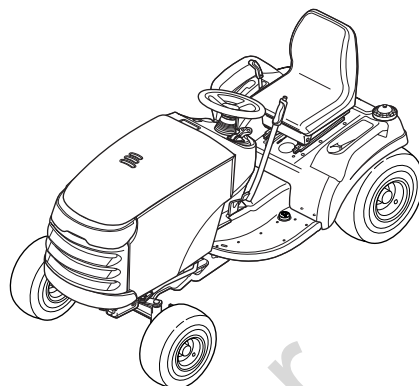




# OPERATOR'S MANUAL



## Prestige / 1800 / 2800 / 500 Series Conquest / 1700 / 2700 / 400 Series

### 23HP Hydro Tractors

Mfg. No.	Description
2690638	Conquest, 23HP 4WD & 44" Mower
2690656	Conquest, 23HP & 44" Mower (CE)
2690657	YT2344, 23HP & 44" Mower (CE)
2690679	Conquest, 23HP 4WD & 50" Mower (CE)
2690744	Conquest, 23HP 4WD & 50" Mower
2690753	Conquest, 23HP & 44" Mower (CE)
2690754	YT2344, 23HP & 44" Mower (CE)
2690765	YT2344, 23HP 4WD & 50" Mower (CE)
2690789	Conquest, 23HP 4WD & 50" Mower (CE)
2690790	Conquest, 23HP 4WD & 50" Mower (CE)
2690805	Conquest, 23HP & 50" Mower (CE)
2690806	YT2350, 23HP & 50" Mower (CE)

### 25HP Hydro Tractors

Mfg. No.	Description
2690571	Prestige, 25HP & 50" Mower (CE)

### 27HP Hydro Tractors

Mfg. No.	Description
2690680	Conquest, 27HP 4WD & 54" Mower
2690681	Conquest, 27HP 4WD & 54" Mower
2690735	Prestige, 27HP 4WD & 50" Mower
2690792	Prestige, 27HP 4WD & 54" Mower

### 44" Mower Decks

Mfg. No.	Description
1695028	44" Mower Deck (CE)
1695033	44" Mower Deck (CE)
1695391	44" Mower Deck
1695400	44" Mower Deck (CE)
1695401	44" Mower Deck (CE)

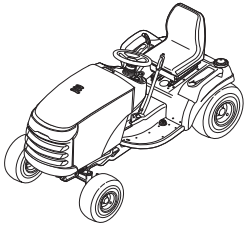
### 50" Mower Decks

Mfg. No.	Description
1695185	50" Mower Deck (CE)
1695213	50" Mower Deck
1695263	50" Mower Deck (CE)
1695265	50" Mower Deck (CE)
1695390	50" Mower Deck
1695392	50" Mower Deck
1695393	50" Mower Deck
1695395	50" Mower Deck
1695417	50" Mower Deck (CE)
1695418	50" Mower Deck (CE)
1695588	50" Mower Deck (CE)
1695589	50" Mower Deck (CE)

### 54" Mower Decks

Mfg. No.	Description
1695266	54" Mower Deck

Not for  
Reproduction



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*NOTE: In this manual, "left" and "right" are referred to as seen from the operating position.*

# Safety Rules & Information



## Operating Safety



Congratulations on purchasing a superior-quality piece of lawn and garden equipment. Our products are designed and manufactured to meet or exceed all industry standards for safety.

Power equipment is only as safe as the operator. If it is misused, or not properly maintained, it can be dangerous! Remember, you are responsible for your safety and that of those around you.

Use common sense, and think through what you are doing. If you are not sure that the task you are about to perform can be safely done with the equipment you have chosen, ask a professional: contact your local authorized dealer.

## Read the Manual

The operator's manual contains important safety information you need to be aware of **BEFORE** you operate your unit as well as **DURING** operation.

Safe operating techniques, an explanation of the product's features and controls, and maintenance information is included to help you get the most out of your equipment investment.

Be sure to completely read the Safety Rules and Information found on the following pages. Also completely read the Operation section.



## Children

Tragic accidents can occur with children. Do not allow them anywhere near the area of operation. Children are often attracted to the unit and mowing activity. Never assume that children will remain where you last saw them. If there is a risk that children may enter the area where you are mowing, have another responsible adult watch them.

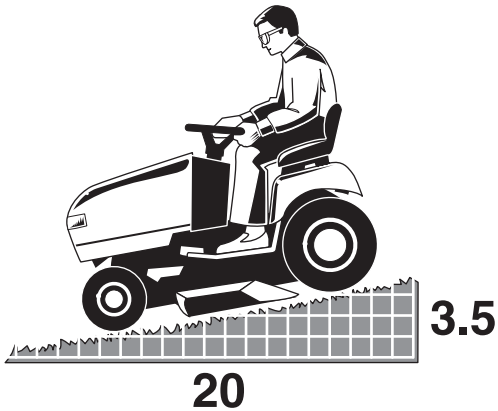
**DO NOT GIVE CHILDREN RIDES ON THIS UNIT!** This encourages them to come near the unit in the future while it is running, and they could be seriously hurt. They may then approach the unit for a ride when you are not expecting it, and you may run over them.

## Reverse

Do not mow in reverse unless absolutely necessary. Always look down and behind before and while traveling in reverse even with the mower blades disengaged.



## Slope Operation



You could be seriously injured or even killed if you use this unit on too steep an incline. Using the unit on a slope that is too steep or where you don't have adequate traction can cause you to lose control or roll over.

A good rule of thumb is to not operate on any slope you cannot back up (in 2-wheel drive mode). You should not operate on inclines with a slope greater than a 3.5 foot rise over a 20 foot length. Always drive up and down slopes: never cross the face.

Also note that the surface you are driving on can greatly impact stability and control. Wet grass or icy pavement can seriously affect your ability to control the unit.

If you feel unsure about operating the unit on an incline, don't do it. It's not worth the risk.

## Moving Parts

This equipment has many moving parts that can injure you or someone else. However, if you are seated in the seat properly, and follow all the rules in this book, the unit is safe to operate.

The mower deck has spinning mower blades that can amputate hands and feet. Do not allow anyone near the equipment while it is running!

To help you, the operator, use this equipment safely, it is equipped with an operator-present safety system. Do NOT attempt to alter or bypass the system. See your dealer immediately if the system does not pass all the safety interlock system tests found in this manual.



## Thrown Objects

This unit has spinning mower blades. These blades can pick up and throw debris that could seriously injure a bystander. Be sure to clean up the area to be mowed BEFORE you start mowing.

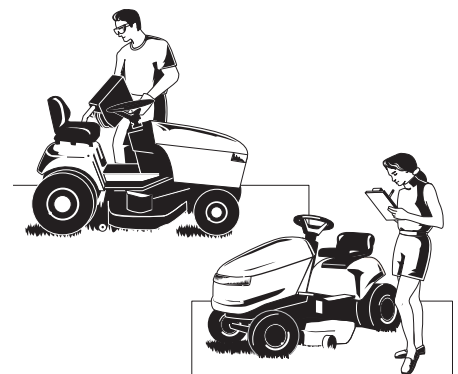
Do not operate this unit without the entire grass catcher or discharge guard (deflector) in place.

Also, do not allow anyone in the area while the unit is running! If someone does enter the area, shut the unit off immediately until they leave.

## Fuel and Maintenance

Gasoline is extremely flammable. Its vapors are also extremely flammable and can travel to distant ignition sources. Gasoline must only be used as a fuel, not as a solvent or cleaner. It should never be stored any place where its vapors can build up or travel to an ignition source like a pilot light. Fuel belongs in an approved, plastic, sealed gas can, or in the tractor fuel tank with the cap securely closed. Spilled fuel needs to be cleaned up immediately.

Proper maintenance is critical to the safety and performance of your unit. Be sure to perform the maintenance procedures listed in this manual, especially periodically testing the safety system.




# Safety Rules & Information

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Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of unit, severe personal injury or death to you, or bystanders, or damage to property or equipment.

**This mowing deck is capable of amputating hands and feet and throwing objects.**

The triangle  in text signifies important cautions or warnings which must be followed.

