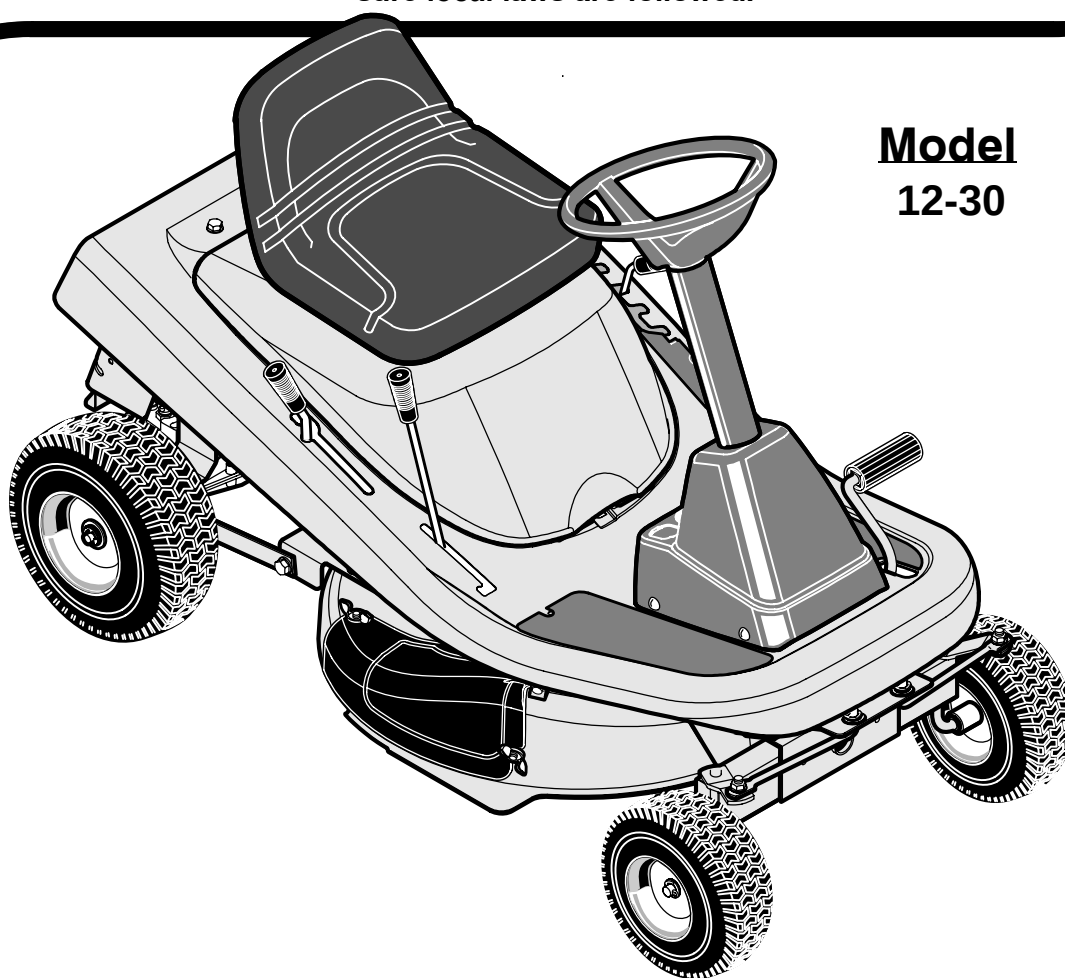




**This Instruction Book Contains Information
For Several Models. Read And Keep This Book For
Future Reference. This Book Contains Important Information On:
SAFETY, ASSEMBLY, OPERATION AND MAINTENANCE.**

PRODUCT INFORMATION

The owner must be certain that all the product information is included with this unit.
This information includes the *INSTRUCTION BOOKS*, the *REPLACEMENT PARTS*
and the *WARRANTIES*. This information must be included to make
sure local laws are followed.



Model
12-30

**Record The Following Information About Your Unit. This Information
Is Necessary When Ordering Parts Or In Case Of Loss Or Theft.**

WHERE PURCHASED: _____.

DATE PURCHASED: Month _____ Day _____ Year _____.

MODEL NO.: _____ **DATE OF MANUFACTURE:** _____.

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OWNER'S INFORMATION

This instruction book is for several different models. The instructions are written for a person with some mechanical ability. Like most service books, not all the steps are described. Steps on how to loosen or tighten fasteners are steps anyone can follow with some mechanical ability. Read and follow these instructions before you use the unit.

Know your product: If you understand the unit and how the unit operates, you will get the best performance. As you read this manual, compare the illustrations to the unit. Learn the location and the function of the controls. To help prevent an accident, follow the operating instructions and the safety rules. Keep this manual for future reference.

IMPORTANT: Many units are not assembled and are sold in cartons. It is the responsibility of the owner to make sure the assembly instructions in this manual are followed exactly. Other units are purchased in an assembled condition. On assembled units, it is the responsibility of the owner to make sure the unit is correctly assembled. The owner must carefully check the unit according to the instructions in this manual before it is first used.



WARNING:



Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to cause cancer and birth defects or other reproductive harm.

**Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to cause cancer and birth or other reproductive harm.
WASH HANDS AFTER HANDLING.**

RESPONSIBILITY OF THE OWNER

The responsibility of the owner is to follow the instructions below.

1. Carefully read and follow the rules for safe operation.
2. Follow all the assembly instructions.
3. Inspect the unit.
4. Make sure that the operator of the unit knows how to correctly use all of the standard and accessory equipment.
5. Operate the unit only with guards, shields, and other safety items in place and working correctly.
6. Correctly adjust the unit.
7. Service the unit only with authorised or approved replacement parts.
8. Complete all maintenance on the unit.

Environmental Awareness

- Do not fill the engine's fuel tank completely full.
- Drain fuel for off-season storage.
- Use only unleaded petrol.
- Service the air cleaner regularly.
- Change oil regularly. Use 10W-30 oil in summer.
- Tune-up the engine regularly.
- Keep equipment in efficient operating condition.
- Dispose of used engine oil properly.

SAFETY RULES

Safe Operation Practices for Ride-on Mowers



WARNING: This cutting machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

I. General operation

1. Read, understand and follow all instructions in the Instruction Book, on the machine, the engine and with any attachments before starting.
2. Only allow responsible adults, who are familiar with the instructions, to operate the machine.
3. Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
4. Be sure the area is clear of other people before mowing. Stop the machine if anyone enters the area.
5. Never carry passengers.
6. Turn off power to the blades or any attachments before backing up. Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
7. Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass bagger or the mower guard in place.
8. Slow down before turning.
9. Never leave a machine unattended with the engine running. Always turn off the blade(s), set the parking brake, stop the engine and remove the key before dismounting.
10. Turn off the power to the attachment(s) when transporting or not in use. Turn off the blade(s) when not mowing.
11. Stop the engine before removing the grass bagger or unclogging the chute.
12. Mow only in daylight or good artificial light.
13. Do not operate the machine while under the influence of alcohol or drugs or when very tired.
14. Watch for traffic when operating near or crossing roadways.
15. Use extra caution when loading or unloading the machine into a trailer or truck.
16. Always wear goggles, safety glasses, or an eye shield when you operate the unit to protect your eyes from foreign objects that can be thrown from the unit. Always wear eye protection when you make an adjustment or repair to the machine.
17. 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.

OWNER'S INFORMATION

- c. Do not turn sharply. Use care when backing.
- d. Use counterweights or wheel weights when suggested in the Instruction Book.
- 18. Do not operate this machine if you are taking drugs or other medication which can cause drowsiness or affect your ability to operate this machine.
- 19. Do not use this machine if you are mentally or physically unable to operate this machine safely.
- 20. Data indicates that operators, age 60 years and above, are involved in a large percentage of riding mower related injuries. These operators should evaluate their ability to operate a riding mower safely enough to protect themselves and others from serious injury.

II. Slope operation

Slopes and rough terrain are major factors related to loss-of-control and tip-over accidents, which can result in severe injury or death. **ALL slopes require extra caution. If you cannot back up the slope or if you feel uneasy on the slope, do not mow it. See the "Slope Guide" in the back of this book to check for safe operation.**

DO

- 1. Mow up and down slopes, not across.
- 2. Remove obstacles such as rocks, tree limbs, etc...
- 3. Watch for holes, ruts or bumps. Uneven terrain could overturn the machine. *Tall grass can hide obstacles.*
- 4. Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.
- 5. Use extra care with grass baggers or other attachments; they can change the stability of the machine.
- 6. Keep all movement on the slopes **slow and gradual**. Do not make sudden changes in speed or direction.
- 7. Avoid starting or stopping on a slope. If tires lose traction, turn off the blades and proceed slowly **straight down** the slope.

DO NOT

- 1. **Do not** turn on slopes unless absolutely necessary, then only turn slowly and gradually downhill, if possible.
- 2. **Do not** mow drop-offs, ditches or embankments. A wheel over the edge or an edge caving in could cause a sudden overturn and injury or death.
- 3. **Do not** mow on wet grass. Reduced traction could cause sliding.
- 4. **Do not** try to stabilize the machine by putting your foot on the ground.
- 5. **Do not** use a grass bagger or other rear mounted accessories on steep slopes (greater than 10 degrees).

III. Children

- 1. Keep children out of the mowing area.
- 2. Be alert and turn the engine off if children enter the area.
- 3. Before and when reversing, look **behind and down** for small children.
- 4. Never carry children or any passengers, even with the blades off. They may fall off and be seriously injured or interfere with the safe operation of the machine.
- 5. Never allow children to operate the machine. Instruct children in the potential dangers of the machine.
- 6. Use extra care when approaching blind corners, shrubs, trees or other objects that may obscure vision.

IV. Service

- 1. Use extra care when handling petrol and other fuels. Fuels are flammable and the vapours are explosive.
 - a. Use only an approved container.
 - b. Never remove the gas cap or add fuel with the engine running. Allow the engine to cool for several minutes before refueling. Do not smoke while using or fuelling the machine.
 - c. Never refuel the machine indoors.
 - d. Never store fuel in a container or in the machine's fuel tank inside where there is an open flame.
- 2. Never start or run the engine inside a closed area.
- 3. Keep all nuts and bolts, especially the blade attachment nuts tight. Frequently check the blade(s) for wear or damage such as cracks and nicks. A blade that is bent or damaged must be immediately replaced with an original equipment blade from an authorised service dealer. For safety, replace the blade every two years. Keep the equipment in good condition.
- 4. Never tamper with the safety devices. Check their proper operation regularly.
- 5. To reduce fire hazards, keep the machine free of grass, leaves or other debris build-up. Clean up oil or fuel spills. Allow the machine to cool before storing.
- 6. Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- 7. Never make adjustments or repairs with the engine running. The carburettor can be adjusted with the engine running. Do not change the engine governor settings or over-rev the engine.
- 8. Grass bagger components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Before storage always make sure the grass bag is empty. Frequently check components and replace with manufacturer's recommended parts when necessary.
- 9. Mower blades are extremely sharp. Wrap the blades, wear gloves and be cautious when servicing them or the blade housing area.
- 10. Check the brake operation frequently. Adjust and service as required.
- 11. Wait for all movement to stop before servicing any part of the unit.



Look for this symbol to indicate important safety precautions.

SAFE MOWING GUIDE

Each person that operates power equipment must learn to use the correct and safe mowing procedures. **Therefore carefully read the following pages.** Most accidents are due to the operator not having read the instructions before use. The result is unsafe use, endangering the operator, bystanders and the equipment. Another result can be a poor appearance of the area mowed.

Read this book. Read the instructions on the unit. Operate the mower according to the Safe Mowing Guide. Follow all safety rules, cautions or warnings in this book and on the unit. Make sure anyone that uses the unit reads the instructions and is told how to safely operate the mower.



The mower will give you good service and durability, if operated in normal conditions. If the mower is not correctly service or is used where the terrain is rough or unsuitable, product performance and safety will be reduced.

Correct clothing is an important part of safe mowing. Safety glasses will protect the eyes from objects discharged by the mower. Safety shoes with steel plates can protect a foot from injury by the blade. For protection from objects discharged from the mower, wear clothing that will cover the arms and legs.



Before you start cutting the grass, practice, using the mower in a large open and level Area. Learn the location of the controls on the mower. Know the purpose of the

controls and how they work. In an emergency, it is important that you can stop the blade quickly. Learn how to control the mower at all times. Many engines are started by hand. When you use a pull start or rope start, place your feet apart and away from the blades. Hold the rope handle tight. Never wrap the rope around your arm or fingers for a "better grip". To start the engine, follow the instructions on the mower, in this book and in the engine operating instructions.

For electric start engines, sit in the seat when you start the engine. The battery can be dangerous. Follow the instructions on the battery, the acid container, and in this book when working with the battery. Even small batteries have enough voltage to cause injury. Always be careful.

The mower is designed to be operated by one person. Never let another person ride with you on the unit or on any accessories. A passenger will make the unit harder to control, block the visibility or distract the operator and is dangerous to the operator, the passenger and the equipment. Without a passenger seat, the passenger can fall from the mower or come into contact with dangerous parts. A mower is not a toy for showing off or for giving rides.



Never cut a wet lawn. Wet grass can cause an accident, affect mower performance and can cause problems with future lawn growth and appearance. Wet grass is slippery and can cause the mower to slip, which can lead to accidents. Wet grass tends to clog the mower, causing poor discharge. Cut wet grass will collect on the lawn and disrupt the growth of the grass. Getting the mower wet will cause parts to rust and decrease the life of the unit.

When you check the lawn, remember obstacles that cannot be removed, like pipes, stumps or large rocks. Keep away from these obstacles that can cause damage to the mower or injury to the operator or bystanders. Clear the area of rocks, toys, wire or other loose objects. These items can damage the mower or can be discharged by the mower blade.



The blade of a power mower rotates at extremely high speeds. It can discharge rocks and other objects over a long distance which can be dangerous. The force of the objects can break windows or injure bystanders. Make sure there are no bystanders in the area to be mowed. Make sure the grass is not discharged toward anyone. Planning your mowing pattern has a double advantage. It makes for a tidier cut and can reduce the possibility of an injury.



Check the terrain of the area to be mowed. Mow in a pattern that will keep you away from dangerous areas. Check the distance you need to stop and the distance available to turn. Slopes and rough terrain must be mowed carefully. Do not mow steep slopes or very rough terrain. With riding mowers, mow up and down slopes. When you must mow rough terrain or on slopes, never change directions or change gears and stop in these areas only in an emergency. Before you ride up or down a slope, try to back straight up the slope. Do not ride up or down a slope that is too steep to back straight up. See the "Guide" in the back of this Instruction Book to check any slopes.



Before you start cutting, make sure the mower was completely assembled according to the Instruction Book. If the

SAFE MOWING GUIDE

mower was completely assembled by the seller, you must still check the mower according to the assembly instructions. Make sure the mower is correctly assembled and that all fasteners are tight. Make sure the engine has the correct amount of oil. Check these items often during the life of the mower.

Your mower has a petrol engine. Petrol is a dangerous fuel. Keep petrol only in an approved safety petrol container. Do not keep large amounts of petrol. When you add petrol to the fuel tank, do not smoke. Store the petrol container and the Mower in an area that has good ventilation. Keep the petrol away from any flames or sources of ignition. If the mower is to be stored for more than a few weeks, remove the petrol from the fuel tank. When inside an enclosure, do not add petrol to the fuel tank. Before you add petrol, move the mower outside and add petrol carefully. Before you start the engine, remove any petrol from the outside of the fuel tank or from the mower. Warm petrol will expand. Leave some space in the fuel tank for the petrol to expand. The fuel cap has a vent hole for fuel vapours. Always use the correct fuel cap. Failure to follow safety rules about petrol will cause fires, explosions, injury to bystanders and damage to the equipment and other property.



If you add petrol to an engine that is running or hot, the result can be an explosion. Before you add petrol, stop the engine and let the engine cool for several minutes. Remove dry grass and other debris from the mower. Keep the mower clean to improve the performance, help the engine and transmission run cooler, extend the life of moving parts, and decrease the danger of a fire.

Fires and explosions are not the only dangers when working around a mower. The engine, transmission, and the muffler will get hot in several minutes when the engine is running. Do not touch these parts

of the mower. Stop the engine. Let the engine and transmission cool before servicing the mower. Remember, exhaust fumes are dangerous. Never operate the engine inside a building. It is important to inform other people that use the lawn that mowers can be dangerous. Remember, a mower is not a toy. It should not be used by children, or anyone who has not read the instruction manual.

If the mower is not correctly assembled, not operated correctly, or not regularly serviced, the mower can be dangerous. The most important rule to follow is to Always use good judgement and common sense. Mow safely and carefully.

Your mower will easily cut thick grass. Fingers, feet and other parts can also be cut by the blade. Injuries occur when the operator forgets about the blades and reaches into the chute opening. Always operate the mower as if the blade is rotating. Do not service or make an adjustment while the engine is running.



Use only accessories that are factory approved for your mower. The wrong accessory can decrease the safety of the mower and can even damage the unit. Read and follow the instructions included with the accessory and the mower.

Use only original equipment or replacement parts that are factory approved for service. If you need service, select an Authorised Service Centre for your mower. If you repair or adjust it yourself follow the instructions in the Instruction Book.



When you mow, be careful of bystanders especially children. Always use caution when mowing around obstacles like trees or shrubs or when moving backward. Only mow in a forward direction if possible. Your visibility is decreased when you mow backward. Also, the blades are made to cut while the unit is moving forward. If you mow backwards, the cutting performance decreases.



Before you leave the mower, stop the engine. Remove the key. Disengage and lower any attachment. Set the parking brake. Never mount or dismount from the seat while the engine is running. An accident could occur if you touch the brake, shift lever, throttle, clutch or blade control while mounting or dismounting. Mount and dismount from the seat on the side of the unit that is marked ENTER-EXIT.



Make sure you are in good condition when you mow. When you mow for several hours your reflexes will decrease and your mind will not be as alert. Take a short break or an accident can occur. If the temperature is hot, use caution to prevent dehydration. If you are tired, angry or not completely alert, do not operate the mower. Do not use the mower or any type of power equipment while under the influence of alcohol, medication or drugs.

Engine speed is a key to safe mowing and to a good looking lawn. The maximum speed of the engine was set at the factory. Do not change the setting of the engine governor.

Select the maximum engine and ground speed that is right for the terrain and the height of the grass. The blade cuts best when the engine is operating at maximum speed. The engine and transmission will also run cooler at maximum engine speed.

SAFE MOWING GUIDE

Also, the grass bagger will function better when the engine is operating at maximum speed. On slopes, decrease the ground speed and use care making sure the mower feels safe to operate.

Do not mow in poor weather conditions. If weather conditions deteriorate, stop cutting and finish later. It is dangerous to cut grass in the rain. Always stop work and go inside during electrical storms. If the weather conditions are very dry, protect your eyes from dust and objects discharged by the mower with safety glasses. A dust or pollen mask can also help.



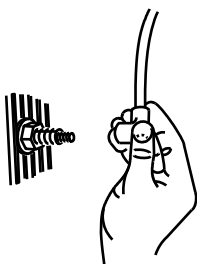
Your mower is equipped with a number of safety devices which are important to the safety of the operator and bystanders, they must never be changed or removed from the mower. If a safety device is lost, damaged or no longer functions, repair or replace the device before you operate the mower.

It is best to mow during the day. If you must mow at night, make sure there is enough light for safe operation.

Your mower will require regular maintenance and service. The maintenance schedule depends on the hours of use. Also, mowing conditions can change the schedule. Check the Instruction Book for more information. Correct maintenance will help the mower function safely.

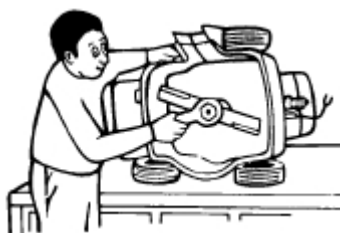
Do not service the mower while the engine is running. Before you service the unit, even with the engine stopped, always disconnect the wire from the spark plug to prevent the engine from starting.

If you hit a large object during operation, stop the engine. Remove the wire from the spark plug. Carefully inspect the mower for damage. Before you start the engine again, make the necessary repairs. If you



feel new or excessive vibration, immediately stop the engine and check for the problem. Keep all nuts, bolts and screws tight.

The blade is the most dangerous part of the mower. Frequently check the blade and the blade mounting fasteners. Keep the fasteners tight. If the blade hits a solid object, stop the engine. Remove the wire from the spark plug. Check for a blade that is bent, cracked or for other damages. Before you start the engine, replace a Damaged blade. Replace the blade every two years to ensure safe operation of the mower.



A sharp blade decreases the workload on the engine and more evenly cuts grass. Frequently sharpen the blade for a better Looking cut. Use the left side of the mower housing to trim near an object.

A grass bagger is a good accessory for your mower. For the best performance and safety, make sure the grass bagger is approved for use with your mower. Follow the assembly and operation instructions included with the grass bagger.

Some grass baggers require a special blade for best performance. Before you attach, check, or empty the grass bagger always stop the engine. Before each use of the grass bagger, check for cracks, wear or deterioration. Before you use the grass bagger, replace a damaged part with a replacement part approved by the factory.



Follow the mowing procedures below to maintain a healthy green lawn. Do not cut the grass too short. If you cut the grass too short you can cause it to become yellow or "scalp" the lawn. Use a lower height of cut in cool months when the grass is thicker. Raise the height of cut in hot dry periods. If you cut the grass with a blade that is not

sharp or at a slow engine speed you can damage the grass. Move the throttle control to the FAST position when mowing and using the grass bagger. Also, use a slower ground speed when using the grass bagger.

If you change the direction or pattern of cut slightly every time you mow will make the grass grow stronger and thicker. Do not add oil or petrol to the mower while on the lawn. Spilled oil or petrol can kill the grass but also remember not to add oil or petrol indoors. In high or thick grass, do not try to cut all the grass the first time. Raise the height of cut on the first cutting and lower the height for the next cutting. Another way is to cut with only part of the width of the mower and decrease your ground speed (not the engine) to move more slowly so that the mower can discharge the grass as it moves forward.

Understand the controls and how they work. Learn the ground speed(s) of your mower. Check the turning radius of the mower. Be aware that the controls on your riding mower are different from a car. The throttle is operated by hand and holds the engine speed constant until it is changed. The location of the shift lever and the shift pattern is different from that of a car. Also, the brake and clutch systems are different. Remember the procedures to follow in an emergency. Remember, turning off the engine ignition

switch will stop the blade and the drive mechanism. If the traction of the wheels is lost or does not feel safe, disengage all systems and stop the engine. Dismount from the mower. Push the unit to a safe place before you begin mowing again.

