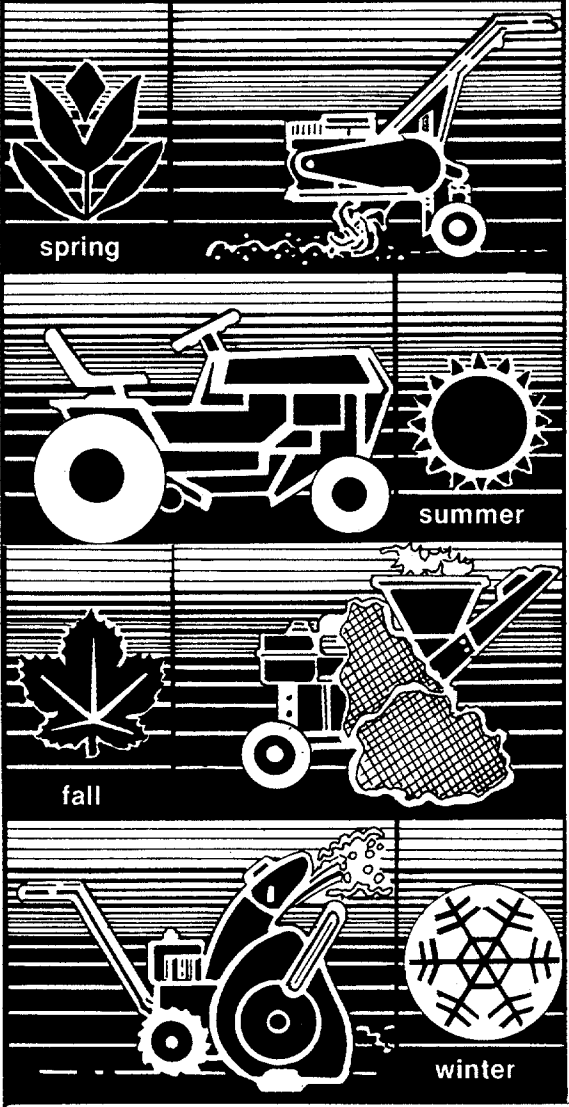


OWNER'S GUIDE

OUTDOOR POWER EQUIPMENT
for all seasons



20" AND 22" ROTARY MOWERS

Model Numbers
115-070-000
115-072-000
115-080-000
115-082-000

Important:
Read Safety Rules and
Instructions Carefully

Thank you for purchasing
an American-built product.

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Instructions given with this symbol are for personal safety. Be sure to follow them.

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



WARNING

This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.



WARNING

To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

TRAINING

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this machine. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. Your rotary mower is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
3. Never allow children to operate a power mower. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
4. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
5. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, an object may have been overlooked and could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones and other foreign objects which could be picked up and thrown by the mower in any direction and cause serious personal injury to the operator or any others allowed in the area.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Do not wear loose fitting clothing that could get caught on the mower.
4. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, while the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
5. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine.
6. The blade control handle is a safety device. Never attempt to bypass its operation. Doing so makes the safety device inoperative and may result in personal injury through contact with the rotating blade. The blade control handle must operate easily in both directions.
7. Never attempt to make a wheel or cutting height adjustment while the engine is running.
8. Mow only in daylight or in good artificial light.
9. Never operate the equipment in wet grass. Always be sure of your footing. A slip and fall can cause

serious personal injury. Keep a firm hold on the handle and walk, never run.

OPERATION

1. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade can cause injury.
3. Stop the blade when crossing gravel drives, walks or roads.
4. After striking a foreign object, stop the engine, remove the wire from the spark plug, and thoroughly inspect the mower for any damage. 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. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the engine is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
7. Before 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 spark plug to prevent accidental starting.
8. Do not run the engine indoors.
9. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes. Always be sure of your footing. A slip and fall can cause serious personal injury.
10. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
11. Never operate mower without proper guards, plates or other safety protective devices in place.

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. For safety protection, replace only with new bag meeting original equipment specifications.

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

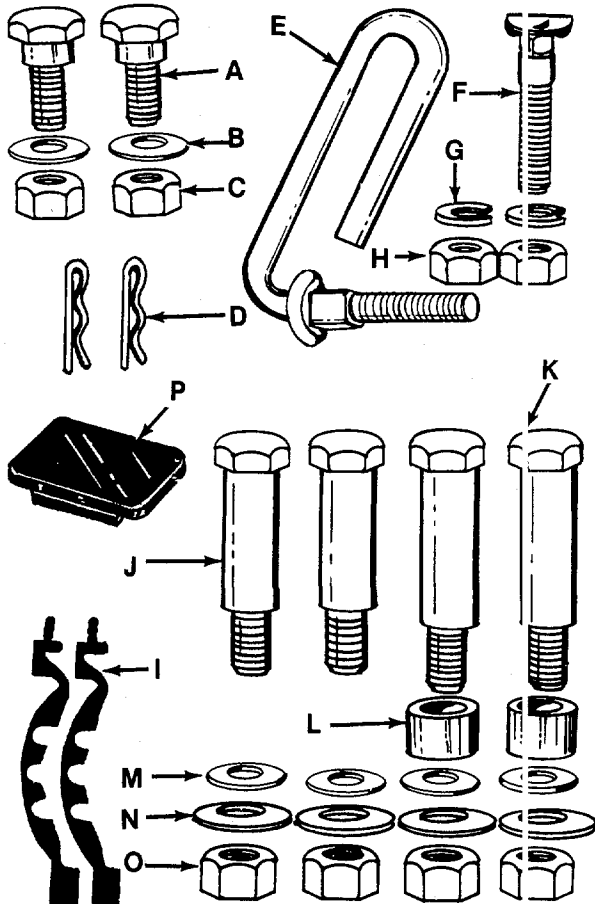


FIGURE 1.

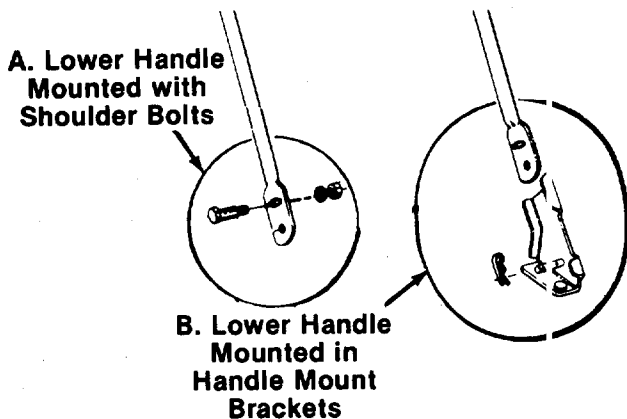


FIGURE 2.

ASSEMBLY INSTRUCTIONS

The instructions in this manual cover various models of mowers. Follow only those instructions which pertain to your unit.

NOTE

Reference to right or left hand side of the mower is observed from the operating position.

