

# OWNER'S GUIDE

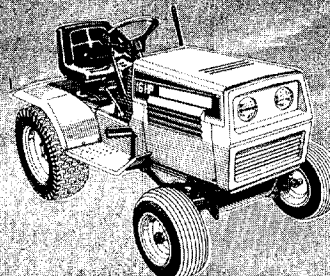
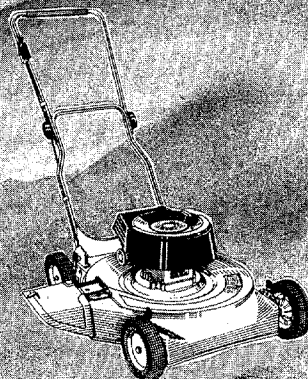
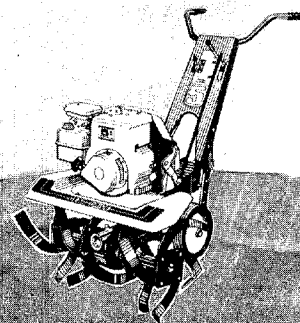
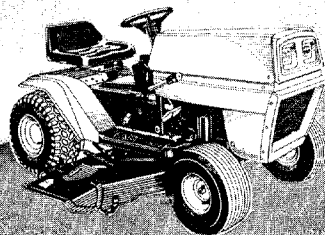
FIFTY CENTS

**MODEL  
NO.  
139-498A**

**ASSEMBLY  
OPERATION  
PARTS  
MAINTENANCE**

**38"  
LAWN  
TRACTOR**

**IMPORTANT:  
READ SAFETY RULES  
& INSTRUCTIONS**



## **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 under this warranty must be paid by the purchaser unless 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 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.

# **IMPORTANT**

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

Your rotary mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

## **SAFE OPERATION PRACTICES FOR RIDING VEHICLES**

1. Know the controls and how to stop quickly—**READ THE OWNER'S MANUAL.**
2. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
3. Do not carry passengers.
4. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction.
5. Clear work area of objects which might be picked up and thrown by the mower in any direction.
6. Disengage all attachment clutches and shift into neutral before attempting to start engine.
7. Disengage power to attachment(s) and stop engine before leaving operator position.
8. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
9. Before attempting to unclog the mower or discharge chute, stop the engine and be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
10. Disengage power to attachment(s) when transporting or not in use.
11. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
12. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
13. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
14. Stay alert for holes in terrain and other hidden hazards.
15. Use care when pulling loads or using heavy equipment.
  - A. Use only approved drawbar hitch points.
  - B. Limit loads to those you can safely control.
  - C. Do not turn sharply. Use care when backing.
  - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
16. Watch out for traffic when crossing or near roadways.
17. When using any attachments never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
18. Handle gasoline with care—it is highly flammable.
  - A. Use approved gasoline container.
  - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
  - C. Open doors if engine is run in garage—exhaust fumes are dangerous. Do not run engine indoors.
19. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual.
20. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
21. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
22. To reduce fire hazard keep engine free of grass, leaves or excessive grease.
23. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
24. Do not change the engine governor settings or overspeed the engine.
25. When using the vehicle with mower, proceed as follows:
  - (1) Mow only in daylight or in good artificial light.
  - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
  - (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
  - (4) Check blade mounting bolts for proper tightness at frequent intervals.
26. Check grass catcher bags frequently for wear or deterioration. For safety protection replace only with new bag meeting original equipment specifications.
27. Look behind to make sure the area is clear before placing the transmission in reverse and backing up.

# INDEX

Limited Warranty .....	2	Off-Season Storage .....	16
Safe Operation Practices .....	3	Trouble Shooting Chart .....	17
Index and Assembly Instructions .....	4	Illustrated Parts for Transaxle .....	18
Battery Information .....	5	Parts List for Transaxle .....	19
Controls .....	7	Illustrated Parts for Rider .....	20, 22, 24, 26
Operating Instructions .....	9	Parts List for Rider .....	21, 23, 25, 27
Maintenance .....	10	Electrical Diagrams .....	28
Lubrication .....	11	Deck Linkage .....	29
Adjustment .....	13	Parts Information .....	Back Cover
Preparing for Belt Removal .....	14		

## ASSEMBLY

GRASS CATCHER Model No. 199-015A is available as optional equipment for the mowers shown in this manual.



**WARNING**

The mower should not be operated without the entire grass catcher or chute deflector 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. 764-0121.



**IMPORTANT**

After striking 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.

The steering wheel and seat, with the necessary hardware, are easily assembled to the machine. The battery must be activated and installed as outlined in this section.

## TIRE PRESSURE

FOR SHIPPING PURPOSES, THE TIRES ON YOUR UNIT MAY BE OVER-INFLATED. TIRE PRESSURE SHOULD BE REDUCED BEFORE UNIT IS PUT INTO OPERATION. PRESSURE SHOULD BE APPROXIMATELY 15 P.S.I. EQUAL TIRE PRESSURE SHOULD BE MAINTAINED ON ALL TIRES. MAXIMUM TIRE PRESSURE IS 30 P.S.I.



**CAUTION**

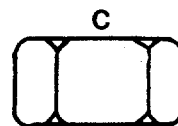
Installation of tire to rim:

1. Lubricate tire beads and rim flanges.
2. Do not exceed 30 P.S.I. when seating beads.
3. Adjust to recommended pressure after beads are sealed.

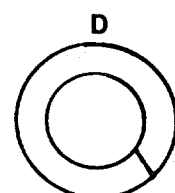


**NOTE**

Reference to right-hand or left-hand side of machine is from the driver's seat facing forward.



Hex Nut 1/2-13 Thd.



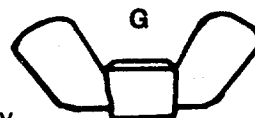
Spring Lockwasher  
1/2" Screw



Belleville Washer



Hex Lock Nut 5/16-18 Thd.



Wing Nut 1/4-20



Hex Bolt  
1/4-20 x 5/8



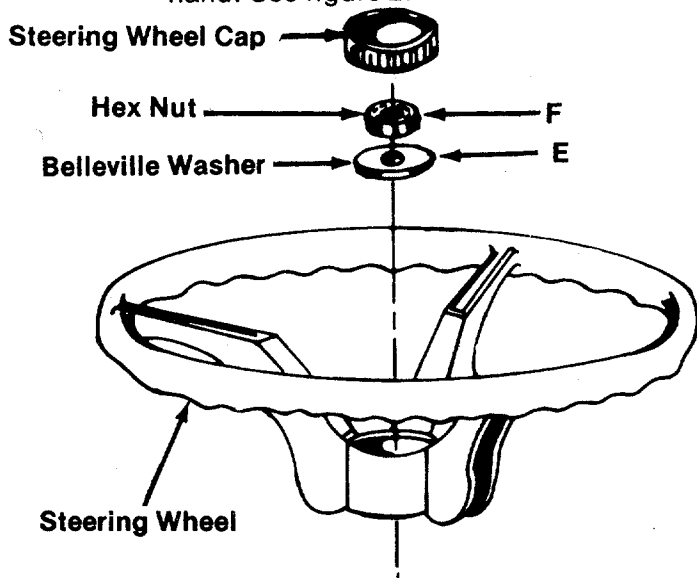
Lockwasher  
1/4" Screw



Hex Nut  
1/4-20 Thd.

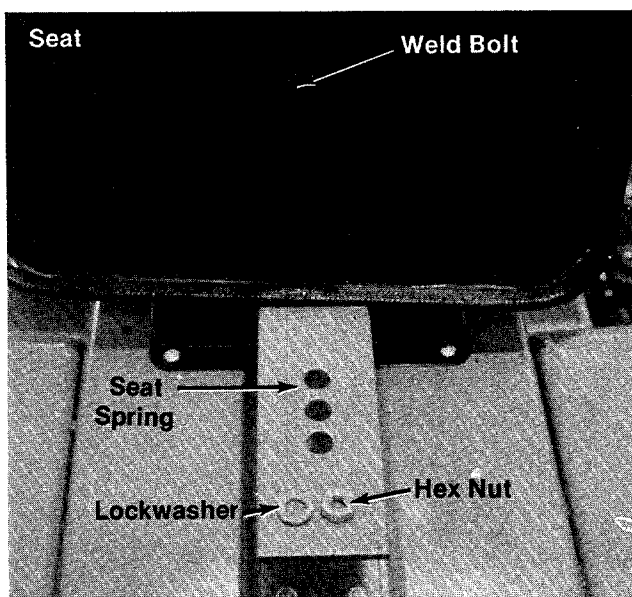
FIGURE 1. HARDWARE SUPPLIED

- Step 1. Remove the lawn mower and all parts from the carton. Make certain that all loose parts and literature have been removed before the carton is discarded.
- Step 2. Place steering wheel over steering shaft.
- Step 3. Secure with Belleville Washer (E) and Hex Nut (F). See figure 2.
- Step 4. Press the cap on the steering wheel by hand. See figure 2.



**FIGURE 2. STEERING WHEEL ASSEMBLY**

- Step 5. Place seat on seat spring (center hole). Secure with Hex Nut (C) and Lockwasher (D). See figure 3.



**FIGURE 3. SEAT ASSEMBLY**



**NOTE**

Check ALL nuts and bolts for correct tightness.

## BATTERY INFORMATION FOR ELECTRIC START MODELS



**WARNING**

- A. Battery acid must be handled with great care as it will blister the skin and damage clothing. It is advisable to wear goggles, rubber gloves, and a protective apron when working with it.
- B. Neutralize acid spilled on clothing with dilute ammonia water or a water solution of baking soda. If acid gets on clothes, dilute it with clean water first, then neutralize.
- C. If for any reason acid should be spattered in the eyes, wash it out immediately with clean cold water. Seek medical aid if discomfort continues.
- D. Since battery acid is corrosive to metals, do not pour into any sink or drain. Rinse empty electrolyte containers and mutilate before discarding.



**DANGER**

**BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added)**

- A. Keep sparks, flame, cigarettes away.
- B. Hydrogen gas is generated during charging and discharging.
- C. Ventilate when charging or using in enclosed space.
- D. When using a charger—to avoid sparks, NEVER connect or disconnect charger clips to battery while charger is turned on.
- E. Always shield eyes, protect skin and clothing when working near batteries.

**A. ACTIVATING THE BATTERY**

1. Place battery to be filled on bench or workbench. NEVER activate battery in unit. Remove vent caps from all cells.
2. Fill each cell carefully using battery grade 1.250-1.265 specific gravity. Sulfuric acid to be 3/8" above the top of the separators or to the split ring.

3. Allow battery to set for 20 minutes to ½ hour. Add additional acid if necessary to bring it up to the proper level.
4. Replace the vent caps.
5. The battery can now be charged after the 20 minutes setting period. Battery can be **SLOW CHARGED (DO NOT FAST CHARGE)** at a maximum bench rate of 4-5 amperes until the specific gravity reading is 1.265-1.275. A charging rate in excess of this will buckle and warp the positive plates and perforate the separators. If electrolyte bubbles violently while charging, reduce charging rate until excessive bubbling action subsides, then continue charging until specific gravity is reached.



#### **CAUTION**

After battery has been in service, add only approved water. **DO NOT ADD ACID.**

#### **B. TO INSTALL BATTERY**

To install the battery in this unit, refer to next column.

#### **C. MAINTENANCE**

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is 9/16" above separator plates. Add only distilled water or good quality drinking water. **NEVER** add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225 remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

#### **D. STORAGE**

1. Charge battery using normal methods. **NEVER** store discharged battery as it will not recover.
2. Store in cold, dry place.

3. Recharge battery whenever the specific gravity is less than 1.225 before returning to service or every two months, whichever occurs first.

#### **E. COMMON CAUSES FOR BATTERY FAILURE ARE:**

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte



#### **NOTE**

**THESE FAILURES DO NOT CONSTITUTE WARRANTY.**

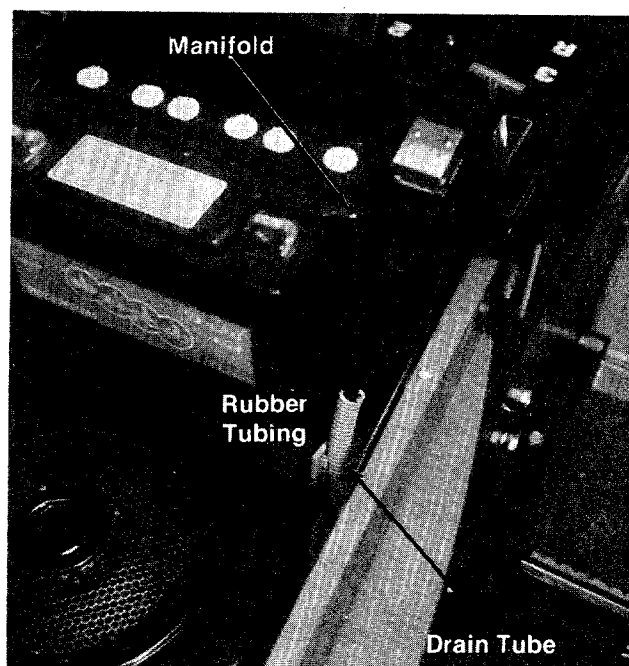
## **INSTALLING THE BATTERY**



#### **NOTE**

If your unit comes with the battery installed, disregard Steps 1 through 6. Proceed with Step 7 and 8 only.

1. Open the hood of the riding mower.
2. Place the battery in the battery case with the terminal to the front. See figure 4.



**FIGURE 4.**

3. Cut the black rubber tubing approximately 4 inches long.
4. Push the rubber tubing into the manifold of the battery and place the other end into the drain tube. See figure 4.



#### NOTE

The vented battery allows any gases or liquid from the battery to be carried to the rear of the mower through the drain tube.

5. Hook the hold down rods under the battery case and place the hold down over the manifold of the battery as shown in figure 5.
6. Secure the hold down with the wing nuts.
7. Attach the positive cable (from the starter solenoid) and the small wire (from the ammeter) to the positive battery terminal with the bolt, lockwasher and nut in the assembly pack.
8. Attach the negative cable, grounded, to the negative battery terminal with the bolt, lockwasher and nut in the assembly pack.

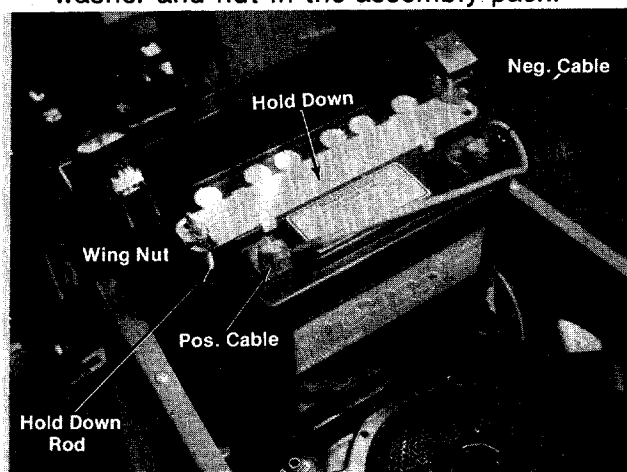


FIGURE 5.