Your unit has an electrical system that includes an operator presence switch in the seat. The operator presence switch detects if the operator is sitting on the seat. The engine will stop if the operator leaves the seat when the blade engagement control is engaged. This operator presence switch is a safety device only. It must not regularly be used to stop the engine or the blade. There are other control systems on the mower for this purpose. Always keep the operator presence switch and other safety devices and controls in place and operating for your protection.

Remember, your mower is a tool that can be dangerous if it is not correctly used. Follow the instructions in this Instruction Book. Safe and careful use of the mower will give you many safe hours of problem free use.

STEPS TO FOLLOW

BEFORE MOWING

- Be sure to dress correctly. Wear hard shoes, not sandals, trainers or tennis shoes.
- Examine the blade. A blade that is bent, cracked, or damaged must be replaced with a factory replacement blade.
- Fill the fuel tank outdoors. Clean off spilled fuel. Be careful not to spoil your lawn with spilt fuel.
- Read and follow the Owner's Manual, the instructions with the engine, and the instructions with any attachments. Owner's Manual instructions are for your safety and the safety of others.
- Exhaust fumes are dangerous. Start the engine outside.
- Make sure all safety devices are in place and working correctly.
- Operation of the mower is only for a person that has experience.
- Wet grass can be dangerous. Let the grass dry.
- Make sure there is no one near the mowing area and instruct bystanders to stay at a safe distance.
- Never cut the grass without good light.
- Pick up loose objects. Remove them from the mowing area.

WHILE MOWING

- Do not allow bystanders in the mowing area especially children. Watch for bystanders who may enter the mowing area.
- Watch for fixed objects and avoid them. They can damage the mower or cause injury.
- A hot engine, muffler, and transmission will cause a burn. Do not touch.
- Inclines and slopes must be carefully mowed. See the "Guide" in the back of this book for instructions on slopes.
- Stop mowing if there is not sufficient daylight or good artificial light to work safely.
- Examine the mower, the blade, and other parts for damage after hitting a foreign object or if the unit vibrates excessively.
- Do not make adjustments or repairs without stopping the engine. Disconnect the spark plug wire.
- On or near roads, watch out for traffic. Direct discharge away from roads.
- When mowing, avoid areas where traction is unsure. Look back before changing direction of travel. Look down and behind before and while backing.
- In heavy grass, raise the cutting height. Cut slower. Stop the engine to remove clogged grass from the mower.
- Never remove any safety related parts.
- Do not pour petrol into the engine when it is hot or running.

AFTER MOWING

- Always let the mower cool before storing in an enclosed area.
- Foreign material on the mower is dangerous. Clean off grass, leaves, grease and oil before storing.
- Tighten all loose nuts, bolts and screws before you use the unit.
- Empty and clean any grass catcher or other accessory.
- Remove the key or disconnect the spark plug wire to prevent unauthorised use.
- Make sure the mower is not kept near a source of ignition. Gas fumes can cause an explosion.
- Only original parts or factory approved substitutes can be used to service the mower.
- When storing the mower for an extended period, remove the fuel from the fuel tank.
- Instruct children to leave the mower alone. It is not a toy.
- Never keep petrol near a source of ignition. Always use an approved container. Keep petrol away from children.
- Lubricate according to the Instruction Book. See "Lubrication".

IMPORTANT--Read the Instruction Book. Keep this book for future use and reference.



WARNING: Look for this symbol to point out important safety precautions.

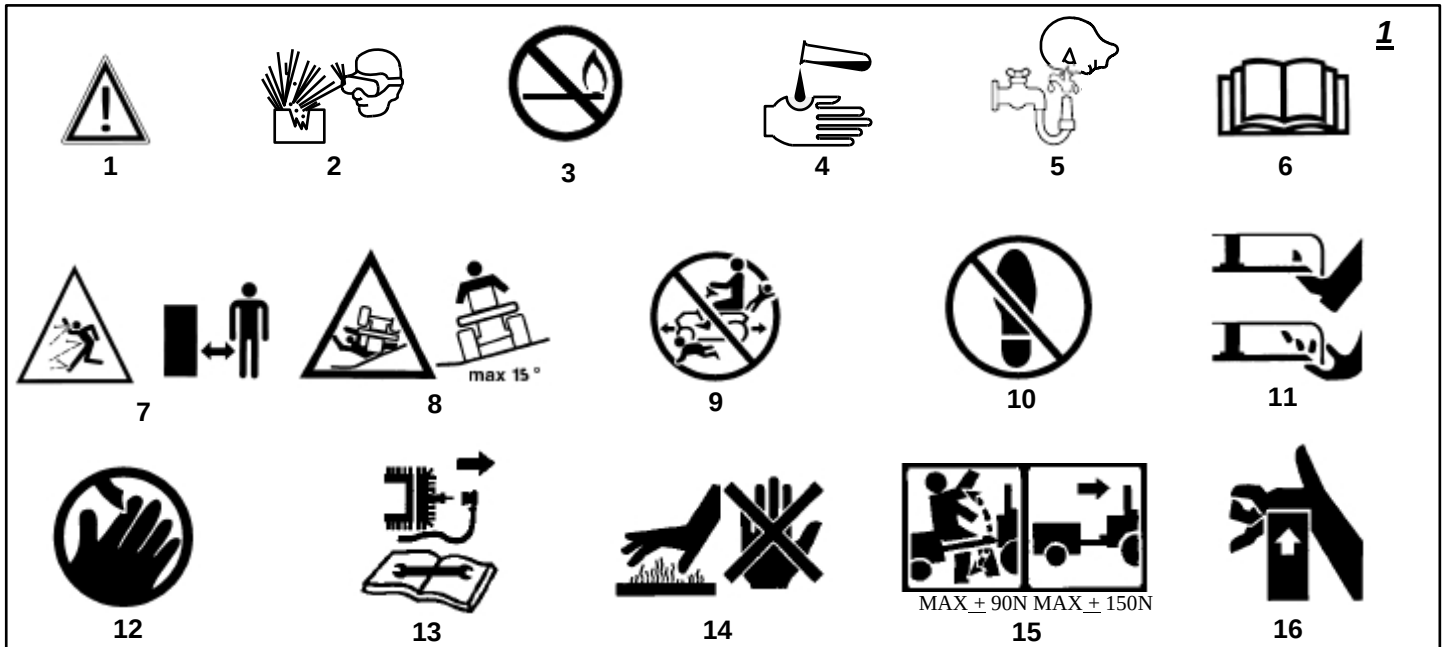
INTERNATIONAL SYMBOLS

INTERNATIONAL SYMBOLS

IMPORTANT: Some of the following symbols are located on your unit or on manuals supplied with the product. Before you operate the unit, check and understand the meaning of each symbol.

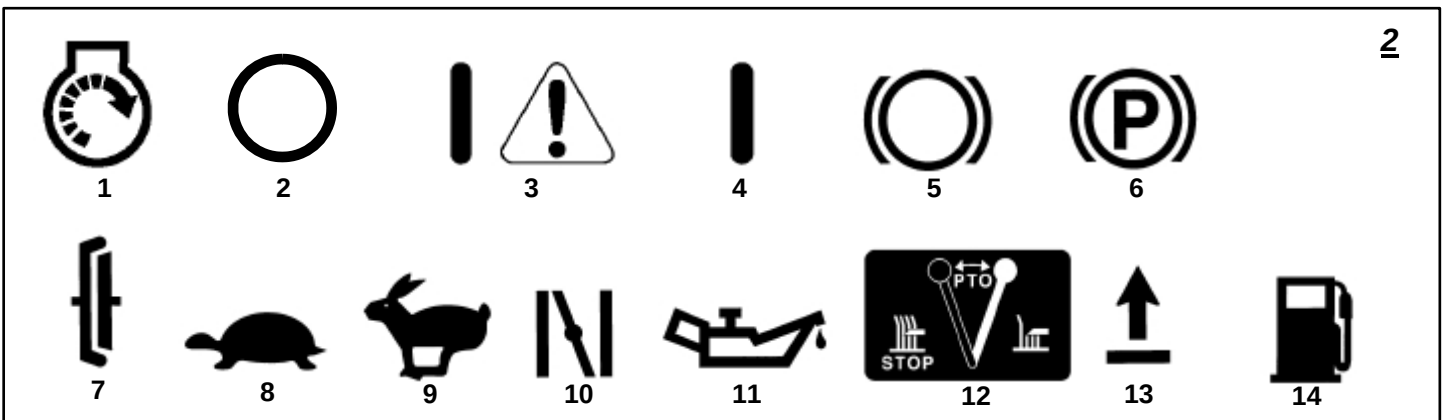
Safety Warning Symbols

- | | | |
|---|--|---|
| 1 Warning | 5 Flush Eyes Immediately With Water. Get Medical Help Fast. | 10 DANGER: No Step. |
| 2 Shield Eyes. Explosive Gases Can Cause Blindness or Injury. | 6 IMPORTANT: Read Owner's Manual Before Operating This Machine. | 11 DANGER: Keep Feet And Hands Away From Rotating Blade. |
| 3 No Sparks, Flames or Smoking. | 7 WARNING: Thrown Objects. Keep Bystanders Away. Read User Instructions Before Operating This Machine. | 12 DANGER: Keep Hands Away From The Rotating Blade. |
| 4 Sulphuric Acid Can Cause Blindness Or Severe Burns | 8 WARNING: Do Not Use This Mower On Slopes Greater Than 15 Degrees. | 13 DANGER: Disconnect Spark Plug Wire Before Servicing Unit. |
| | 9 DANGER: Keep People, Especially Children, Away From The Unit. | 14 WARNING: Hot Surface. |
| | | 15 WARNING: Use Caution When Connecting Or Disconnecting Accessories. |
| | | 16 WARNING: Crushed Fingers. |



Control And Operating Symbols

- | | | |
|------------------|-----------------|---------------------------|
| 1 Engine Start | 5 Brake | 10 Choke |
| 2 Engine Stop | 6 Parking Brake | 11 Oil |
| 3 Select Reverse | 7 Clutch | 12 Blade Rotation Control |
| 4 Engine Run | 8 Slow | 13 Raise |
| | 9 Fast | 14 Fuel |



ASSEMBLY

ASSEMBLY

Read and follow the assembly and adjustment instructions for your mower. All fasteners are in the parts bag. Do not discard any parts or material, keep extras as spares.

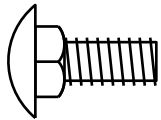


WARNING: Before doing any assembly or maintenance to the mower, remove the wire from the spark plug.

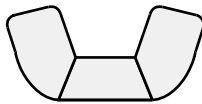
NOTE: In this instruction book, left and right describe the location of a part with the operator on the seat.

PARTS BAG - CONTENTS

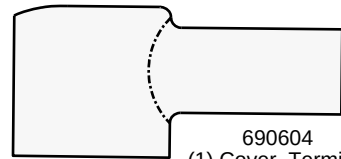
The fasteners and other loose parts are shown below. The fasteners are shown full size. The quantity is shown in brackets ().



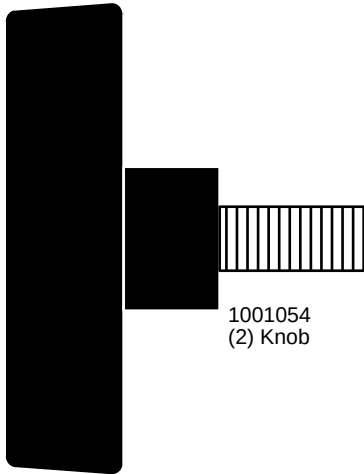
2x82
(2) Carriage Bolt



14x79
(2) Wing Nut



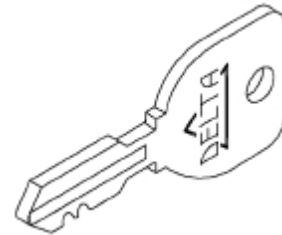
690604
(1) Cover, Terminal



1001054
(2) Knob

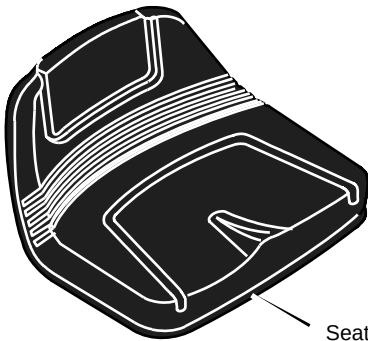


17x47
(2) Washer

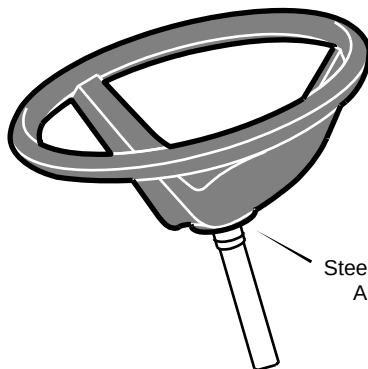


(2) Ignition Key

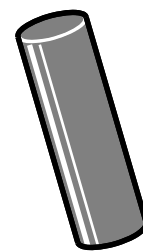
LOOSE PARTS - CONTENTS



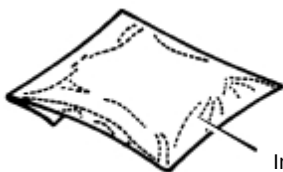
Seat



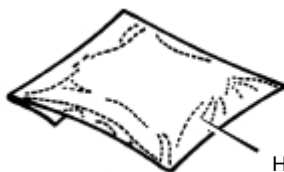
Steering Wheel
And Post



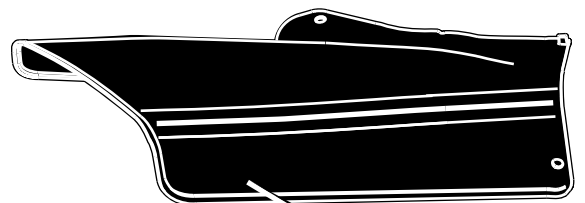
Steering Collar



Instructions Pack



Hardware Pack

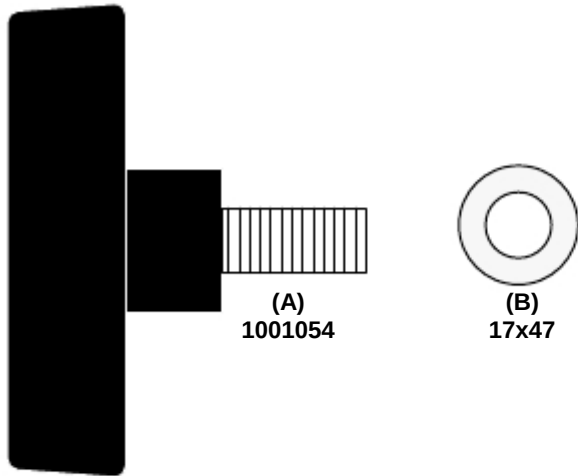


Side Discharge Attachment

ASSEMBLY

HOW TO INSTALL THE SEAT

Use the fasteners shown below to install the **seat**.



1. Carefully remove the plastic bag from the **seat**.
2. Raise the **seat support** and secure in the UP position with the **seat support rod**.
3. Align the holes in the **seat** to the holes in the **seat support** (Figure 1). Fasten the **seat** to the **seat support** with the fasteners as shown.

4. Check the operating position of the **seat**. If the **seat** needs to be adjusted, loosen the two **wing bolts (A)**. Slide the **seat** forward or backward along the **seat adjusting holes** as shown. Tighten the **wing bolts (A)**.

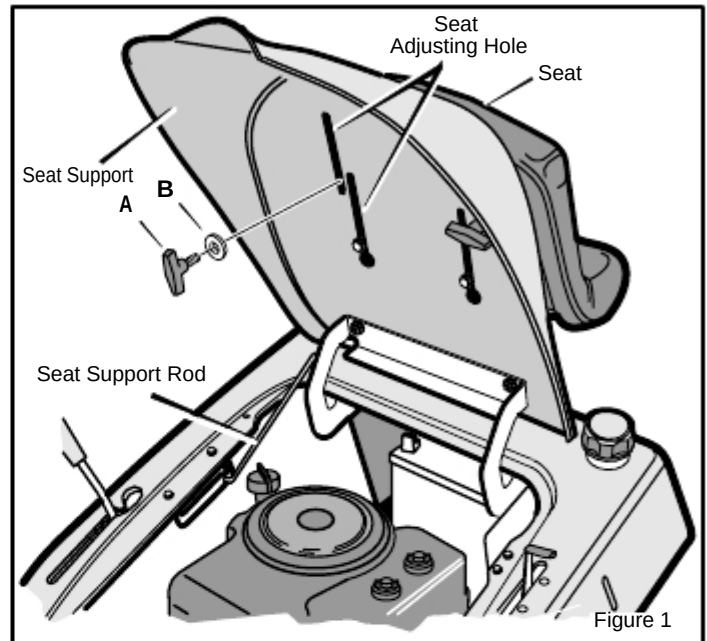


Figure 1

HOW TO ASSEMBLE THE STEERING WHEEL

Attach the steering wheel as follows:

1. Make sure the front wheels point forward.
2. Slide the **tube** into the **console** (Figure 2). Make sure the end of the **tube** fits over the steering bushing.

NOTE: Before attaching the steering wheel, make sure that the front wheels point forward and are straight. The steering wheel will have either 3-spokes or 4-spokes. For proper alignment of the steering wheel, see Figure 2.

3. Slide the **steering wheel** and **steering post** into the **tube** and **console**. Push on the **steering wheel**. The **steering post** will lock onto the pinion gear. Pull on the **steering wheel**. Make sure that the **steering post** is locked in place.

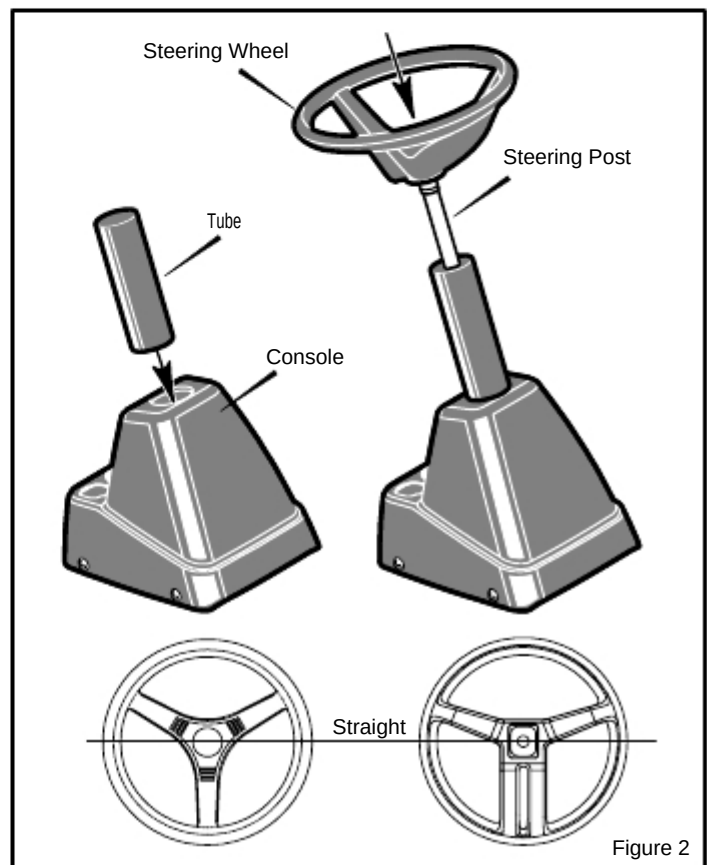


Figure 2

ASSEMBLY

MAINTENANCE FREE BATTERY

IMPORTANT: Before you attach the battery cables to the battery, check the battery date. The battery date will tell you if the battery must be charged.

1. Raise the seat support and secure in the UP position with the seat support rod.
2. Check the top and the side of the battery for the **battery date** (Figure 3).
3. If the **battery** is put into service before the battery date, the **battery cables** can be attached without charging the battery. See "How To Install The Battery Cables".
4. If the **battery** is put into service *after* the **battery date**, the **battery** must be charged. See "How To Charge The Maintenance Free Battery".

HOW TO CHARGE THE MAINTENANCE FREE BATTERY



WARNING: When you charge the battery, do not smoke. Keep the battery away from any sparks. The fumes from the battery acid can cause an explosion.

1. To disconnect the battery retainer from the battery tray, push in on the lower end of the **battery retainer**.
2. Remove the **battery** from the right side of the unit.

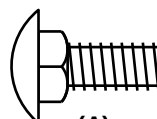
3. Remove the protective cap from the **battery terminal**.
4. Use a 12 volt battery charger to charge the **battery**. Charge at a rate of 6 amperes for one hour. If you do not have a battery charger, have an authorised service centre charge the battery.
5. Install the **battery** and secure with the **battery retainer**. Make sure the **positive (+) terminal** is on the right side.

HOW TO INSTALL THE BATTERY CABLES

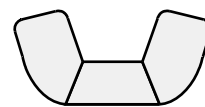


WARNING: To prevent sparks, fasten the red cable to the positive (+) terminal before you connect the black cable.

Use the fasteners shown below to install the **battery cables**. The fasteners are shown at full size.



(A)
2x82



(B)
14x79

1. Remove the protective cap from the **battery terminal**.
2. Fasten the **red cable** and **terminal cover** to the **positive (+) terminal** with the fasteners as shown (Figure 3).
3. Fasten the **black cable** to the negative (-) terminal with the fasteners as shown.