## GENERAL OPERATION

1. Read, understand, and follow all instructions in the manual and on the unit before starting.
2. Do not put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
3. Only allow responsible adults, who are familiar with the instructions, to operate the unit (local regulations can restrict operator age).
4. Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade(s).
5. Be sure the area is clear of other people before mowing. Stop the unit if anyone enters the area.
6. Never carry passengers.
7. Do not mow in reverse unless absolutely necessary. Always look down and behind before and while travelling in reverse.
8. Never direct discharge material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blade(s) when crossing gravel surfaces.
9. Do not operate the machine without the entire grass catcher, discharge guard (deflector), or other safety devices in place.
10. Slow down before turning.
11. Never leave a running unit unattended. Always disengage the PTO, set parking brake, stop engine, and remove keys before dismounting.
12. Disengage blades (PTO) when not mowing. Shut off engine and wait for all parts to come to a complete stop before cleaning the machine, removing the grass catcher, or unclogging the discharge guard.
13. Operate the machine only in daylight or good artificial light.
14. Do not operate the unit while under the influence of alcohol or drugs.
15. Watch for traffic when operating near or crossing roadways.
16. Use extra care when loading or unloading the unit into a trailer or truck.
17. Always wear eye protection when operating this unit.
18. Data indicates that operators, age 60 years and above, are involved in a large percentage of power equipment-related injuries. These operators should evaluate their ability to operate the equipment safely enough to protect themselves and others from injury.
19. Follow the manufacturer's recommendations for wheel weights or counterweights.
20. Keep in mind the operator is responsible for accidents occurring to other people or property.
21. All drivers should seek and obtain professional and practical instruction.
22. Always wear substantial footwear and trousers. Never operate when barefoot or wearing sandals.
23. Before using, always visually check that the blades and blade hardware are present, intact, and secure. Replace worn or damaged parts.
24. Disengage attachments before: refueling, removing an attachment, making adjustments (unless the adjustment can be made from the operator's position).
25. When the machine is parked, stored, or left unattended, lower the cutting means unless a positive mechanical lock is used.
26. Before leaving the operator's position for any reason, engage the parking brake (if equipped), disengage the PTO, stop the engine, and remove the key.
27. To reduce fire hazard, keep the unit free of grass, leaves, & excess oil. Do not stop or park over dry leaves, grass, or combustible materials.

---

## TRANSPORTING AND STORAGE

1. When transporting the unit on an open trailer, make sure it is facing forward, in the direction of travel. If the unit is facing backwards, wind lift could damage the unit.
2. Always observe safe refueling and fuel handling practices when refueling the unit after transportation or storage.
3. Never store the unit (with fuel) in an enclosed poorly ventilated structure. Fuel vapors can travel to an ignition source (such as a furnace, water heater, etc.) and cause an explosion. Fuel vapor is also toxic to humans and animals.
4. Always follow the engine manual instructions for storage preparations before storing the unit for both short and long term periods.
5. Always follow the engine manual instructions for proper start-up procedures when returning the unit to service.
6. Never store the unit or fuel container inside where there is an open flame or pilot light, such as in a water heater. Allow unit to cool before storing.

## SLOPE OPERATION

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution. If you cannot back up the slope or if you feel uneasy on it, do not operate on it.

Control of a walk-behind or ride-on machine sliding on a slope will not be regained by the application of the brake. The main reasons for loss of control are: insufficient tire grip on the ground, speed too fast, inadequate braking, the type of machine is unsuitable for its task, lack of awareness of the ground conditions, incorrect hitching and load distribution.

1. Mow up and down slopes, not across.
2. Watch for holes, ruts, or bumps. Uneven terrain could overturn the unit. Tall grass can hide obstacles.
3. Choose a slow speed so that you will not have to stop or change speeds while on the slope.
4. Do not mow on wet grass. Tires may lose traction.
5. Always keep unit in gear especially when traveling down slopes. Do not shift to neutral and coast downhill.
6. Avoid starting, stopping, or turning on a slope. If tires lose traction, disengage the blade(s) and proceed slowly straight down the slope.
7. Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to rollover.
8. Use extra care while operating machines with grass catchers or other attachments; they can affect the stability of the unit. Do not use on steep slopes.
9. Do not try to stabilize the machine by putting your foot on the ground (ride-on units).
10. Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
11. Do not use grass catchers on steep slopes.
12. Do not mow slopes you cannot back up them.
13. See your authorized dealer/retailer for recommendations of wheel weights or counterweights to improve stability.
14. Remove obstacles such as rocks, tree limbs, etc.
15. Use slow speed. Tires may lose traction on slopes even through the brakes are functioning properly.
16. Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
17. Four Wheel Drive Models: Four Wheel Drive improves access to dangerously sloped terrain, increasing the possibility of roll-over. If the machine stops while going uphill, stop the blades and back down slowly. Avoid sudden turns.

## TOWED EQUIPMENT (RIDE-ON UNITS)

1. Tow only with a machine that has a hitch designed for towing. Do not attach towed equipment except at the hitch point.
2. Follow the manufacturer's recommendations for weight limit for towed equipment and towing on slopes.
3. Never allow children or others in or on towed equipment.
4. On slopes, the weight of the towed equipment may cause loss of traction and loss of control.
5. Travel slowly and allow extra distance to stop.
6. Do not shift to neutral and coast down hill.

## WARNING

Never operate on slopes greater than 17.6 percent (10°) which is a rise of 3-1/2 feet (106 cm) vertically in 20 feet (607 cm) horizontally.

When operating on slopes use additional wheel weights or counterweights. See your dealer/retailer to determine which weights are available and appropriate for your unit.

Select slow ground speed before driving onto slope. In addition to front weights, use extra caution when operating on slopes with rear-mounted grass catchers.

Mow UP and DOWN the slope, never across the face, use caution when changing directions and **DO NOT START OR STOP ON SLOPE.**

## CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the unit and the mowing activity. Never assume that children will remain where you last saw them.

1. Keep children out of the mowing area and under the watchful care of another responsible adult.
2. Be alert and turn unit off if children enter the area.
3. Before and during reverse operation, look behind and down for small children.
4. Never carry children, even with the blade(s) off. They may fall off and be seriously injured or interfere with safe unit operation. Children who have been given rides in the past may suddenly appear in the mowing area for another ride and be run over or backed over by the machine.
5. Never allow children to operate the unit.
6. Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

## EMISSIONS

1. Engine exhaust from this product contains chemicals known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.
2. Look for the relevant Emissions Durability Period and Air Index information on the engine emissions label.

## IGNITION SYSTEM

1. This spark ignition system complies with Canadian ICES-002.

# Safety Rules & Information

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## SERVICE AND MAINTENANCE

### Safe Handling of Gasoline

1. Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
2. Use only approved gasoline containers.
3. Never remove the gas cap or add fuel with the engine running. Allow the engine to cool before refueling.
4. Never fuel the machine indoors.
5. Never store the machine or fuel container where there is an open flame, spark, or pilot light such as near a water heater or other appliance.
6. Never fill containers inside a vehicle or on a truck bed with a plastic bed liner. Always place containers on the ground away from your vehicle before filling.
7. Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
8. Keep nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
9. If fuel is spilled on clothing, change clothing immediately.
10. Never over-fill the fuel tank. Replace gas cap and tighten securely.
11. Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
12. If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.
13. Replace all fuel tank caps and fuel container caps securely.
12. Do not use gasoline containing METHANOL, gasohol containing more than 10% ETHANOL, gasoline additives, or white gas because engine/fuel system damage could result.
13. If the fuel tank must be drained, it should be drained outdoors.
14. Replace faulty silencers/mufflers.
15. Maintain or replace safety and instruction labels as necessary.
16. Use only factory authorized replacement parts when making repairs.
17. Always comply with factory specifications on all settings and adjustments.
18. Only authorized service locations should be utilized for major service and repair requirements.
19. Never attempt to make major repairs on this unit unless you have been properly trained. Improper service procedures can result in hazardous operation, equipment damage and voiding of manufacturer's warranty.
20. On multiple blade mowers, take care as rotating one blade can cause other blades to rotate.
21. Do not change engine governor settings or over-speed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.
22. Disengage drive attachments, stop the engine, remove the key, and disconnect the spark plug wire(s) before: clearing attachment blockages and chutes, performing service work, striking an object, or if the unit vibrates abnormally. After striking an object, inspect the machine for damage and make repairs before restarting and operating the equipment.
23. Never place hands near the moving parts, such as a hydro pump cooling fan, when the tractor is running. (Hydro pump cooling fans are typically located on top of the transaxle).