CONTENTS OF HARDWARE PACK: (See figure 1)
Hardware for Lower Handle Installation

- A (2) Shoulder Bolts (070 and 080)
- B (2) Belleville Washers 5/16" I.D. (070 and 080)
- C (2) Hex Lock Nuts 5/16-18 Thread (070 and 080)
- D (2) Hairpin Cotters (072 and 082)

Hardware for Upper Handle Installation

- E (1) Rope Guide Bolt
- F (1) Curved Carriage Bolt
- G (2) Lock Washers 5/16" I.D.
- H (2) Hex Nuts 5/16-18 Thread
- I (2) Cable Ties

Hardware for Installation of Wheels (if unassembled)

- J (2) Shoulder Bolts 2 1/4" Long
- K (2) Shoulder Bolts 2-5/8" Long
- L (2) Spacers
- M (4) Belleville Washers 3/8" I.D. x 7/8" O.D.
- N (4) Belleville Washers 3/8" I.D. x 1-1/8" O.D.
- O (4) Hex Nuts 3/8-16 Thread
- P (1) Plastic Plug

1. Remove lawn mower and loose parts from carton. Make certain all parts and literature have been removed from the carton before the carton is discarded.
2. Extend the throttle control cable (attached to the upper handle) and the brake cable (attached to the engine) and place on the floor. Be careful not to bend or kink control cables.

LOWER HANDLE INSTALLATION

The lower handle is mounted to the deck by one of two methods. See figure 2.

- A. **Models 070 and 080**—Shoulder bolts, belleville washers and hex lock nuts secure the handle directly to the deck.
- B. **Models 072 and 082**—Handle is secured to handle mount brackets on top of the deck with hairpin cotters.

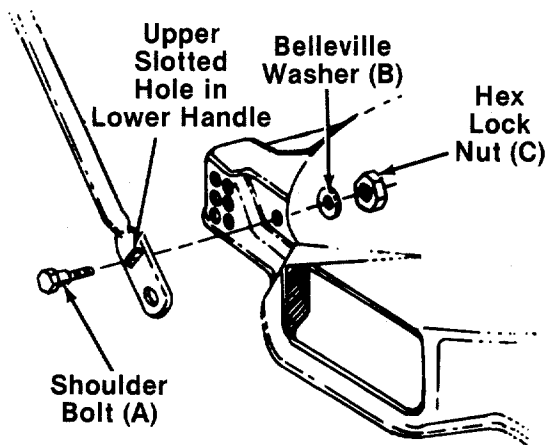


FIGURE 3.

- A. Line up the upper slotted hole in lower handle with the mounting hole on deck. Make certain the instruction label on the lower handle can be read from the operating position. Place shoulder bolt (A) through lower handle and deck. See figure 3. Place belleville washer (B) on the shoulder bolt, with the cupped side of the washer against the deck. Secure with hex lock nut (C).



It may be necessary to bend the ends of the lower handle inward slightly to obtain a tight fit against the deck.

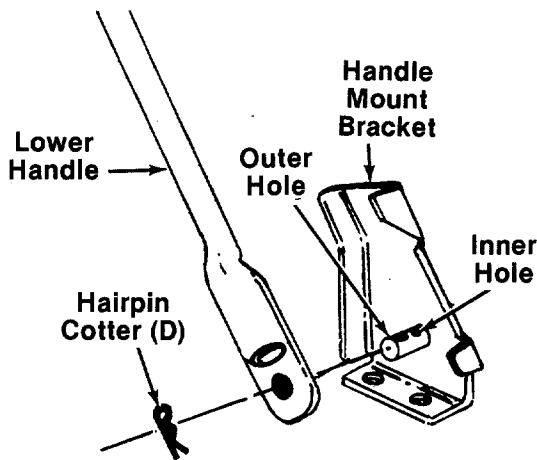


FIGURE 4.

- B. Place lower handle in position over weld pins in handle mount brackets on deck, using the bottom hole in the lower handle. Make certain the instruction label on the lower handle can be read from the operating position. Secure with hairpin cotters (D) in inner hole on weld pin. See figure 4.



There are two (2) holes in the handle mount brackets. Place hairpin cotter in the inner hole for operation. Outer hole is for storage.



It may be necessary to pull open the ends of the lower handle to obtain a tight fit when assembled into handle mount brackets.

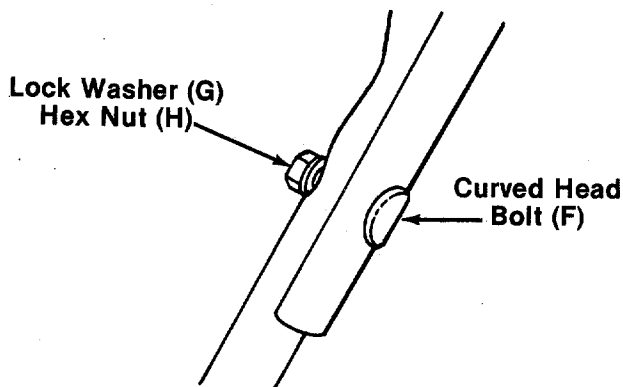


FIGURE 5.

UPPER HANDLE INSTALLATION

1. Place the upper handle in position over the lower handle. The control housing must be on the right hand side of the handle. Secure the left hand side of upper handle using the curved head bolt (F), lock washer (G) and hex nut (H) as shown in figure 5.



The right hand side of the handle will be secured with the rope guide bolt. However, left handed operators may assemble the rope guide bolt to the left side of the handle for easier starting.

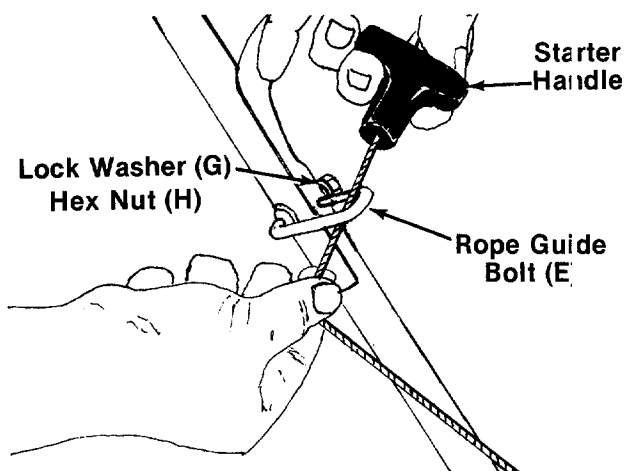


FIGURE 6.

2. Insert the rope guide bolt (E) through the right hand side of upper and lower handle.
3. The starter rope is wound around the starter handle. Maintain the tension on the rope as you unwind it.
4. Slip the starter rope into the rope guide bolt as shown in figure 6. Secure the rope guide bolt with lock washer (G) and hex nut (H). If more slack is needed in the starter rope, disconnect and ground the spark plug wire. Depress the blade control handle and pull additional rope out from the engine.

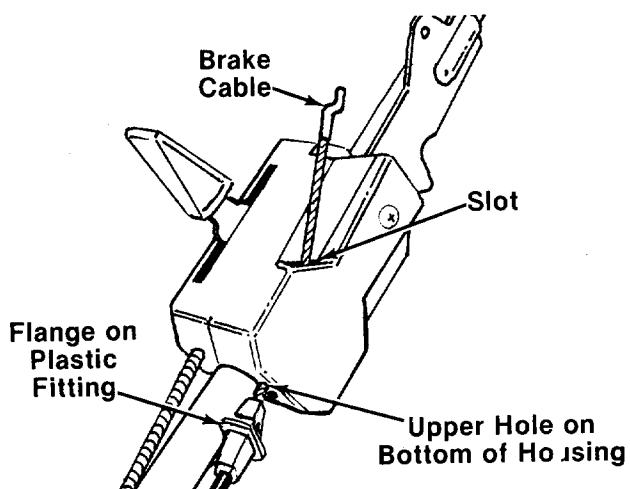


FIGURE 7.

