

# OWNER'S HANDBOOK 36" LAWN TRACTOR



SOLE UNITED KINGDOM DISTRIBUTOR

G. D. MOUNTFIELD LTD.  
REFORM RD., MAIDENHEAD BERKS SL6 8DQ

READ AND RETAIN THIS MANUAL. IT CONTAINS IMPORTANT INFORMATION ON SAFETY, OPERATION, ASSEMBLY, AND MAINTENANCE.

RE MURRAY POWER PRODUCTS OHIO USA

## OWNER'S INFORMATION

Record the following information about your mower so that you will be able to provide it when ordering parts or in case of loss or theft.

WHERE PURCHASED: \_\_\_\_\_

DATE PURCHASED: Month \_\_\_\_\_, Day \_\_\_\_\_, Year \_\_\_\_\_

MODEL NO.: \_\_\_\_\_ DATE OF MANUFACTURE: \_\_\_\_\_

(Stamped on nameplate)





IMPORTANT



**Safe Operation Practices for Riding Vehicles  
As Recommended by American National Standards Institute**

1. Know the controls and how to stop quickly. **READ THE OWNER'S MANUAL.**
2. Do not allow children to operate the vehicle. Do not allow adults to operate it without proper instruction.
3. Clear the work area of objects which might be picked up and thrown.
4. Disengage all attachment clutches and shift into neutral before attempting to start the engine.
5. Disengage power to attachment(s) and stop the engine before leaving the operator's position.
6. Disengage power to attachment(s) when transporting or not in use.
7. Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; never across the face. (maximum 15°)
8. Reduce speed and exercise extreme caution on slopes and in sharp turns to prevent tipping or loss of control. Be especially cautious when changing direction on slopes.
9. Stay alert for holes, rocks and roots in the terrain and other hidden hazards.
10. Use care when pulling loads or using heavy equipment.
  - a. Limit loads to those you can safely control.
  - b. Do not turn sharply. Use care when backing.
  - c. Use counterweight(s) or wheel weights when suggested in the owner's manual.
11. Watch out for traffic when crossing or near roadways.
12. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
13. Handle gasoline with care—it is highly flammable.
  - a. Use approved gasoline container.
  - b. Never remove the fuel cap or add gasoline to a running or hot engine, or fill the fuel tank indoors. Wipe up spilled gasoline.
  - c. Open doors if the engine is run in the garage—exhaust fumes are dangerous. Do not run the engine indoors.
14. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
15. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
16. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
17. 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.
18. Do not change the engine governor settings or overspeed the engine.
19. 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 the engine is running if the operator must dismount to do so.
  - (3) Shut the engine off when removing the grass catcher or unclogging chute.
  - (4) Check the blade mounting bolts for proper tightness at frequent intervals. Check blade.
20. Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the mower.
21. Check the grass catcher bags frequently for wear or deterioration. Replace with new bags for safety protection. Use only original equipment or authorized replacement parts.
22. Do not operate mower without either the entire grass catcher or guards in place. Read instructions with the grass catcher.
23. Do not carry passengers. Keep children and pets a safe distance away.
24. Take all possible precautions when leaving the vehicle unattended, such as disengaging the blade rotation control lever, lowering the attachment(s), shifting into neutral, setting the parking brake, stopping the engine, and removing the key.
25. Keep the vehicle and attachments in good operating condition, and keep safety devices in place.
26. Disengage power to attachment(s) and stop the engine before making any repairs or adjustments. Carburetor may be adjusted with engine running.
27. Wait for all movement to stop before servicing any part of unit.
28. Read and follow instructions on the mower concerning its safety and operation.



## SAFE MOWING TIPS

Every person who uses power equipment should learn the difference between proper and improper use, safe and unsafe mowing practices. **Read the next few pages carefully. They may help you learn.** Too often the mower user is inexperienced, not properly instructed, or has not read the Owner's Manual and instructions on the unit before using it for the first time. This can result in unsafe use endangering the operator, bystanders, and the equipment. Another result may be a poor appearance of the area mowed.

**Read this Manual.** Read the instructions on the unit. Operate the mower according to these Safe Mowing Tips and other safety rules and recommendations in this Manual and on the unit. Make sure anyone who uses the unit has read the instructions and has been told how to operate the mower safely.



Your mower is designed to provide good service and durability in normal residential cutting. If the mower is not properly serviced and maintained or used on unsuitable terrain or in conditions not suitable for mowing, product performance and safety will be reduced.

Most of these Safe Mowing Tips are applicable to both riding and walk behind equipment. Almost everyone who has a rider also has a walk behind mower, and many people who have only a walk behind unit will use a rider at some time.

Proper attire is an important part of safe mowing. Safety glasses protect eyes from thrown objects. Safety shoes with steel toes can protect a foot from being cut by the blade. Shirts and pants that cover arms and legs may stop or deflect a thrown object.

Practice using the mower before you actually begin cutting grass. For the first practice, select a large open level area. Learn the mower's controls, where they are, how they work, and what they do. How fast you can stop the blade may be important in an emergency. Learn how to cut and how to keep control of the mower at all times.



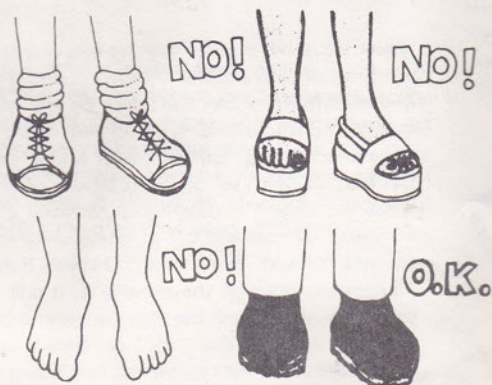
Most mowers are started manually. When using a pull start or rope start, place your feet firmly and away from the blade. Walk behind mowers usually have a place marked to put one foot while starting. Hold the rope handle securely, but never wrap the rope around your arm or fingers for a "better grip". In starting a riding mower, follow instructions on the machine and in the Manual exactly. For electric start equipment, always take the normal operator's position before starting. The battery on the unit can be dangerous. Follow instructions on the battery, acid container, and in the Manual when working with any battery. Even small batteries carry enough electricity to shock or burn you. Always be careful.

The mower is designed for use by one person. Always mow alone. Never carry passengers on the unit or on accessories. Adding a passenger is dangerous for the passenger, the operator, and the equipment. A passenger can make the unit harder to control, obstruct the operator's vision, or affect the concentration of the operator. Without a proper seat, the passenger may fall off or contact parts of the equipment from which the operator is protected. A mower is not a play thing for showing off, carrying objects, or giving rides.

Look over the area you are planning to mow, even if you have cut it before. Is the area wet? Never cut a wet lawn. Cutting wet grass may cause an accident, it may affect mower performance, and it may cause problems with future lawn growth and appearance. Wet grass is slippery and might cause the operator to fall or the mower to slip. Someone could be hurt by touching the blade. Wet grass tends to clog the mower, causing poor discharge. The wet clippings bunch up on the lawn retarding the growth of grass under them. Also, getting the mower wet may cause parts to rust reducing the useful life of the unit.



When you look over the lawn, refresh your memory about hard, immovable obstacles such as pipes, stumps, and rocks. Avoid them, they can cause damage to the mower or an accident injuring the operator or a bystander. Take a litter bag along and walk over the area to be cut. Pick up any stones, toys, wire, bones, or other loose objects. These items can damage the mower or they may become dangerous flying objects if the mower blade hits them. The blade of a power mower travels very fast. It can throw rocks and other objects with force over long distances. Objects thrown by mowers can break windows, cause bruises, or even put out an eye. Often the person hurt by a thrown object is a bystander such as a child, another family member or a neighbor. Clear the area to be cut. Keep people and pets completely out of the mowing area. Direct the mower's discharge away from areas where people may be. Planning your mowing pattern has a double benefit. It can reduce chances of an injury and make the clean up after mowing easier.





Are there ditches, walls, or major inclines in the area to be cut? Plan the mowing pattern to avoid such danger areas. Check out stopping distances and distances available for turning. Inclines and rough terrain should be mowed carefully and some areas should not be cut with a mower at all. With riding equipment, mow up and down the hill. With walk behind equipment, mow across the incline so if you or the mower slip, you won't run into each other. Never change directions, or shift gears and avoid stops while mowing on rough terrain or on slopes. Never mow slopes greater than 15°.

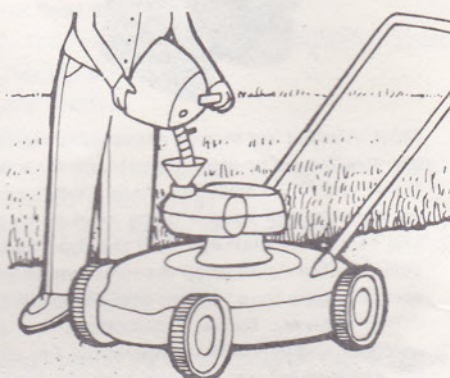


Ready to start cutting? Not yet. Be sure the mower has been fully assembled according to directions in the Owner's Manual. Even if assembly was done by a lawn and garden shop or the store where the unit was purchased, it must be checked. Are all nuts, bolts, and screws tight? Does the motor have oil? Is the battery charged? These items should also be checked periodically throughout the life of the mower.

Your mower has a gasoline engine. Gas is dangerous. Store fuel only in an approved gas container. Do not store large amounts of gas. Put out all cigarettes, pipes and cigars before working with gasoline. Store fuel and the mower itself in a well ventilated area away from any possible source of ignition such as a pilot light on a furnace. If the mower is to be stored for an extended time, remove gas from the tank. This minimizes the chance of fire and keeps the tank clear of deposits and old gasoline, thus improving mower performance. Move the mower outside before adding gasoline. Use a funnel and wipe up any spilled fuel before starting. Remember, gas expands when heated so leave some expansion room. Also, most mower gas caps are vented to allow for expansion. Always use the proper cap. People are needlessly burned by fires, hurt in explosions, mowers and other property are damaged because of failure to follow basic safety rules related to gasoline and fueling.

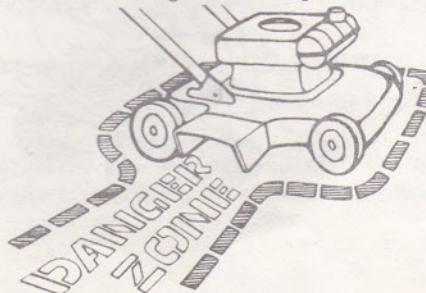
Never add gasoline to an engine which is running or which is hot from recent use, this could result in a fire or explosion. Remove grease, oil, or exhaust deposit build-up from the mower. Remove dry grass and other debris from the mower. Keeping the mower clean will improve performance, help the engine stay cooler, lengthen the life of moving parts, and minimize the danger of fire.

People get burned working with and around their mowers for other reasons than fire and explosion. It takes only a few seconds of operation for the engine and the muffler to become hot. Do not touch these parts when the mower is running. Stop the engine and let it cool down before servicing the mower. Remember, exhaust fumes can be dangerous. Never operate the engine indoors or in an enclosed area.



Getting a new mower can be a big event for a family. Let family members satisfy their curiosity about the mower and at the same time, tell them about its dangers. Remember, a mower is not a toy and is not for use by children or anyone lacking in age, strength or experience. As with any power equipment, a mower can be dangerous if not properly assembled, misused, or not properly maintained. The most important Safe Mowing Tip is to exercise good judgement and common sense whenever your mower is concerned.

Your mower will cut thick grass and heavy plant stems with ease. Fingers and toes are no more resistant to the mower's blade. Those facts are obvious, nevertheless, many people wind up in hospital emergency rooms because they "forgot" and reached into the discharge chute to clear a blockage, or they pulled the mower back over their own foot because they were not watching. Always treat your lawn mower as if the blade is rotating. Never perform any service or try to make any adjustment while the engine is running.

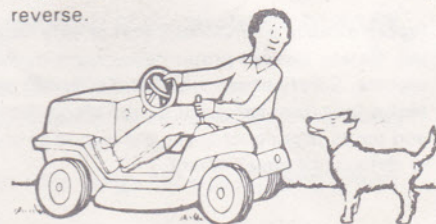


Do you plan to use accessories such as grass bags and garden carts? Use only accessories suited for your mower. Use of improper accessories may reduce the safety designed into both the mower and the accessory, it may even damage the unit. Using accessories that do not match may cause both the mower and accessory to perform poorly. Read and follow the instructions which come with the accessory and the mower.

Use only original equipment or approved substitutions as service parts. If you need professional service, select a shop that is an Authorized Service Center for your brand of mower. It should have the right parts and training to care for the mower. If you plan to service the unit yourself, follow directions in the Owner's Manual. One tip that can save time is to have spare service parts on hand at all times. An extra spark plug, spare blade and blade adapter, chain and belts can make service faster and easier.

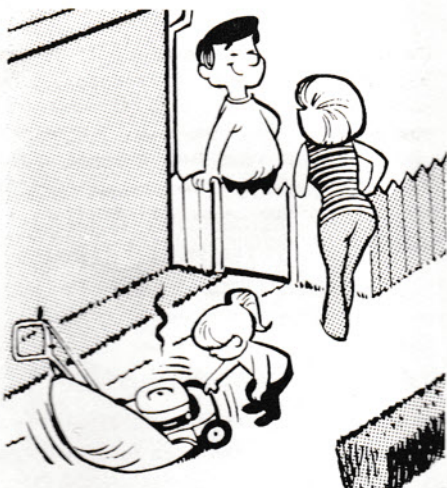


As you mow, remember children and pets are sometimes attracted to the activity. Be especially careful when trimming around shrubbery or when backing up. Always look thoroughly around shrubbery before mowing. Look behind you before shifting to reverse. If at all possible, don't mow in reverse or when moving backwards. It is dangerous because vision is restricted. Also, blades are designed to cut while the unit is moving forward so cutting performance is reduced when mowing in reverse.



