

**ASSEMBLY • OPERATION • MAINTENANCE • PARTS** 

# 20" REAR DISCHARGE ROTARY MOWER

Important:

Read Safety Rules and Instructions Carefully

Model Number 111-338A

## INDEX

Safe Operation Practices	3	Maintenance	
Assembly	4	Off-Season Storage	
Controls	9	Illustrated Parts	18.20
Operation	10	Repair Parts List	
Adjustments		Parts Information	Back Cover
Lubrication	10		

## **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.



## TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.



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

- It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future reference and for ordering replacement parts.
- Your rotary mower is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
- 3. Read this Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- 4. 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.
- 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, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury.

#### PREPARATION

- 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 injury.
- 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.
- Never attempt to make a wheel or cutting height adjustment while the engine is running.
- 7. Mow only in daylight or in good artificial light.
- 8. Never operate the equipment in wet grass. Always be sure of your footing. Keep a firm hold on the handle and walk, never run.

#### **OPERATION**

 Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.

- 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.
- 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.
- If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop the engine whenever you leave the mower, before cleaning the mower housing, and when making any repairs or inspections.
- 7. When cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
- 8. Before attempting to unclog the mower or discharge chute, stop the engine and be sure the blade has stopped completely. 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. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
- 9. Do not run the engine indoors.
- Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging chute.
- Mow across the face of slopes, never up-anddown. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
- 12. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
- 13. Never operate mower without proper guards, plates or other safety protective devices in place.
- 14. Keep washout ports and other mower-housing service openings closed when mowing.
- 15. DO NOT OPERATE this mower with the chute doors open, unless the complete grass catcher is properly mounted on the mower.

#### **MAINTENANCE AND STORAGE**

 Check the blade and engine mounting bolts at frequent intervals for proper tightness.

## **SAFE OPERATION PRACTICES (Continued)**

- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
- 4. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
- Check the grass catcher bag frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.

#### **BLADE BRAKE/CLUTCH MAINTENANCE**

NOTE: Any required repair work on the blade brake/clutch should be performed by an authorized service dealer. If you cannot locate an authorized service dealer, contact the manufacturer as set forth on your copy of the Owner's Registration Card.

 The blade brake/clutch hand control 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. This hand control must operate freely in both directions.

- Striking a solid object can cause damage to the blade brake/clutch or to the engine crankshaft. Extensive vibration of the mower during operation is an indication of damage and the unit should be inspected and repaired.
- 3. A leak in the lower engine crankshaft oil seal could expose the blade brake/clutch friction pads to excess oil resulting in blade or brake slippage, which could increase the stopping time of the blade. Oil collection on the floor beneath the mower during storage may be an indication of an oil seal leak. The unit should be checked by an authorized service dealer.
- 4. Periodically inspect the inner control cable in the area where it attaches to the hand control. It the cable becomes frayed, it could cause the blade brake/clutch to operate improperly. Also, be careful to avoid pinching the blade brake/clutch control cable when using the folding handle feature (on units so equipped).

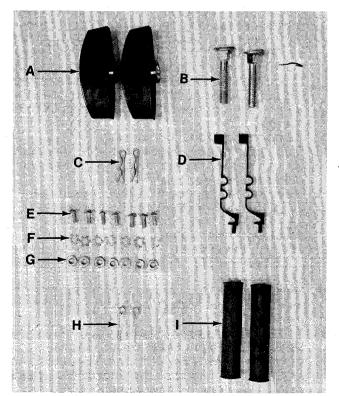


FIGURE 1.

## **ASSEMBLY**



This unit is shipped WITHOUT GAS-OLINE or OIL. After assembly, see operating section of this manual for proper fuel and engine oil recommendations.

#### ← Contents of Hardware Pack: (See Figure 1)

- A (2) Hand Knobs
- B (2) Curved Carriage Bolts 5/16-18 x 1.75" Long
- C (2) Hairpin Cotters
- D (2) Cable Ties
- E (7) Truss Head Bolts 3/8" Long
- F (7) External Lock Washers
- G (7) Hex Nuts #10-24 Thread
- H (2) Cotter Pins
- I (2) Tubing Connectors
- Remove the lawn mower, loose parts, hardware pack and literature from the carton. Make certain all parts and literature have been removed before the carton is discarded.
- 2. Extend the upper handle with control wires attached and place on the floor. Be careful not to bend or kink control wires.

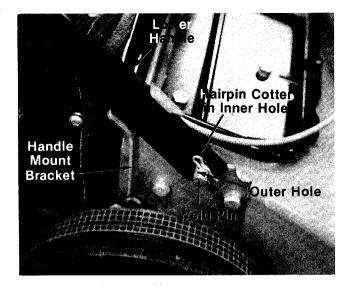


FIGURE 2.

 Place lower handle in position over weld pins in handle mount brackets on deck. Secure by placing two hairpin cotters (C) in inner hole on weld pins. See figure 2.



It may be necessary to bend the ends of the lower handle inward slightly to assure a snug fit against the bracket mounting area.

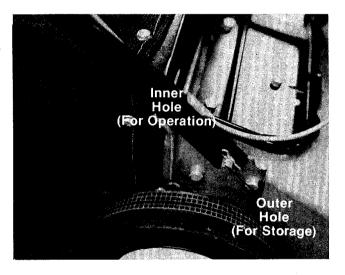


FIGURE 3.

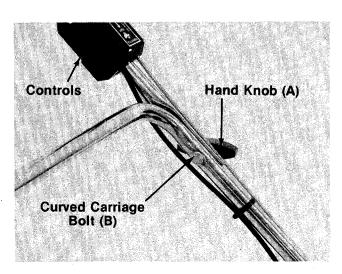


FIGURE 4.