5. Route the brake cable under the lower handle. Place the end of the brake cable into the upper hole on the bottom of the control housing, and through the slot in the side of the housing as shown in figure 7. The angle of the flange on the plastic fitting must be positioned downward as shown. Be careful not to bend or kink the cable.



Brake cable must be assembled as shown for proper blade brake operation.

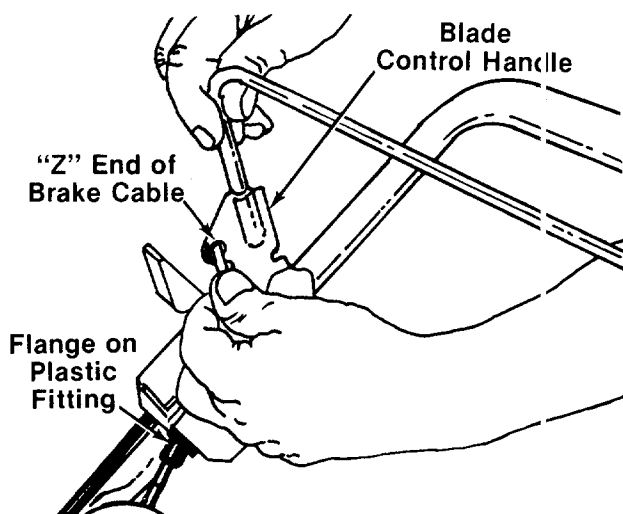
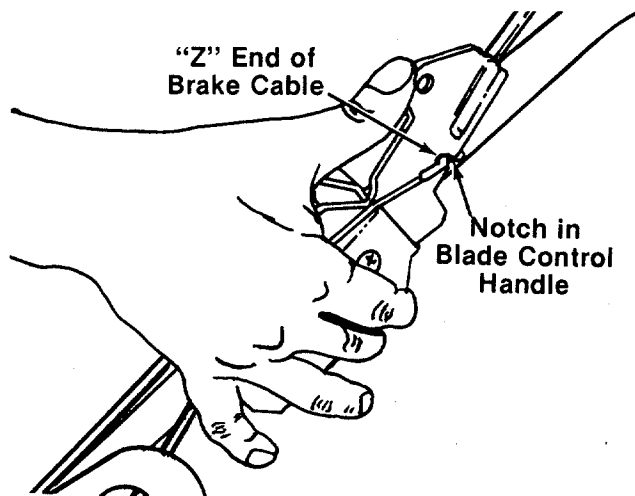


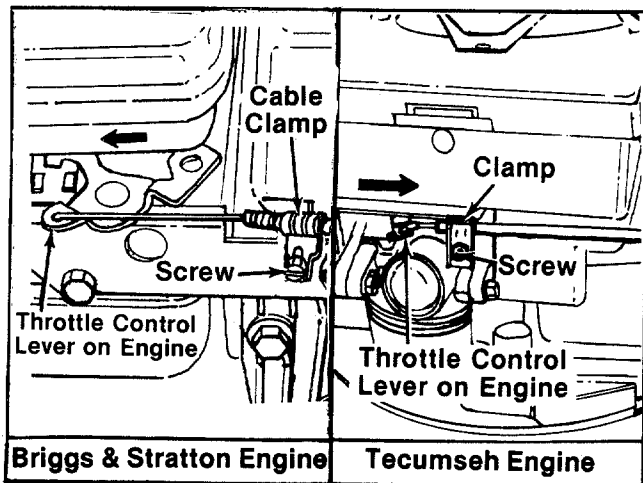
FIGURE 8.

6. Snap the plastic fitting on the end of the cable into the throttle control housing. Hook the "Z" end of the brake cable into the hole in the blade control handle. See figure 8. If additional slack is needed in order to hook the cable into the handle, proceed as follows.



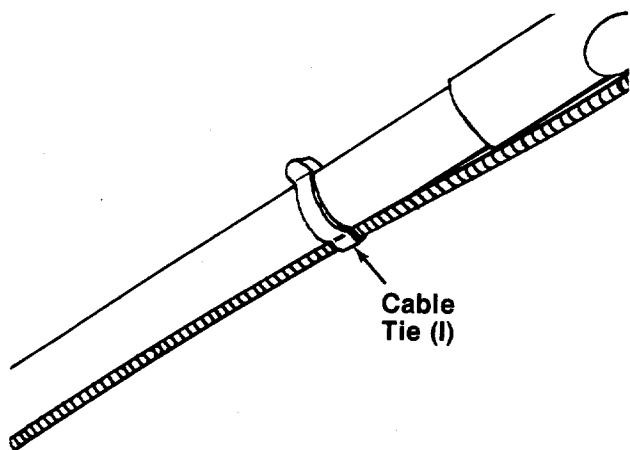
- a. Hook the "Z" end of the cable into notch provided in the blade control handle. See figure 9.
- b. Squeeze blade control handle against upper handle.
- c. Release the blade control handle, unhook the cable from the notch and hook it into the hole in the blade control handle.

FIGURE 9.



7. Place the throttle control lever on the handle in "Fast" position.
8. Push the throttle control lever on the engine to the full open position (as far toward the outside of the unit as it will go on Briggs and Stratton engines and as far toward the rear of the unit as it will go on Tecumseh engines) as shown in figure 10.
9. Hook the "Z" end of the throttle control cable into the hole in the control lever on the engine.
10. Remove the screw on the cable clamp shown in figure 10. Slip the control casing under the clamp. With the throttle lever on the engine still in the full open position, replace and tighten the screw to secure the throttle control cable.

FIGURE 10.



11. Secure throttle control cable and brake cable to upper and lower handles with cable ties (I). See figure 11.

FIGURE 11.

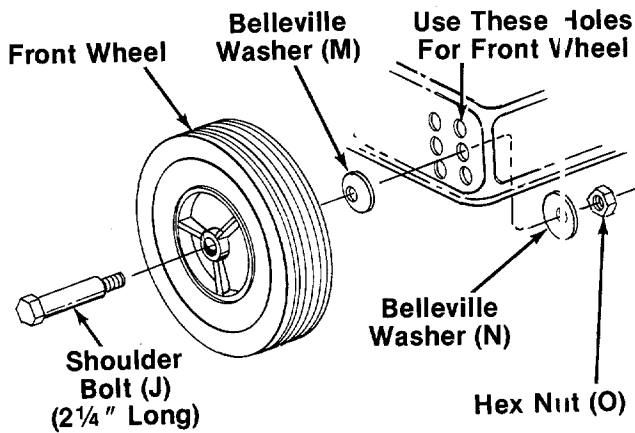


FIGURE 12.

INSTALLATION OF WHEELS

If the wheels on your mower are not already assembled, proceed as follows. The front wheels must be assembled in one of the three holes nearest the front of the deck. See figure 12. The rear wheels must be assembled in one of the three holes nearest the rear of the deck. See figure 13.

The three holes provide three cutting heights for your mower. Use the same hole location for all four wheels when assembling. If wheels are to be assembled in the lowest cutting position (highest hole in the deck), refer to the note below.