## CONTROLS

### CONTROLS

The controls on both models may be considered as the Drive Control and the Cutting Control as follows:

- a. **Throttle Control.** The throttle control is used to regulate the engine speed and choke the engine. The engine should be operated from  $\frac{3}{4}$  to full throttle when operating the cutting deck or snow thrower (optional). See figure 6.
- b. **Gear Shift Lever.** The gear shift lever is used to shift into one of three FORWARD GEARS, NEUTRAL or REVERSE. Also you have a hi-low

range shift lever to give you the equivalent of six forward speeds. See figures 6, 7 and 8.

c. **Brake.** The brake pedal is located on the right hand side of the mower and is operated by depressing it with your right foot. See figure 9.

d. **Brake Lock.** The brake lock is located on the right hand side of the mower. To lock the brake, depress the brake pedal and lift up the lock button. The pedal will stay depressed. To release, depress the pedal. See figure 9.

e. **Clutch Pedal.** The clutch pedal is used to disengage the drive mechanism. Depressing the clutch pedal at any time will reduce mower speed. If depressed all the way, it will stop the mower. See figure 10.

f. **Clutch Lockout.** When the clutch pedal is depressed all the way it can be locked by placing the clutch lockout in the START position as shown in figure 10. The clutch lockout must be in this position before the engine will start.

g. **Ammeter.** The ammeter registers the rate of battery charge or discharge. The ammeter should register on the plus side (+) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling the ammeter will not show a charge. See figure 6.

h. **Light Switch.** Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 6.

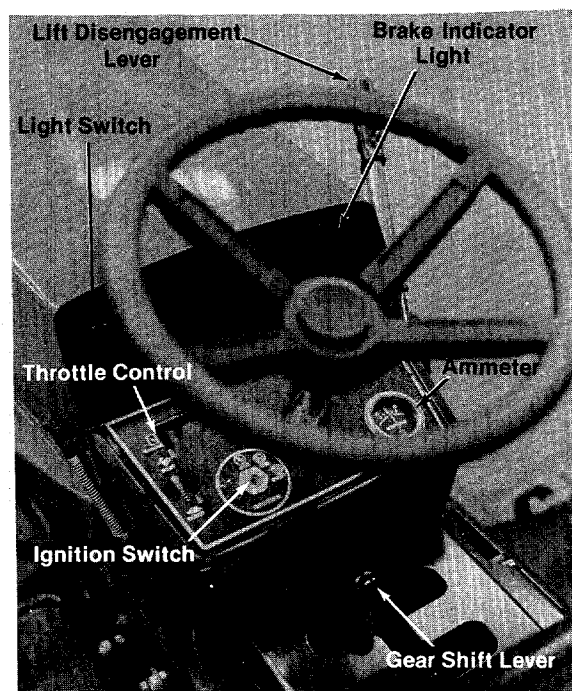
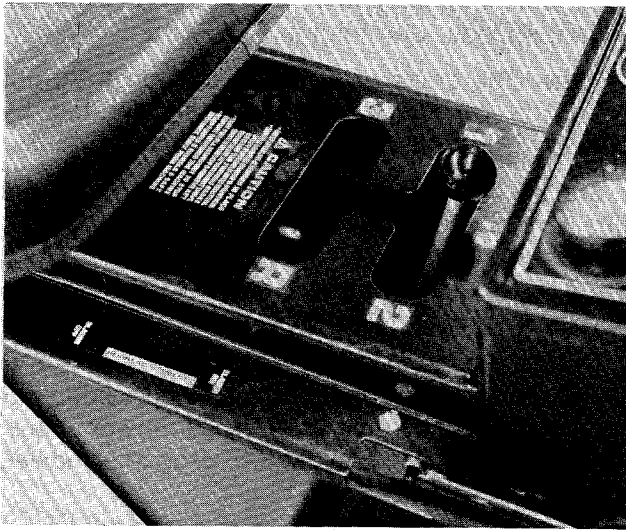
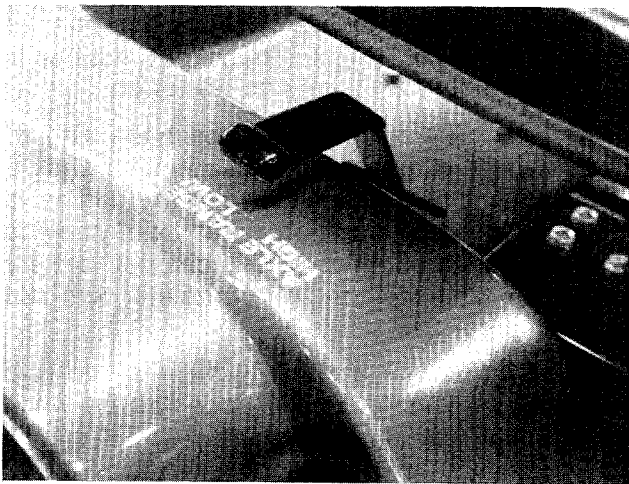


FIGURE 6. CONTROLS

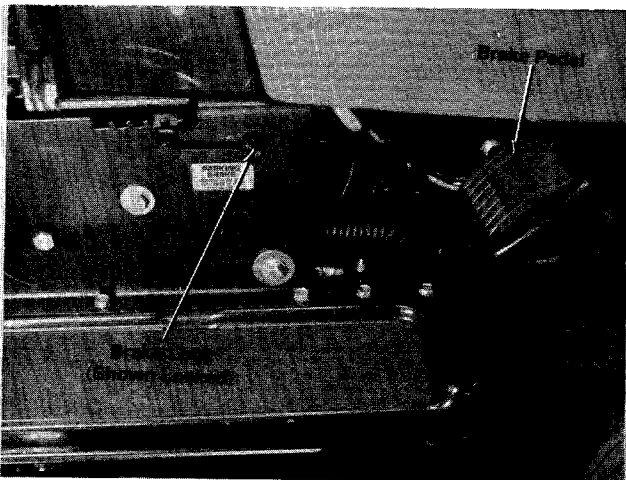




**FIGURE 7. SHIFT PATTERN**



**FIGURE 8.**



**FIGURE 9.**

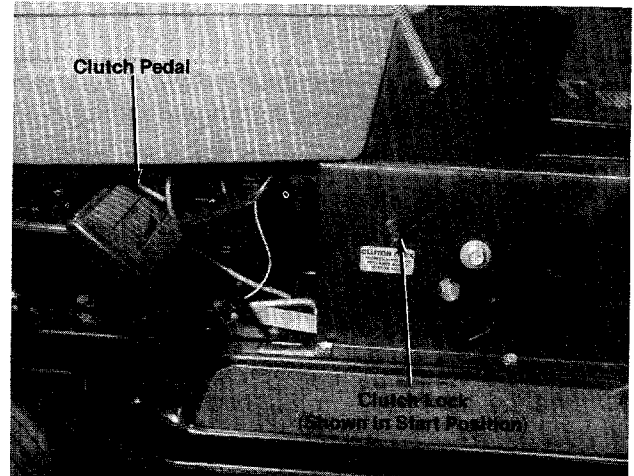
**i. Ignition Switch.** The ignition switch is located on the right side of the dashboard.

**Electric Start.** See figure 6. Turn the key to the START position to start the engine. When the engine is running, let the key return to the ON

position. To stop the engine, turn the key to the left to the OFF position and remove it to prevent accidental starting.



The engine will not start unless the clutch lockout is in the START position and the lift lever is in the DIS-ENGAGED position.

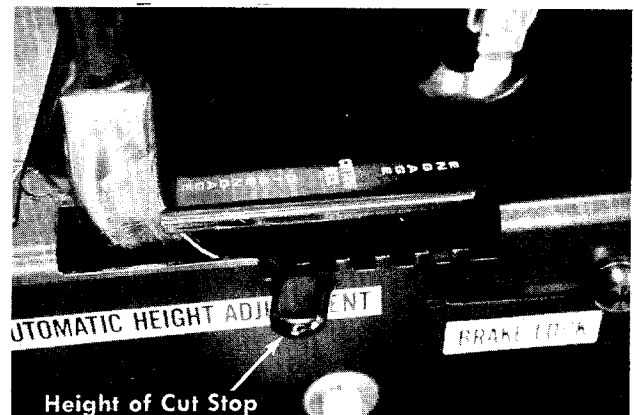


**FIGURE 10.**

**j. Lift and Disengagement Lever.** It is used to raise the cutting deck. Pulling it all the way back and locking it disengages the blades. the engine will not start unless the lift and disengagement lever is in the disengaged position. See figure 6.

**k. Cutting Controls.** The cutting controls consist of the height of cut stop and the wheel height adjusters.

**Height of Cut Stop.** See figure 11. Lift the stop and set it at the desired cutting height.



**FIGURE 11. HEIGHT OF CUT SETTINGS**

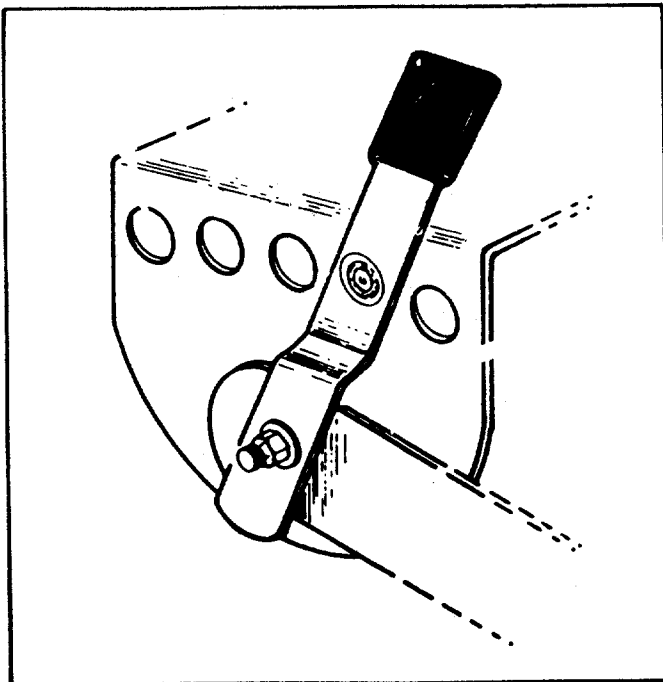
**Wheel Height Adjuster.** See figure 12. Move the lever towards the wheel and set it in the desired cutting height.



The cutting height of the mower can be set in two different ways: **FULL FLOAT** position where the deck follows the contour of the ground, and the **SUSPENDED** position where the deck hangs from the frame of the rider. The suspended position is normally used for cutting rough uneven ground.

To set the cutting deck in the full float position, set the wheel height adjusters in the desired cutting height as indicated in figure 12. Set height of cut stop in the 1½ position. See figure 11.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheels so they just clear the ground.

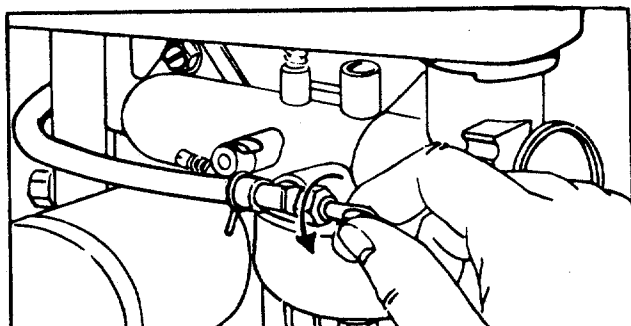


**FIGURE 12. WHEEL HEIGHT ADJUSTER**

## **OPERATING INSTRUCTIONS**

### **STARTING THE ENGINE**

Be sure to follow the instructions for the oil and gasoline as described in the engine manual.



**FIGURE 13. FUEL SHUT-OFF VALVE**

- Step 1. Be sure the fuel shut-off valve is open  
See figure 13.
- Step 2. Place the clutch lockout in the **START** position. See figure 10.
- Step 3. Place the lift and disengagement lever in the **DISENGAGED** position. See figure 6.
- Step 4. Set the throttle control in the **CHOKE** position. See figure 6.

### **NOTE**

This unit is equipped with a brake indicator light which is located on the dash panel. Whenever the starter key is on and the brake pedal is depressed, it will light.

### **CAUTION**

This light indicates that the brake is engaged. Operating the unit with the brake engaged will result in rapid brake wear and premature brake failure.

### **Electric Start**

Turn the ignition key to the **START** position. When the engine is running, let the key return to the **ON** position.

### **NOTE**

A brief break-in period is essential to ensure maximum engine and mower life. This consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 2 hours of operation.

### **CAUTION**

Parking brake **MUST** be disengaged before unit is put into motion.

### **NOTE**

Unit is equipped with separate brake and clutch pedals. To efficiently stop, it is necessary to disengage clutch when applying brakes.

### **STOPPING THE ENGINE**

Turn the ignition key to the left to the **OFF** position and remove the key to prevent accidental starting.

## OPERATING THE MOWER

- Step 1. Set the desired cutting height.
- Step 2. Start the engine as outlined above.
- Step 3. Select gear and shift.



### NOTE

DO NOT force the gear shift lever! If the lever cannot be moved from NEUTRAL to one of the drive positions, release the clutch pedal slowly, depress it again, and then move the gear shift lever as required.

- Step 4. Once the machine is in motion, remove foot from the pedal. The mower will now move ahead or to the rear, and the use of the steering wheel will provide directional control.
- Step 5. The mower is brought to a stop by pressing your right foot against the brake pedal and your left foot against the clutch pedal. The drive belt will be disengaged and the brake will be applied.



### CAUTION

Gear changing should be done only after the mower has been brought to a full stop. If the mower is not to be used for a long period, place the gear shift lever in NEUTRAL and stop the engine. DO NOT leave the machine on an incline.

## OPERATING THE CUTTER BLADE

The cutting blades may be engaged while the mower is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.



### WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening and from the blade.

To stop the blades, move the lift and disengagement lever (figure 6) into the DISENGAGED position. This raises the deck and disengages the blades.



### NOTE

When the machine is used for other than mowing operations the blade drive should be disengaged.

# MAINTENANCE

## CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

### Oil Check

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil should be kept between the add and full marks on the dipstick. See figure 14.