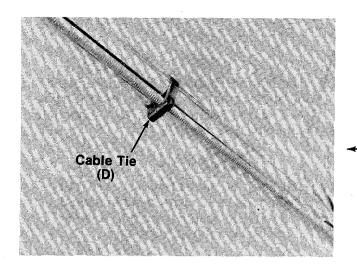
There are two (2) holes in the handle mount brackets. Place hairpin cotter in the inner hole for operation. The outer hole is for storage. See figure 3.

4. Place upper handle in position over lower handle. Controls should be on the left side of the handle. Blade brake/clutch control wire must be assembled so that it is behind the handle as shown in figure 4.

Secure with two carriage bolts (B) and hand -knobs (A) as shown in figure 4. The knobs can be either to the inside or outside of the handle.

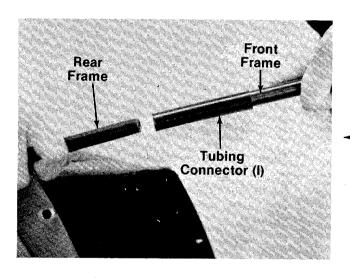


Reference to left or right side of machine is determined from operator's position at the handle facing forward.



- Secure throttle control cable and blade brake/clutch cable to handle with cable ties
   (D) provided. See figure 5.
- 6. Check all nuts and bolts for correct tightness.

#### FIGURE 5.



## **Grass Catcher Assembly**

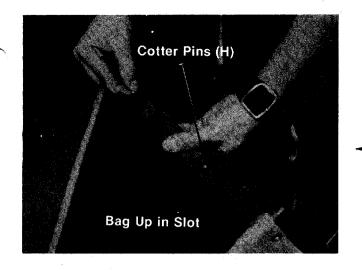
 Join the front and rear frames by pushing the ends of the rear frame into the ends of the tubing connectors (I). See figure 6.

FIGURE 6.



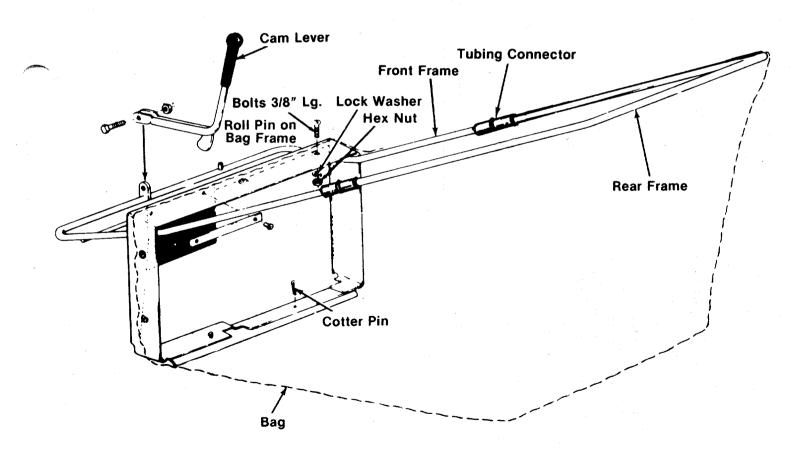
2. Insert frame into bag (printing on bag is the top of the bag). Fasten edges (with eyelets) to front frame with 3/8" bolts (E), lock washers—(F) and hex nuts (G). Finger tighten. See figure 7. Hint: For easier assembly, **Do not** fasten lower bolts on sides until after step 3.

FIGURE 7.



3. Stand bag on end with open end up. Pull bottom of bag forward into slot. Align holes and slip cotter pins (H) into holes. Spread ends of pins to secure bag to frame. See figure 8. Tighten all nuts and bolts securely with screwdriver.

FIGURE 8.



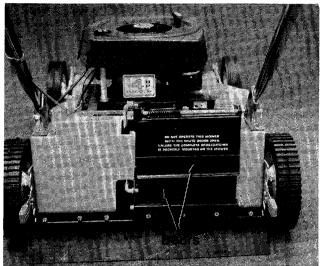
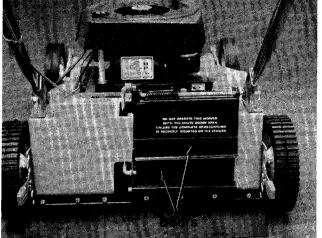


FIGURE 9.



1. Attach the grass catcher frame to the front of

-the adapter as shown in figure 10.

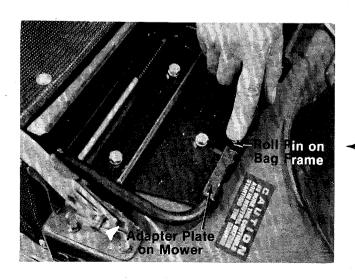
## To Attach Bag To Mower

The doors shown in figure 9 cannot be opened to discharge the grass unless the grass catcher is in place.



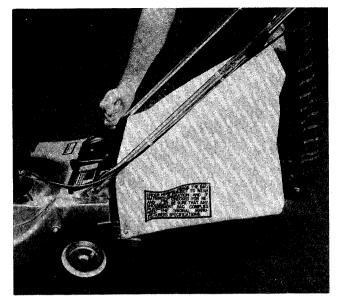
Under no circumstances should the doors be opened while the engine is operating unless the grass catcher is securely in place.





Tilt bag slightly forward and slide roll pin on bag frame into slot on mower. See figure 11. Push down on bag to position on mower.

