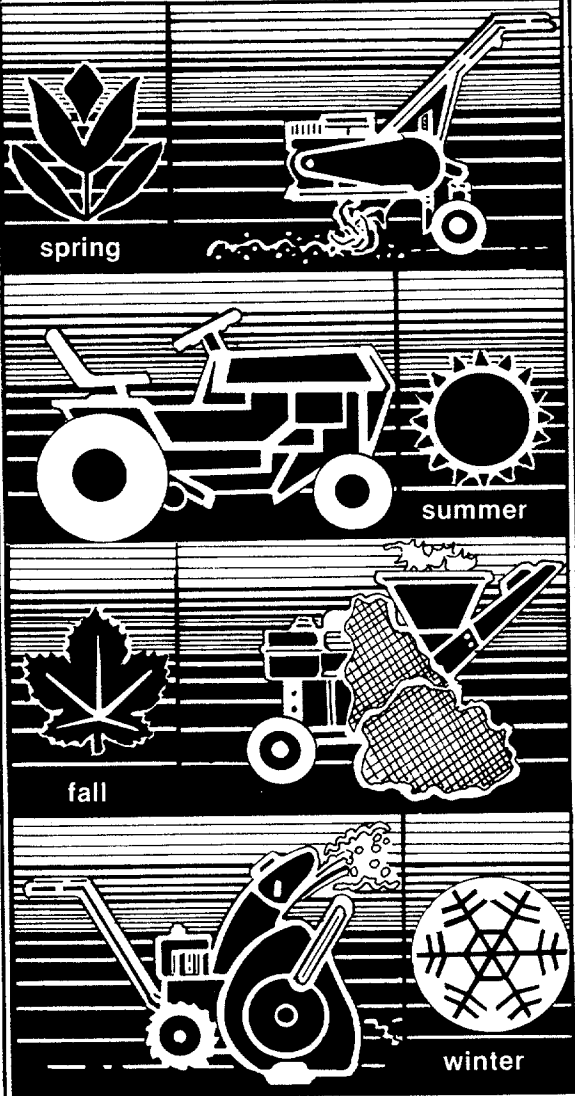


# OWNER'S GUIDE

OUTDOOR POWER EQUIPMENT  
for all seasons



**21" SIDE  
AND TOP  
DISCHARGE  
ROTARY  
MOWERS**

**Model Numbers  
115-102-000  
115-112-000**

**Important:  
Read Safety Rules and  
Instructions Carefully**

Thank you for purchasing  
an American-built product.

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

## LIMITED WARRANTY

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

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

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

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

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

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



**WARNING**

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

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



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

## SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

### TRAINING

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

### PREPARATION

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

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

### OPERATION

1. Do not change the engine governor settings or over-speed the engine. Excessive engine speeds are dangerous.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade can cause injury.
3. Stop the blade when crossing gravel drives, walks or roads.
4. After striking a foreign object, stop the engine, remove the wire from the spark plug, and thoroughly inspect the mower for any damage. Repair the damage before restarting and operating the mower.
5. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
6. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging the chute. The cutting blade continues to rotate for a few seconds after the engine is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating.
7. Before cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the spark plug to prevent accidental starting.
8. Do not run the engine indoors.
9. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes. Always be sure of your footing. A slip and fall can cause serious personal injury.
10. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
11. Never operate mower without proper guards, plates or other safety protective devices in place.
12. **DO NOT OPERATE** top discharge mowers with the chute door open, unless the complete grass catcher is properly mounted on the mower.

### 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.

This owner's manual covers both side discharge (Model 102) and top discharge (Model 112) rotary mowers. Follow only the instructions which pertain to your style mower.

**NOTE**

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

**NOTE**

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

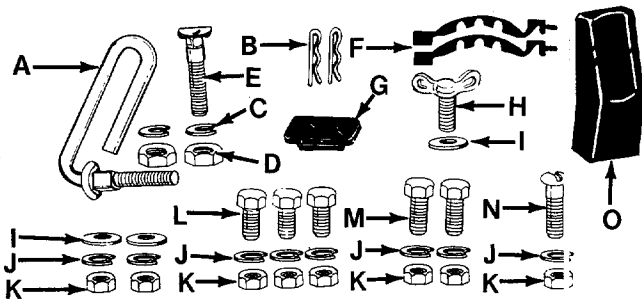


FIGURE 1.

# ASSEMBLY INSTRUCTIONS

Contents of Hardware Pack: (See Figure 1)

- A (1) Rope Guide Bolt
- B (2) Hairpin Cotter
- C (2) Lock Washers 5/16" I.D.
- D (2) Hex Nuts 5/16-18 Thread
- E (1) Curved Head Carriage Bolt
- F (2) Cable Ties
- G (1) Plastic Plug
- H (1) Wing Bolt 1/4-20 Thread
- I (3) Flat Washers 1/4" I.D.
- J (2) Lock Washers 1/4" I.D. (Model 102)
- (8) Lock Washers 1/4" I.D. (Model 112)
- K (2) Hex Nuts 1/4-20 Thread (Model 102)
- (8) Hex Nuts 1/4-20 Thread (Model 112)
- L (3) Hex Bolts 1/4-20 x 1/2" Long\*
- M (2) Hex Bolts 1/4-20 x 5/8" Long\*
- N (1) Round Head Bolt 1/4-20 x 3/4" Long\*
- O (1) Door Grip\*

\*Top discharge mowers (Model 112) only.

**Loose Parts in Carton:**

- (1) Lower Handle
- (1) Upper Handle
- (1) Side Chute Deflector (102) or Top Discharge Chute (112)
- (1) Top Catcher Panel\*
- (1) Panel Support Bracket\*
- (1) Rope Guide Bracket Assembly\*
- (1) Grass Catcher Handle\*
- (1) Front Catcher Frame\*
- (1) Grass Catcher Bag\*

\*Top discharge mowers (Model 112) only.

1. Remove lawn mower and loose parts from carton. Make certain all parts and literature have been removed from the carton before the carton is discarded.
2. Extend the throttle control cable (attached to the upper handle) and the brake cable (attached to the engine) and place on the floor. Be careful not to bend or kink control cables.
3. Attach the lower handle by placing the bottom holes in the lower handle over the weld pins on the handle wheel bracket assemblies. Make certain the instruction label on the lower handle can be read from the operating position. Secure with hairpin cotters (B) in inner holes on weld pins. See figure 2.

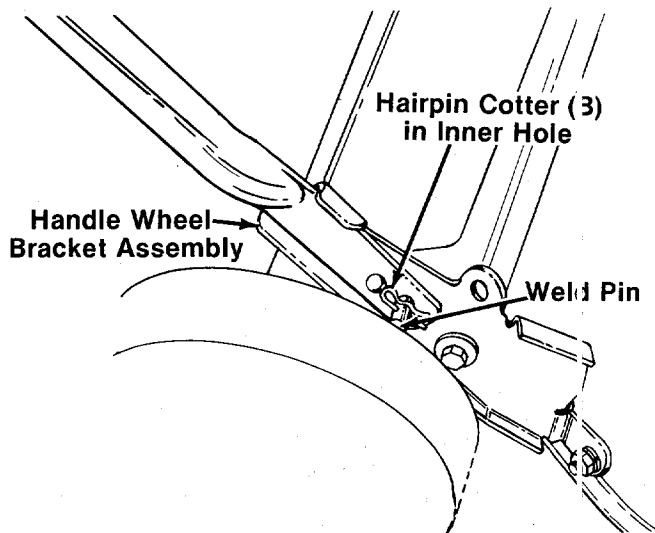


FIGURE 2.

**NOTE**

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

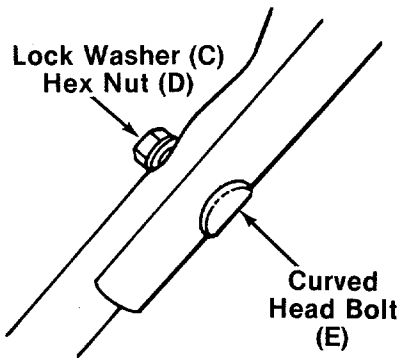


FIGURE 3.

