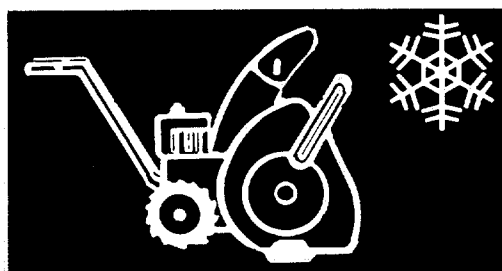
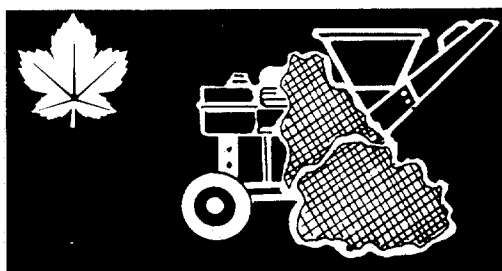
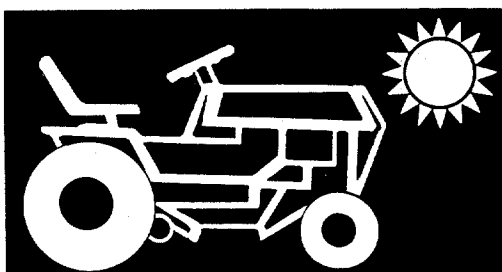
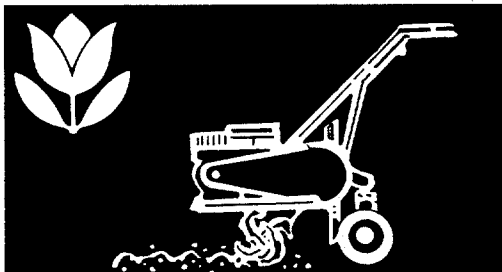


\$1.00

OWNER'S GUIDE

OUTDOOR POWER EQUIPMENT
for all seasons



22" HI-WHEEL ROTARY MOWERS

Model Numbers

118-502R000

118-506R000

118-508R000

190-066-000

IMPORTANT:
Read Safety Rules and
Instructions Carefully

Thank you for purchasing
an American-built product.

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Dear Customer,

So often throughout the year we are all in a rush to meet our daily obligations.

However, we at MTD Products Inc are taking a quick moment out to say...

"Thank you for your business."

Sincerely,

MTD PRODUCTS INC



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.

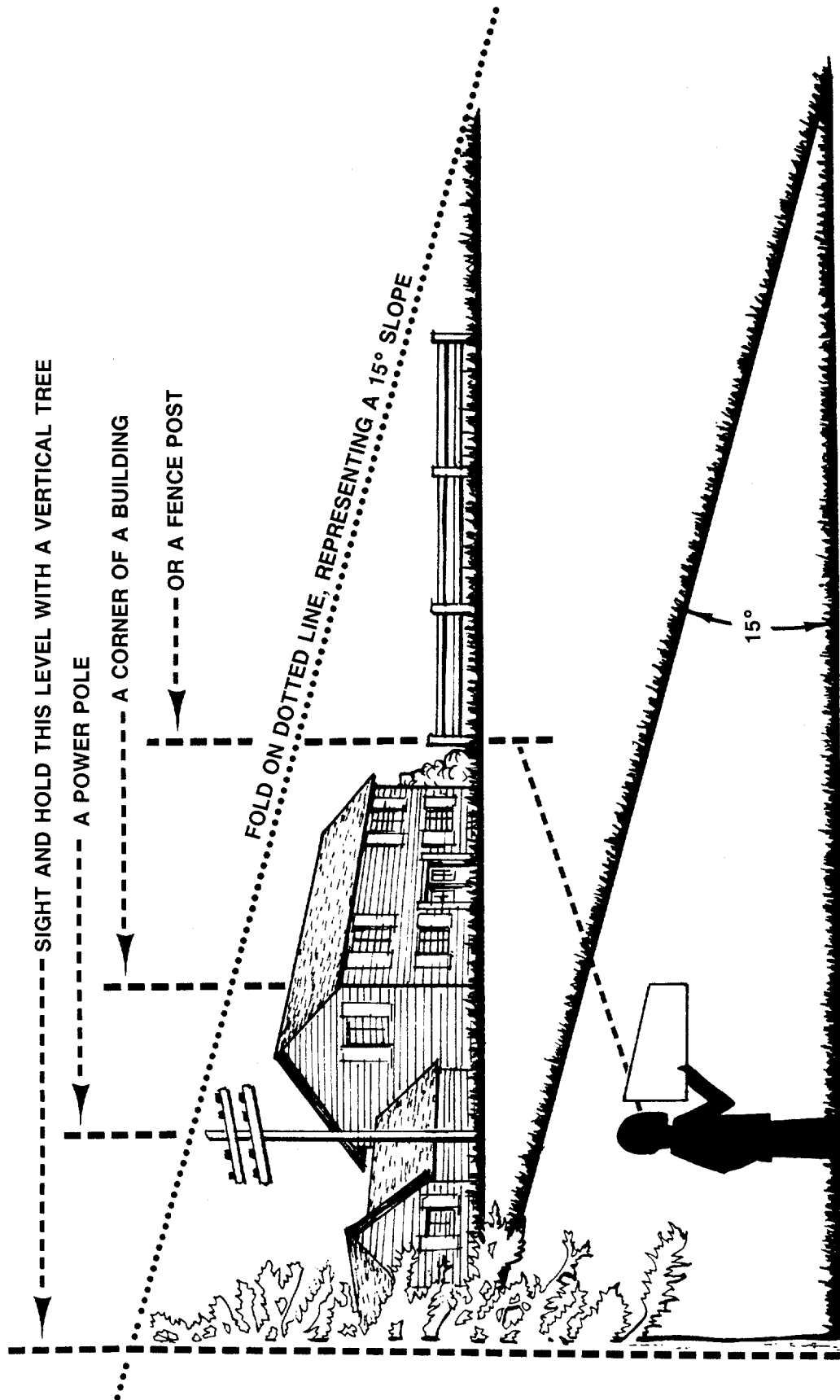
WARNING: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester 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 for the muffler is available through your nearest engine authorized service center.

USE THIS SHEET AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.

SLOPE GAUGE

(Keep this sheet in a safe place for future reference.)