Never leave the mower running and unattended. Shut off the engine. Disengage and lower any attachments. Set the brake on and never mount or dismount riding equipment while the engine is running. Contact with brake, gear, throttle, clutch, or blade rotation controls while the engine is running could result in an accident. Get on and off of riding units from the side marked "Enter-Exit". On walk behind equipment, position the mower so it will not roll and make certain the throttle control is all the way down to the "off" or "stop" position. If the unit is self propelled, make sure the drive control is disengaged.





When mowing, be aware of your condition and the weather conditions. After mowing a long time, you will be tired. This is the time when reactions slow down, your attention wanders; the time when you are wide open for an accident. Take a short break. If temperatures are high, take precautions to avoid becoming dehydrated. If you are tired and must keep going, be more careful. If you are angry, tired, or unable to give your full attention to mowing, if you have been consuming alcohol, medicines, or drugs, do not use your mower or any type of power equipment.

If weather conditions become worse while you are cutting, stop and finish later. Cutting grass in the rain is no fun and it is dangerous. Always seek shelter in an electrical storm. In extremely dry mowing conditions, your safety glasses can serve a dual purpose by protecting your eyes from dust and thrown objects, also a dust or pollen mask may be helpful. Be sure to clean the cooling fins and blower cover on the engine after mowing.



Your mower is equipped with a number of safety features which are important to the safety of the operator and bystanders and should never be altered or removed. If a safety feature should become inoperable, lost, or damaged, it should be repaired or replaced before the mower is used.

Engine speed is a key to safe mowing and a nice looking lawn. The speed of the engine on your mower has been set at the factory. Do not change the engine governor in any way. When mowing, it is seldom necessary to run the engine at top speed, select a speed that is right for the terrain and the height of grass. On walk behind mowers, never walk fast or run just to get done sooner. On inclines, reduce speed and exercise extreme care.

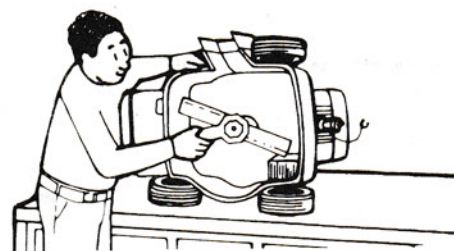
It is best to mow only during daylight hours; however, if you must mow in the late afternoon or evening, make sure there is good artificial light.

Your mower will require maintenance including service and adjustments before and after use as with any machinery. The frequency of the maintenance is generally based on hours of use, however, the frequency may vary because of mowing conditions. Check the Manual for more detailed instructions. Proper maintenance protects your investment in the mower and helps insure that it will function safely and reliably. Never attempt any service (with the possible exception of carburetor adjustment) with the engine running. After turning the engine off, always disconnect the spark plug wire to prevent accidental restarting while the unit is being serviced.



While mowing, if you should strike a foreign object, stop the engine. Remove the spark plug wire. Carefully and thoroughly inspect the mower for damage. Make necessary repairs before restarting. If the unit starts to vibrate abnormally, stop the engine immediately and check for the cause. Vibration is generally a warning of trouble. Keep all nuts, bolts, and screws tight.

The blade is the most dangerous part of the mower and also the most important part in obtaining a nice lawn appearance. Check blade mounting hardware frequently. Keep it tight. If the blade should strike a solid object, check it thoroughly for deformation or cracks and replace if damaged. A sharp blade reduces the work load on the engine and cuts grass more cleanly, for a better looking cut with less work. The blade is always close to the outside of the mower housing. For best trimming, cut with the left side of the housing toward the area that needs trimming.



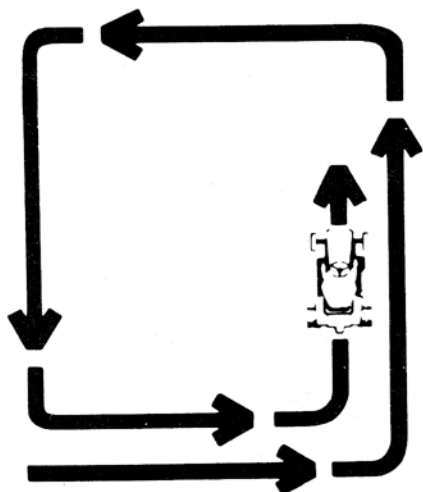
A useful accessory for your mower is a grass catcher. There are grass catchers available for most models. For best performance and safety, be sure the grass catcher is approved for use with your mower. Assemble as directed and follow operating and safety instructions with the catcher and in this Manual. Often the grass catcher requires a special blade for best performance. Before mounting, checking or emptying grass catcher, always turn the engine off. Remember to check the grass catcher before each use for cracks, wear, or deterioration. Replace any part that is damaged with manufacturer's recommended replacement part before using the grass catcher again.



Proper cutting technique is important if you want your lawn to look good. Avoid the temptation to cut grass too short. Cutting grass too short may kill the plant, cause grass to turn yellow, or make the lawn look brown and thatchy. Use higher cutting heights in cool months when grass is lush and in extremely dry periods. Cutting with a dull blade bruises, shreds, and may uproot some grass making the lawn look dull and brown a few days after cutting. The same thing can happen if your mower is used for cutting while the engine is at idle speed, or if the mower is left standing with the blade turning.

Change the mowing pattern slightly each time you cut and the grass will grow straighter and thicker and will cut better also. If you always cut the same way, the grass will develop a "set" and clippings will accumulate more heavily in some areas than in others causing grass to get thinner in those areas. Do not service your mower over grass. Spilled oil and gas can kill the grass. In tall grass or very heavy grass, do not try to get it all at once. Raise the height of cut on the first cutting and lower it for the next cutting the same day or within a few days. Another way is to cut only part of the width of the mower and adjust your ground speed (not the blade speed) to move more slowly so the mower can clear itself as it goes.





Riding mowers require driving skills as well as mowing know how. Learn the ground speed(s) of your mower. Check its braking distances at various throttle and gear positions. Check the mower's turning radius. The controls on your riding mower are somewhat different than in an automobile. The throttle is hand operated and holds the speed set until it is readjusted. The throttle control is located near the steering wheel. Gear shift location and shift pattern may be different than in a car. Brake and clutch systems are also somewhat different. Learn the controls and how they work. Think about possible emergencies and plan what you would do. Remember, turning off the engine will stop the blade and the drive mechanism. If the mower should ever get stuck or begin to feel unstable, it is best to shut down all systems and the engine, dismount from the mower and then move it to a safer place before resuming mowing.

When cutting with a walk behind mower, always push the unit. Do not pull it. Pushing the unit keeps the operator behind the mower in the "operator's zone" for better control. Pushing the unit also gives you a chance to see exactly where and what you are mowing. There may be times while you are mowing that you will have to pull the mower backwards (such as when the front of the mower has come up against a wall or fence). If you must back up, make sure your feet are in the clear. Stand well back from the mower, plant your feet firmly with each step and back up being careful to look behind you. Resume normal mowing as soon as possible.



If your unit is self propelled, remember that the drive mechanism is not designed to do all the work, but the unit can move without your help. Always keep your hands on the handle near controls when the engine is running. Remember too that the self propelled mechanism can be dangerous. Keep hands and feet away from belts and chains. Always turn off the engine before attempting to remove anything that becomes entangled in the self propelled system.



**LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS — ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.**

Remember, your mower is a useful tool, but it can be dangerous. Follow the instructions in this manual, use the mower properly and carefully and it will give you many hours of trouble free, accident free operation.



## OWNER'S RESPONSIBILITY

IT IS THE OWNER'S RESPONSIBILITY TO: (1) Be certain that all assembly instructions have been followed; (2) Make all necessary adjustments; (3) Carefully read and follow rules for safe operation; (4) Check out the unit before operating; (5) Perform all required maintenance; (6) Know how to operate all standard and accessory equipment on the unit; (7) Make certain that anyone using the unit has been fully instructed in its operation; (8) Operate the mower only with guards, shields and protective devices in place and working correctly; (9) Use only authorized or approved replacement parts when servicing this unit.

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

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. See your Authorized Engine Service Center for a spark arrester muffler. Your nearest center is listed in the "Yellow Pages" under "Engines Gasoline" or "Gasoline Engines".





## POINTS TO REMEMBER

**B**e sure to dress properly. Wear sturdy footwear, **not** sandals or tennis shoes.  
**E**xamine the blade for tightness. Check all other mower parts.  
**F**ill gas tank outdoors. Wipe up all spilled fuel.  
**O**wner's Manual instructions are for your safety and the safety of others. Read and follow the manual.  
**R**ead and follow rules for safe operation.  
**E**xhaust fumes are dangerous. Start engine outside.

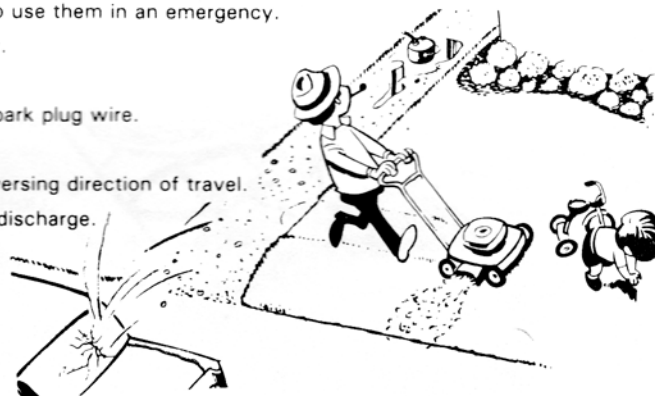
**M**ake certain all safety devices are in their proper position and functional.  
**O**peration of the mower is for experienced adults only.  
**W**et grass can be dangerous. Wait until it dries to cut.  
**I**nstruct children and other persons to stay out of the mowing area.  
**N**ever mow without good light.  
**G**ather up loose objects. Remove them from the mowing area.

Do not use Mower unless safety devices are in place and operating.



**W**atch for fixed objects and avoid them. They can damage the mower or cause injury.  
**H**ot engines, exhaust pipes and mufflers will cause burns. Avoid contact with them.  
**I**nclines should be mowed carefully. Follow manual directions for your type of mower. Don't mow slopes over 15° or which are rough and uneven.  
**L**earn how the mower works, where controls are, what they do and how to use them in an emergency.  
**E**xamine mower after striking a foreign object or if unit vibrates excessively.

**M**ake no adjustments or repairs without first stopping engine. Disconnect spark plug wire.  
**O**n or near roads, watch out for traffic. Direct discharge away.  
**W**hen mowing, avoid areas where traction is unsure. Look behind before reversing direction of travel.  
**I**n heavy grass raise cutting height. Cut more slowly. Stop engine to clear discharge.  
**N**ever leave mower engine running when not in use.  
**G**asoline should not be added to an engine that is hot or running.



**A**lways allow mower to cool down before storing in an enclosed area.  
**F**oreign material on the mower is dangerous. Clean off grass, leaves, grease and oil before storage.  
**T**ighten all loose nuts bolts and screws to be sure mower is safe and ready for its next use.  
**E**mpy and clean any grass catchers or other accessories  
**R**emove key or disconnect spark plug wire to prevent unauthorized use.

**M**ake sure the mower is not stored near a source of ignition for gasoline or fumes.  
**O**nly original equipment parts or authorized substitutions should be used when servicing t  
**W**hen storing the mower for an extended period remove gasoline from the tank.  
**I**nstruct children to leave the mower alone. It is not a toy.  
**N**ever store gasoline near a source of ignition. Always use an approved container. Keep gasoline  
**G**rease and oil according to the Owner's Manual section on "Lubrication".

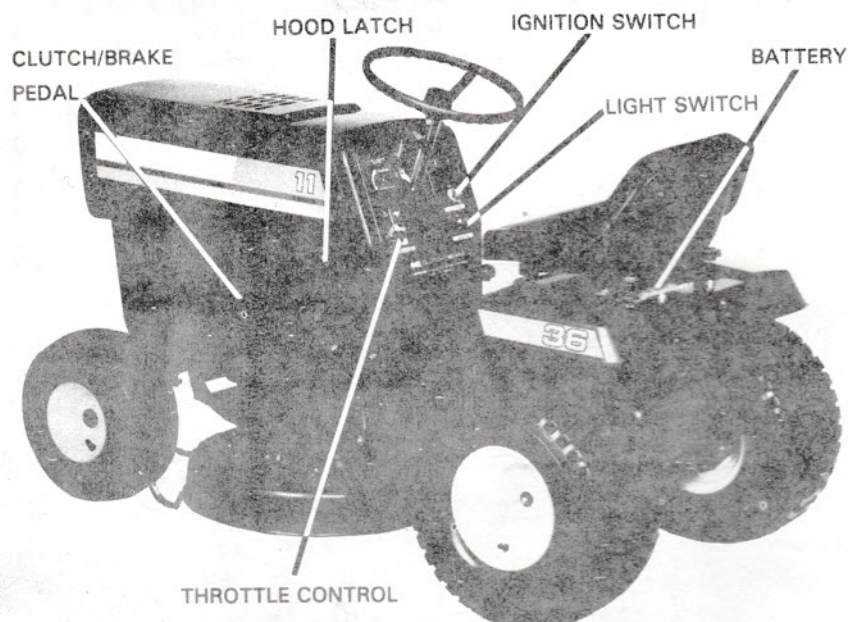
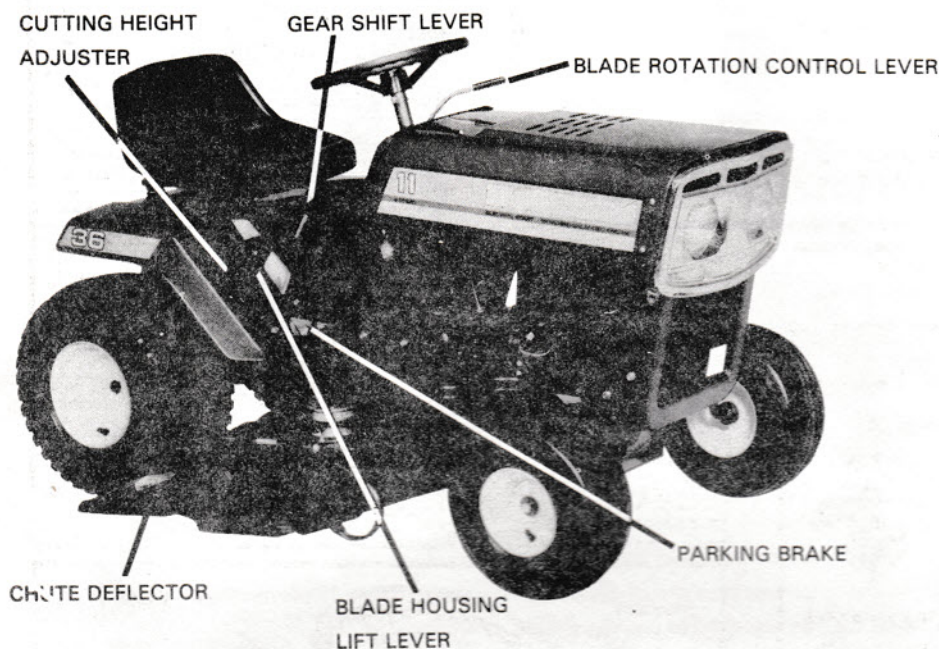