FIGURE 11.



 Pull cam lever back and down to lock grass catcher on mower. This automatically opens —— rear discharge doors on mower.

To remove the grass catcher, unlock the cam lever and lift off the grass catcher.

FIGURE 12.

## **CONTROLS**

#### THROTTLE CONTROL

The throttle is located on the left side of handle. It controls engine speed. See figure 13.

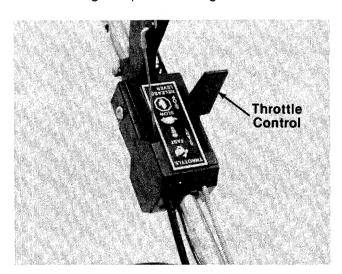


FIGURE 13.
BLADE BRAKE/CLUTCH CONTROL

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

The blade brake/clutch control is located on the upper handle of the mower. The clutch handle engages and disengages the blade.

To engage the blade, pull the side release lever away from the unit. See figure 14. Pull the clutch control handle against the upper handle. Release side lever.

Release the clutch control handle to stop the blade from turning.



If the engine should stall when the blade is engaged, move the throttle control lever to a faster engine speed.

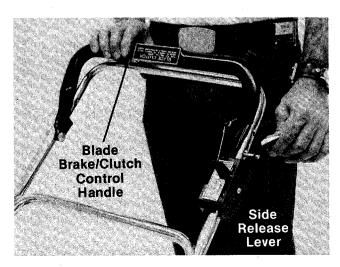


FIGURE 14.

### **OPERATION**

DO NOT OPERATE THIS MOWER WITH THE CHUTE DOORS OPEN, UNLESS THE COMPLETE GRASSCATCHER IS PROPERLY MOUNTED ON THE MOWER.



FIGURE 15.

Keep hands and feet away from the chute area on cutting deck. See figure 15.



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 adjustment section.

#### **BEFORE STARTING**

 Fill sump with oil, using a high quality detergent oil classified "For Service SC, SD, SE or MS." Nothing should be added to the recommended oil.

Use SAE 30 oil. If not available, use SAE 10W-30 or SAE 10W-40 oil.

Place the engine level. Remove oil dipstick. Fill the oil sump to full mark on dipstick. Pour slowly. Capacity 1¼ pints.

Fill fuel tank, using clean, fresh, leaded regular grade automotive gasoline. Fill tank completely!

DO NOT MIX OIL WITH GASOLINE.

3. Attach spark plug wire to spark plug.

#### START ENGINE

- Move throttle control lever to "START" position.
- Crank engine, pulling recoil starter with a quick firm pull. Do not pull out so far that rope stops with a jerk as this will cause rope failure. Do not allow rope and handle to snap back into place.
- 3. After two or three full firm pulls on recoil, or as soon as engine fires, move throttle control to run position.

#### TO STOP

- Release the blade brake/clutch handle to stop the blade. To stop engine, move throttle control lever to "STOP" position.
- 2. Remove spark plug wire from spark plug to prevent accidental starting while equipment is unattended.

#### **USING YOUR ROTARY MOWER**

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

Be sure that lawn is clear of stones, sticks, wire, or other objects which could damage lawn mower or 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. If wet grass must be cut, reduce walking speed.

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

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.



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

Striking a solid object can cause damage to the blade brake/clutch or to the engine crankshaft. Extensive vibration of the mower during operation is an indication of damage. The unit should be inspected and repaired.



Unless the entire grass catcher is correctly positioned on the mower, do not open the discharge chute doors when the engine is running.



Periodically check the cam lever on grass catcher for correct alignment on roller. The cam lever MUST hit on center of roller to lock the grass catcher in position and open the doors all the way open.

## **ADJUSTMENTS**



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

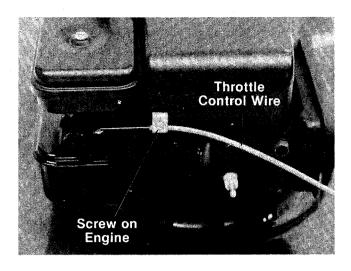
#### **CUTTING HEIGHT**

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

#### **THROTTLE**

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

- Loosen, but do not remove, screw securing throttle control wire assembly at engine. See figure 16.
- 2. Move throttle control lever on handle to "FAST" position.
- Move lever, to which control wire is fastened at engine, to full open position and retighten screw to secure throttle control wire assembly.



#### FIGURE 16.

#### **CARBURETOR ADJUSTMENTS (See figure 17)**



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. 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.

All carburetor adjustments should be made with the air cleaner on engine. Air cleaner mounting screw must be in carburetor when engine is run. Best adjustment is made with a fuel tank half full of gasoline.

#### To Adjust Carburetor:

- Start engine and run long enough to warm it to operating temperature. If engine is out of adjustment so that it will not start, close the needle valve by turning it clockwise. Then open needle valve 1½ turns counterclockwise.
- 2. Move engine control to run engine at normal operating speed.
  - a. Turn needle valve in clockwise until engine starts to lose speed (lean mixture).
  - Then slowly turn needle valve out counterclockwise past the point of smoothest operation until engine just begins to run unevenly (rich mixture).

- c. Turn needle valve back in clockwise very slowly till engine runs evenly.
- d. Final adjustment of the needle valve should be slightly to the rich side (turn counterclockwise) of the mid-point.
- 3. Move engine control to "SLOW." Turn idle adjusting screw until a fast idle is obtained—(1750 R.P.M.).
- 4. To check adjustment move, engine control from "SLOW" to "FAST" speed. Engine should accelerate smoothly. If engine tends to stall or die out increase idle speed or readjust carburetor, usually to a slightly richer mixture.