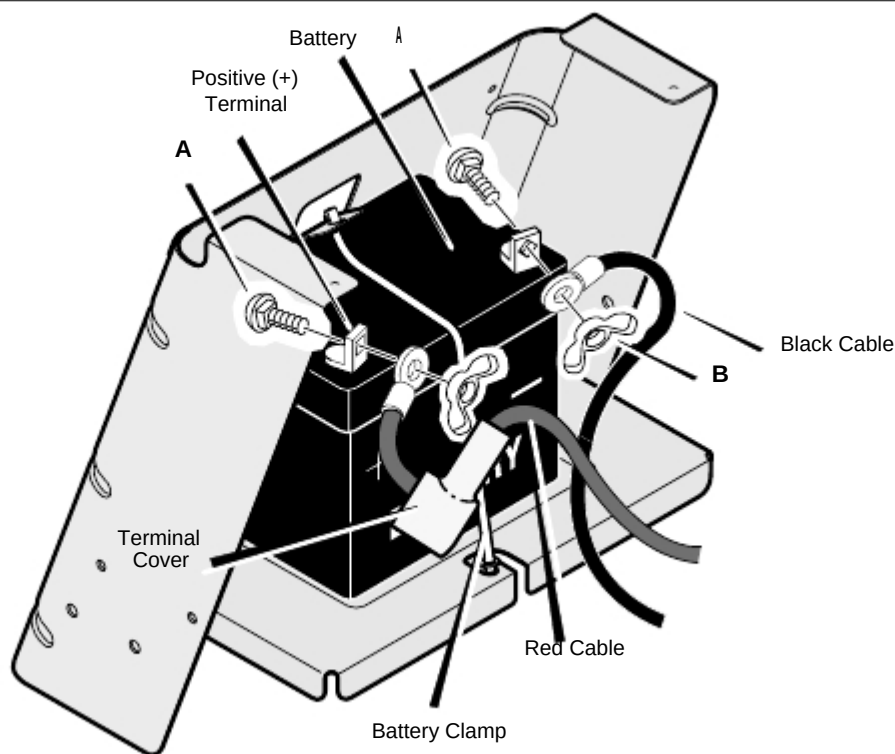


Figure 3

ASSEMBLY

IMPORTANT! BEFORE YOU START MOWING

- Check the engine oil.
- Fill the fuel tank with petrol.
- Check the air pressure of the tires.
- Check the level of the mower housing.
- Make sure the battery cables are attached.
- Make sure the wire is attached to the spark plug.



WARNING: Before doing any assembly or maintenance to the mower, remove the wire from the spark plug.

NOTE: In this instruction book, left and right describe the location of a part with the operator on the seat.

HOW TO PREPARE THE ENGINE

NOTE: The engine was shipped from the factory filled with oil. Check the level of the oil. Add oil as needed.

NOTE: The operation of a new engine will sometimes result in a slight amount of smoke. This smoke is caused by paint or oil on or around the muffler. This is normal should be expected during initial operation.

A separate engine manual is also included with the unit. See this engine manual for the manufacturer's instructions for the type of petrol and oil to use. Before you use the unit, read the information on safety, operation, maintenance, and storage.



WARNING: Follow the engine manufacturer's instructions for the type of petrol and oil to use. Always use a safety petrol container. Do not smoke when adding petrol to the engine. When inside an enclosure, do not fill with petrol. Before you add petrol, stop the engine. Let the engine cool for several minutes.

IMPORTANT: This unit is equipped with an internal combustion engine and must 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 laws (if any). If a spark arrester is used, it must be maintained in effective working order by the operator.

See an Authorised Service Centre for a spark arrester for the muffler.

In some areas, local law requires the use of a resistor spark plug to control the ignition signals. See an Authorised Service Centre for a resistor spark plug for the engine.

NOTE: Actual sustained horsepower will likely be lower due to operating limitations and environmental factors.

CHECK THE TIRES

NOTE: The tires were over inflated for shipment. The correct air pressure is shown on the side of the tire.

Check the air pressure in the tires. Tires with too much air pressure will cause the unit to ride rough. Also, the wrong air pressure will keep the mower housing from cutting level. The correct air pressure is shown on the side of the tire.

CHECK THE LEVEL OF THE MOWER HOUSING

Make sure the level of cut is still correct. After you mow a short distance, look at the area that was cut. If the mower housing does not cut level, see the instructions on "How to Level The Mower Housing" in the Maintenance section of this instruction book.

OPERATION

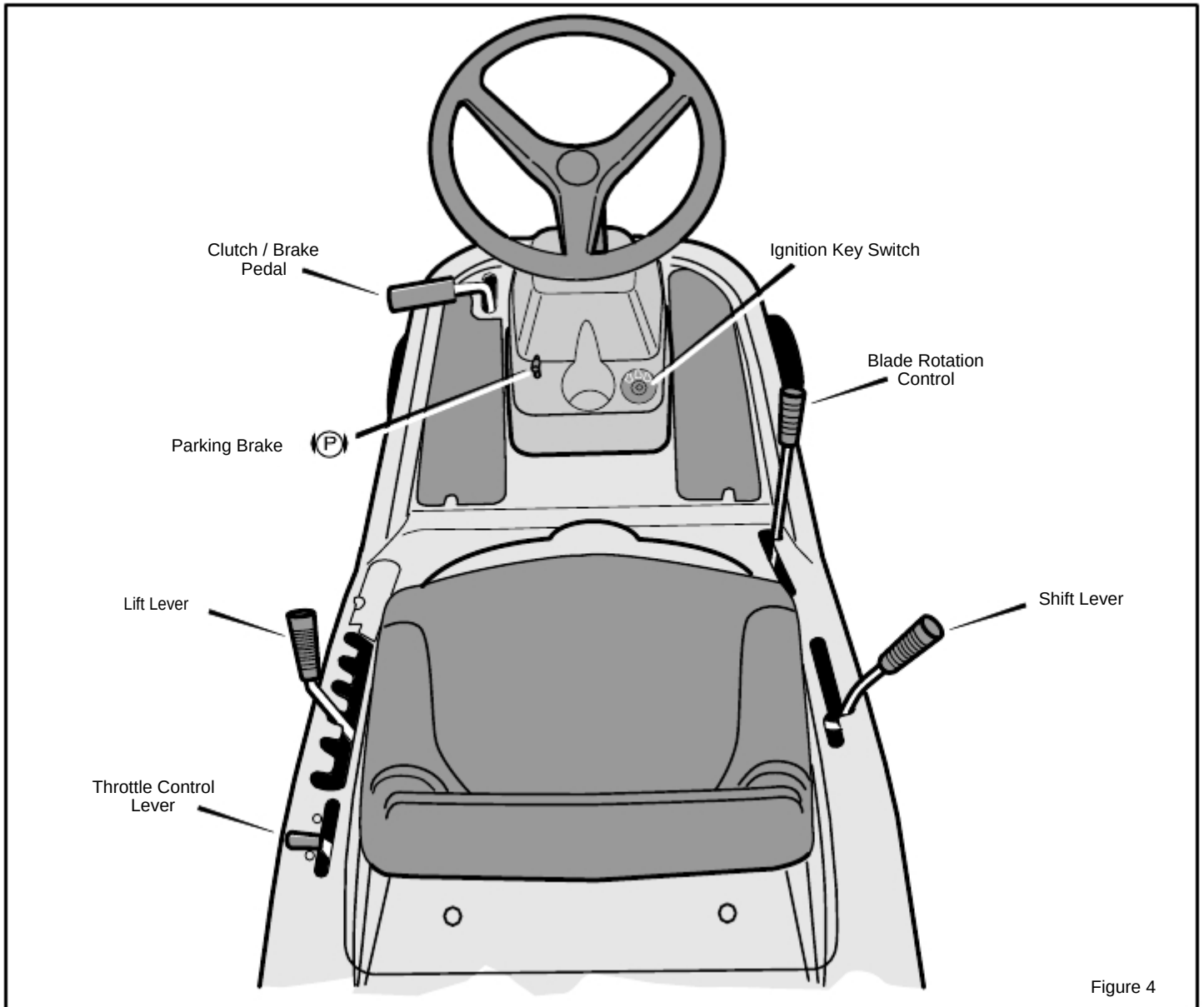


Figure 4

LOCATION OF CONTROLS

BLADE ROTATION CONTROL: Use the blade rotation control to start and stop the rotation of the blade.

CLUTCH / BRAKE PEDAL: The pedal has two functions. The first function is a clutch. The second function is a brake. Use the brake pedal to quickly stop the forward or reverse motion of the unit.

IGNITION KEYSWITCH: Use the ignition key switch to start and stop the engine. When you start the engine and release the ignition key, the switch will automatically default to the recommended RUN-MOW position for normal mowing.

SHIFT LEVER: Use the shift lever to change the speed of the unit.

LIFT LEVER: Use the lift lever to change the height of cut.

PARKING BRAKE LEVER: Use the parking brake lever to engage the brake when you leave the unit.

THROTTLE CONTROL LEVER: Use the throttle control lever to increase or decrease the speed of the engine.

OPERATION

ATTACHMENTS

This unit can use many different attachments. See the attachment page in this book. This unit can pull attachments like a lawn sweeper, a lawn aerator, a hopper spreader, or a small trailer. This unit cannot use attachments that engage the ground like a plow, a disk harrow, or a cultivator.

For all pull-behind attachments or trailers, the maximum gross

weight is 200 pounds. Gross weight is the weight of the attachment or trailer and any load that might be on or in it.

Do not operate on a slope that is greater than 10 degrees when using a pull-behind attachment or trailer. We have included a slope guide in this book to help you check which slopes are safe to work on. Never allow someone to stand or ride on or in an attachment or trailer.

ELECTRICAL SAFETY SYSTEM

The electrical system has two primary components, an Operator Presence System and a Select Reverse system.

Operator Presence System (Seat)

The Seat has an Operator Presence System to shut off the engine when the operator leaves the seat. This system is not intended for

regular use in stopping the engine or the blade(s). Before leaving the seat, move the blade rotation control to the DISENGAGE position, shift to neutral, set the parking brake and stop the engine.

Select Reverse System

The **Select Reverse** system will allow the mower blade(s) to continue to rotate when traveling in reverse. See "How To Operate The Ignition Key Switch" and "How To Start The Engine" for further details.

HOW TO OPERATE THE IGNITION KEY SWITCH

Use the ignition key switch to start and stop the engine. When you start the engine and release the ignition key, the ignition key switch will automatically default to the recommended RUN-MOW position for normal mowing.

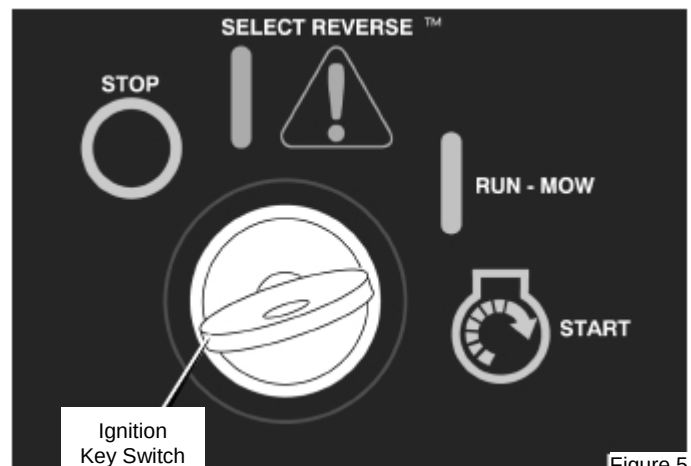
START - Use this position to start the engine.

RUN-MOW - When you start the engine and release the ignition key, the ignition key switch will automatically default to the recommended **RUN-MOW** position for normal mowing. In the **RUN-MOW** position, the system will stop the engine and the blade when the speed control pedal/shift lever is put in the reverse position.

SELECT REVERSE - The optional **Select Reverse** Position will allow the mower blade to continue to rotate when traveling in reverse. Always go back to the recommended RUN-MOW position for normal mowing when operating in **Select Reverse** is not absolutely necessary. **NEVER** use the **Select Reverse** option if children are on or near the property.

 **WARNING:** Operators are strongly discouraged from using this option unless the operator decides such operation is absolutely necessary and that safe precautions are taken. Never use the Select Reverse option if children are on or near the property. Always look down and behind before and while backing. After using the Select Reverse position, move the ignition key back to the RUN-MOW position.

STOP - Use this position to stop the engine.



OPERATION

HOW TO USE THE THROTTLE / CHOKE CONTROL

Use the **throttle/choke control** to choke the engine for cold starts and increase or decrease the speed of the engine (see Figure 6).

1. Move the **throttle/choke control** completely forward to the **CHOKE**  position to start a cold engine.
2. The **FAST** position is marked with a catch. For normal operation and when using a grass bagger, move the **throttle control** to the **FAST** position. For maximum charging of the battery and for a cooler running engine, operate the engine in the **FAST** position.
3. For transport and to tow pull behind attachments, move the throttle control to the **SLOW** position.
4. The engine governor is set at the factory for maximum performance. Do not adjust the governor to increase the speed of the engine.

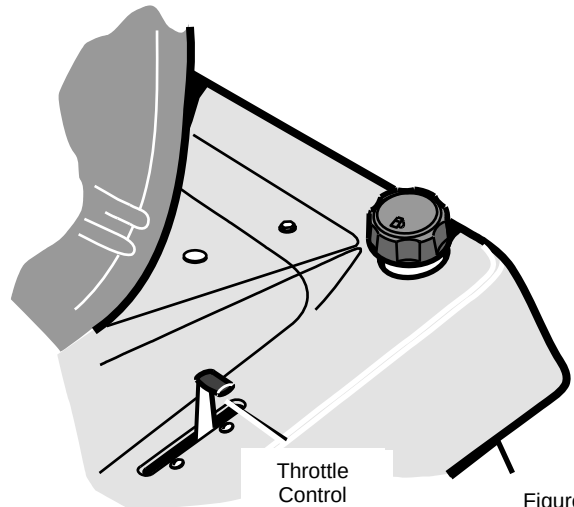


Figure 6

HOW TO USE THE BLADE ROTATION CONTROL

Use the **blade rotation control** to engage the blade (Figure 7).

1. Before you start the engine, make sure the **blade rotation control** is in the **DISENGAGE** position.
 2. To rotate the blade, move the **blade rotation control** forward to lock the blade in the **ENGAGE** position.
- Note: If the engine stops when you engage the blade, the transmission is in reverse.**
3. To stop the blade, move the **blade rotation control** to the **DISENGAGE** position. Before you leave the operator's position, make sure the blade has stopped rotating.
 4. Before you ride the unit across a sidewalk or a road, move the **blade rotation control** to the **DISENGAGE** position.

5. Before operating in reverse, move the blade rotation control to the **DISENGAGED** position. If the blade rotation control is not in the **DISENGAGED** position, the engine will stop when the speed control pedal/shift lever is moved to the **REVERSE** position.



WARNING: Always keep your hands and feet away from the blade, deflector opening, and the mower housing when the engine runs.

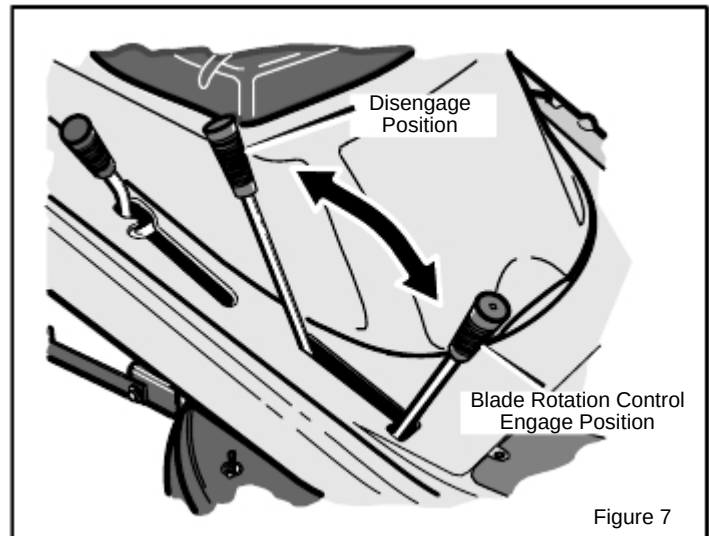


Figure 7

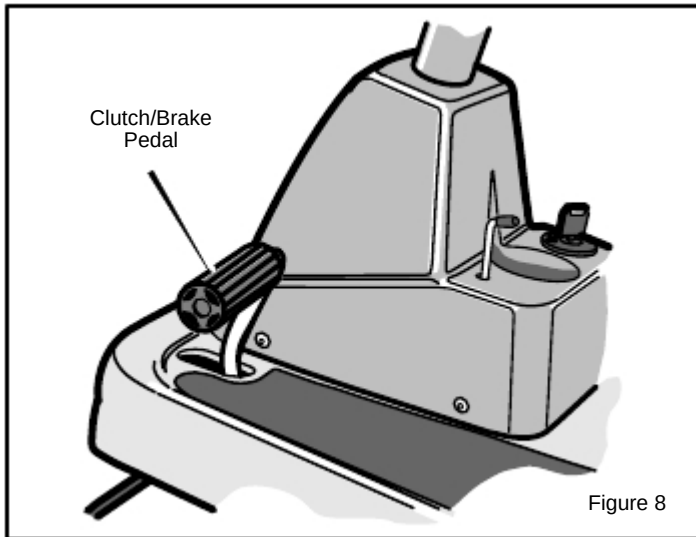
OPERATION

HOW TO USE THE SHIFT LEVER

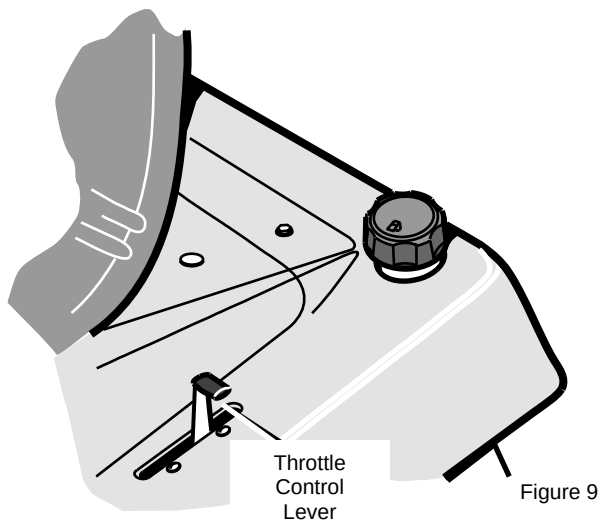
To change the forward speed or the direction of the unit, follow the steps below.

CAUTION: Before you move the shift lever, completely push the clutch/brake pedal forward to stop the unit. If the unit is not stopped, the gearbox can be damaged.

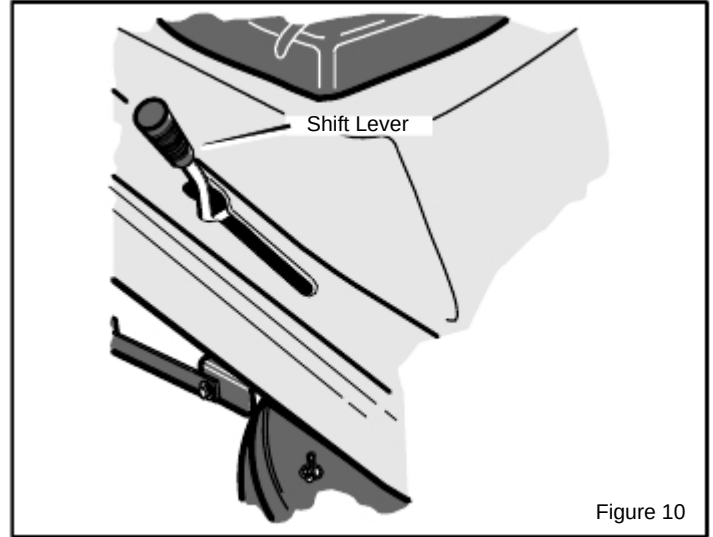
1. Completely push the **clutch/brake pedal** forward to stop the unit. Keep your foot on the pedal (see Figure 8).



2. Move the **throttle control lever** to the SLOW position (see Figure 9).

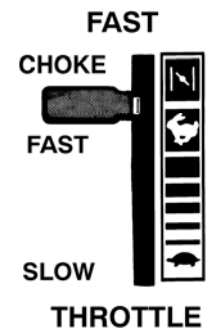


3. To go forward, move the **shift lever** to a forward speed setting.
4. To go backward, move the shift lever to reverse. Always Disengage the blades and look down and behind before and while backing.



5. Slowly release the **clutch/brake pedal**. Do not keep your foot on the pedal.
6. Move the **throttle control** to the FAST position.

FUNCTION	SHIFT LEVER 5-6 SPEEDS
Trimming	1
Snow Thrower	
Bagging Grass	1 or 2
Mulching Grass	1 or 2
Normal Mowing	2 or 3
Easy Mowing Snow Blade	3 or 4
Transport	5 or 6
Attachments	*



* See the Instruction Book for the Attachment.

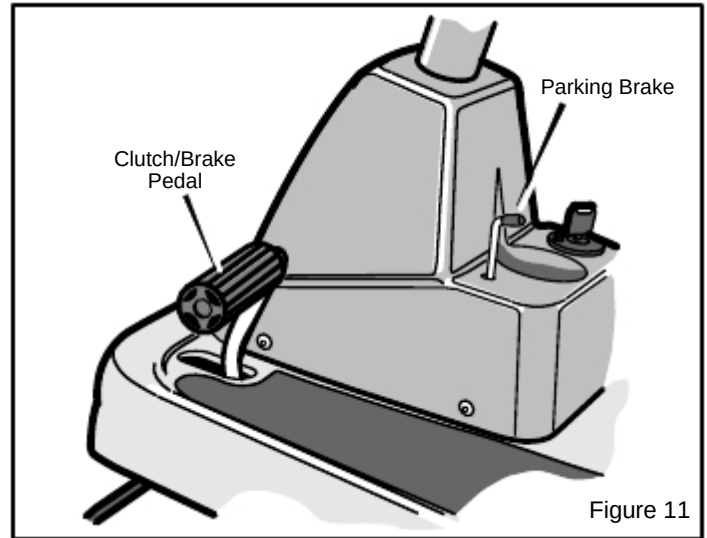
OPERATION

HOW TO SET THE PARKING BRAKE

1. Completely push the **clutch/brake pedal** forward.
2. Lift the **parking brake lever** (Figure 11).
3. Remove your foot from the clutch/brake pedal and then release the **parking brake lever**. Make sure the parking brake will hold the unit.
4. To release the **parking brake**, completely push the **clutch/brake pedal** forward. The **parking brake** will automatically release.