4. Place the upper handle in position over the lower handle. The control housing must be on the left hand side of the handle. Secure the left hand side of upper handle using the curved head bolt (E), lock washer (C) and hex nut (D) as shown in figure 3.

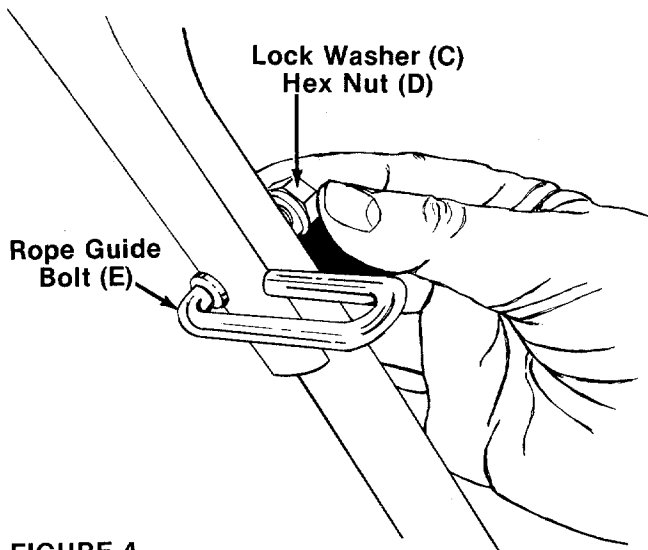


FIGURE 4.

5. Insert the rope guide bolt (A) through the right hand side of upper and lower handle. Secure finger tight only with lock washer (C) and hex nut (D). See figure 4.

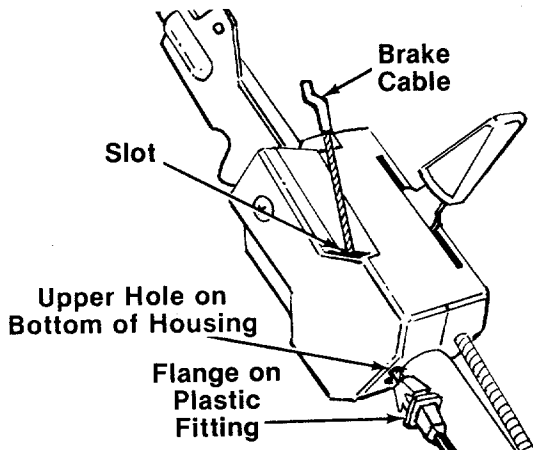


FIGURE 5.

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



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

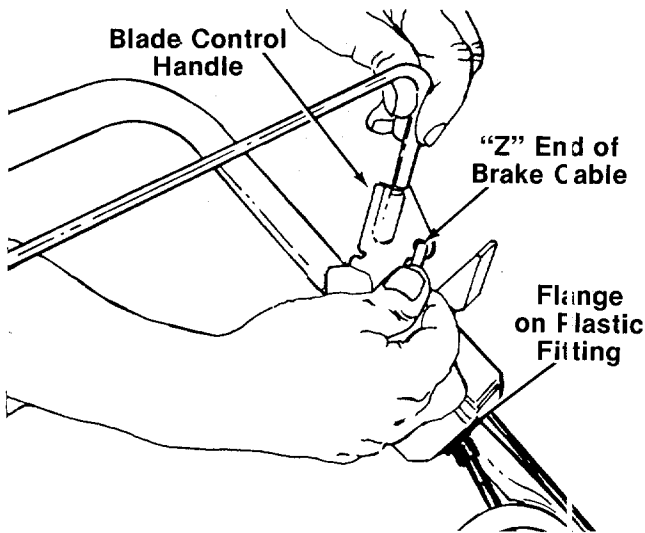


FIGURE 6.

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

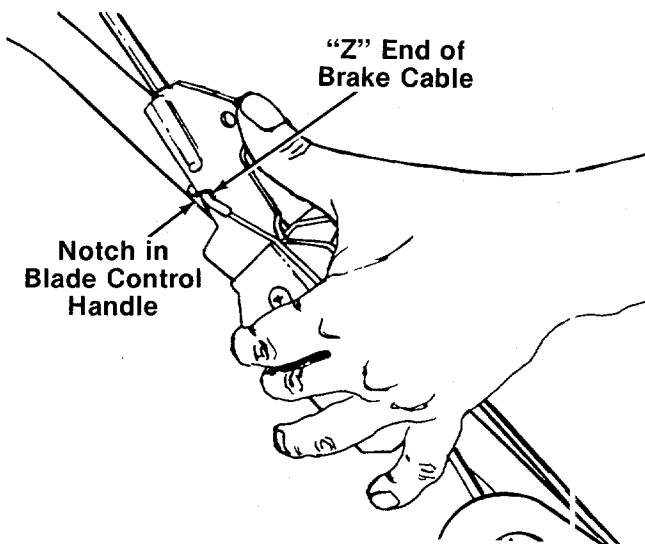


FIGURE 7.

- a. Hook the "Z" end of the cable into notch provided in the blade control handle. See figure 7.
- b. Squeeze blade control handle against upper handle.
- c. Release the blade control handle, unhook the cable from the notch and hook it into the hole in the blade control handle.

8. Move throttle control lever on handle forward until it stops in "Fast" position. (**Do not** push all the way forward to "Choke" position.) See figure 8.
9. Slide the throttle control lever on the engine as far toward the outside of the engine as it will go **easily** as shown in figure 8. (**Do not** force it into the extreme outside position, which is the "Choke" position.)

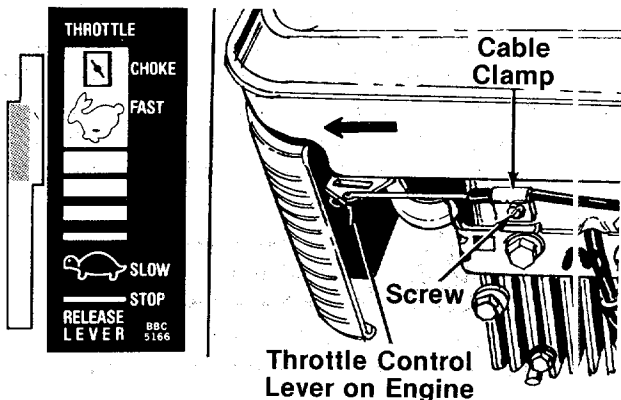


FIGURE 8.

10. Hook the "Z" end of the throttle control cable into the hole in the control lever on the engine.

11. Loosen the screw on the cable clamp shown in figure 8. Slip the control casing under the clamp. With the throttle lever on the engine still in the "Fast" position, tighten the screw to secure the throttle control cable. Be certain the clamp is positioned so it holds the cable in a straight line, parallel to the engine shroud.

12. 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.

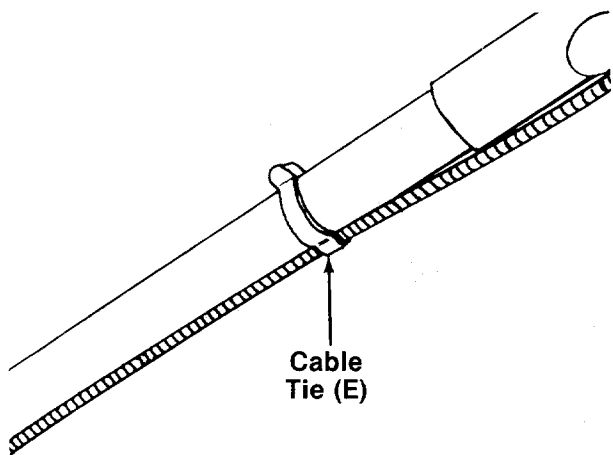


FIGURE 9.

13. Secure throttle control cable and blade brake cable to upper and lower handles with cable ties (E) provided. See figure 9.
14. Insert plastic plug (G) into hole in the top rear of the deck by slipping one end of plug into hole, then pressing down on the other end of plug.

**IMPORTANT**

If your unit is equipped with both a side chute deflector and top discharge chute and grass bag, follow the instructions for top discharge mowers. After assembly is completed, it can then easily be converted to a side discharge mower.