**IMPORTANT—Read your Owner's Manual. Retain the manual for future use and reference.**



## KNOW YOUR PRODUCT

THIS OWNERS MANUAL SHOULD BE READ IN ITS ENTIRETY BEFORE OPERATING YOUR UNIT. If you understand the machine and its operation, efficient and peak performance will be achieved. While reading the manual, compare the illustration with your unit to familiarize yourself with the location of various controls and adjustments. Study the operating instructions and safety precautions thoroughly to insure proper functioning of your unit and to prevent injury to yourself and others. Save this manual for future reference.



PHOTOS ABOVE ARE FOR IDENTIFICATION AND LOCATION OF FEATURES AND CONTROLS AND MAY VARY ON DIFFERENT MODELS.

Your unit is designed to provide power for operating or pulling a large variety of lawn care attachments. It can be used for pulling attachments such as Lawn Sweepers, Lawn Aerator and Hopper Spreaders. It is not designed for use with ground engaging attachments such as Plows, Disc Harrow and Cultivator.

## SPECIFICATIONS

### ENGINE

Single cylinder, air-cooled with remote fuel tank.  
Electric Start with alternator, ammeter  
Ignition Point Gap: 0.508 mm (0.020 in.)  
Spark Plug Gap: 0.762 mm (0.030 in.)

### BLADE HOUSING

Housing: 14 gauge steel, single belt drive  
Cutting Height: 3.8 cm to 11.4 cm (1.5 in. to 4.5 in.)  
Cutting Width: 91.4 cm (36 in.) twin blades

### TRANSAXLE

Peerless: 3 forward speeds with 1 reverse  
Type of Drive: Pulley and belt with clutch/brake pedal engagement



## ASSEMBLY

### TOOLS REQUIRED FOR ASSEMBLY:

1. Standard Screwdriver
2. Adjustable Wrench
3. Pliers

### 1. BATTERY REMOVAL

Battery is located under the seat. Remove battery before adding electrolyte (battery acid) and charging.

**NOTE:** Spilled acid can damage the paint, insulation, and metal parts.

- a. Remove the battery retainer and remove battery.

### 2. ACTIVATING BATTERY

- a. Always wear protective clothing, such as rubber gloves, apron, and goggles when handling battery acid or a battery that has been filled with acid.
- b. Do not spill any acid. Immediately flush area with water or cover with baking soda and flush with water if acid is spilled.

**NOTE:** Read battery acid container instructions before proceeding.

### DANGER — CAUSES SEVERE BURNS

Contains sulphuric acid.

Do not allow contact with skin, eyes or clothing.

To prevent accidents, neutralize excess acid with baking soda and rinse empty container with water.

#### ANTIDOTE:

**External** — Flush with water, then water containing sodium bicarbonate.

**Internal** — Drink large quantities of water, milk, or milk of magnesia. Give whites of eggs beaten with water. Call physician immediately.

**Eyes** — Flush with water for 15 minutes and get prompt medical attention.

#### POISON

— KEEP OUT OF THE REACH OF CHILDREN —

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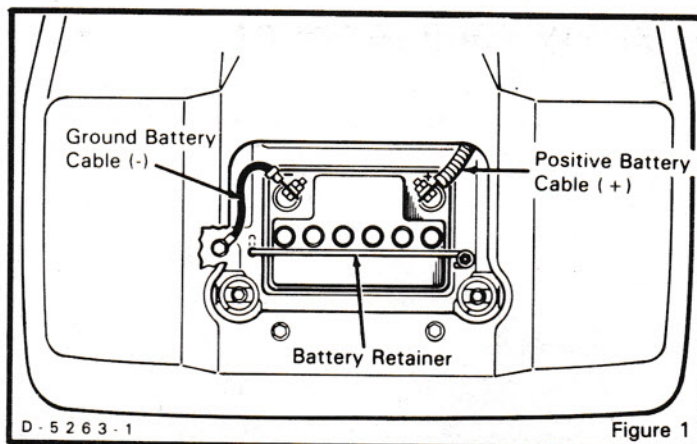


Figure 1

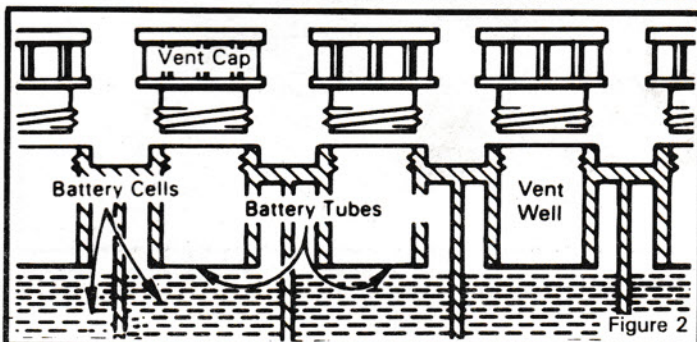


Figure 2

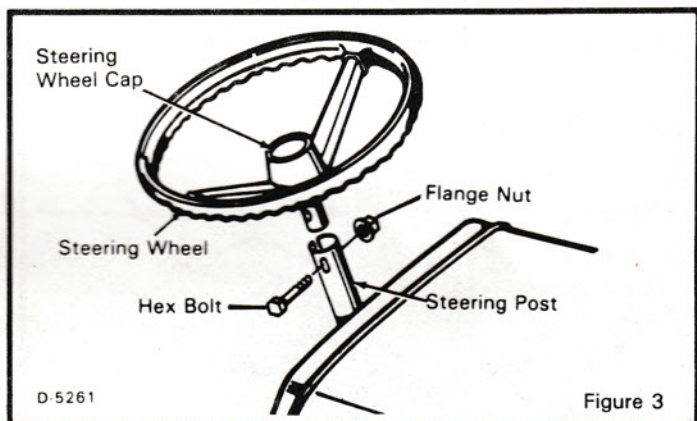


Figure 3

- c. Remove vent caps from the battery and fill each cell with acid until the acid reaches the bottom of the vent well as shown. Do not overfill with acid; the excess will splash out of the vent wells when the battery is charging.
- d. Allow the battery to stand for 20 minutes with the vent caps off. If acid level drops add more acid until proper level is reached. Replace vent caps and rinse battery top with water to remove any acid and wipe dry. Charge battery before replacing in unit. See "Charging Battery".



**AVOID SPARKS, SMOKING, OR OPEN FLAMES;  
FUMES FROM CHARGED ACID ARE EXPLOSIVE.**

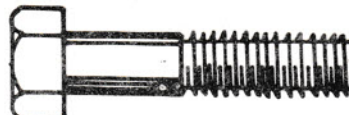
- e. Dispose of all remaining battery acid in container following the procedure below.  
**NOTE:** Do not pour into any sink or drain until acid has been neutralized. Acid is corrosive to metals.
- f. Add water and sodium bicarbonate (baking soda) to acid and stir with a wooden stick. Continue adding baking soda and stirring until all foaming stops.
- g. Rinse empty container and destroy before discarding.

### 3. CHARGING BATTERY

Charge battery at a rate not exceeding 4.5 amperes using a 12-volt battery charger. Do not charge battery longer than 3-4 hours. Fast charging is not recommended. Add water until proper level is reached if acid level drops.

### 4. STEERING ASSEMBLY

Install steering wheel using: hex bolt and flange nut (shown full size below).



1X102

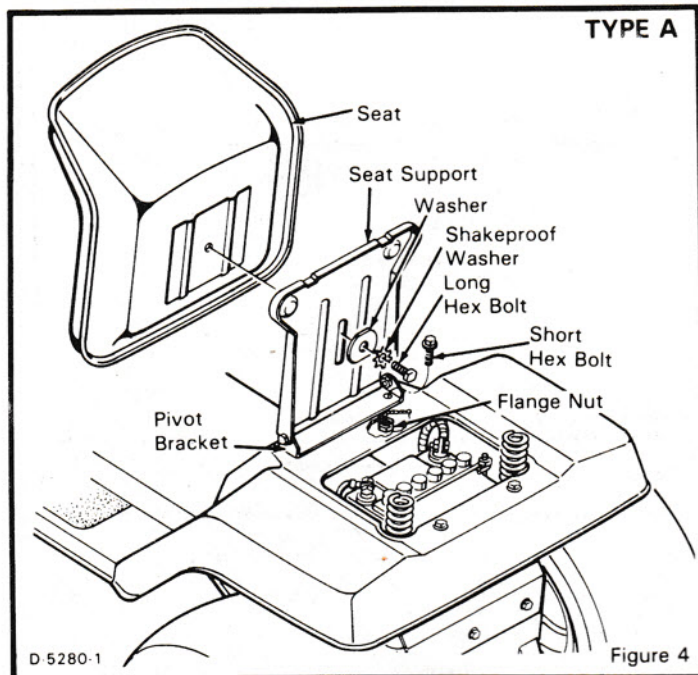


15X88

- a. Mount steering wheel to steering post as shown. Secure with hex bolt and flange nut.
- b. The height of the steering wheel is adjustable. Loosen the hex bolt on the lower end of the steering post. Slide the steering wheel and post to the most comfortable position and securely tighten hex bolt.
- c. If not already attached, assemble the steering wheel cap to the steering wheel.

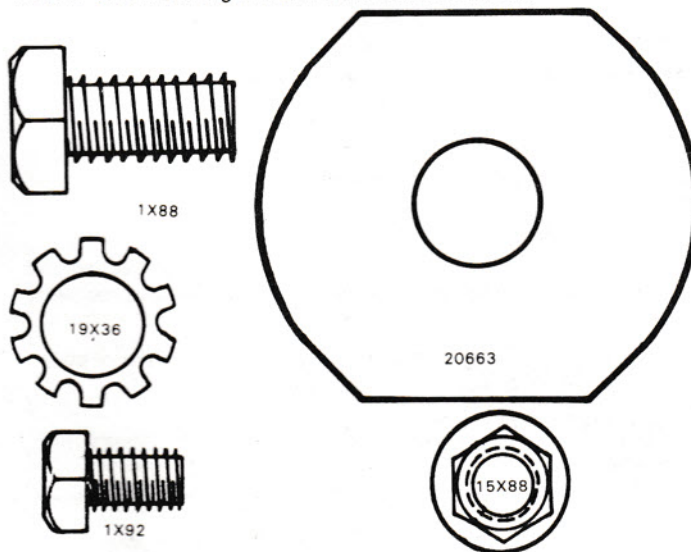


## ASSEMBLY

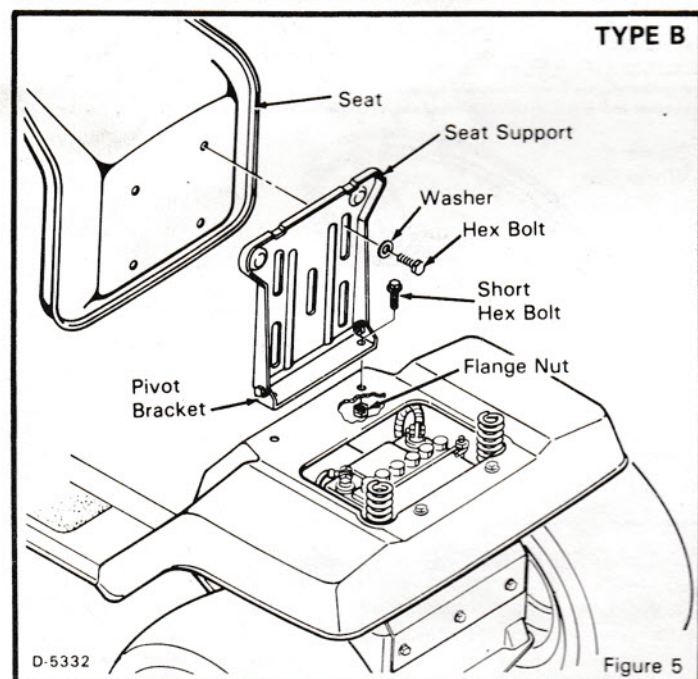


### 5. SEAT ASSEMBLY - TYPE A

Assemble seat using: three hex bolts, one washer, one shakeproof washer and two flange nuts (shown full size below).