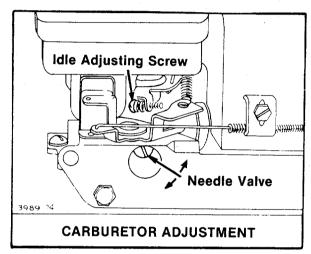


FIGURE 17.

## **LUBRICATION**



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

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

Wheels—Mower is 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.

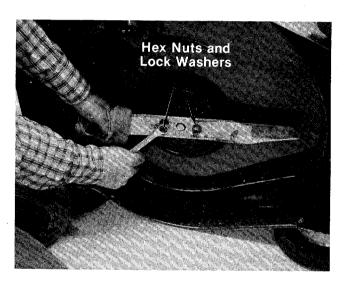
## **MAINTENANCE**



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

#### **CUTTING BLADE**

To remove the cutting blade for sharpening or replacement, remove the two hex nuts and lock washers which hold the blade to the blade brake/clutch. See figure 18.



#### FIGURE 18.

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 for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

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. Nuts 275 in. lb. min., 330 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.



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

#### **ENGINE OIL**

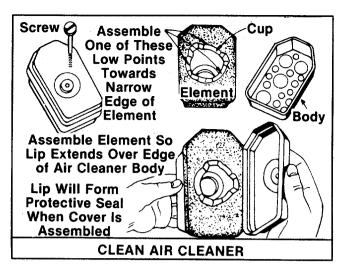
Check oil level before starting and after every 5 hours of operation. ADD oil as necessary to keep level to full mark on dipstick. Before removing dipstick, clean area around dipstick to prevent dirt from entering oil fill tube. Engine should be in a level position when checking oil.

Change oil after first 5 hours of operation. Thereafter change every 25 hours. Change oil while engine is warm. Oil may be drained thru oil fill tube by tipping the unit on its side. Oil capacity 1-1/4 pints.

#### AIR CLEANER

Clean air cleaner and re-oil element 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. See figure 19.

- 1. Remove screw.
- 2. Remove air cleaner carefully to prevent dirt from entering carburetor.
- 3. Take air cleaner apart.
- 4. WASH foam element in kerosene or a liquid detergent and water to remove dirt.
- 5. DRY foam completely by wrapping and squeezing in a cloth.
- 6. SOAK foam with engine oil. Squeeze to distribute and remove excess oil.
- 7. Reassemble parts and fasten to carburetor.



#### FIGURE 19. SPARK PLUG

The spark plug should be cleaned (see figure 20) and the gap reset to a 0.030-inch clearance once a season (see figure 21). Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type.

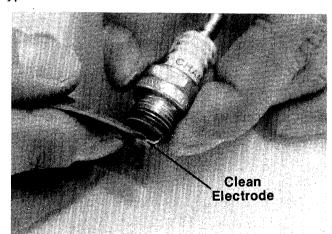


FIGURE 20.

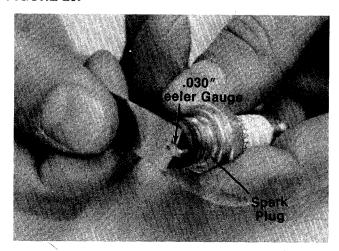


FIGURE 21.

#### **BLADE BRAKE/CLUTCH**

This unit is equipped with a blade brake/clutch. If for some reason the blade brake/clutch becomes inoperative, it is suggested that the complete unit as shown in figure 22 be returned to the factory for a replacement.

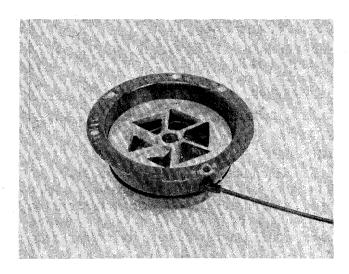


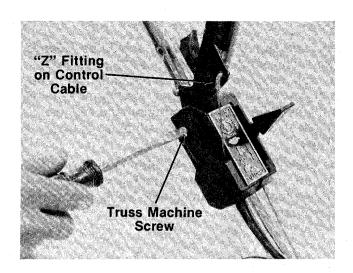
FIGURE 22. BLADE BRAKE/CLUTCH

All repair work on the blade brake/clutch should be performed by an authorized service dealer. The unit should be inspected by an authorized service dealer if any of the following conditions are noticed.

- 1. Frayed clutch control cable.
- Leaking oil seal (oil collection on the floor during mower storage).
- 3. Extensive vibration of the unit.

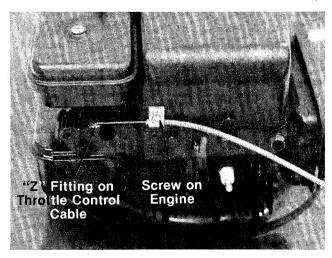
#### Blade Brake/Clutch Removal

- 1. Disconnect the spark plug wire and ground it against the engine block.
- 2. Empty fuel tank and drain oil from crankcase.
- 3. Remove the cable ties which secure control cables to the handle.
- 4. Remove one truss machine screw on the inside of control housing as shown in figure 23. Loosen the truss machine screw on the outside of the control housing until the inside half of control housing can be lifted off.



#### FIGURE 23.

- Disconnect the "Z" fitting on the blade brake/clutch cable from the clutch control handle. See figure 23. Slide the blade brake/clutch cable out of the control housing.
- Disconnect the throttle control cable from the engine by loosening screw on engine and disconnecting the "Z" fitting. See figure 24.