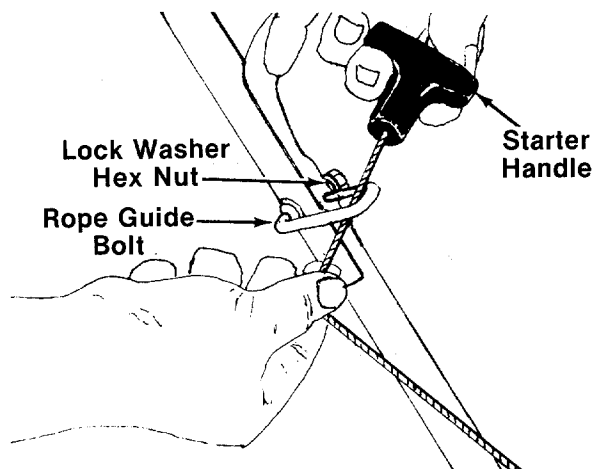


FIGURE 10.

**SIDE DISCHARGE MOWERS ONLY (Model 102)**

This section is for side discharge models only. If your mower is a top discharge model (with grass bag), proceed to the next section.

1. The starter rope is wound around the starter handle. Maintain the tension on the rope as you unwind it.
2. Slip the starter rope into the rope guide bolt as shown in figure 10. If more slack is needed in the starter rope, disconnect and ground the spark plug wire. Depress the blade control handle and pull additional rope out from the engine.
3. Tighten the hex nut, lock washer and rope guide bolt securely.

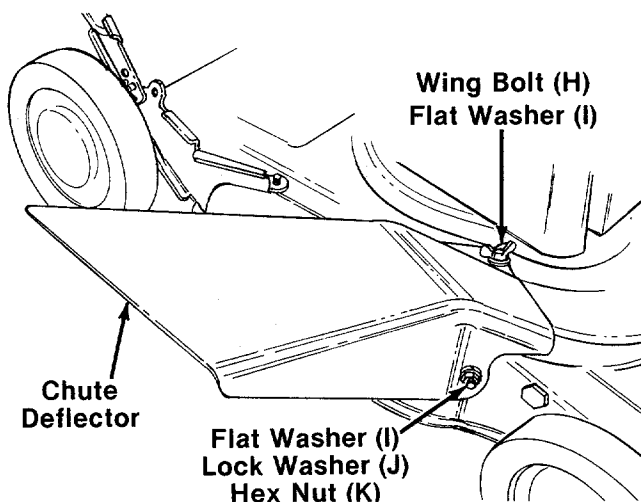


FIGURE 11.

4. Place the holes in the chute deflector over the bolts protruding from the right hand side of the deck, and slide it into position. Secure the top of the deflector with one flat washer (I) and wing bolt (H). See figure 11.
5. Secure the front of the deflector to the bolt protruding from the deck with one flat washer (I), lock washer (J) and hex nut (K). See figure 11.

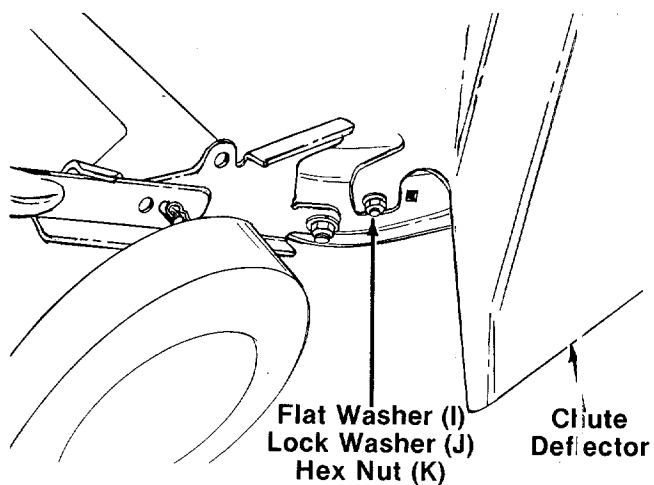


FIGURE 12.

6. Secure the back of the deflector in the same manner. See figure 12.
7. Check all nuts and bolts for correct tightness.

**NOTE**

A grass catcher kit is available which will convert your mower from side to top discharge. Order model number 195-067-000.

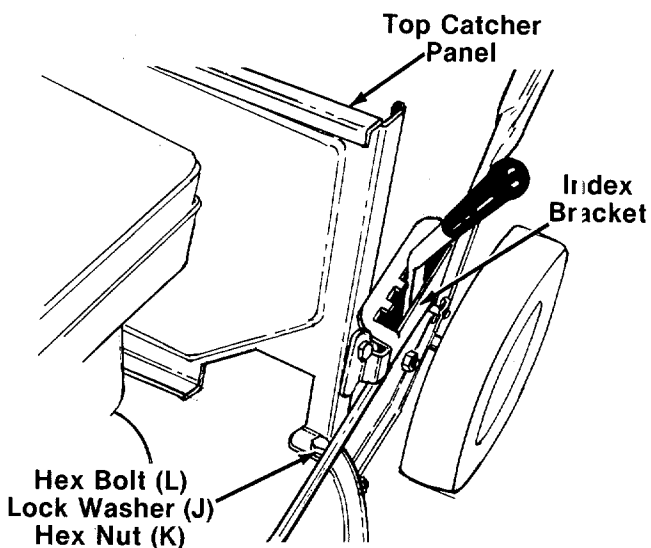


FIGURE 13.

**TOP DISCHARGE MOWERS ONLY (Model 112)**

**NOTE**

Before assembling the top catcher panel and grass catcher to the unit, open the fuel shut-off valve on the engine. Refer to "Before Starting" section and figure 26 on page 13.

1. Place the top catcher panel in position on the back of the mower as shown in figure 13. The door in the panel should be to the right side of the mower. Secure the bottom of the catcher panel to the mower using two 1/2" long hex bolts (L), lock washers (J) and hex nuts (K), finger tight only. See figure 13.
2. On the left side of the mower, secure the side of the catcher panel to the index bracket using 1/2" long hex bolt (L), lock washer (J) and hex nut (K), finger tight only. See figure 13.

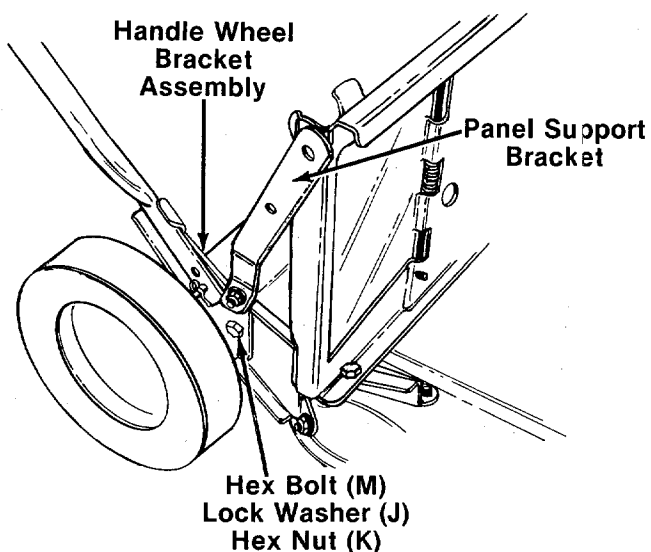


FIGURE 14.

3. Place the panel support bracket in position on the right side of the unit. The bend in the bracket goes toward the outside of the unit, and the holes are positioned as shown in figure 14. Secure bottom of bracket to the handle wheel bracket assembly with one hex bolt (M), lock washer (J) and hex nut (K), finger tight only. See figure 14.