To assemble the front wheels: (See figure 12)

1. Place shoulder bolt (J) (2 1/4" long) through wheel.
2. Place one belleville washer 7/8" O.D. (M) on shoulder bolt, with the cupped side of washer toward the deck (away from wheel).
3. Secure wheel to deck with one belleville washer 1-1/8" O.D. (N) on the inside of the deck (cupped side against the deck) and hex nut (O).

If your unit is equipped with handle mount brackets, assemble the rear wheels in the same manner as front wheels were assembled.

If the handle on your unit is mounted to the deck with shoulder bolts, follow these instructions when assembling the rear wheels. See figure 13.

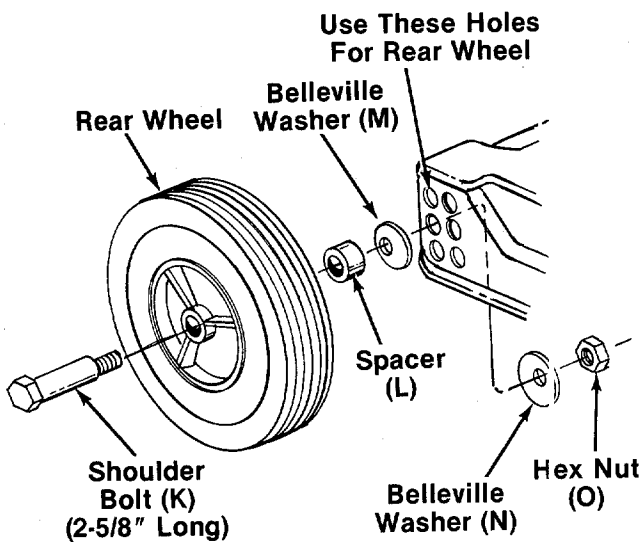


FIGURE 13.

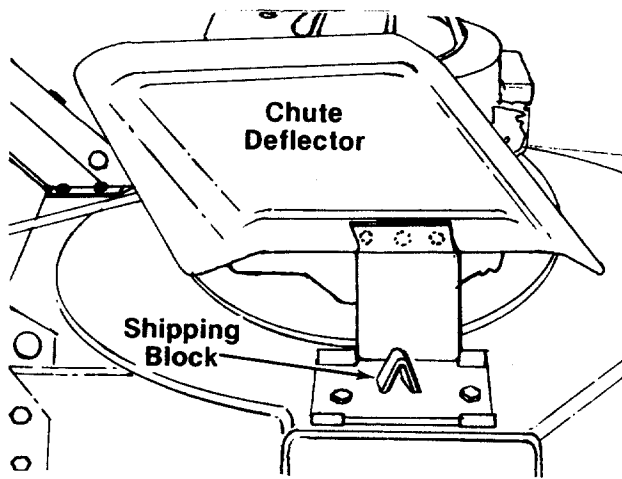
1. Place shoulder bolt (K) (2-5/8" long) through rear wheel.
2. Place spacer (L) on shoulder bolt, next to wheel.
3. Place one belleville washer 7/8" O.D. (M) on shoulder bolt, with the cupped side of washer toward the deck (away from spacer).
4. Secure wheel to deck with one belleville washer 1-1/8" O.D. (N) on the inside of the deck (cupped side against the deck) and hex nut (O).

NOTE

If the lowest cutting position (highest hole in the deck) is used, it is necessary to place the 1-1/8" washer on the outside of the deck and the 7/8" washer on the inside.

INSTALLATION OF PLUG

Insert plastic plug (P) into hole in the top rear of the deck by slipping one end of plug into hole, then pressing down on the other end of plug.



FINAL CHECK

Check all nuts and bolts for correct tightness.



Please note that the chute deflector on your mower is in an upright position. It is held in the 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. See figure 14.

FIGURE 14.

CONTROLS

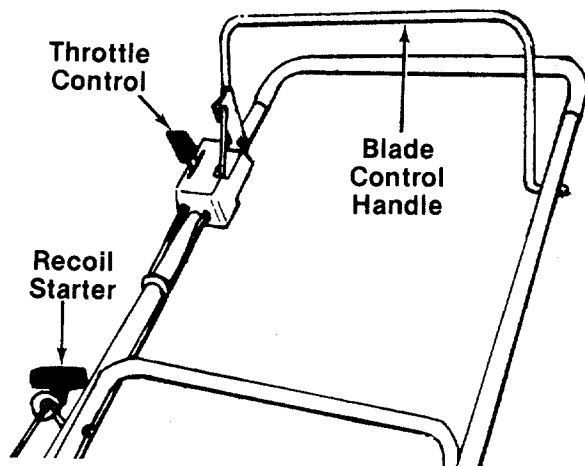


FIGURE 15.
BLADE CONTROL HANDLE

WARNING
THIS CONTROL MECHANISM IS A SAFETY DEVICE. NEVER ATTEMPT TO BYPASS ITS OPERATIONS

The blade control handle is located on the upper handle of the mower. See figure 15. The blade control handle must be depressed in order to operate the unit. Release the blade control handle to stop the engine and blade.



The blade will be rotating whenever the engine is running.

THROTTLE CONTROL

The throttle control is located on the right side of the upper handle. It is used to regulate the engine speed. The engine should be started with the engine in the FAST or START position.



The throttle control cannot be used to stop the engine.

RECOIL STARTER

The recoil starter handle is attached to the handle. See figure 15. Stand behind the unit in the operating position to start the unit.

OPERATION



FIGURE 16.

Keep hands and feet away from the chute area on cutting deck. See figure 16.



If the wheels on your unit were assembled at the factory, they are set in a low cutting height position for shipping purposes. For best results, raise the cutting position until it is determined which height is best for your lawn. See cutting height adjustment.

BEFORE STARTING

1. Service engine with oil and gasoline as instructed in the separate engine manual packed with your unit. Read the instructions carefully.
2. Attach spark plug wire to spark plug.

TO START ENGINE AND ENGAGE BLADE

1. Move the throttle control lever to FAST or START position.
2. Standing behind the unit, depress the blade control handle and hold it against the upper handle as shown in figure 17.
3. Grasp the recoil starter handle as shown and pull up rapidly. Return it slowly to the rope guide bolt.
4. After engine starts, move throttle control lever to desired engine speed.

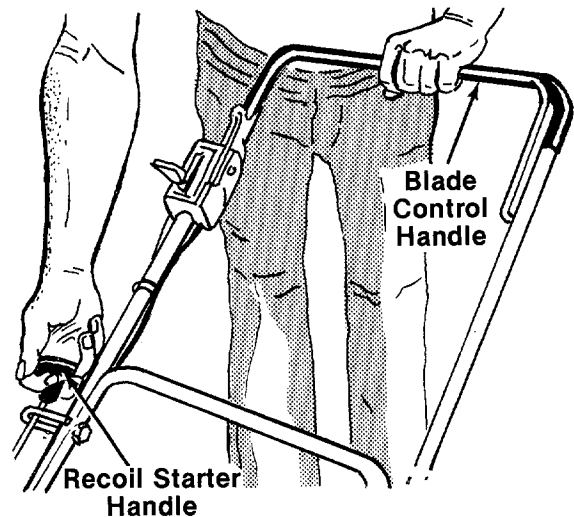


FIGURE 17.

TO STOP ENGINE AND BLADE

1. Release the blade control handle to stop the engine and blade.



The blade continues to rotate for a few seconds after the engine is shut off.