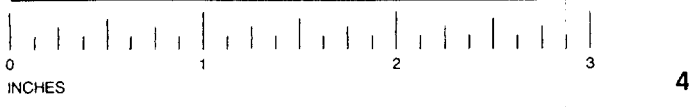
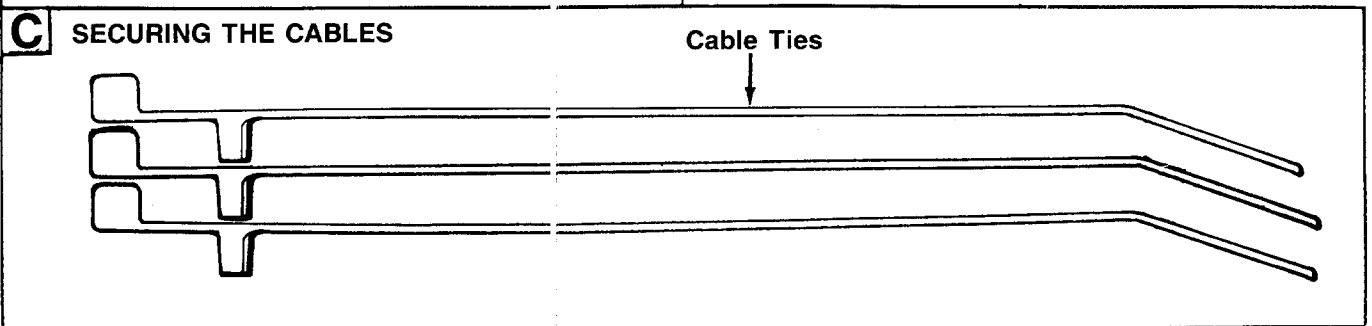
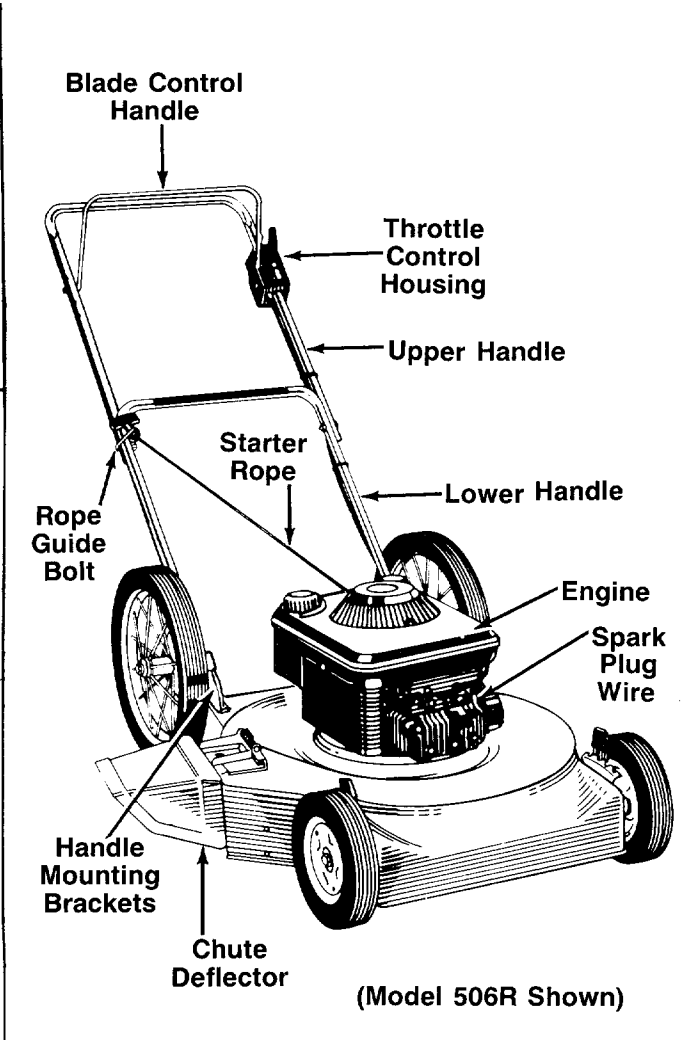
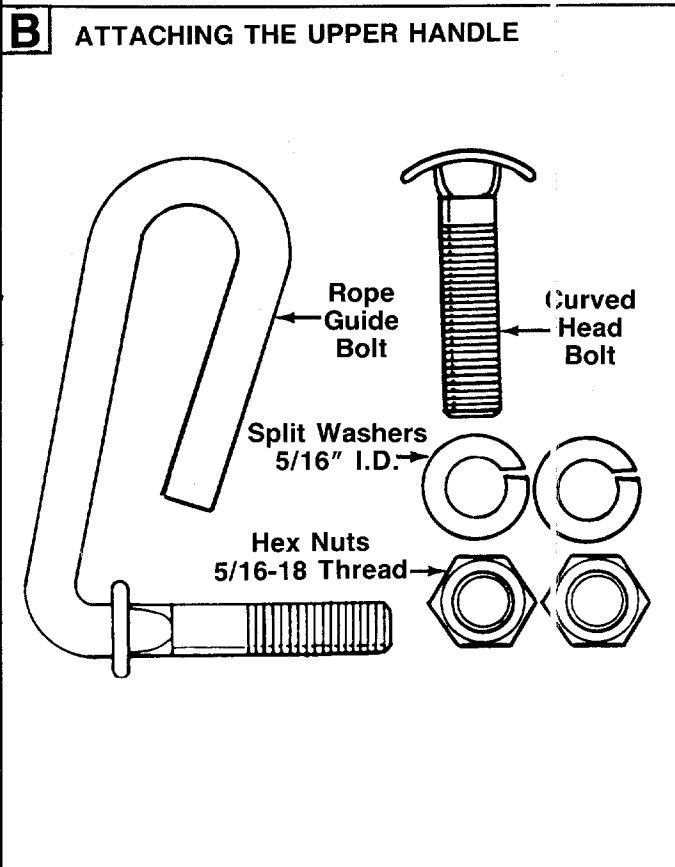
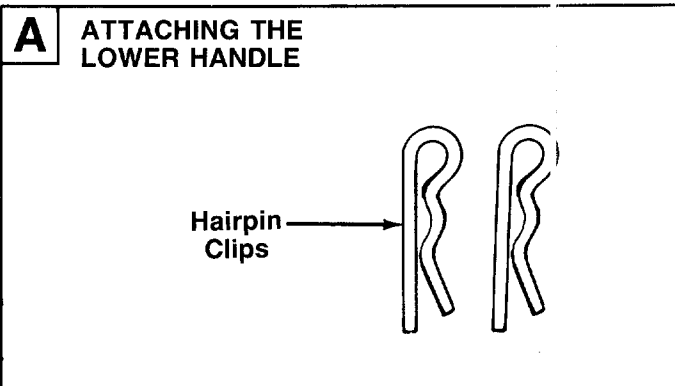
Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2½ feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

Operate RIDING mowers up and down slopes, never across the face of slopes.

Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.

CONTENTS OF HARDWARE PACK/PARTS IDENTIFICATION

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.
 (Hardware pack may contain extra items which are not used on your unit.)