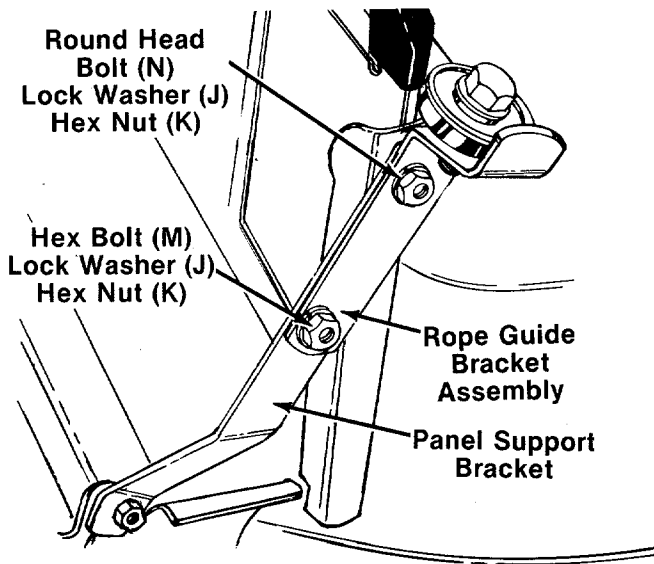


FIGURE 15.

4. Place the rope guide bracket assembly in position against the panel support bracket as shown in figure 15. Secure bottom hole in rope guide bracket to panel support bracket with hex bolt (M), lock washer (J) and hex nut (K), finger tight only.
5. Secure top hole of rope guide bracket assembly to panel support bracket and catcher panel using round head bolt (N) (head of bolt must be to the inside of the catcher panel), lock washer (J) and hex nut (K). See figure 15.
6. Tighten securely all six bolts and nuts used in assembling the catcher panel.

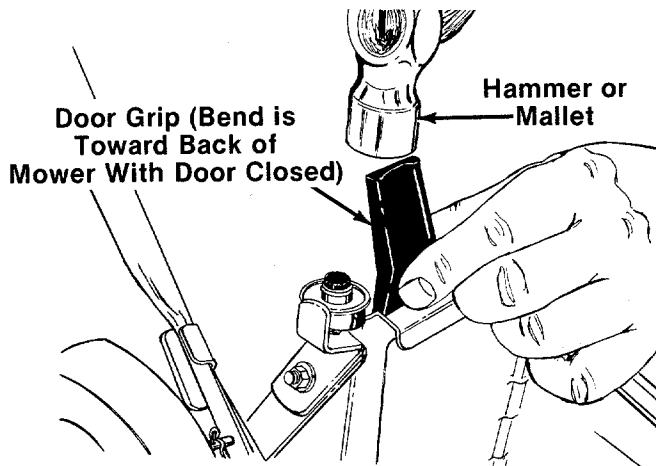


FIGURE 16.

7. Attach the door grip to the tab on the top of the door in the catcher panel so that the bend in the grip is toward the back of the mower. See figure 16. Tap on gently with a hammer or mallet.

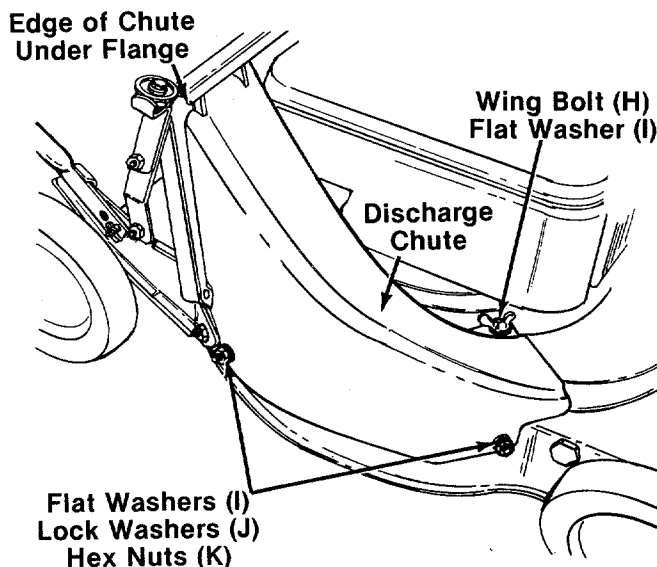


FIGURE 17.

8. Attach the discharge chute as follows.
  - a. Slide the top edge of the discharge chute under the flange on the catcher panel. See figure 17.
  - b. Place the two holes on the bottom edge of the discharge chute over the two bolts which protrude from the deck. See figure 17.
  - c. Attach the front of the discharge chute to the deck with one flat washer (I) and wing bolt (H).
  - d. Secure the bottom of the discharge chute to the deck with flat washers (I), lock washers (J) and hex nuts (K). See figure 17.

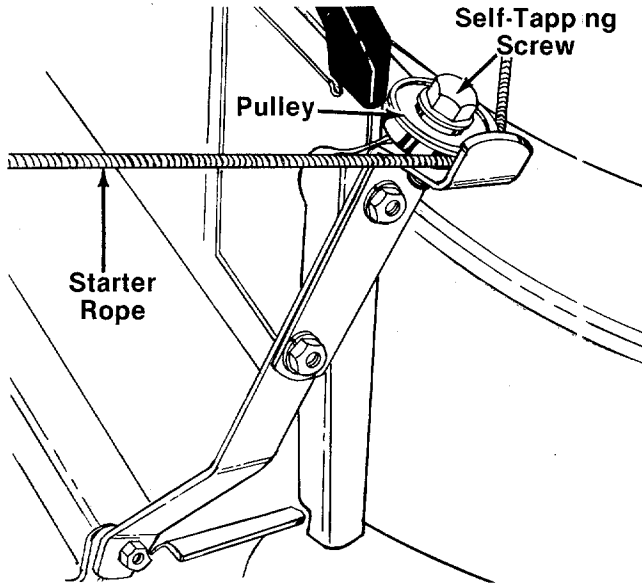


FIGURE 18.

9. Loosen (do not remove) the self-tapping screw which secures the pulley to the rope guide bracket. See figure 18.
10. The starter rope is wound around the starter handle. Maintain the tension on the rope as you unwind it.
11. Lift the pulley on the rope guide bracket, and route the starter rope around the pulley. Reassemble the pulley securely.

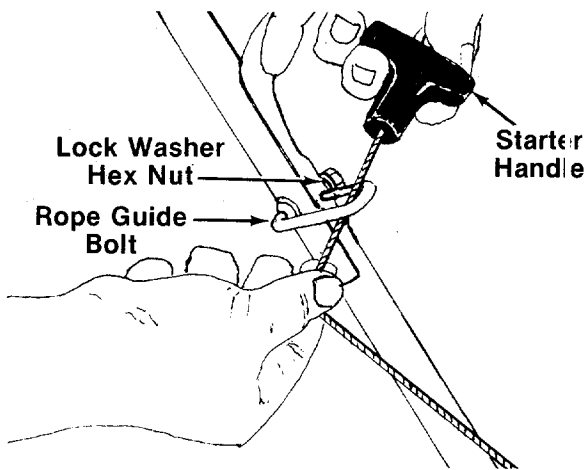


FIGURE 19.

12. Slip the starter rope into the rope guide bolt as shown in figure 19. If more slack is needed in the starter rope, disconnect and ground the spark plug wire. Depress the blade control handle and pull additional rope out from the engine.
13. Tighten the hex nut, lock washer and rope guide bolt securely.
14. Check **all** nuts and bolts for correct tightness.

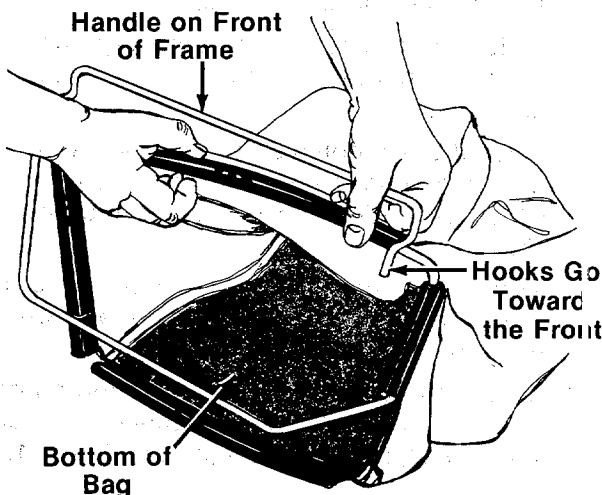


FIGURE 20.

## Grass Catcher Assembly

(Model 112 Only)

1. Place bag over frame (black plastic side is the bottom of bag). Handle on frame goes to the top of bag. Hooks go toward the front. See figure 20.
2. Secure bag to frame by slipping plastic channels on bag over frame. See figure 20.