### Service & Maintenance

1. Never run the unit in an enclosed area where carbon monoxide fumes may collect.
2. Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
3. Never tamper with safety devices. Check their proper operation regularly and make necessary repairs if they are not functioning properly.
4. Keep unit free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage. and remove any fuel-soaked debris. Allow machine to cool before storage.
5. If you strike an object, stop and inspect the machine. Repair, if necessary, before restarting.
6. Never make adjustments or repairs with the engine running.
7. Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
8. Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
9. Check brake operation frequently. Adjust and service as required.
10. Maintain or replace safety and instructions labels, as necessary.
11. Do not remove the fuel filter when the engine is hot as spilled gasoline may ignite. Do not spread fuel line clamps further than necessary. Ensure clamps grip hoses firmly over the filter after installation.
24. Units with hydraulic pumps, hoses, or motors: **WARNING:** Hydraulic fluid escaping under pressure may have sufficient force to penetrate skin and cause serious injury. If foreign fluid is injected into the skin it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result. Keep body and hands away from pin holes or nozzles that eject hydraulic fluid under high pressure. Use paper or cardboard, and not hands, to search for leaks. Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system. If leaks occur, have the unit serviced immediately by your authorized dealer.
25. **WARNING:** Stored energy device. Improper release of springs can result in serious personal injury. Springs should be removed by an authorized technician.
26. Models equipped with an engine radiator: **WARNING:** Stored energy device. To prevent serious bodily injury from hot coolant or steam blow-out, never attempt to remove the radiator cap while the engine is running. Stop the engine and wait until it is cool. Even then, use extreme care when removing the cap.



# Identification Numbers

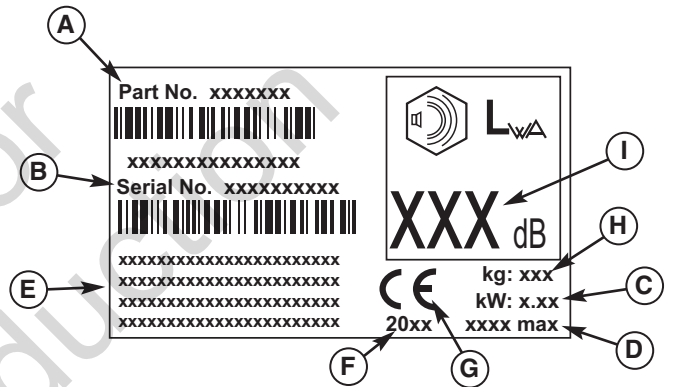
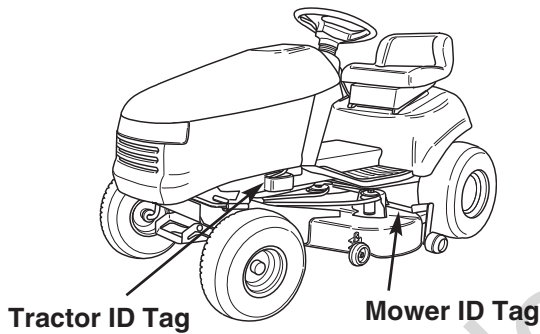
When contacting your authorized dealer for replacement parts, service, or information you **MUST** have these numbers.

Record your model name/number, manufacturer's identification numbers, and engine serial numbers in the space provided for easy access. These numbers can be found in the locations shown.

*NOTE: For location of engine identification numbers, refer to the engine owner's manual.*

## CE Identification Tag

- A. Manufacturer's Identification Number
- B. Manufacturer's Serial Number
- C. Power Rating in Kilowatts
- D. Maximum Engine Speed in Rotations per Minute
- E. Manufacturer's Name and Address
- F. Year of Manufacture
- G. CE Compliance Logo
- H. Mass of Unit in Kilograms
- I. Guaranteed Sound Power in Decibels



PRODUCT REFERENCE DATA	
Model Description Name/Number	
Unit Mfg Number	Unit Serial Number
Mower Deck Mfg Number	Mower Deck Serial Number
Dealer Name	Date Purchased
ENGINE REFERENCE DATA	
Engine Make	Engine Model
Engine Type/Spec	Engine Code/Serial Number

# Safety Decals

## Safety Decals

This unit has been designed and manufactured to provide you with the safety and reliability you would expect from an industry leader in outdoor power equipment manufacturing.

Although reading this manual and the safety instructions it contains will provide you with the necessary basic knowledge to operate this equipment safely and effectively, we have placed several safety labels on the unit to remind you of this important information while you are operating your unit.

All DANGER, WARNING, CAUTION and instructional messages on your rider and mower should be carefully read and obeyed. Personal bodily injury can result when these instructions are not followed. The information is for your safety and it is important! The safety decals below are on your rider and mower.

If any of these decals are lost or damaged, replace them at once. See your local dealer for replacements.

These labels are easily applied and will act as a constant visual reminder to you, and others who may use the equipment, to follow the safety instructions necessary for safe, effective operation.

## Safety Icons

### Warning: Read Operator's Manual.

Read and understand the Operator's Manual before using this machine.



### Danger: Dismemberment.

This mower deck can amputate limbs. Keep hands and feet away from blades.



### Danger: Thrown Objects.

This machine is capable of throwing objects and debris. Keep bystanders away.



### Danger: Fire Hazard.

Do not add fuel while engine is hot or running. Stop engine and allow to cool for 3 minutes prior to adding fuel.



### Warning: Remove Key Before Servicing.

Remove the key and consult technical literature before performing repairs or maintenance.



### Danger: Hot Surface.

Allow machine to cool before touching this area.



### Danger: Machine Rollover.

Do not use this machine on slopes greater than 10°.



### Danger: Carbon Monoxide Poisoning.

Do not operate the engine in an unventilated area.



### Danger: Dismemberment.

This machine can amputate limbs. Keep bystanders and children away when engine is running.

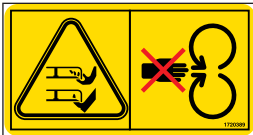


Decals Locations

Operating Instructions,  
CE Models, Part No. 1734027



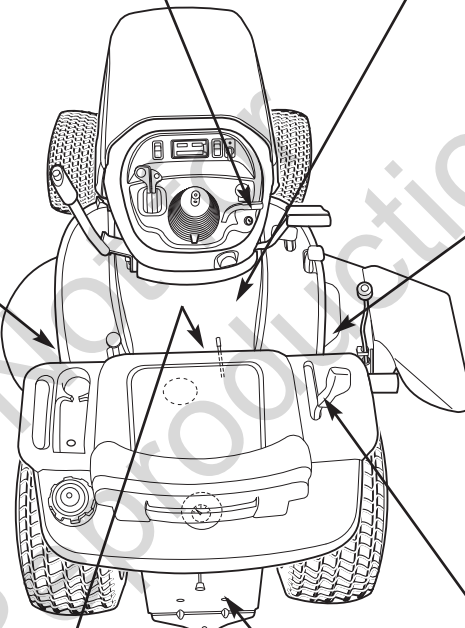
Ignition Switch  
Positions  
Part No. 1722806