2. Disconnect the spark plug wire and ground it against the engine to prevent accidental starting while equipment is unattended.

USING YOUR ROTARY MOWER

Be sure that lawn is clear of stones, sticks, wire, or other objects which could damage lawn mower or engine. Such objects could be accidentally thrown by the mower in any direction and cause serious personal injury to the operator and others.

Operate a new engine at intermediate speeds and light load for the first few hours as you would a new automotive engine.

For best results, do not cut wet grass because it tends to stick to the underside of the mower, preventing proper discharge of grass clippings, and could cause you to slip and fall. New grass, thick grass or wet grass may require a narrower cut. Blade speed should be adjusted to the condition of the lawn.

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.

For best results, cut off one-third or less of the total length of the grass. Lawn should be cut in the fall as long as there is growth.

This mower is designed to be operated at full throttle to give you the best cut and do the most effective job of bagging the cut grass.

➔ IMPORTANT

If you strike 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. Extensive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.

ADJUSTMENTS



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

CUTTING HEIGHT ADJUSTMENT Units With Height Adjustment Brackets

An adjusting plate and thumb lever at each wheel provides cutting height adjustment. Each adjusting plate has nine height positions. Height of cut will be changed when the thumb lever is moved from one position to another. Simply depress thumb lever towards wheel and move wheel and lever assembly to desired position. All wheels must be placed in the same relative position. See figure 18.

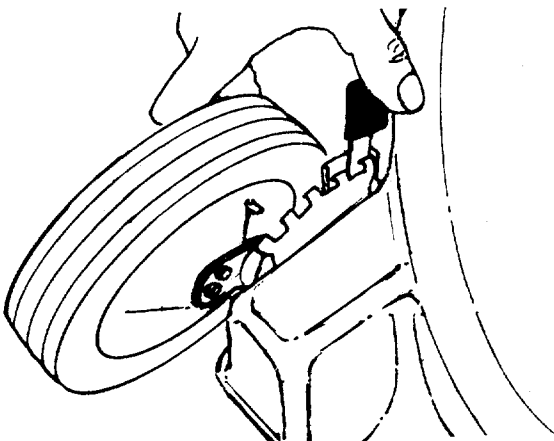


FIGURE 18.

Units Without Height Adjustment Brackets

Adjustment may be made by removing and moving axle bolts to desired position. Cutting heights will be raised as axle bolts are moved to a lower hole and lowered as axle bolts are moved to a higher hole in the deck. All axle bolts must be mounted in the same relative position. Belleville washers must be assembled on the inside and outside of the deck so that the cupped side of the washers are against the deck. The spacers (on units so equipped) must be assembled between the rear wheels and the belleville washers. Refer to figures 12 and 13.

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. See figure 10.
2. Move throttle control lever on handle to "FAST" position.
3. Move control lever on engine to full open position. Retighten screw to secure throttle control wire assembly.

CARBURETOR ADJUSTMENTS



If any adjustments are made to the engine while the engine is running (e.g. carburetor), keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load.

Refer to the separate engine manual packed with your mower for carburetor adjustment information.

LUBRICATION



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

Blade Control—Lubricate the pivot points on the blade control handle and the brake cable at least once a season with light oil. See figure 19. The blade control must operate freely in both directions.

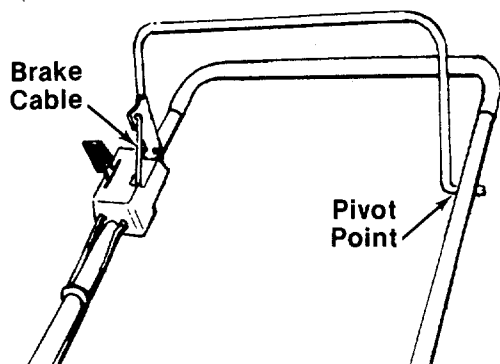


FIGURE 19.

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.

Wheels—Mower may be provided with ball bearing wheels. Lubricate at least once a season with light oil. Also, if the wheels are removed for any reason, lubricate the surface of the axle bolt and the inner surface of the wheel with light oil. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

Engine—Follow engine manual for lubrication instructions.

Throttle—Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil for ease of operation.

MAINTENANCE



When tipping the unit, empty the fuel tank and keep engine spark plug side up.

CUTTING BLADE

A. Removal for Sharpening or Replacement



Be sure to disconnect and ground the spark plug wire before working on the cutting blade to prevent accidental engine starting.

Remove the large bolt and lock washer which holds the blade and adapter to the engine crankshaft. Remove the blade and adapter from the crankshaft.

If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.



Periodically inspect the blade adapter for cracks, especially if you strike a foreign object. Replace when necessary.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the 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, may cause damage to the mower and could break, causing personal injury.

It is recommended that the blade always be removed from the adapter for the best test of balance. The blade can be tested by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the engine crankshaft and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.

5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

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

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.

 **NOTE**

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

ENGINE

Refer to the separate engine manual for engine maintenance instructions.

AIR CLEANER

Service air cleaner every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced.

To service the air cleaner, refer to the separate engine manual packed with your unit.

SPARK PLUG

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specifications.

OFF-SEASON STORAGE

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

1. Clean and lubricate mower thoroughly as described in the lubrication instructions.
2. Refer to engine manual for correct engine storage instructions.
3. Coat mower's cutting blade with chassis grease to prevent rusting.
4. Store mower in a dry, clean area.

 **NOTE**

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially cables and all moving parts.

HANDLE STORAGE

On units equipped with handle mount brackets, the handle may be placed in an upright position for storage.

Move hairpin cotters to outer hole on weld pins. See figure 4. Press inward on the bottom of the lower handle and push forward. The handle will lock in this position.

To place the handle in the operating position, remove the starter rope from the rope guide bolt. Grasp the lower handle at the bottom, press inward slightly and tip the handle backward. Place the cotter hairpins in the inner holes. With the spark plug wire disconnected and grounded, depress the blade control handle and pull the starter rope out from the engine. Slip the starter rope into the rope guide bolt.

 **NOTE**

The use of any accessory on this Rotary Mower other than those manufactured by the mower manufacturer is **not** recommended.

GRASS CATCHER Model 065 is available as optional equipment for the mower shown in this manual.



1. DO NOT operate the mower without the entire grass catcher or chute deflector in place.
2. DO NOT operate the mower 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. 764-0217.