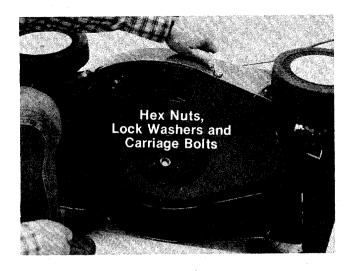


#### FIGURE 24.

- Tip the mower on its side. Remove the blade by removing two hex nuts and lock washers. Refer to figure 18.
- 8. Remove the baffle from the deck by removing three hex nuts, lock washers and carriage bolts, then three self-tapping screws located near the discharge opening. See figure 25. A 7/16" wrench and 5/16" wrench are required.

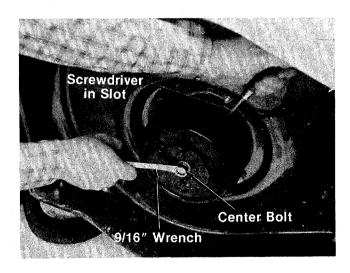


When reassembling, heads of the carriage bolts must be to the inside of the baffle.



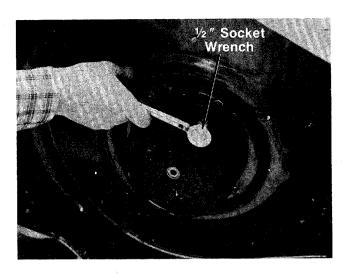
#### FIGURE 25.

- 9. Remove the center bolt as follows.
  - a. Insert a screwdriver into the slot provided in the blade brake/clutch housing where the control cable enters housing. See figure 26.
  - b. Place a 9/16" wrench on the center bolt. Turn the wrench slowly until the screwdriver catches in a groove provided inside the clutch. The screwdriver will now keep the clutch from turning, and the center bolt, lock washer and flat washer may be removed.



#### FIGURE 26.

 Support the engine with one hand. Remove the three self-tapping screws which secure the deck and blade brake/clutch to the engine. A ½" socket wrench is required. See figure 27.



#### FIGURE 27.

- 11. Slide the blade brake/clutch cable through the hole in the deck as you lift off the engine and blade brake/clutch. Be careful not to kink control cable.
- 12. Remove blade brake/clutch from engine crankshaft.

#### Blade Brake/Clutch Installation

- 1. Place the new blade brake/clutch on engine crankshaft. Line up holes on blade brake/clutch with mounting holes on engine.
- Place the flat washer and lock washer onto crankshaft. Secure with hex bolt finger tight only.
- 3. Place cable through engine mounting hole on deck.
- 4. Reverse steps 1 through 11 of preceding section for reassembly.

## **OFF-SEASON STORAGE**

If the machine is to be inoperative for a period longer than 30 days, the following procedures are recommended:

 Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank. Then run the engine until all fuel in the carburetor is exhausted.



Do not drain fuel while smoking, or if near an open fire.

- Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm). Refill the crankcase with clean new oil.
- 3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about 2 or 3 tablespoons of engine oil into the cylinder. Turn the engine over several times to spread out the oil. Replace the spark plug, but do not connect the wire.
- 4. Clean the engine and the entire mower thoroughly.
- 5. Lubricate all lubrication points.

## HANDLE STORAGE

The handle can be stored in an upright position to take less space. Move hairpin cotters to outer hole on weld pins (see figure 3). Grasp the lower handle at the bottom and pull apart slightly. Tip the handle forward. It will lock in this position. Reverse this procedure to place the handle in the operating position.

This model may also be folded away completely for storage.



Be careful not to kink or pinch blade brake/clutch cable when folding the handle for storage.

- Remove hairpin cotters from inner hole on weld pins on handle mount brackets. Place in outer hole.
- Loosen the two hand knobs on the inside of the handle.
- 3. Push outward on the bottom of each side of the lower handle, and push forward.
- 4. Fold the upper handle back and down.

To take the handle out of storage position, proceed as follows.

- 1. Lift the upper handle up and towards the rear.
- 2. Pull the handle back until it locks into the operator's position.
- 3. Tighten the two hand knobs securely.
- 4. Move the hairpin cotters to the inner hole on the weld pins.



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



DO NOT operate the mower with the chute doors open unless the complete grass catcher is properly mounted on the mower.

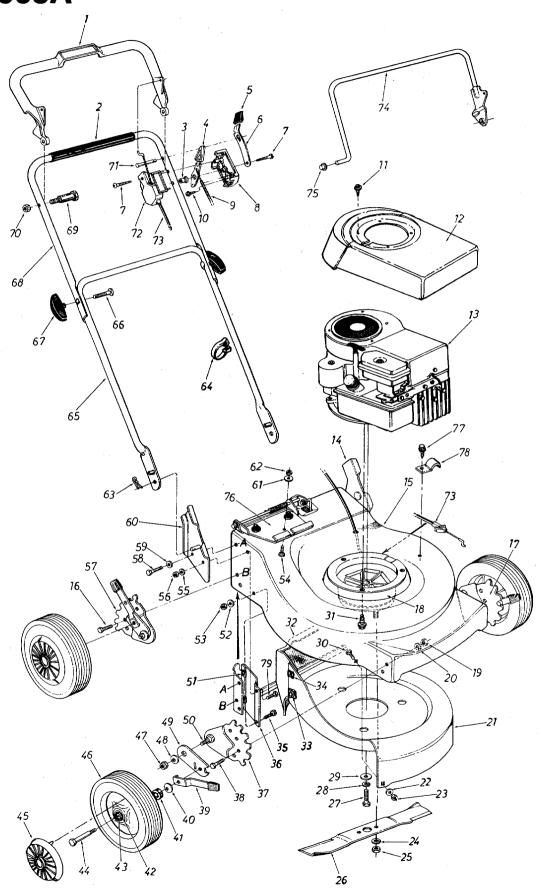


The mower shall not be operated without the protective shield on the rear of the mower in place.