CE-Danger, Rotating Blades,  
Part No. 1720389



CE-Danger, Rotating Blades,  
Part No. 1720389



Decal - Cutting  
Height  
Part No. 1721197



Decal - Cutting  
Height  
Part No. 1723470



Decal - Cutting  
Height  
Part No. 1723847



Fuel Level  
Part No. 1730172



Transmission  
Release  
Part No. 1730202



Attachment Lift  
Part No. 1730264

# Features & Controls

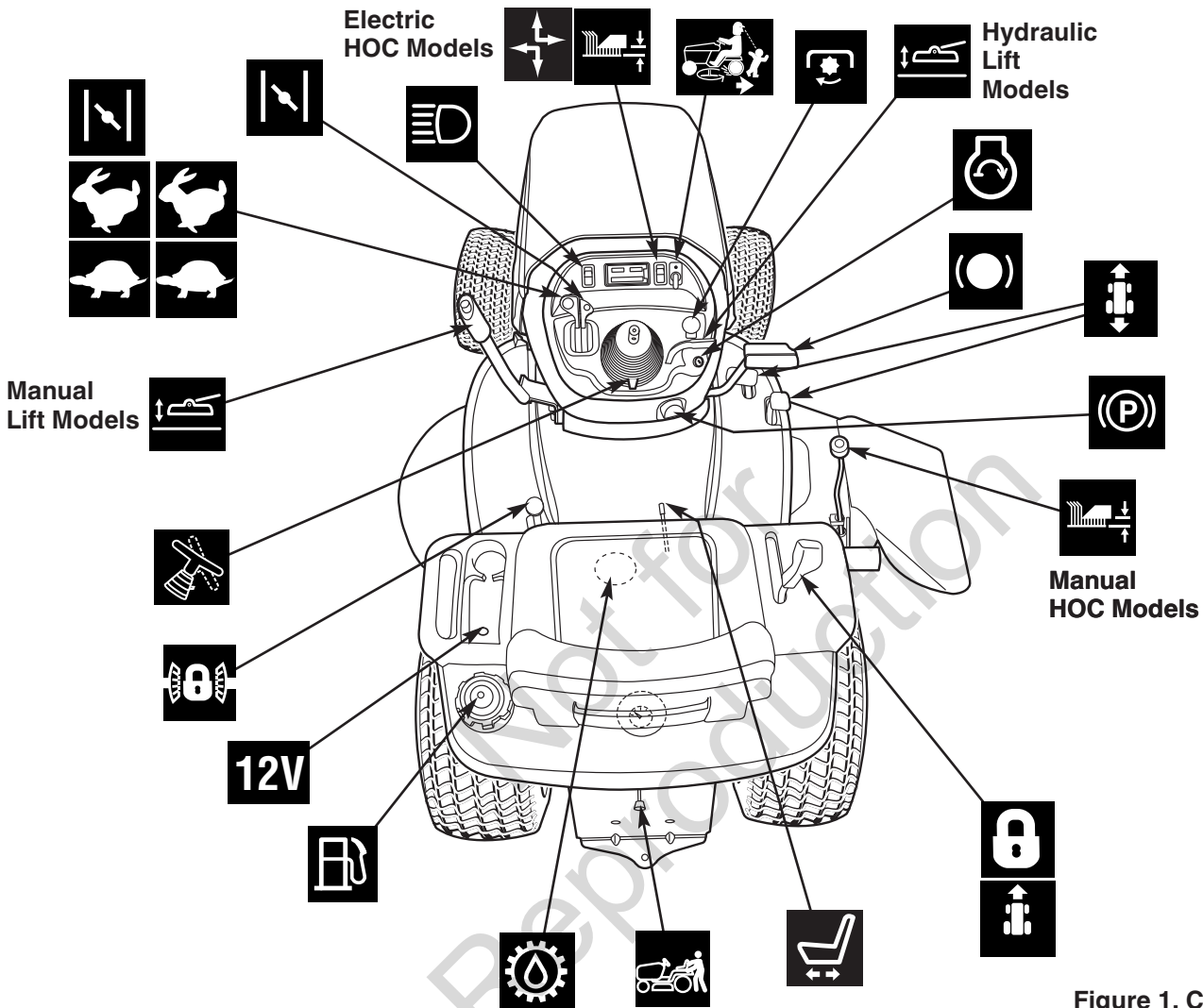
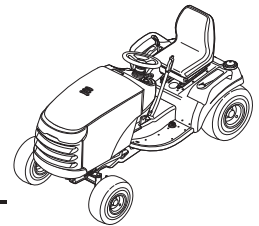


Figure 1. Controls

## Control Functions

The information below briefly describes the function of individual controls. Starting, stopping, driving, and mowing require the combined use of several controls applied in specific sequences. To learn what combination and sequence of controls to use for various tasks see the OPERATION section.



### Throttle Control

The throttle controls engine speed. Move the throttle forward to increase engine speed and back to decrease engine speed. Always operate at FULL throttle.



### Choke

Close the choke for cold starting. Open the choke once the engine starts. A warm engine may not require choking. Move the lever forward to close the choke.



### Headlights

The light switch turns the tractor headlights on and off.



### Reverse Mowing Option (RMO)

The Reverse Mowing Option allows for mowing (or use of other PTO driven attachments) while traveling in reverse. If you choose to mow or operate another attachment in reverse, turn the RMO key after the PTO is engaged. The L.E.D. light will illuminate, and the operator can then mow in reverse. Each time the PTO is disengaged the RMO needs to be reactivated if desired.



## PTO Switch

The PTO (Power Take-Off) switch engages and disengages attachments that use the PTO. To engage the PTO, pull UP on the switch. Push DOWN to disengage. *Note that the operator must be seated firmly in the tractor seat for the PTO to function.*



## Ignition Switch

The ignition switch starts and stops the engine, it has three positions:



**OFF** Stops the engine and shuts off the electrical system.



**RUN** Allows the engine to run and powers the electrical system.



**START** Cranks the engine for starting.

*NOTE: Never leave the ignition switch in the RUN position with the engine stopped—this drains the battery.*



## Brake Pedal

Depressing the brake pedal applies the tractor brake.



## Ground Speed Pedals

The tractor's forward ground speed is controlled by the forward ground speed control pedal. The tractor's reverse ground speed is controlled by the reverse ground speed control pedal.

Depressing either pedal will increase ground speed. Note that the further down the pedal is depressed, the faster the tractor will travel.



## Parking Brake

The parking brake knob is used to lock the parking brake when the tractor is stopped. Fully depressing the brake pedal and pulling up on the knob engages the parking brake



## Mower Height of Cut Adjustment

The cutting height is infinitely adjustable between 1" and 3-5/8."

**Electric Height of Cut Models:** The cutting height adjustment switch controls the mower cutting height. This same switch also controls the spout rotator motor when a snowthrower is installed. The arrows on the switch correspond to the direction of adjustment (UP arrow raises cutting height, RIGHT arrow rotates the spout right, etc). When the adjustment indicator has reached the end of its travel, release the switch; holding the switch down will damage the motor.

**Manual Lift Models:** The cutting height adjustment knob controls the mower cutting height.



## Cruise Control (Select Models)

The cruise control is used to lock the ground speed control in forward. Move the lever forward until the desired ground speed is reached. To disengage the cruise control move the lever back. In the event you need to stop quickly, depressing the brake pedal will also return the cruise control to neutral.



## Seat Adjustment Lever

The seat can be adjusted forward and back. Move the lever, position the seat as desired, and release the lever to lock the seat into position.



## Transmission Release Valve Lever

The transmission release valve lever deactivates the transmission so that the tractor can be pushed by hand. See *PUSHING THE TRACTOR BY HAND*.



## Transmission Oil Expansion Chamber (K71 Models Only)

Transmission oil is added through the transmission oil expansion chamber. It also serves as extra holding capacity for oil as the transmission heats up and the oil expands. See your dealer for oil check/ fill procedures.



## Fuel Tank

To remove the cap, turn counterclockwise. On models with a dashboard display, the fuel gauge is part of the dashboard. Models without a dashboard display have a fuel gauge located under the seat.



## 12V Power Outlet (Select Models)

The power outlet is 12V-DC. Accessory must be rated at 14 amps or less.



## Differential Lock Pedal (Select Models)

Depressing this pedal locks the transmission differential, locking both rear wheels into "drive".

Use this feature if the tractor is stuck because one wheel is slipping. **Engage the differential lock at slow ground speeds only.**



## Steering Tilt Adjust (Select Models)

Use the tilt knob located on the bellows to release the pivot mechanism and pivot the wheel to the desired position. Release the tilt knob to lock in position.

## Features & Controls



### Attachment Lift Control Lever

When using the mower deck, lift the deck off the ground while transporting to and from the job site. **DO NOT** cut with the mower in the raised, transport position.