Trouble Shooting Chart

Problem	Cause	Remedy
1 Engine fails to start	<p>A Blade control handle disengaged</p> <p>B Check fuel tank for gas</p> <p>C Spark plug lead wire disconnected.</p> <p>D Throttle control lever not in the starting position</p> <p>E Faulty spark plug</p> <p>F Carburetor improperly adjusted, engine flooded</p> <p>G Old stale gasoline</p> <p>H Engine brake engaged</p>	<p>A Engage blade control handle.</p> <p>B Fill tank if empty.</p> <p>C Connect lead wire.</p> <p>D Move throttle lever to start position.</p> <p>E Spark should jump gap between control electrode and side electrode. If spark does not jump, replace the spark plug.</p> <p>F Remove spark plug, dry the plug, crank engine with plug removed, and throttle in off position. Replace spark plug and lead wire and resume starting procedures.</p> <p>G Drain and refill with fresh gasoline.</p> <p>H Follow starting procedure.</p>
2 Hard starting or loss of power	<p>A Spark plug wire loose</p> <p>B Carburetor improperly adjusted</p> <p>C Dirty air cleaner</p>	<p>A Connect and tighten spark plug wire.</p> <p>B Adjust carburetor. See separate engine manual.</p> <p>C Clean air cleaner as described in separate engine manual.</p>
3 Operation erratic	<p>A Dirt in gas tank</p> <p>B Dirty air cleaner</p> <p>C Water in fuel supply</p> <p>D Vent in gas cap plugged</p> <p>E Carburetor improperly adjusted</p>	<p>A Remove the dirt and fill tank with fresh gas.</p> <p>B Clean air cleaner as described in separate engine manual.</p> <p>C Drain contaminated fuel and fill tank with fresh gas.</p> <p>D Clear vent or replace gas cap.</p> <p>E Adjust carburetor. See separate engine manual.</p>
4 Occasional skip (hesitates) at high speed	<p>A Carburetor idle speed too slow</p> <p>B Spark plug gap too close</p> <p>C Carburetor idle mixture adjustment improperly set</p>	<p>A Adjust carburetor. See separate engine manual.</p> <p>B Adjust to .030".</p> <p>C Adjust carburetor. See separate engine manual.</p>
5 Idles poorly	<p>A Spark plug fouled, faulty, or gap too wide</p> <p>B Carburetor improperly adjusted</p> <p>C Dirty air cleaner</p>	<p>A Reset gap to .030" or replace spark plug.</p> <p>B Adjust carburetor. See separate engine manual.</p> <p>C Clean air cleaner as described in separate engine manual.</p>
6 Engine overheats	<p>A Carburetor not adjusted properly</p> <p>B Air flow restricted</p> <p>C Engine oil level low</p>	<p>A Adjust carburetor. See separate engine manual.</p> <p>B Remove blower housing and clean as described in separate engine manual.</p> <p>C Fill crankcase with the proper oil.</p>
7 Excessive vibration	<p>A Cutting blade loose or unbalanced</p> <p>B Bent cutting blade</p>	<p>A Tighten blade and adapter. Balance blade.</p> <p>B Replace blade.</p>

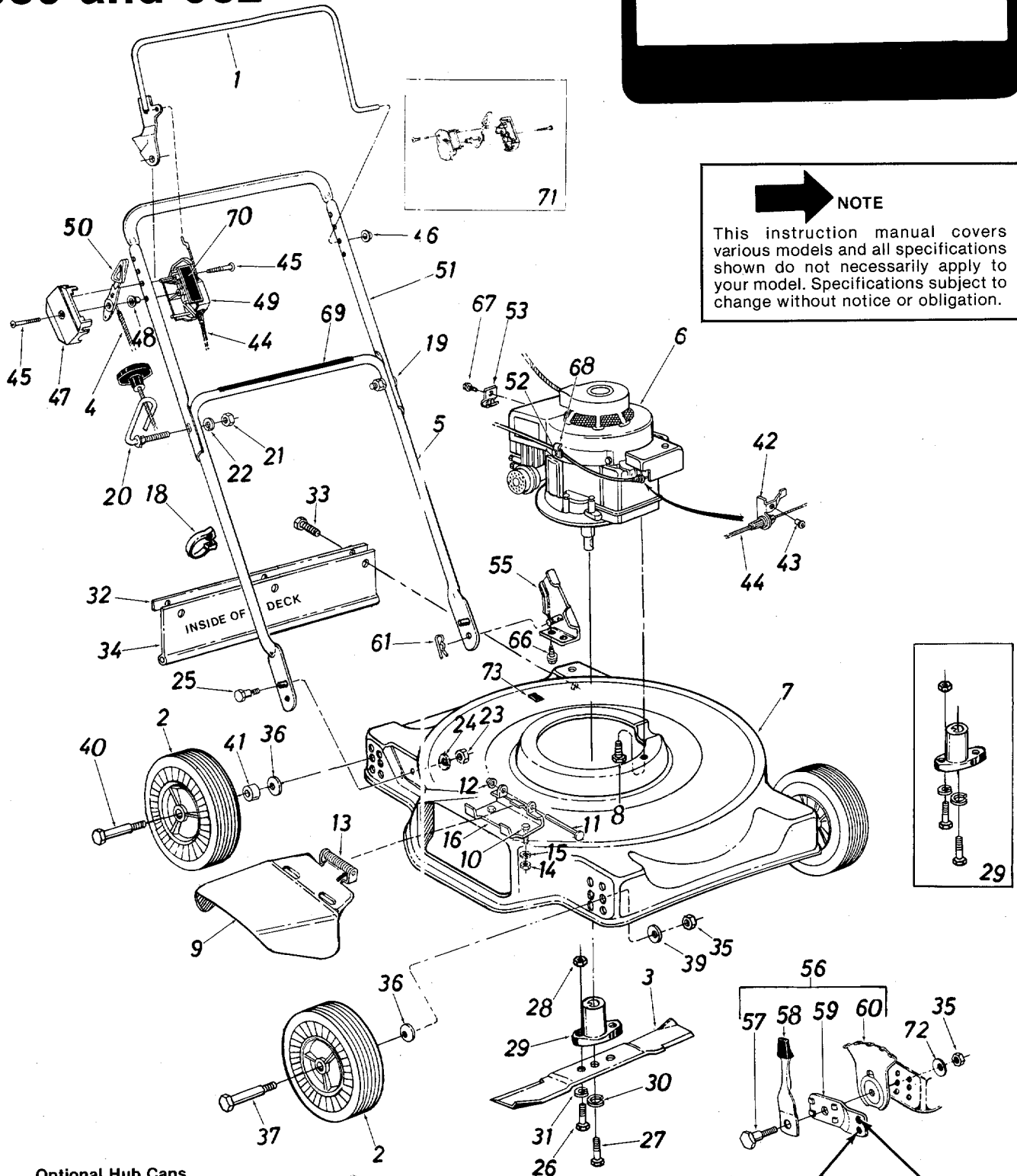
Note: For repairs beyond the minor adjustments listed above, contact your local authorized service dealer.