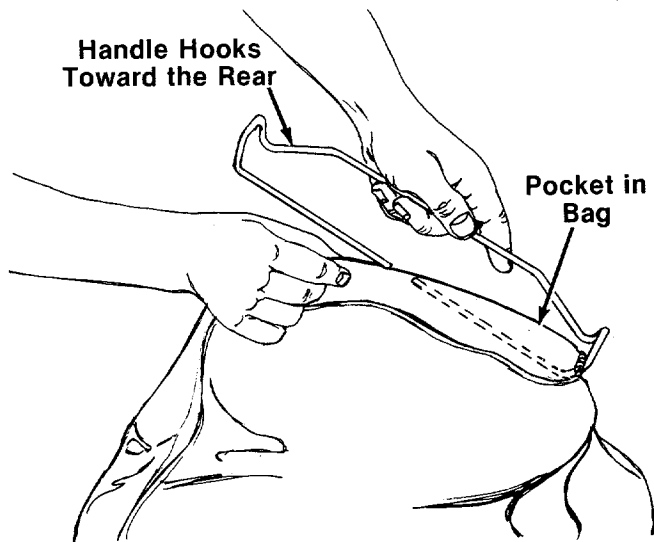


FIGURE 21.

3. Attach the rear handle to bag by inserting one side of handle into pocket on the rear of the bag. The handle should hook toward the rear of the bag as shown in figure 21. Thread all the material onto one side, then slide it over onto the other side. See figure 21.

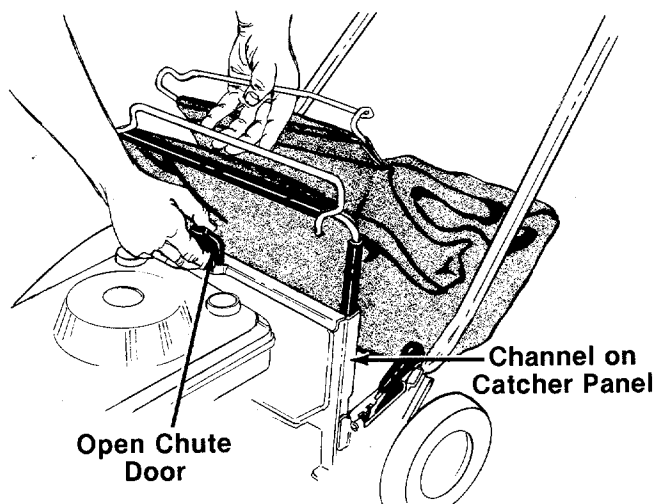


FIGURE 22.

## To Attach Bag To Mower

(Model 112 Only)



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

1. Hold the chute door on the catcher panel open as shown in figure 22.
2. Slide the frame of the grass catcher down into the channels on the catcher panel. The hooks on the frame go over the catcher panel.
3. Hook the handle on the rear of the grass catcher over the lower handle of the mower. See figure 23.

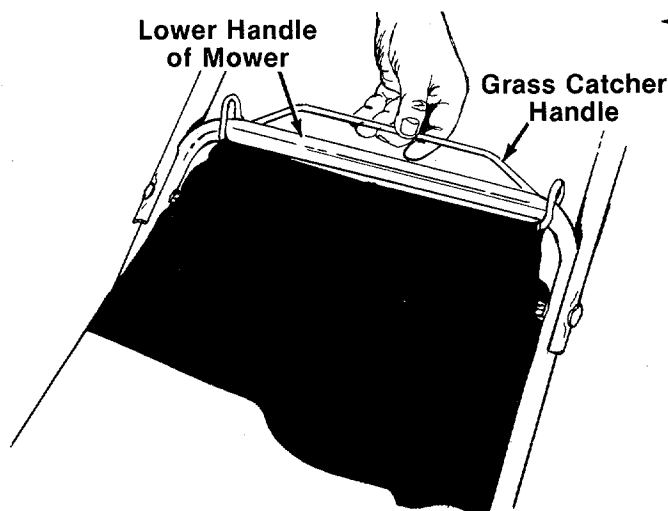


FIGURE 23.

To remove the grass catcher, unhook the rear handle and lift the grass catcher straight up.

To convert your mower back to a side discharge unit, remove only the grass bag and top discharge chute, and assemble the side chute deflector. It is not necessary to remove the catcher panel and brackets.

If your unit is not equipped with a side deflector, one is available. Order model number 195-068-000.



Never operate your unit without either the side chute deflector or entire top discharge chute and catcher panel assembly in place.

## CONTROLS

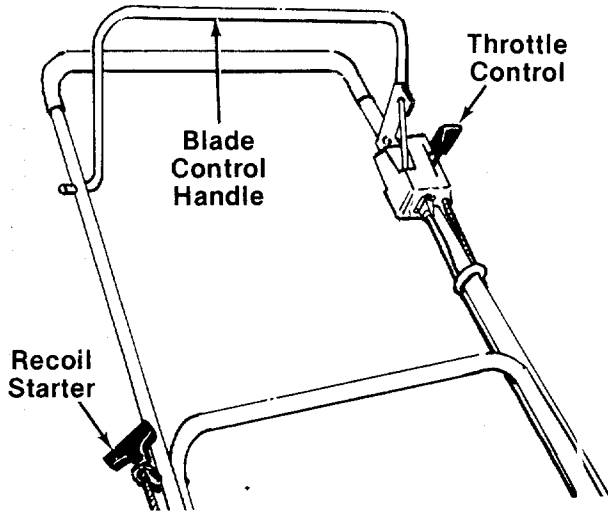


FIGURE 24.

### 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 24. The blade control handle must be depressed in order to operate the unit. Release the blade control handle to stop the engine and blade.



**WARNING**

The blade will be rotating whenever the engine is running.

### THROTTLE CONTROL

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



**WARNING**

The throttle control cannot be used to stop the engine.

### RECOIL STARTER

The recoil starter handle is attached to the handle. See figure 24. Stand behind the unit in the operating position to start the unit.

## OPERATION



FIGURE 25.

Keep hands and feet away from the chute area on cutting deck. See figure 25.



### 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.

### BEFORE STARTING

1. Fill sump with oil as instructed in the separate engine manual packed with your unit.
2. Fill fuel tank, using clean, fresh, unleaded, low-lead or regular grade leaded gasoline. Fill tank completely!  
DO NOT MIX OIL WITH GASOLINE.
3. Attach spark plug wire to spark plug.
4. Open fuel shut-off valve, located beneath the fuel tank. See figure 26.



### NOTE

On Model 112, an access hole is provided in the catcher panel. Open fuel shut-off valve using a wrench. See figure 27.

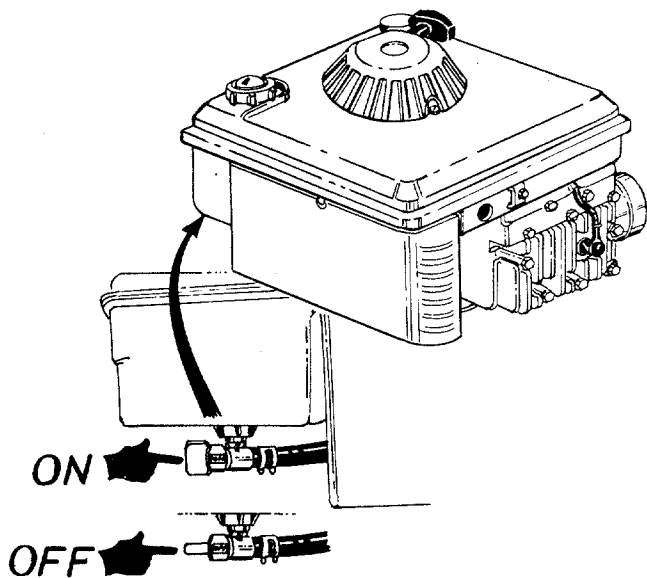


FIGURE 26.