**Hydraulic Lift Models:** The attachment lift control lever raises and lowers attachments that utilize the tractor's hydraulic lift cylinder. Pushing the lever forward lowers the attachment while pulling the lever back raises the attachment.

*IMPORTANT NOTE - On models equipped with hydraulic lift, the attachment lift will not work when the parking brake is engaged.*

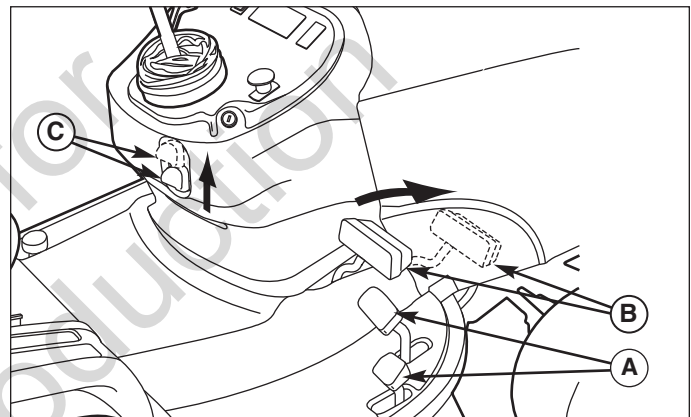
**Manual Lift Models:** The attachment lift control lever raises and lowers attachments that utilize the tractor's manual lift linkage. To lower an attachment: pull the lever back slightly, depress the release button, and push the lever forward until it locks in the lowered position. To raise an attachment: push the lever forward slightly, depress the release button, then pull the lever back until it locks in the raised position.

## Parking Brake Function

**Applying the Parking Brake** - See Figure 2. To lock the parking brake, release the ground speed pedals (A), fully depress the brake pedal (B), pull UP on the parking brake knob (C), and then release brake pedal.

**Releasing the Parking Brake** - See Figure 2. To release the parking brake, fully depress the brake pedal (B) and push the parking brake knob (C) DOWN.

*IMPORTANT NOTE: The tractor's hydraulic attachment lift will not work when the parking brake is engaged.*



**Figure 2. Engaging the Parking Brake**

- A. Ground Speed Pedals**
- B. Brake Pedal**
- C. Parking Brake Knob**

## Automatic Controlled Traction (w/o 4WD)

### What is Automatic Controlled Traction?

Automatic Controlled Traction (ACT) is an exclusive feature of our transmissions that provides improved traction. ACT applies a preset amount of torque to both rear wheels even if one starts slipping (a transmission without ACT will lose traction completely if one rear wheel starts slipping). This preset torque is just enough to provide additional traction, and still allow the wheels to turn at different speeds in a tight turn without damaging the lawn.

### What to Expect from Your ACT Tractor

For the most part, while using your tractor you will not notice ACT working, and you will simply become accustomed to increased traction an ACT transmission provides.

Under certain circumstances the ACT system limit can be exceeded, and one of the rear wheels may slip (for instance if trying to turn up a hill while accelerating). This is normal. If you start to lose traction, do not speed up. Instead, slow to a stop, straighten the steering wheel, and slowly accelerate. Stopping the tractor allows the transmission to regain more traction.

## Dashboard Display & Functions

### Display Items

Refer to Figure 3.

#### A. FUEL LEVEL

Indicates the amount of fuel in the fuel tank. Left is empty; right is full.

#### B. HOUR METER / CLOCK / SERVICE INDICATOR

Displays the clock, hour meter, and maintenance reminder.

The hour meter measures the number of hours the key has been in the RUN position. The hour meter will flash an initial oil change indicator at 5 hours, and a lubrication reminder every 50 hours. These reminders display for approximately two hours and will automatically reset themselves.

*NOTE: The hour meter will register the passage of time when the key is in the RUN position, even if the engine is not running. The hour meter has a self contained power source so the total hours are always visible.*

#### C. SELECT BUTTON

Used to set the clock and reset the maintenance reminder.

#### D. SET BUTTON

Used to set the clock and reset the maintenance reminder.

#### E. PTO LIGHT

Indicates the PTO switch is in the ON position.

#### F. CRUISE CONTROL LIGHT

Indicates that the cruise control is engaged.

#### G. LOW OIL PRESSURE LIGHT

Indicates that the engine oil pressure is low. The light will turn on when the tractor is first started and then go out. IF THIS LIGHT TURNS ON WHILE THE TRACTOR IS IN USE, TURN THE ENGINE OFF IMMEDIATELY. Contact your authorized dealer for service.

#### H. LOW VOLTAGE LIGHT

Indicates that the electrical system voltage is low. The light will turn on when the tractor is first started and then go out. IF THIS LIGHT TURNS ON WHILE THE TRACTOR IS IN USE, TURN THE ENGINE OFF IMMEDIATELY. Contact your authorized dealer for service.

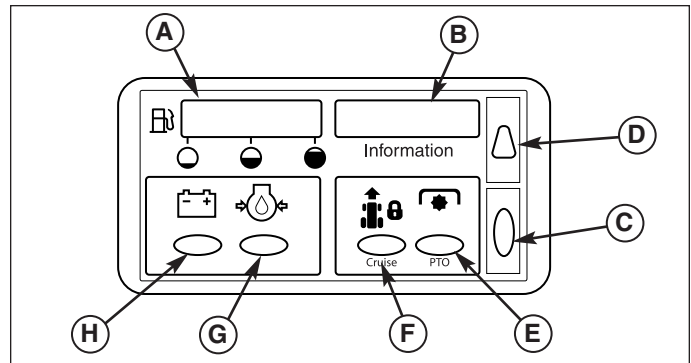


Figure 3. Dashboard Display - Select Models

## Functions

### DASHBOARD DISPLAY MODELS

**Display Total Running Hours** - When the key switch is first turned to the RUN position, all warning indicators will light and the total running hours will be displayed. Be sure all lights are functioning.

**Display PTO Hours** - Turn the key OFF, engage the PTO, and turn the key to RUN (engine off).

**Set the Clock** - Start the engine, leave the engine running. Depress the select button (C) for three (3) seconds and release. Depress set button and HOLD to advance time. Depress select button to select minutes. Depress and HOLD set button (D) to advance time. Leave alone for 5 seconds and clock will activate. Shut off engine.

**Demonstration Mode** - With the engine off, hold down the set button (D) and turn the key switch to RUN.

**Maintenance Reminder** - A maintenance reminder will display in the information window (B) after the first 5 hours of operation, and then after every 50 hours. The reminder will automatically reset after 5 hours. The reminder can be manually reset by turning the key switch from OFF to RUN (with engine off) and then depressing the set (D) and select (C) buttons simultaneously for 5 seconds.

## 12 Volt Power Outlet (Select Models)

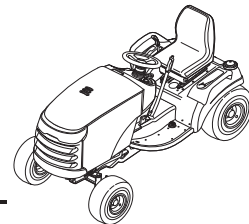
### ⚠ CAUTION

**Avoid Injury. Safe operation requires your full attention. Do not wear radio or music headphones while operating machine.**

The 12-volt accessory plug is located in the left side pod (see Figure 1). It can be used to power small electronic devices. The accessory must be rated at 14 amps or less.

*NOTE: Operating a 12-volt accessory, especially with the engine at idle, may cause battery discharge. When not using the accessory plug it must be covered with the rubber plug to prevent moisture from causing a short circuit. Entrance of water into plug can cause a short circuit.*

# Operating the Tractor



## Safety Interlock System Tests

### **⚠ WARNING**

This unit is equipped with safety interlock switches and other safety devices. These safety systems are present for your safety. Do not attempt to bypass safety switches, and never tamper with safety devices.

#### Test 1 — Engine should NOT start if:

- Blade rotation control is in the ENGAGE position, OR
- Brake pedal is NOT fully depressed (parking brake OFF).

#### Test 2 — Engine SHOULD start if:

- Operator is sitting in seat, AND
- Blade rotation control is in the DISENGAGE position, AND
- Brake pedal is fully depressed (parking brake ON).

#### Test 3 — Engine should SHUT OFF if:

- Operator rises off seat.