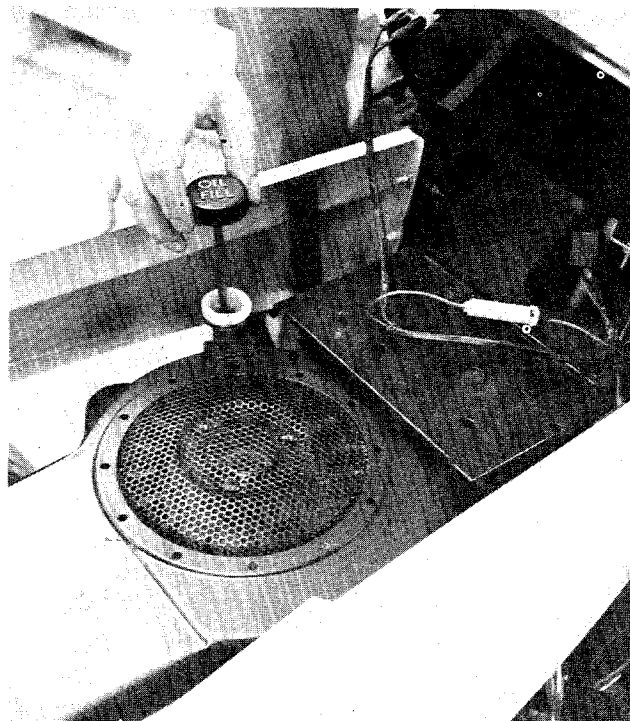
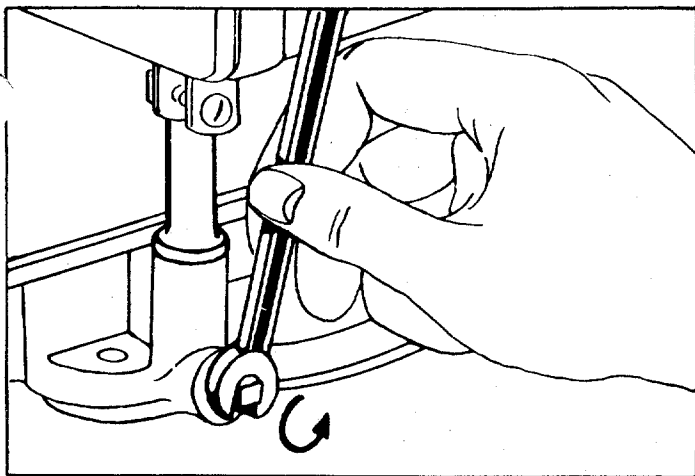


FIGURE 14.

After the first five hours of operating a new engine, drain the oil (See figure 15.) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. This procedure ensures for minimum wear of engine parts and provides for virtually trouble-free operation. To change the oil, proceed as follows:

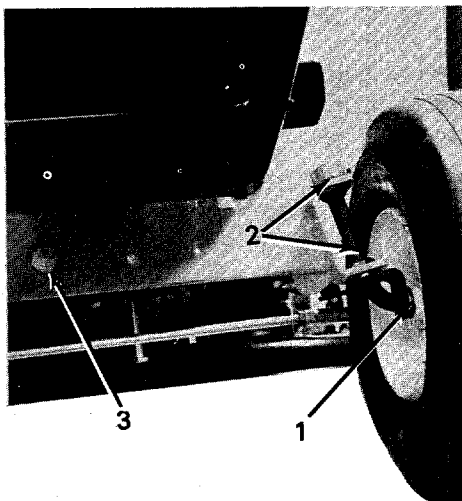
- Step 1. With the machine on level ground, place a suitable metal container under the oil drain plug, then remove the drain plug. See figure 15.
- Step 2. After the oil has been drained completely from the crankcase, replace the drain plug and tighten.
- Step 3. Refill crankcase with 2¼ pints of good quality, type MS, Engine oil into the crankcase. Summer use SAE 30; Winter (Below 40°F) use SAE 5W-20 or SAE 10W.



**FIGURE 15. OIL DRAIN**

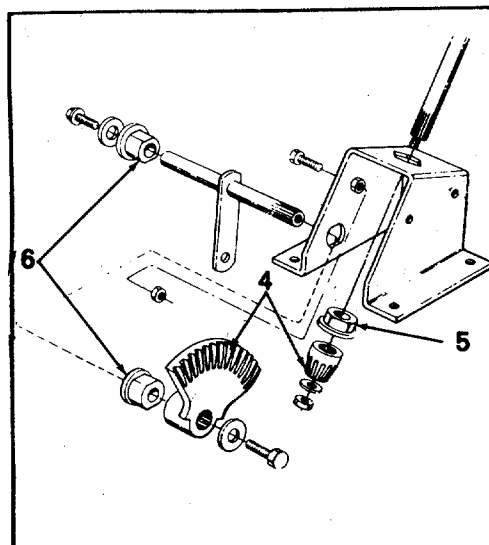
## LUBRICATION

1. **Wheel Bearings (4).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. (See figure 16.)
2. **King Pins (2).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. (See figure 16.)



**FIGURE 16.**

3. **Front Pivot Bolt (1).** Lubricate with SAE 30 oil after every 25 hours of operation or once a season. (See figure 16.)
4. **Steering Gears (2).** Lubricate teeth of gears with automotive multi-purpose grease after every 25 hours of operation or once a season. (See figure 17.)
5. **Steering Column Bearings (2).** Lubricate the top and bottom bearings with SAE 30 oil after every 25 hours of operation or once a season. (See figure 17.)
6. **Steering Shaft Bearings (2).** Requires no lubrication. (See figure 17.)



**FIGURE 17.**

The following parts should be oiled once a year with SAE 30 oil.

1. All deck links.
2. Clutch and brake pivot points and linkages.
3. Height adjustment levers.
4. Steering column bearings.

The following items have sealed bearings and require no further lubrication.

1. Blade Spindles
2. Idler Bearings
3. Tie Rod Ends

## AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions the air cleaner must be serviced after every hour of operation. Refer to figure 18.

When assembling the air cleaner, make certain the lip of the foam element extends over edge of the air cleaner body. The foam element will form a protective seal.

Step 1. Remove two screws and lift off complete air cleaner assembly.

Step 2. Remove screen and spacers from foam element.

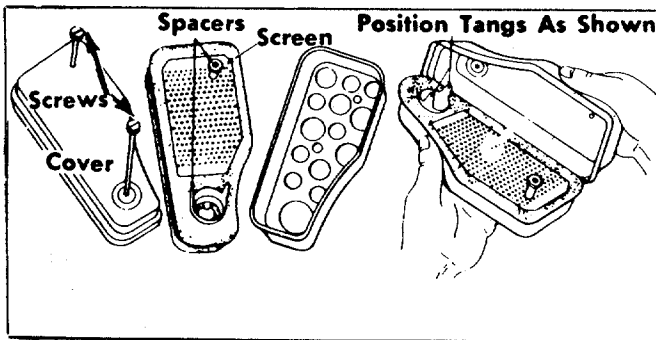
Step 3. Remove foam element from air cleaner body.

Step 4. a. Wash foam element in kerosene or liquid detergent and water to remove dirt.

b. Wrap foam in cloth and squeeze dry.

c. Saturate foam in SAE 30 engine oil, then squeeze out excess oil.

- d. Assemble parts, fasten to carburetor with screw.



**FIGURE 18. AIR CLEANER**

### CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

### BELTS

Check that belts are free of oil or dirt. Wipe the belts periodically with a clean rag.



### NOTE

Belt tension is maintained by the spring on the idler bracket on the drive belts and the belt tension on the deck belt is maintained by the belt adjustment bolt. See page 30.

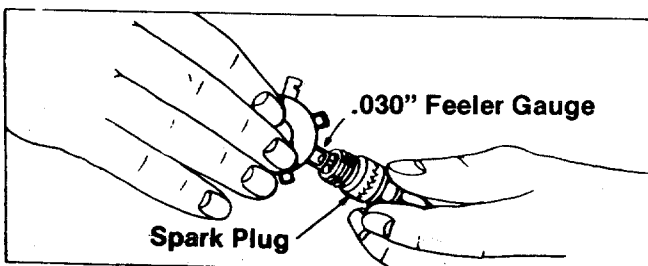
### SPARK PLUG

The spark plug gap should be cleaned and reset to a 0.030-inch clearance every 25 hours of engine operation. (See figure 19.) Spark plug replacement is recommended at the start of each mowing season; check engine parts list for correct plug type.

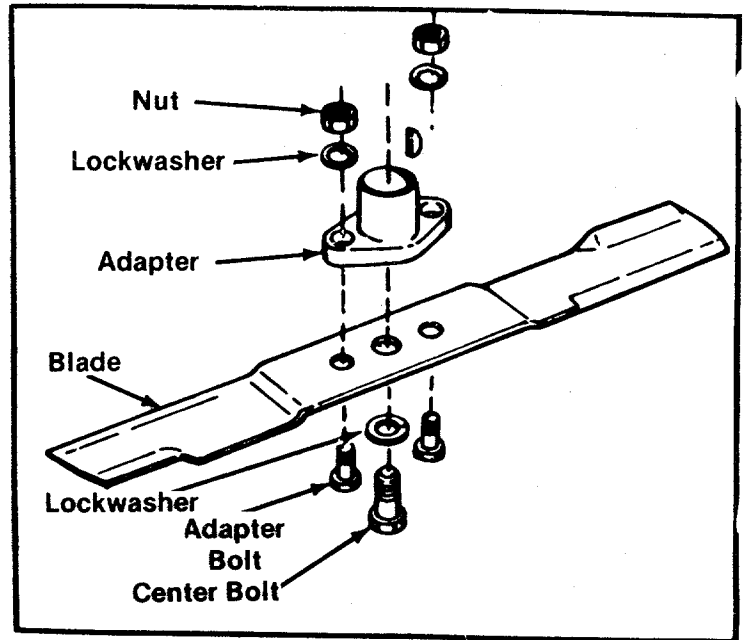


### NOTE

Whenever the spark plug is removed for cleaning, it is advisable to replace the spark plug gasket with a new gasket.



**FIGURE 19. SPARK PLUG CLEARANCE**



**FIGURE 20. BLADE REMOVAL  
REPLACING BLADE**



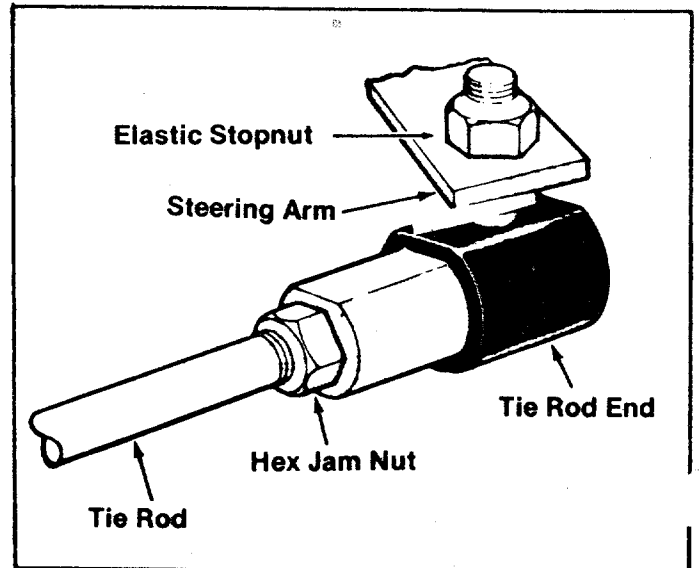
### WARNING

Before beginning work on the cutter blade, remove the spark plug from the cylinder.

The adapter can be removed from the blade by removing the two adapter bolts, lockwashers and nuts.

**Removing and Sharpening Blades.** Remove the center bolt and lockwasher. See figure 20. Pull the blade and blade adapter from the blade spindle.

### WHEEL ADJUSTMENT



**FIGURE 21. TIE ROD END**

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) requires no adjustment. Automotive steering principals have been used to determine the caster and camber on the rider. The front wheels should toe-in 1/8 inch.

To adjust the toe-in follow these steps.

Step 1. Remove the elastic locknut and drop the tie rod end from the wheel bracket. See figure 21.

Step 2. Loosen the hex jam nut on the rod.

Step 3. Adjust the tie rod assembly for correct toe-in.

## ADJUSTMENT

Dimension "B" should be approximately 1/8" less than dimension "A".

A.) To increase dimension "B", screw the rod into tie rod end. See figure 22.

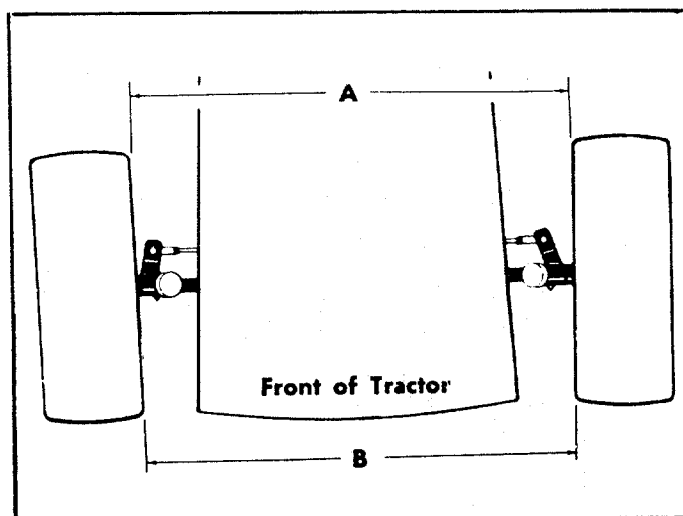


FIGURE 22. TOE-IN DIAGRAM

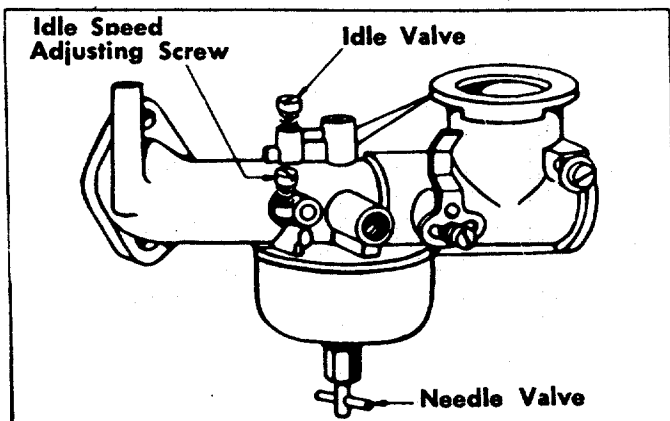


FIGURE 23. CARBURETOR ADJUSTMENT

B.) To decrease dimension "B", unscrew tie rod from tie rod end. See figure 22.

C.) Reassemble the rod. Check dimensions. Readjust if necessary.



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

## ADJUSTING CARBURETOR CHOKE

Proper choke operation is dependent upon proper adjustment of remote controls on the powered equipment.

### To Check Operation of Choke-A-Matic Controls:

Move control lever to CHOKE position. (See figure 6.) The carburetor choke should be closed.



The air cleaner can be removed to check the operation of the choke.