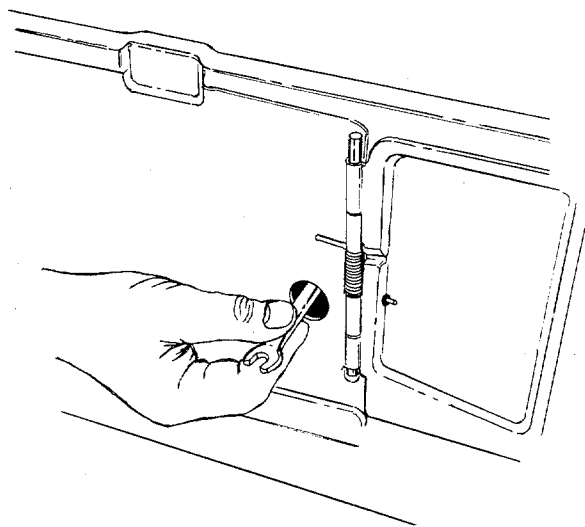


FIGURE 27.

#### TO START ENGINE AND ENGAGE BLADE

1. Move the throttle control lever to FAST or START position.
2. Standing behind the unit, depress the blade control handle and hold it against the upper handle as shown in figure 28.
3. Grasp the recoil starter handle as shown and pull up rapidly. Return it slowly to the rope guide bolt.
4. After engine starts, move throttle control to desired engine speed.

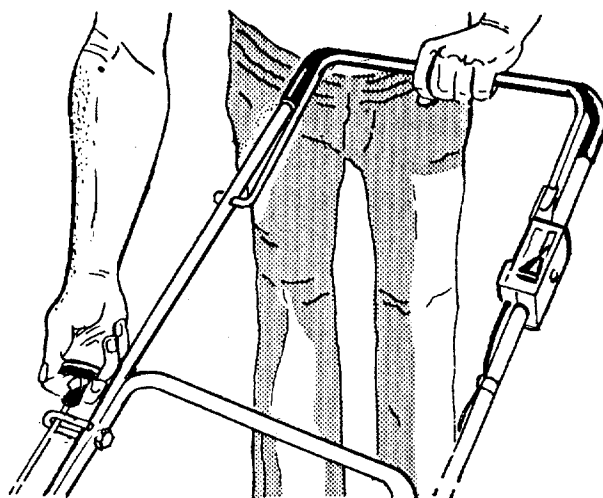


FIGURE 28.



Never operate your unit without either the side chute deflector or entire top discharge chute and catcher panel assembly in place.

#### 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



**DO NOT** operate mower Model 112 with the chute door open unless the complete grass catcher is properly mounted on the 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.

When using the side discharge mower, 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

The height adjustment handle is located on the left side of the deck. The handle may be placed in one of nine cutting height positions. Push the handle to the left and then either forward to lower the cutting height or backward to raise the cutting height. See figure 29.

For rough or uneven lawns, move the height adjustment handle to a position which will give a higher cutting height.

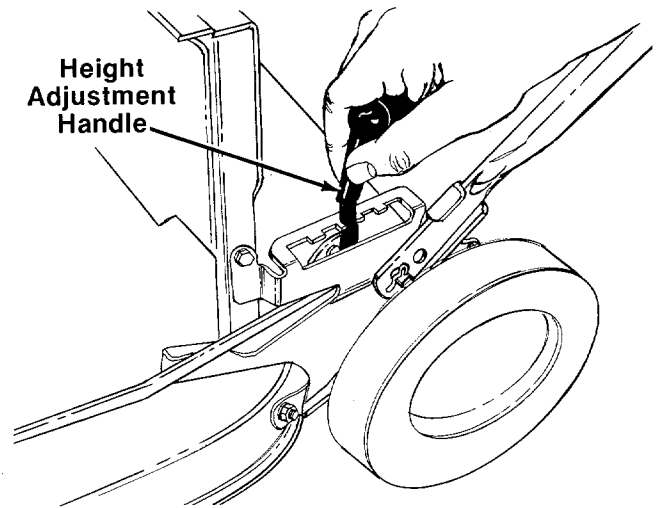


FIGURE 29.

### THROTTLE

The throttle control wire assembly can be adjusted if necessary. Refer to steps 8 thru 12 of 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 adjustment may be required to compensate for differences in fuel, temperature, altitude and load.

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

## LUBRICATION



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

**Blade Control**—Lubricate the pivot points on the blade control handle and the brake cable at least once a season with light oil. See figure 30. The blade control must operate freely in both directions.

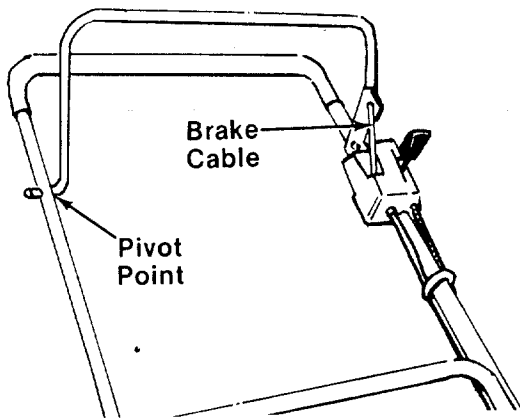


FIGURE 30.

**Discharge Chute Door Mechanism (Model 112)—**

The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding. Door 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



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

### CUTTING BLADE

#### A. Removal for Sharpening or Replacement



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

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

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



#### CAUTION

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

#### B. Sharpening

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

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

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

#### C. Reassembly

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

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

#### Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.  
5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

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

#### DECK

The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

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



**NOTE**

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

**ENGINE OIL**

Check oil level before starting engine 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 drain on bottom of the engine. Oil capacity 1-1/4 pints.

**AIR CLEANER**

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

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

**SPARK PLUG**

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

**OFF-SEASON STORAGE**

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

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



**NOTE**

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



 **NOTE**

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

GRASS CATCHER Model 067 is available as replacement equipment for the mower Model 112 shown in this manual.



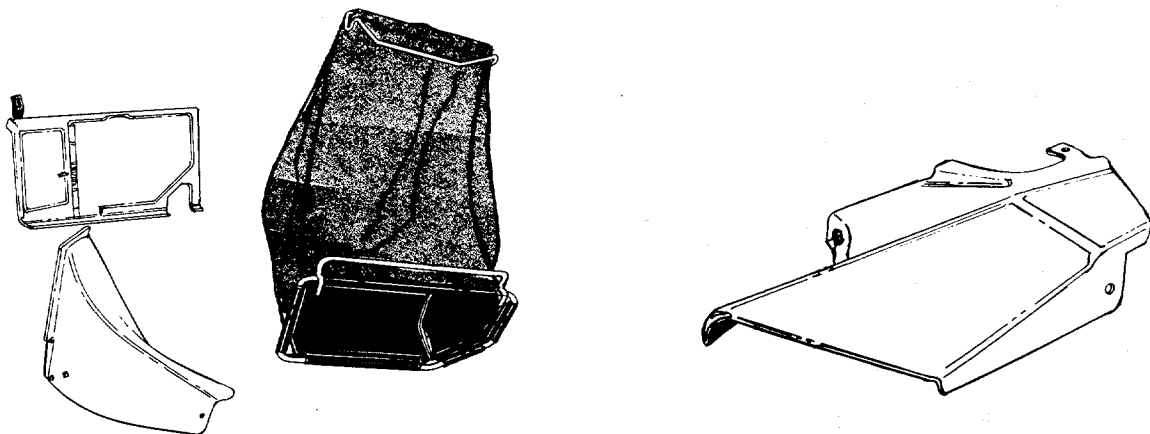
**WARNING**

1. DO NOT operate the mower with the chute door open unless the complete grass catcher is properly mounted on the mower.
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. 764-0212.