Cut Along This Line

IMPORTANT

RULES FOR SAFE OPERATION



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR LAWN MOWER. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL—



HEED ITS WARNING.



DANGER

Your lawn mower was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.



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. 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 to help prevent blade contact or thrown object injury. 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. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine in any direction.
3. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
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 until engine has been allowed to cool for two minutes after running. Replace gasoline cap securely and 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. 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. Mow only in daylight or in good artificial light.

9. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.



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. 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.

- ➡ IMPORTANT:** This unit is shipped **WITHOUT GASOLINE** or **OIL**. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.
- ➡ NOTE:** Reference to right or left hand side of the mower is observed from the operating position. Refer to parts identification on page 4 for location of parts when assembling the mower.

ASSEMBLY INSTRUCTIONS

Tools Required for Assembly

- (1) Pair of Pliers
- (1) 1/2" Wrench*
- (1) 5/16" Wrench or Nutdriver*
- *Or one 6" Adjustable Wrench.

UNPACKING

1. Remove the lawn mower from the carton by opening the top flaps and lifting the unit out. Be careful of the staples. Make certain all parts and literature have been removed from the carton before the carton is discarded.
2. Disconnect and ground the spark plug wire against the engine. Check beneath the deck for any cardboard packaging. Remove if present.
3. Stretch out all control cables and place on the floor. Be careful not to bend or kink the cables at any time during assembly.
4. Remove page four from this manual and lay the contents of the hardware pack on the illustration for identification.

ATTACHING THE LOWER HANDLE (Hardware A)

1. Attach the lower handle by placing the bottom holes in the lower handle over the weld pins on the handle mounting brackets extending through the rear of the deck. Make certain the instruction label on the lower handle can be read from the operating position.
2. Using a pair of pliers, squeeze one leg of the lower handle against the handle mounting bracket. Insert the hairpin clip into the **inner hole** on the weld pin. See figure 1. Repeat on other side.

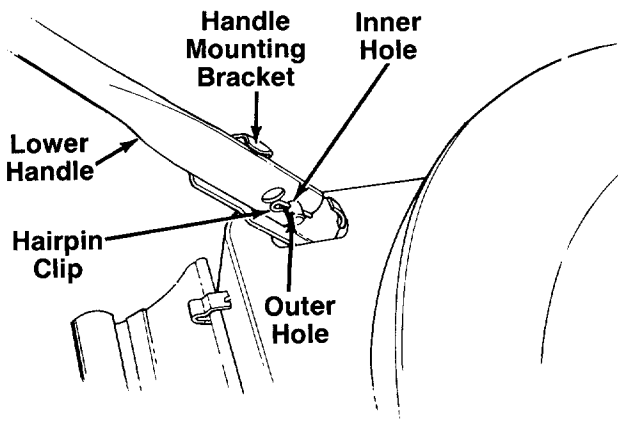


FIGURE 1.

➡ NOTE

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

ATTACHING THE UPPER HANDLE (Hardware B)

1. Place the upper handle in position over the lower handle. **The label on the throttle control housing and the control lever must be facing up.**

➡ NOTE

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 by following steps 2 and 3 and reversing the left and right hand instructions.

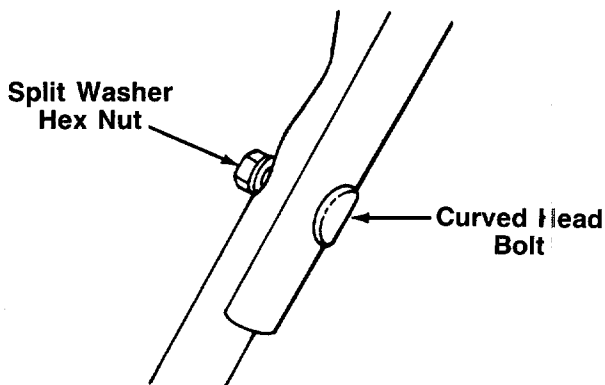


FIGURE 2.

- ➡ 2. Secure the left hand side of upper handle using the curved head bolt, split washer and hex nut as shown in figure 2.

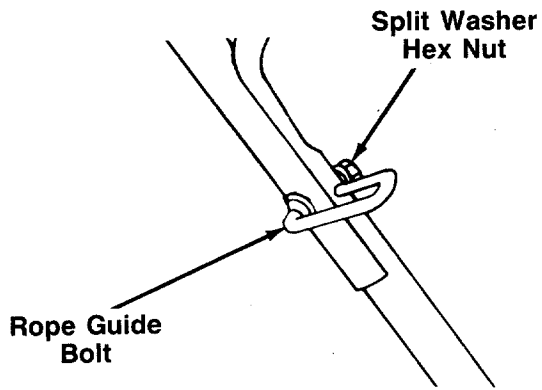


FIGURE 3.

3. Insert the rope guide bolt through the right hand side of upper and lower handle. See figure 3. Secure with split washer and hex nut, finger tight only.

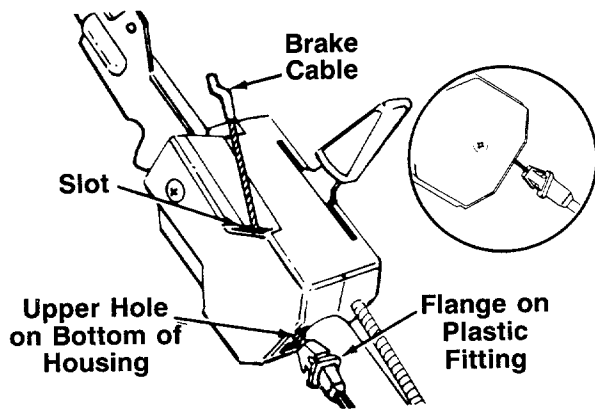


FIGURE 4.

ATTACHING THE BRAKE CABLE

1. The brake cable is attached to the engine, and has a "Z" fitting on the loose end. Route the brake cable below the lower handle. Place end of cable into the upper hole on the bottom of the control housing, and through the slot as shown. The angle of the plastic flange must be positioned downward as shown in figure 4. Be careful not to bend or kink the cable at any time.
2. Push the plastic fitting until it locks into the control housing.



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

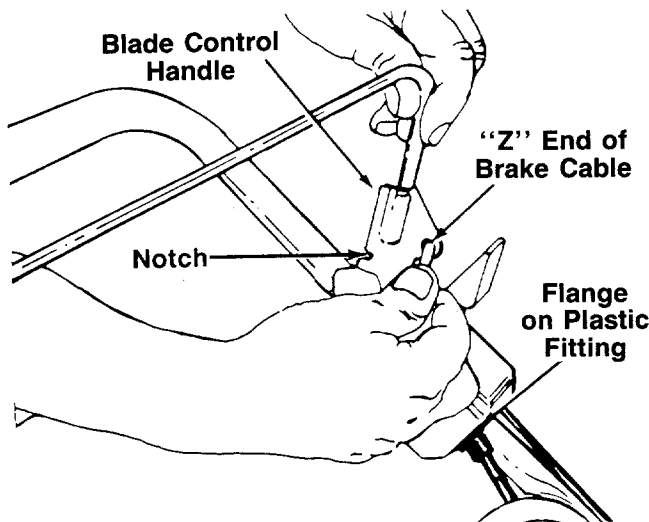


FIGURE 5.