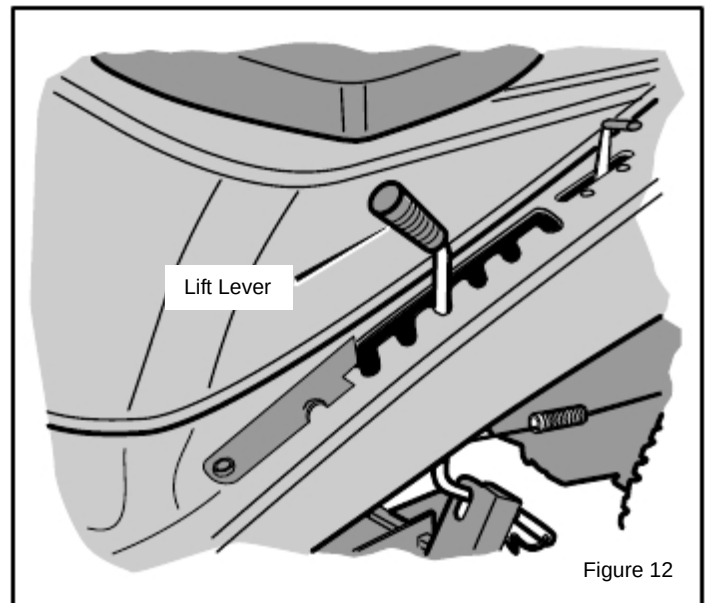
WARNING: Before you leave the operator's position, move the shift lever to the neutral (N) position. Set the parking brake. Move the blade rotation control to the DISENGAGE position. Stop the engine and remove the ignition key.



HOW TO CHANGE THE CUTTING HEIGHT

To change the cutting height, raise or lower the **lift lever** as follows.

1. Move the **lift lever** forward to lower the mower housing and back to raise the mower housing (Figure 12).
2. When you ride the mower on pavement, move the **lift lever** to the highest position and move the blade rotation control to the DISENGAGE position.



HOW TO STOP THE UNIT

1. Completely push the **clutch/brake pedal** forward to stop the unit. Keep your foot on the pedal.
2. Move the blade rotation control to the DISENGAGE position.
3. Move the shift lever to the NEUTRAL position.
4. Set the parking brake.



WARNING: Make sure the parking brake will hold the unit.

5. Move the throttle control to the SLOW position.
6. To stop the engine turn the ignition key to the STOP position. Remove the key.

HOW TO TRANSPORT THE UNIT

To transport the unit, follow the steps below.

1. Move the blade rotation control to the DISENGAGE position.
2. Raise the lift lever to the highest position.

3. Move the throttle control to a position between SLOW and FAST.
4. To go faster, move the shift lever to a faster speed.

OPERATION

HOW TO INSTALL THE SIDE DISCHARGE ATTACHMENT



WARNING: To prevent the engine from starting, disconnect the wire from the spark plug. Make sure the blade rotation control is in the DISENGAGE position.

The mulcher cover lets you mulch the grass for a clean, fine cut. To discharge the grass out the side, install the **side discharge attachment** as follows.

1. Remove the fasteners that secure the **mulcher cover** (see Figure 13).
2. Lift the **mulcher cover**. Mount the **side discharge attachment** onto the same bolts that secured the **mulcher cover**.
3. Secure the **side discharge attachment** with the fasteners.
4. To mulch, remove the **side discharge attachment** and mount the **mulcher cover** to the mower housing with the fasteners.

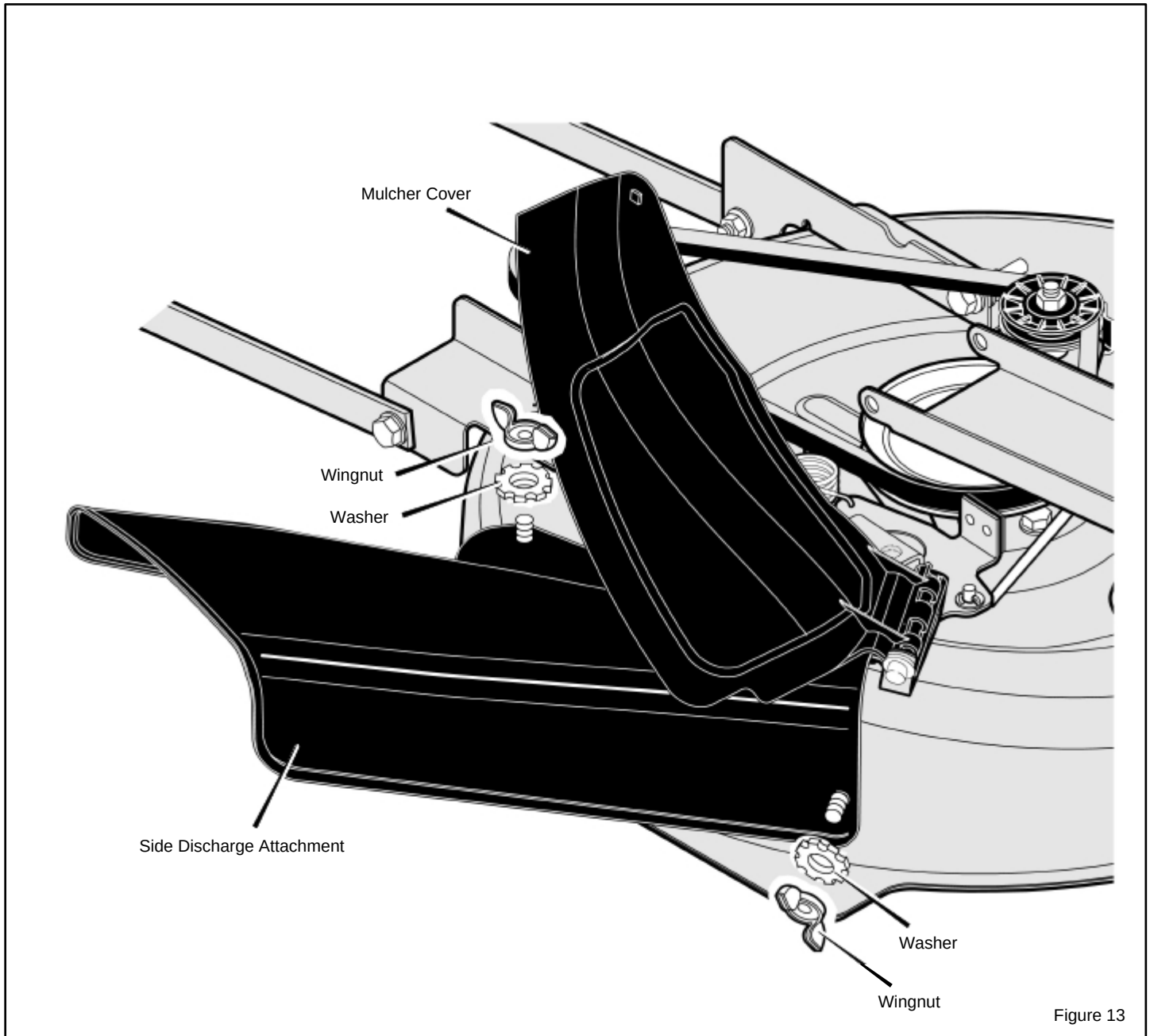


Figure 13

OPERATION

BEFORE STARTING THE ENGINE

CHECK THE OIL

NOTE: The engine was shipped from the factory filled with oil. Check the level of the oil. Add oil as needed. See the engine manufacturer's instructions for the type of petrol and oil to use.

1. Make sure the unit is level.

NOTE: Do not check the level of the oil while the engine runs.

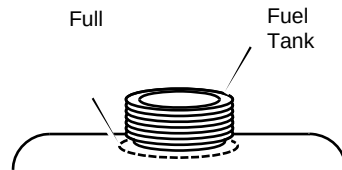
2. Check the Oil. Follow the procedure in the engine manufacturer's instructions.
3. If necessary, add oil until the oil reaches the FULL mark on the dipstick. The quantity of oil needed from ADD to FULL is shown on the dipstick. Do not add too much oil.

ADD PETROL



WARNING: Always use a safety petrol container. Do not smoke when adding petrol to the fuel tank. Do not add petrol when you are inside an enclosure. Before you add petrol, stop the engine and let the engine cool for several minutes.

Fill the fuel tank with regular unleaded petrol. Do not use premium unleaded petrol. Make sure the petrol is fresh and clean. Leaded petrol will increase deposits and shorten the life of the valves.



CAUTION: A mixture of alcohol (ethanol or methanol) and petrol (called gasohol), will attract moisture and cause acid deposits during storage. While the unit is in storage, the acids in the fuel can damage the fuel system.

To prevent engine problems with the fuel system, empty the fuel system before storage of 30 days or longer as follows.

1. Drain the fuel tank.
2. Start the engine. Let the engine run until the fuel lines and the carburettor are empty.
3. After storage, make sure you use fresh fuel. See the storage instructions for additional information.
4. Never use engine cleaner or carburettor cleaner in the fuel tank or permanent damage can occur.

HOW TO START THE ENGINE



WARNING: The electrical system has two primary components, an operator presence system and a Select Reverse system. The operator presence system determines if the operator is sitting on the seat. This system will stop the engine when the operator leaves the seat. The Select Reverse system gives the operator the ability to temporarily mow in reverse if they decide such operation is absolutely necessary and safe operating precautions are taken. For your protection, always make sure these systems operate correctly.

NOTE: The engine will not start unless you depress the Clutch/brake pedal or engage the parking brake and move the blade rotation control to the DISENGAGE position.

1. Make sure the spark plug wire is connected to the spark plug.
2. Push the clutch/brake pedal completely forward. Keep your foot on the pedal.

3. Move the shift lever to the neutral (N) position.
4. Make sure the blade rotation control is in the DISENGAGE position. If the blade rotation control is not in the DISENGAGE position, the engine will not start.
5. Move the throttle control completely forward to the CHOKEN or FAST position. Some models have a separate choke knob. Pull the choke knob to the full CHOKE position.
6. Turn the ignition key to the START  position. Release the key when the engine starts. The ignition key switch will automatically default to the recommended RUN-MOW position for normal mowing. See "How To Operate The Ignition Key Switch" in the Operation Section.

NOTE: If the engine does not start after four or five tries, see the TROUBLE SHOOTING CHART.

7. Slowly move the throttle control to the SLOW position.
8. Let a cold engine run for several minutes. Begin work when the engine is warm. To start a hot engine, move the throttle control to a position between FAST and SLOW.

OPERATION

HOW TO OPERATE WITH THE MOWER HOUSING



WARNING: The deflector is a safety device. Do not remove the deflector. The deflector forces the discharged material toward the ground. Always keep the deflector in the down position. If the deflector is damaged, replace the deflector with an original equipment part from an authorised service centre.

IMPORTANT: When you operate with the mower housing, always operate with the throttle control in the **FAST** position.

1. Start the engine.
2. Move the lift lever to a height of cut position. In high or thick grass, cut the grass in the highest position first and then lower the mower housing to a lower position.

CAUTION: Do not operate with the mower housing in the **LEVEL ADJUSTMENT** position. If you operate in the **LEVEL ADJUSTMENT** position, the mower housing and blades can be damaged.

3. Move the throttle control to the **SLOW** position.

4. Slowly move the blade rotation control to the **ENGAGE** position.
5. Push the clutch/brake pedal completely forward.
6. Move the shift lever to one of the speed settings.
NOTE: When you mow in heavy grass or mow with a bagger, put the shift lever in the slowest speed.
7. Slowly release the clutch/brake pedal.
8. Move the throttle control to the **FAST** position. If you need to go faster or slower, stop the unit and move the shift lever to another speed setting.
9. Make sure the level of cut is still correct. After you mow a short distance, look at the area that was cut. If the mower housing does not cut level, see the instructions on "How To Level The Mower Housing" in the Maintenance section.



WARNING: For better control of the unit, always select a safe speed.

HOW TO OPERATE THE UNIT ON HILLS



WARNING: Do not ride up or down slopes that are too steep to back straight up. Never ride the unit across a slope. See the "Slope Guide" in the back of this book for information on how to check slopes.

1. Before you ride up or down a hill, move the shift lever to the slowest speed.
2. Do not stop or change speed settings on a hill. If you must stop quickly push the clutch/brake pedal forward and set the parking brake.
3. To start again, make sure the shift lever is in the slowest speed. Move the throttle control to the **SLOW** position. Slowly release the pedal.
4. If you must stop or start on a hill, always have enough space for the unit to roll when you release the brake and engage the clutch.
5. Be very careful when you change directions on a hill. When on a slope or in a turn on a hill, move the throttle control to the **SLOW** position to help prevent an accident.

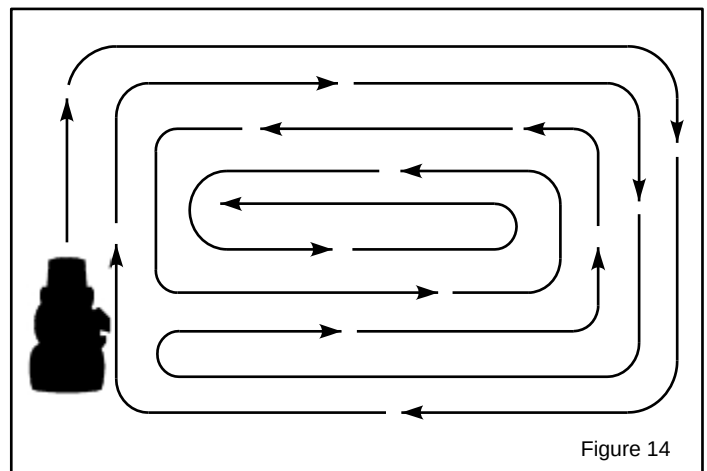
OPERATION

OPERATING TIPS

1. Check the blade rotation control for correct adjustment for the blade to disengage correctly, the adjustment must be correct.
2. Before you use the unit, check the oil in the engine and add oil if necessary.
3. If the engine will not start, first make sure the wire is attached to the spark plug.
4. Make sure all the belts are inside all the belt guides. See the Instructions on how to remove and install the motion drive and mower drive belts.
5. Before you make an inspection, adjustment (except for the carburetor) or repair, make sure the wire from the spark plug is disconnected.
6. For longer life of the battery on electric start models, charge the battery every three months.
7. Use the shift lever to change the ground speed, not the throttle control.
8. Belt noise can occur when the blade or clutch is engaged. This noise is normal and does not affect the operation of the unit.

MOWING AND BAGGING TIPS

1. For a lawn to look better, check the cutting level of the mower housing. See "How To Level The Mower Housing" in the Maintenance section.
2. For the mower housing to cut level, make sure the tires have the correct amount of air pressure and use slow ground speeds when turning.
3. Every time you use the unit, check the blade. If the blade is bent or damaged, immediately replace the blade. Also, make sure the nut for the blade is tight.
4. Keep the blade sharpened. Worn blades will cause the ends of the grass to turn brown.
5. Do not cut or bag grass that is wet. Wet grass will not discharge correctly. Let the grass dry before cutting.
6. Use the left side of the mower housing to trim near an object.
7. Discharge the cut grass onto the mowed area. The result is a more even discharge of cut grass.
8. When you mow large areas, start by turning to the right so that the cut grass will discharge away from shrubs, fences, driveways, etc. After one or two round, mow in the opposite direction making left turns until finished (Figure 14).
9. Use a mowing pattern that eliminates reverse travel as much as possible.
10. If the grass is very high, cut two times to decrease the load on the engine. First cut with the mower housing in the highest position and then lower the mower housing for the second cut.
11. For better engine performance and an even discharge of the cut grass, always operate the engine with the throttle in the FAST position.
12. When you use a bagger, operate the engine with the throttle in FAST position and the shift lever in first or second gear.
13. For better cutting performance and a quality cut, mow with the shift lever in one of the slower speeds.
14. After each use, clean the bottom and top of the mower housing for better performance. A clean mower housing will help to reduce the risk of fire.



MAINTENANCE

MAINTENANCE CHART

FREQUENCY	MAINTENANCE REQUIRED	COMMENTS
Daily or before each use	Maintenance the engine.	Refer to the Engine Owner's Manual .
	Examine blade(s).	Check for cracks, wear, and damage.
	Remove debris from unit and mowing area.	
	Examine all rotating and sliding parts.	
	Check tire inflation.	Refer to the Maintenance section.
	Verify that the mower housing is level.	Refer to the Maintenance section.
	Examine V-belts.	Check for cracks, wear, and damage.
	Check brake operation.	Refer to the Operation and Maintenance sections.
After first 5 hours of use	Change oil.	Refer to the Engine Owner's Manual .
After 25 hours	Maintenance engine.	Refer to the Engine Owner's Manual .
	Remove, examine, sharpen, and balance blade(s).	Refer to Maintenance section.
	Check adjustments: a. Blade Rotation Control b. Brake c. Clutch d. Steering	Refer to Maintenance section.
	Lubricate chassis and mower housing.	Refer to Where to Lubricate instructions.
	Check the muffler: a. Torque b. For wear or burn out c. Condition of spark arrestor (if applicable).	Refer to Maintenance section.
Before storage of 30 days or more	Prepare the engine for storage.	Refer to the Engine Owner's Manual .
	Drain fuel system.	Refer to the warnings in the Owner's Manual .
	Add fuel stabilizer.	Refer to the Engine Owner's Manual .
	Prepare battery for storage: a. Remove from unit. b. Fully charge. c. Move to a cool dry place.	

GENERAL RECOMMENDATIONS

1. The owner's responsibility is to maintain this product. This will extend the life of the product and is also necessary to maintain warranty coverage.
2. Check the spark plug, drive brake, lubricate the unit and clean the air filter once a year.
3. Check the fasteners. Make sure all fasteners are tight.
4. Follow the Maintenance section to keep the unit in good operating condition.



WARNING: Before you make an inspection, adjustment or repair to the unit, disconnect the wire to the spark plug. Remove the wire from the spark plug to prevent the engine from starting by accident.

NOTE: Torque is measured in foot pounds (metric Nm). This measurement describes how tight a nut or bolt must be. The torque is measured with a torque wrench.

HOW TO CHECK THE MUFFLER

Check the muffler every 50 hours. Make sure the muffler is correctly mounted and is not loose. If the muffler is worn or burnt, replace with a new muffler. A worn muffler is a fire hazard and can also damage the engine.

If you mount a spark arrester to the muffler, also check the spark arrester when you check the muffler. If the spark arrester is worn or damaged, replace it with a new spark arrester. See your nearest authorised service centre for a spark arrester.

MAINTENANCE

INSPECT BLADE



WARNING: Before you inspect or remove the blade, disconnect the wire to the spark plug. If the blade hits an object, stop the engine. Check the unit for damage. The blade has sharp edges. When you hold the blade, use gloves to protect your hands.

If you keep the blade sharp and inspect the blade for damage, the blade will cut better and be more safe to operate. Frequently check the blade for wear, cracks, or other damage. Frequently check the nut that holds the blade. Keep the nut tight. If the blade hits an object, stop the engine. Disconnect the wire to the spark plug. See if the blade is bent or damaged. Check the blade adapter for damage. Before you operate the unit, replace damaged parts with original equipment parts. See the authorised service centre in your area. Every three years, have an authorised service person inspect the blade or replace the old blade with an original equipment part.

HOW TO REMOVE AND INSTALL THE BLADE

1. Remove the mower housing. See the instructions on "How To Remove The Mower Housing".
2. Use a piece of wood to keep the blade from rotating.
3. Remove the **nut** that holds the blade (Figure 15).

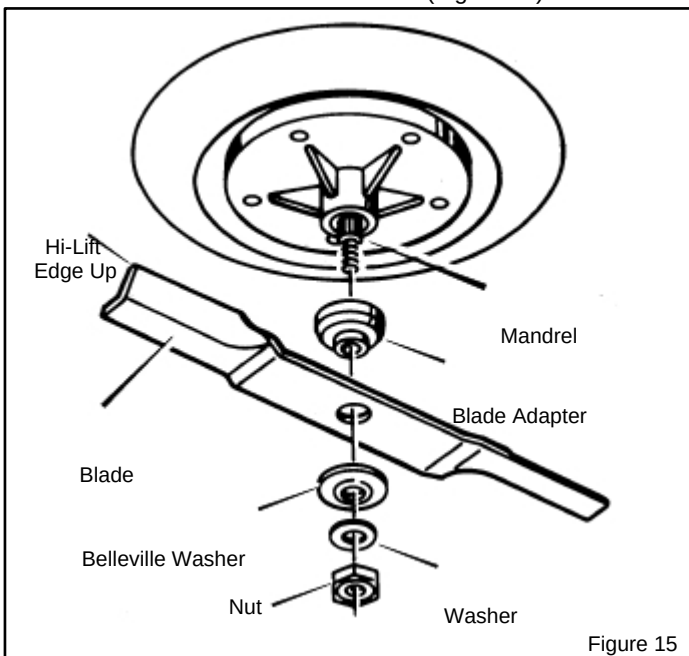


Figure 15

4. Check the **blade** and the **blade adapter** according to the Instructions for "Inspect Blade". Replace a badly worn or damaged **blade** with an original equipment blade. See an authorised service centre in your area.
5. Clean the top and bottom of the mower housing. Remove all grass and debris.
6. Mount the **blade** and **blade adapter** on the **mandrel** (Figure 15).
7. Mount the **blade** so that the **hi-lift edges** are up. If the **blade** is upside down, the **blade** will not cut correctly and can cause an accident.
8. Fasten the **blade** with the original washers and **nut**. Make sure the outside rim of the **Belleville washer** is against the **blade** (Figure 16).



WARNING: Always keep the nut tight that holds the blade. A loose nut or blade can cause an accident.

9. Tighten the **nut** that holds the **blade** to a torque of 35 foot pounds (47,5 N-m).
10. Install the mower housing. See "How To Install The Mower Housing".

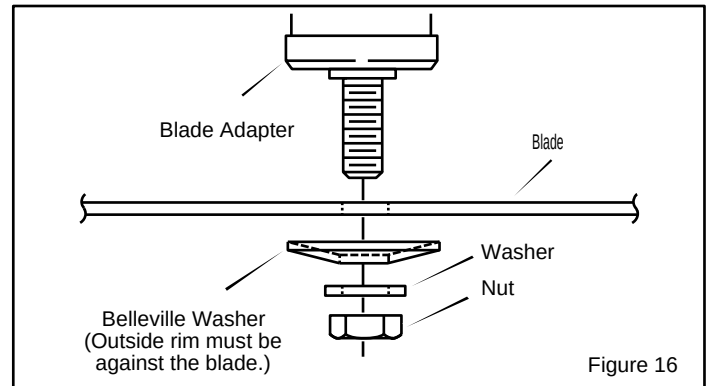


Figure 16

HOW TO SHARPEN THE BLADE



WARNING: Vibration can be caused if the blade is not correctly balanced or if the blade is damaged. A blade that is damaged with cracks can break and cause an accident.

Keep a sharp edge on the **blade**. A **blade** that is not sharp will cause the tips of the grass to become brown.

