

Owner's Operating Service Instruction Manual

10¢

Model Nos.

116-040A

116-050A

- ASSEMBLY
- OPERATION
- REPAIR PARTS

20 & 22" ROTARY MOWERS

MTD PRODUCTS INC • 5389 WEST 130th STREET • P. O. BOX 2741 CLEVELAND OHIO 44111

PRINTED IN U.S.A.

FORM NO. 770-6061

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

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.
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

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, 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.
6. 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.
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.

MAINTENANCE AND STORAGE

1. Check the blade and 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 bag frequently for wear or deterioration. Replace with new bag for safety protection.

ASSEMBLY

Your new mower is shipped preassembled with the exception of the handle.

1. Remove lawn mower and all parts from the carton. Make certain that all loose parts and literature have been removed before the carton is discarded.
2. Extend throttle control assembly which is attached to rear of mower and place on the floor. **CAUTION:** Do not bend or kink control wire.
3. a. Snap lower handle into position on two studs which extend from either side on the rear of the deck in front of the rear wheels.



NOTE

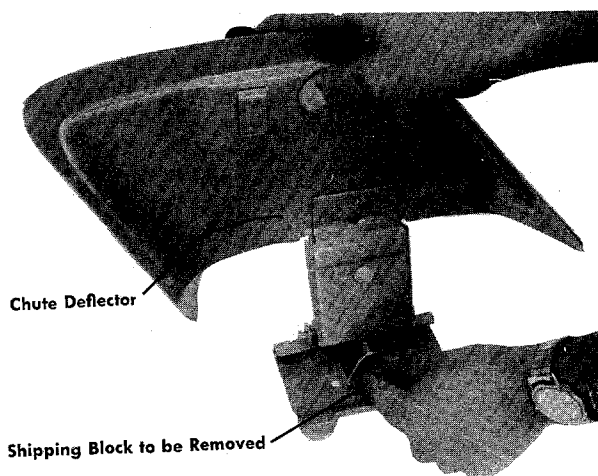
It may be necessary to bend the lower handle in. This will insure a tight fit when assembled over weld studs on your unit.

- b. Assemble the two upper handle parts with cap screws and locknuts provided in parts bag. The yellow cap screw should be used to attach throttle control assembly to upper handle. Do not tighten nuts.
 - c. Attach upper handle assembly to lower handle with cap screws and locknuts. Tighten all nuts.
 - d. Secure control wire to lower handle with cable clips.
4. Check ALL nuts and bolts for correct tightness.
 5. 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.



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.

1. Service engine with gas and oil. See Engine Manual packed with lawn mower for complete instructions for the 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.
3. 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 (OPTIONAL)

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.

STANDARD CUTTING HEIGHT

Adjustment may be made by removing and moving wheel studs to desired position. Cutting heights will be raised as wheel studs are moved to a lower hole and lowered as wheel studs are moved to a higher hole in the deck. All wheel studs must be mounted in a relative position to the deck.

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.

LUBRICATION



IMPORTANT

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.

Optional Ball Bearing Wheels — Wheel bearings are ball bearings and require lubrication at least once a season with a light oil.

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.

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.



CHANGE OIL (Oil Sump)

Change oil after 5 hours of operation while engine is warm. Thereafter, change oil every 25 hours of operation while engine is warm.

MAINTENANCE

CUTTING BLADE

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

1. Remove bolt and lock washer holding blade and blade adapter to engine crankshaft.
2. Remove blade and blade adapter from engine crankshaft.
3. Remove two bolts, lock washers 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.



NOTE

Periodically check ALL nuts and bolts for correct tightness to insure safe operation of your unit.

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 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.



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 the 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 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.

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.

NOTE

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.



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. 764-0119.