**Model 067**

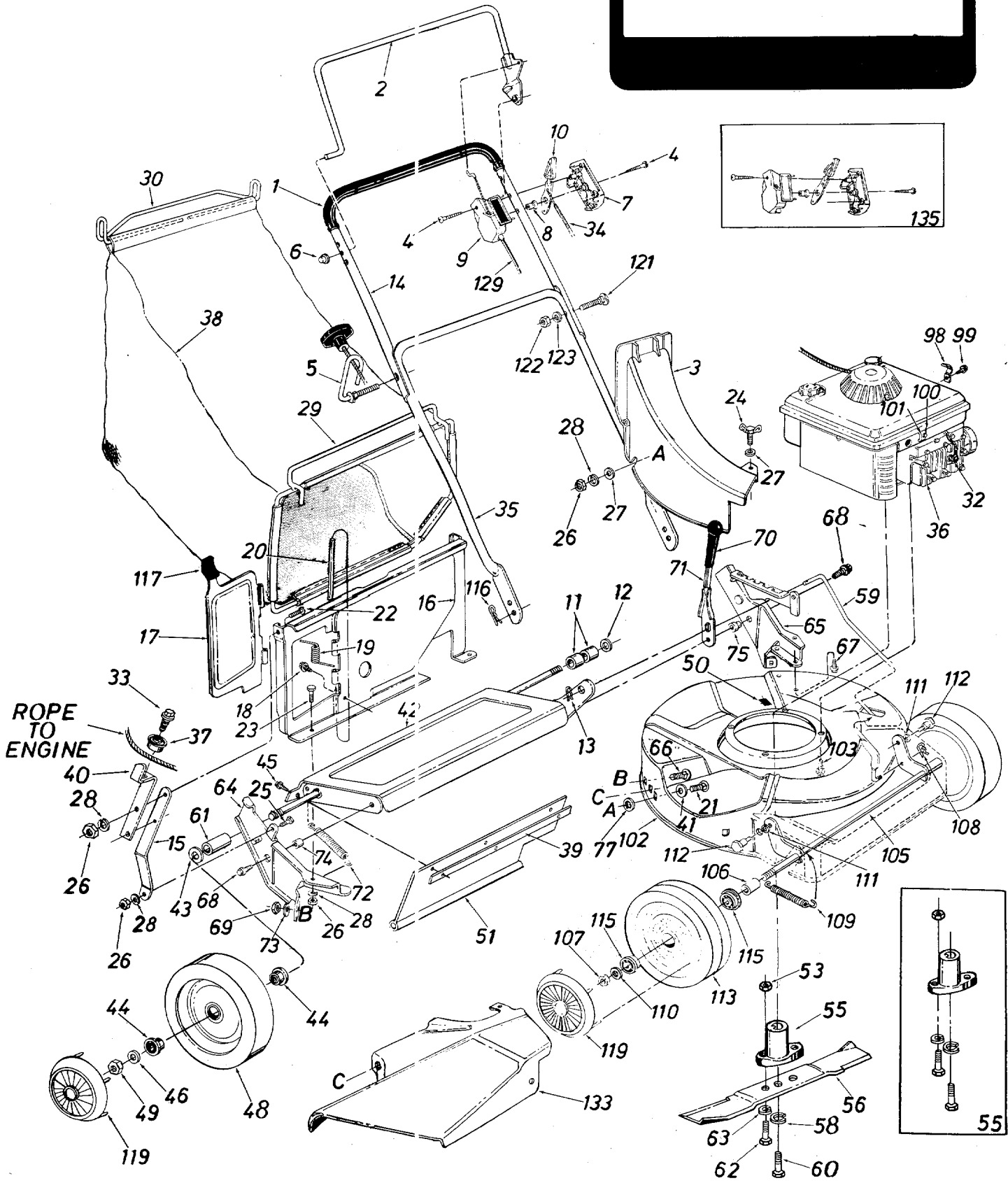
**Model 068**

For units not equipped with the above, top discharge grass bag assembly Model 195-067-000 and side chute deflector Model 195-068-000 are available as optional equipment.

# Models 102 and 112

Meets CPSC Blade Safety Requirements

Lot/Model	Mfg. Date
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# Models 102 and 112

## PARTS LIST FOR MODELS 102 AND 112 21" ROTARY MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	718-0145		Grip		44	741-0180		Flange Ball Bearing 1/2" I.D.	
2	14321		Control Handle Ass'y.—L.H.		45	710-0776		Hex AB-Tap Scr. 1/4 x .62"	
3	731-0733		Top Discharge Chute					Lg.	
			Ass'y.†	N	46	736-0160		FI-Wash. .531" I.D. x .930"	
4	710-0796		Truss Mach. Scr. #12 x					O.D.	
			1.50" Lg.		47	712-0296		Hex Patch L-Nut 3/8-24 Thd.	
5	710-0842		Rope Guide Bolt		48	734-1026		Rear Wheel Ass'y.—Comp.	
6	726-0135		Cap Speed Nut .31 Dia.					8 x 1.75	
7	731-0523		Control Panel Half		49	712-0200		Hex L-Nut 1/2-20 Thd.	
8	731-0524		Control Disc Pin		50	731-0564		Plug	
9	731-0526		Clutch Panel Half		51	731-0672		Rear Flap 3.75" x 17.30" Lg.	N
10	731-0528		Throttle Control Lever		53	712-0123		Hex Nut 5/16-24 Thd.*	
11	711-0500		Spacer .526" I.D. x .690"		55	753-0348		Blade Adapter Kit	
			O.D. x .640" Lg.	N	56	742-0289		21" Blade	N
12	736-0160		FI-Wash. .531" I.D. x .930"		58	736-0217		L-Wash. 3/8" I.D.—H.D.	
			O.D.		59	747-0510		Height Adj. Rod 1.50" x	
								19.42" Lg.	N
13	714-0104		Intern. Cotter Pin 5/16" Dia.		60	710-0331		Hex Bolt 3/8-24 x 2.25" Lg.	
14	749-0437		Upper Handle—Chrome					(Grade 5)	
15	16129		Panel Support Brkt.†	N	61	748-0191		Spacer .51" I.D. x .69" O.D.	
16	16140		Top Catcher Panel†	N				x .690" Lg.	N
17	16145		Top Door†	N	62	710-0888		Hex Bolt 5/16-24 x 1.00" Lg.	
18	710-0429		Hex "B" Tap Scr. #10 x					(Grade 5)	
			.38" Lg.†		63	736-0119		L-Wash. 5/16" I.D.*	
19	732-0483		Torsion Spring .20" I.D. x		64	16136		R.H. Handle Wheel Brkt.	
			1.14" Lg.†	N				Ass'y.	N
20	747-0514		Pivot Pin .187" Dia. x		65	16137		L.H. Handle Wheel Brkt.	
			7.25" Lg.†	N				Ass'y.	N
21	710-0134		Carriage Bolt 1/4-20 x .62"		66	710-0260		Carriage Bolt 5/16-18 x .62"	
			Lg.*					Lg.*	
22	710-0255		Truss Mach. Scr. 1/4-24 x		67	710-0603		Hex Wash. Hd. B-Tap Scr.	
			.75" Lg.†					5/16-18	
23	710-0289		Hex Bolt 1/4-20 x .50" Lg.†		68	710-0654		Hex Wash. Hd. TT-Tap Scr.	
24	710-0934		Wing Bolt 1/4-20 x .62" Lg.	N				3/8-16	
25	710-0258		Truss Mach. Scr. 1/4-20 x		69	712-0267		Hex Nut 5/16-18 Thd.*	
			.62" Lg.†		70	720-0143		Grip	
26	712-0287		Hex Nut 1/4-20 Thd.*†		71	732-0473		Height Adj. Lever 1.25 x	
27	736-0463		FI-Wash. .280" I.D. x .620"					8.5" Lg.	N
			O.D.		72	732-0481		Extension Spring .50" O.D.	
28	736-0329		L-Wash. 1/4" I.D.*†					x 3.80" Lg.	N
29	747-0494		Front Grass Catcher Frame†	N	73	736-0242		Bell-Wash. .345" I.D. x .88"	
30	747-0495		Grass Catcher Handle†	N				O.D.	
32	735-0639		Spark Plug Insulator		74	750-0526		Spacer .385" I.D. x .502"	
33	710-0654		Hex Wash. Hd. Tap Scr.					O.D. x .270" Lg.	
			3/8-16 x 1.00" Lg.†		75	750-0624		Shld. Spacer .500" Dia. x	
34	746-0472		Throttle Control Wire 58.0"					.100	N
			Lg.		77	726-0233		Bolt Retainer 1/4 x .50" O.D.	N
35	749-0505		Lower Handle—Chrome		98	12894		Throttle Control Cable Clip	
36	—		Engine		99	710-0429		Hex B-Tap Scr. #10 x .38"	
37	741-0267		Flanged Ball Bearing 3/8"					Lg.	
			I.D.†		100	710-0899		Hex Sems Bolt #10-32 x	
38	764-0212		21" Top Discharge Grass	N				.62" Lg.	
			Bag†		101	751-0333		Casing Clamp	
39	14835		Retaining Strip		102	16125		21" Deck Ass'y.	N
40	16324		Rope Guide Brkt.†	N	103	710-0654		Hex Wash Hd. TT-Tap Scr.	
41	736-0204		FI-Wash. .344" I.D. x .62"					3/8-16	
			O.D.		104	712-0185		Speed Nut 1/4-20 U-Type	
42	16131		Rear Axle Ass'y.	N	105	10662		Front Axle Ass'y.	
43	736-0160		FI-Wash. .531" I.D. x .930"						
			O.D.						

