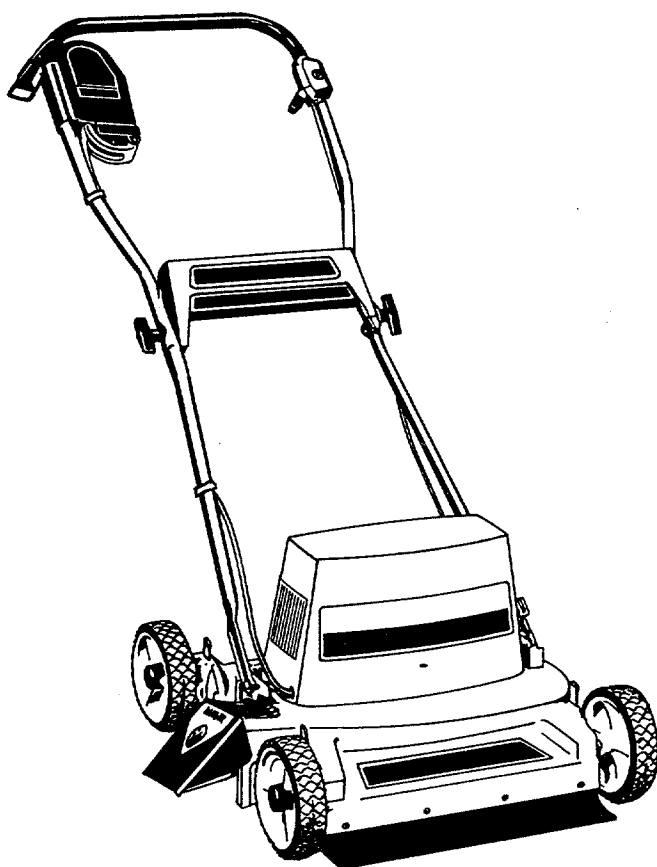


\$1.00

# OWNER'S GUIDE

ASSEMBLY • OPERATION • MAINTENANCE • PARTS



## TWIN BLADE ELECTRIC ROTARY MOWER

Model Number  
**181-222A002**

(4318) <sup>72003</sup>  
706-GB0115  
GB115 (BAG)



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

# IMPORTANT

## RULES FOR SAFE OPERATION

**THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR LAWN MOWER.**

### CAUTION

**THE MOTOR CONTROL ON THIS MOWER IS INSTALLED TO MINIMIZE THE RISK OF BLADE CONTACT INJURY AND IS REQUIRED BY FEDERAL REGULATIONS. DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO DEFEAT THE FUNCTION OF THE MOTOR CONTROL.**

### TRAINING:

- Read the Operation and Service Instruction Manual carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
- Never allow children to operate equipment. Never allow adults to operate equipment without proper instruction.
- Keep the area of operation clear of all persons, especially small children and pets.
- Use the mower only as the Manufacturer intended and as described in the Operator's Manual.
- Store idle mower indoors - When not in use, mower should be stored indoors in dry, high or locked-up place - Out of reach of children.
- Do not operate mower after it has been dropped or damaged in any manner. Return product to nearest Authorized Service Center for examination and repair.
- The use of accessory attachments not recommended by the mower manufacturer may cause hazards.

### PREPARATION:

- Objects struck by the lawn mower blade can cause severe injuries to persons. The lawn should always be carefully examined and cleared of all stones, sticks, wires, bones and other foreign objects.
- Dress properly - Wear only solid shoes when mowing. Do not operate mower when barefoot, or wearing open sandals. Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of rubber gloves and substantial footwear is recommended when working outdoors.
- Never attempt to make a wheel height adjustment while the motor is running.
- Mow only in daylight or in good artificial light.
- Do not operate mower in damp or wet locations. Always be sure of your footing; keep a firm hold on the handle and walk never run.
- Do not use in rain.
- Don't force product - it will do the job better and safer at the rate for which it was designed.
- Don't abuse cord - never pull product by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
- Warning - to prevent shock hazard use only with an extension cord suitable for outdoor use.

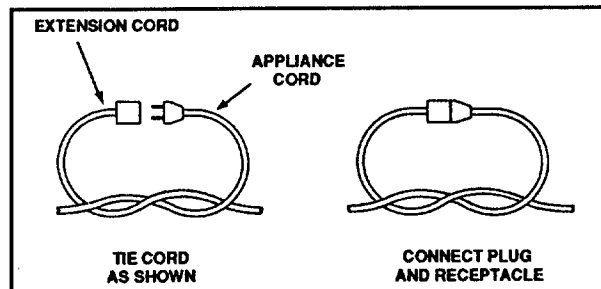
- Avoid accidental starting - don't pull plugged-in product with finger on switch. Be sure switch is off when plugging in.

### EXTENSION CORDS:

- Use only UL approved outdoor extension cords of adequate gauge (min. 16 gauge recommended) which accept the appliance's plug. Replace or repair damaged cords. Extension cords are available at your dealer.
- To prevent disconnection of Lawn Mower from the extension cord during operation, use the strain relief connector described in this manual.
- Cord sets - Make sure your cord set is in good condition. When using a cord set, be sure to use one heavy enough to carry the current your lawn mower will draw. For lengths less than 50 feet, No. 16 AWG cord set should be used. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. (NOTE: Table below shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number the heavier the cord.)