1. Sharpen the **blade** two times a year or every 25 hours of use.
2. Remove the **blade** according to the instructions in "How To Remove And Install The Blade".
3. Clean the **blade** with a brush, soap and water. Check the **blade**. Look for cracks, nicks, or other damage. Replace a badly worn or damaged blade with an original equipment blade. See an authorised service centre in your area.
4. Sharpen the **blade** with a **file** (Figure 17). Make sure you keep the original bevel angle.
5. Make sure the **blade** is balanced. Use a **screwdriver** and hold the **blade** parallel to the **ground** (Figure 17). A **blade** that is balanced will stay parallel to the **ground**. If the **blade** is not balanced, the heavy end will rotate toward the **ground**. Sharpen the heavy end until the **blade** is balanced.
6. A new blade will cut better than a badly worn blade. Every three years, have an authorised service person inspect the blade or replace the old blade with an original equipment blade.
7. Assemble the **blade** according to the instructions "How To Remove And Install The Blade".

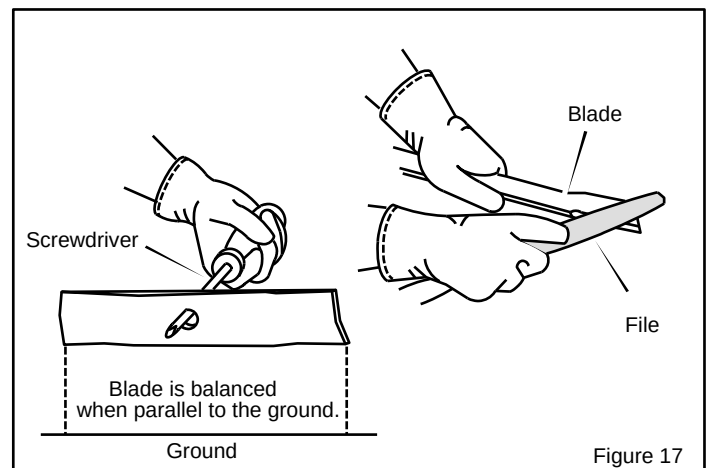


Figure 17

MAINTENANCE

CHECK THE BLADE ROTATION CONTROL



WARNING: To prevent an injury, the blade rotation control must operate correctly.

In normal usage, the **blade rotation control** will not require an adjustment. However, if the cutting performance decreases or the quality of the cut is poor, make the following changes.

1. When you mow, make sure the throttle control is in the FAST position.
2. Move the **blade rotation control** to the **DISENGAGE position** (Figure 18).
3. Stop the engine. Disconnect the wire from the spark plug.

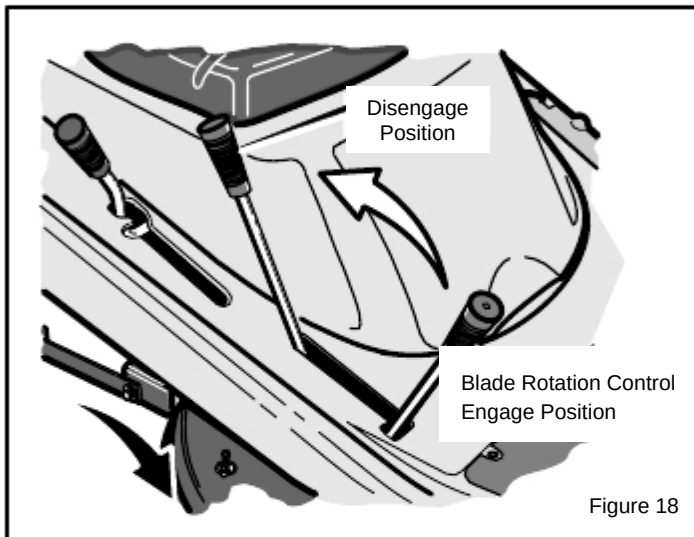


Figure 18

4. Check the blade(s). Keep a sharp edge on the blade(s). A blade that is not sharp will cause the tips of the grass to become brown.
5. If the quality of cut has not improved, replace the **mower drive belt**. See "How To Replace The Mower Drive Belt". If replacing the belt does not correct the problem, take the unit to an authorised service centre.
6. Move the **blade rotation control** to the **DISENGAGE position**. Stop the engine. Disconnect the wire from the spark plug.
7. Check the operation of the **blade brake**. Rotate the pulley with your hand. Make sure the **brake pad** is pressed tightly against the pulley (Figure 19).



WARNING: If the brake pad does not press tightly against the pulley, take the unit to an authorised service centre.

8. Move the **blade rotation control** to the **ENGAGE position**.
9. Check the pad for the **blade brake**. If the pad is worn or damaged, replace the **brake pad** assemblies. Correct replacement parts and assistance are available from an authorised service centre.
10. Attach the wire to the spark plug. Mow for a short distance and again check the operation of the **blade rotation control**.
11. When you move the **blade rotation control** to the **DISENGAGE position**, all movement will stop within five seconds. If there is movement of the belt or the blades continue to rotate, engage and disengage the **blade rotation control** five times to remove any excess rubber from a new **mower drive belt**. If you need assistance, take the unit to an authorised service centre.

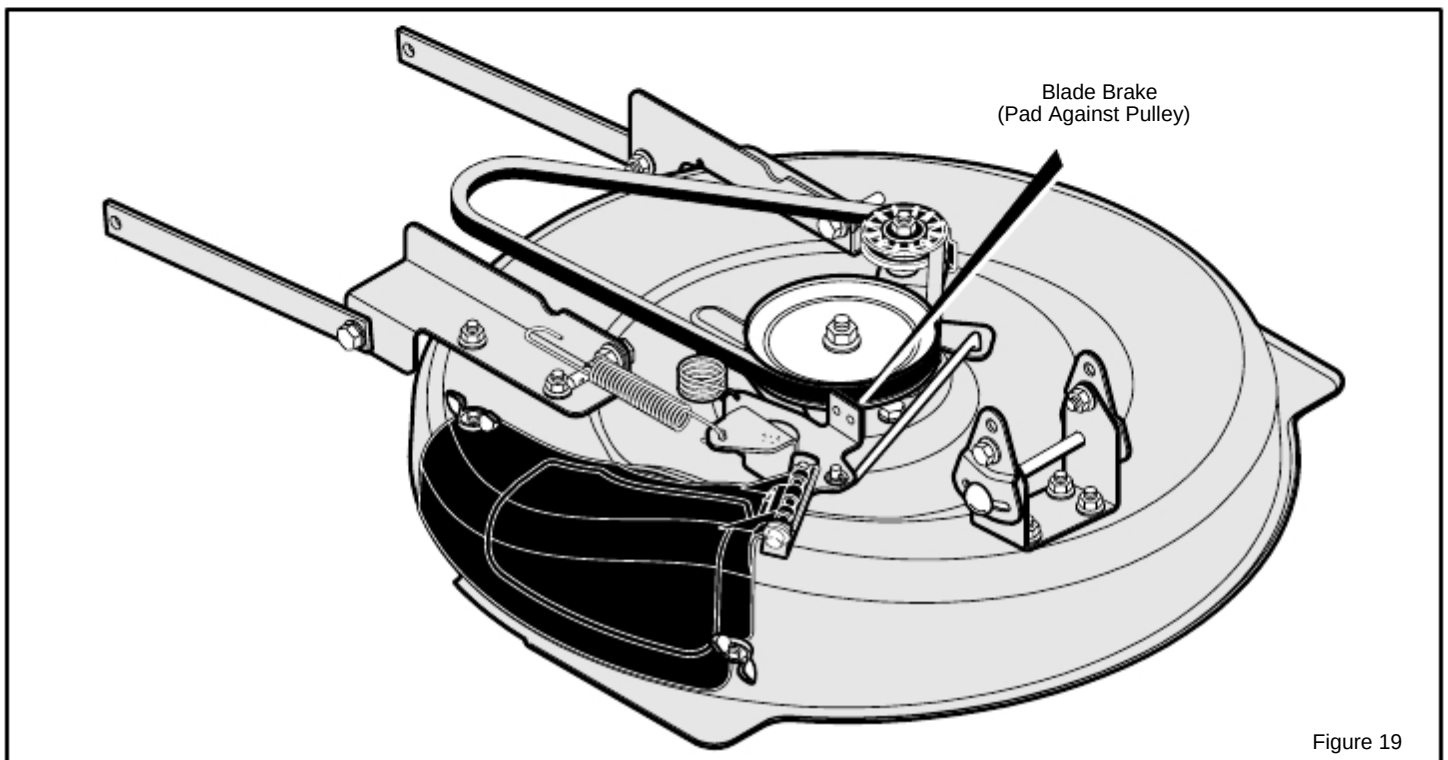


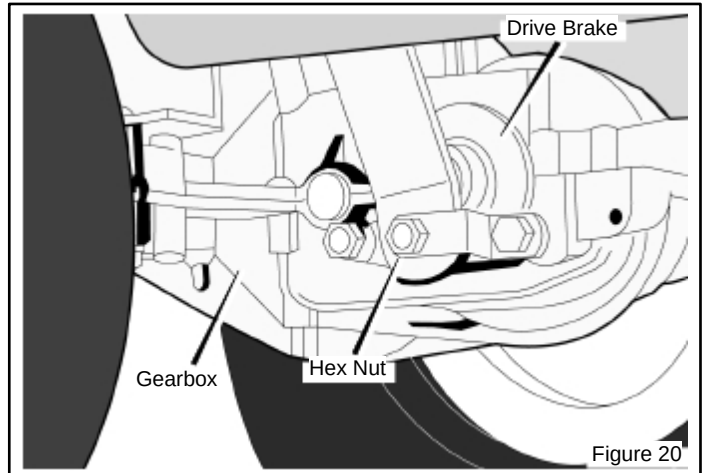
Figure 19

MAINTENANCE

HOW TO CHECK AND ADJUST THE DRIVE BRAKE

Completely push the clutch/brake pedal forward. Set the parking brake. Move the shift lever to the neutral (N) position. Push the unit. If the rear wheels rotate, adjust or replace the brake pads. Adjust the **drive brake** as follows.

1. The location of the **drive brake** is on the left side of the **gearbox** (Figure 20).
2. Make sure the parking brake is set and the shift lever is in neutral (N). Turn the **hex nut** in a clockwise direction until the rear wheels do not turn when the unit is pushed forward.
3. Release the parking brake and push the unit. If the unit does not roll, turn the **hex nut** in a counter-clockwise direction until the unit rolls.
4. Set the parking brake. Push the unit. If the rear wheels do not turn, the **drive brake** is correctly adjusted. Release the parking brake.



WARNING: If you cannot correctly adjust the drive brake, replace the brake pads. Correct replacement parts and assistance are available from an authorised service centre.

HOW TO CHECK AND ADJUST THE CLUTCH

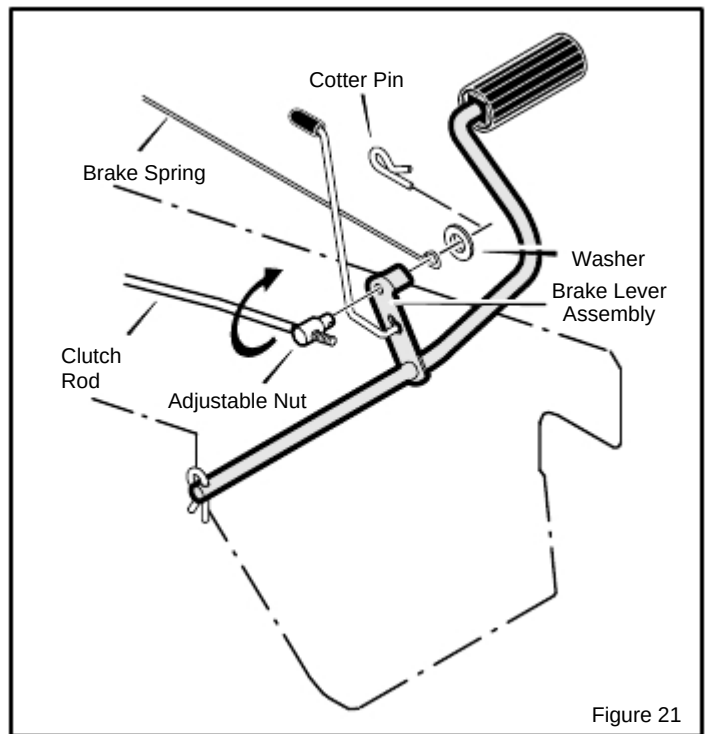
If the motion drive belt is loose, the clutch will slip when; (1) going up hill, (2) pulling a heavy load or (3) the unit will not move forward. Adjust the clutch as follows.

7. If the belt still slips after the clutch has been adjusted, then the motion drive belt is worn or damaged and must be replaced. See "How To Replace The Motion Drive Belt".



WARNING: Before you make an inspection, adjustment, or repair to the unit, disconnect the wire to the spark plug. Remove the wire from the spark plug to prevent the engine from starting by accident.

1. Check the routing of the motion drive belt. Make sure the belt is installed correctly and is inside all the belt guides.
2. Remove the **cotter pin**, **washer**, and **brake spring** from the **adjustable nut** (Figure 21).
3. Disconnect the **adjustable nut** from the **brake lever assembly**.
4. Align the hole in the **brake lever** with the rear of the slot in the **frame**.
5. Push the **clutch rod** toward the rear. Turn the **adjustable nut** until the nut will fit through the hole in the **brake lever**.
6. Assemble the **adjustable nut** to the **brake lever** and to the **brake spring**. Fasten with the **washer** and **cotter pin**.

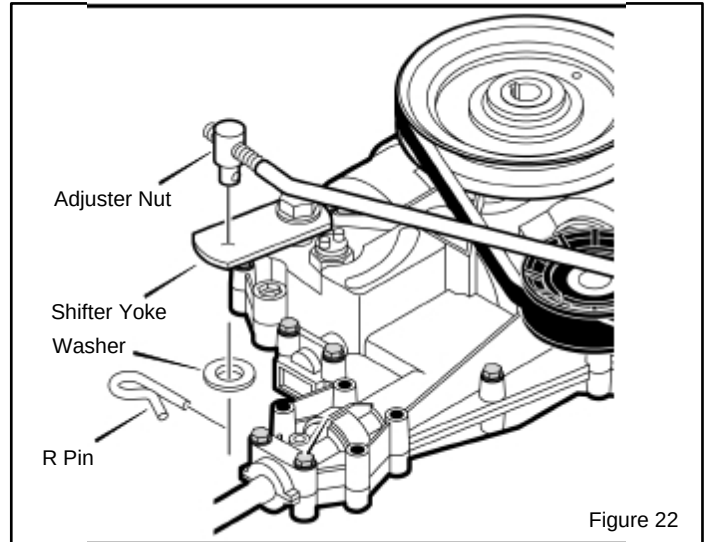


MAINTENANCE

HOW TO ADJUST THE SHIFT LEVER

If the NEUTRAL position on the shift lever does not match neutral on the gearbox, adjust the shift lever as follows.

1. Stop the engine.
2. Disconnect the **adjuster nut** from the **shifter yoke** (Figure 22).
3. Make sure the shift lever is in the NEUTRAL position.
4. Push the unit forward. Make sure the gearbox is in neutral.
5. To align the **adjuster nut** with the hole in the **shifter yoke**, turn the **adjuster nut**.
6. Connect the **adjuster nut** to the **shifter yoke**.
7. Make sure the NEUTRAL position on the shift lever matches neutral on the gearbox.



MAINTENANCE FREE BATTERY

HOW TO REMOVE THE BATTERY

To charge or clean the **battery**, remove the **battery** from the unit as follows.



WARNING: To prevent sparks, disconnect the black battery cable from the negative (-) terminal before you disconnect the red cable.
WARNING: The battery contains sulphuric acid which is harmful to the skin, eyes and clothing. If the acid gets on the body or clothing, wash with water.

1. Disconnect the **black cable** from the negative (-) terminal (Figure 23).
2. Disconnect the **red cable** from the **positive (+) terminal**.
3. To disconnect the **battery retainer** from the **battery tray**, push in on the lower end of the **battery retainer**.
4. Remove the **battery** from the right side of the unit.

HOW TO CLEAN THE BATTERY

1. Remove the **battery**.
2. Wash the **battery** with a solution of one gallon of water and four tablespoons of baking soda (sodium bicarbonate). Make sure the solution does not get into the battery cells.
3. Clean the **terminals** and the ends of the **cables** with a wire brush.
4. Install the **battery**.
5. To prevent corrosion, apply grease to the **battery terminals**.

HOW TO CHARGE THE BATTERY



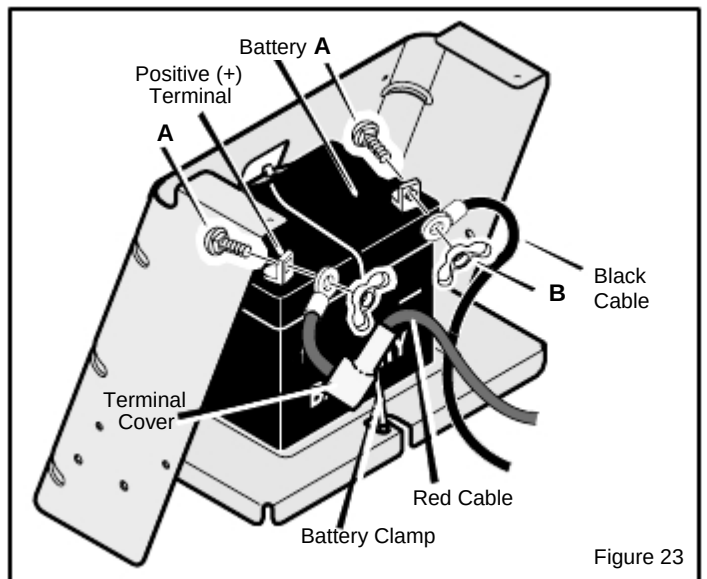
WARNING: When you charge the battery, do not smoke. Keep the battery away from any sparks. The fumes from the battery acid can cause an explosion.

1. Before you charge the **battery**, remove the **battery**.
2. To charge the **battery**, use a 12 volt battery charger. Charge at a rate of 6 amperes for 1 hour.
3. Install the **battery**.



WARNING: To prevent sparks, fasten the red cable to the positive (+) terminal before you connect the black cable.

4. Fasten the **red cable** and **terminal cover** to the **positive (+) terminal** with the fasteners as shown.
5. Fasten the **black cable** to the negative (-) terminal with the fasteners as shown.



MAINTENANCE

WHERE TO LUBRICATE



Apply grease with a brush to the areas shown.



Lubricate the areas shown with engine oil.

NOTE: Apply grease to the steering gear assembly.

CAUTION: If the unit is operated in dry areas that have sand, use a dry graphite spray to lubricate the unit.

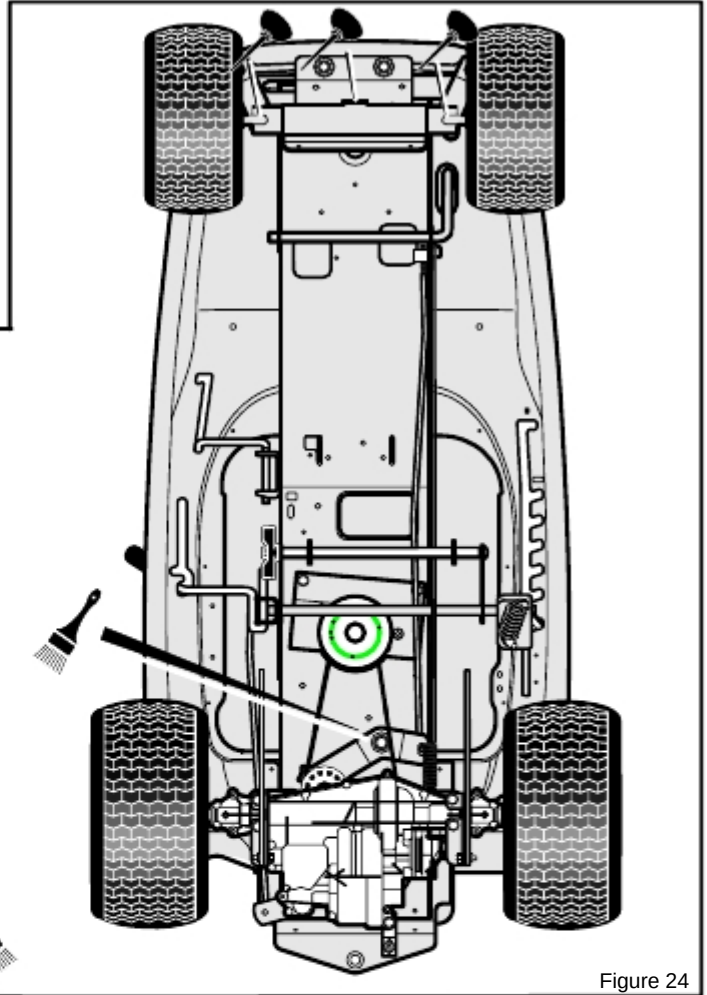


Figure 24

HOW TO CHECK THE FUEL FILTER

NOTE: Before you replace the fuel filter or the fuel line, the fuel tank must be empty.

If the **fuel filter** is dirty, the engine will run rough and have less performance. Remove the old filter (Figure 25). Replace the old filter with a new filter. Use an original equipment part. See an authorised service dealer in your area.

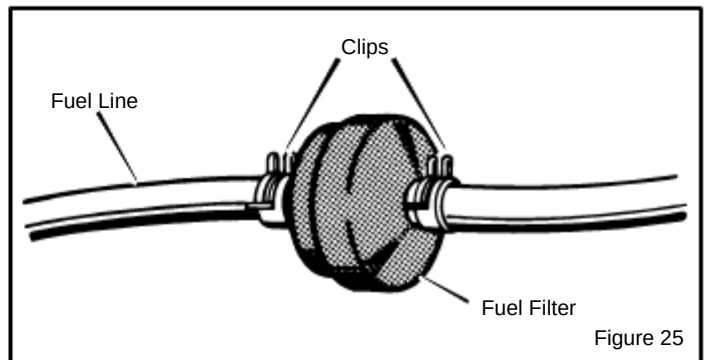


Figure 25

CHECK THE TIRES

Check the air pressure in the tires. Tires with too much air pressure will cause the unit to ride rough. Also, the wrong air pressure will keep the mower housing from cutting level. The correct air pressure is shown on the side of the tire.

MAINTENANCE

HOW TO LEVEL THE MOWER HOUSING

If the mower housing is level, the blade will cut easier and the lawn will look better.