### To Adjust:

Place control lever on equipment in FAST (high speed) position. Loosen control casing clamp screw B. Move control casing A and wire until lever D touches choke operating link at C. Tighten casing clamp screw B. See figure 24.

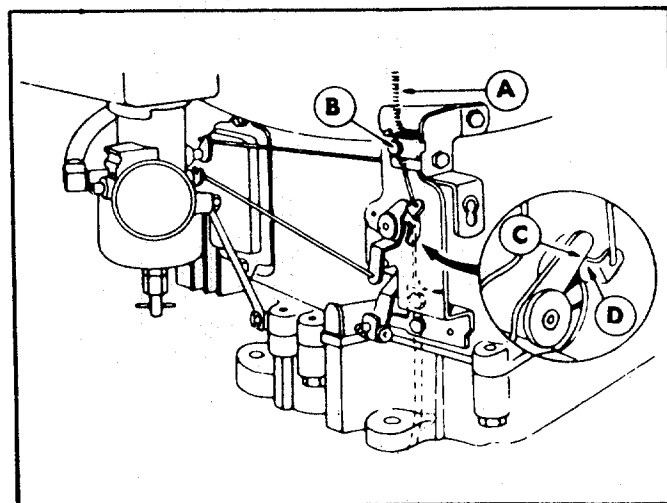


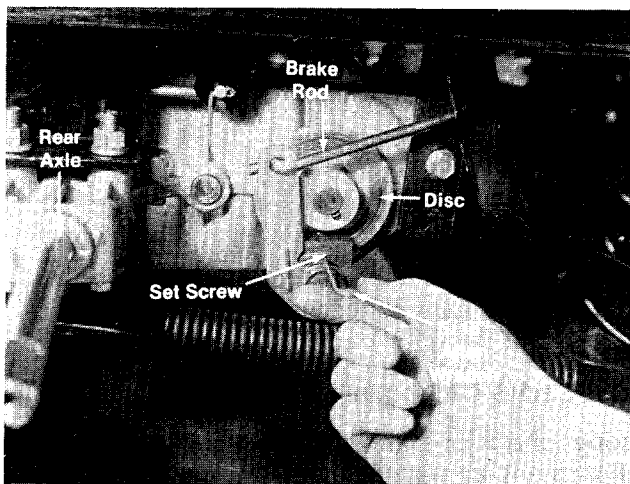
FIGURE 24. CHOKE ADJUSTMENT

## BRAKE ADJUSTMENT



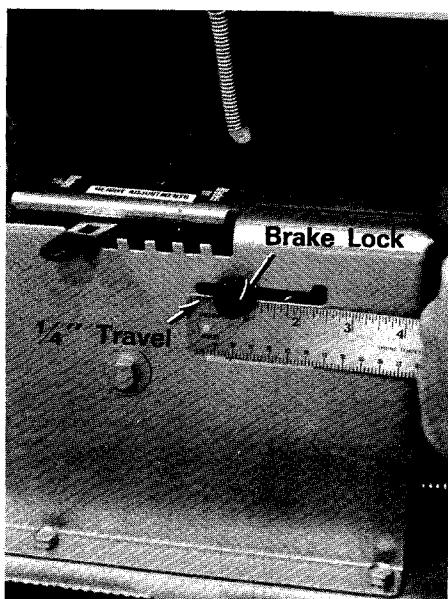
**CAUTION**

Do not have the engine running when you adjust the brakes.



**FIGURE 25.**

1. Move the brake pedal forward by hand until resistance is noted. This is the point where the brake pedal spring begins to stretch.
2. If the adjustment is correct the brake lock should move  $\frac{1}{4}$  inch. (See figure 26.)
3. If adjustment is necessary, tighten or loosen the brake set screw until the correct dimension is obtained. (See figure 25.) Periodic adjustment is necessary to maintain effective brake operation.



**FIGURE 26.**

## PREPARING FOR BELT REMOVAL



**WARNING**

Disconnect the spark plug wire and ground it against the engine.

1. Remove the battery.



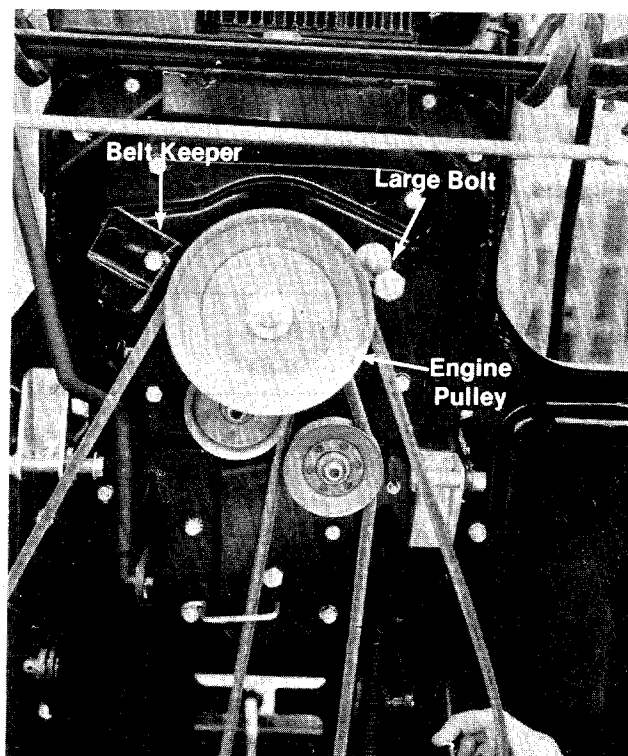
**CAUTION**

Disconnect the negative terminal first and connect last when installing the battery.

2. To prevent gasoline from leaking from the engine, remove the gasoline cap, place a piece of thin plastic over the neck of the gasoline tank and screw on the cap.
3. Close the fuel shut-off valve.
4. Set the brake and lock it.
5. Lift the front end of the rider up and rest it on the rear wheels and set. It will balance in this position.
6. Do not leave the rider in this position any longer than necessary as oil may get into the cylinder head. If this happens, remove the spark plug and crank over the engine to clear the oil.

## REMOVING THE DECK BELT

1. Place the lift lever in the disengaged position.
2. Remove the belt keeper and large bolt from the engine pulley. (See figure 27.)
3. Unhook the deck belt from the engine pulley.
4. Place the lift lever in the engaged position.



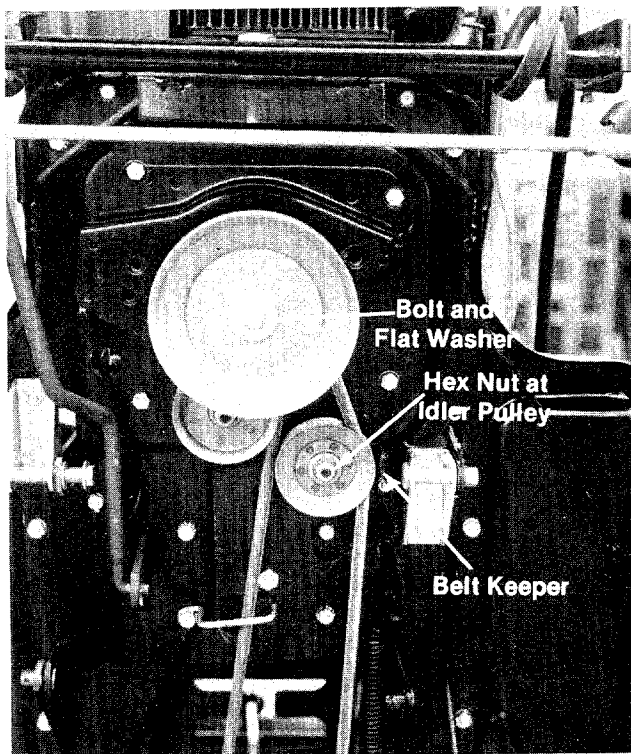
**FIGURE 27.**

5. Remove the two deck tension springs.

6. Remove the cotter pins holding the four front deck links. The deck can now be tipped forward.
7. Remove the belt guard on the left deck pulley by removing the three bolts and nuts.
8. Remove the belt guard on the right deck pulley by removing the three bolts and nuts.
9. Remove and replace the deck belt. Reassemble in reverse order.

#### REMOVING THE TRANSMISSION BELT

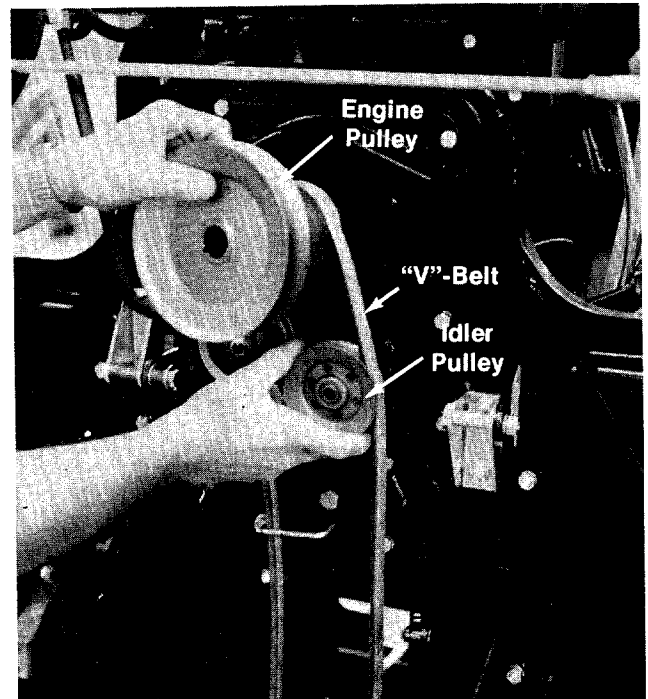
1. Follow steps 1 through 6 on Preparing for Belt Removal.
2. Place the lift lever in the disengaged position.
3. Remove the belt keeper and large bolt from the engine pulley. (See figure 27.)
4. Unhook the deck belt from the engine pulley.
5. Place the lift lever in the engaged position.
6. Unhook the tension springs.
7. Remove the six cotter pins holding the deck to the links.
8. Lift off the deck and set it aside.
9. Remove the engine pulley bolt and flat washer and remove the hex nut at idler pulley. (See figure 29.)



**FIGURE 29.**

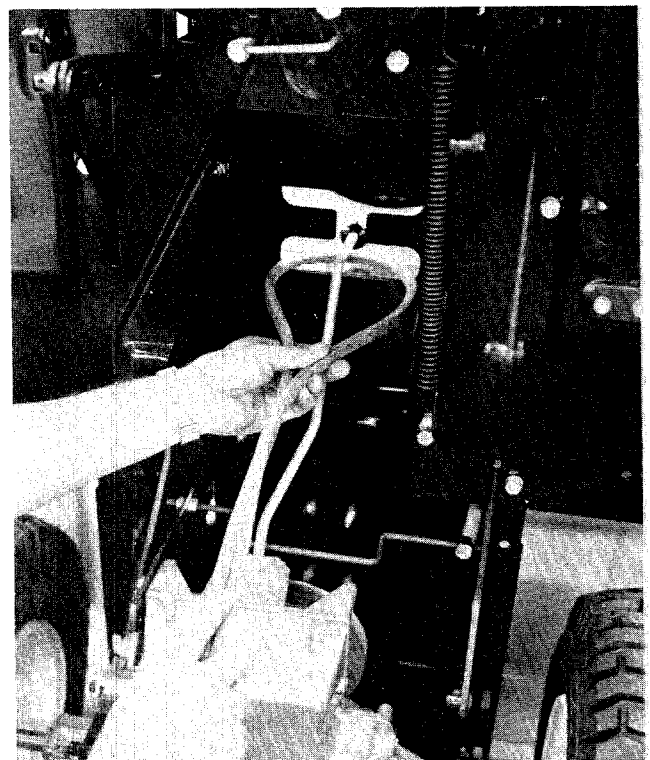
10. Remove the belt keeper on flat idler. (See figure 29.)

11. Slide off the V-idler and remove the belt.
12. Unhook the belt from the engine pulley. (See figure 30.)



**FIGURE 30.**

13. Slip the belt over the gear shift lever, and remove from transaxle. See figure 31.



**FIGURE 31.**

14. Replace the belt and reassemble in reverse order.



## CUTTING BLADES

The blades may be removed for sharpening or replacement as follows:

1. Remove the large bolt and lockwasher holding the blade adapter to the blade spindle. (See figure 32.)

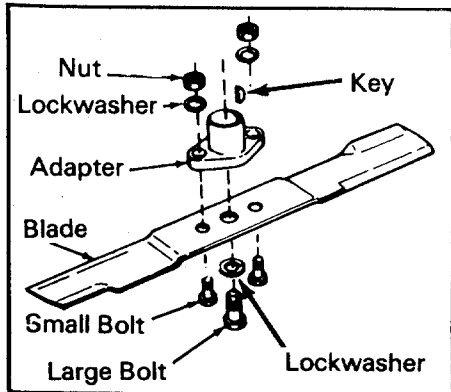


FIGURE 32.

2. Remove the blade and adapter from the blade spindle.
3. Be careful not to lose the key on the spindle.
4. Remove the two small bolts, lockwashers and nuts holding the blade to the adapter.

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 and may cause damage to the mower.

When grinding or filing the blade, remove equal amounts of metal from both edges to keep the blade in balance. The blade can be tested for balance by balancing it on a screwdriver. Remove metal from the heavy side until it balances evenly. (See figure 33.)

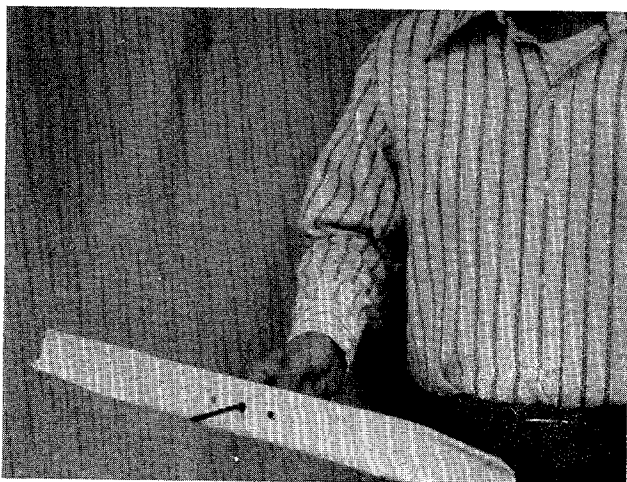


FIGURE 33.

When replacing the blade be sure the side of the blade marked "Bottom" or having the part number is facing the ground when the mower is in the operating position.

## OFF-SEASON STORAGE

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

- Step 1. 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 carburetor is exhausted.