3. Hook the "Z" end of the brake cable into the hole in the blade control handle from the inside to the outside as shown in figure 5.

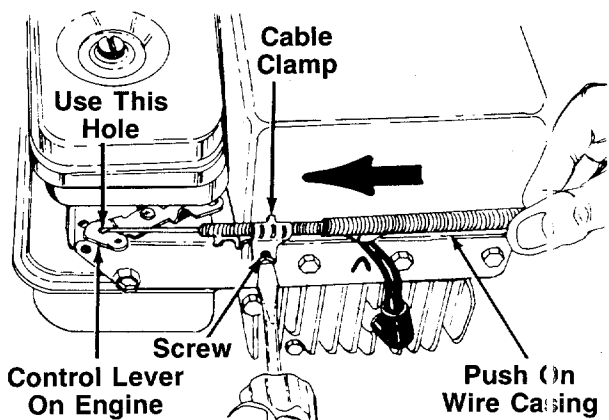


FIGURE 6A.—Model 502R

ATTACHING THE THROTTLE CABLE

Model 502R Only:

1. Place the throttle control lever on the handle in **FAST** position.
2. The throttle control cable is attached to the upper handle. Route the throttle control cable under the lower handle and inside the handle mounting bracket. Hook the "Z" end of the throttle control cable into the arm on the control lever on the engine which has two holes, using the **outside** hole as shown in figure 6A.
3. Remove the screw on the cable clamp on the engine shown in figure 6A. Slip the control casing under the clamp. Replace the screw, but do not tighten (cable must still move freely beneath the clamp).
4. Slide the control lever on the engine as far toward the **outside** of the engine as it will go. Push the wire casing on the throttle control cable toward the control lever on the engine as shown in figure 6A as you tighten the screw on the cable clamp to secure the cable in this position.
5. Loosen the screw on the clamp on the side of the engine. Secure the cable **away from the muffler**. Be careful not to bend or kink the cable. Tighten the screw.

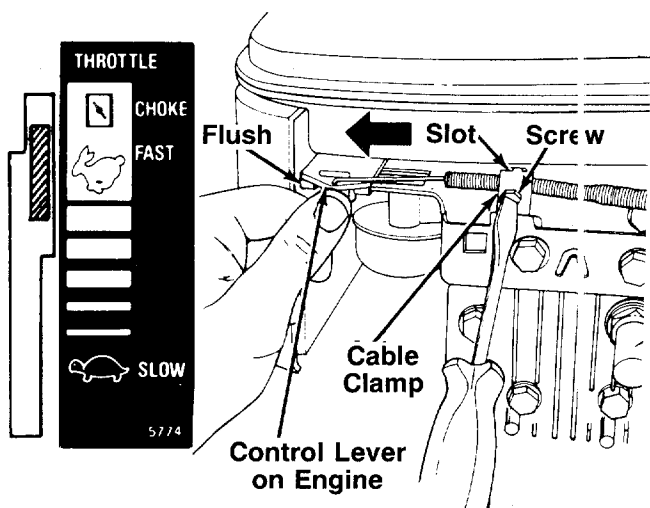


FIGURE 6B.—Model 506R

ATTACHING THE THROTTLE CABLE

Model 506R Only:

1. Push the throttle control lever on the handle all the way forward to **CHOKE**, then back it off **two "clicks"** (approximately 5/16"). See figure 6B.
2. The throttle control cable is attached to the upper handle. Route the throttle control cable under the lower handle and inside the handle mounting bracket. Hook the "Z" end of the throttle control cable into the hole in the control lever on the engine. See figure 6B.
3. Using a 5/16" wrench or nutdriver, remove the screw on the cable clamp shown in figure 6B. Slip the control cable under the clamp. Replace the screw (cable should be above the screw), but do not tighten (cable must still move freely beneath the clamp). Make certain the tab on the cable clamp is seated into the slot on the engine.
4. Push the control lever on the engine as far toward the **outside** of the engine as it will go. The edge of the control lever should be flush with the bracket on the engine. See figure 6B. Hold the control lever in this position as you tighten the screw on the cable clamp to secure the throttle cable.
5. Loosen the screw on the clamp on the side of the engine. Slip the cable casing under the clamp to secure the cable **away from the muffler**. Be careful not to bend or kink the cable. Tighten the screw.

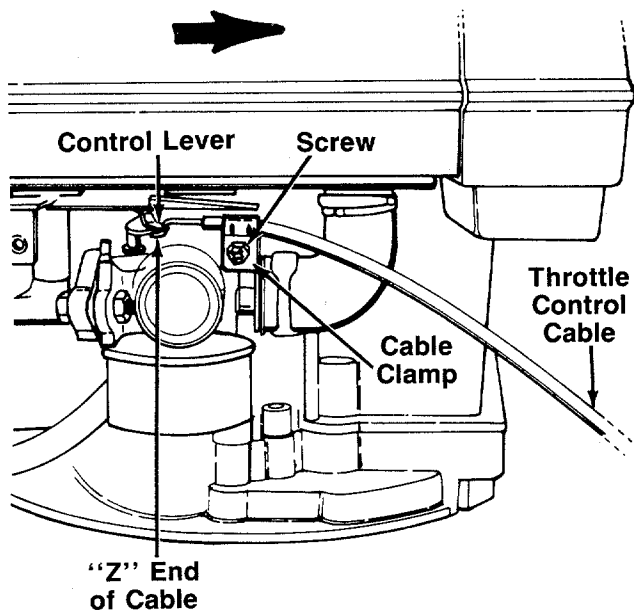


FIGURE 6C.—Model 508R

ATTACHING THE THROTTLE CABLE

Model 508R Only:

1. Place the throttle control lever on the handle in FAST position.
2. The throttle control cable is attached to the upper handle. Route the throttle control cable under the lower handle and inside the handle mounting bracket. Hook the "Z" end of the throttle control cable into the control lever on the engine as shown in figure 6C.
3. Loosen (do not remove) the screw on the cable clamp shown in figure 6C. Slip the control casing under the clamp (cable must move freely beneath the clamp).
4. Place the control lever on the engine in the full open position by pushing it as far toward the rear of the unit as it will go. Tighten the screw on the cable clamp to secure the cable in this position.