#### Test 4 — Blade Brake Check

Mower blades and mower drive belt should come to a complete stop within five seconds after blade rotation control is moved to DISENGAGE position. If the mower drive belt does not stop within five seconds, see your dealer.

### **⚠ WARNING**

If the unit does not pass a safety test, do not operate it. See your authorized dealer.

### **⚠ WARNING**

Gasoline is highly flammable and must be handled with care. Never fill the tank when the engine is still hot from recent operation. Do not allow open flame, smoking or matches in the area. Avoid over-filling and wipe up any spills.



Do not use gasoline containing METHANOL, gasohol containing more than 10% ETHANOL, gasoline additives, or white gas because engine/fuel system damage could result.

## Starting The Engine

1. While sitting in the operator's seat, fully depress the brake pedal or set the parking brake.
2. Make sure that your feet are not depressing the ground speed control pedals and that the cruise control lever is in neutral.
3. Disengage the PTO clutch.
4. Set the throttle to FULL.
5. Close the choke.

*NOTE: A warm engine may not require choking.*

6. Insert the ignition key and turn it to START.
7. After the engine starts, move the engine throttle control to half speed. Warm up the engine by running it for at least 30 seconds.
8. Set throttle to FULL.

*NOTE: In the event of an emergency the engine can be stopped by simply turning the ignition switch to STOP. Use this method only in emergency situations. For normal engine shut down follow the procedure given in STOPPING THE TRACTOR.*

## General Operating Safety

Be sure to read all information in the Safety and Operation sections before attempting to operate this unit. Become familiar with all of the controls and how to stop the unit.

## Adding Fuel

To add fuel:

1. Remove the fuel cap (A, Figure 4).
2. Fill the tank. Do not overfill. Leave room in the tank for fuel expansion. Refer to your engine manual for specific fuel recommendations.
3. Install and hand tighten the fuel cap.

## Stopping The Tractor & Engine

1. Return the ground speed control(s) to neutral.
2. Disengage the PTO and wait for all moving parts to stop.
3. **Briggs & Stratton Models:** Move the throttle control to SLOW position and turn the ignition key to OFF. Remove the key.

**Kohler Models:** Move the throttle control to FAST position and turn the ignition key to OFF. Remove the key.



## Driving The Tractor

1. Sit in the seat and adjust the seat so that you can comfortably reach all the controls and see the dashboard display.
2. Engage the parking brake.
3. Make sure the PTO switch is disengaged.
4. Start the engine (see *STARTING THE ENGINE*).
5. Disengage the parking brake and release the brake pedal.
6. Depress the forward ground speed control pedal to travel forward. Release the pedal to stop. Note that the further down the pedal is depressed the faster the tractor will travel.
7. Stop the tractor by releasing the ground speed control pedals, setting the parking brake, and stopping the engine (see *STOPPING THE TRACTOR & ENGINE*).

## Mowing

1. Set the mower cutting height to the desired level and set the gauge wheels to the appropriate position (if equipped).
2. Engage the parking brake. Make sure the PTO switch is disengaged.
3. Start the engine (see *STARTING THE ENGINE*).
4. Fully lower the mower using the attachment lift lever and set cutting height.
5. Set the throttle to FULL.
6. Engage the PTO (Mower Deck).
7. Begin mowing.
8. When finished, shut off the PTO and raise the mower using the attachment lift control lever.
9. Stop the engine (see *STOPPING THE TRACTOR & ENGINE*).

## Mowing in Reverse

### ⚠ WARNING

The engine will shut off if the reverse ground speed pedal is depressed while the PTO is on and the RMO has not been activated. The operator should always turn the PTO off prior to driving across on roads, paths or any area that maybe used by other vehicles. Sudden loss of drive could create a hazard.

### ⚠ WARNING

Mowing in reverse can be hazardous to bystanders. Tragic accidents can occur if the operator is not alert to the presence of children. Never activate RMO if children are present. Children are often attracted to the unit and the mowing activity.

If an operator chooses to mow in reverse, the RMO system can be used. To use the Reverse Mowing Option (RMO) turn the RMO key after the PTO is engaged. The L.E.D. light will illuminate, and the operator can then mow in reverse. Each time the PTO is engaged the RMO needs to be reactivated if desired. The key should be removed to restrict access to the RMO feature.

## Attachment Operation in Reverse

If an operator chooses to operate a PTO driven attachment in reverse, the RMO system can be used. To use the Reverse Mowing Option (RMO) turn the RMO key after the PTO is engaged. The L.E.D. light will illuminate, and the operator can then operate the attachment in reverse. Each time the PTO is disengaged the RMO needs to be reactivated if desired. The key should be removed to restrict access to the RMO feature.

## Pushing the Tractor by Hand

1. Disengage the PTO and turn the engine off.
2. Pull the transmission release (B, Figure 4) back approximately 2-1/2" (6 cm) to lock into released position.
3. The tractor can now be pushed by hand.



### DO NOT TOW TRACTOR

Towing the unit will cause transmission damage. • Do not use another vehicle to push or pull this unit. • Do not actuate the transmission release valve lever while the engine is running.

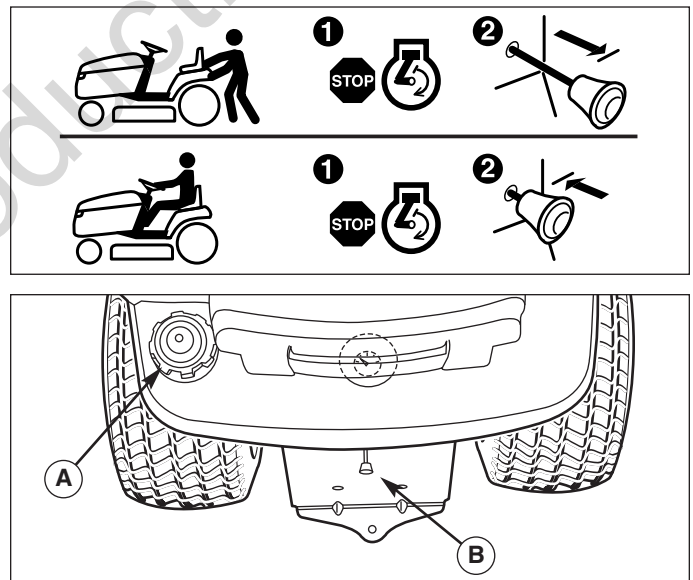


Figure 4. Transmission Release Lever & Fuel Tank  
A. Fuel Tank Cap  
B. Transmission Release Lever

# Operating the Tractor

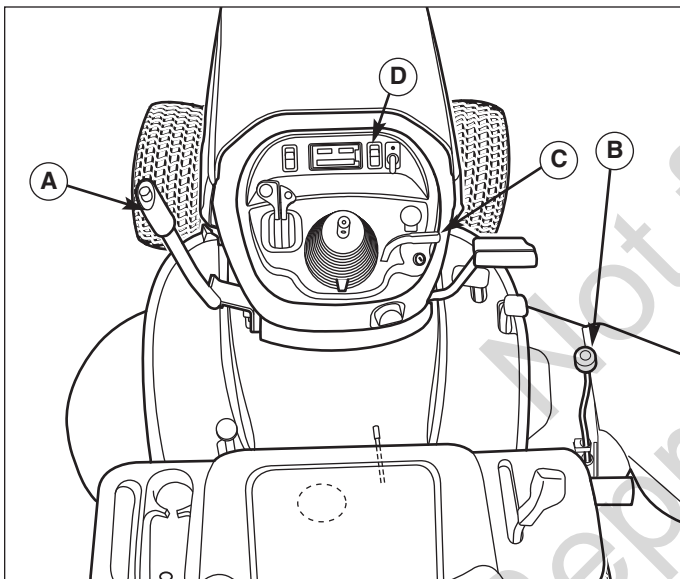
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## Adjusting Mower Cutting Height

The cutting height is infinitely adjustable between approximately 1" and 3-5/8" (2,5-9,2 cm).