WARNING: Before you make an inspection, adjustment, or repair to the unit, disconnect the wire to the spark plug. Remove the spark plug wire to prevent the engine from starting by accident.

1. Make sure the unit is on a hard flat surface.
2. Check the air pressure in the tires. If the air pressure is incorrect, the mower housing will not cut level. The correct air pressure is shown on the side of the tire.
3. Make sure the blade rotation control is in the DISENGAGE position.
4. Open the **cover** (see Figure 26).
5. Move the **lift lever** to the LEVEL ADJUSTMENT position (see Figure 26).
6. Loosen the front and rear **adjuster knobs** (see Figure 26 and Figure 27). Make sure both sides of the mower housing are setting on a flat surface.
7. Check the clearance between the **link rod** and the **mower drive belt** (see Figure 27). If the link rod is resting on the mower drive belt, the level adjustment may not be correct. Push down on the **link rod** as shown in Figure 27. Make sure that the adjuster plate is loose and can easily move up or down.
8. Tighten the front and rear **adjuster knobs**. Make sure the **Adjuster** knobs are tight. If necessary, use a wrench to tighten the **adjuster knobs**. Tighten to a torque of 10 foot pounds (13,5 N-m).
9. Raise the **lift lever** from the LEVEL ADJUSTMENT position to a CUTTING HEIGHT position (Figure 28).
10. Close the **cover**.
11. Attach the spark plug wire to the spark plug.
12. Mow for a short distance. If the height of cut is not level, repeat the above steps.

CAUTION: Do not operate with the mower housing in the LEVEL ADJUSTMENT position. If you operate in the LEVEL ADJUSTMENT position, the mower housing and blades can be damaged.

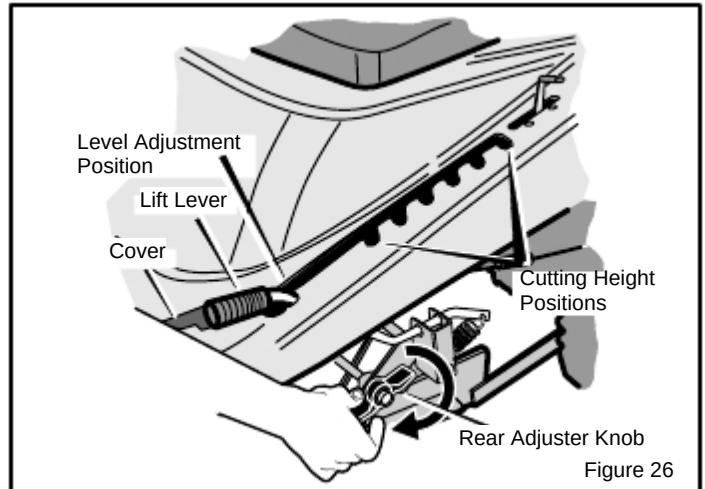


Figure 26

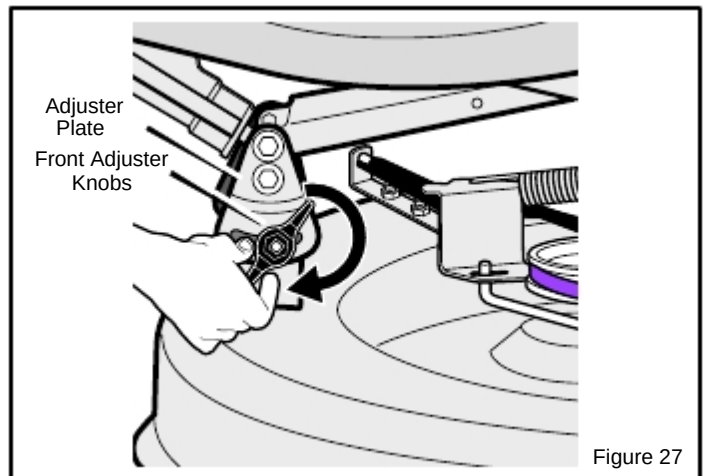


Figure 27

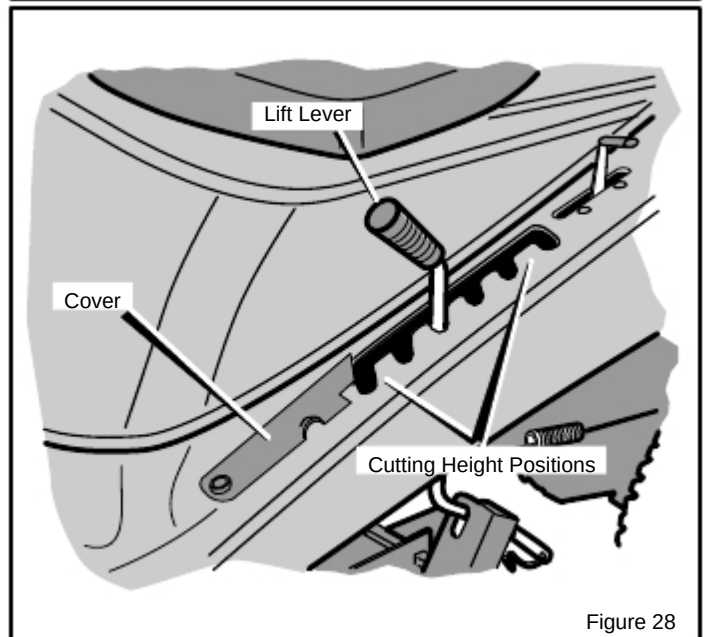


Figure 28

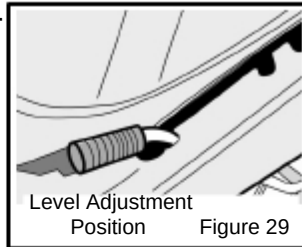
MAINTENANCE

HOW TO REMOVE THE MOWER HOUSING

1. Move the **blade rotation control** to the DISENGAGE position.
2. Move the lift lever to the level adjustment position (Figure 29).

NOTE: Make sure the lift lever is locked in the LEVEL ADJUSTMENT position.

3. Remove the R pins and the washers from the **rear suspension arms** (Figure 30). See illustrations "C" and "D".
4. Remove the R pins and washers from the **suspension links**. See illustrations "A" and "B".
5. Disconnect the **extension spring** from the **blade control rod**. See illustration "E".
6. Disconnect the **front hanger** from the frame support. See illustration "F".
7. Remove the **mower drive belt** from the **stack pulley**. See illustration "G".
8. Pull the mower housing away from the right side of the unit.
9. To operate without the mower housing, move the lift lever to the TOP position.



HOW TO INSTALL THE MOWER HOUSING

1. Push the mower housing under the right side of the unit.
2. Put the **mower drive belt** around the **stack pulley**. Make sure the "V" side of the **mower drive belt** is against the **stack pulley**. Also, make sure the **mower drive belt** is not twisted.
3. Attach the **front hanger** to the frame support with the **hanger rod**. Fasten with the fasteners as shown. See illustration "F".
4. Make sure the **mower drive belt** is between the **stack pulley** and the two **belt guides**. See illustration "G".
5. Attach the **suspension links** to the **lifter assembly**. Fasten with the washers and R pins. See illustrations "A" and "B".
6. Attach the **rear suspension arms** to the suspension brackets. Fasten with the washers and R pins. See illustrations "C" and "D".
7. Attach the **extension spring** to the **blade control rod**. See illustration "E".
8. Move the **blade rotation control** to the ENGAGE position. Make sure the **mower drive belt** is inside all the **belt guides** and is also below the **spacer tube**.
9. Make sure the mower housing is level. See the instructions on "How To Level The Mower Housing".
10. Check the operation of the **blade rotation control**. See the instructions on "How To Adjust The Blade Rotation Control".

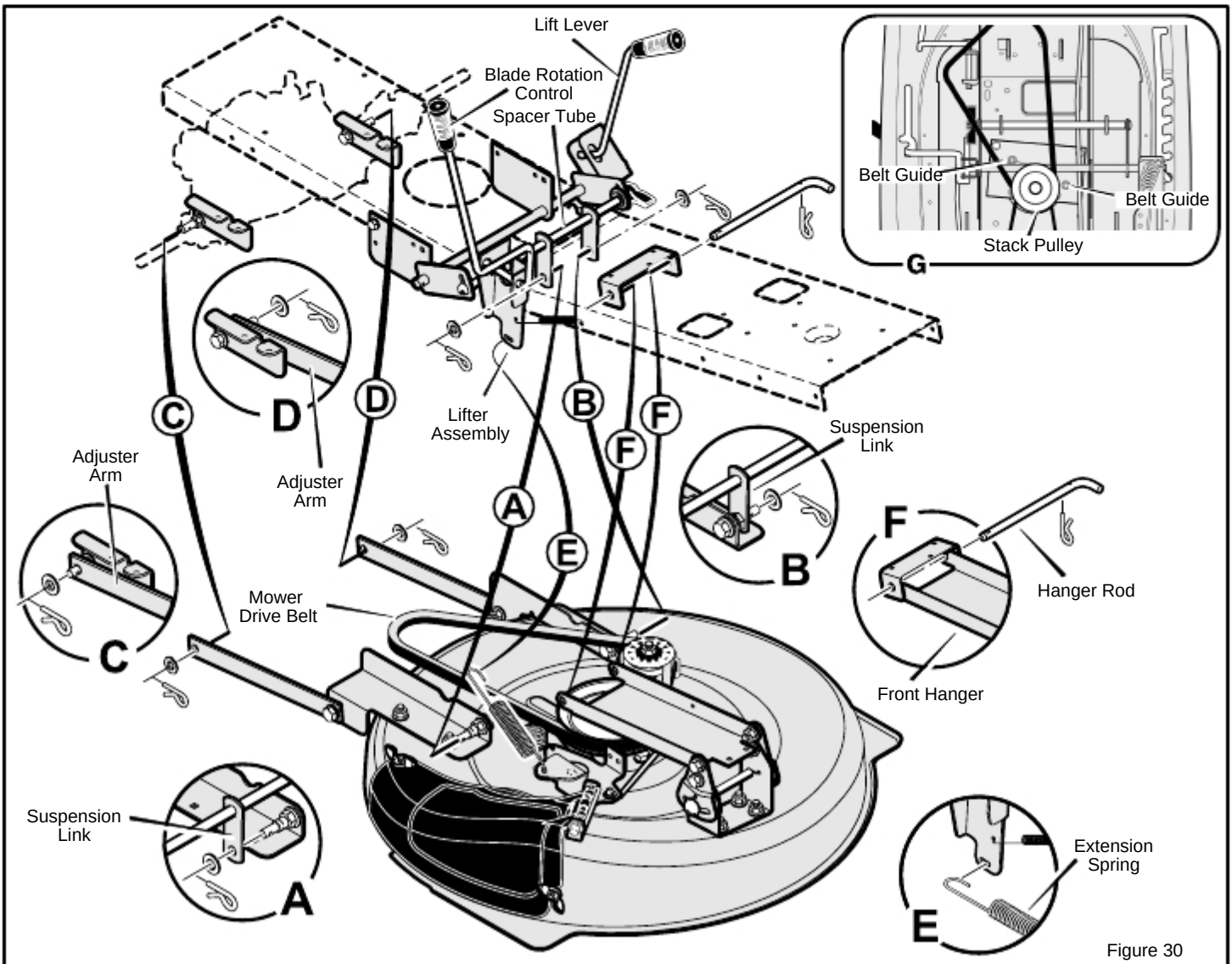


Figure 30

MAINTENANCE

HOW TO REPLACE THE MOTION DRIVE BELT

REMOVAL

1. Remove the mower housing. See the instructions on "How To Remove The Mower Housing".
2. Completely push the pedal forward and engage the parking brake.
3. Remove the **idler pulley** (Figure 31).
4. Loosen the **belt guides** next to the **drive pulley**.
5. Remove the **motion drive belt** from the **drive pulley**.
6. Remove the **motion drive belt** from the **stack pulley**. A correct replacement part or assistance is available from an Authorised Service Centre in your area.

INSTALLATION

1. Slide the **motion drive belt** between the **stack pulley** and the **belt guides** (Figure 31). Install the **motion drive belt** on the

top pulley of the **stack pulley**. Make sure the "V" side of the belt is against the pulley.

2. Install the end of the **motion drive belt** around the **drive pulley**.
3. Make sure the **motion drive belt** is inside of the **belt guides** next to the **drive pulley**. Tighten the **belt guides**.
4. Put the belt around the **idler pulley**. Assemble the **idler pulley**. Fasten the **idler pulley** with the hex nut. Make sure the "V" side of the belt is against the **idler pulley**. Also, make sure the belt is not twisted.
5. Check the routing of the **motion drive belt**. Make sure the **motion drive belt** is installed correctly on the **idler pulley**. Make sure the **motion drive belt** is inside all the **belt guides**.
6. Before you use the unit, check the adjustment of the clutch. See the instructions "How To Check And Adjust The Clutch".
7. Install the mower housing. See the instructions "How To Install The Mower Housing".

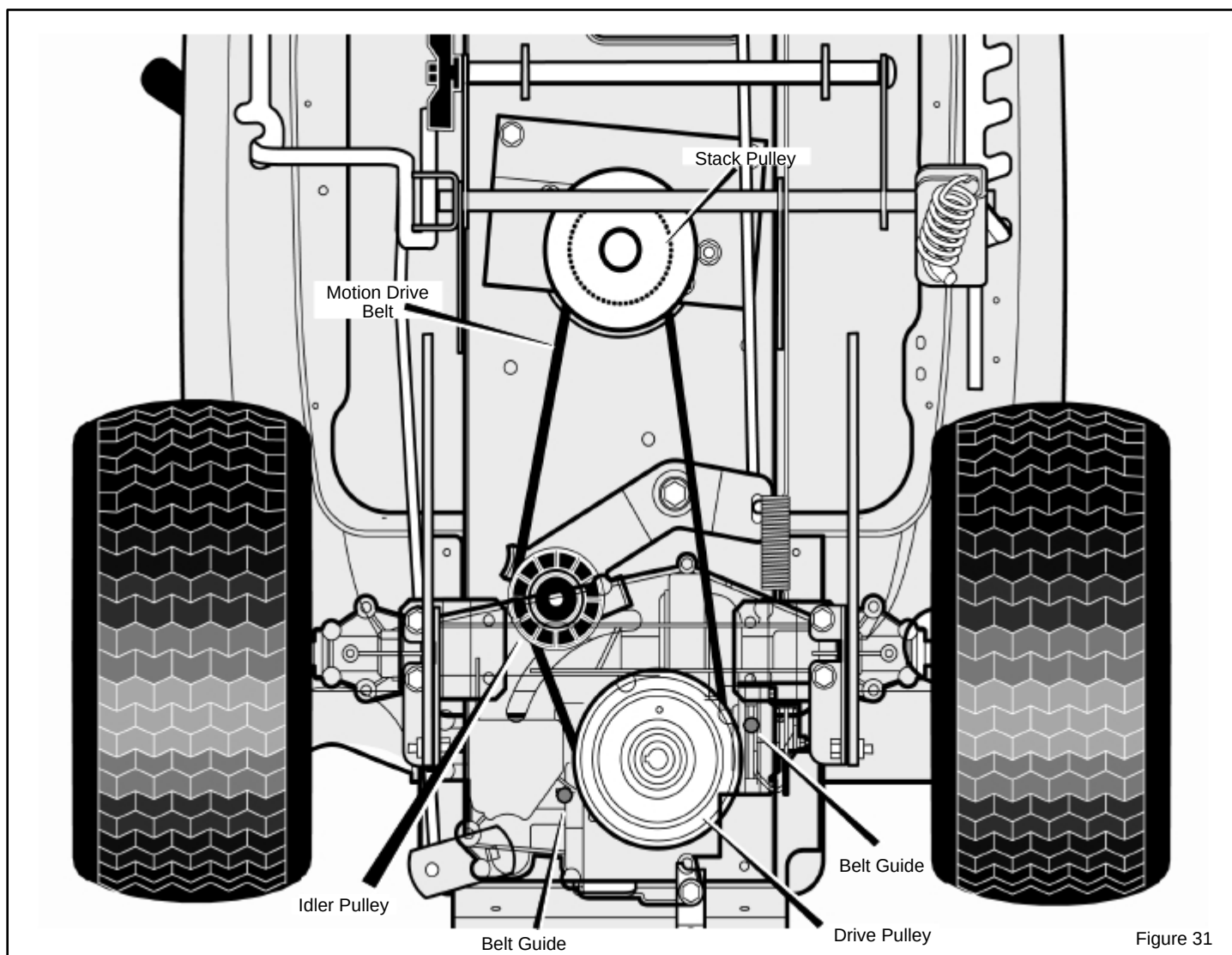


Figure 31

MAINTENANCE

HOW TO REPLACE THE MOWER DRIVE BELT

1. Remove the mower housing. See the instructions on "How To Remove The Mower Housing".
2. Pull the **belt retainer** away from the **idler pulley** and remove the **mower drive belt** (Figure 32).
3. Pull the **brake pad** away from the **jackshaft pulley** and remove the **mower drive belt**.
NOTE: Replace the mower drive belt with an original equipment belt from an authorised service centre.
4. Install the new **mower drive belt**. Pull the **brake pad** away from the **jackshaft pulley**. Put the **mower drive belt** around the **jackshaft pulley**.
5. Pull the **belt retainer** away from the **idler pulley**. Put the **mower drive belt** around the **idler pulley**.
6. Make sure the "V" side of the **mower drive belt** is against the **jackshaft pulley** and the **idler pulley**.
7. Install the mower housing. See the instructions on "How To Install The Mower Housing".
8. Before you mow, check the blade rotation control. See the instructions on "How To Adjust The Blade Rotation Control".

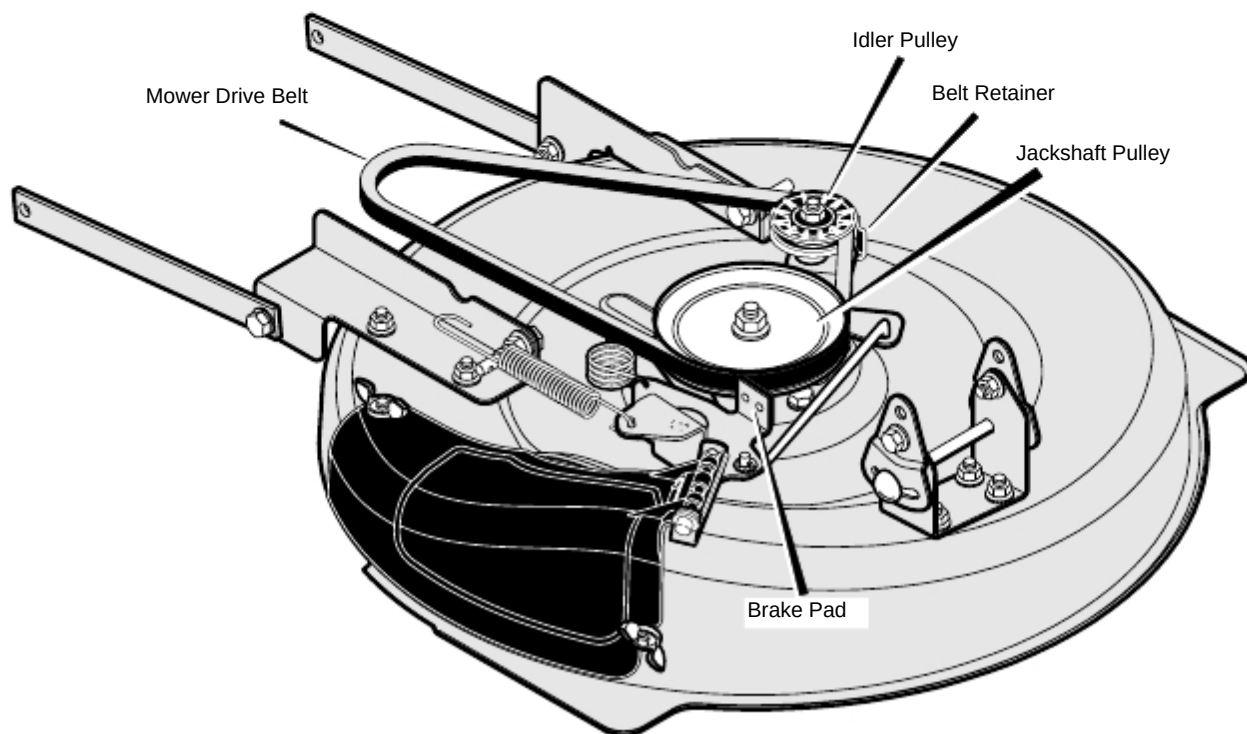


Figure 32

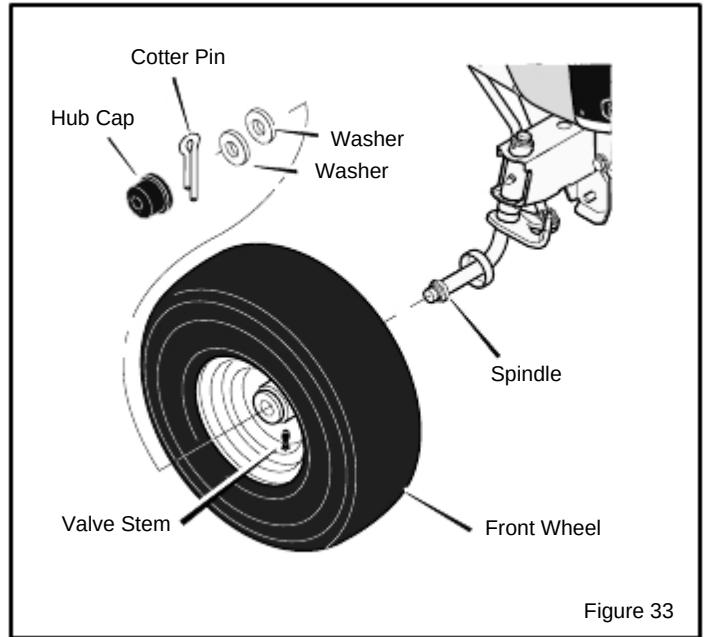
MAINTENANCE

HOW TO INSTALL THE WHEELS

If the wheels must be removed for service, make sure they are installed as follows.