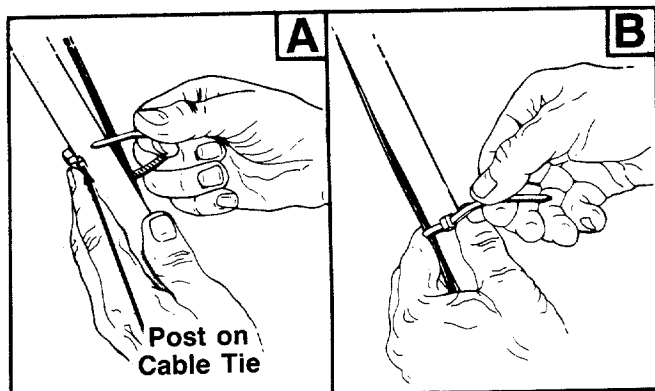


FIGURE 7.

SECURING THE CABLES (Hardware C)

Secure all cables to the handle as follows.

- A. Insert posts on cable ties into holes provided on the left side of the handle, one on the upper handle and two on the lower handle. The holes may be either on the inside or outside of the handles. See figure 7A.
- B. Secure the cables with the cable ties. See figure 7B
- C. Trim excess ends of cable ties.

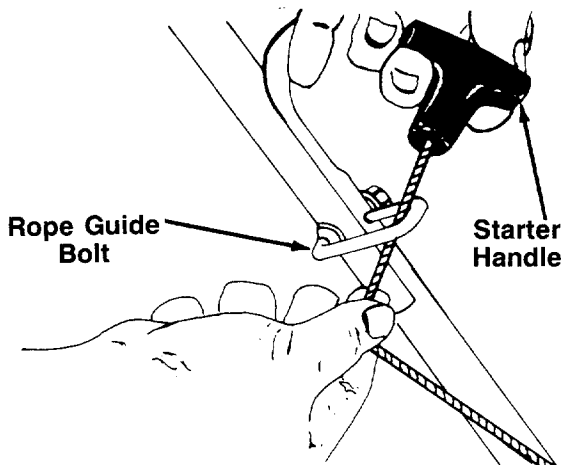


FIGURE 8.

ATTACHING THE STARTER ROPE

1. The starter rope protrudes from the top of the engine. Additional rope may be wound around the starter handle. If so, unwind the rope from the handle.
2. With the spark plug wire disconnected and grounded, depress the blade control handle and pull the rope out of the engine.
3. Slip the starter rope into the rope guide bolt as shown in figure 8.
4. Tighten the hex nut on the rope guide bolt securely.

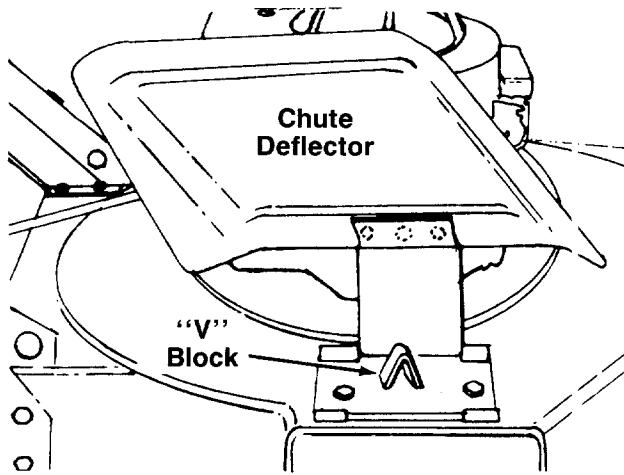


FIGURE 9.

FINAL ASSEMBLY OF MOWER

1. The chute deflector on your mower is held in an upright position by a "V" block for shipping purposes only. This "V" block must be removed and discarded before the mower is put into operation. See figure 9.

To remove the "V" block, pull the spring-loaded chute toward the engine. Remove the "V" block and carefully lower the chute into operating position, keeping fingers out of the way.

2. Make certain **all** nuts and bolts are tightened securely.

CONTROLS

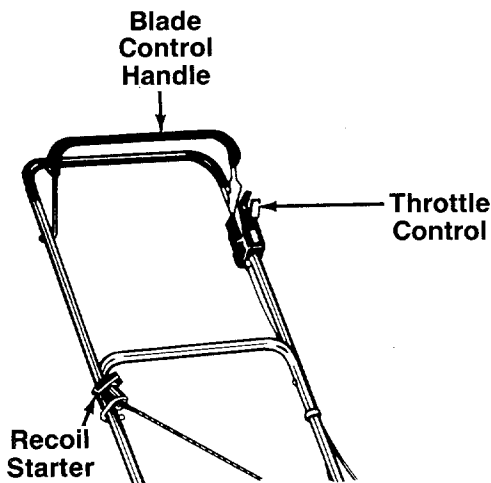


FIGURE 10.

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 10. 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 side of the upper handle. It is used to regulate the engine speed.



The throttle control cannot be used to stop the engine.

RECOIL STARTER

The recoil starter handle is attached to the handle. See figure 10. Stand behind the unit in the operating position to start the unit.

OPERATION



FIGURE 11.

Keep hands and feet away from the chute area on cutting deck. See figure 11.

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 cutting height adjustment section.

GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your mower. **Read instructions carefully.**



Never fill fuel tank indoors, with engine running or until the engine has been allowed to cool for at least two minutes after running.

TO START ENGINE AND ENGAGE BLADE

1. Attach spark plug wire to spark plug. If unit is equipped with a rubber boot over the end of the spark plug wire, make certain the metal loop on the end of the spark plug wire (inside the rubber boot) is fastened securely over the metal tip on the spark plug. See figure 12.

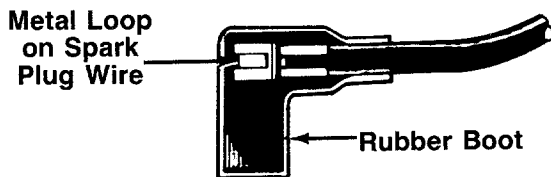


FIGURE 12.

2. **Model 506R only:** Open fuel shut-off valve. See figure 13.

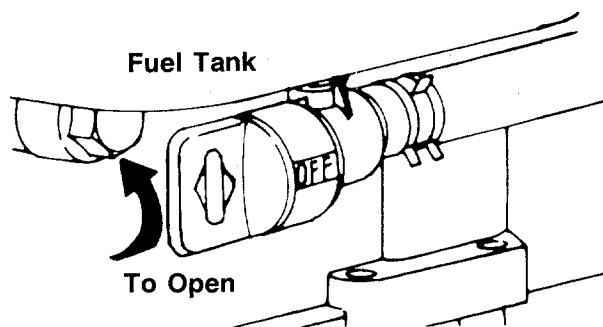


FIGURE 13.—Model 506R

3. **Model 506R only:** Move throttle control lever to CHOKE position.