**Electric Height of Cut Models:** The cutting height adjustment switch (D, Figure 5) controls the mower cutting height. This same switch also controls the spout rotator motor when a snowthrower is installed. The arrows on the switch correspond to the direction of adjustment (UP arrow raises cutting height, RIGHT arrow rotates the spout right, etc). When the adjustment indicator has reached the end of its travel, release the switch; holding the switch down will damage the motor

**Manual Lift Models:** The cutting height adjustment knob (B, Figure 5) controls the mower cutting height. Turn the knob clockwise to raise the deck and counterclockwise to lower it.

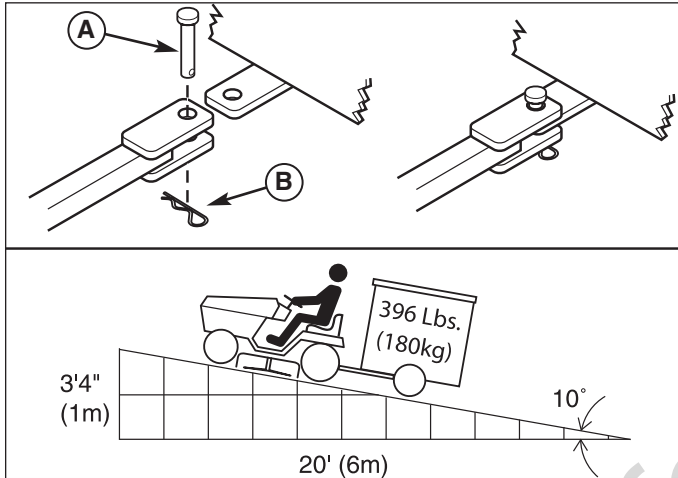


**Figure 5. Raising and Lowering Mower**

- A. Attachment Lift - Manual**
- B. Cutting Height Control Knob**
- C. Attachment Lift - Hydraulic**
- D. Electric Height of Cut Switch**

## Attaching a Trailer

The maximum horizontal drawbar force allowed is 444 Newton. The maximum vertical drawbar force is 222 Newton. This equates to a 396 lbs (180 kg) trailer on a 10 degree hill. Secure the trailer with an appropriately sized clevis pin (A, Figure 6) and clip (B).



**Figure 6. Trailer Weight Recommendations**  
**A. Clevis Pin**  
**B. Clip**

## Storage

### **⚠ WARNING**

**Never store the unit (with fuel) in an enclosed, poorly ventilated structure. Fuel vapors can travel to an ignition source (such as a furnace, water heater, etc.) and cause an explosion.**

**Fuel vapor is also toxic to humans and animals.**

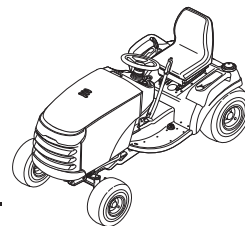
Before you store your unit for the off-season, read the Maintenance and Storage instructions in the Safety Rules section, then perform the following steps:

- Disengage the PTO, set the parking brake, & remove the key.
- Perform engine maintenance and storage measures listed in the engine owner's manual. This includes draining the fuel system, or adding stabilizer to the fuel (do not store a fueled unit in an enclosed structure - see warning).
- Battery life will be increased if it is removed, put in a cool, dry place and fully charged about once a month. If the battery is left in the unit, disconnect the negative cable.

Before starting the unit after it has been stored:

- Check all fluid levels. Check all maintenance items.
- Perform all recommended checks and procedures found in the engine owner's manual.
- Allow the engine to warm up for several minutes before use.

# Regular Maintenance



## MAINTENANCE SCHEDULE & PROCEDURES

The following schedule should be followed for normal care of your tractor and mower.

TRACTOR AND MOWER
<b>Every 8 Hours or Daily</b>
Check safety interlock system
Clean debris off tractor and mower deck
Clean debris from engine compartment
<b>Every 25 Hours or Annually *</b>
Check mower blade stopping time
Check tractor and mower for loose hardware
Check tire pressure
<b>Every 50 Hours or Annually *</b>
Check tractor brakes
Clean battery and cables
<b>See Dealer Annually to</b>
Lubricate tractor and mower
Check mower blades **

\* Whichever comes first

\*\* Check blades more often in regions with sandy soils or high dust conditions.

ENGINE
<b>First 5 Hours</b>
Change engine oil - see engine manual
<b>Every 8 Hours or Daily</b>
Check engine oil level - see engine manual
<b>Every 25 Hours or Annually *</b>
Clean engine air filter and pre-cleaner **
<b>Every 50 Hours or Annually *</b>
Change engine oil
Replace oil filter
<b>Annually</b>
Replace air filter
Replace pre-cleaner
<b>See Dealer Annually to</b>
Inspect muffler and spark arrester
Replace spark plug
Replace fuel filter
Clean engine air cooling system

\* Whichever comes first

\*\* Clean more often in dusty conditions or when airborne debris is present.

## Check Tire Pressures

Tire Pressure should be checked periodically, and maintained at the levels shown in the chart (Figure 7). Note that these pressures may differ slightly from the "Max Inflation" stamped on the side-wall of the tires. The pressures shown provide proper traction, improve cut quality, and extend tire life.

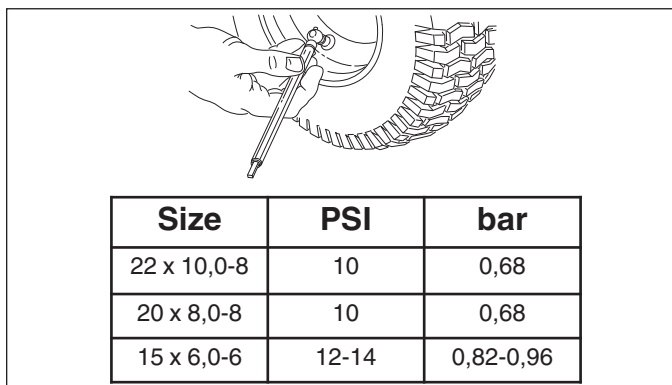


Figure 7. Tire Pressure

## Safety Interlock System Check

Check the function of the safety interlock system using the test procedure in *Operating the Tractor*. If the tractor fails any of the tests, see your dealer.

## Blade Brake Check

Mower blades and mower drive belt should come to a complete stop within five seconds after the electric PTO switch is turned off.

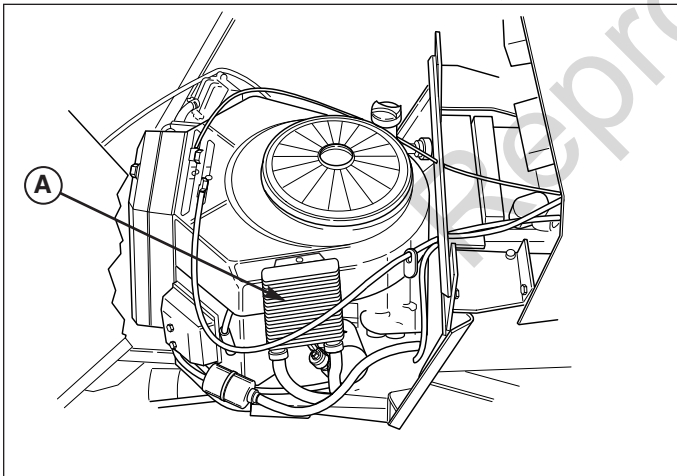
1. With tractor in neutral, PTO disengaged and operator in seat, start the engine.
2. Look over the left-hand footrest at the mower drive belt. Engage the PTO and wait several seconds. Disengage the PTO and check the amount of time it takes for the mower drive belt to stop.
3. If mower drive belt does not stop within five seconds, see your dealer.

## Engine Maintenance

Refer to the engine owner's manual for all engine maintenance procedures and recommendations.

### Check / Clean Oil Cooler (Kohler Models)

The engine oil cooler is located on the side of the engine (A, Figure 8) and should be cleaned with compressed air at regular intervals or if dirty.



