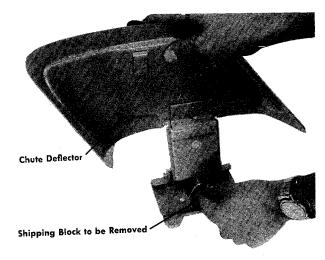
### **Handle Assembly**

- Assemble upper handle to lower handle using four each screws and locknuts provided in parts bag.
- Assemble complete handle assembly to mower so that throttle control mounting hole in upper handle will be on right side. Holes at bottom of lower handle are to be fitted over studs located in front of each rear wheel mounting position.
- Position throttle control assembly on right hand side of upper handle so that holes in control assembly and handle are in line. Secure in place with screw and locknut found in parts bag. Secure throttle wire to lower right handle tube with clips in parts bag.
- 4. Place the plastic control cover over the throttle control and secure with two self-tapping screws.
- Slip hand grips on the upper end of each handle. They will slip on more easily if you first soak them in warm soapy water.
- 6. Check blade bolts for correct tightness.



### CAUTION

Please note that the chute deflector on your mower is in an upright position. It is held in that position by a shipping block. This block is used for shipping purposes only. It must be removed and discarded before your mower is put into operation.



### **OPERATION**



### NOTE

For shipping purposes your mower is set with the wheels in a low cutting height position. For best results raise the cutting position until it is determined which height is best for your lawn. See adjustments.

- Service engine with gas and oil. See engine manual packed with lawn mower for complete instructions for care and maintenance of engine. READ DIRECTIONS CAREFULLY.
- 2. When ready to start engine, place throttle control lever, on handle, in "START" position and start engine in accordance with instructions in Engine Manual. After engine starts, move throttle control lever, on handle, to desired engine speed. The engine is stopped by placing control lever on handle in the "STOP" position.
- Be sure that lawn is clear of stones, sticks, wire or other objects which could damage lawn mower or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.

### **ADJUSTMENTS**



### CAUTION

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

### **EASY 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:

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

### LUBRICATION



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

**Wheels** — Wheel bearings are of lifetime Fortiflex. They require no lubrication.

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

# NOTE: FILL AND DRAIN OIL FROM OIL FILL PLUG.



Always disconnect spark plug cable during repairs, refueling or changing oil. Engine oil may be drained through oil filler opening by tilting the mower on its side. Change oil after first 5 hours of operation while engine is warm. Thereafter, change oil every 25 hours of operation while engine is warm.

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

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 operation.

Engine - Follow engine manual for lubrication instructions.

### MAINTENANCE

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

- 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.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

Deck — The underside of the 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 rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

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



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 underside of the mower thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce 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.

### HANDLE STORAGE

The handle may be put in a storage position by pressing inward on the lower handle and moving it forward. To put the handle back into the operating position simply pull the handle back. It will lock automatically.



The manufacturer DOES NOT recommend the use of any accessory on this rotary mower other than those manufactured by MTD products Inc.

GRASS CATCHER Model No. 196-003A is available as optional equipment for the mowers shown in this manual.



- 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.



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. 764-0119.