- Attach the seat support and pivot bracket assembly to the seat deck as shown and secure with two short bolts and two flange locknuts. Tighten securely.
- The seat support is slotted to provide adjustment of the seat. Set in the most comfortable position and secure with large washer, shakeproof washer and hex bolt as shown. Tighten securely.



### 5a. SEAT ASSEMBLY - TYPE B

Assemble seat using: six hex bolts, four washers, and two flange nuts (shown full size below).



- Attach the seat support and pivot bracket assembly to the seat deck as shown and secure with two short bolts and two flange locknuts. Tighten securely.
- The seat support is slotted to provide adjustment of the seat. Set in the most comfortable position and secure with four hex bolts and four washers as shown. Tighten securely.

### 6. BATTERY REPLACEMENT

Assemble battery using: two hex bolts and two keps nuts (shown full size below).

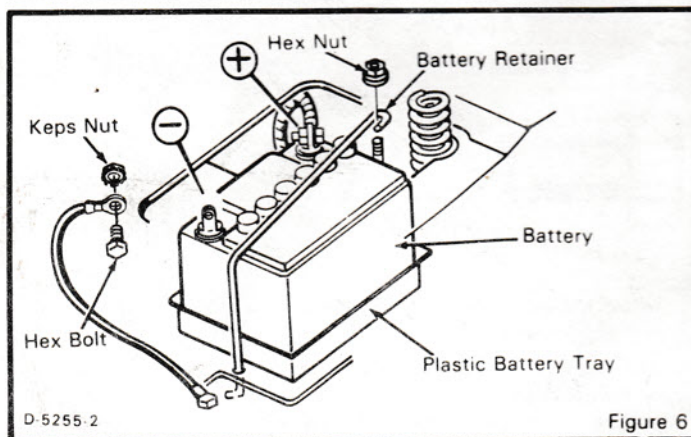


- Set charged battery into unit with the positive (+) battery terminal to the right side. Secure with battery retainer as shown.



**CONNECT THE RED CABLE TO THE POSITIVE (+) BATTERY TERMINAL BEFORE CONNECTING THE BLACK CABLE TO PREVENT ACCIDENTAL GROUNDING AND SPARKING.**

- Connect red cable to the positive (+) battery terminal and secure with hex bolt and keps nut.
- Connect black cable to negative (-) battery terminal and secure with hex bolt and keps nut.





## ASSEMBLY

### 7. ENGINE PREPARATION

**NOTE: FILL ENGINE CRANKCASE WITH OIL BEFORE STARTING.**

The engine has been completely drained of all gasoline and oil. Refer to the "Engine Owner's Manual" for information on oil and gasoline. Before operating be sure to read the "Engine Owner's Manual". It contains important information on safety, preparation, operation, maintenance and storage.



**DO NOT ADD GASOLINE WHILE ENGINE IS RUNNING OR WHEN HOT.**

### 8. TIRES

The tires were over-inflated for shipping purposes. Reduce tire pressure to the recommended p.s.i. (pounds per square inch) indicated on tires. If not indicated, reduce tire pressure to 10-12 p.s.i. Do not inflate tires above the recommended pressure indicated on tires.

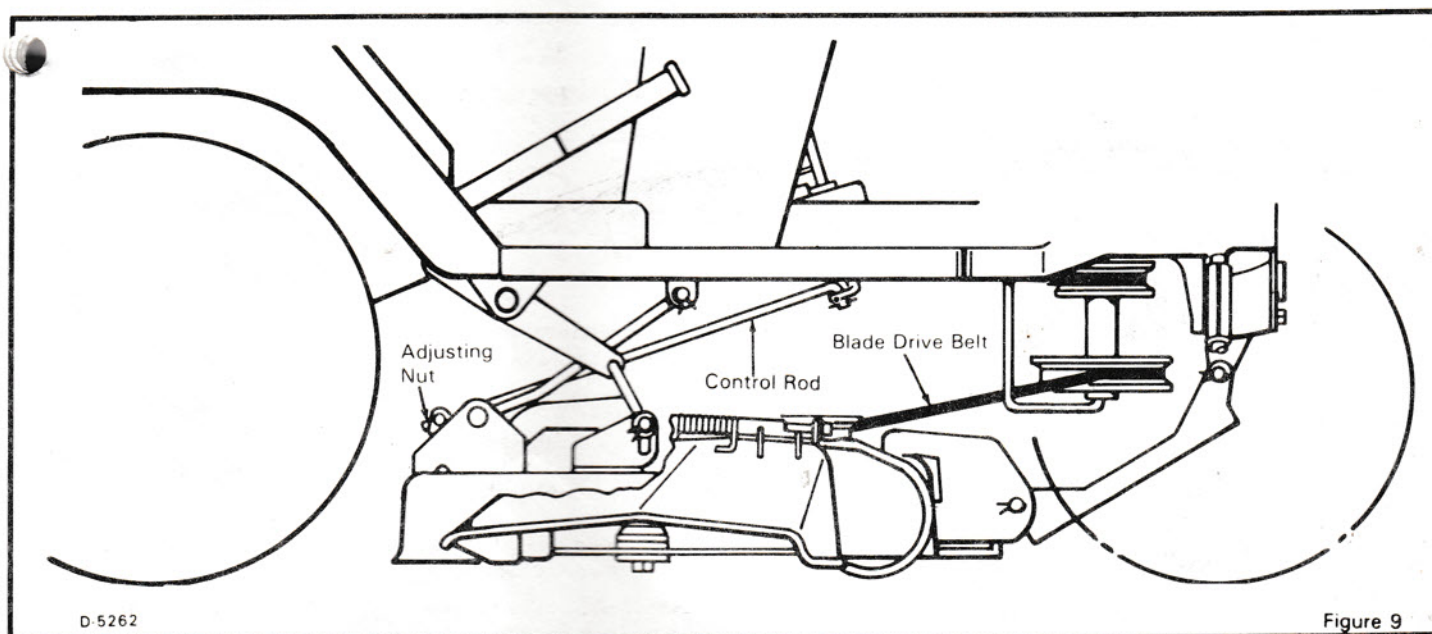
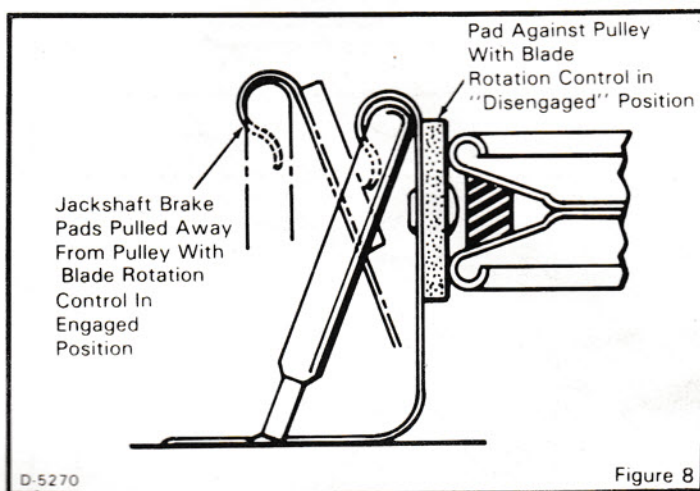
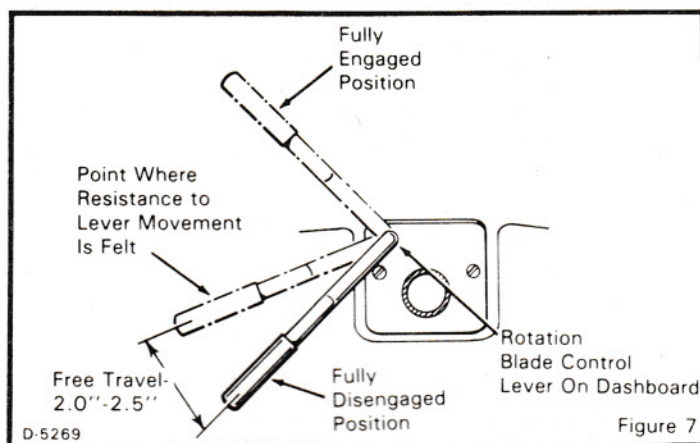
### 9. BLADE HOUSING LEVEL ADJUSTMENT:

Before mowing adjust the cutting level of your Blade Housing. See the "Level Adjustment" instruction found on page 17.

### 10. BLADE ROTATION CONTROL LEVER figure 7&8

Before mowing check the operation of the blade rotation control lever.

- Place the lever in the "Disengaged" position and the mower in the mid-range cutting height position. The lever should have 2.0 inches to 2.5 inches of free travel. Free travel is measured from the fully "Disengaged" position to the point where a distinct resistance to movement is felt (see illustration). Disconnect the control rod from the blade rotation control lever (see figure 9). Turn the control rod clockwise to shorten rod for more free travel and counter-clockwise to lengthen rod for less free travel.
- Correct control rod length adjustment is required for proper "V" belt tension and for proper jackshaft brake operation as shown in figure 8. Shorten control rod length slightly if brake pads do not firmly contact the pulleys with the blade rotation control lever in "Disengaged" position. Replace pads if they become worn or ineffective.
- Occasionally check the operation of the blade rotation control lever. Readjustment may be required whenever the mower drive belt is replaced.





## OPERATION

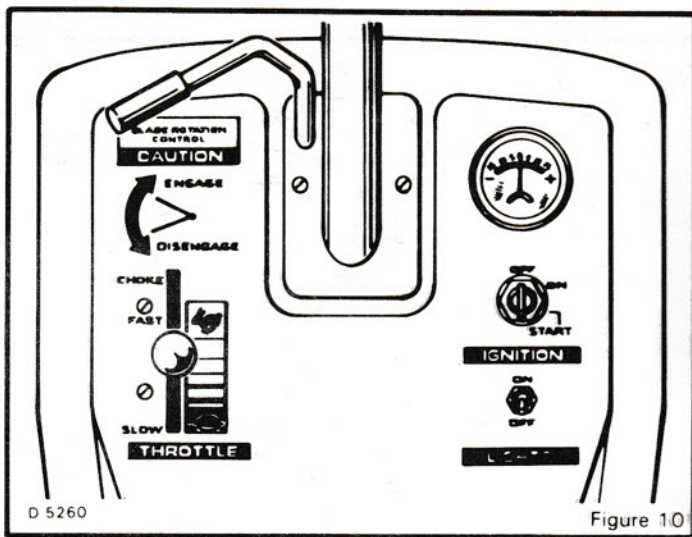


Figure 10

### 1. THROTTLE CONTROL

The throttle control is used to reduce or increase the engine speed. Engine governed speeds are preset at the factory for maximum performance. Do not tamper with parts or adjustments which would increase maximum engine speed above factory setting.

### 2. HEADLIGHTS

The headlight switch is located on the dashboard. The headlight switch and ignition switch must be in the "On" position for headlights to operate. On models with Briggs and Stratton engines the engine must also be running for the headlights to operate.

### 3. BLADE HOUSING LIFT LEVER

Engage the lift lever in the "Transport" position when crossing driveways, sidewalks, or roads. Disengage the lift lever and the blade housing will return to the desired cutting height.

### 4. CUTTING HEIGHT ADJUSTER

The cutting height of the blade housing can easily be set anywhere from 1.5 inches to 4.5 inches. To set the cutting height proceed as follows:

- Raise the lift lever and engage in the "Transport" position.
- Rotate the cutting height adjuster clockwise to raise the stop plate or counter-clockwise to lower the stop plate.
- Mow a short distance to determine if the cutting height is acceptable, readjust if necessary.

### 5. BLADE ROTATION CONTROL LEVER

The blade rotation control lever is used to engage and disengage the mower blade(s). It also is used to operate the optional snow thrower attachment.

- Move the lever to the "Engage" position and the mower housing blade(s) will rotate. Do not engage lever until fully seated and ready for mowing grass.
- Move the lever to the "Disengage" position and the blade(s) will stop rotating. Allow sufficient time for blade(s) to stop rotating before dismounting from tractor.
- The lever must be in the "Disengage" position before the engine will start.

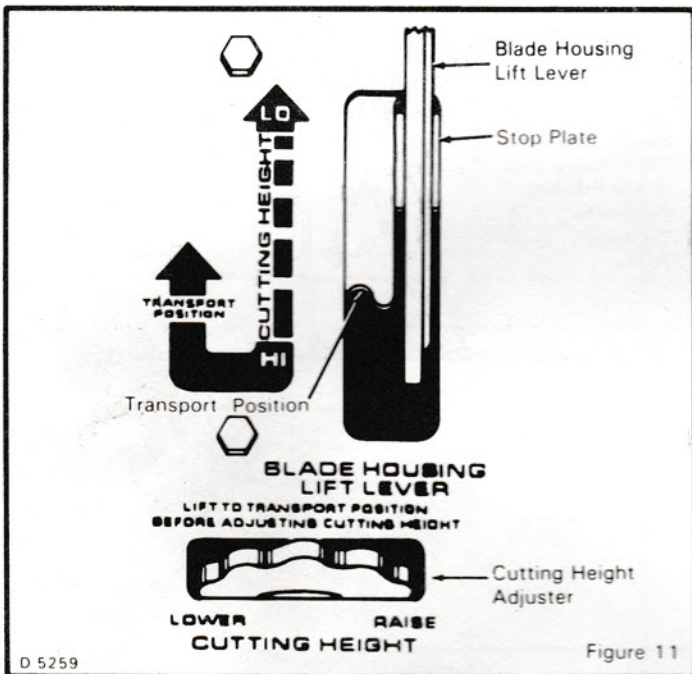


Figure 11



MOVE THE LEVER TO THE "DISENGAGE" POSITION WHEN CROSSING DRIVEWAYS, SIDEWALKS OR ROADS.