**WARNING**

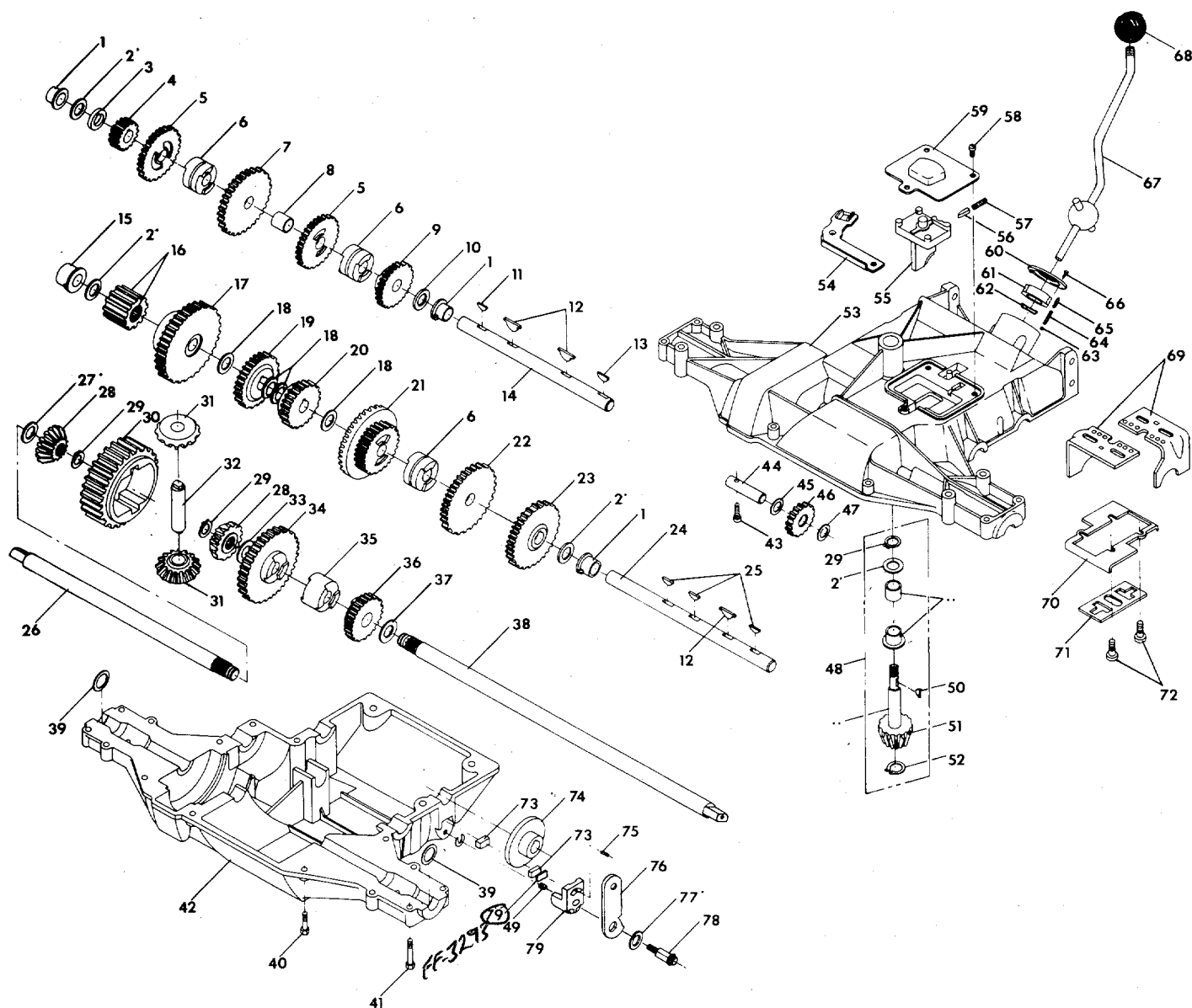
Do not drain fuel while smoking, or if near an open fire.

- Step 2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with clean new oil.
- Step 3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.
- Step 4. Clean the engine and the entire mower thoroughly.
- Step 5. Lubricate all lubrication points indicated in figure 16; then wipe the entire machine with an oiled rag in order to protect the surfaces.

# TROUBLE SHOOTING CHART

TROUBLE	LOOK FOR	REMEDY
Engine fails to start.	Safety System	<p>A. Check for a blown fuse in the wire leading from the positive terminal of the battery.</p> <p>B. Before checking the safety system further, be sure the clutch control and the blade control are disengaged; only the starting system is being checked. Therefore remove the spark plug lead and ground it to prevent the engine from starting.</p> <p>C. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal (coil primary) of the solenoid. If the engine cranks, the problem is in the safety system.</p> <p>D. Check for continuity from the battery to the solenoid. NOTE: The positive terminal of the battery should have a large cable (#8 gauge) and a small wire (#18 gauge) attached to it.</p> <p>E. Check all wires and cable for tightness.</p> <p>F. Use a #8 gauge wire and jump between the two large terminals of the solenoid. If the unit starts, replace the solenoid.</p> <p>G. If the unit fails to start after following the above procedure the problem is probably in the starting motor of the engine.</p>
	Blocked fuel line or empty gas tank	Clean fuel line; check fuel supply. Also check fuel shut-off valve.
	Defective spark plug	<p>Spark plug lead wire disconnected.</p> <p>Faulty spark plug—spark should jump gap between control electrode and side electrode. If spark does not jump, replace spark plug.</p> <p>NOTE: Use insulated pliers to hold the spark plug wire.</p>
	Throttle setting	Throttle control lever not in the starting position.
	Loose connections	Spark plug wire loose.
Hard starting or loss of power.	Dirty air cleaner	Remove air cleaner and clean as outlined in <b>Engine Manual</b> .
	Carburetor improperly adjusted	Review paragraph <b>Carburetor Adjustment</b> .
Excessive vibration.	Bent or damaged blade spindle	Stop engine immediately; tighten all bolts and make all necessary repairs. If vibration continues, have the unit serviced by a competent repairman.
Unit fails to discharge grass.	Discharge chute clogged	Clean discharge chute and inside of deck.
	Foreign object lodged in deck	Remove object from deck. See CAUTION following step 1 in paragraph <b>Operation</b> .
Engine overheats.	Obstructions in air passages	Remove any obstruction from air passages in shroud.
	Grass and dirt in engine shroud	Clean cooling fins.
	Oil level	Fill crankcase to proper oil level.

# 139-498A



Lubricate with 35 oz.  
of Shell DARINA #0  
OR VALVOLINE #6939 grease.

737-0166  
Plastilube #0

# 139-498A

## PARTS LIST FOR SIX SPEED TRANSAXLE 717-0392 (4000-1)

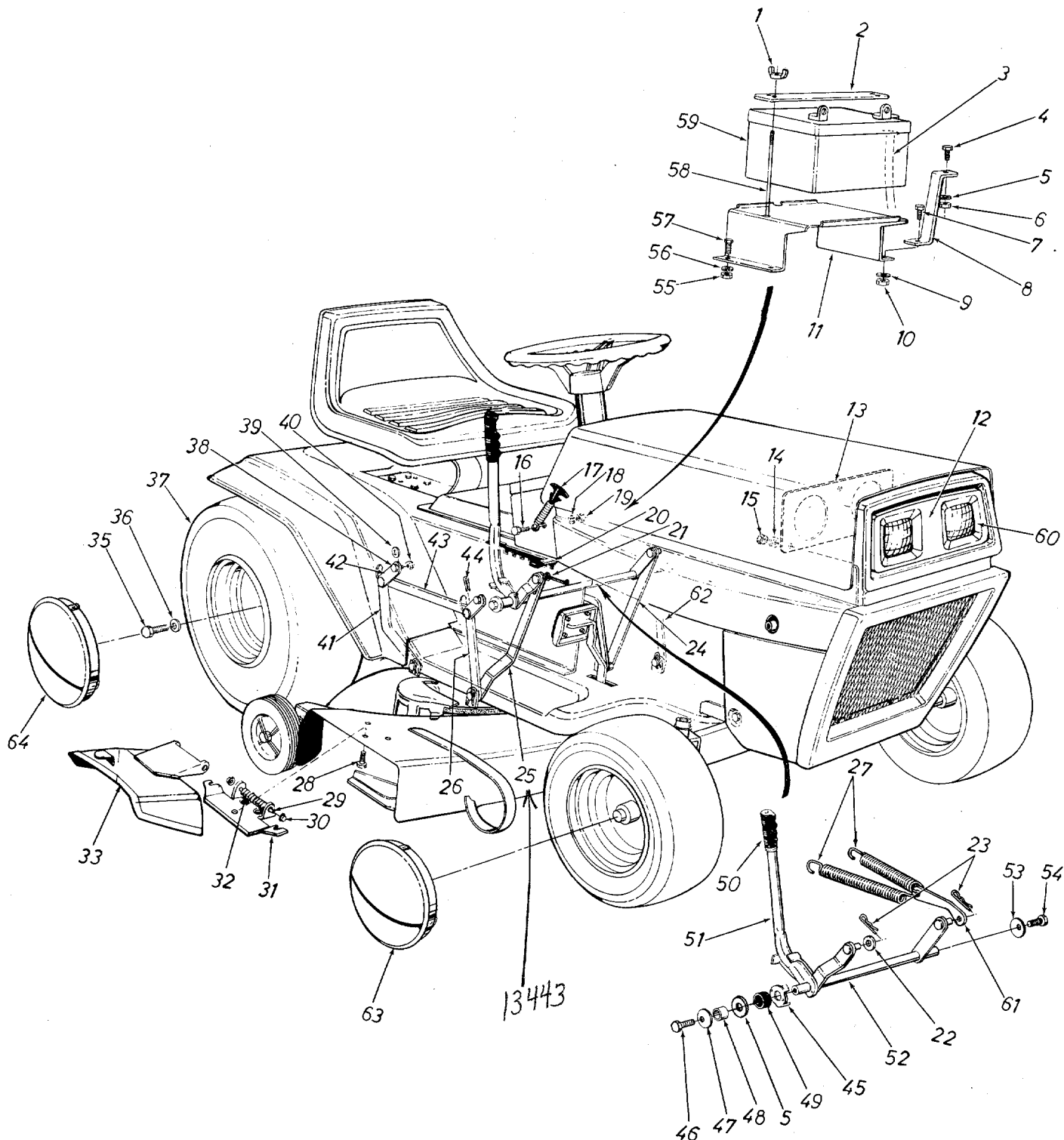
REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION	REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION
1	FF-1101	3	Bearing, Flange	40	FF-1919	10	Bolt, Hx. Hd., S.T. 1/4-20 x .750
2	FF-1145	*	Washer, (.060)	41	FF-1360	4	Bolt, Hx. Hd., S.T. 1/4-20 x 1-5/16
2	FF-1358	*	Washer, (.050)	42	FF-3264	1	Housing, Lower
2	FF-1425	*	Washer, (.045)	43	FF-3188	1	Screw, Tapping, #10-24 x .937
2	FF-1068	*	Washer, (.040)	44	FF-3182	1	Shaft, Idler
2	FF-1424	*	Washer, (.035)	45	FF-3194	1	Washer, Plain, .750 x .505 x .020
2	FF-1082	*	Washer, (.031)	46	FF-2718	1	Assembly, Gear, Idler
2	FF-1423	*	Washer, (.025)	47	FF-3194	1	Washer, Plain, .750 x .505 x .020
2	FF-1441	*	Washer, (.020)	48	FF-2769	1	Assembly, Input Shaft Kit
3	FF-3187	1	Spacer	49	FF-1479	1	Spring, Compression
4	FF-1174	1	Gear, Spur 13T. Steel	50	FF-1371	1	Key, Wdrf., #4 Alloy
5	FF-3141	2	Gear, Spur, 25T.	51	FF-3232	1	Pinion, Bevel, 16T.
6	FF-1083	3	Collar, Clutch	52	FF-1100	1	Ring, Retaining
7	FF-3142	1	Gear, Spur, 30T.	53	FF-3265	1	Housing, Upper
8	FF-3173	1	Spacer, .87 x .632 x .679	54	FF-3192	1	Lever, Shift, Hi-Lo
9	FF-3144	1	Gear, Spur, 20T.	55	FF-3183	1	Fork, Shifter, Hi-Lo
10	FF-1441	1	Washer, Plain, 1.00 x .632 x .020	56	FF-1929	1	Pin, Detent
11	FF-1464	1	Key, Wdrf., #5 Alloy	57	FF-3175	1	Spring, Detent
12	FF-3068	3	Key, Hi-Pro, Special	58	FF-3035	3	Bolt, Hx. Hd., S.T. #8-32 x .500
13	FF-1375	1	Key, Wdrf., #61 Alloy	59	FF-3193	1	Plate, Cover, Hi-Lo
14	FF-3160	1	Shaft, Intermediate, C-1118	60	FF-3238	1	Cover, Nylon
15	FF-3186	1	Bearing, Flange	61	FF-1091	1	Insert, Nylon
16	FF-2726	1	Assembly, Gear, Spur, 12T.	62	FF-1096	1	Washer, Wave
17	FF-3146	1	Gear, Spur, 37T.	63	FF-1037	2	Ball, Detent
18	FF-1082	4	Washer, Plain, 1.00 x .630 x .031	64	FF-1475	2	Spring, Detent
19	FF-3147	1	Gear, Spur, 25T.	65	FF-3239	2	Screw, Set, 1/4-20 x .500
20	FF-3149	1	Gear, Spur, 20T.	66	FF-1357	4	Screw, Tr. Hd. S.T. #10-24 x .500
21	FF-3150	1	Gear, Spur, 20T & Bevel, 42T.	67	FF-2751	1	Assembly, Lever, Shift
22	FF-3143	1	Gear, Spur, 33T.	68	FF-1318	1	Knob, Shift
23	FF-3153	1	Gear, Spur, 30T.	69	FF-3189	2	Fork, Shifter
24	FF-3161	1	Shaft, Drive, C-1118	70	FF-3208	1	Plate, Fork, Support
25	FF-1369	4	Key, Wdrf., #3 Alloy	71	FF-3190	2	Plate, Lockout
26	FF-3235	1	Axle, L.H.	72	FF-3240	4	Screw, Posi-Driv.
27	FF-3180	*	Washer, (.060)	73	FF-1767	2	Puck, Friction
27	FF-3198	*	Washer, (.040)	74	FF-1902	1	Disc, Brake
27	FF-3184	*	Washer, (.030)	75	FF-1606	1	Screw, Set (No. 8-32)
28	FF-3155	2	Gear, Miter, 15T., Splined	76	FF-2758	1	Assembly, Actuating Lever
29	FF-1099	3	Ring, Retaining	77	FF-1546	*	Washer, Plain, .750 x .505 x .060
30	FF-3154	1	Gear, Spur, 32T.	77	FF-1544	*	Washer, Plain, .750 x .505 x .030
31	FF-3156	2	Gear, Miter, 15T.	78	FF-1477	1	Bolt, Shoulder
32	FF-3179	1	Shaft, Cross	79	FF-2618	1	Assembly, Brake Jaw
33	FF-3184	2	Washer, Plain, 1.25 x .755 x .031				
34	FF-3157	1	Gear, Spur, 35T.				
35	FF-3158	1	Lock, Gear				
36	FF-3159	1	Gear, Spur, 22T.				
37	FF-3180	1	Washer, Plain, 1.25 x .755 x .062				
38	FF-3234	1	Axle, R.H.				
39	FF-3191	2	Seal, Felt				

\*Indicates use in various combinations totaling two (2) per unit.