# Models 102 and 112

## PARTS LIST FOR MODELS 102 AND 112 21" ROTARY MOWERS (CONTINUED)


REF. NO.	PART NO.	COLOR CODE	DESCRIPTION		REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
106	711-0313		Sleeve .526" I.D. x .690" O.D. x .880" Lg.		115	741-0180		Flange Ball Bearing 1/2" I.D.	
107	712-0200		Hex L-Nut 1/2-20 Thd.		116	714-0104		Intern. Cotter Pin 5/16" Dia.	
108	714-0104		Intern. Cotter Pin 5/16" Dia.		117	720-0208		Door Grip x 2.5†	N
109	732-0482		Extension Spring .50" O.D. x 3.20" Lg.	N	118	726-0192		Cable Tie (Not Shown)	
110	736-0160		Fl-Wash. .531" I.D. x .930" O.D.		119	**		Hub Cap—Plastic	
111	736-0221		Intern. L-Wash. 3/8 x .56" O.D.		121	710-0671		Curved Carr. Bolt 5/16-18 x 1.38" Lg.	
112	738-0615		Shld. Bolt .623" Dia. x .425	N	122	712-0267		Hex Nut 5/16-18 Thd.*	
113	734-1264		Front-Wheel Ass'y. Comp. 7 x 1.75	N	123	736-0119		L-Wash. 5/16" I.D.*	
					129	746-0477		Control Cable—43" Lg.	
					133	16148		Side Chute Deflector (102 Only)	N
					135	753-0360		Kit—Control Housing Comp.	

†Top Discharge Model 112 Only.

(462—Red Flake)

\*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.

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

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."

**Find It Fast  
In The  
Yellow Pages**



### \*\*Hub Caps Available

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

## Trouble Shooting Chart

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

**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 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 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.

<b>ALABAMA</b>	<b>BIRMINGHAM</b>	<b>CARROLL</b>
Auto Electric & Carburetor Co. . . . .	2625 4th Ave. S. . . . . 35233	Box 366, 71 High St. . . . . 43112
<b>ARKANSAS</b>	<b>NORTH LITTLE ROCK</b>	<b>CLEVELAND</b>
Sutton's Lawn Mower Shop . . . . .	5301 Roundtop Drive	7900 Lorain Ave. . . . . 44102
	Box 368, Rt. 4 . . . . . 72117	<b>WADSWORTH</b>
<b>CALIFORNIA</b>	<b>PORTERVILLE</b>	National Central . . . . . 44281
Billious . . . . .	75 North D Street . . . . . 93257	<b>YOUNGSTOWN</b>
<b>COLORADO</b>	<b>DENVER</b>	Burton Supply Co. . . . . 44501
Spitzer Industrial Products Co. . . . .	6601 N.	Box 929 . . . . .
	Washington St. . . . . 80229	<b>MUSKOGEE</b>
<b>FLORIDA</b>	<b>JACKSONVILLE</b>	Victory Motors, Inc. . . . . 74401
Radco Distributors . . . . .	4909 Victor St.	<b>PORTLAND</b>
	Box 5459 . . . . . 32207	8216 N. Denver Ave. . . . . 97217
	<b>HIALEAH</b>	<b>PENNSYLVANIA</b>
Small Eng. Dist. . . . .	7995 W. 26th Court . . . . . 33016	<b>HARRISBURG</b>
<b>GEORGIA</b>	<b>EAST POINT</b>	EECO Inc. . . . . 17110
East Point Cycle & Key Inc. . . . .	2834 Church St. . . . . 30344	<b>PHILADELPHIA</b>
<b>ILLINOIS</b>	<b>LYONS</b>	Thompson Rubber Co. . . . . 19120
Keen Edge Co. . . . .	8615 Ogden Ave. . . . . 60534	<b>PITTSBURGH</b>
<b>INDIANA</b>	<b>ELKHART</b>	Bluemont Co. . . . . 15235
Parts & Sales Inc. . . . .	2101 Industrial Pkwy. . . . . 46516	<b>PUNXSUTAWNEY</b>
<b>IOWA</b>	<b>DUBUQUE</b>	R.D. 2 . . . . . 15767
Power Lawn & Garden Equip. . . . .	2551 J.F. Kennedy . . . . . 52001	<b>SCRANTON</b>
<b>LOUISIANA</b>	<b>NEW ORLEANS</b>	Scranton Auto Ignition Co. . . . . 18509
Suhren Engine Co. . . . .	8330 Earhart Blvd. . . . . 70118	<b>TENNESSEE</b>
<b>MARYLAND</b>	<b>TAKOMA PARK</b>	Master Repair Service . . . . . 37921
Center Supply Co. . . . .	6867 New Hampshire	<b>MEMPHIS</b>
	Ave. . . . . 20912	American Sales & Service, Inc. . . . . 3811f
<b>MASSACHUSETTS</b>	<b>SPRINGFIELD</b>	<b>TEXAS</b>
Morton B. Collins Co. . . . .	300 Birnie Ave. . . . . 01107	<b>DALLAS</b>
<b>MICHIGAN</b>	<b>LANSING</b>	Marr Brothers, Inc. . . . . 75203
Lorenz Service Co. . . . .	2500 S. Pennsylvania . . . . . 48910	<b>FORT WORTH</b>
	<b>MOUNT CLEMENS</b>	Woodson Sales Corp. . . . . 76118
Power Equipment Dist. . . . .	340 Hubbard . . . . . 48043	<b>HOUSTON</b>
<b>MINNESOTA</b>	<b>HOPKINS</b>	Bullard Supply Co. . . . . 77003
Hance Distributing Inc. . . . .	420 Excelsior Ave. W. . . . . 55343	<b>SAN ANTONIO</b>
<b>MISSOURI</b>	<b>KANSAS CITY</b>	Engine House Inc. . . . . 78217
Automotive Equip. Service . . . . .	3117 Holmes St. . . . . 64109	<b>BOUNTIFUL</b>
	<b>ST. JOSEPH</b>	Powered Products . . . . . 84010
Ross-Frazier Supply Co. . . . .	8th and Monterey . . . . . 64503	<b>VIRGINIA</b>
	<b>ST. LOUIS</b>	<b>RBI Corp.</b>
Henzler, Inc. . . . .	2015 Lemay Ferry Rd. . . . . 63125	101 Cedar Ridge Dr. . . . . 23005
<b>NEW JERSEY</b>	<b>BELLMAWR</b>	<b>WASHINGTON</b>
Lawnmower Parts Inc. . . . .	717 Creek Rd. . . . . 08030	Equip. Northwest . . . . . 98122
<b>NEW MEXICO</b>	<b>ALBUQUERQUE</b>	<b>WISCONSIN</b>
Spitzer Eng. & Parts Co. . . . .	1023 Third Ave. N.W. . . . . 87103	Horst Dist. Inc. . . . . 53014
<b>NEW YORK</b>	<b>CARTHAGE</b>	<b>NORTH CAROLINA</b>
Gamble Dist., Inc. . . . .	West End Ave. . . . . 13619	Smith Hardware Co. . . . . 27530
		<b>GREENSBORO</b>
		Dixie Sales Company . . . . . 27402

## WARRANTY PARTS AND SERVICE POLICY

(0484)

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

### CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

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

All claims MUST be substantiated with the following information:

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