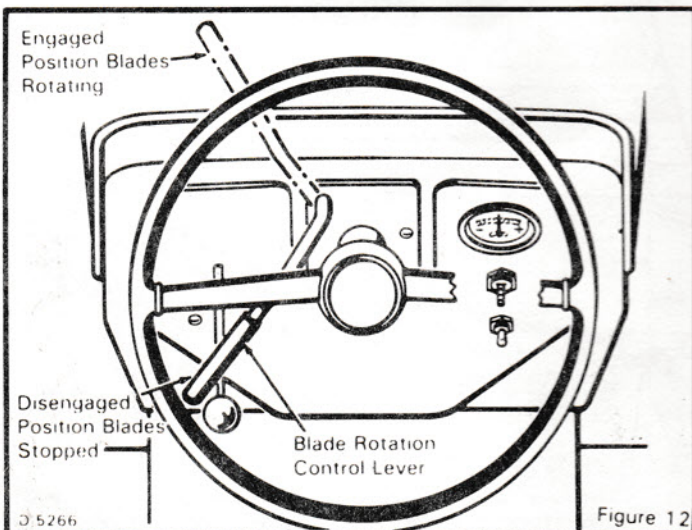


Figure 12



ALWAYS KEEP HANDS AND FEET AWAY FROM THE BLADE(S), BLADE HOUSING, AND DISCHARGE OPENING WHEN ENGINE IS RUNNING.



## OPERATION

### 6. CHUTE DEFLECTOR

The chute deflector is a safety unit and must not be removed. Always maintain the chute deflector in the down position over the chute opening. Should the deflector become damaged, replace immediately.

### 7. DRIVE CLUTCH AND BRAKE figure 14

Your unit has a single clutch/brake pedal that operates both the clutch for changing gears and the brake. Fully depress the clutch/brake pedal to stop your unit. Allow adequate time and distance for brake to take effect when stopping.

### 8. PARKING BRAKE figure 15

Engage the parking brake by fully depressing the clutch/brake pedal and lifting the parking brake knob. Hold the knob up and release the clutch/brake pedal.

The parking brake knob will automatically release when the clutch/brake pedal is fully depressed.



**BEFORE DISMOUNTING: STOP ENGINE, SHIFT TO NEUTRAL, DISENGAGE ATTACHMENT, ENGAGE PARKING BRAKE AND REMOVE IGNITION KEY.**

### 9. TRANSAXLE

**WARNING:** Bring unit to a complete stop before shifting gears or the transaxle may be damaged.

- Fully depress clutch/brake pedal and stop unit.
- Reduce engine speed and move gear shift lever to desired gear.
- Slowly release clutch/brake pedal and resume desired engine speed.
- Do not ride with foot on pedal.
- The recommended gear for operating your unit is shown in the chart below.

OPERATION	GEAR
Trimming	1
Close Quarters	1
Snow Throwing	1
Snow Dozing	1
Normal Mowing	2
Light Mowing	3
Transport	3

### 10. STOPPING YOUR UNIT

- Fully depress clutch/brake pedal and shift to neutral (N).
- Engage the parking brake by lifting parking brake knob upwards into notch. Release pedal and parking brake should remain in notch.



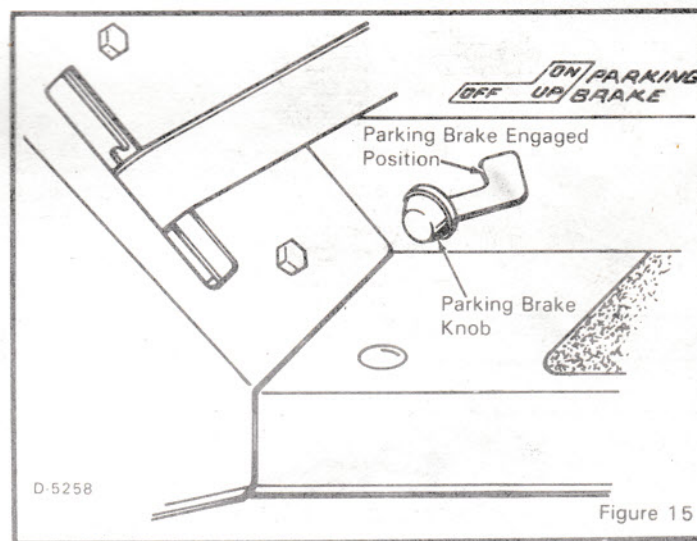
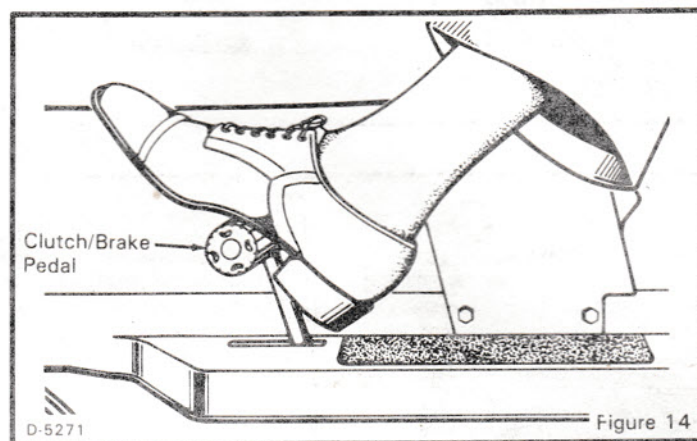
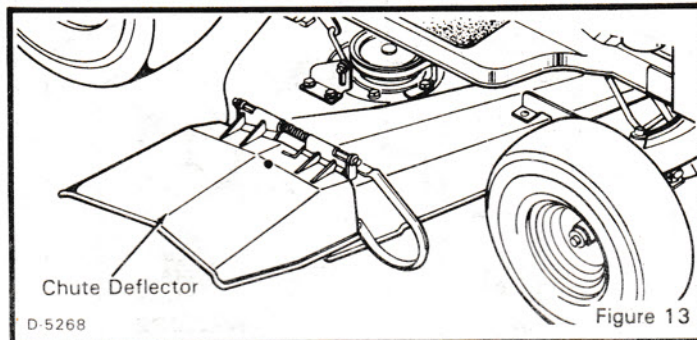
**MAKE SURE PARKING BRAKE WILL SECURELY HOLD UNIT.**

- Place blade rotation control lever in "Disengage" position.
- Move throttle control lever to "Slow" position.
- Turn ignition key to "Off" position. Remove key when leaving unit to prevent unauthorized use.

### 11. STARTING THE ENGINE



**YOUR UNIT IS EQUIPPED WITH A SAFETY INTERLOCK SYSTEM WHICH MUST NOT BE ALTERED IN ANY WAY.**



- Fully depress clutch/brake pedal. Place gear shift lever in "Neutral" (N) position.
- Place blade rotation control lever in the "Disengage" position.
- Move throttle control lever to "Choke" position.
- Turn ignition key to "Start" position. Release ignition key when engine starts. Slowly move throttle control lever to "Slow" position.
- If the engine fails to start after 4 or 5 attempts place throttle control lever in "Fast" position and crank engine several times. If engine will not start see "Save-A-Service Call" chart in this manual.
- Allow the engine to warm-up for a few minutes before operating. When restarting a hot engine place throttle control between "Fast" and "Slow" position.
- Turn the ignition key to "Off" position to stop the engine.



## OPERATION

### 12. OPERATION OF UNIT

- Place throttle control lever in "Slow" position.
- Fully depress clutch/brake pedal and move gear shift lever to desired gear.
- Slowly release clutch/brake pedal to start motion.
- Move throttle control to a faster position or stop unit and shift to a higher gear if speed is too slow. **NOTE:** Always select a safe speed for proper control of your unit depending upon the area being mowed.
- For mowing heavy grass, place throttle control in "Fast" position and place gear shift lever in first gear.

### 13. OPERATION ON HILLS



**DO NOT DRIVE UP OR DOWN HILLS WITH SLOPES GREATER THAN 15°. NEVER DRIVE ACROSS ANY SLOPE.**



**REDUCE SPEED AND EXERCISE EXTREME CAUTION ON SLOPES AND IN SHARP TURNS TO PREVENT TIPPING OR LOSS OF CONTROL. BE ESPECIALLY CAUTIOUS WHEN CHANGING DIRECTION ON SLOPES.**

- Shift to the lowest gear before starting up or down hills. Move throttle control lever to a slower position if necessary.
- AVOID STOPPING OR SHIFTING ON HILLS.** If stopping is absolutely necessary, quickly depress clutch/brake pedal and engage parking brake.
- To restart, make sure gear shift lever is in low gear and throttle is in "Slow" position. Slowly release clutch/brake pedal.
- Leave enough room when stopping and starting to allow slight downhill roll as brake releases and clutch engages.

## MAINTENANCE

Use the following maintenance schedule to keep your unit in good operating condition. All maintenance information on the engine is found in the "Engine Owner's Manual".



**BEFORE MAKING ANY INSPECTION, ADJUSTMENT (EXCEPT CARBURATOR) OR REPAIR, DISCONNECT SPARK PLUG WIRE.**

### EVERY 10 HOURS

#### 1. LUBRICATION



Oil with SAE 30 motor oil every 5 to 10 hours.

Grease every 5 to 10 hours.

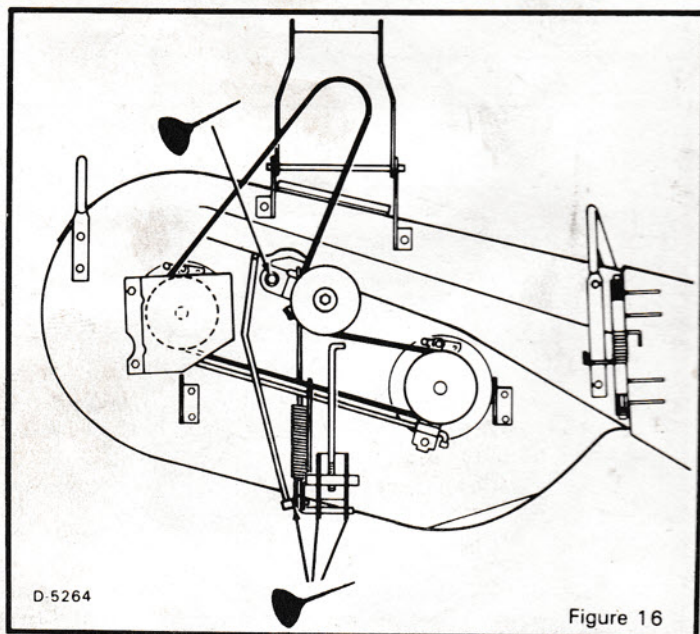


Figure 16

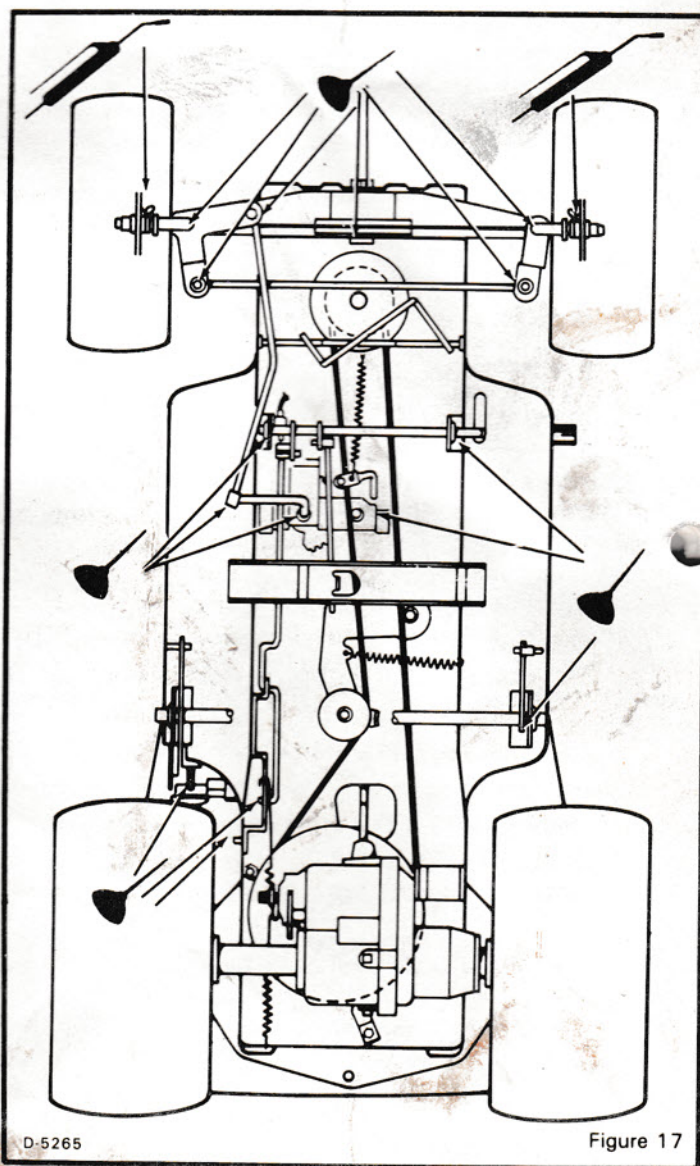


Figure 17



# MAINTENANCE

## 2. CHECK BATTERY

- Keep battery terminals clean and battery cables tight.
- Check battery acid level in each cell. Acid should reach bottom of vent well. Add water if necessary.

**IMPORTANT:** Permanent damage to the battery can result if the acid level is not properly maintained.

## EVERY 25 HOURS

### 1. CLUTCH/BRAKE PEDAL ADJUSTMENT figure 19

Check for 1/8 inch clearance between rear of clutch/brake pedal and back of slot in running board. If there is more or less than 1/8 inch clearance an adjustment is required.