Required Cord Gauge				
Motor Amp Rating	Cord Length in Feet			
	25	50	100	150
	Wire Gauge			
10-12	16	16	14	12

- If extension cord is damaged in any manner while plugged in, pull extension cord from wall receptacle.
- To prevent disconnection of unit from extension cord during operation, make knot as shown in illustration, or use one of the plug receptacle retaining straps or connectors available at most hardware stores.



### POWER SUPPLY:

- Fuses - The motor should be operated on a 15 AMP circuit. If difficulty in starting is experienced with a standard 15 AMP fuse or circuit breaker, contact your nearest Authorized Service Center.
- Frequent blowing of fuses - do not use a higher rated fuse without consulting your power company.

## DOUBLE INSULATED LAWN MOWER

DOUBLE INSULATION IS A CONCEPT IN SAFETY, IN ELECTRIC LAWN MOWERS, WHICH ELIMINATES THE NEED FOR THE USUAL THREE WIRE GROUNDED POWER CORD AND GROUNDED SUPPLY SYSTEM. WHEREVER THERE IS ELECTRIC CURRENT IN THE MOWER THERE ARE TWO COMPLETE SETS OF INSULATION TO PROTECT THE USER. ALL EXPOSED METAL PARTS ARE ISOLATED FROM THE INTERNAL METAL MOTOR COMPONENTS WITH PROTECTING INSULATION.

IMPORTANT SERVICING OF A LAWN MOWER WITH DOUBLE INSULATION REQUIRES EXTREME CARE AND KNOWLEDGE OF THE SYSTEM AND SHOULD BE PERFORMED ONLY BY A QUALIFIED SERVICE TECHNICIAN. FOR SERVICE WE SUGGEST YOU RETURN THE LAWN MOWER TO YOUR NEAREST AUTHORIZED SERVICE CENTER FOR REPAIR. ALWAYS USE ORIGINAL FACTORY REPLACEMENT PARTS WHEN SERVICING.

### OPERATION:

- Do not put hands or feet near or under rotating parts.
- Keep clear of the discharge opening at all times.
- Stop the motor whenever you leave the mower, before crossing drives, walks or roads.
- After striking a foreign object, shut off the motor, make absolutely sure the blade and all moving parts have completely stopped, disconnect the power cord to prevent accidental starting, then thoroughly inspect the mower for any damage. Such damage must be repaired before restarting and operating the mower. Remember, heavy vibration is generally a sign of trouble.
- If mower should start to vibrate abnormally, stop the motor and check immediately for the cause.
- Stop the motor, wait for blade and all moving parts to stop, before cleaning, unclogging chute, removing grass catcher, repairing or inspecting the mower. Always disconnect power cord to prevent accidental starting.
- Never operate the mower without proper guards, plates, or other safety protective devices in place.

- Never cut grass by pulling the mower towards you. Mow grass across the face of slopes, never up and down. Do not mow excessively steep slopes. Use caution when operating the mower on uneven terrain or changing direction; maintain good footing.

### MAINTENANCE AND STORAGE:

- Maintain Lawn Mower With Care - Keep cutting edges sharp and clean for best and safest performance.
- Check the blade and the motor mounting bolts at frequent intervals for proper tightness.
- Check all bolts, nuts and screws, etc. at frequent intervals for proper tightness to be sure equipment is in safe working condition.
- To reduce fire hazard, keep the motor free of grass, leaves, or excessive grease.
- Check grass catcher bags frequently for deterioration and wear and replace worn bags. Check that replacement bags comply with original manufacturer's recommendations or specifications.
- Allow motor to cool before storing in any enclosure.
- Use identical replacement blades only.

This Lawn Mower conforms to the safety standards of the American National Standards Institute, Underwriter's Laboratories & Outdoor Power Equipment Institute. Meets Consumer Products Safety Commission Blade safety requirements for walk behind rotary power lawn mowers.



## ALWAYS WEAR EYE PROTECTION

The operation of any lawnmower can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before starting power tool operation or while performing any adjustments or repairs. We recommend a wide vision safety mask for over spectacles or standard safety glasses, available at your nearest distributor.

This symbol on the products name plate  
means it is listed by  
UNDERWRITERS LABORATORIES, INC





**WARNING:** Do not operate this mower without the safety chute guard or an entire approved grass catcher in place. These guards are for your protection and are required by the American National Standards Institute.

# SET-UP INSTRUCTIONS

Read this manual in its entirety before attempting to assemble or operate the Lawn Mower. The Lawn Mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as Nuts, Washers, Bolts, Etc., necessary to complete the assembly, have been placed in the Parts Bag.

**NOTE:** Failure to follow all set-up and operating instructions will void the warranty on this product.

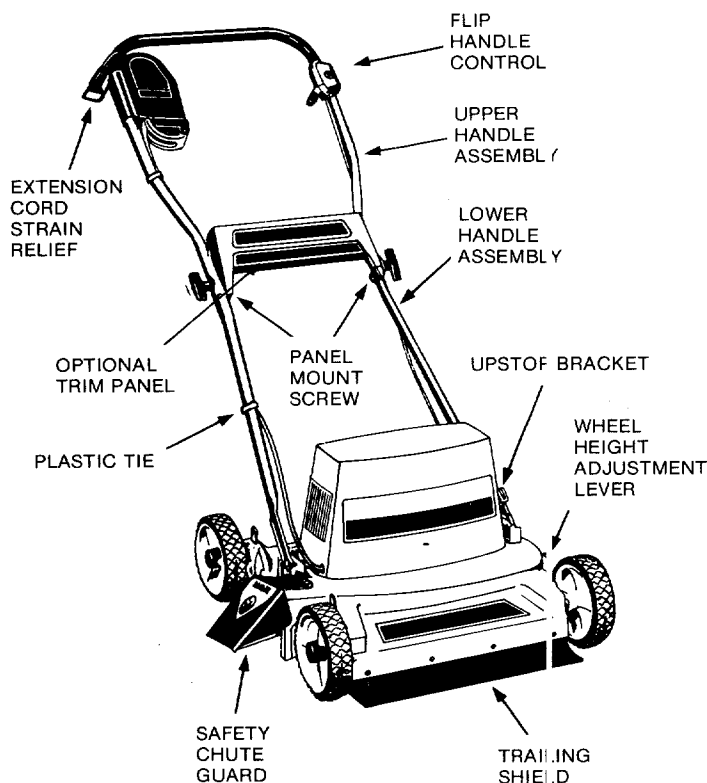
## The following parts are included not assembled:

Upper & Lower Handle, Flip-Over Handle Control, Hardware Parts Bag

**NOTE: Before Assembling or Operating Unit, Check for Damage and/or Missing Parts. DO NOT OPERATE THIS MOWER UNTIL THE FOLLOWING STEPS HAVE BEEN COMPLETED.**

Remove the mower from carton by gripping both ends of the mower housing and place on level ground for set-up. See Reference Illustration for assembly assistance. **WARNING:** Bottom edge of deck may have sharp edges. The blade is also very sharp. Always wear gloves or other protection when working under or lifting the mower.

## REFERENCE ILLUSTRATION

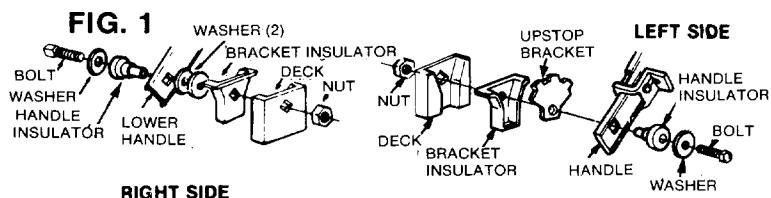


MEETS CPSC BLADE SAFETY REQUIREMENTS

## STEP 1

### TO ASSEMBLE LOWER HANDLE

Remove bolts, handle insulators, washers, upstop bracket and nuts from the deck. Attach lower handle. (See Fig. 1)



RIGHT SIDE



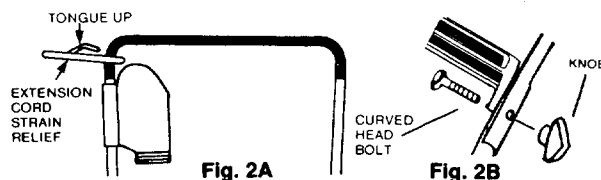
**WARNING:** Insulators are safety components. It is important that all parts be assembled in position shown. (See Fig. 1)

## STEP 2

### TO ASSEMBLE UPPER HANDLE

Remove bolts, knobs and extension cord strain relief from parts bag. Before attaching handle, slide strain relief on handle and position as shown (See Fig. 2A).

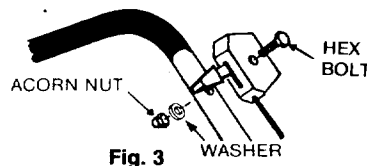
Attach handle to lower handle and tighten knobs securely. (See Fig. 2B).



## STEP 3

### TO ASSEMBLE FLIP HANDLE CONTROL

Remove acorn nut, 1/4" washer and hex bolt from parts bag. Attach to upper handle (See Fig. 3).



## STEP 4

Attach plastic ties (excess cord should be between lower tie and motor cover). See reference illustration for location.

## STEP 5

### OPTIONAL TRIM PANEL ASSEMBLY

Assemble to lower handle with #10 sheet metal screws supplied and tighten securely (See Ref. Illustration).

The grass catcher accessory specifically designed for and suitable for use with your mower is Model 190-132 Grass Catcher. Caution: The use of other accessories not specifically designed or recommended for your mower may be hazardous.



**WARNING: DO NOT OPERATE LAWN MOWER WITHOUT THE CHUTE GUARD OR AN APPROVED GRASS CATCHER IN PLACE.**

# OPERATING INSTRUCTIONS

## ADJUSTING HEIGHT-OF-CUT



**WARNING: Disconnect power cord from unit before adjusting wheels.**

Your Lawn Mower may be adjusted to five cutting heights. (See Fig. 5) This is done by moving fingertip height adjustment lever on each wheel. The average lawn should be cut approx. 1½ to 2 inches during the cool season and over 2 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.

**NOTE:** The heights of cut are measured from the ground to the blade tip with the motor not running. These cutting heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

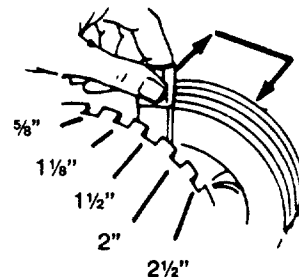


FIG. 5

## SAFETY DEADMAN CONTROL SWITCH

Your Lawn Mower is equipped with a Safety Deadman Control Switch which prevents unintentional starting of motor. **TO RUN** - Lift lever with left forefinger and pull lever up with right hand. **TO STOP** - Release lever and motor will automatically shut-off. (See Fig. 6)