FF-3295

# 139-498A

IF YOU WRITE TO US ABOUT THIS ARTICLE  
OR IF YOU ORDER REPLACEMENT PARTS AL-  
WAYS MENTION THIS MODEL & SERIAL NO  
MODEL



# PARTS LIST FOR MODEL 139-498A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	712-0113		Wing Nut Solid 1/4-20 Thd.	N	35	710-0627		Hex Scr. 5/16-24 x .75" Lg. *	N
2	13959		Battery Hold Down		36	736-0242		Bell.-Wash. .345 I.D. x .88 O.D.	
3	731-0333		Convolute Conduit						
4	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.		37	734-0601		Rear Wheel Ass'y.—Comp. 18.0 x 8.50	
5	736-0237		FI-Wash.		38	738-0140		Shld. Scr. .437 Dia. x .180	
6	712-0272		Hex Nut 1/4-20 Thd. Sems*		39	736-0264		FI-Wash. .344 I.D. x .62 O.D.	
7	710-0258		Hex Scr. 1/4-20 x .62" Lg. *		40	712-0267		Hex Nut 5/16-18 Thd. *	
8	12811		Battery Brkt. Brace		41	10349		Deck Link Ass'y.	
9	736-0329		L-Wash. 1/4" Scr. *		42	09721		Pivot Link Ass'y.	
10	712-0287		Hex Nut 1/4-20 Thd. *		43	09735		Connecting Rod 3/16 x 1 x 12.5" Lg.	
11	12747		Battery Brkt.						
12	12787		Head Lamp Bezel		44	714-0101		Inter. Cot. Pin 1/2" Dia.	
13	12788		Head Lamp Retainer		45	11029		Handle Pivot Brkt.	
14	736-0329		L-Wash. 1/4" Scr. *		46	710-0201		Hex Scr. 3/8-16 x .62" Lg. *	
15	712-0287		Hex Nut 1/4-20 Thd. *		47	736-0133		FI-Wash. .400 I.D. x 1.25 O.D.	
16	710-0289		Hex Scr. 1/4-20 x .50" Lg. *		48	750-0273		Spacer .632 I.D. x .88 O.D.	
17	723-0296		Hood Latch Ass'y.		49	735-0195		Rubber Wash.	
18	736-0329		L-Wash. 1/4" Scr. *		50	720-0157		Grip	
19	712-0287		Hex Nut 1/4-20 Thd. *		51	749-0212		Lift Handle	
20	11027		Handle Stop Brkt. Ass'y.		52	11032		Lift Handle Brkt. Ass'y.	
21	726-0121		Push Cap 1/4" Dia. Black		53	736-0219		Bell.-Wash. .400 I.D. x 1.13 O.D.	
22	736-0192		FI-Wash. .531 I.D. x 1.13 O.D.		54	710-0201		Hex Scr. 3/8-16 x .62" Lg. *	
23	714-0101		Inter. Cot. Pin 1/2" Dia.		55	712-0287		Hex Nut 1/4-20 Thd. *	
24	13636		Lock Out Link Ass'y.		56	736-0329		L-Wash. 1/4" Scr. *	
25	13636		Lock Out Link Ass'y. (Straight)		57	710-0258		Hex Scr. 1/4-20 x .62" Lg. *	
26	10904		Deck Link Ass'y.		58	711-0222		Battery Hold Down Rod	
27	732-0233		Spring		59	725-0661		Battery 12-Volt Manifold Vented	
28	710-0195		Hex Scr. 1/4-28 x .62" Lg. *		60	725-0222		Head Light	
29	711-0576		Pivot Pin		61	13638		Spring Link	
30	726-0106		Push-on Flange Palnut		62	10904		Deck Link Ass'y.	
31	11399		Adapter Plate Ass'y.		63	734-0541		6" Hub Cap	
32	732-0261		Torsion Spring		64	734-0542		8" Hub Cap	
33	11633		Chute Cover Ass'y.						



## 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.

\*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—11836 (462).)

## WHEEL CHART

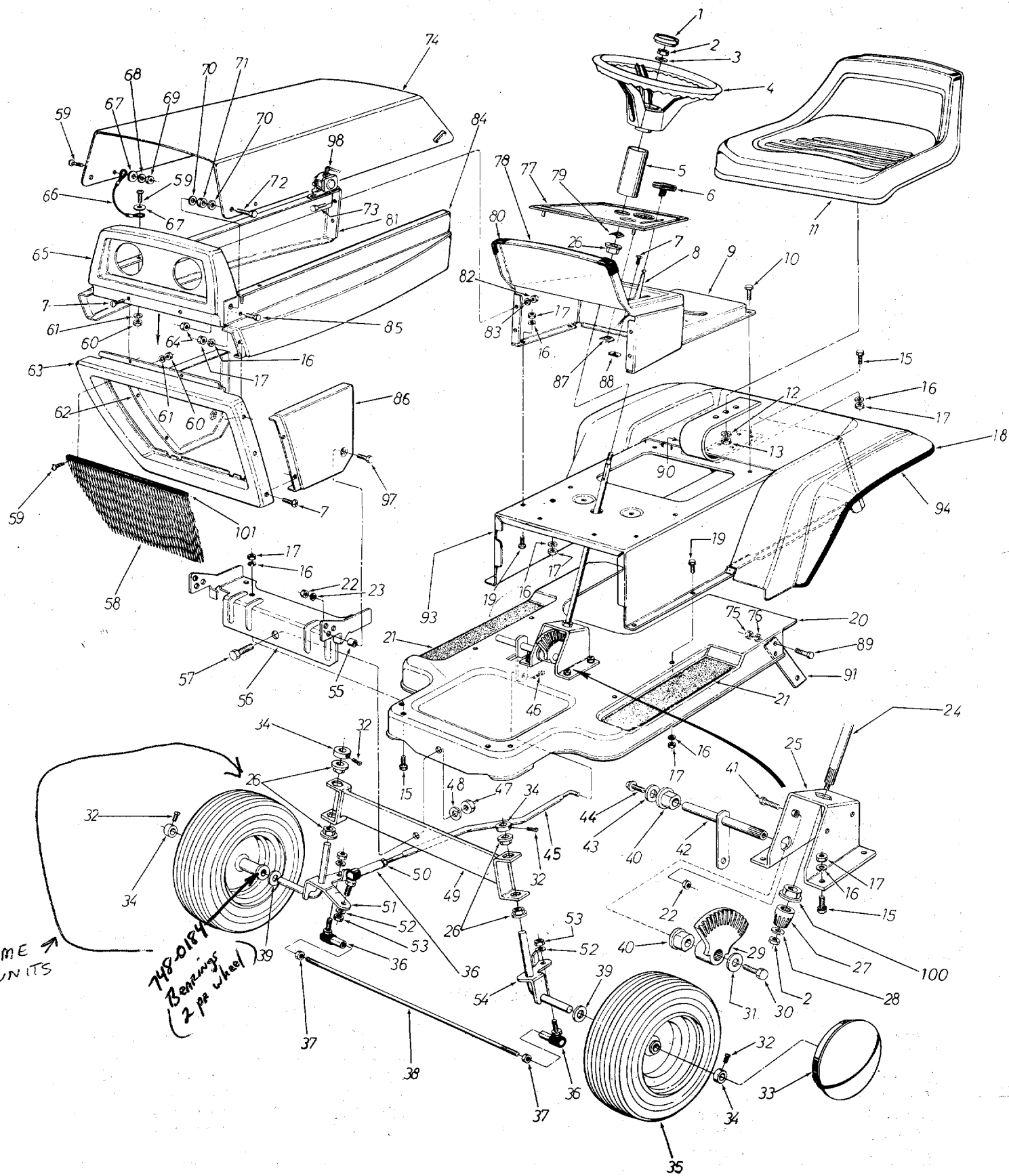
### FRONT WHEEL

PART NO.	DESCRIPTION
734-0497	Wheel Ass'y. Comp.
734-0499	Rim Ass'y. Only
734-0498	Tire Only 15 x 6.00
734-0255	Air Valve
748-0184	Bearing

### REAR WHEEL

PART NO.	DESCRIPTION
734-0601	Wheel Ass'y. Comp.
734-0603	Rim Ass'y. Only
734-0516	Tire Only 18 x 8.50
734-0255	Air Valve

# 139-498A





# PARTS LIST FOR MODEL 139-498A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap		46	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*	
2	712-0158		Hex Cent. L-Nut 5/16-18 Thd.		47	712-0923		Hex Cent. L-Nut 5/8-16 Thd.	
3	736-0242		Bell.-Wash. .345 I.D. x .88 O.D.		48	736-0158		L-Wash. 5/8" Scr.*	
4	731-0356		Steering Wheel		49	13947		Front Pivot Bar Ass'y.	N
5	750-0319		Steering Tube		50	712-0711		Hex Jam Nut 3/8-24 Thd.	
6	722-0111		Knob—Throttle Control		51	12755		Axle Ass'y.—Front R.H.	
7	710-0227		Hex AB Tapp Scr. #8 x .50" Lg.		52	736-0169		L-Wash. 3/8" Scr.*	
8	746-0356		Throttle Control Ass'y. Comp.		53	712-0241		Hex Nut 3/8-24 Thd.*	
9	13495		Transmission Cover		54	12752		Axle Ass'y.—Front L.H.	
10	710-0599		Hex C-Tap. Scr. 1/4-20 x .50" Lg.		55	748-0193		Spacer .380 I.D. x .630 O.D. x .575 Lg.	
11	757-0285		Seat Ass'y.		56	12411		Front Pivot Bracket	
12	736-0921		L-Wash. 1/2" Scr.*		57	710-0622		Hex Scr. 5/8-18 x 1.62" Lg.*	
13	712-0206		Hex Nut 1/2-13 Thd.*		58	12791		Grille Screen	
15	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*		59	710-0192		Truss Scr. #10-24 x .375" Lg.*	
16	736-0119		L-Wash. 5/16" Scr.*		60	712-0121		Hex Nut #10-24 Thd.*	
17	712-0267		Hex Nut 5/16-18 Thd.*		61	736-0722		L-Wash. #10 Scr.*	
18	11839 —462		Rear Fender		62	12782		Lower Side Panel R.H.	
19	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*		63	12781		Lower Grille Panel	
20	13460		Frame Assembly		64	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
21	723-0241		Foot Pad 15.75 x 4.00"		65	12814		Front Grille Upper Ass'y.	
22	712-0798		Hex Nut 3/8-16 Thd.*		66	727-0199		Hood Stop	
23	736-0105		Bell.-Wash. .400 I.D. x .88 O.D.		67	736-0463		FI-Wash. 25 I.D. x .62 O.D.	
24	738-0317		Steering Shaft		68	736-0722		L-Wash. #10 Scr.*	
25	12850		Steering Gear Support Ass'y.		69	712-0121		Hex Nut #10-24 Thd.*	
26	741-0225		Hex Flange Bearing .630 I.D.		70	736-0101		FI-Wash. .380 I.D. x 1.00 O.D.	
27	748-0237		Pinion Gear		71	735-0126		Rubber Wash. .33 I.D. x .87 O.D.	
28	736-0264		FI-Wash. .344 I.D. x .62 O.D.		72	710-0253		Hex Scr. 3/8-16 x 1.00" Lg.*	
29	748-0236		Side Gear		73	710-0258		Hex Scr. 1/4-20 x .62" Lg.*	
30	710-0180		Hex Scr. 3/8-24 x .75" Lg.*		74	12780		Front Hood	
31	736-0133		FI-Wash. .406 I.D. x 1.25 O.D.		75	712-0287		Hex Nut 1/4-20 Thd.*	
32	710-0666		Sq. Hd. Set Scr. 5/16-18 x .38 Cup		76	736-0329		L-Wash. 1/4 Scr.*	
33	734-0541		Hub Cap for 6.0" Dia. Rim		77	731-0476		Dash Panel Insert	N
34	711-0169		Collar 5/8" I.D.		78	13877		Dash Panel Ass'y.	
35	734-0497		Front Wheel Ass'y.—Comp. 15 x 6		79	712-0222		Speed Nut Push-on 5/8" Dia.	
36	723-0156		Ball Joint Ass'y. 3/8-24 Thd.		80	722-0133		Foam Strip	
37	712-0711		Hex Jam Nut 3/8-24 Thd.		81	13974		Side Panel R.H.	N
38	711-0613		Tie Rod		82	712-0287		Hex Nut 1/4-20 Thd.*	
39	736-0156		FI-Wash. .635 I.D. x 1.20 O.D.		83	736-0329		L-Wash. 1/4" Scr.*	
40	748-0199		Plas. Flange Brg. w/Flats .75 I.D.		84	12785		Side Panel L.H.	
41	710-0670		Hex Nylon Scr. 3/8-16 x 1.25" Lg.		85	710-0621		Hex Scr. 5/16-18 x .50" Lg.*	
42	12749		Steering Arm Shaft Ass'y.		86	12783		Lower Side Panel L.H.	
43	736-0133		FI-Wash. .406 I.D. x 1.25 O.D.		87	726-0157		Speed Nut 1/8" Stud	
44	710-0180		Hex Scr. 3/8-24 x .75" Lg.*		88	712-0147		Speed Nut #10-24 "U"-Type	
45	747-0186		Steering Rod		89	710-0258		Hex Scr. 1/4-20 x .62" Lg.*	
					90	732-0354		Seat Spring 4.125" High	
					91	10410		Spring Brkt.	
					93	13466		Upper Frame	
					97	710-0342		Hex Scr. 3/8-16 x 1.25" Lg.*	
					98	725-0530		Solenoid	
					100	741-0225		Flange Brg. .630 I.D.	
					101	731-0144		Ext. Vinyl U-Channel	
					102	712-0237		Nut 5/16-24	