- Disconnect the adjusting nut from the lever assembly (see illustration).
  - Rotate the adjusting nut until a clearance of 1/8 inch is achieved with the clutch rod reassembled to the lever assembly. Lengthening the clutch rod will increase the pedal clearance.
- Check the brake rod after any adjustment to the pedal as explained in (f) under "CHECK DRIVE BRAKE".

### 2. CHECK DRIVE BRAKE

Fully depress clutch/brake pedal and engage the parking brake. Push your unit, if the rear wheels turn the drive brake needs adjusting. Release parking brake and proceed as follows:

- Loosen the hex jam nut (see figure 20).
- Push forward on the brake arm and turn the adjusting nut clockwise until there is a gap of 0 to 1/32 inch between the stop bolt and the brake arm (see figure 20).
- Hold the adjusting nut and securely tighten the hex jam nut.
- Push forward on the brake arm and check for a gap of 0 to 1/32 inch.
- Engage the parking brake. Push your unit, if the rear wheels do not turn the brake is in correct adjustment.
- Release the parking brake and check for proper adjustment of the brake rod (figure 21). The center end of the brake rod must line up with the center of the "V" notch as shown in figure 21.
- If adjustment of brake rod is necessary, remove the hair pin and washer from the end of the brake rod. Rotate brake rod until the center end of the rod lines up with the center of the "V" notch. Replace hairpin.
- Correct brake rod adjustment will result in a slight clearance between the parking brake knob and the forward end of the frame slot when the clutch/brake pedal is fully depressed (see figure 22).

### 3. CHECK TIRE PRESSURE

Tires with incorrect air pressure will cause a rough ride and when mowing an uneven cut. Keep tires inflated to the p.s.i. (pounds per square inch) indicated on tire. If not indicated, inflate to 10-12 p.s.i.

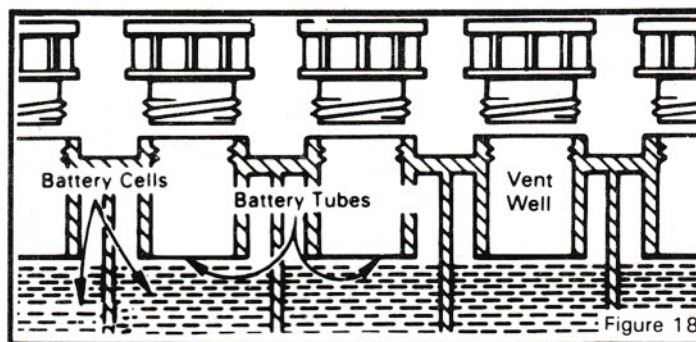


Figure 18

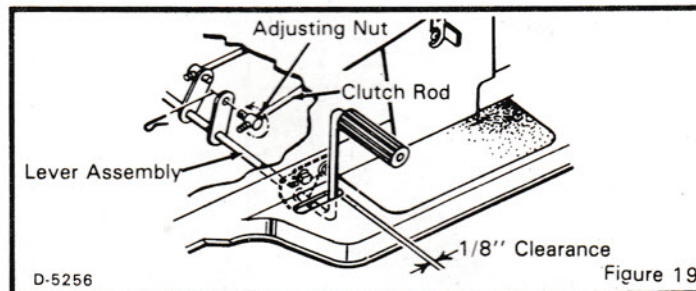


Figure 19

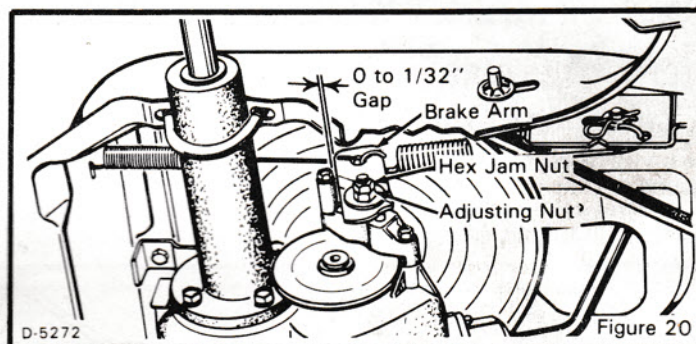


Figure 20

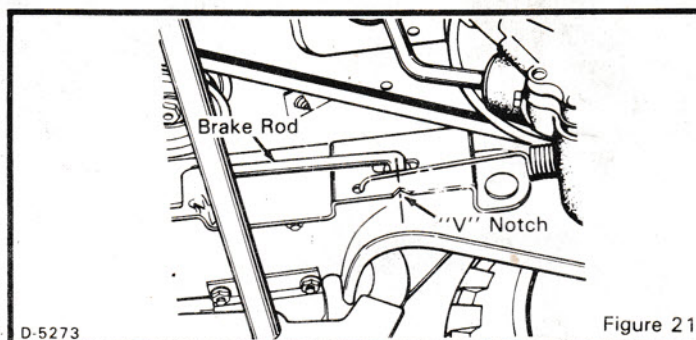


Figure 21

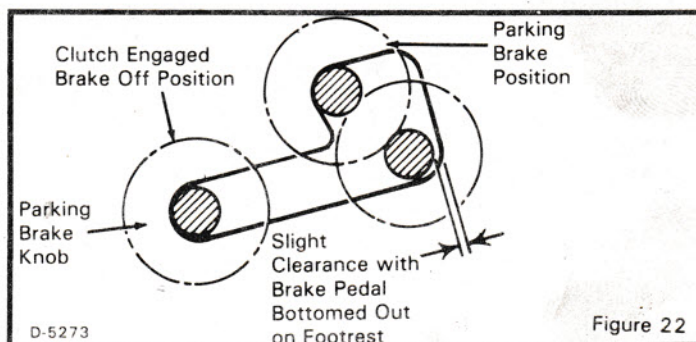


Figure 22



## MAINTENANCE

### 2. CHECK TRANSAXLE OIL

Check oil in transaxle every 50 hours of operation. Remove oil fill plug and check oil level. Oil should be even with hole. If not, add SAE 90 gear lubricant.

### AS NEEDED

#### 1. REMOVAL OF BLADE HOUSING

Remove the blade housing from the chassis to service the drive belt, blade(s) or brake components. This may be done as follows:

- Place the lift lever in "Lo" position and move the blade rotation control lever to the "Disengage" position.
- Remove hair pins and washers from right and left hanger rods. See drawings "A" and "B" below.
- Disconnect control rod from the blade rotation control lever. See drawing "D" below.
- Disconnect link rod from chassis. See drawing "C" below.
- Disconnect the front hanger from the chassis. See drawing "E" below.
- Remove blade drive belt from engine stack pulley. Belt removal may be easier if the four screws holding the belt guide at the stack pulley are loosened and the belt guide moved away from the stack pulley.
- Turn steering wheel completely to the left and slide mower housing out from the right side of the chassis.

#### 2. REPLACEMENT OF BLADE HOUSING

- Turn steering wheel completely to the left. Slide blade housing under from the right side of the chassis.
- Place the V-side of the blade drive belt on engine stack pulley. The belt must be inside of the belt guide. Position belt guide 1/4 inch from stack pulley and tighten the four belt guide screws.
- Assemble front hanger to chassis with rod and secure with hair pins.
- Attach right and left hanger rods to mower housing. Secure with washers and hair pins.
- Attach link rod to chassis support with hair pin.
- Connect the control rod to the blade rotation control lever and secure with hair pin.
- Engage blade rotation control lever. Check to be sure belt is properly seated in all pulleys and inside of all belt guides (see figure 26).

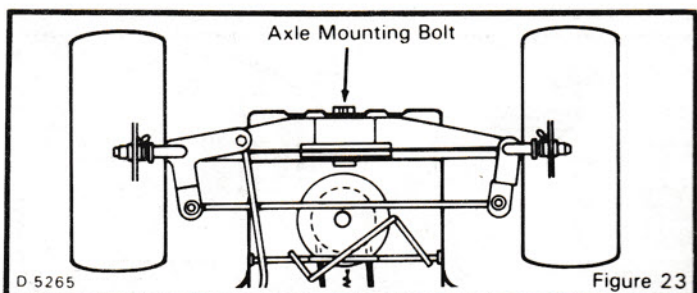


Figure 23

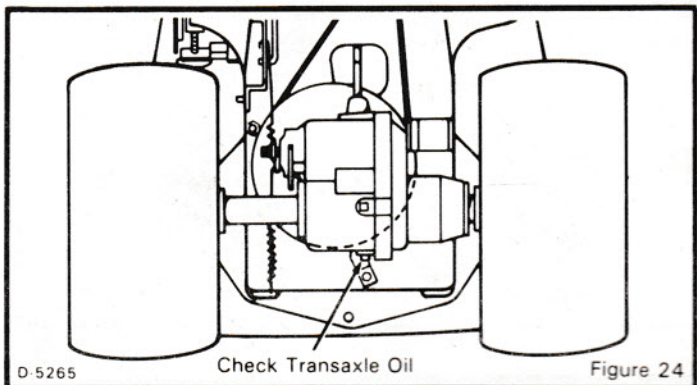


Figure 24

### EVERY 50 HOURS

#### 1. FRONT AXLE ADJUSTMENT

The front axle is supported by an axle support bracket and can be adjusted by tightening the axle mounting bolt. After approximately 50 hours of operation the front axle may become loose. If so, tighten the axle mounting bolt as required.

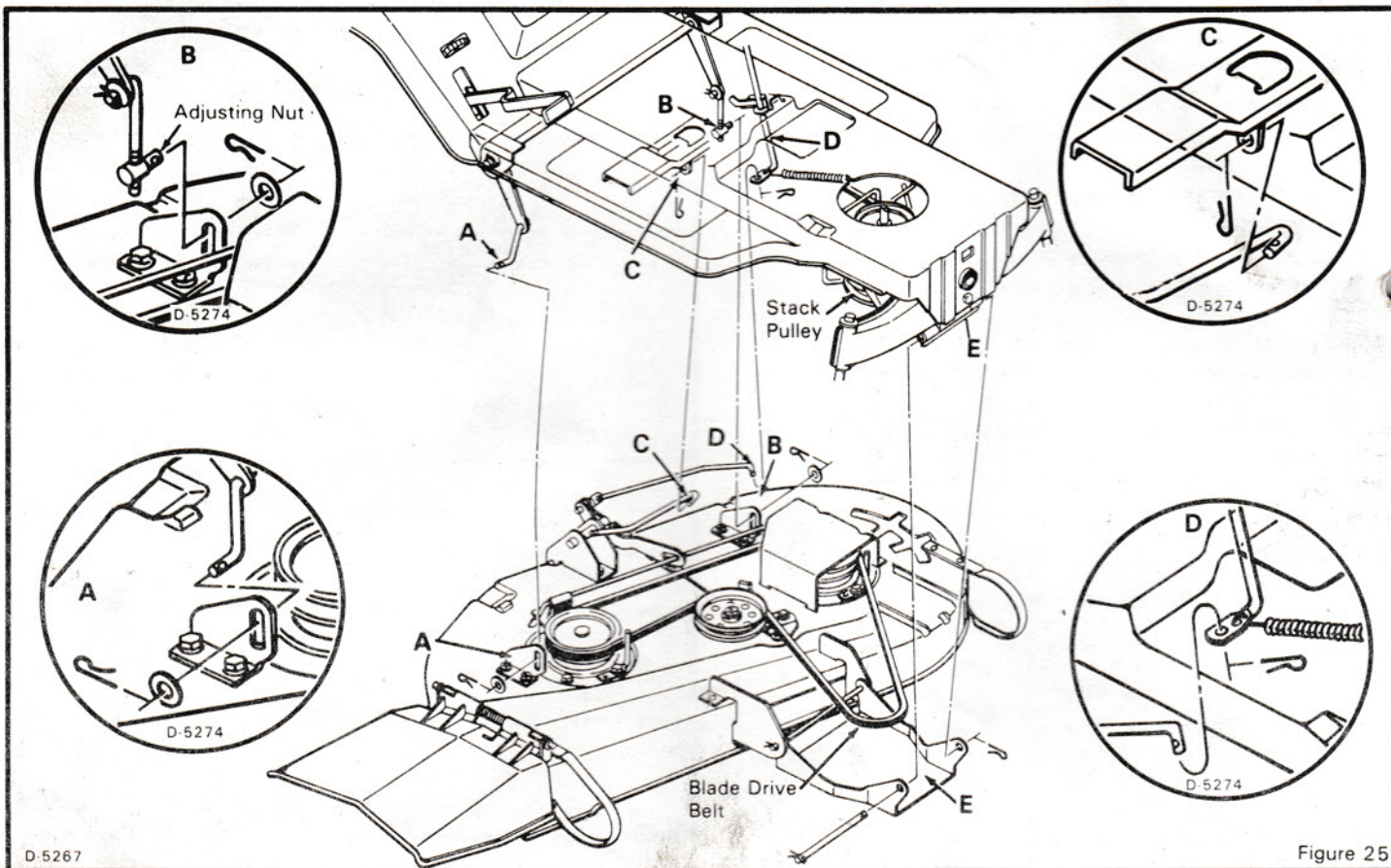


Figure 25



## MAINTENANCE

### 3. BELT REPLACEMENT—BLADE HOUSING

- Remove blade housing as outlined under "Removal of Blade Housing".
- Remove the jackshaft pulley cover.
- Remove the hex nut from the idler pulley and remove the idler pulley.
- Carefully spring the two brake pads away from the jackshaft pulley and remove belt. Replace only with factory replacement belt.
- Carefully spring the two brake pads away from the jackshaft pulleys. Install new belt with the "V" side of the belt fitted into the jackshaft pulley as shown in drawing "A".
- Reassemble idler pulley with the flat side of the belt against the idler pulley as shown in drawing "B". Secure idler pulley with hex nut.
- Reassemble the jackshaft pulley cover.
- Replace blade housing as outlined under "Replacement of Blade Housing".
- Before mowing, check the operation of the blade rotation control lever as outlined in the "Assembly" section of this manual.