Models 070, 072, 080 and 082

Meets CPSC Blade Safety Requirements

Lot/Model

Mfg. Date



NOTE
This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

Optional Hub Caps

Color	Part No.
Red	731-0124
Orange	731-0254
Black	731-0354
Gray	731-0355

7" wheel is assembled in bottom hole

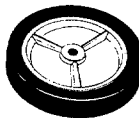

8" wheel is assembled in top hole

PARTS LIST FOR MODELS 070, 072, 080 and 082 ROTARY MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	14320		Control Handle Ass'y.—R.H.		40	738-0509		Rear Axle Bolt (070 & 080)	
2	**		Wheel Ass'y. Comp. (See Chart Below)			738-0102		Rear Axle Bolt (072 & 082)	
3	742-0123		20" Blade (070 & 072)		41	750-0515		Spacer .511 I.D. x .70" O.D. (070 & 080)	
	742-0125		22" Blade (080 & 082)		42	14924		Cable Bracket	
4	746-0473		Throttle Control Wire—39"		43	728-0171		Pop Rivet .156" Dia. x .379	
	746-0417		Throttle Control Wire—43"†		44	746-0477		43" Control Cable—Yellow (070)	
5	749-0373		Lower Handle (Chrome)					49" Control Cable—Blue (072, 080, 082)	
	749-0372		Lower Handle (Painted)			746-0478		57" Control Cable—Red†	
6	—		Engine					Truss Mach. Scr. #12 x 1.50"	
7	14994 —462		20" Deck Ass'y. (070)		45	746-0480		Cap Speed Nut 5/16" Rod	
	14995 —462		20" Deck Ass'y. (072)		46	710-0796		Control Panel Half	
	14997 —462		22" Deck Ass'y. (080)		47	726-0135		Control Disc Pin	
	14998 —462		22" Deck Ass'y. (082)		48	731-0523		Clutch Panel Half	
8	710-0654		Hex Wash. Hd. TT-Tap Scr. 3/8-16 x 1.00" Lg.		49	731-0524		Throttle Control Lever	
9	14944		Chute Deflector Ass'y.		50	731-0526		Upper Handle (Chrome)	
10	710-0289		Hex Bolt 1/4-20 x .50" Lg.*		51	731-0528		Upper Handle (Painted)	
11	711-0555		Hinge Pin 1/4" Dia. x 3.88 Lg.			749-0536		Hex "B" Tap Scr. #10 x .38"	
12	726-0106		Push Cap .25" Rod		52	749-0538		Casing Clamp	
13	732-0253		Torsion Spring		53	710-0429		Handle Mount Brkt. Ass'y.—L.H. (072 & 082)	
14	712-0287		Hex Nut 1/4-20 Thd.*		55	751-0369		Handle Mount Brkt. Ass'y.—R.H. (Not Shown) (072 & 082)	
15	736-0329		L-Wash. 1/4" I.D.*			12935		Height Adjuster Ass'y. Comp.—R.H. (072 & 082)	
16	11130		Deflector Hinge Plate			12936		Height Adjuster Ass'y. Comp.—L.H. (Not Shown) (072 & 082)	
18	726-0192		Cable Tie					Shoulder Bolt .500" Dia. x .357 (072 & 082)	
19	710-0671		Curved Carriage Bolt 5/16-18 x 1.38" Lg.		56	14578		Spring Lever Ass'y. w/Knob (072 & 082)	
20	710-0842		Rope Guide Bolt					Pivot Bar (072 & 082)	
21	712-0267		Hex Nut 5/16-18 Thd.*			14579		Index Plate (072 & 082)	
22	736-0119		L-Wash. 5/16" I.D.*					Hairpin Cotter (072 & 082)	
23	712-0429		Hex Ins. L-Nut 5/16-18 Thd. (070 & 080)		57	738-0507		Hex Wash. Hd. Self-Tap Scr. 5/16-18 x .50" Lg. (072 & 082)	
24	736-0242		Bell-Wash. .345" I.D. x .88" O.D. (070 & 080)					Hex Wash. Hd. AB-Tap Scr. #8 x .38" Lg.	
25	738-0296		Shld. Bolt .437" Dia. x .268 (070 & 080)		58	14832		Cable Clip	
26	710-0888		Hex Bolt 5/16-24 x 1.00" Lg. (Grade 5) Special		59	15262		Instruction Label—Handle	
27	710-0331		Hex Bolt 3/8-24 x 2.25" Lg. (Grade 5)		60	15261		Control Label—Throttle	
28	712-0123		Hex Nut 5/16-24 Thd.*		61	714-0104		Kit—Control Housing Comp.	
29	753-0348		Blade Adapter Kit		66	710-0603		Belleville Wash. .39 I.D. x 1.4 O.D. (072 & 082)	
30	736-0217		L-Wash. 3/8" I.D.—H.D.					Plastic Plug	
31	736-0119		L-Wash. 5/16" I.D.*		67	710-0227		Hardware Pack (070 & 080)	
32	14846		Retainer Strip		68	12894		Hardware Pack (072 & 082)	
33	710-0776		Hex Wash. Hd. AB-Tap Scr. 1/4" x .62" Lg.		69	777-3455			
34	731-0575		Rear Flap Ass'y.		70	777-5168			
35	712-0798		Hex Nut 3/8-16 Thd.*		71	753-0360			
36	736-0105		Bell-Wash. .400" I.D. x .88"		72	736-0356			
37	738-0213		Front Axle Bolt (070 & 080)		73	731-0564			
	738-0102		Front Axle Bolt (072 & 082)		—	8070-000-5			
39	736-0331		Bell-Wash. .39" I.D. x 1.13" O.D. (070 & 080)		—	8072-000-5			

† Optional Parts

**WHEEL CHART


Size	Plastic Rim		Steel Rim			
			Tread Type		Bearings	
			Size	Twinline		Waffle
7 x 1.5	734-0840	734-1161	7 x 1.5	734-0639	734-0637	Ball Brgs. 3/8" I.D.—741-0267, 1/2" I.D.—741-0484, Spacer-750-0434 (Use Axle Bolt 710-0347)
8 x 1.75	734-Q841	734-1162	8 x 1.75	734-0643	734-0645	
			7 x 1.5	734-0876	734-0893	1/2" I.D. Plastic Brg.—741-0262 (2 per Wheel)
			8 x 1.75	734-0661	734-0812	

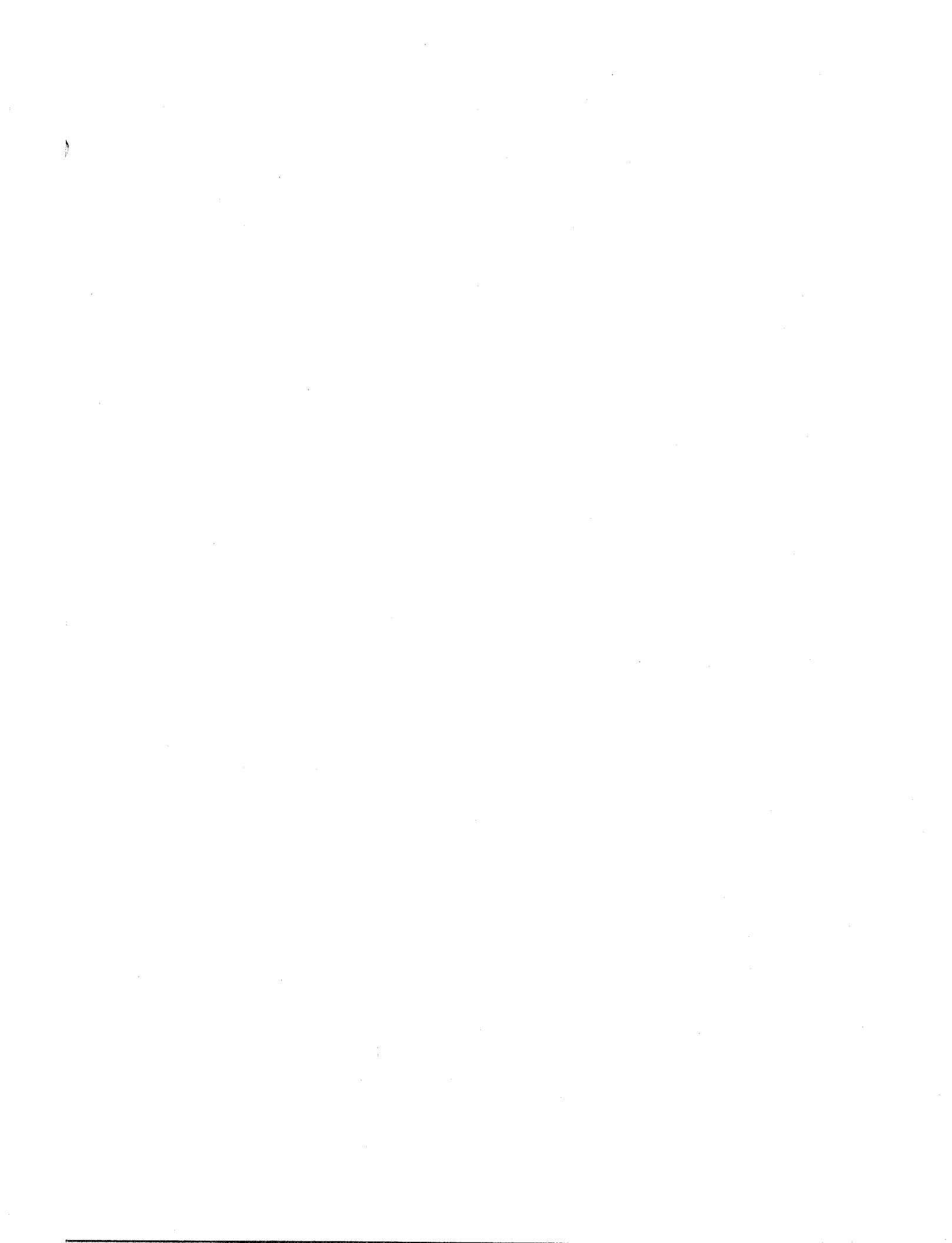
*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g.—Red Flake finish—14483 (462).)