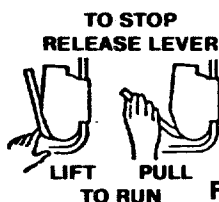


FIG. 6



**CAUTION: THE MOTOR CONTROL ON THIS MOWER IS INSTALLED TO MINIMIZE THE RISK OF BLADE CONTACT INJURY AND IS REQUIRED BY FEDERAL REGULATIONS. DO NOT UNDER ANY CIRCUMSTANCES ATTEMPT TO DEFEAT THE FUNCTION OF THE MOTOR CONTROL.**

## BLADE BRAKING FEATURE

Your lawn mower has a braking feature. When the switch is turned off, the blades will stop in less than 3 seconds. **THE HIGH PITCH NOISE THAT YOU WILL HEAR IS THE DECELERATION OF THE ELECTRIC MOTOR. SPARKING AT TOP OF MOTOR IS ALSO NORMAL DURING DECELERATION.**



**IF MOTOR DOES NOT COME TO IMMEDIATE STOP UPON RELEASE OF MOTOR CONTROL LEVER, CONTACT AN AUTHORIZED SERVICE DEALER.**

## CORD CONNECTION



**WARNING: Make sure switch lever is in "OFF" position.**

Connect extension cord to strain relief. Allow enough excess cord for loop to make switch box connection (approx. 20 inches). (See Fig. 7A) Swing open spring loaded plug retainer and insert extension cord connector fully into switch box plug.

**NOTE** - Your mower is equipped with a polarized AC power plug (one blade of the plug is wider than the other), which will fit into the power extension cord connector only one way (See Fig. 7B). Should you be unable to insert the cord connector fully onto the switch box plug, try reversing the cord connector. Should the connector still fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.

Plug extension cord into outlet. See page 2-3 for instructions on extension cords, power supply and grounding.

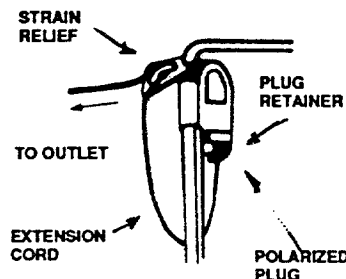


Fig. 7A

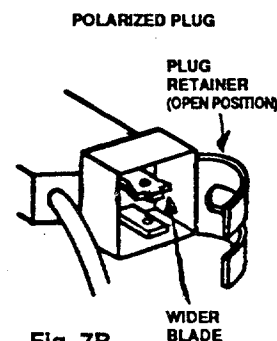


Fig. 7B

## TIPS FOR WINDING CORD

To prevent snarling, as you pick cord up, wind cord in a series of equal loops on each side of your hand. (See Fig. 8)



FIG. 8

## FLIP-OVER HANDLE CONTROL

Before mowing, lock handle in the desired operating position. (See Fig. 9)

To reverse mowing direction, pull up the flip handle control knob and swing handle over. The slide lock bracket will lock handle in place.

**WARNING:** Make sure slide lock bracket is disengaged before swinging handle over.

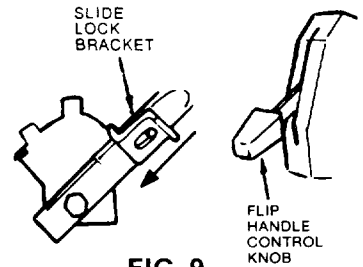


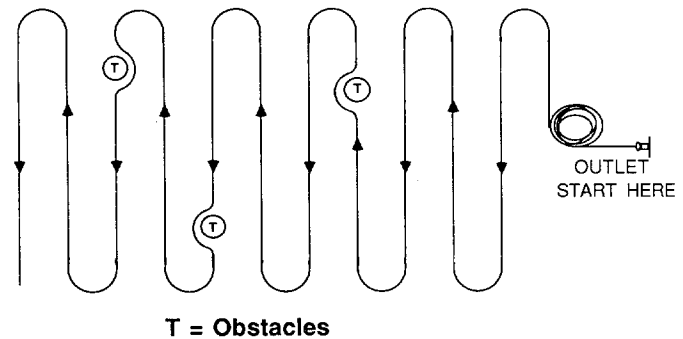
FIG. 9

## MOWING PROCEDURE

Never mow around the lawn in circles. Always travel back and forth across the lawn, beginning at the point nearest the electric outlet where you connect cord. Gradually move away from outlet as the lawn is mowed (This will keep the cord on the same side of the mower and out of the way).

Do not allow extension cord to become wrapped around trees, shrubs or other obstacles. Follow the technique illustrated.

The length of the extension cord you will need depends on the size of the area to be mowed. See extension cord information on page 2.



# MAINTENANCE AND STORAGE INSTRUCTIONS

**WARNING:** TURN OFF MOTOR AND DISCONNECT POWER SUPPLY BEFORE CHECKING THE LAWN MOWER.

1. Check blades at frequent intervals for proper tightness.
2. Keep all nuts, bolts and screws tight to be sure equipment is in safe working condition.
3. Remove any build-up of grass and leaves on or around motor cover (DO NOT USE WATER)
4. At the end of each mowing season lubricate blade spindle bearings. Turn mower over on its left side and locate grease fitting on each spindle housing and clean. (See Fig. 10) With a hand grease gun apply grease slowly until the grease begins to come out of the relief groove on the side of the fitting.