**OPERATE MOWER ONLY WITH BELT INSIDE OF THE BELT GUIDES.**

### 4. BLADE HOUSING LEVEL ADJUSTMENT



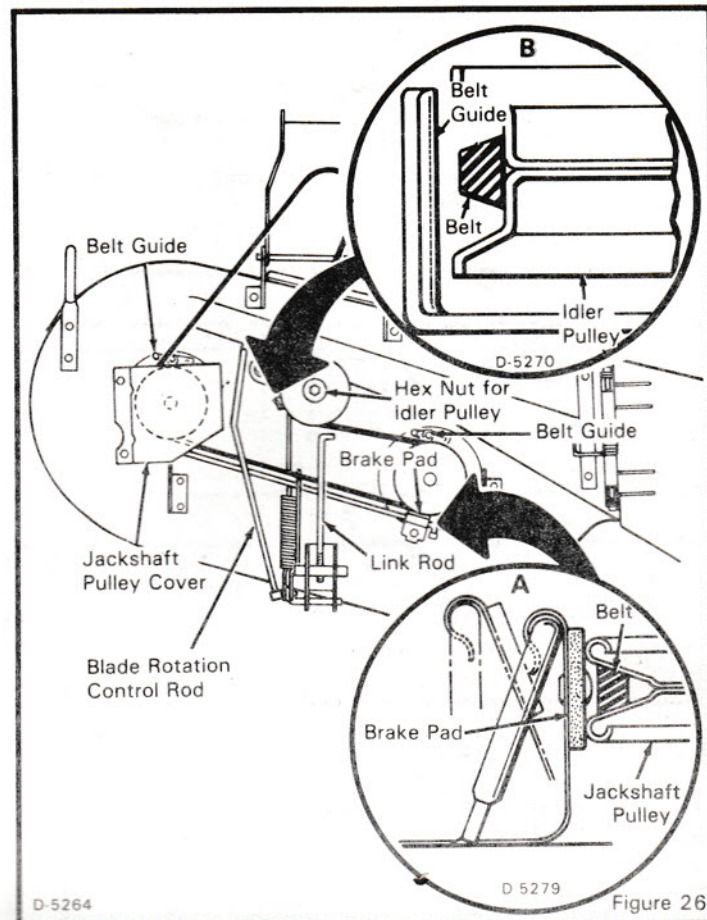
**TURN THE IGNITION SWITCH TO THE OFF POSITION AND DISCONNECT THE SPARK PLUG WIRE TO PREVENT ANY ACCIDENTAL STARTING BEFORE MAKING ANY INSPECTION, ADJUSTMENT, OR REPAIR.**

- Place the unit on a hard level surface, such as a driveway or garage floor.
- Check tire pressure. Incorrect tire pressure will cause an uneven cut. Keep tires inflated between 10-12 p.s.i. (pounds per square inch).
- Engage the Blade Rotation Control Lever and adjust the cutting height to the mid-range position.
- There are two basic adjustments for leveling your blade housing, the FRONT TO BACK and the SIDE TO SIDE. To adjust proceed as follows:

#### FRONT TO BACK ADJUSTMENT

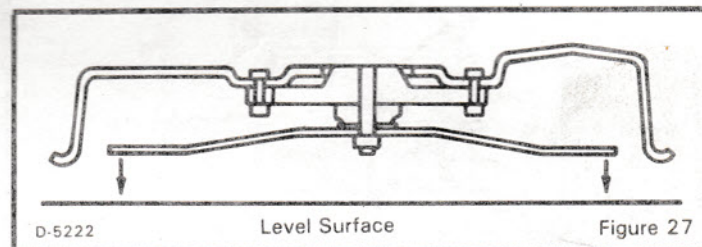
Position the right cutting blade in line with the length of the unit. Using a small ruler, measure from the level surface to the underside of the blade tips. The front blade tip should be one-eighth inch lower than the rear blade tip. If not, then adjust as follows:

- Disconnect the link rod (see figure 26) from the chassis support by removing the hairpin.
- Turning the link rod clockwise will shorten the rod lowering the front blade tip and counter-clockwise will lengthen and raise the front blade tip.
- Replace the link rod into the support channel. Check the front and rear blade tips for correct adjustment. Secure with hairpin.



D-5264

Figure 26



D-5222

Level Surface

Figure 27

#### SIDE TO SIDE ADJUSTMENT

Position both right and left blades straight across the blade housing. Using a small ruler, measure from the level surface to the underside of the blade tips at each side of the mower housing. The outer blade tips should be the same height. If not, the adjust as follows:

- Disconnect the adjusting nut from the lifter assembly by removing the hairpin (see drawing "B" in figure 25 for location of adjusting nut).
- Turning the adjusting nut clockwise will shorten the rod raising the left side of the blade housing. Turning the adjusting nut counter-clockwise will lengthen the rod and lower the left side of the blade housing.
- Replace the adjusting nut into the lifter assembly. Check the blade tips for correct adjustment. Secure adjusting nut with hairpin.

### 5. FUEL FILTER

Occasionally check fuel filter. If fuel filter is dirty or clogged the engine may run rough or loose power. Remove old filter and replace with new filter.



**FUEL TANK MUST BE EMPTY BEFORE REPLACING FUEL LINE OR FILTER.**



## MAINTENANCE

### 6. BLADE HOUSING CLEANING



**STOP ENGINE AND DISCONNECT SPARK PLUG WIRE BEFORE ATTEMPTING TO CLEAN BLADE HOUSING.**

Clean collected grass and debris from top of mower housing to ensure proper operation of the mower belt drive system. Keep the underside of the blade housing clean and free from grass build-up to maintain cutting performance. Clean the underside after each mowing if cutting heavy, moist grass.

### 7. BLADE MAINTENANCE

The blade(s) will become worn after prolonged use. Cutting efficiency will be reduced and the blade(s) should be replaced with factory replacement blade(s). To replace blade(s) proceed as follows:

- Remove blade housing as outlined under "Removal of Blade Housing".
- Block blade with a piece of wood to prevent rotation and remove blade mounting nut and blade.
- Note the word UP stamped on blade. Replace blade with the side marked UP onto the jackshaft first. This will insure that the blade is assembled with the unsharpened edges turned up.
- Secure blade with blade mounting nut. Tighten nut to 30 foot pounds of torque.

#### BLADE CARE GUIDE

- A bent blade or an unlevel blade housing will result in an uneven cut. See "Blade Housing Level Adjustment".
- A dull blade will result in splitting or bruising the grass ends causing rapid browning. Maintain a sharp cutting edge by filing or grinding the cutting edge, retaining the bevel edge.
- Stop the mower and check blade after striking an object. A bent or damaged blade will cause vibration which is a hazard and must be replaced.
- The blade adapter is designed to break, preventing engine damage, when the blade strikes an object. Stop the mower and check for a broken blade adapter if the blade strikes a large rock, tree stump, or other hidden objects.

### 8. DRIVE BELT REPLACEMENT

- Remove blade housing as outlined under "Removal of Blade Housing".
- Engage parking brake. Turn front wheels completely to left.
- Remove hex nut from idler pulley and remove pulley.
- Loosen screw on belt guide #2. Loosen nut on belt guide #3.
- Remove belt from drive pulley and stack pulley. Guide belt around gear shift lever and remove from unit.
- Replace belt with factory replacement.
- Guide belt around gear shift lever (see figure 30) and attach to stack pulley first and then drive pulley.
- Position belt guide #2 1/8 inch from drive pulley and secure screw. Position belt guide #3 1/8 inch away from drive pulley and tighten nut securely.
- Reassemble idler pulley with flat side of the belt against the idler pulley as shown in drawing "A". Secure idler pulley with hex nut.
- Before operating check clutch/brake pedal adjustment under "Every 25 Hours" in the Maintenance Section.
- Replace blade housing as outlined under "Replacement of Blade Housing".