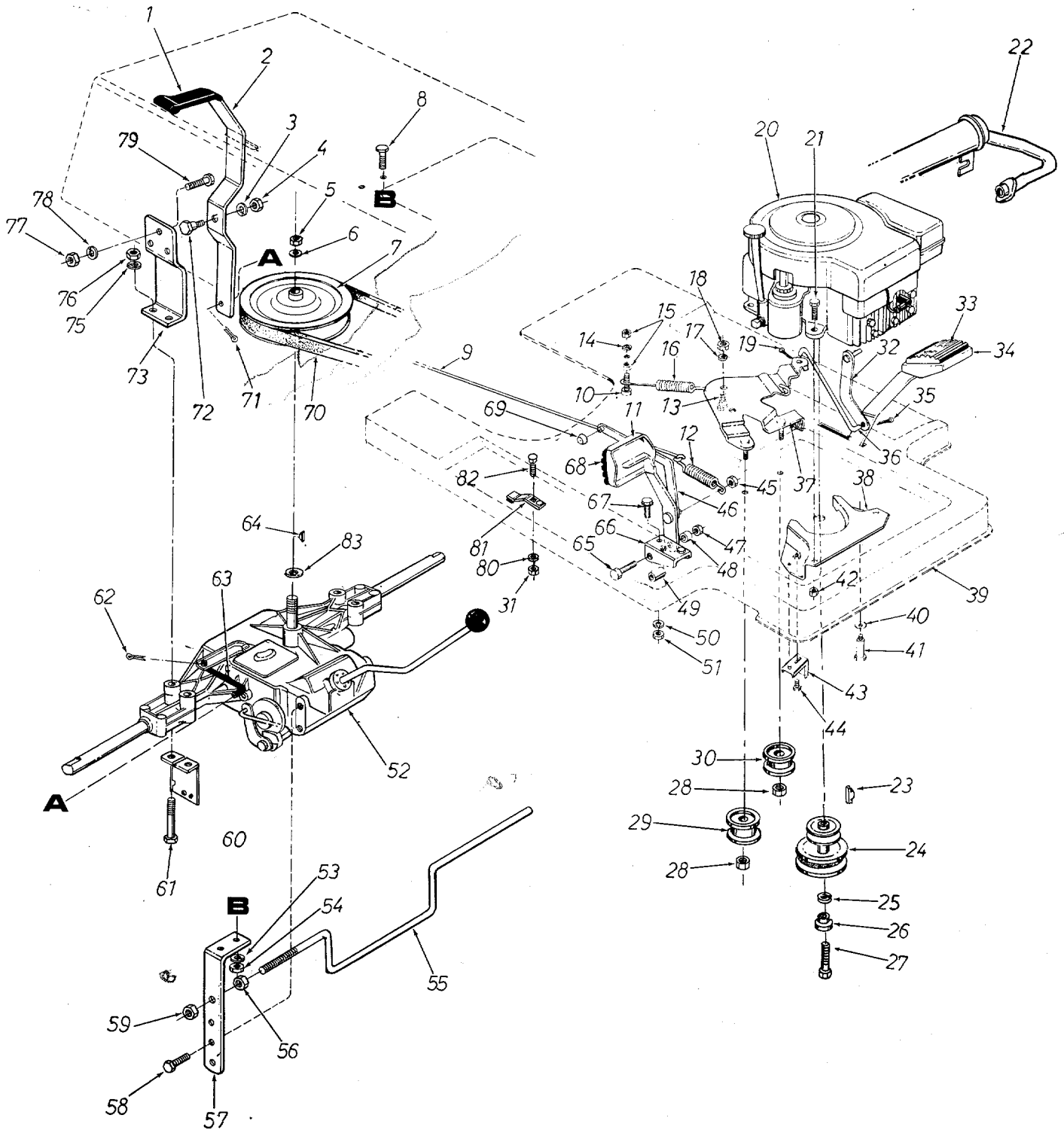
\*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Red Flake Finish—11836 (462).)

# 139-498A


 Hitch  
 BRKT.  
 09963



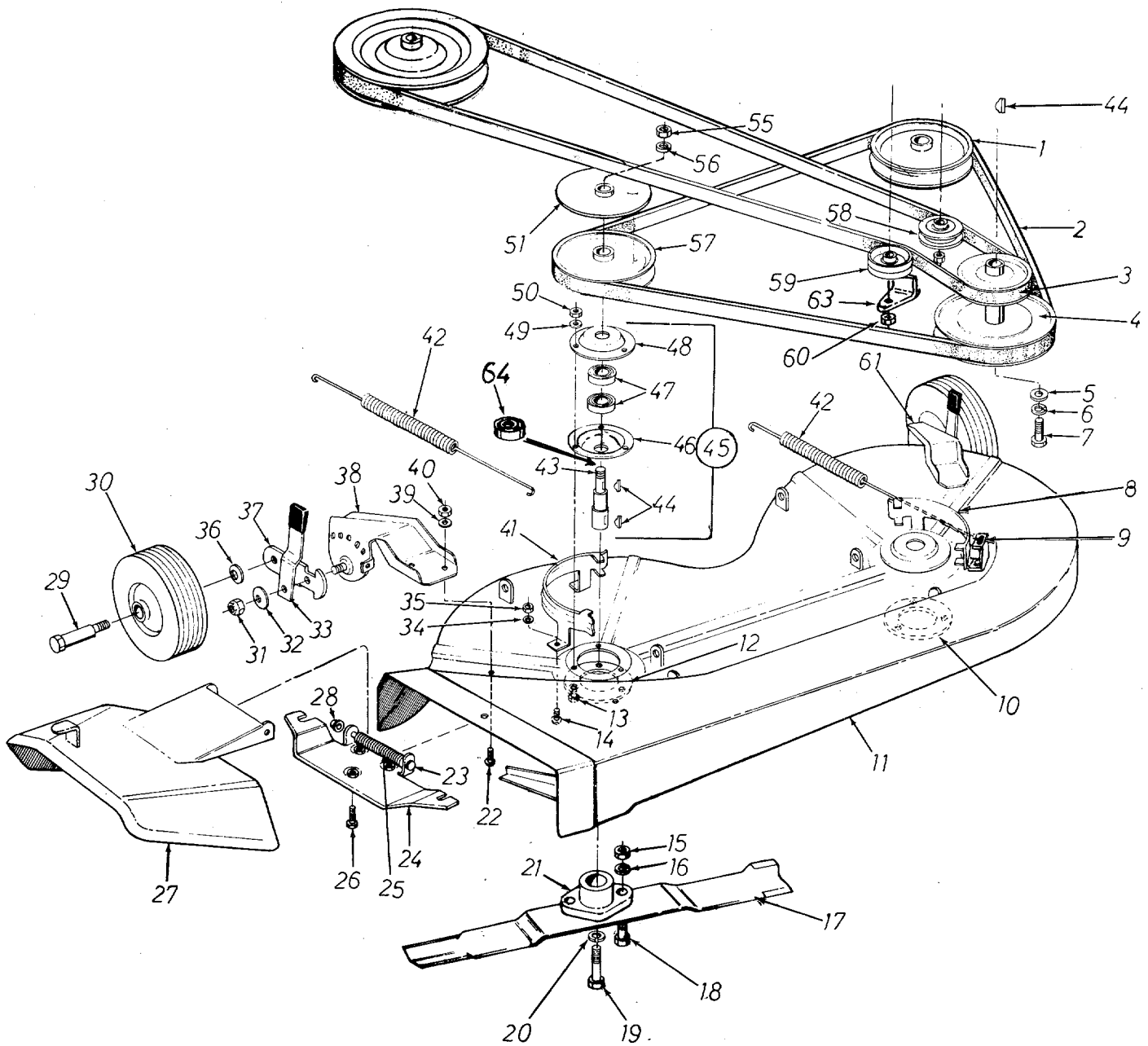
# PARTS LIST FOR MODEL 139-498A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0142		Grip—Flat Bar		44	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
2	13439		Shift Lever—Hi-Low		45	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
3	736-0119		L-Wash. 5/16" Scr.*		46	13875		Parking Brake Lever Ass'y.	
4	712-0267		Hex Nut 5/16-18 Thd.		47	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
5	712-0922		Hex Jam Nut 1/2-20 Thd.*		48	711-0630		Spacer .380 I.D. x .50 O.D. x .562" Lg.	
6	736-0921		L-Wash. 1/2" Scr.*		49	750-0298		Spacer .384 I.D. x .50 O.D. x 1.43" Lg.	
7	756-0254		Transaxle Pulley- 6		50	736-0119		L-Wash. 5/16" Scr.*	
8	710-0198		Hex Scr. 5/16-18 x .75" Lg.*		51	712-0267		Hex Nut 5/16-18 Thd.*	
9	747-0270		Brake Rod		52	717-0392		6 Speed Transaxle	
10	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*		53	736-0119		L-Wash. 5/16" Scr.*	
11	12813		Brake Pedal Ass'y.		54	712-0267		Hex Nut 5/16-18 Thd.*	
12	732-0245		Extension Spring .90 O.D. x 3.75" Lg.		55	747-0275		Belt Guard	
13	738-0140		Shld. Scr. .437 Dia. x .180		56	712-0267		Hex Nut 5/16-18 Thd.*	
14	736-0119		L-Wash. 5/16" Scr.*		57	13436		Torque Brkt.	
15	712-0267		Hex Nut 5/16-18 Thd.*		58	710-0601		Hex Self Tap Scr. 5/16-24 x .75" Lg.	
16	732-0191		Spring .75" O.D. x 11.00" Lg.		59	712-0267		Hex Nut 5/16-18 Thd.*	
17	736-0119		L-Wash. 5/16" Scr.*		60	13469		Deck Spring Brkt.	
18	712-0267		Hex Nut 5/16-18 Thd.*		61	710-0629		Hex Scr. 3/8-24 x 2.75" Lg.	
19	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*		62	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*	
20	—		Engine		63	747-0269		Shift Link	
21	710-0442		Hex Scr. 5/16-18 x 1.50" Lg.	N	64	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia.	
22	751-0263		Muffler		65	710-0194		Hex Scr. 3/8-16 x 3.00" Lg.*	
23	714-0365		#6 Hi-Pro Key		66	11039		Pedal "U"-Brkt. Ass'y.	
24	756-0303		Engine Pulley		67	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*	
25	736-0169		L-Wash. 3/8" Scr.*		68	12378		Brake Pedal Pad	
26	711-0572		Step Wash.		69	726-0121		Push Cap 1/4" Dia.—Black	
27	710-0459		Hex Scr.		70	754-0226		"V"-Belt 1/2" x 82" Lg.	
28	712-0116		Hex L-Nut		71	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*	
29	756-0217		Fi-Idler		72	738-0155		Shld. Scr. .437 Dia. x .162" Lg.	
30	756-0116		V-Idler		73	13437		Axle Brkt.	
31	736-0329		L-Wash. 1/4" Scr.*		75	736-0169		L-Wash. 3/8" Scr.*	
32	11057		Parking Brake Lever Ass'y.		76	712-0262		Hex Cent. L-Nut 3/8-24 Thd.	
33	12379		Clutch Pedal Pad		77	712-0267		Hex Nut 5/16-18 Thd.*	
34	11037		Clutch Pedal Ass'y.		78	736-0119		L-Wash. 5/16" Scr.*	
35	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*		79	710-0198		Hex Scr. 5/16-18 x .75" Lg.*	
36	747-0112		Clutch Rod		80	736-0329		L-Wash. 1/4" Scr.*	
37	12448		Idler Brkt. Ass'y.		81	761-0157		Blade Brake	
38	12654		Belt Guard Ass'y.—Engine		82	710-0134		Carriage Bolt	
39	13460		Frame Ass'y.		83	736-0160		Fi-Wash.	
40	736-0105		Bell. Wash. .400 I.D. x .88 O.D.						
41	738-0215		Shld. Scr. .489" Dia. x 3.00" Lg.						
42	712-0267		Hex Nut 5/16-18 Thd.*						
43	12160		Belt Keeper Ass'y.						



## IMPORTANT

Belts listed by Part Number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide temporary service.



# PARTS LIST FOR MODEL 139-498A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	756-0251		Deck Pulley 4.75" O.D.		33	10949		Spring Lever Ass'y. w/ Knob	
2	754-0145		"V"-Belt 21/32 x 69" Lg.		34	736-0329		L-Wash. 1/4" Scr. *	
			(Blade Drive Belt)		35	712-0287		Hex Nut 1/4-20 Thd. *	
3	754-0226		"V"-Belt 1/2 x 82" Lg.		36	736-0105		Bell.-Wash. .400 I.D. x .88	
			(Transmission)					O.D.	
4	756-0303		Two Step Engine Pulley		37	10937		Wheel Pivot Bar	
5	711-0572		Step Wash.		38	11236		Wheel Brkt. Ass'y.—R.H.	
			O.D.					(Deck)	
6	736-0169		L-Wash. 3/8" Scr. *		39	736-0329		L-Wash. 1/4" Scr. *	
7	710-0459		Hex Scr. 3/8-24 x 1.50" Lg. *		40	712-0287		Hex Nut 1/4-20 Thd. *	
8	12672		Belt Guard—L.H. Deck		41	12673		Belt Guard—R.H. (Deck)	
9	12405		Deck Spring Brkt.		42	732-0307		Extension Spring	
10	09164		Deck Reinforcement Plate		43	711-0255		Blade Spindle	
11	13453		38" Deck Ass'y. <del>Comp.</del> <i>comp.</i>		44	714-0365		#6 Hi-Pro Key 5/32 x 5/8"	
12	09164		Deck Reinforcement Plate					Dia.	
13	710-0322		Hex Sems Scr. 5/16-18 x		45	09321		Spindle Ass'y. Comp.	
			1.00" Lg. *					(Deck)	
14	710-0289		Hex Scr. 1/4-20 x .50" Lg. *		46	08253		Bearing Housing	
15	712-0123		Hex Nut 5/16-24 Thd. *		47	741-0919		Ball Bearing .787 I.D. x 1.85	
16	736-0119		L-Wash. 5/16" Scr. *					O.D.	
17	742-0122		19" Blade		48	08253		Bearing Housing	
18	710-0117		Hex Scr. 5/16-24 x 1.00" Lg.		49	736-0329		L-Wash. 1/4" Scr. *	
19	710-0459		Hex Scr. 3/8-24 x 1.50" Lg.		50	712-0287		Hex Nut 1/4-20 Thd. *	
			H.T.		51	09322		Blade Brake Disc	
20	736-0217		L-Wash. 3/8" Scr. (Heavy		55	712-0261		Hex Jam Nut 5/8-11 Thd.	
			Duty)		56	736-0158		L-Wash. 5/8" Scr. *	
21	10769		Blade Adapter Kit		57	756-0251		Deck Pulley 4.75" O.D.	
22	710-0289		Hex Scr. 1/4-20 x .50" Lg. *		58	756-0116		"V"-Belt Idler 3.06" O.D.	
23	711-0571		Pivot Pin		59	756-0217		Fl. Idler 2.75" O.D.	
24	11399		Adapter Plate Ass'y.					w/ Flanges	
25	732-0261		Torsion Spring		60	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
26	710-0195		Hex Scr. 1/4-28 x .62" Lg. *		61	11237		Wheel Brkt. Ass'y.—L.H.	
27	11574		Chute Cover Ass'y.					(Deck)	
28	726-0106		Push Nut—1/4" Rod		62	<del>13454</del>		38" Deck Ass'y <del>Comp.</del> (For	
29	738-0119		Shld. Scr. .625" Dia. x 1.75"					<del>Scree</del> )	
			Lg.		63	08664		Belt Keeper	
30	734-0796		Wheel Ass'y.—5.0 x 1.25		64	13703		Bearing Shield	
			Dia. (Deck)						
31	712-0116		Hex Ins. L-Nut 3/8-24 Thd.						
32	736-0219		Bell.-Wash. .400 I.D. x .88						
			O.D.						