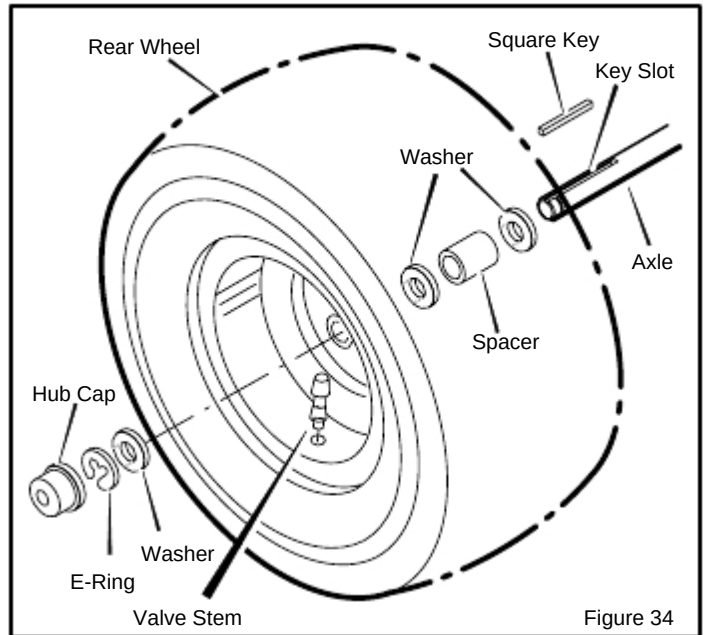
Front Wheel

1. Make sure the **valve stem** is to the outside of the tractor. Slide the **front wheel** on the **spindle** (See Figure 33).
2. Fasten the **front wheel** with **washer** and **cotter pin**. Bend the ends of the **cotter pin** apart to keep the **front wheel** on the **spindle**.
3. If your model has **hub caps**, install the **hub caps**. Make sure the **washer** holds the **hub caps** in place.



Rear Wheel

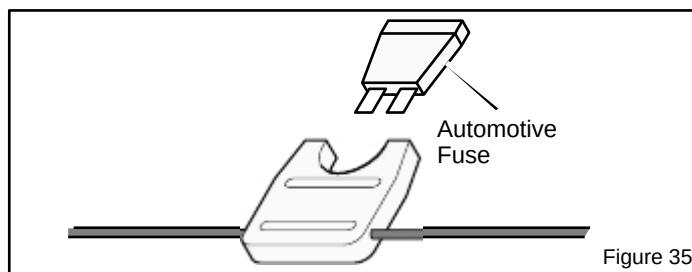
1. Install the **washers** and **spacer** onto the **axle** as shown in Figure 34.
2. Mount the **square key** in the **key slot** (See Figure 34).
3. Make sure the **valve stem** is to the outside of the tractor. Align the slot in the **rear wheel** with the **square key**. Slide the **rear wheel** on the **axle**.
4. Fasten the **rear wheel** with the **washer** and **e-ring**.
5. If your model has **hub caps**, install the **hub caps**. Make sure the **washer** hold the **hub caps** in place.



MAINTENANCE

HOW TO REPLACE THE FUSE

If the fuse is blown, the engine will not start. The location of the fuse is next to the battery. Remove the fuse and replace with an automotive fuse (Figure 35).



HOW TO CLEAN THE MOWER HOUSING



WARNING: Before you clean the mower housing, stop the engine and disconnect the wire to the spark plug.

Grass and other debris on top of the mower housing can keep the belt from working correctly. For safety and correct operation,

frequently clean the top of the mower housing. Remove grass and debris from around the pulleys and other moving parts.

1. Move the lever for the blade rotation control to the ENGAGE position.
2. Clean the top of the mower housing.
3. Move the lever for the blade rotation control to the DISENGAGE position.
4. Again clean the top of the mower housing.
5. After you cut the grass, clean the bottom of the mower housing.

STORAGE (over 30 days)

At the end of each year, prepare the unit for storage as follows.

THE ENGINE

For storage information, see the engine manufacturer's instructions.

THE BATTERY

1. Remove the battery.
2. Clean the battery terminals of any deposits.
3. Charge the battery. See the instructions on "How to Prepare And Charge The Battery".
4. Store the battery in a cool, dry place.

NOTE: After a long time in storage, charge the battery.

THE FUEL SYSTEM



WARNING: Do not drain petrol from the mower inside a building or near a fire. Do not smoke because the fumes from the fuel can cause an explosion.

1. Start the engine.
2. Run the engine until the fuel tank and the carburettor are out of fuel and the engine stops.
3. After storage, make sure you use fresh fuel.

CLEAN THE UNIT

1. Clean the dirt and grass from the engine.
2. Clean the mower housing.

LUBRICATE THE UNIT

See the "Lubrication" instructions in this book.

TROUBLE SHOOTING CHART

PROBLEM: The engine will not start.

1. Follow the steps, "How To Start The Engine" in this book.
2. Electric-Start Models: Clean the battery terminals. Tighten the cables.
3. Drain the fuel tank. Clean the fuel line. Replace the fuel filter.
4. Remove the spark plug. Move the throttle to the SLOW position. Turn the ignition key to the ON position. Try to start the engine several times. Install the spark plug.
5. Replace the spark plug.
6. Adjust the carburettor.

PROBLEM: The engine will not turn over.

1. Follow the steps, "How To Start The Engine" in this book.
2. Electric-Start Models: Check the level of the acid in the battery. If needed, add water. Charge the battery.
3. Replace the fuse.
4. Check the wiring harness for damage or a loose connection. Repair the damaged wire.
5. Electric-Start Models: replace the solenoid. Recoil-Start Models: replace the module.

PROBLEM: The engine is difficult to start.

1. Replace the spark plug.
2. Replace the fuel filter.

PROBLEM: The engine does not run smooth or has a loss of power.

1. Check the oil.
2. Clean the air filter.
3. Clean the air screen.
4. Replace the spark plug.
5. The engine is working too hard. Use a lower gear.
6. Adjust the carburettor.
7. Replace the fuel filter.

PROBLEM: The engine does not run smooth at fast speed.

1. Replace the spark plug.
2. Adjust the throttle control.
3. Clean the air filter.
4. Replace the fuel filter.

PROBLEM: The engine stops when the blades are engaged.

1. Check the wiring harness for damage or a loose connection. Repair the damaged wire.
2. Transmission is in reverse. Before operating in reverse, move the blade rotation control to the **DISENGAGED position**.

PROBLEM: On slopes, the engine stops.

1. Mow up and down slopes. Never mow across a slope.
2. To activate the seat sensor, always sit in the middle of the seat.

PROBLEM: The engine will not idle.

1. Replace the spark plug.
2. Clean the air filter.
3. Adjust the carburettor.
4. Adjust the throttle control.
5. Drain the fuel tank. Clean the fuel line. Replace the fuel filter.

PROBLEM: A hot engine causes a decrease in power.

1. Clean the air screen.
2. Check the oil.
3. Adjust the carburettor.
4. Replace the fuel filter.

PROBLEM: Excessive vibration.

1. Replace the blade.
2. Check for loose engine bolts.
3. Decrease the air pressure in the tires.
4. Adjust the carburettor.
5. Check for a damaged belt or damaged pulley. Replace the damaged parts.

PROBLEM: The grass does not discharge correctly.

1. Stop the engine. Clean the mower housing.
2. Raise the height of cut.
3. Replace or sharpen the blade(s).
4. Move the shift lever to a slower speed.
5. Move the throttle control to the FAST position.
6. Replace the spring for the blade idler.

PROBLEM: The mower housing does not cut level.

1. Check the air pressure in the tires.
2. Adjust the level of the mower housing.
3. Check the front axle. If the front axle does not freely pivot, loosen the axle bolt(s).

PROBLEM: The mower blades will not rotate.

1. Check the mower drive belt. Make sure the belt is installed correctly.
2. Replace the mower drive belt.

PROBLEM: The unit will not move when the clutch is engaged.

1. Check the motion drive belt. Make sure the belt is installed correctly.
2. Adjust the clutch.
3. Replace the motion drive belt.

PROBLEM: The unit moves slower or stops when the clutch is engaged.

1. Adjust the clutch.
2. Replace the motion drive belt.

PROBLEM: When the clutch/brake pedal is released, belt noise can be heard.

1. Temporary belt noise does not change the operation of the unit. If belt noise is continuous, check the routing of the belt. Make sure the belt is inside all belt guides.
2. If the noise is continuous, adjust the clutch.

PROBLEM: The rear wheels spin over uneven terrain.

1. Check the front axle. If the front axle does not freely pivot, loosen the axle bolt(s).

PROBLEM: The engine stops when the operator leaves the seat.

1. This is normal. The operator presence system is designed to allow operation only if the operator is in the seat.

PROBLEM: The engine stops when selecting reverse travel.

1. Before selecting reverse travel, move the blade rotation control to the **DISENGAGE** position. See the Operation section for details.

PROBLEM: The transaxle is difficult to shift between gears with the engine running and the clutch depressed.

1. Check the clutch adjustment to make sure the belt stops when the clutch pedal is depressed with the transaxle in (N) neutral.
2. Check the belt guides around the transaxle drive pulley. Make sure the belt guides do not touch the pulley.

HOW TO ORDER REPAIR PARTS

Only use a factory repair part. Repair parts, except for the engine or the transmission, are available from the store where the unit was purchased, a service shop recommended by the store, or an authorised service shop.

If you cannot get a repair part or service as described above, call the number shown below. When you order, include the following information: (1) Complete Model Number (see nameplate), (2) Date of Manufacture, (3) Complete Part Number, (4) Description, (5) Quantity. Repair parts for the engine or the transmission are available from the manufacturer's authorised service centre. See the individual engine or transmission warranties.

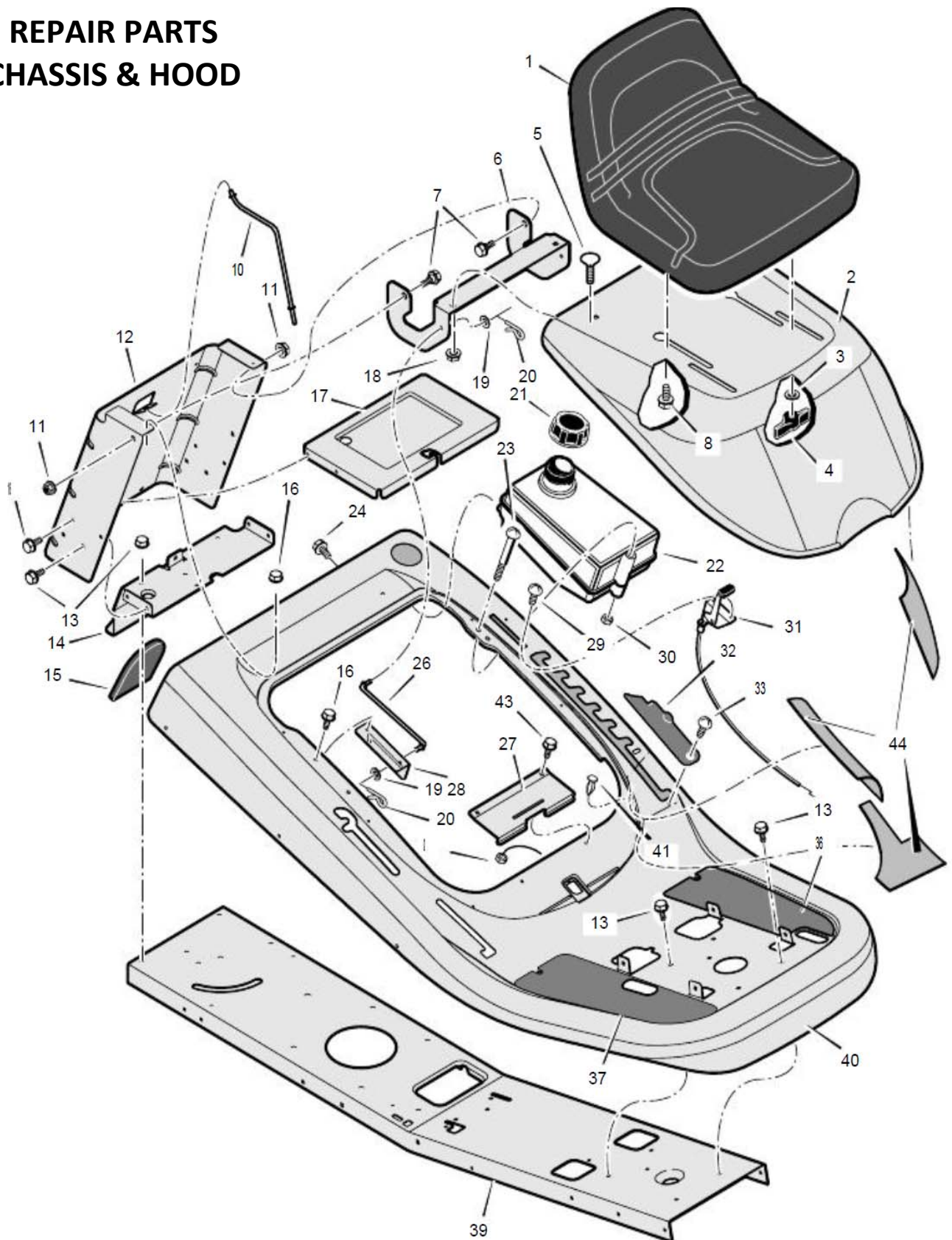
If you are unable to obtain parts or service in the manner outlined above, then call: 01793 333212

NOTES



12530 Ride On Mower WE12530

REPAIR PARTS CHASSIS & HOOD





12530 Ride On Mower WE12530

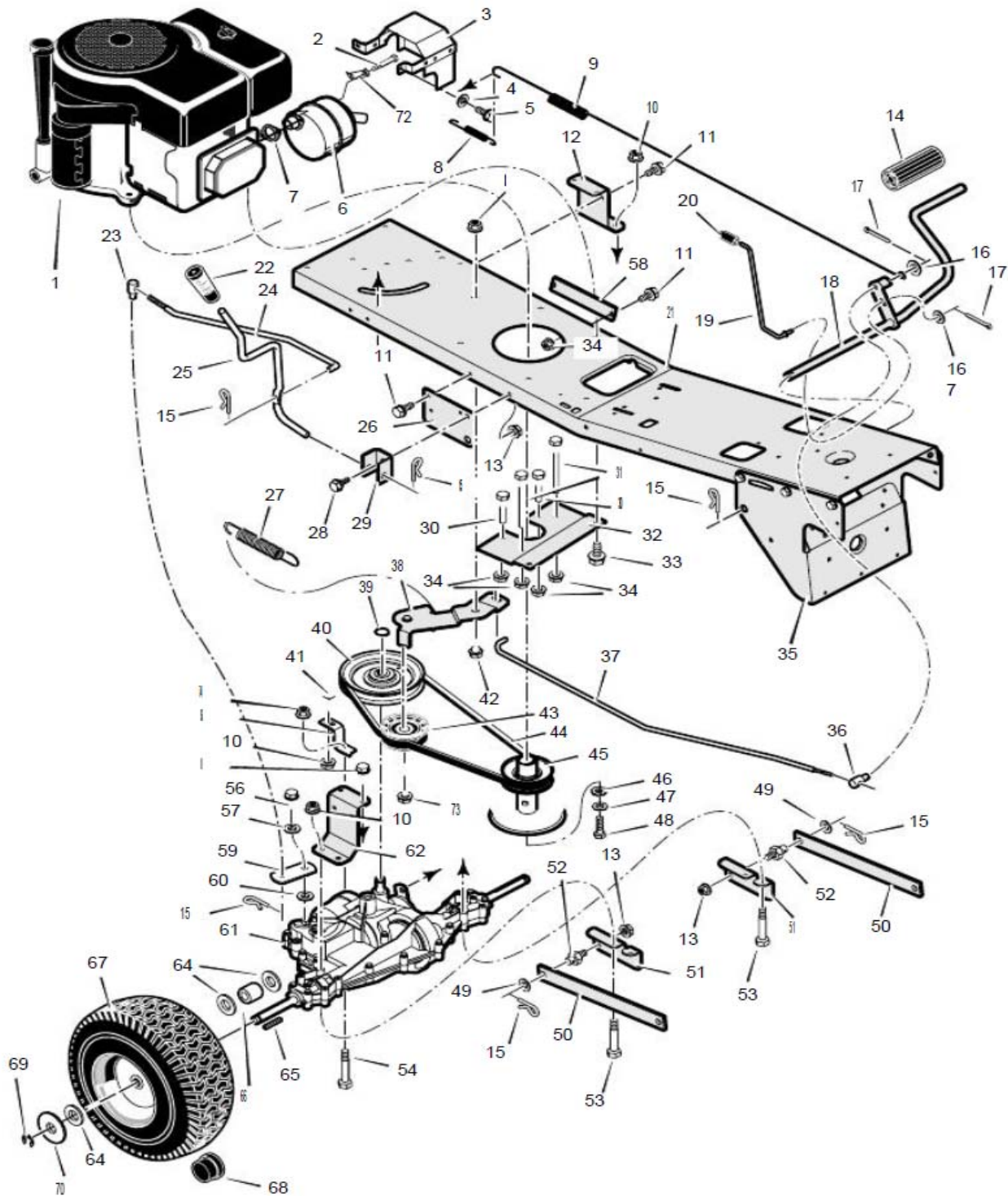
REPAIR PARTS CHASSIS & HOOD

REF	PART NO	DESCRIPTION		REF	PART NO	DESCRIPTION
1	WE-690566	Seat		22	WE-1401240	Fuel Tank
2	WE-1401027E245	Hood		23	WE-06x111	Screw
3	WE-017x47	Washer		24	WE-26x253	Screw
4	WE-1001054	Wing Bolt		26	WE-1401110	Hood Prop Rod
5	WE-002x53	Carriage Bolt		27	WE-1401282	Seat Deck Spring
6	WE-1401036E701	Hinge Bracket		28	WE-1401352E701	Propr Rod Bracket
7	WE-009x29	Shoulder Bolt		29	WE-26x201	Screw
8	WE-009x56	Shoulder Bolt		30	WE-15x116	Nylon Lock Nut
10	WE-1401113	Battery Rod		31	WE-1401248	Throttle Control
11	WE-015x84	Flange Nut		32	WE-1401084	Detent Cover
12	WE-1401025E701	Rear Plate		33	WE-009x47	Shoulder Bolt
13	WE-26x249	Screw		36	WE-1401145	Left Footmat
14	WE-1401050E701	Hitch Plate		37	WE-1401144	Right Footmat
15	WE-1401086	Cover		39	WE-1401298E701	Frame
16	WE-26x263	Screw		40	WE-1401347E245	Seat Deck
17	WE-1401076E701	Battery Tray		41	WE-094744	Bumper
18	WE-015x79	Flange Nut		42	WE-15x116	Nut
19	WE-017x37	Washer		43	WE-0025x2	Screw
20	WE-0031x6	Cotter Pin		44	WE-7601036	Foil Heat Shield Kit
21	WE-092317	Fuel Tank Cap				



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REPAIR PARTS MOTION DRIVE





12530 Ride On Mower WE12530

REPAIR PARTS MOTION DRIVE

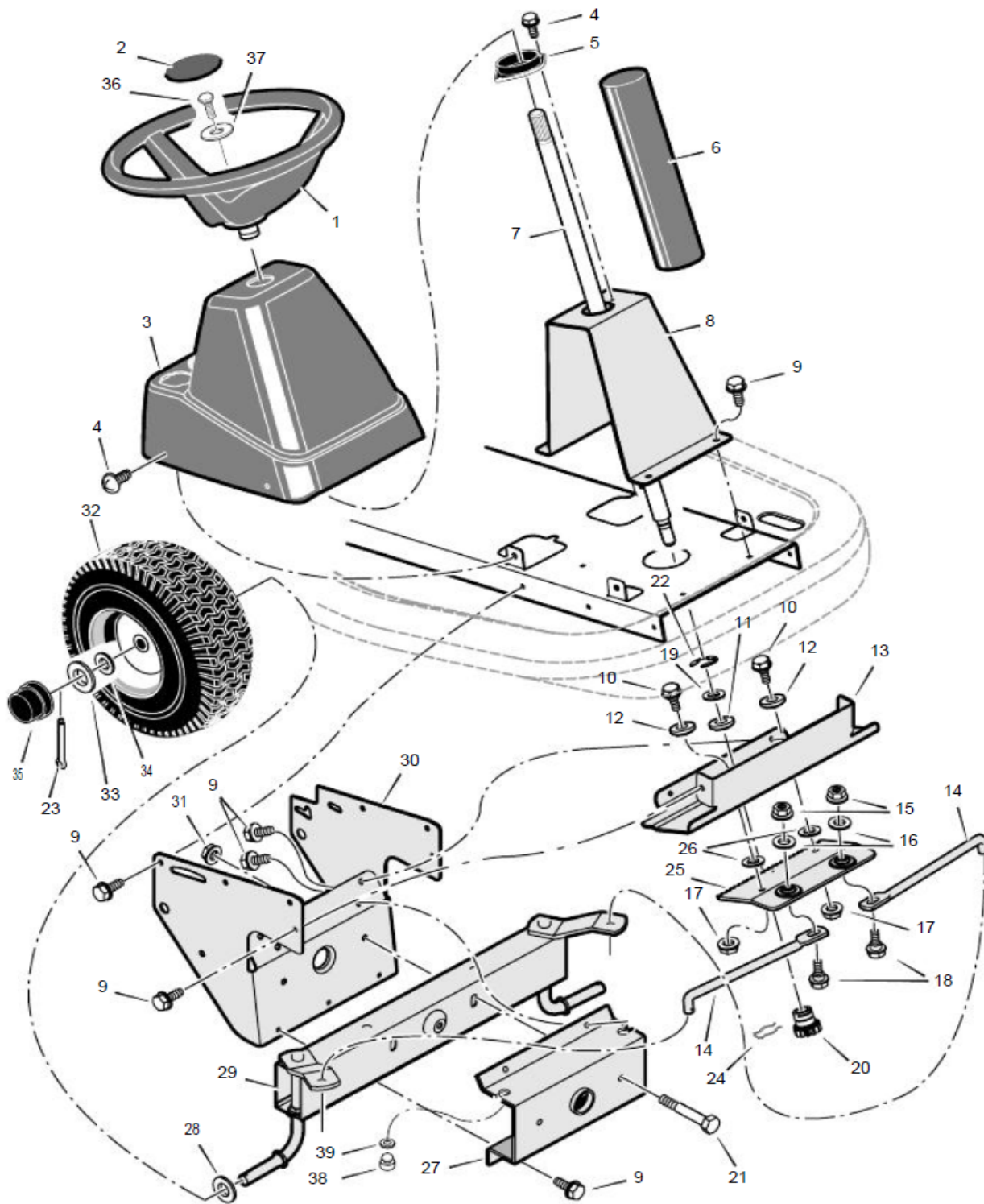
REF	PART NO	DESCRIPTION		REF	PART NO	DESCRIPTION
1		B&S Engine		37	WE-1401078	Clutch Rod
2	WE-01x134	Hex Bolt		38	WE-1401128E701	Clutch Arm Assembly
3	WE-1401207	Heat Shield Assembly		39	WE-0011x7	Retainer Ring
4	WE-018x32	Lockwasher		40	WE-1401077	Drive Pulley
5	WE-0025x2	Screw		41	WE-002x53	Carriage Bolt
6	WE-1401251	Muffler		42	WE-009x39	Shoulder Bolt
7	WE-091309	Muffler Gasket		43	WE-1401252	Idler Pulley
8	WE-165x75	Extension Spring		44	WE-37x110	Motion Drive Belt
9	WE-165x148	Extension Spring		45	WE-1401066	Split Stack Pulley
10	WE-015x88	Nut		46	WE-019x35	Star Washer
11	WE-26x249	Screw		47	WE-17x170	Washer
12	WE-1401068E701	Transaxle LH Bracket		48	WE-01x140	Hex Bolt
13	WE-015x84	Flange Nut		49	WE-17x102	Washer
14	WE-021544	Pedal Cover		50	WE-1401031E701	Rear Arm
15	WE-0031x4	Cotter Pin		51	WE-1401039E701	Rear Hanger Bracket
16	WE-017x53	Washer		52	WE-094067	Threaded Shoulder Pin
17	WE-030x20	Cotter Pin		53	WE-01x155	Hex Bolt
18	WE-1401127E701	Pedal Assembly		54	WE-01x120	Bolt
19	WE-1401112	Parking Brake Rod		55	WE-1401051E701	Torque Reator Bracket
20	WE-091079	Parking Brake Rod Grip		56	WE-06x105	Screw
21	WE-1401298E701	Frame		57	WE-017x38	Shift Yoke Washer
22	WE-094198	Shift Lever Grip		58	WE-1401260E701	Reinforcement Plate
23	WE-1401148	Adjusting Nut		59	WE-1401351 Z	Shift Yoke
24	WE-1401122	Shift Link		60	WE-17x148	Washer
25	WE-1401355	Shift Lever		61		Peerless Transaxle
26	WE-1401032E701	Lift Pivot Bracket		62	WE-1401042E701	Transaxle RH Bracket
27	WE-165x147	Extension Spring		64	WE-17x160	Washer
28	WE-009x39	Shoulder Bolt		65	WE-056534	Square Key
29	WE-1401043E701	Pivot Bracket		66	WE-1401103 Z	Rear Wheel Spacer
30	WE-1401104	Short Belt Guide		67	WE-1401120	Rear 15" Wheel
31	WE-1401105	Long Belt Guide		68	WE-094618	Hub Cap
32	WE-1401057E701	Belt Guide Plate		69	WE-0011x3	E-Ring
33	WE-0025x7	Bolt		70	WE-17x195	Washer
34	WE-015x79	Flange Nut		72	WE-092378	Screw Lock
35	WE-1401059E701	Support Bracket		73	WE-015x98	Nut
36	WE-094815	Adjusting Nut		74	WE-015x43	Nut