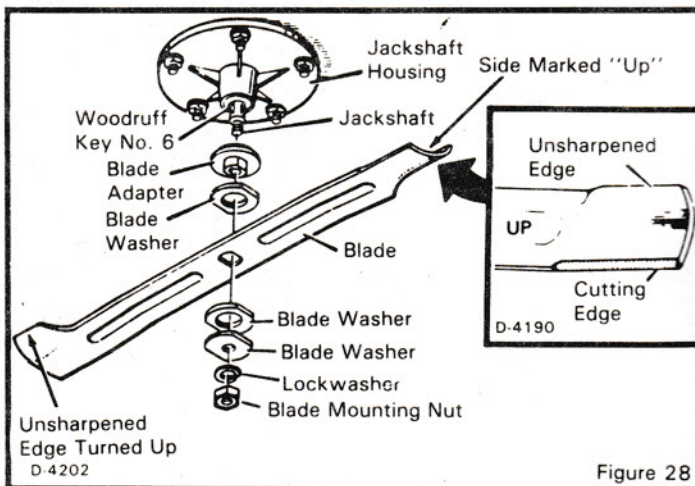


Figure 28

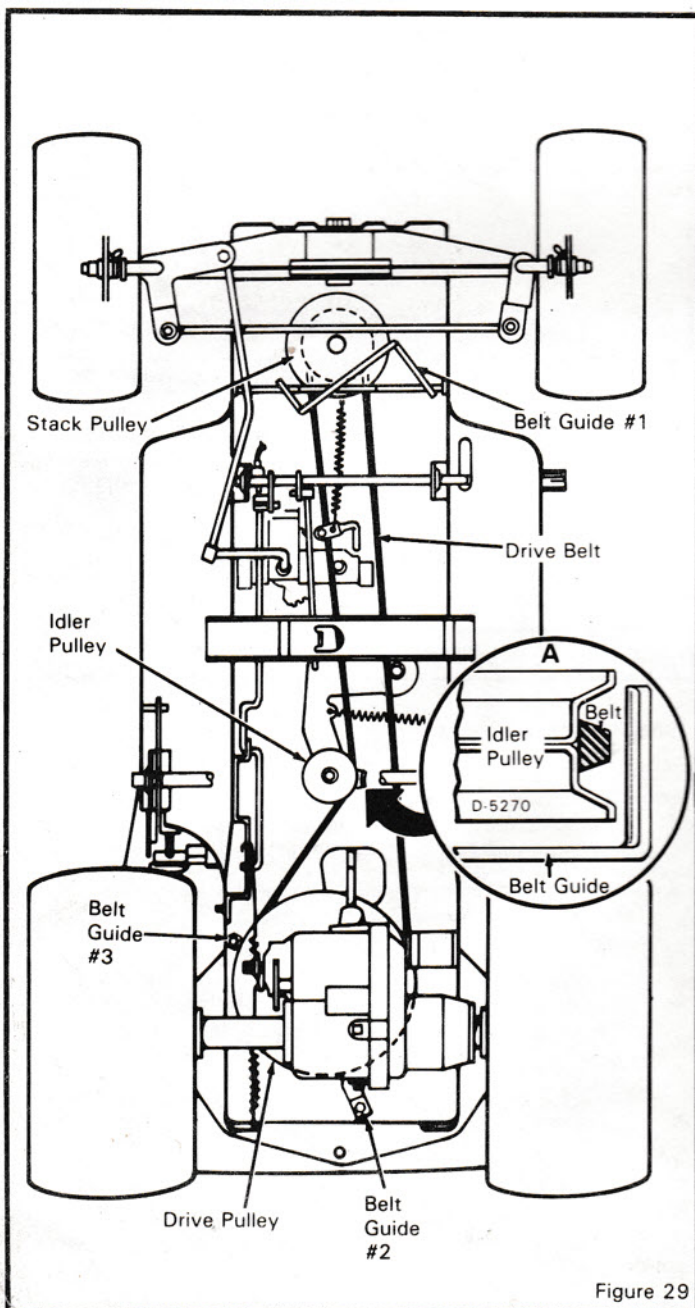


Figure 29

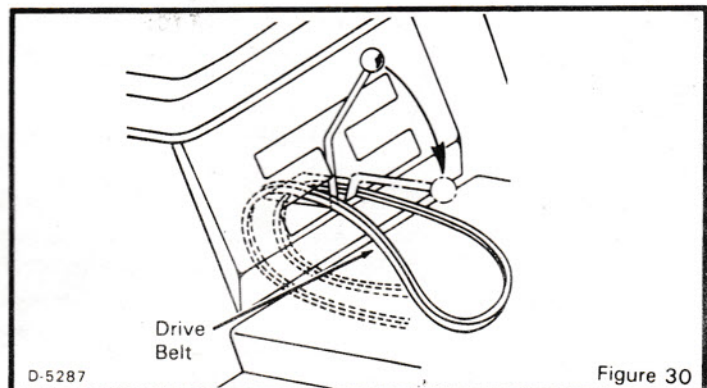


Figure 30



## SAVE—A—SERVICE CALL

Problem	Cause	Remedy
Engine fails to start	<p>A. Key not switched to "On".</p> <p>B. No fuel in tank.</p> <p>C. Spark plug lead wire disconnected.</p> <p>D. Throttle control lever not in choke position on cold engine.</p> <p>E. Blade rotation control lever in "Engage" position.</p> <p>F. Gear shift lever in gear or clutch not fully depressed.</p> <p>G. Cuts in wires or bare wires causing a short in the wiring system. Loose or broken electrical connections.</p> <p>H. Engine flooded.</p> <p>I. Fouled spark plug.</p> <p>J. Limit switch(es) loose or wires running to the switch(es) loose or unplugged.</p> <p>K. Improper carburetor adjustment.</p> <p>L. Stale gasoline. <b>Note:</b> Gas stored for several months loses its ability to burn effectively.</p> <p>M. Water in fuel.</p> <p>N. Obstructed or leaking fuel line or dirty fuel filter.</p> <p>O. No spark at spark plug.</p>	<p>A. Turn key to "On".</p> <p>B. Fill tank if empty.</p> <p>C. Connect lead wire.</p> <p>D. Place throttle control lever in "Choke" position.</p> <p>E. Move blade rotation control lever to "Disengage" position.</p> <p>F. Place gear shift lever in neutral, depress clutch fully.</p> <p>G. Using wiring diagram trace and examine all wires and connections. Replace defective electrical connections and tape any cuts or bare spots in the wiring with electrical tape.</p> <p>H. Remove spark plug and dry the plug. Crank engine with plug removed and throttle control in the "Off" or "Slow" position. Replace spark plug, attach plug wire securely and resume starting procedures.</p> <p>I. Remove spark plug and reset gap to .030". Spark plug should be changed once a season.</p> <p>J. Tighten limit switch(es). See wiring diagram to locate the switch(es) on your unit.</p> <p>K. Adjust carburetor. (See "Engine Owner's Manual").</p> <p>L. Drain tank and refill with fresh gasoline.</p> <p>M. Drain tank. Remove spark plug and dry the electrodes. Replace the plug and fill tank with fresh gasoline.</p> <p>N. Remove any obstructions and replace the fuel line if any leaking is found. Replace fuel filter. <b>Note:</b> Fuel tank must be empty before replacing fuel line or filter.</p> <p>O. Replace with new spark plug. Have a service shop replace or adjust distributor points.</p>
Engine fails to start (Electric start only)	<p>A. Blown fuse.</p> <p>B. Dead battery</p> <p>C. Dirty or loose battery connections.</p> <p>D. Battery acid level too low.</p> <p>E. Bad solenoid.</p>	<p>A. Replace fuse. <b>Note:</b> Before replacing fuse look for possible cause of blown fuse. Trace all wires using wiring diagram. Replace any defective electrical connections, and tape any cuts or bare spots in the wiring with electrical tape.</p> <p>B. Recharge battery. (See Maintenance).</p> <p>C. Clean battery terminal and tighten the connections.</p> <p>D. Add water to battery then recharge. (See Maintenance).</p> <p>E. Have solenoid checked by a qualified serviceman.</p>
Hard starting or loss of power	<p>A. Spark plug wire loose.</p> <p>B. Dirty air filter.</p> <p>C. Cutting too low for the conditions overloading engine.</p> <p>D. Clogged blade housing.</p> <p>E. Improper carburetor adjustment.</p> <p>F. Choke partially closed.</p> <p>G. Lack of oil in engine.</p> <p>H. Engine overheating</p> <p>I. Stale gasoline.</p> <p>J. Clogged fuel filter.</p>	<p>A. Connect and tighten spark plug wire.</p> <p>B. Clean air filter. (See "Engine Owner's Manual").</p> <p>C. Raise the cutting height adjustment.</p> <p>D. STOP ENGINE. (See Maintenance about cleaning underside of blade housing).</p> <p>E. Adjust carburetor. (See "Engine Owner's Manual").</p> <p>F. Open choke by resetting throttle control lever.</p> <p>G. Fill with proper oil.</p> <p>H. Clean cooling fins on engine of any grass accumulation. (See "Engine Owner's Manual").</p> <p>I. Drain tank and refill with fresh gasoline.</p> <p>J. Replace fuel filter. <b>Note:</b> Fuel tank must be empty before replacing fuel line or filter.</p>



## SAVE—A—SERVICE CALL (Cont.)

Problem	Cause	Remedy
Engine operation rough	<ul style="list-style-type: none"> <li>A. Dirt in gas tank.</li> <li>B. Dirty air filter.</li> <li>C. Water in fuel.</li> <li>D. Vent in gas cap plugged.</li> <li>E. Improper carburetor adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>A. Remove any dirt and fill tank with fresh, clean gasoline. Replace fuel filter.</li> <li>B. Clean air filter. (See "Engine Owner's Manual").</li> <li>C. Drain fuel tank. Remove spark plug and dry plug electrodes. Replace plug and fill tank with fresh, clean fuel.</li> <li>D. Clear vent or replace gas cap.</li> <li>E. Adjust carburetor. (See "Engine Owner's Manual").</li> </ul>
Occasional skip (hesitates) at high speed	<ul style="list-style-type: none"> <li>A. Carburetor idle speed too slow.</li> <li>B. Spark plug gap too close.</li> <li>C. Carburetor needle valve adjusted improperly.</li> <li>D. Dirty air filter.</li> </ul>	<ul style="list-style-type: none"> <li>A. Adjust carburetor. (See "Engine Owner's Manual").</li> <li>B. Remove spark plug and adjust gap to .030".</li> <li>C. Adjust carburetor. (See "Engine Owner's Manual").</li> <li>D. Clean air filter. (See "Engine Owner's Manual").</li> </ul>
Idles poorly	<ul style="list-style-type: none"> <li>A. Spark plug fouled or gap too wide.</li> <li>B. Dirty air filter.</li> <li>C. Improper carburetor adjustment.</li> <li>D. Dirt or obstructions in fuel system.</li> <li>E. Throttle control not adjusted properly.</li> <li>F. Faulty spark plug.</li> </ul>	<ul style="list-style-type: none"> <li>A. Remove and reset gap to .030". Spark plug should be changed once a season.</li> <li>B. Clean air filter. (See "Engine Owner's Manual").</li> <li>C. Adjust carburetor. (See "Engine Owner's Manual").</li> <li>D. Clean tank and remove any obstructions in fuel line. Replace fuel filter.</li> <li>E. Adjust throttle control. (See "Engine Owner's Manual").</li> <li>F. Replace with new spark plug.</li> </ul>
Engine overheats	<ul style="list-style-type: none"> <li>A. Clogged engine cooling fins.</li> <li>B. Engine oil level too low.</li> <li>C. Grass and debris restricting air flow in engine compartment.</li> <li>D. Improper carburetor adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>A. Clean cooling fins. (See "Engine Owner's Manual").</li> <li>B. Fill with proper oil.</li> <li>C. Remove any grass or debris from engine compartment. (See "Engine Owner's Manual").</li> <li>D. Adjust carburetor. (See "Engine Owner's Manual").</li> </ul>
Excessive vibration	<ul style="list-style-type: none"> <li>A. Bent or damaged blade or broken blade adapter.</li> <li>B. Loose engine bolts.</li> <li>C. Loose stack pulley.</li> <li>D. Improper carburetor adjustment.</li> <li>E. Air pressure in tires too high.</li> </ul>	<ul style="list-style-type: none"> <li>A. Replace blade or blade adapter (see blade maintenance section).</li> <li>B. Tighten engine bolt.</li> <li>C. Disconnect spark plug wire. Tighten stack pulley. Connect plug wire.</li> <li>D. Adjust carburetor. (See "Engine Owner's Manual").</li> <li>E. Decrease air pressure in tires to 10-12 p.s.i.</li> </ul>
Poor grass discharge	<ul style="list-style-type: none"> <li>A. Clogged blade housing.</li> <li>B. Dull blade, bent blade, broken blade, broken blade adapter.</li> <li>C. Throttle control not set properly</li> </ul>	<ul style="list-style-type: none"> <li>A. STOP ENGINE. (See Maintenance section for underside cleaning of blade housing).</li> <li>B. STOP ENGINE. Disconnect spark plug wire. (See blade maintenance section before attempting any corrections).</li> <li>C. Set throttle control on "Fast" setting.</li> </ul>
Uneven cut or poor quality cut	<ul style="list-style-type: none"> <li>A. Dull, bent, or broken blade(s), or broken blade adapters.</li> <li>B. Incorrect tire pressure.</li> <li>C. Blade housing unlevel.</li> <li>D. Blade rotation control lever out of adjustment.</li> <li>E. Hair pin and or clevis pin missing causing the blade housing not to hang properly.</li> <li>F. Spring broken on idlers, improperly functioning.</li> </ul>	<ul style="list-style-type: none"> <li>A. STOP ENGINE. Disconnect spark plug wire. (See blade maintenance section before attempting any corrections).</li> <li>B. Keep tires inflated to the p.s.i. (pounds per square inch) indicated on tire. If not indicated inflate to 10-12 p.s.i.</li> <li>C. Adjust blade housing. (See Maintenance section).</li> <li>D. Readjust the blade rotation control lever as described in the assembly section.</li> <li>E. Replace missing hair pin or clevis pin.</li> <li>F. Replace spring.</li> </ul>
Clutch slips-tractor slows or stops with clutch engaged.	<ul style="list-style-type: none"> <li>A. Belt stretch</li> <li>B. Clutch/Brake pedal not adjusted.</li> </ul>	<ul style="list-style-type: none"> <li>A. Replace belt (see Maintenance section).</li> <li>B. Adjust clutch/brake pedal (see Maintenance section).</li> </ul>

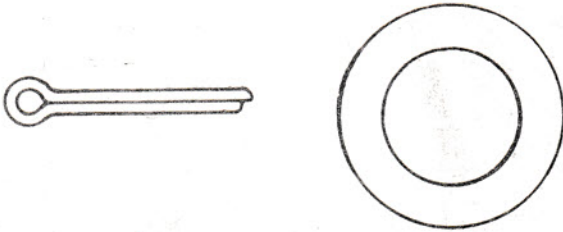


## DEAR CUSTOMER!

THE FOLLOWING INFORMATION MUST BE ADDED TO YOUR OWNER'S MANUAL.

### WHEEL ASSEMBLY

Install each wheel with washer, cotter pin (shown full size below) and grease found in parts bag.

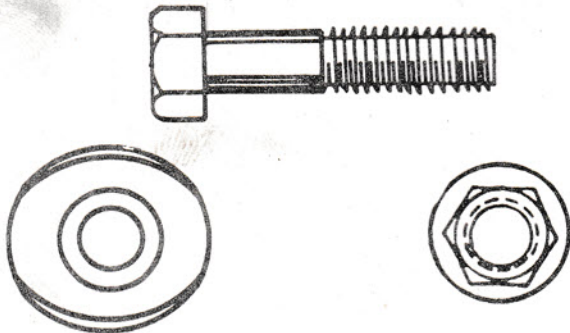


The front wheels are not assembled to the tractor. The wheels can be assembled by using the proper lifting devices to raise the tractor. The assistance of another person may be necessary if the proper lifting devices are not available. Be careful not to damage unit when lifting. Check air pressure in tires before installation. Correct air pressure (PSI) is indicated on tire sidewall.

- Raise front of tractor and place a support, such as a wooden block, under the tractor.
- Apply axle grease, supplied in parts bag, to each spindle.
- Be sure valve stem is to the outside and slide wheel onto spindle.
- Secure each wheel with washer and cotter pin. Bend cotter pin ends apart to secure wheel on spindle.

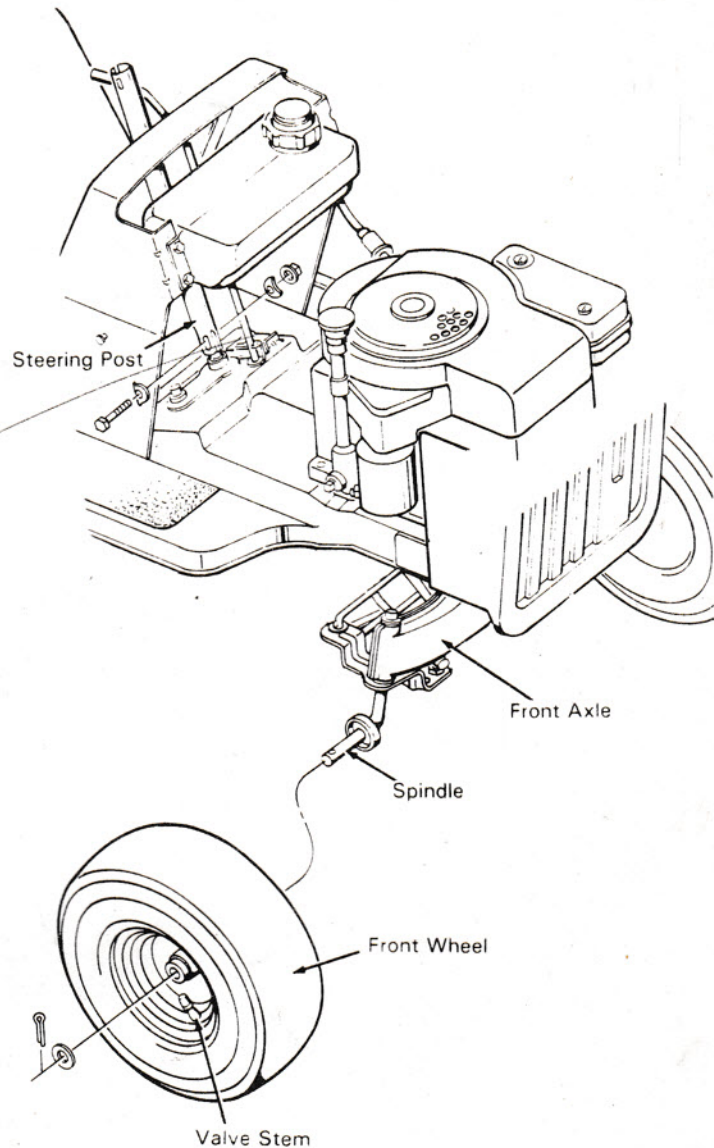
### STEERING POST

Install steering post using one hex bolt, two washers, and one nut (shown full size below).



- Turn the front wheels straight ahead.
- Slide the small end of the steering post thru hole in control panel and over the pinion gear and shaft.
- Fasten securely with hex bolt, two washers, and nut, making sure bolt passes thru hole in pinion gear shaft and hole in steering post.

**AFTER ASSEMBLY OF WHEELS AND STEERING POST, CAREFULLY ROLL TRACTOR REARWARD OFF WOODEN CONTAINER BOTTOM.**



D-5340