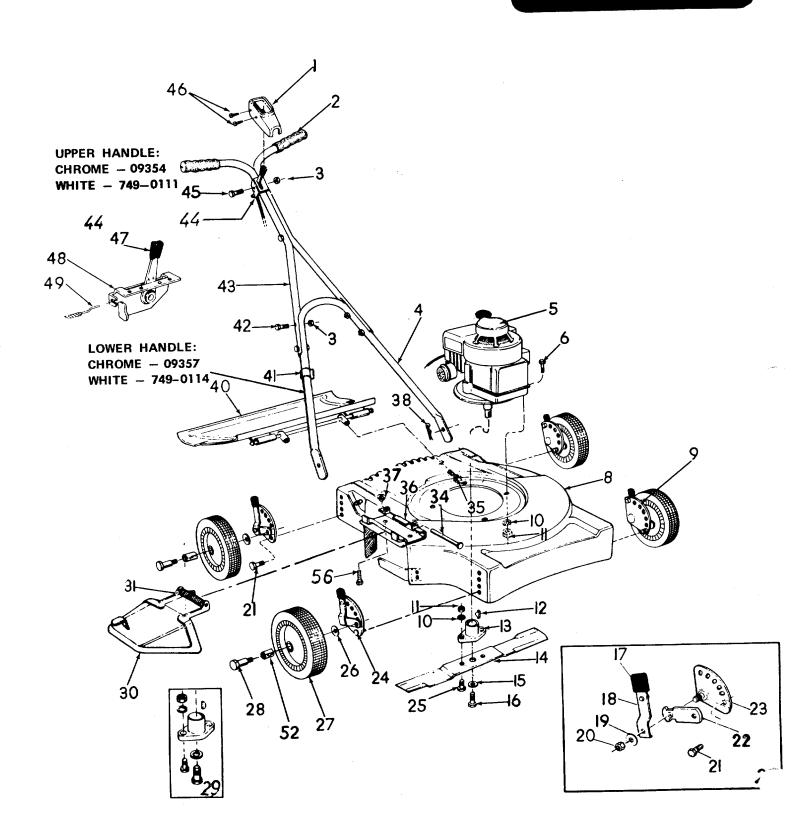


### **IMPORTANT**

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

116-110A 116-120A

IF YOU WRITE TO US ABOUT THIS ARTICLE OR IF YOU ORDER REPLACEMENT PARTS AL-WAYS MENTION THIS MODEL & SERIAL NO M O D E L



### PARTS LIST FOR MOWER MODELS 116-110A AND 116-120A

	FARTS LIST FOR MOWER MODELS 116-110A AND 116-120A				
Ref. No.	Part No. Color 116-110A Code	Part No. Color 116-120A Code	Description	New Part	
1	11608	11608	Throttle Control—Cover		
2	720-0157	720-0157	Grip		
3	712-0107	712-0107	Hex Center Locknut 1/4-20 Thd.		
4	09356	09357	Lower Handle		
5			Engine		
6	710-0158	710-0158	Hex Hd. Cap Scr. 5/16-24 x 11/4" Lg.*		
8	11409 —463	11411 —463	Deck Assembly		
9	10950	10950	Height Adjuster Assembly—Comp. L.H.		
10	736-0119	736-0119	Spring Lockwasher 5/16" Scr.*		
11	712-0123	721-0123	Hex Nut 5/16-24 Thd.*		
12	714-0365	714-0365	#6 Hi-Pro Key 5/32 x 5/8" Dia.		
13	10769	10769	Blade Adapter Kit		
14	742-0123	742-0125	Blade		
15	736-0217	736-0217	Spring Lockwasher 3/8" Scr.—H.D.		
16	710-0459	710-0459	Hex Hd. Cap Scr. 3/8-24 x 1½" Lg.—H.T.		
17	07520	07520	Knob—Height Adjuster		
18	10949	10949	Spring Lever Ass'y, with Knob		
19	736-0219	736-0219	Belleville Washer .400 I.D. x 1.130 O.D.		
20	712-0116	712-0116	Elastic Stopnut		
21	710-0209	710-0209	Sems Hex Hd. Cap Scr. 3/8-16 x 5/8" Lg.		
22	10937	10937	Pivot Bar		
23	10934	10934	Index Plate Assembly—R.H.		
	10935	10935	Index Plate Assembly—L.H.		
24	10951	10951	Height Adjuster Ass'y.—Comp. R.H.		
25	710-0117	710-0117	Hex Hd. Cap Scr. 5/16-24 x 1" Lg.—H.T.		
26	736-0105	736-0105	Belleville Washer 3/8" Scr.		
27	09392-502	09392-501	Wheel Ass'y.—Comp.		
28	738-0102	738-0102	Axle Bolt		
29	10769	10769	Blade Adapter Kit		
30	11679 —463	11679 —463	Chute Deflector Assembly		
31	732-0253	732-0253	Torsion Spring		
34	711-0555	711-0555	Pivot Pin		
35	710-0567	710-0567	Hex Hd. Cap,Scr. 1/4-28 x .62" Lg. Nylock		
36	11130 —463	11130 —463	Adapter Plate		
37	726-0106	726-0106	Push-on Flange Palnut		
38	714-0104 hts3∽	714-0104	Hair Pin cotter		
40	<del>11196</del> —463	11197 —463	Rear Protective Shield Ass'y.—Comp.		
41	746-0128	746-0128	Cable Clip		
42	710-0606	710-0606	Hex Hd. Cap Scr. ¼-20 x 1.75" Lg.*		
43	09354	09354	Upper Handle		
44	11597	11597	Throttle Control Assembly—Complete		
45	710-0136	710-0136	Hex Hd. Cap Scr. 1/4-20 x 1.50" Lg.*		
46	710-0227	710-0227	Hex Wash. Hd. AB-Tapp Scr. #8 x .38		
47	07470	07470	Throttle Control—Knob		
48	11598	11598	Throttle Control—Bracket Assembly		
49	746-0229	746-0229	Conduit and Wire		
52	07006	07006	Fortiflex Bearing		
56	710-0289	710-0289	Hex Scr. 1/4-20 x .50" Lg.*		

<sup>\*</sup>For faster service, obtain standard nut, bolts and washers 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 above (e.g. Top Flite Red-11409 (463).)

NOTE: This instruction manual covers various models and all accessories shown do not necessarily apply to your model mower. NOTE: 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 Check the "Yellow Pages" of Yellow Pages" of Yellow Pages" your telephone book under "Engines—Gasoline."

## PARTS INFORMATION

### POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts numbers, description of parts and the quantity of each part required.