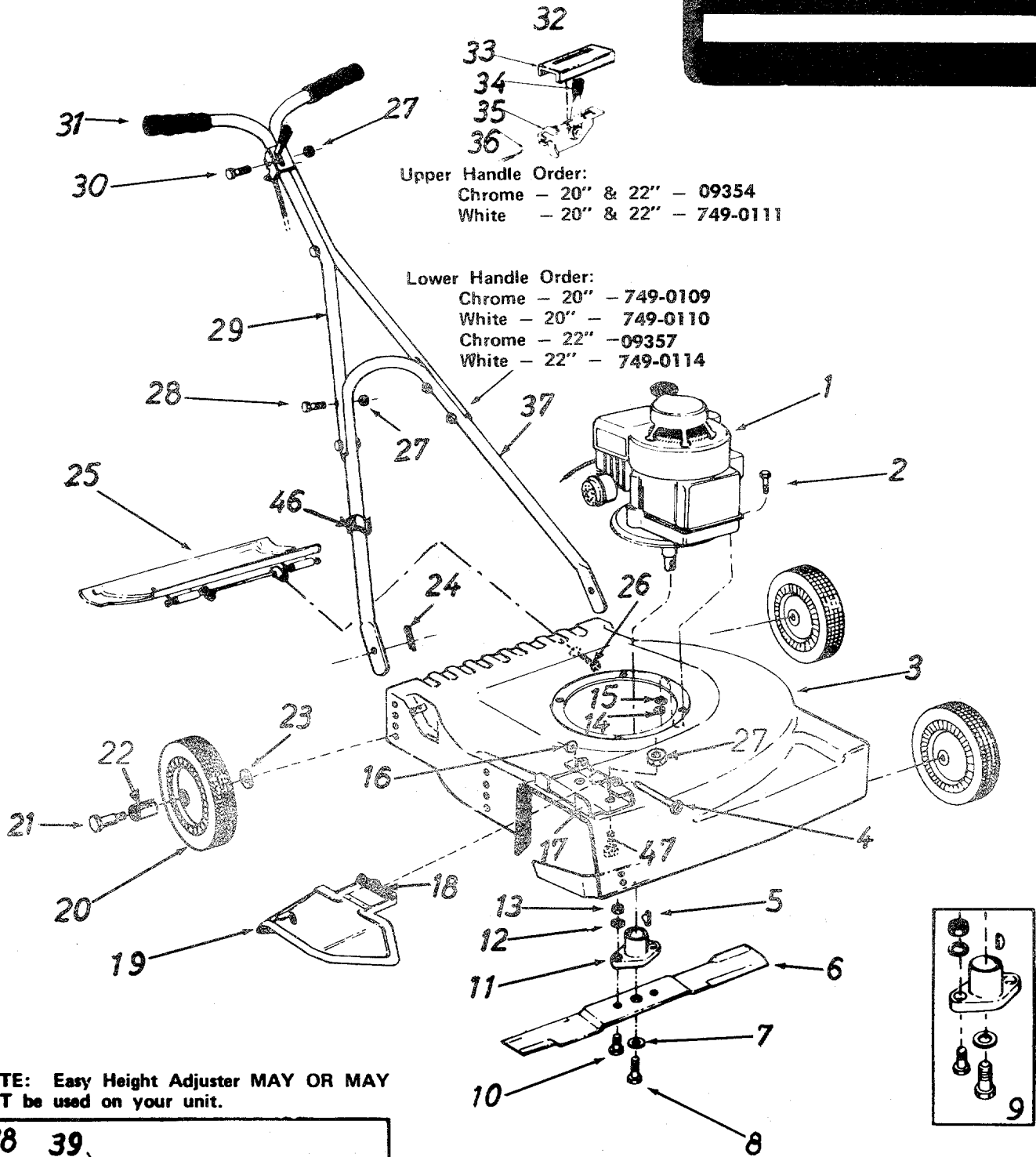


IMPORTANT

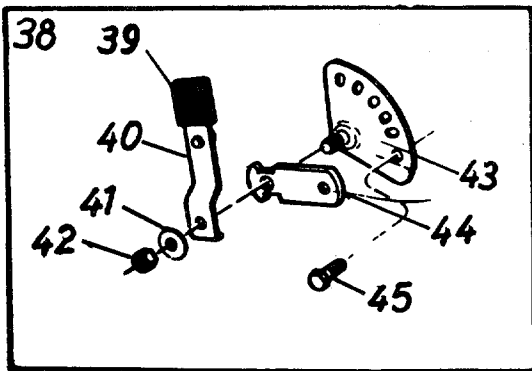
After striking a foreign object, stop the engine, remove wire from spark plug. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

116-040A 116-050A

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



NOTE: Easy Height Adjuster MAY OR MAY NOT be used on your unit.