12530 Ride On Mower WE12530

REPAIR PARTS

STEERING





12530 Ride On Mower WE12530

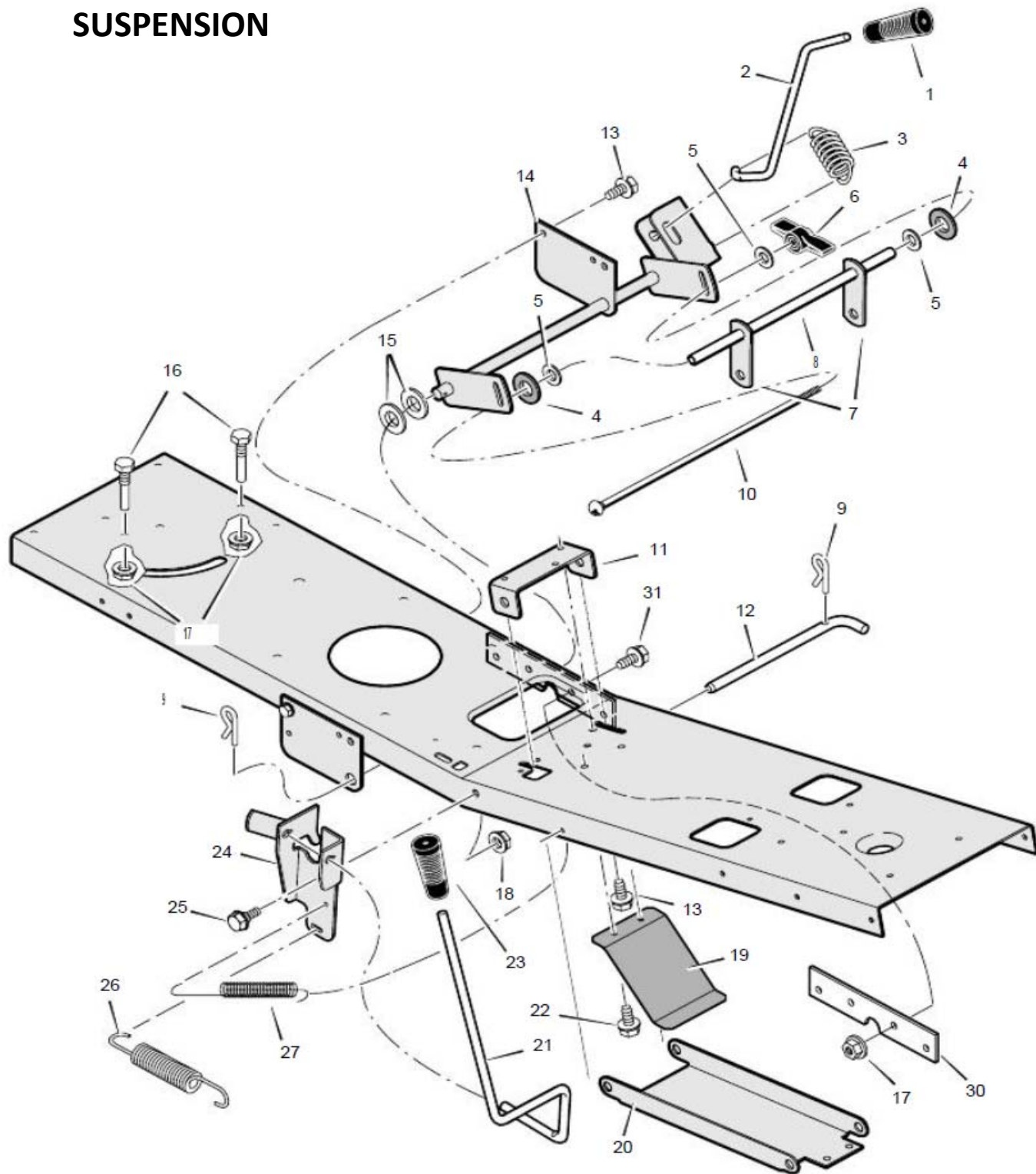
REPAIR PARTS STEERING

REF	PART NO	DESCRIPTION		REF	PART NO	DESCRIPTION
1	WE-095185	Steering Wheel		21	WE-01x146	Hex Bolt
2	WE-711326	Steering Insert		22	WE-011x23	E-Clip
3	WE-1401044	Steering Console		23	WE-030x35	Cotter Pin
4	WE-26x270	Screw		24	WE-094131	Spring Retainer
5	WE-1401090	Upper Steering Bearing		25	WE-1401046E701	Steering Rack
6	WE-1401226	Steering Tube		26	WE-17x201	Washer
7	WE-1401100	Steering Shaft		27	WE-1401376E701	Front Axle Bracket
8	WE-1401055E701	Steering Support		28	WE-17x157	Washer
9	WE-26x249	Screw		29	WE-1401250E701	Axle & Spindle Assembly
10	WE-009x67	Shoulder Bolt		30	WE-1401059E701	Support Bracket
11	WE-1401098	Lower Steering Bearing		31	WE-15x118	Flange Nut
12	WE-1401102	Roller		32	WE-1401143	Front Wheel
13	WE-1401058E701	Gear Mounting Plate		33	WE-17x197	Washer
14	WE-1401123E701	Drag Link		34	WE-17x157	Washer
15	WE-015x84	Flange Nut		35	WE-094618	Hub Cap
16	WE-17x104	Washer		36	WE-0025x3	Bolt
17	WE-015x88	Flange Nut		37	WE-17x146	Washer
18	WE-01x111	Hex Bolt		38	WE-1401377	Rubber Bumper
19	WE-17x118	Washer		39	WE-017x91	Washer
20	WE-1401099	Pinion Gear				



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REPAIR PARTS
MOWER HOUSING
SUSPENSION





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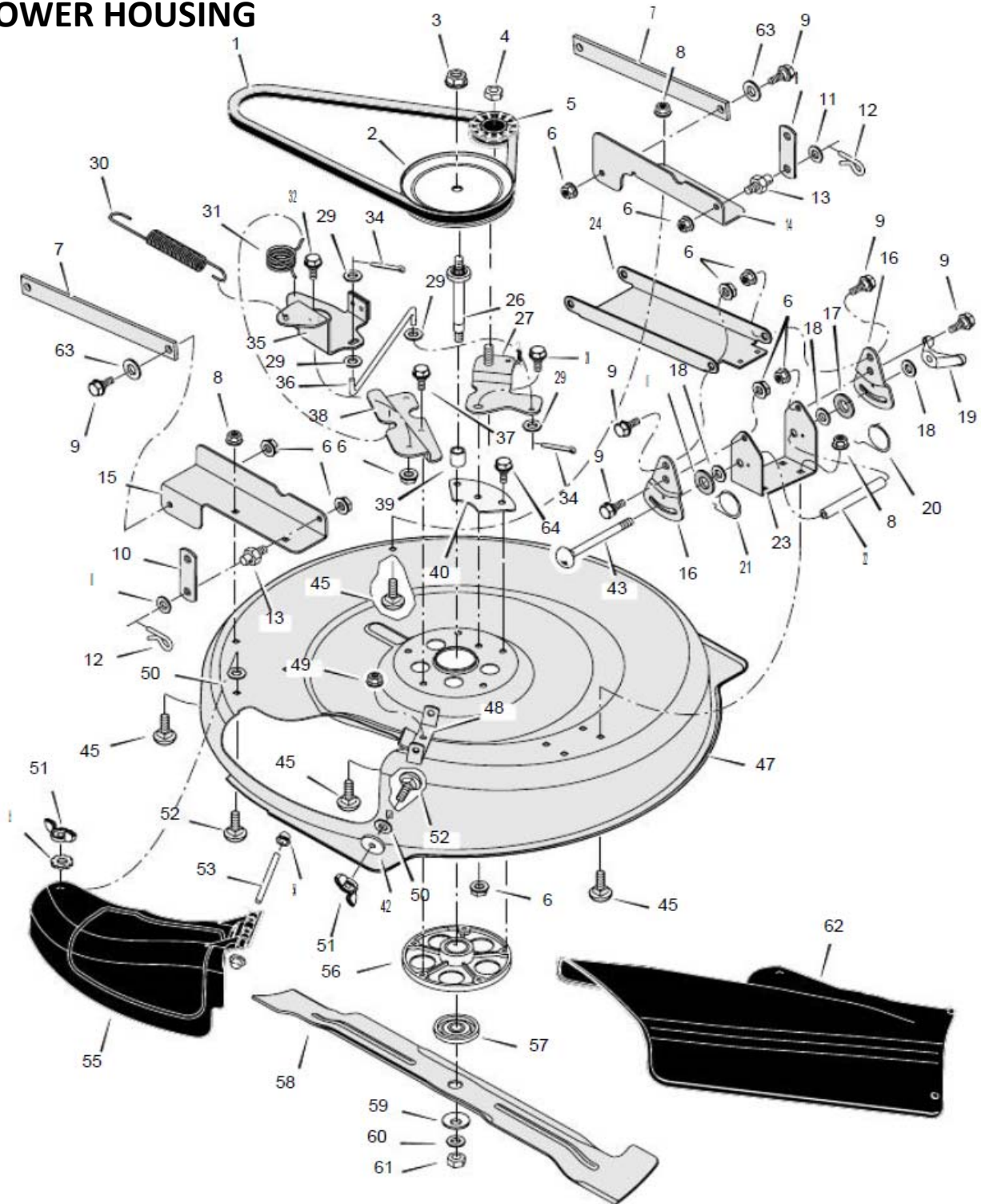
REPAIR PARTS MOWER HOUSING SUSPENSION

REF	PART NO	DESCRIPTION		REF	PART NO	DESCRIPTION
1	WE-092697	Lift Lever Grip		16	WE-093349	Guide Screw
2	WE-1401117	Lift Lever		17	WE-015x79	Flange Nut
3	WE-165x154	Extension Spring		18	WE-015x84	Flange Nut
4	WE-094137	Friction Pad		19	WE-1401147	Leaf Spring
5	WE-017x45	Washer		20	WE-1401040E701	Front Hanger
6	WE-095004	Wingnut		21	WE-1401116	PTO Lever
7	WE-1401033E701	Lift Link		22	WE-26x263	Screw
8	WE-1401096	Spacer Tube		23	WE-094198	PTO Grip
9	WE-0031x4	Hair Pin		24	WE-1401369E701	PTO Bracket
10	WE-002x93	Carriage Bolt		25	WE-009x42	Shoulder Bolt
11	WE-1401030E701	Front Hanger Pivot Bracket		26	WE-165x157	Extension Spring
12	WE-1401118	Front Hanger Pin		27	WE-165x92	Extension Spring
13	WE-26x249	Screw		30	WE-1401260	Reinforcement Plate
14	WE-1401129E701	Lifter Arm Assembly		31	WE-26x267	Screw
15	WE-17x206	Washer				



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REPAIR PARTS MOWER HOUSING





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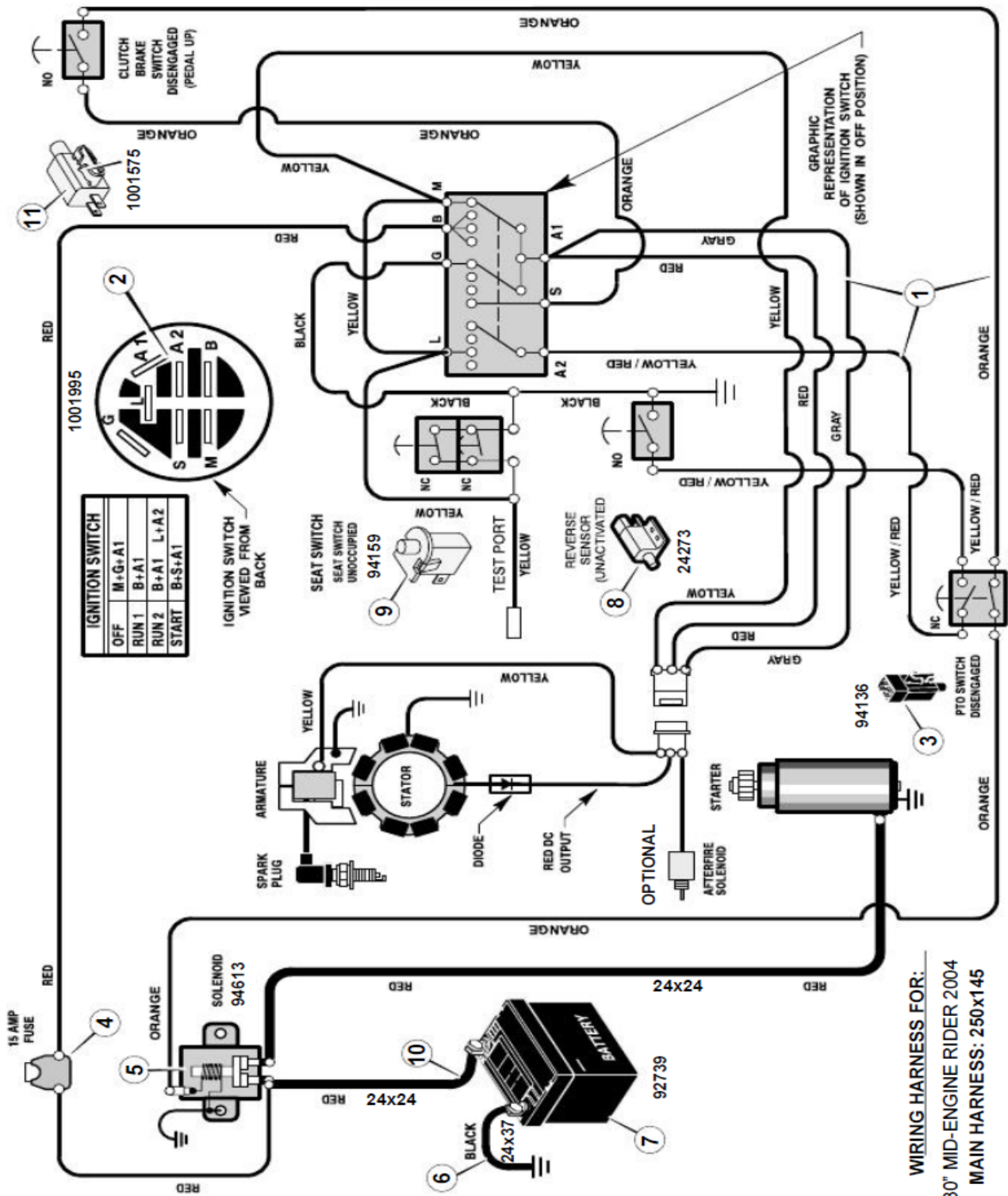
REPAIR PARTS MOWER HOUSING

REF	PART NO	DESCRIPTION		REF	PART NO	DESCRIPTION
1	WE-37x111	Blade Drive Belt		32	WE-009x42	Shoulder Bolt
2	WE-1401092	Input Pulley		34	WE-030x20	Cotter Pin
3	WE-15x140	Locknut		35	WE-1401185E701	Brake Arm Assembly
4	WE-015x98	Flange Nut		36	WE-1401119	Idler Arm Link
5	WE-1401252	Idler Pulley		37	WE-0025x7	Bolt
6	WE-015x84	Flange Nut		38	WE-1401052E701	Brake Mounting Bracket
7	WE-1401031E701	Rear Arm		39	WE-1401094	Jackshaft Spacer
8	WE-015x79	Flange Nut		40	WE-1401259 Z	Idler Mounting Plate
9	WE-009x58	Shoulder Bolt		42	WE-019x45	Washer
10	WE-1401033E701	Lift Link		43	WE-002x94	Carriage Bolt
11	WE-17x102	Washer		45	WE-002x53	Carriage Bolt
12	WE-0031x4	Hair Pin		47	WE-1401036E701	Blade Housing
13	WE-094067	Threaded Shoulder Bolt		48	WE-1401106E701	Mulching Cover Hinge
14	WE-1401047E701	Left Rear Bracket		49	WE-015x88	Flange Nut
15	WE-1401235E701	Right Rear Bracket		50	WE-028x76	Speed Nut
16	WE-1401038E701	Adjustment Plate		51	WE-014x86	Wingnut
17	WE-094137	Friction Pad		52	WE-002x74	Carriage Bolt
18	WE-017x45	Washer		53	WE-091767 Z	Chute Deflector Rod
19	WE-095004	Wingnut		54	WE-028x23	Push Cap
20	WE-166x43	Left Torsion Spring		55	WE-1401080	Mulch Cover
21	WE-166x42	Right Torsion Spring		56	WE-1401275	Mandrel Housing
22	WE-1401095	Spacer Tube		57	WE-1001035	Blade Adapter
23	WE-1401037E701	Deck Bracket		58	WE-1401079E701	Blade
24	WE-1401040E701	Front Hanger		59	WE-17x166	Cup Washer
26	WE-1401065	Splined Shaft		60	WE-17x165	Washer
27	WE-1401258E701	Idler Arm Assembly		61	WE-15x100	Blade Mount Nut
28	WE-009x39	Shoulder Bolt		62	WE-1401081	Chute Deflector
29	WE-017x47	Washer		63	WE-17x120	Washer
30	WE-165x157	Extension Spring		64	WE-0025x7	Bolt
31	WE-166x46	Torsion Spring			WE-7601035	Complete Mower Deck Assembly



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REPAIR PARTS ELECTRICAL SYSTEM





12530 Ride On Mower WE12530

REPAIR PARTS ELECTRICAL SYSTEM

REF	PART NO	DESCRIPTION
1	WE-250x145	Chassis Wire Harness
2	WE-1001995	Ignition Switch
2	WE-327349	Ignition Key
3	WE-094136	Limit (PTO) Switch
4	WE-302031	Fuse
4	WE-407078	Fuse Holder
5	WE-1002004	Solenoid
5	WE-26x229	Mounting Screw
5	WE-15x116	Locknut
6	WE-024x37	Battery Ground Cable
6	WE-23x229	Ground Cable Screw
7	WE-021075	Battery Ground Cable
7	WE-960604	Battery Terminal Cover
7	WE-002x82	Carriage Bolt
7	WE-014x79	Wingnut
8	WE-024273	Select Reverse Switch
8	WE-26x270	Mounting Screw
9	WE-094159	Seat Sensor Switch
10	WE-024x24	Cable
11	WE-1001575	Clutch Brake Switch

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EC Declaration of Conformity

We, Importer
Handy Distribution
SN3 4NS

Declare that the product
Designation: RIDE-ON LAWNMOWER
Model: WE12530

Complies with the following directives:
2006/42/EC- Machinery Directive (Not Annex IV Equipment)

The conformity assessment procedure followed was in accordance with
Council Directive 2006/42/EC.

Name of the Notified Body: **TÜV SÜD Product Service GmbH**
Address:.. Zertifizierstelle, Ridlerstrasse 65, 80339 **München**, GERMANY

Guaranteed Sound Power Level: $L_{WA} = 112$ dB (A)

Standards and technical specifications referred to:
EN 836/A3:2004

Authorised signatory and technical file holder

Date: 16/12/2011

Signature: 

Name / title: Mr. Simon Belcher / Managing Director
Hobley Drive, Stratton St Margaret, Swindon, Wiltshire, SN3 4NS.

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