Models 502R and 508R: Move the throttle control lever to FAST or START position.

4. **Model 508R only:** Prime engine as instructed in the separate engine manual packed with your unit.
5. Standing behind the unit, depress the blade control handle and hold it against the upper handle as shown. See figure 14.
6. Grasp the recoil starter handle and pull back rapidly, extending rope fully. Return it slowly to the rope guide bolt.
7. After engine starts, move throttle control to desired engine speed.

NOTE

If any problems are encountered, refer to the Trouble Shooting Chart on page 18.

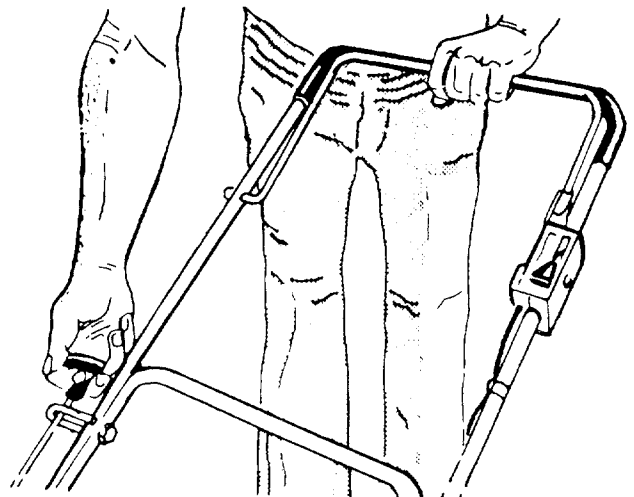


FIGURE 14.

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 the 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

An adjusting plate and thumb lever at each wheel position 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 hole to another. Simply depress the lever towards wheel and move wheel and lever assembly to desired position. All wheels must be placed in the same relative position. See figure 15.

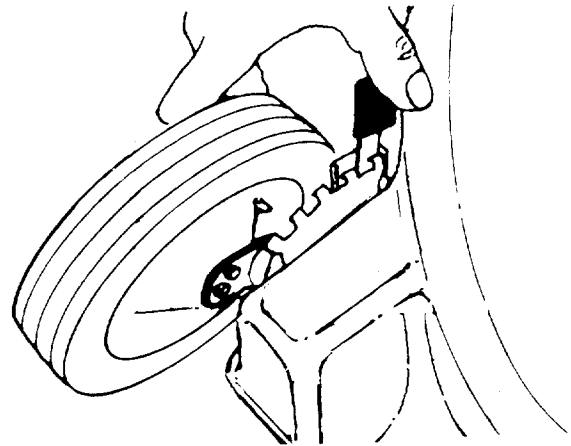


FIGURE 15.

THROTTLE

The throttle control wire assembly can be adjusted if necessary. Loosen the screw on the cable clamp shown in figure 6. Adjust as instructed in steps 1 and 4 of "Attaching the Throttle Control Cable" in Assembly Instructions.

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 adjustments may be required to compensate for differences in fuel, temperature, altitude and load. To adjust carburetor, refer to the separate engine manual packed with your mower.

➔ NOTE

A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor. Refer to the separate engine manual.

LUBRICATION



WARNING

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 16. The blade control must operate freely in both directions.

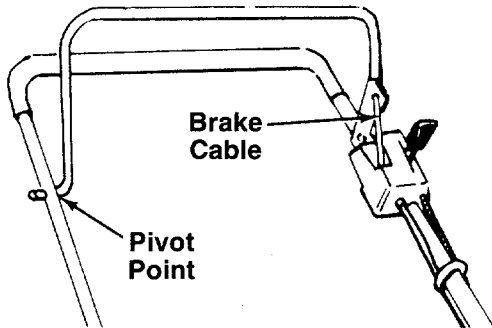


FIGURE 16.

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



WARNING

Be sure to disconnect and ground the spark plug wire before performing any repairs or maintenance.



NOTE

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

TROUBLE SHOOTING

Refer to page 18 of this manual for trouble shooting information.

CUTTING BLADE

When removing the cutting blade for sharpening or replacement protect hands by using heavy gloves or a rag to grasp the cutting blade. Remove the bolt and blade bell washer which hold the blade and adapter to the engine crankshaft. Remove the blade and adapter from the crankshaft.



CAUTION

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

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.

The blade can be tested by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

Before reassembling the blade and the blade adapter to the unit, lubricate the engine crankshaft, the inner surface of the blade adapter and the center bolt 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.

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

Center Bolt: 375 in. lb. min., 450 in. lb. max. If lacking torque wrench, tighten until the blade bell washer is flattened.

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 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 all engine maintenance instructions.

Maintain **engine oil** as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.

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.

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.

Clean the engine regularly with a cloth or brush. Keep the cooling system (blower housing area) clear to permit proper air circulation which is essential to engine performance and life. Be certain to remove all grass, dirt and combustible debris from muffler area.

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

The handle may be placed in an upright position for storage. Move hairpin clips to outer hole on weld pins. See figure 1. 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 hairpin clips 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 066 is available as optional equipment for the mowers shown in this manual.