PARTS LIST FOR MODELS 116-040A AND 116-050A

Ref. No.	Part No.	Color Code	Description	New Part
1			Engine	
2	710-0158		Hex Hd. Cap Scr. 5/16-24 x 1 1/4" Lg. *	
3	11419	—463	Deck Assembly—Complete (116-040A)	
	11420	—463	Deck Assembly—Complete (116-050A)	
4	711-0555		Pivot Pin	
5	714-0365		#6 Hi-Pro Key 5/32 x 5/8" Dia.	
6	742-0123		Blade 20 inch (116-040A)	
	742-0125		Blade 22 inch (116-050A)	
7	736-0217		Spring Lockwasher 3/8" Scr. Heavy Duty	
8	710-0459		Hex Hd. Cap Scr. 3/8-24 x 1 1/2" Lg. * Heat Treated	
9	10769		Blade Adapter Kit	
10	710-0117		Hex Hd. Cap Scr. 5/16-24 x 1" Lg. Heat Treated	
11	10769		Blade Adapter Kit	
12	736-0119		Spring Lockwasher 5/16" Scr. *	
13	712-0123		Hex Nut 5/16-24 Thd. *	
14	712-0123		Hex Nut 5/16-24 Thd. *	
15	736-0119		Spring Lockwasher 5/16" Scr. *	
16	726-0106		Push-on Flange Nut	
17	11130	—463	Adapter Plate	
18	723-0253		Torsion Spring	
19	11680	—463	Chute Deflector Assembly	
20	09392-504		Wheel Assembly—Complete (116-040A)	
	09392-505		Wheel Assembly—Complete (116-050A)	
21	738-0213		Axle Bolt	
	738-0102		Axle Bolt (Use if your unit has Easy Height Adjusters)†	
22	07006		Fortiflex Bearing	
23	736-0105		Belleville Washer	
24	714-0104		Hair Pin Cotter*	
25	11191	—463	Protective Shield Assembly—Comp. (116-040A)	
	11197	—463	Protective Shield Assembly—Comp. (116-050A)	
26	710-0567		Hex Hd. Cap Scr. 1/4-28 x .62" Lg. *	
27	712-0107		Hex Center Locknut 1/4-20 Thd.	
28	710-0606		Hex Hd. Scr. 1/4-20 x 1.50" Lg. *	
29	749-0111		Upper Handle (2-Required)	
30	710-0136		Hex Hd. Cap Scr. 1/4-20 x 1.75" Lg. *	
31	720-0157		Grip	
32	11609		Throttle Control Assembly—Complete	
33	731-0344		Throttle Control—Cover	
34	07470		Throttle Control—Knob	
35	11598		Throttle Control—Assembly	
36	746-0229		Conduit and Wire	
37	749-0110		Lower Handle (116-040A)	
	749-0114		Lower Handle (116-050A)	
38	10951		Height Adjuster Assembly Complete—R.H. (Optional)	
	10950		Height Adjuster Assembly Complete—L.H. (Optional)	
39	07520		Grip†	
40	10949		Spring Lever Assembly with Knob†	
41	736-0219		Spring Washer†	
42	712-0116		Elastic Locknut 3/8-24 Thd. †	
43	10934		Index Plate Assembly—R.H. †	
	10935		Index Plate Assembly—L.H. †	
44	10937		Pivot Bar†	
45	710-0209		Sems Hex Hd. Cap Scr. 3/8-16 x 5/8" Lg. * †	
46	746-0128		Cable Clip	
47	710-0289		Hex Scr. 1/4-20 x .50" Lg. *	

N

†Optional Height Adjusters.

*For faster service, obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on 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—11419 (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 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.