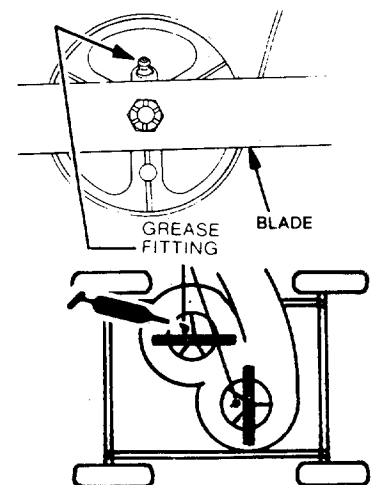


FIG. 10

## BLADE CARE

All lawn mower blades must be balanced to run smoothly. Your blade has been checked at the factory. Resharpening is not recommended. Replace worn blade.

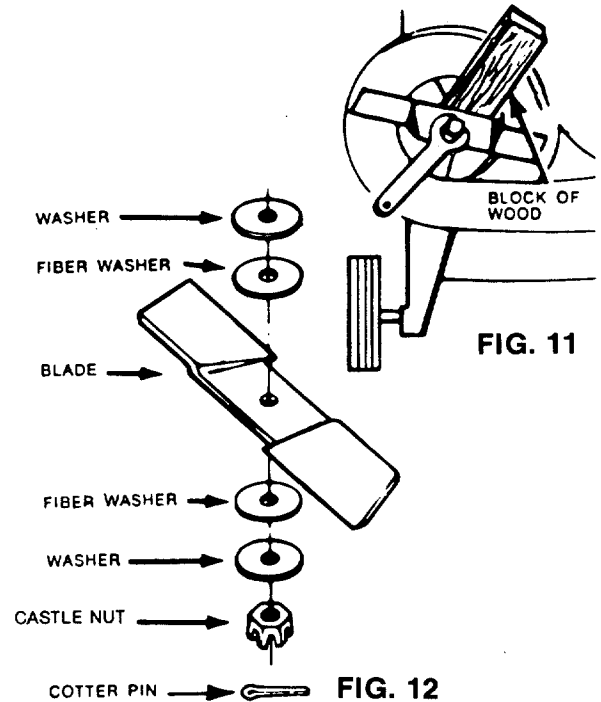
### REPLACING BLADE

**WARNING:** Disconnect power supply before replacing blade.

**CAUTION:** For proper operation, cutting edges of blade must be sharp. Always protect your hands by wearing heavy gloves and/or wrapping cutting edges with newspapers or other materials when performing any blade maintenance.

1. Lay lawn mower on its side.
2. Insert a block of wood into one of the baffles to prevent blades from turning. (See Fig. 11)
3. Remove cotter pin, locknut, washer, fiber washer and blade. Replace one blade before starting on the other. (See Fig. 12)
4. Place new blade on with the sharp cutting edge facing the ground away from the deck.
5. Reassemble washers and locknut, tighten securely (18 - 25 ft. pounds of torque).
6. Reinsert cotter pin. (If necessary tighten castle nut only enough to allow cotter pin insertion.)

**WARNING:** It is important that all parts be reassembled in positions shown (see illustration).



## STORAGE

Store Lawn Mower in a cool, dry place when not in use. Do not cover Lawn Mower with solid plastic sheet. Trapping moisture around Lawn Mower will promote rust and corrosion.

### FOR "STAND-UP" STORAGE

Position handle vertically.

**WARNING:** BE SURE POWER SUPPLY IS DISCONNECTED.

Turn mower over and remove grass cuttings with scraper from under deck. Wipe lawn mower clean with dry cloth occasionally.

1. Make sure switch is in off position for storage.
2. Replace extension cord if cut or abraded.
3. Extension cord should be wiped dry of any foreign substance such as oil or stains.
4. Wind cord and store in cool, dry place. (See Page 5)

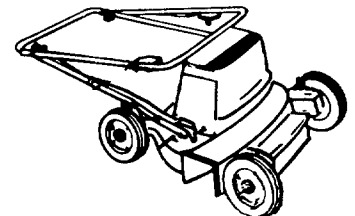


FIG. 13

### FOR COMPACT STORAGE

Upper Handle may be folded as shown by loosening locking knobs in center of handle. (Fig. 13) **NOTE:** Be sure cord is not pinched between upper and lower handle when folding or raising handle.