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."

The logo for the Yellow Pages, featuring a stylized telephone handset and the text "Find It Fast In The Yellow Pages" inside a decorative border.



PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

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

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA Auto Electric & Carburetor Co. 2625 4th Ave. S. 35233	BIRMINGHAM NORTH LITTLE ROCK Sutton's Lawn Mower Shop 5301 Roundtop Drive Box 368, Rt. 4 72117	OHIO Stebe's Mid-State Mower Supply Box 366, 71 High St. 43112	CARROLL CLEVELAND 7900 Lorain Ave. 44102
ARKANSAS Sutton's Lawn Mower Shop 5301 Roundtop Drive Box 368, Rt. 4 72117	PORTERVILLE DENVER Spitzer Industrial Products Co. 6601 N. Washington St. 30229	Bleckrie, Inc.	WADSWORTH 687 Seville Rd. 44281
CALIFORNIA Billious	PORTERVILLE DENVER Spitzer Industrial Products Co. 6601 N. Washington St. 30229	National Central	YOUNGSTOWN 1301 Logan Ave. Box 929 44501
COLORADO Spitzer Industrial Products Co. 6601 N. Washington St. 30229	JACKSONVILLE HIALEAH Small Eng. Dist. 7995 W. 26th Court. 33016	OKLAHOMA Victory Motors, Inc.	MUSKOGEE 605 S. Cherokee 74401
FLORIDA Radco Distributors	JACKSONVILLE HIALEAH Small Eng. Dist. 7995 W. 26th Court. 33016	OREGON Kenton Supply Co.	PORTLAND 8216 N. Denver Ave. 97217
GEORGIA East Point Cycle & Key Inc. 2834 Church St. 30344	EAST POINT LYONS Keen Edge Co. 8615 Ogden Ave. 30534	PENNSYLVANIA EECO Inc.	HARRISBURG 4021 N. 6th St. 17110
ILLINOIS Keen Edge Co.	EAST POINT LYONS Keen Edge Co. 8615 Ogden Ave. 30534	Thompson Rubber Co.	PHILADELPHIA 5222-24 N. Fifth St. 19120
INDIANA Parts & Sales Inc.	ELKHART DUBUQUE Power Lawn & Garden Equip. 2551 J.F. Kennedy 52001	Bluemont Co.	PITTSBURGH 11125 Frankstown Rd. 15235
IOWA Power Lawn & Garden Equip. 2551 J.F. Kennedy 52001	NEW ORLEANS TAKOMA PARK Center Supply Co. 6867 New Hampshire Ave. 20912	Frank Roberts & Sons	PUNXSUTAWNEY R.D. 2 15767
LOUISIANA Suhren Engine Co. 8330 Earhart Blvd. 70118	NEW ORLEANS TAKOMA PARK Center Supply Co. 6867 New Hampshire Ave. 20912	Scranton Auto Ignition Co.	SCRANTON 1133-35 Wyoming Ave. 18509
MARYLAND Center Supply Co.	SPRINGFIELD LANSING Lorenz Service Co. 2500 S. Pennsylvania 48910	TENNESSEE Master Repair Service 2000 Western Ave. 37921	KNOXVILLE 2000 Western Ave. 37921
MASSACHUSETTS Morton B. Collins Co. 300 Birnie Ave. 01107	LANSING MOUNT CLEMENS Power Equipment Dist. 340 Hubbard 48043	American Sales & Service, Inc. 3035-43 Bellbrook 38116	MEMPHIS 3035-43 Bellbrook 38116
MICHIGAN Lorenz Service Co. 2500 S. Pennsylvania 48910	MOUNT CLEMENS HOPKINS Hance Distributing Inc. 420 Excelsior Ave. W. 55343	TEXAS Marr Brothers, Inc.	DALLAS 423 E. Jefferson 75203
MINNESOTA Hance Distributing Inc. 420 Excelsior Ave. W. 55343	HOPKINS BILOXI Biloxi Sales & Service, Inc. 506 Caillavet St. 39533	Woodson Sales Corp.	FORT WORTH 6733 Baker Blvd. Hwy. 10 76118
MISSISSIPPI Biloxi Sales & Service, Inc. 506 Caillavet St. 39533	KANSAS CITY ST. JOSEPH Ross-Frazer Supply Co. 8th and Monterey 64503	Engine House Inc.	HOUSTON 2409 Commerce St. 77003
MISSOURI Automotive Equip. Service 3117 Holmes St. 64109	ST. JOSEPH ST. LOUIS Henzler, Inc. 2015 Lemay Ferry Rd. 63125	UTAH Powered Products 485 N 500 W. 84010	SAN ANTONIO 8610 Botts Lane P.O. Box 17867 78217
NEW JERSEY Lawnmower Parts Inc. 717 Creek Rd. 08030	BELLMAWR ALBUQUERQUE Spitzer Eng. & Parts Co. 1023 Third Ave. N.W. 87103	VIRGINIA RBI Corp.	ASHLAND 101 Cedar Ridge Dr. 23005
NEW MEXICO Spitzer Eng. & Parts Co. 1023 Third Ave. N.W. 87103	ALBUQUERQUE CARTHAGE Gamble Dist., Inc. West End Ave. 13619	WASHINGTON Equip. Northwest	SEATTLE 1410 14th Ave. 98122
NEW YORK Gamble Dist., Inc. West End Ave. 13619		WISCONSIN Horst Dist. Inc. 444 N. Madison St. 53014	CHILTON 444 N. Madison St. 53014
		NORTH CAROLINA Smith Hardware Co. 515 N. George St. 27530	GOLDSBORO 515 N. George St. 27530
		Dixie Sales Company 335 N. Green 27402	GREENSBORO 335 N. Green 27402

WARRANTY PARTS AND SERVICE POLICY

(0484)

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.