ALABAMA	BIRMINGHAM	
	Auto Electric & Carburetor Co.	2625 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	
	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	SUFFIELD	
	The Jones & Ramsey Co.	850 Thompsonville Rd. 06078
FLORIDA	JACKSONVILLE	
	Radco Distributors	2403 Market St. 32206
	CORAL GABLES	
	Moz-All of Florida, Inc.	365 Greco Ave. 33146
GEORGIA	EAST POINT	
	East Point Cycle & Key	2834 Church St. 30344
ILLINOIS	LYONS	
	Keen Edge Co.	8615 Ogden Ave. 60534
INDIANA	ELKHART	
	Parts & Sales Inc.	2101 Industrial Pkwy. ..46514
	CORYDON	
	Brown Equip. Dist., Inc.	110 Beech St.47112
IOWA	DUBUQUE	
	Power Lawn & Garden Equip.	2551 J.F. Kennedy 52001
KANSAS	WICHITA	
	Hixon, Inc.	3030 Mascot 67204
LOUISIANA	NEW ORLEANS	
	Suhren Engine Co.	8330 Earhart Blvd. 70118
MARYLAND	TAKOMA PARK	
	Center Supply Co.	6867 New Hampshire Ave. 20012
MASSACHUSETTS	SPRINGFIELD	
	Morton B. Collins Co.	300 Birnie Ave. 01107
MICHIGAN	MOUNT CLEMENS	
	Power Equipment Dist.	36463 South Gratiot... 48043
	LANSING	
	Lorenz Service Co.	2500 S. Pennsylvania.. 48900
MINNESOTA	MINNETONKA	
	Hance Distributing Inc.	11212 Wayzata Blvd. ..55343
MISSISSIPPI	BILOXI	
	Biloxi Sales & Service, Inc.	506 Caillavet St. 39533
MISSOURI	KANSAS CITY	
	Automotive Equip. Service	3117 Holmes St. 64109
	ST. LOUIS	
	Henzler, Inc.	2015 Lemay Ferry Rd. 63125
NEBRASKA	OMAHA	
	R.P.W., Inc.	7402 "L" St. 68127

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 —

NEW YORK	CARTHAGE	
	Gamble Dist., Inc.	West End Ave. 13619
	SYRACUSE	
	Kimber's, Inc.	115 N. Geddes St. 13204
	ROCHESTER	
	Henry W. O'Neil & Associates	410 N. Goodman St. ... 14609
NORTH CAROLINA	GREENSBORO	
	Dixie Sales Company	327 Battleground Ave.. 27402
	GOLDSBORO	
	Smith Hardware Co.	515 N. George St. 27530
OHIO	WADSWORTH	
	National Central	687 Seville Rd. 44281
	CLEVELAND	
	Bleckrie, Inc.	7900 Lorain Ave. 44102
	CARROL	
	Stebe's Mid-State Mower Supply	Box 366 43112
	WILLARD	
	Sunshine Wholesale Tire Outlet	Route 224 44890
	MANSFIELD	
	McClure Lawn & Garden Supply	1114 Lexington Ave. . 44903
OKLAHOMA	MUSKOGEE	
	Victory Motors, Inc.	605 S. Cherokee 74401
	ADA	
	Ada Auto Supply	301 E. 12th St. 74820
OREGON	PORTLAND	
	Kenton Supply Co.	8216 N. Denver Ave. . 97217
PENNSYLVANIA	LANCASTER	
	Raub Supply Co.	James & Mulberry Sts...17604
	PITTSBURGH	
	Bluemont Co.	11125 Frankstown Rd.. 15235
TENNESSEE	KNOXVILLE	
	Master Repair Service	2423 Broadway, N.E. ...37917
	MEMPHIS	
	Memphis Cycle & Supply Co.	421 Monroe Ave. 38103
	American Sales & Service, Inc.	1922 Lynnbrook 38117
TEXAS	DALLAS	
	Marr Brothers, Inc.	423 E. Jefferson 75203
	HOUSTON	
	Bullard Supply Co.	2409 Commerce St. 77003
	SAN ANTONIO	
	Catto & Putty, Inc.	P.O. Box 240878206
	FORT WORTH	
	Woodson Sales Corp.	1702 N. Sylvania 76111
UTAH	SALT LAKE CITY	
	A-1 Engine & Mower Co.	437 E. 9th St.84111
VERMONT	BURLINGTON	
	Vermont Appliance Co.	44 Lakeside Ave.05401
VIRGINIA	RICHMOND	
	RBI Corp.	963 Myers St. 23260
WASHINGTON	SEATTLE	
	Bailey's Rebuild, Inc.	1325 E. Madison St. ...98102
WEST VIRGINIA	CHARLESTON	
	Young's, Inc.	233 Virginia St., E. ... 25301
WISCONSIN	APPLETON	
	Automotive Supply Co.	123 S. Linwood Ave. ..54911

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.