# TROUBLE SHOOTING CHART

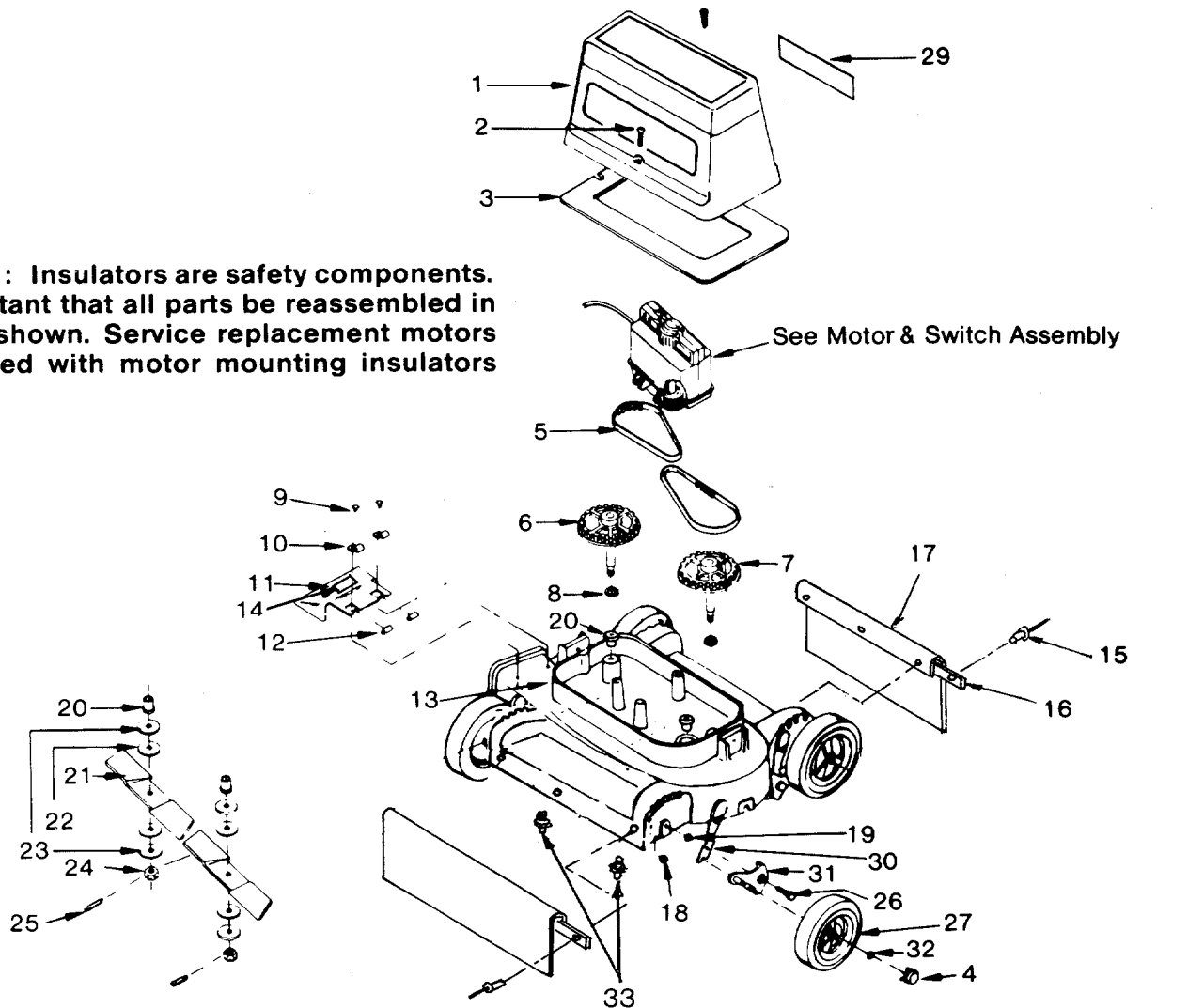
PROBLEM	CORRECTION
<b>DOES NOT START</b>	<ol style="list-style-type: none"> <li>1. Be sure that the extension cord is plugged into the outlet and the Lawn Mower switch cord. (See page 5 for cord connection)</li> <li>2. Check to see if a fuse has been blown or a circuit breaker tripped in your electrical box. (See page 2 for instruction on fuses)</li> </ol>
<b>FREQUENT BLOWING OF FUSES</b>	Do not use a higher rated fuse without consulting your power company. If condition persists, (be sure circuit is not overloaded) have your unit checked by your nearest Authorized Service Dealer.
<b>EXCESSIVE VIBRATION</b>	<p>Turn off the motor immediately.</p> <p><b>⚠ WARNING: DISCONNECT POWER SUPPLY.</b></p> <p>Check for damaged or loose parts. If vibration persists, have the lawn mower and motor checked by your nearest Authorized Service Dealer before continuing to use.</p>
<b>APPARENT LOSS OF POWER — MOTOR STALLS</b>	<p>Motor switch must be in "OFF" position.</p> <p><b>⚠ WARNING: DISCONNECT POWER SUPPLY.</b></p> <ol style="list-style-type: none"> <li>1. Check for dirt accumulation around all moving parts.</li> <li>2. Clean underside of deck (See Page 7)</li> </ol>
<b>POOR GRASS DISCHARGE</b>	<p>Motor switch must be in "OFF" position.</p> <p><b>⚠ WARNING: DISCONNECT POWER SUPPLY.</b></p> <p>Wait until blades have stopped then:</p> <ol style="list-style-type: none"> <li>1. Clean underside of deck and chute area.</li> <li>2. Check for excessively worn or damaged blade.</li> </ol>
<b>LOOSE BLADE</b>	<p>Motor switch must be in "OFF" position.</p> <p><b>⚠ WARNING: DISCONNECT POWER SUPPLY.</b></p> <ol style="list-style-type: none"> <li>1. Check for damaged blade.</li> <li>2. Check blade mounting. (Refer to Page 7, Replacing Blade Instructions)</li> </ol>



## Model 222A (4318)



**WARNING:** Insulators are safety components. It is important that all parts be reassembled in positions shown. Service replacement motors are supplied with motor mounting insulators attached.