BIRMINGHAM
ALABAMA BIRMINGHAM
Auto Electric & Carburetor Co2625 4th Ave. S 35233
ARKANSAS NORTH LITTLE ROCK
Sutton's Lawn Mower Shop Rt. 4, Box 368 72117
FORT SMITH
Mity Mite Motors, Inc 2515 Towson Ave 72901
CALIFORNIA SAN BERNARDINO
Lawn Mower Supply Co 25608 E. Baseline 92410
SAN FRANCISCO
SAN FRANCISCO
J.W. Jewett Co 981 Folsom St 94107
SACRAMENTO
Luttig & Severson 2030 28th St 95818
COLORADO DENVER
South Denver Lawn Equip 527 West Evans 80223
CONNECTICUT SHEFIELD
The Jones & Ramsey Co 850 Thompsonville Rd. 06078
FLORIDA JACKSONVILLE Radco Distributors2403 Market St 32206
Radco Distributors
CORAL GABLES
Moz-All of Florida, Inc 365 Greco Ave 33146
GEORGIA EAST POINT
East Point Cycle & Key 2834 Church St 30344
II I INOIS LYONS
Keen Edge Co
INDIANA ELKHART
Parts & Sales Inc
CORYDON
CURTION 110 Beech St. 47112
Brown Equip. Dist., Inc 110 Beech St47112
IOWA DUBUQUE
Power Lawn & Garden Equip 2551 J.F. Kennedy 52001
KANSAS WICHITA
mixon, inc
LOUISIANA NEW ORLEANS
Suhren Engine Co
MARYLAND TAKOMA PARK
Center Supply Co
MASSACHUSETTS SPRINGFIELD
Morton B. Collins Co 300 Birnie Ave 01107
Power Equipment Dist 36463 South Gratiot 48043
Power Equipment Dist 30403 300111 Granot 40040
LANSING
Lorenz Service Co 2500 S. Pennsylvania 48900
MINNESOTA MINNETONKA
Hance Distributing Inc 11212 Wayzata Blvd55343
MICCICCIPPI RILOXI
Biloxi Sales & Service; Inc 506 Caillavet St 39533
MICCOLIDI KANSAS CITY
Automotive Equip. Service 3117 Holmes St 64109
ST. LOUIS
Henzler, Inc
NEBRASKA OMAHA R.P.W., Inc

# BRIGGS & STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts a 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

NEW YORK	CARTHAGE
Gamble Dist., Inc.	SYRACUSE SYRACUSE
Kimbaria Ina	
	ROCHESTER
Henry W. O'Neil & /	Associates410 N. Goodman St 14609
NORTH CAROLINA	iny
	GOLDSBORO
OHIO	WADSWORTH687 Seville Rd 44281
Marional Commun.	CI EVELAND
Bleckrie, Inc	CARROL 7900 Lorgin Ave 44102
Stebe's Mid-State A	Mower Supply Box 366 43112
	WILLARD Tire Outlet Route 224 44890
Sunshine Wholesali	MANSFIELD
McClure Lawn & Go	arden Supply1114 Lexington Ave 44903
OKLAHOMA	MUSKOGEE c
	ADA
Ada Auto Supply .	301 E. 12th St 74820
OREGON	PORTLAND
DENNSYL VANIA	IANCASTER
Raub Supply Co	James & Mulberry Sts 1760
54	PITTSBURGH 11125 Frankstown Rd., 152
TENNESSEE	KNOXVILLE
Master Repair Ser	vice 2423 Broadway, N.E37917
	MEMPHIS
Memphis Cycle & S	Supply Co 421 Monroe Ave38103
	Service, Inc.: 1922 Lynnbrook 38117
TEXAS	
	HOUSTON
Bullard Supply Co	SAN ANTONIO SAN ANTONIO
Cotto & Puthy Inc	c P.O. Box 240878206
	FORT WORTH
Woodson Sales Co	SALT LAKE CITY
UTAH A-1 Engine & Mov	ver Co 437 E. 9th St84111
VEDMONT	RURLINGTON
	e Co 44 Lakeside Ave05401 RICHMOND
VIRGINIA RBI Corp	
1	,
WASHINGTON	CEATTI E
Dailanta Dahmild	SEATTLE Inc. 1325 F. Madison St98102
Bailey's Rebuild, WEST VIRGINIA Young's, Inc	SEATTLE Inc 1325 E. Madison St98102 CHARLESTON 
Bailey's Rebuild, WEST VIRGINIA Young's, Inc	CEATTI E

### WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture, It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

# CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

- 1. Replacement of Missing Parts on new equipment.
- 2. Replacement of Defective Parts within the warranty period.
- 3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

- 1. Model Number of unit involved.
- 2. Date unit was purchased or first put into service.
- 3. Date of failure.
- 4. Nature of failure.