Under normal usage bag material is subject to wear and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0188.



#### PARTS LIST FOR MODEL 111-338A

·	PARTS LIST FOR MODEL 111-338A							
REF.	NO. CODE	DESCRIPTION	NEW PART		NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0527	Clutch Control Handle	N	39	10531		Spring Lever Ass'y.	
2	718-0145	Grip					w/Knob	1
3	731-0524	Control Disc Pin	N	40	736-01		Belleville Wash.	1
4	731-0528	Throttle Control Lever		41	741-04		Flanged Ball Brg. 1/2" I.D.	
_		w/Knob	N	42	741-02		Flanged Ball Brg. 3/8" I.D.	
5	720-0190	Knob	N	43	750-04		Split Tubing Spacer 3/8" I.D.	
6	732-0401	Lockout Spring	N	44	710-04		Hex Bolt 3/8-16 x 2.00" Lg.*	
7	710-0796	Truss Mach. Hi-B Tap Scr.		45	731-01		Hub Cap	
		#12 x 1.50" Lg.	N	46	734-08		Front Wheel Ass'y.—Comp.	
8	731-0523	Control Panel Half	N	47	712-03		Hex Cent. L-Nut 3/8-16 Thd.	
9	746-0432	Conduit and Wire Throttle		48	736-02	55	Belleville Wash.	
1.0	740 0000	64" Lg.		49	10619		Pivot Bar	
10	710-0200	Hex Wash, Hd. B Tap Scr.		50	738-02		Shoulder Bolt .495 Dia. x .275	,
		#8 x .50" Lg.		51	712-03		Speed Nut #10Z	ŀ
11	710-0227	Hex Wash. Hd. AB-Tap Scr.		52	736-03		L-Wash. 1/4" I.D.*	1
	704 0000	#8 x .50" Lg.		53	712-02		Hex Nut 1/4-20 Thd.*	-
12	731-0303	Shroud		54	710-01	67	Carriage Bolt 1/4-20 x .50"	Ì
13		Engine					Lg.*	
14	12297	Handle Mount Bracket Ass'y		55	736-03		L-Wash. 1/4 " I.D.*	
15	14500	20" Deck	N ·	56	712-02	87	Hex Nut 1/4-20 Thd.*	
16	710-0781	Hex Tap Scr. w/Cone Pt.		57	12322		Height Adjuster Ass'y.—R.H.	
4-7	10004	3/8-16 Thd.		58	710-05	99	Hex Wash. Hd. Self-Tap Scr.	
17	12321	Height Adjuster Ass'y.—L.H.			<b>-</b> 00.00		½-20 x .50" Lg.	
18	717-0481	Blade Brake/Clutch Ass'y.		59	736-03	29	L-Wash. 1/4" I.D.*	
40	710.0700	Comp.	N	60	12296	••	Handle Mount Bracket Ass'y.	
	712-0798	Hex Nut 3/8-16 Thd.		61	736-03		L-Wash. 1/4 " I.D.*	
_ 20	736-0169	L-Wash. 3/8" I.D.*		62	712-02		Hex Nut 1/4-20 Thd.*	ĺ
<u>}</u> 1	12190	Rear Discharge Baffle		63	714-010		Internal Cotter Pin 5/16" Dia.	
22	736-0329	L-Wash. 1/4 " I.D.*		64	726-019		Cable Tie (Triple Loop)	N
23	712-0287	Hex Nut 1/4-20 Thd.*		65	749-03		Lower Handle	ĺ
	736-0169	L-Wash. 3/8" I.D.*		66	710-040	<b>ບ</b> ອຸ	Curved Hd. Carriage Bolt	İ
20	712-0241 742-0220	Hex Nut 3/8-24 Thd.*		67	00000		5/16-18 x 1.75" Lg.	
27	710-0151	Blade 20"	N	67	09966	.	Hand Knob	
21	710-0151	Hex Bolt 3/8-24 x 2.00"		68	749-043		Upper Handle	N
28	736-0169	Lg.*		69	738-050	סע	Shoulder Bolt .375 Dia. x	
	736-0169	L-Wash. 3/8" I.D.		70	710 000	\_	.560" Lg.	N
29	730-0236	FI-Wash38 I.D. x 1.00" O.D. x .35 Thk.	1	70	712-030	) JO	Hex Cent. L-Nut 5/16-18	
30	710-0167		ļ	71	711 07		Thd. (w/Patch)	
30	1000101	Carriage Bolt 1/4-20 x .50"		(1)	711-07	וְשׁ	Lock Pin .314" Dia. x 1.80"	.
31	710-0654	Lg.*		72	721 054	,	Lg.	N
ו יין	110-0004	Hex Wash. Hd. Thd. Roll	i	72 73	731-052 746-040		Clutch Control Panel Half	N
32	12176	Bolt 3/8-16 x .88" Lg.	ļ			ן וי	Clutch Cable 48.0" GRN.	N
	710-0589	Rear Deck Section Ass'y.	İ	74 75	14325 728-013	,_	Clutch Control Handle	N
00	7 10-0369	Hex Wash. Hd. AB-Tap Scr.	-	76		20	Push Nut 5/16" Rod	ļ
34	726-0139	#10 x .75" Lg. Speed Nut "U"-Type		10	12192		Adapter Plate—Grass	l
	710-0599	Hex Wash. Hd. Self-Tap		77	710-064	12	Catcher	
	10-0099	Scr. ¼-20 x .50" Lg.		''	7 10-004	14	Hex Wash. Hd. Self-Tap Scr.	ļ
36	12302	Side Plate		78	12894		¼-20 x .75" Lg.	l
	12323	Index Plate		79	710-075	.	Cable Clamp	
	710-0638	Hex Sems Bolt 3/8-16 x .75"	- 1	, 9	110-076	''	Hex Bolt 1/4-20 x .62" Lg.	-
22	0 0000	Lg.*	1:				(Grade 5)	
		-a.			<u> </u>	<u>.                                    </u>		