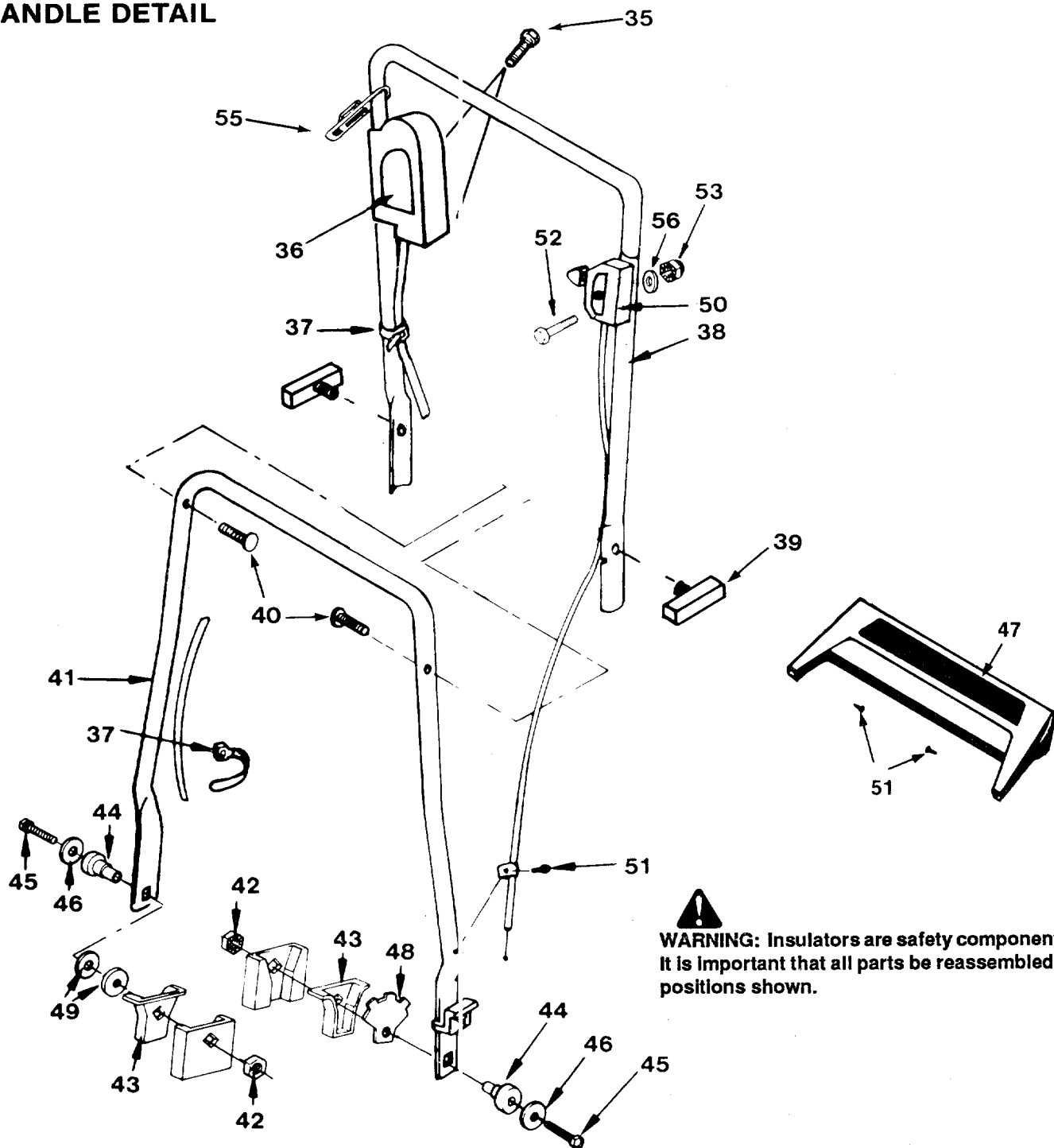


Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	731-1241	Motor Cover	18	712-0429	Nut 5/16 - 18 Locking
2	710-1111	Screw Motor Cover	19	736-0464	Washer, Axle
3	724-0172	Baffle Air	20	741-0582	Bearing, Blade Shaft
4	720-0251	Hub Cap	21	742-0565	Blade - 9"
5	754-0374	Belt-Drive	22	736-0468	Washer, Fibre
*6	618-0022	Blade Shaft/Pulley Long	23	736-0467	Washer, Flat
*7	618-0021	Blade Shaft/Pulley Short	24	712-0443	Nut, Blade
8	736-0466	Washer, Pulley	25	714-0228	Cotter Pin
9	728-0123	Rivet, Blind	26	738-0860	Shoulder Bolt
10	782-3015	Hinge, Chute Guard	27	634-0010	Wheel
11	782-7001	Chute Guard	29	777-9381	Caution & Data Label
12	711-0872	Hinge Pin	30	782-0017	Handle Height Adjustment
13	<del>682-0011</del> 782-0121	Deck Assembly (Inc. Ref. #20, 15, 16, 17)	31	682-0507	Bracket & Axle Assembly
14	777-8151	Label - Danger	32	716-0183	Retaining Ring
5	728-0143	Rivet - Blind	33	737-0280	Grease Fitting
16	782-7515	Strap - Trail Shield	-	770-7393F	Operator's Manual (Not Shown)
17	720-0248	Trailing Guard			