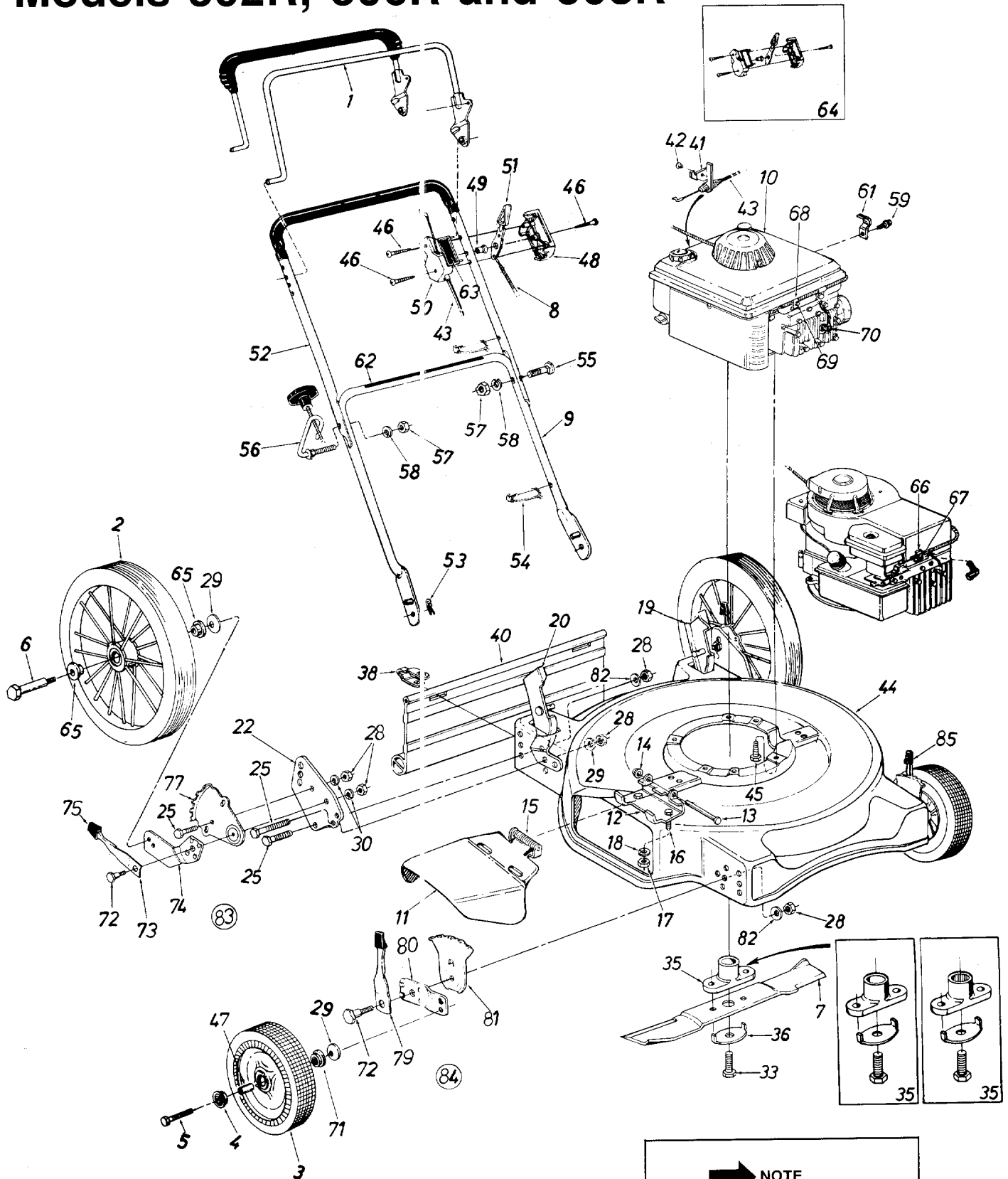
1. DO NOT operate the mower without the entire grass catcher or chute deflector in place.
2. DO NOT operate the mower without the protective shield on the rear of the deck in place.

 **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.

Models 502R, 506R and 508R



ATTACHING THROTTLE WIRE TO LEVER
Models 502R and 506R: Use upper hole
in lever as shown. Model 508R: Use lower
hole in lever.

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.

Models 502R, 506R and 508R

PARTS LIST FOR MODELS 502R, 506R AND 508R ROTARY MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	14321		Control Handle (Standard)		47	750-0434		Spacer	
	731-0609		Control Handle (Deluxe)		48	731-0817		Control Panel Half	
2	734-0244		Rear Wheel Ass'y.—Comp. 14.0 x 1.75		49	731-0524		Control Disc Pin	
					50	731-0816		Clutch Panel Half	
3	734-1259		Front Wheel Ass'y.—Comp. 8.0 x 1.75		51	731-0528		Throttle Control Lever	
					52	749-0754		Upper Handle	
4	741-0484		Bearing 1/2" I.D.		53	714-0104		Intern. Cot. Pin 5/16" Dia.	
5	710- 0347 /020		Front Axle Bolt		54	726-0240		Cable Tie	
6	738-0481		Rear Axle Bolt		55	710-0671		Curved Carriage Bolt 5/16-18 x 1.38" Lg.	
7	742-0522		22" Blade	N					
8	746-0632		Throttle Wire—53" (502R, 506R)		56	710-0842		Rope Guide Bolt	
					57	712-0267		Hex Nut 5/16-18 Thd.*	
	746-0631		Throttle Wire—49" (508R)		58	736-0119		L-Wash. 5/16" I.D.*	
9	749-0373		Lower Handle		59	710-0429		Hex B-Tap Scr. #10 x .38" Lg. (B&S)	
10	—		Engine					Cable Clamp (B&S)	
11	14944	638	Chute Deflector Ass'y. Comp.		61	12894		Instruction Label—Handle	
12	11130		Adapter Plate		62	777-5776		Control Label—Throttle	
13	711-0555		Pivot Pin		63	777-5774		Control Housing Comp.	
14	726-0106		Push Nut 1/4" Rod		64	753-0430		Flange Bearing	
15	732-0253		Torsion Spring		65	748-0147		Cable Clamp (502R)	
16	710-0289		Hex Bolt 1/4-20 x .50" Lg.*		66	751-0369		Hex AB-Tap Scr. #8 x .38" Lg. (502R)	
17	712-0287		Hex Nut 1/4-20 Thd.*		67	710-0227		Casing Clamp (506R)	
18	736-0329		L-Wash. 1/4" I.D.*					Hex B-Tap Scr. #10 x .62" (506R)	N
19	17189		Handle Mount Brkt.—L.H.	N	68	751-0463		Spark Plug Boot	
20	17188		Handle Mount Brkt.—R.H.	N	69	710-0436		Ball Bearing 3/8" I.D.	
22	16645		Mounting Plate					Shoulder Bolt .50" Dia.	
25	710-0216		Hex Bolt 3/8-16 x .75" Lg.		70	735-0639		Spring Lever	
28	712-0798		Hex Nut 3/8-16 Thd.*		71	741-0267		Pivot Bar—R.H.	
29	736-0105		Bell-Wash. .400" I.D. x .88"		72	738-0507		Pivot Bar—L.H.	
30	736-0169		L-Wash. 3/8" I.D.*		73	732-0417		Spring Lever Knob	
33	710-0757		Hex Bolt 7/16-20 x 1.5" Lg. (Used w/Splined Adapter)		74	14765		Hex Bolt 3/8-16 x .75" Lg.*	
						14766		Index Plate	
	710-0459		Hex Bolt 3/8-24 x 1.5" Lg. (Used w/Keyed Adapter)		75	720-0190		Spring Lever Ass'y. w/Knob	
35	753-0463		Blade Adapter Kit (Splined)	N	76	710-0216		Pivot Bar	
	753-0462		Blade Adapter Kit (Keyed)		77	14764		Height Adj. Plate	
36	736-0415		Blade Bell-Wash.	N	79	14832		Bell-Wash. .39" I.D. x 1.38"	
38	17098		Hinge Clip	N	80	15262		Rear Height Adj. Ass'y. Comp.—R.H.	
40	731-0872		Rear Flap Ass'y.	N	81	15261		Rear Height Adj. Ass'y. Comp.—L.H. (Not Shown)	
41	14924		Cable Bracket (B&S)		82	736-0356		Front Height Adj. Ass'y. Comp.—R.H.	
42	728-0171		Pop Rivet (B&S)		83	16106		Front Height Adj. Ass'y. Comp.—L.H.	
43	746-0476		Control Cable—39" (502R, 506R)			16107			
	746-0478		Control Cable—49" (508R)		84	14578			
44	17046	638	22" Deck Ass'y.	N					
45	710-0654		Hex Wash. Hd. TT-Tap Scr. 3/8-16 x 1.00" Lg.		85	14579			
46	710-0796		Truss Mach. "B"-Tap Scr. #12 x 1.50" Lg.						