<sup>\*</sup>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.

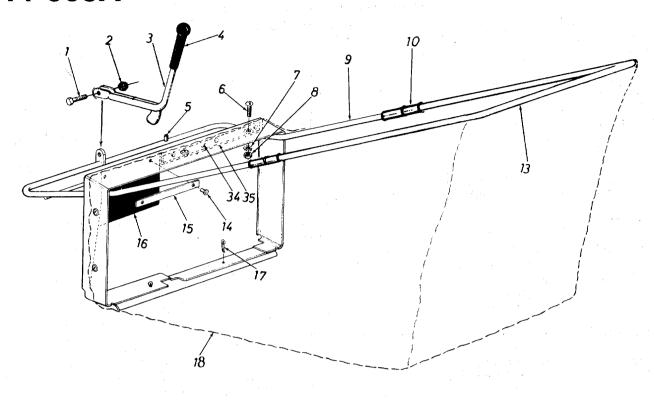
#### (462-Red Flake)

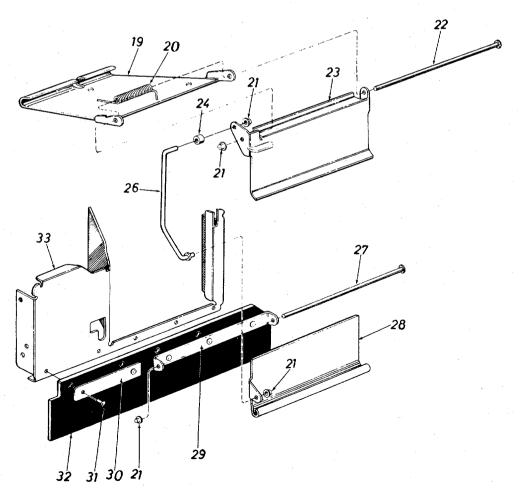
When ordering parts, if color or finish is important use the appropriate color code shown above. (e.g. Red Flake Finish—10292 (462).)



#### 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.





#### PARTS LIST FOR MODEL 111-338A

REF.	PART NO.	COLOR CODE	DESCRIPTION	NEW
1	710-011	7	Hex Bolt 5/16-24 x 1.00" Lg.*	
2 3 4 5 6	712-030	5	Hex Cent. L-Nut 5/16-24 Thd.	1
3	12393		Cam Lever Ass'y.	
4	720-014	3	Grip	
5	715-024	7	Spring Pin Spiral	.
	710-0192	2	Truss Mach. Scr. #10-24 x .38" Lg.*	
7	736-0147	7	Ext. L-Wash. #10 Scr.*	
8	712-012	1	Hex Nut #10-24 Thd.*	
9	14131		Catcher Frame Ass'y. Lower Half	
10	750-0473	3	Tubing Connector	
13	749-0370	)	Frame—Rear Half	
14	728-0128	3	Rivet	
15 16	12185		Reinforcement Bar	
			Grass Catcher Flap	
17	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*	
18	764-0188	}	Grass Catcher Bag	
19	12192		Grass Catcher Adapter	
20	732-0295	,	Torsion Spring	
21	726-0135		Push Nut 5/16" Rod	
22	738-0253		Hinge Rod	
23	12395		Chute Door—Upper Half	
24	748-0246		Roller Spacer	
26	747-0141		Connecting Rod	
27	738-0253		Hinge Rod	
28	12194		Chute Door—Lower Half	
29	12195		Hinge Bracket	
30	12185		Reinforcement Bar	
31	728-0131		Rivet .188 x .438_	
	735-0167		Rear Protective Flap	
	12612		Rear Deck Section Ass'y.	
34 35	12316		Reinforcement Bar	
აე	735-0183		Grass Catcher Flap	į

(462—Red Flake) When ordering parts if color or finish is important, use the appropriate color code shown at left. (e.g. Red Flake Finish—12191 (462).)

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."



<sup>\*</sup>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.