**NOTE:** Specifications subject to change without notice or obligation.

# Model 222A (4318)

## HANDLE DETAIL

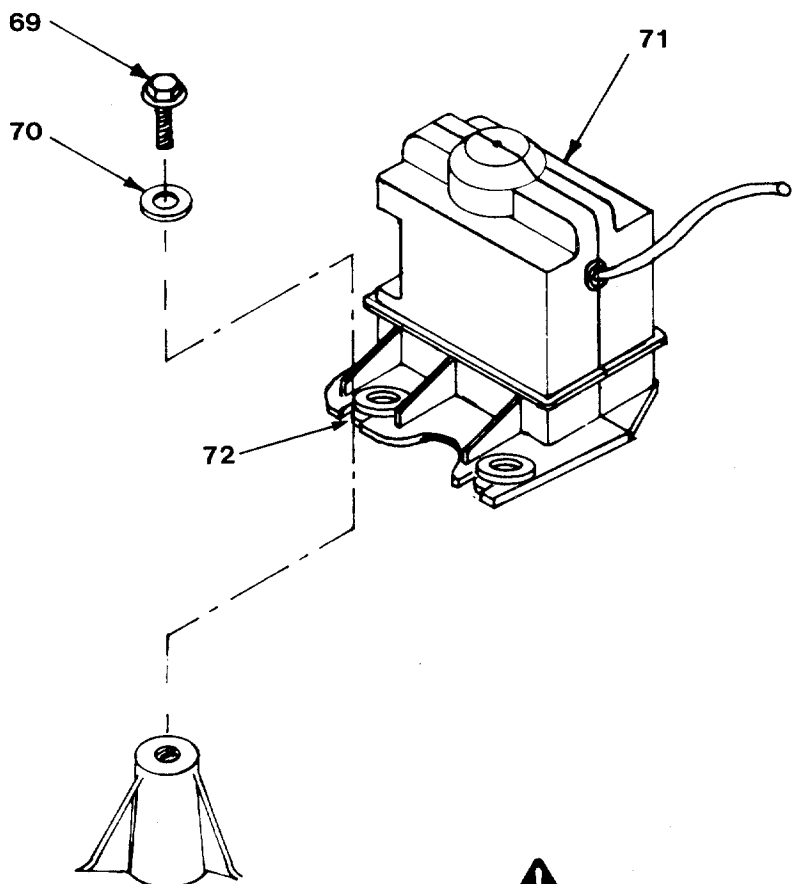


Ref. No.	Part No.	Description
35	710-1150	Screw
36	777-9380	Motor Switch Label
37	726-0303	Plastic Tie
38	749-0900	Handle, Upper
39	720-0241	Locking Knob
40	710-1152	Curved Head Screw
41	749-0877	Handle, Lower
42	712-0429	Nut 5/16-18 x 1/2 Locking
43	721-0280	Bracket Insulator
44	721-0279	Screw Insulator
45	710-0442	Screw 5/16-18 x 1-1/2 Hex

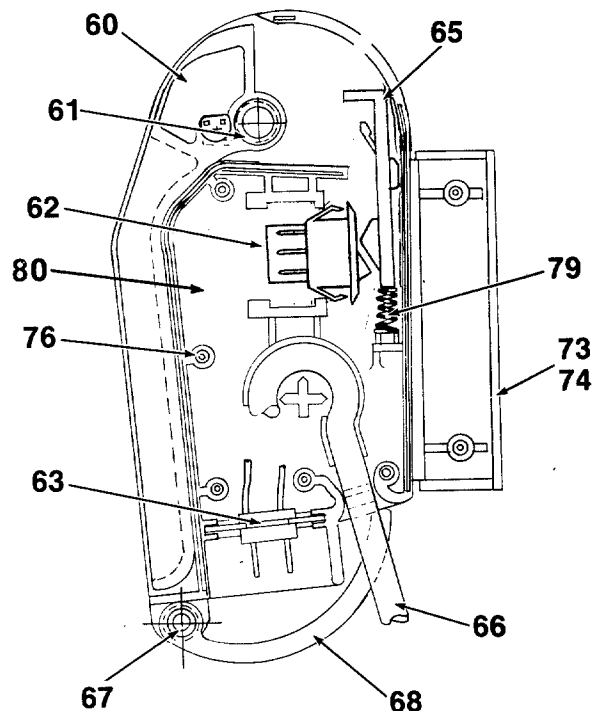
Ref. No.	Part No.	Description
46	736-0262	Washer
47	720-0253	Trim plate (Optional)
48	782-3014	Upstop Bracket
49	736-3068	Washer
50	720-0250	Cable Release Control
51	710-0589	Mounting Screw
52	710-0886	Screw 1/4-20 x 1-1/2 Hex
53	712-0442	Nut 1/4-20 Acorn
55	725-1590	Strain Relief
56	736-0142	Washer

# MODEL 222A (4318)

## MOTOR & SWITCH ASSEMBLY



## SWITCH DETAIL Complete Cord & Switch Box Assembly Key No. 77



**WARNING:** Insulators are safety components. It is important that all parts be reassembled in positions shown. Replacement motors are supplied with motor mounting insulators attached.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
60	731-1210	Handle-Switch	70	736-3090	Washer-1/4" ID x 3/4" OD x 1/16" Thick
61	732-0679	Spring	71	818-60121	Motor & Switch Assy. (Complete)
62	725-1565	Switch	72	731-1216	Insulator, Motor Housing (Part of Ref. No. 56)
63	729-0304	Plug Assembly	73	731-1208	Housing - Upper Half
65	731-1198	Latch	74	731-1209	Housing - Lower Half (Not Shown)
66	818-60001	Cord Ass'y. (Includes #63)	76	710-1147	Screw - Switch Box (Not Shown)
67	732-0680	Spring - Plug Ret.	77	818-60000	Cord & Switch Box (Complete)
68	731-1211	Plug Retainer	79	732-0681	Latch Spring
69	710-1108	Bolt, Motor Mount	80	818-60002	Jumper Wire (Not Shown)



**WARNING:** The motor is an important part of the double insulated system. To avoid the possibility of alteration or damage to the system, it is recommended that service be performed at a factory authorized service location.

**REPLACEMENT PARTS • P.O. BOX 360900 • CLEVELAND, OHIO 44136**