*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.

If color or finish is important when ordering parts, use the appropriate color code shown below [i.e. (part no.)—638 for MTD Red Finish].

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."



Color Codes

312—White	480—Brilliant Green
436—Radiant Yellow	483—Charcoal Grey
447—Patina Silver	499—Beige
452—Black	629—Silver Flake
456—Radiant Tangerine	630—Blue
460—Green Flake	638—MTD Red

Trouble Shooting Chart

Symptom	Possible Causes	Corrective Action
1 Engine fails to start	<p>A Blade control handle disengaged</p> <p>B Check fuel tank for fuel</p> <p>C Fuel shut-off valve closed (on units so equipped).</p> <p>D Spark plug lead wire disconnected.</p> <p>E Throttle control lever not in the starting position</p> <p>F Faulty spark plug</p> <p>G Carburetor improperly adjusted, engine flooded</p> <p>H Old stale fuel</p> <p>I Engine brake engaged</p>	<p>A Engage blade control handle.</p> <p>B Fill tank if empty.</p> <p>C Open fuel shut-off valve.</p> <p>D Connect lead wire.</p> <p>E Move throttle lever to start position.</p> <p>F Clean, adjust gap or replace.†</p> <p>G 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>H Drain and refill with fresh fuel.</p> <p>I 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.†</p> <p>C Clean air cleaner.†</p>
3 Operation erratic	<p>A Dirt in fuel 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 fuel.</p> <p>B Clean air cleaner.†</p> <p>C Drain contaminated fuel and fill tank with fresh fuel.</p> <p>D Clear vent or replace gas cap.</p> <p>E Adjust carburetor.†</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.†</p> <p>B Adjust to .030".</p> <p>C Adjust carburetor.†</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.†</p> <p>C Clean air cleaner.†</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.†</p> <p>B Remove blower housing and clean.†</p> <p>C Fill crankcase with the proper oil or fuel mixture.</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>

†Refer to separate engine manual packed with your unit.

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

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

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

BRIGGS AND 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.

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	BIRMINGHAM	NEW YORK	CARTHAGE
Auto Electric & Carburetor Co.	2625 4th Ave. S. 35233	Gamble Dist., Inc.	West End Ave. 13619
ARKANSAS	NORTH LITTLE ROCK	NORTH CAROLINA	GREENSBORO
Sutton's Lawn Mower Shop.	5301 Roundtop Drive	Dixie Sales Company	335 N. Green 27402
	Box 368, Rt. 4 72117	OHIO	CARROLL
CALIFORNIA	PORTERVILLE	Stebe's Mid-State Mower Supply	Box 366, 71 High St. 43112
Billious	75 North D Street 93257		CLEVELAND
COLORADO	DENVER	Bleckrie, Inc.	7900 Lorain Ave. 44102
Spitzer Industrial Products Co.	8601 N.	National Central	WADSWORTH
	Washington St. 80229	Burton Supply Co.	687 Seville Rd. 44281
FLORIDA	JACKSONVILLE		YOUNGSTOWN
Radco Distributors	4909 Victor St.		1301 Logan Ave.
	Box 5459 32207		Box 929 44501
	HIALEAH	PENNSYLVANIA	HARRISBURG
Small Eng. Dist.	7995 W. 26th Court 33016	EECO Inc.	4021 N. 6th St. 17110
GEORGIA	EAST POINT		WILLOW GROVE
East Point Cycle & Key Inc.	2834 Church St. 30344	Thompson Rubber Co.	850 Davisville Rd. 19090
ILLINOIS	LYONS	Bluemont Co.	PITTSBURGH
Keen Edge Co.	8615 Ogdan Ave. 60534		11101 Frankstown Rd. 15235
INDIANA	ELKHART		PUNXSUTAWNEY
Parts & Sales Inc.	2101 Industrial Pkwy. 46516	Frank Roberts & Sons	R.D. 2 15767
IOWA	DUBUQUE		SCRANTON
Power Lawn & Garden Equip.	2551 J.F. Kennedy 52001	Scranton Auto Ignition Co.	1133-35 Wyoming Ave. 18509
LOUISIANA	NEW ORLEANS	TENNESSEE	KNOXVILLE
Suhren Engine Co.	8330 Earhart Blvd. 70118	Ace Distributors	2103 Magnolia 37917
MARYLAND	TAKOMA PARK		MEMPHIS
Center Supply Co.	6867 New Hampshire	American Sales & Service, Inc.	3035-43 Bellbrook 38116
	Ave. 20912	TEXAS	DALLAS
MASSACHUSETTS	SPRINGFIELD	Marr Brothers, Inc.	423 E. Jefferson 75203
Morton B. Collins Co.	300 Birnie Ave. 01107		SAN ANTONIO
MICHIGAN	MOUNT CLEMENS	Engine House Inc.	8610 Botts Lane
Power Equipment Dist.	340 Hubbard 48043		P.O. Box 17867 78217
MINNESOTA	PLYMOUTH	UTAH	SALT LAKE CITY
Hance Distributing Inc.	12795 16th Ave. North 55441	Powered Products	1661 N. Beck St. 84116
MISSOURI	EARTH CITY	VIRGINIA	ASHLAND
Oscar Wilson Engine & Parts	4159 Shoreline Dr. 63045	RBI Corp.	101 Cedar Ridge Dr. 23005
	KANSAS CITY	WASHINGTON	SEATTLE
Automotive Equip. Service	3117 Holmes St. 64109	Equip. Northwest	1410 14th Ave. 98122
NEW JERSEY	ALLOWAY	WISCONSIN	MILWAUKEE
Piersons	Canal St., Box 494 08001	Wisconsin Magneto Inc.	4727 N. Teutonia St. 53209
NEW MEXICO	ALBUQUERQUE		
Spitzer Eng. & Parts Co.	1023 Third Ave. N.W. 87103		

WARRANTY PARTS AND SERVICE POLICY

(0687)

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 or 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, Serial Number and/or Data Code of unit involved.
2. Date unit was purchased or first put into service.
3. Date of Failure.
4. Nature of Failure.