### PARTS INFORMATION

#### POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, 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 firn 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 Auto Electric & Carburetor Co	<b>BIRMINGHAM</b> 2625 4th Ave. S 35233
ARKANSAS	FORT OMETH
ARKANSAS	FORT SMITH 4515 S. 16th St 72901
Mity Mite Motors, Inc.	4515 S. 16th St
	NORTH LITTLE ROCK Rt. 4, Box 36872117
Sutton's Lawn Mower Shop	Rt. 4, Box 36872117
CALIFORNIA	PORTERVILLE 75 North D Street 93257
Billious	75 North D Street 93257
Dilliodo	SAN FRANCISCO
.LW .lewett.Co. '	SAN FRANCISCO 981 Folsom St 94107
0.00.0000000000000000000000000000000000	DENIVED
COLORADO	<b>DENVER</b> Box 59, 43 W. 9th Ave 80201
Spitzer industrial Products Co.	Box 59, 43 W. 9th Ave80201
FLORIDA Radco Distributors	JACKSONVILLE
Radco Distributors	4909 Victor St.
	OPA LOCKA
Small Eng. Dist	OPA LOCKA 2351 N.W. 147th St 33054
GEORGIA	EAST POINT 2834 Church St 30344
East Point Cycle & Key	2834 Church St 20244
Last Form Cycle & Rey	2004 Onuren 3t 30344
ILLINOIS	<b>LYONS</b> 8615 Ogden Ave 60534
Keen Eage Co	8615 Ogden Ave60534
INDIANA	ELKHART 2101 Industrial Pkwy46514
Parts & Sales Inc	2101 Industrial Pkwy46514
IOWA	DUBUQUE
Power Lawn & Garden Equip	2551 J.F. Kennedy52001
LOUISIANA	NEW ORLEANS
Suhren Engine Co	NEW ORLEANS 8330 Earhart Blvd70118
MARYLAND	TAKOMA PARK 6867 New Hampshire Ave20012
Center Supply Co	6867 New Hampshire
Conton Supply Co	Ave 20012
MASSACHUSETTS Morton B. Collins Co	SDRINGEIELD
Morton P. Colling Co.	300 Birnio Avo 01107
MICHIGAN	LANSING 2500 S. Pennsylvania 48910
Lorenz Service Co	2500 S. Pennsylvania 48910
	MOUNT CLEMENS 36463 South Gratiot 48043
Power Equipment Dist	36463 South Gratiot 48043
MINNESOTA	HOPKINS
Hance Distributing Inc	420 Excelsior Ave. W55343
AMAGICALIBRI	DIL OVI
Biloxi Sales & Service, Inc	506 Caillavet St 39533
MICCOURT	KANCAC CITY
MISSOURI	3117 Holmes St 64109
Automotive Equip. Service	3117 Hollines St 04109
Book France Committee Co	ST. JOSEPH 64503
noss-riaziei Supply Co	oth and Monterey 64503
Hanzler Inc	ST. LCUIS 2015 Lemay Ferry Road 63125
nenzier, inc.	2015 Lemay Ferry Hoad 63125
NEW JERSEY_	<b>BELLMAWR</b> 717 Creek Rd
Lawnmower Parts Inc	717 Creek Rd 08030
NEW YORK	CARTHAGE West End Ave13619
Gamble Dist., Inc	West End Ave 13619
•	

in assembly of this difft, write	e to advise the factory so
NORTH CAROLINA	GOLDSBORO
Smith Hardware Co	GOLDSBORO 515 N. George St 27530
	<b>GREENSBORO</b>
Dixie Sales Company	335 N. Green27402
OHIO	CARROLL
Stebe's Mid-State Mower Supply	. Box 366, 71 High St 43112
Bleckrie, Inc.	CLEVELAND
Bleckrie, Inc	/900 Lorain Ave44102
Mational Control	WADSWORTH687 Seville Rd44281
National Central	YOUNGSTOWN
Burton Supply Co	1301 Logan Ave.
Burton Supply Co	Box 929 44501
OKLAHOMA Victory Motors, Inc	MUSKOGEE
Victory Motors, Inc	605 S. Cherokee 74401
	OKLAHOMA CITY . 6415 N. Olie73116
Forest Sales Inc	6415 N. Olie/3116
OREGON Kenten Supply Co	PORTLAND 8216 N. Denver Ave 97217
PENNSYLVANIA	CHESTER
Stull Equipment Corp.	742 W. Front St 19013
	HARRISBURG 4021 N. 6th St 17110
EECO Inc	4021 N. 6th St 17110
_	<b>PHILADELPHIA</b> 5222-24 N. Fifth St 19120
Thompson Rubber Co	5222-24 N. Fifth St 19120
Diverset Co	PITTSBURGH 11125 Frankstown Rd 15235
Bidemont Co	DIINYCIITAWNEV
Frank Roberts & Sons	<b>PUNXSUTAWNEY</b> R.D. 2
TENNESSEE	KNOXVILLE 2000 Western Ave 37921
Master Repair Service	2000 Western Ave 3792)
	MEMPHIS
American Sales & Service, Inc	3035-43 Bellbrook 38116
TEXAS	<b>DALLAS</b> 423 E. Jefferson 75203
marr Brotners, Inc	FORT WORTH
Woodson Sales Corn	1702 N. Sylvania 76111
	HOUSTON
Bullard Supply Co.	2409 Commerce St 77003
,,,,,	SAN ANTONIO 414 Live Oak78298
Catto & Putty, Inc	414 Live Oak 78298
UTAH	SALT LAKE CITY 437 E. 9th St
VERMONT	BURLINGTON
Vermont Howe Co. Inc.	180 Flynn Ave05401
VIRGINIA	ASHI AND
VIRGINIA RBI Corp	Lake Ridge Park
	101 Cedar Run Dr 23005
WASHINGTON	SEATTLE
	1414 14th Ave 98102
WEST VIRGINIA	CHARLESTON 233 Virginia St., E 25301
WISCONSIN	MADSHEIFI D
WISCONSIN Power Pac	301 F 29th St 5/4/40

#### **WARRANTY PARTS AND SERVICE POLICY**

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

## CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

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

All claims MUST be substantiated with the following information:

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