(462—Red Flake)

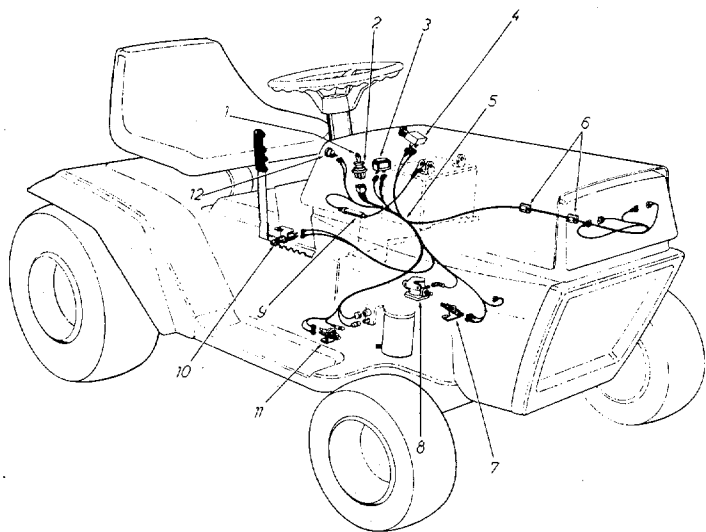
\*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Red Flake Finish—11839 (462).)

# 139-498A

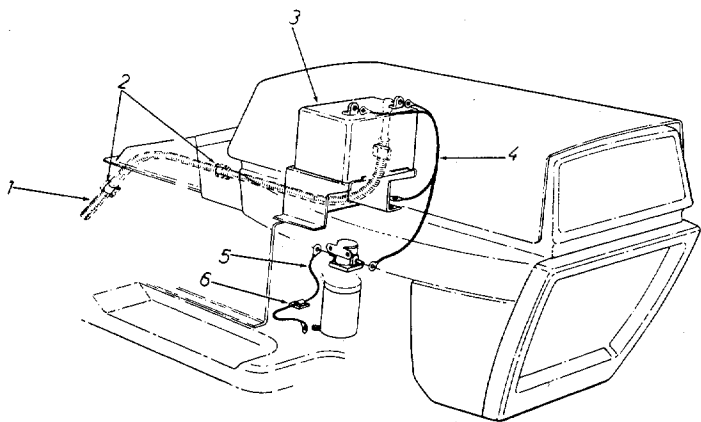
## PARTS LIST FOR MODEL 139-498A

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0201	Ignition Key	N
2	725-0267	Ignition Switch	
3	725-0119	Ammeter	
4	725-0634	Headlight Switch	
5	725-0641	Wire Harness	
6	726-0152	Mtg. Clamp	
7	725-0268	Safety Switch	
8	725-0530	Solenoid	
9	725-0298	Fuse 7 1/2 Amp 1/4 Dia. x 1.25 Lg.	
10	725-0268	Safety Switch	N
11	725-0269	Safety Switch—Red w/Brkt.	
12	725-0635	Indicator Light	



## PARTS LIST FOR MODEL 139-498A

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	731-0333	Convuluted Conduit	N
2	726-0154	Push Mtg. Ties 3/8 I.D.	
3	725-0661	Battery 12 V-Manifold Vented	
4	725-0503	Battery Cable Harness	
5	725-0121	Electric Wire	
6	726-0152	Mtg. Clamp	

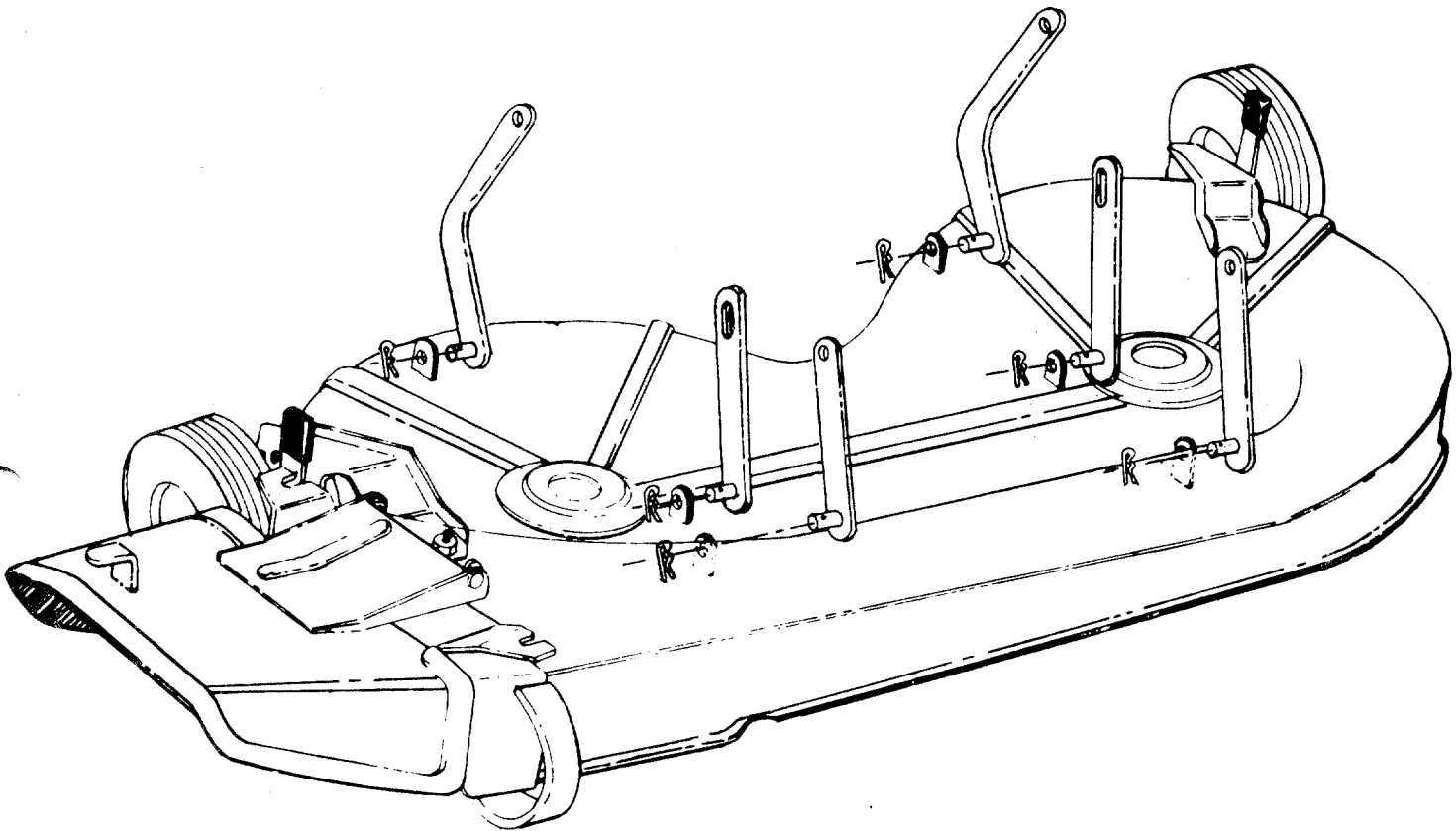


## DECK LINKAGE



### NOTE

Refer to illustration below for proper deck link hookup. If the deck is removed for any reason use the illustration below for correct assembly.





# 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, parts number, description of parts and the quantity of each part required.

<b>ALABAMA</b>	<b>BIRMINGHAM</b>
Auto Electric & Carburetor Co. ....	2625 4th Ave. S. .... 35233
<b>ARKANSAS</b>	<b>NORTH LITTLE ROCK</b>
Sutton's Lawn Mower Shop ....	Rt. 4 Box 368 .... 72117
	<b>FORT SMITH</b>
Mity Mite Motors, Inc. ....	2515 Towson Ave. .... 72901
<b>CALIFORNIA</b>	<b>PORTERVILLE</b>
Billious ....	75 North D Street .... 93257
	<b>SAN BERNARDINO</b>
Lawn Mower Supply Co. ....	25608 E. Baseline .... 92410
	<b>SAN FRANCISCO</b>
J.W. Jewett Co. ....	981 Folsom St. .... 94107
	<b>SACRAMENTO</b>
Luttig & Severson ....	2030 28th St. .... 95818
<b>COLORADO</b>	<b>DENVER</b>
South Denver Lawn Equip. ....	527 West Evans .... 80223
<b>FLORIDA</b>	<b>JACKSONVILLE</b>
Radco Distributors ....	2403 Market St. .... 32206
	<b>CORAL GABLES</b>
Moz-All of Florida, Inc. ....	365 Greco Ave. .... 33146
<b>GEORGIA</b>	<b>EAST POINT</b>
East Point Cycle & Key ....	2834 Church St. .... 30344
<b>ILLINOIS</b>	<b>LYONS</b>
Keen Edge Co. ....	8615 Ogden Ave. .... 60534
<b>INDIANA</b>	<b>ELKHART</b>
Parts & Sales Inc. ....	2101 Industrial Pkwy. .... 46514
<b>IOWA</b>	<b>DUBUQUE</b>
Power Lawn & Garden Equip. ....	2551 J.F. Kennedy ... 52001
<b>LOUISIANA</b>	<b>NEW ORLEANS</b>
Suhren Engine Co. ....	8330 Earhart Blvd. ... 70118
<b>MARYLAND</b>	<b>TAKOMA PARK</b>
Center Supply Co. ....	6867 New Hampshire Ave. 20012
<b>MASSACHUSETTS</b>	<b>SPRINGFIELD</b>
Morton B. Collins Co. ....	300 Birnie Ave. .... 01107
<b>MICHIGAN</b>	<b>MOUNT CLEMENS</b>
Power Equipment Dist. ....	36463 South Gratiot ... 48043
	<b>LANSING</b>
Lorenz Service Co. ....	2500 S. Pennsylvania . 48900
<b>MINNESOTA</b>	<b>MINNETONKA</b>
Hance Distributing Inc. ....	11212 Wayzata Blvd. ... 55343
	<b>ST. PAUL</b>
Power Tools Inc. ....	3771 Sibley Memorial Hwy. . 55122
<b>MISSISSIPPI</b>	<b>BILOXI</b>
Biloxi Sales & Service, Inc. ....	506 Caillavet St. .... 39533
<b>MISSOURI</b>	<b>KANSAS CITY</b>
Automotive Equip. Service ....	3117 Holmes St. .... 64109
	<b>ST. JOSEPH</b>
Ross-Frazier Supply Co. ....	8th and Monteray .... 64503
	<b>ST. LOUIS</b>
Henzler, Inc. ....	2015 Lemay Ferry Rd. . 63125
<b>NEW JERSEY</b>	<b>BELLMAWR</b>
Lawnmower Parts Inc. ....	717 Creek Rd., P.O. Box 7. 08030
	<b>RUTHERFORD</b>
Feld Distributor ....	28 Glen Rd. .... 07070
<b>NEW YORK</b>	<b>CARTHAGE</b>
Gamble Dist., Inc. ....	West End Ave. .... 13619

## 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.

	<b>SYRACUSE</b>
GTP Leisure Products Inc. ....	420 Marcellus St. .... 13204
<b>NORTH CAROLINA</b>	<b>GREENSBORO</b>
Dixie Sales Company ....	327 Battleground Ave. 27402
	<b>GOLDSBORO</b>
Smith Hardware Co. ....	515 N. George St. .... 27530
<b>OHIO</b>	<b>WADSWORTH</b>
National Central ....	687 Seville Rd. .... 44281
	<b>CLEVELAND</b>
Bleckrie, Inc. ....	7900 Lorain Ave. .... 44102
	<b>CARROLL</b>
Stebe's Mid-State Mower Supply. Box 366-71 High St. . 43112	
	<b>YOUNGSTOWN</b>
Burton Supply Co. ....	1301 Logan Ave. Box 929 . 44501
<b>OKLAHOMA</b>	<b>MUSKOGEE</b>
Victory Motors, Inc. ....	605 S. Cherokee. .... 74401
	<b>OKLAHOMA CITY</b>
Forest Sales Inc. ....	1039 NW 63rd St. .... 73116
	<b>ADA</b>
Ada Auto Supply ....	301 E. 12th St. .... 74820
<b>OREGON</b>	<b>PORTLAND</b>
Kenton Supply Co. ....	8216 N. Denver Ave. ... 97217
<b>PENNSYLVANIA</b>	<b>CHESTER</b>
Stull Equipment Corp. ....	742 W. Front St. .... 19013
	<b>HARRISBURG</b>
EECO Inc. ....	4021 N. 6th St. .... 17110
	<b>PHILADELPHIA</b>
Thompson Rubber Co. ....	5222-24 N Fifth St. ... 19120
	<b>PITTSBURGH</b>
Bluemont Co. ....	11125 Frankstown Rd. 15235
<b>TENNESSEE</b>	<b>KNOXVILLE</b>
Master Repair Service ....	2423 Broadway, N.E. . 3791
	<b>MEMPHIS</b>
Memphis Cycle & Supply Co. ....	421 Monroe Ave. .... 38103
American Sales & Service, Inc. ....	1922 Lynnbrook .... 38116
<b>TEXAS</b>	<b>DALLAS</b>
Marr Brothers, Inc. ....	423 E. Jefferson. .... 75203
	<b>HOUSTON</b>
Bullard Supply Co. ....	2409 Commerce St. ... 77003
	<b>SAN ANTONIO</b>
Catto & Putty, Inc. ....	P.O. Box 2408 .... 78206
	<b>FORT WORTH</b>
Woodson Sales Corp. ....	1702 N. Sylvania .... 76111
<b>UTAH</b>	<b>SALT LAKE CITY</b>
A-1 Engine & Mower Co. ....	437 E. 9th St. .... 84111
<b>VERMONT</b>	<b>BURLINGTON</b>
Vermont Hdwe. Co. Inc. ....	180 Flynn Ave. .... 05401
<b>VIRGINIA</b>	<b>RICHMOND</b>
RBI Corp. ....	963 Myers St. .... 23260
<b>WASHINGTON</b>	<b>SEATTLE</b>
Bailey's Inc. ....	1414 14th Ave. .... 98122
<b>WEST VIRGINIA</b>	<b>CHARLESTON</b>
Young's, Inc. ....	233 Virginia St., E. ... 25301
<b>WISCONSIN</b>	<b>APPLETON</b>
Automotive Supply Co. ....	123 S. Linwood Ave. ... 54911

## 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 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.