**Figure 8. Clean Oil Cooler**  
A. Oil Cooler

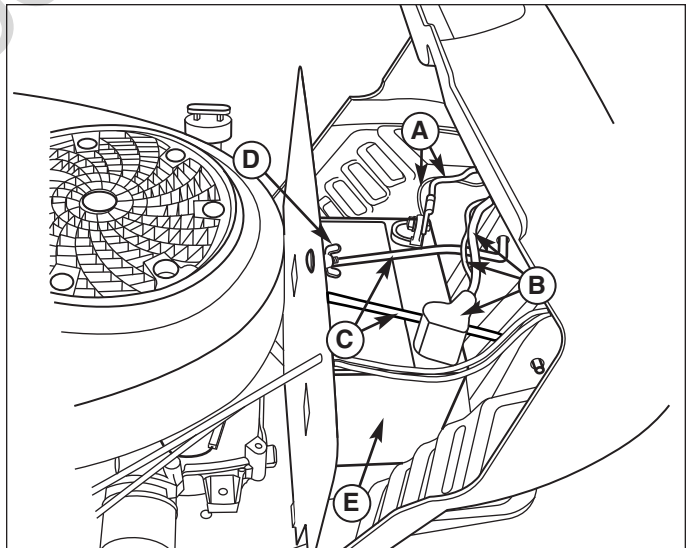
## Battery Maintenance

### Cleaning the Battery and Cables

#### ⚠ WARNING

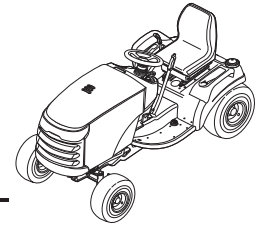
When removing or installing battery cables, disconnect the negative cable **FIRST** and reconnect it **LAST**. If not done in this order, the positive terminal can be shorted to the frame by a tool.

1. Disconnect the cables from the battery, negative cables first (A, Figure 9) then the cover & positive cables (B).
2. Loosen the wingnut & washer (D).
3. Pivot the hold-down rod (C) up and away from battery. Secure to steering tower.
4. Remove the battery (E).
5. Clean the battery compartment with a solution of baking soda and water.
6. Clean the battery terminals and cable ends with a wire brush and battery terminal cleaner until shiny.
7. Reinstall the battery (E) in the battery compartment. Secure with the battery hold-down rod (C) and wingnut & washer (D).
8. Re-attach the battery cables, positive cables and cover first (B) then the negative cables (A).
9. Coat the cable ends and battery terminals with petroleum jelly or non-conducting grease.



**Figure 9. Battery Maintenance**  
A. Negative Cables  
B. Positive Cables & Cover  
C. Hold-Down Rod  
D. Wingnut & Washer  
E. Battery

# Troubleshooting & Adjustment



## Troubleshooting

While normal care and regular maintenance will extend the life of your equipment, prolonged or constant use may eventually require that service be performed to allow it to continue operating properly.

The troubleshooting guide below lists the most common problems, their causes, and remedies.

See the information on the following pages for instructions on how to perform most of these minor adjustments and service repairs yourself. If you prefer, all of these procedures can be performed for you by your local authorized dealer.

## **⚠ WARNING**

**To avoid serious injury, perform maintenance on the tractor or mower only when the engine is stopped and the parking brake engaged.**

**Always remove the ignition key, disconnect the spark plug wire and fasten it away from the plug before beginning the maintenance, to prevent accidental starting of the engine.**

## Troubleshooting the Tractor

PROBLEM	LOOK FOR	REMEDY
<b>Engine will not turnover or start.</b>	Brake pedal not depressed.	Fully depress brake pedal.
	PTO (electric clutch) switch is in ON position.	Place in OFF position.
	Cruise control engaged.	Move knob to NEUTRAL/OFF position.
	Out of fuel.	If engine is hot, allow it to cool, then refill the fuel tank.
	Engine flooded.	Disengage the choke.
	Fuse is blown.	See authorized dealer.
	Battery terminals require cleaning.	See <i>Cleaning the Battery and Cables</i> .
	Battery discharged or dead.	Recharge or replace battery.
	Wiring loose or broken.	Visually check wiring. If wires are frayed or broken, see authorized dealer.
	Solenoid or starter motor faulty.	See authorized dealer.
	Safety interlock switch faulty.	See authorized dealer.
	Water in fuel.	See authorized dealer.
Gas is old or stale.	See authorized dealer.	
<b>Engine starts hard or runs poorly.</b>	Fuel mixture too rich.	Clean air filter.
	Engine has other problem.	See authorized dealer.
<b>Engine knocks.</b>	Low oil level.	See engine manual.
	Using wrong grade oil.	See engine manual.
<b>Excessive oil consumption.</b>	Engine running too hot.	See authorized dealer.
	Using wrong grade oil.	See engine manual.
	Too much oil in crankcase.	Drain excess oil.

## Troubleshooting the Tractor (Continued)

PROBLEM	LOOK FOR	REMEDY
<b>Brake will not hold.</b>	Internal brake worn.	See authorized dealer.
<b>Tractor steers hard or handles poorly.</b>	Steering linkage is loose.	See authorized dealer.
	Improper tire inflation.	See <i>Check Tire Pressure</i> section.
	Front wheel spindle bearings dry.	See authorized dealer.
<b>Engine exhaust is black.</b>	Dirty air filter.	See engine manual.
	Choke closed.	Open choke.
<b>Engine runs, but tractor will not drive.</b>	Ground speed control pedals not depressed.	Depress pedals.
	Transmission release lever in PUSH position.	Move into DRIVE position.
	Mower drive belt is broken.	See authorized dealer.
	Parking brake is engaged.	Disengage parking brake.
	Traction drive belt is broken or slipping.	See authorized dealer.

## Troubleshooting the Mower

PROBLEM	LOOK FOR	REMEDY
<b>Mower will not raise.</b>	Lift linkage not properly attached or damaged.	See authorized dealer.
<b>Mower cut is uneven.</b>	Mower not leveled properly.	See authorized dealer.
	Tractor tires not properly inflated.	See <i>Check Tire Pressure</i> .
<b>Mower cut is rough looking.</b>	Engine speed too slow.	Set to full throttle.
	Ground speed too fast.	Slow down.
	Mower has other problem.	See authorized dealer.
<b>Engine stalls easily with mower engaged.</b>	Engine speed too slow.	Set to full throttle.
	Ground speed too fast.	Slow down.
	Dirty or clogged air filter.	See engine manual.
	Cutting height set too low.	Cut tall grass at maximum cutting height during first pass.
	Discharge chute jamming.	Cut grass with discharge pointing toward previously cut area.
	Engine not up to operating temperature.	Run engine for several minutes to warm-up.
<b>Excessive mower vibration.</b>	Starting mower in tall grass.	Start the mower in a cleared area.
	Mower has other problem.	See authorized dealer.
<b>Engine runs and tractor drives, but mower will not drive.</b>	PTO not engaged.	Engage the PTO.
	Mower has other problem.	See authorized dealer.

# Troubleshooting & Adjustment

## Battery Charging

### ⚠ WARNING

Keep open flames and sparks away from the battery; the gasses coming from it are highly explosive. Ventilate the battery well during charging.

A dead battery or one too weak to start the engine may be the result of a defect in the charging system or other electrical component. If there is any doubt about the cause of the problem, see your dealer. If you need to replace the battery, follow the steps under *Cleaning the Battery & Cables*.

To charge the battery, follow the instructions provided by the battery charger manufacturer as well as all warnings included in the safety rules sections of this book. Charge the battery until fully charged. Do not charge at a rate higher than 10 amps.

## Brake Adjustment

This unit does not have a user-adjustable brake. If brake does not function properly, see your dealer.

## Seat Adjustment

### Pitch Adjustment

The pitch of the seat can be adjusted to one of three positions. To adjust, remove the carriage bolts, spacers, washers, and nuts (B, Figure 10) from the hinge and reinstall them in the desired holes.

### Seat Slide Adjustment

The seat can also be adjusted forward and back. Move the lever (A, Figure 10), position the seat as desired, and release the lever to lock the seat into position.

### Seat Spring Adjustment

The seat springs (C, Figure 10) can be adjusted to provide a softer or firmer ride. Tilt the seat forward and slide the spring assembly (C) forward for a softer ride, and back for a firmer ride.

## Manual Lift Assist Adjustment

Models with large, left-side lift lever. If the manual lift does not function properly, see your dealer.

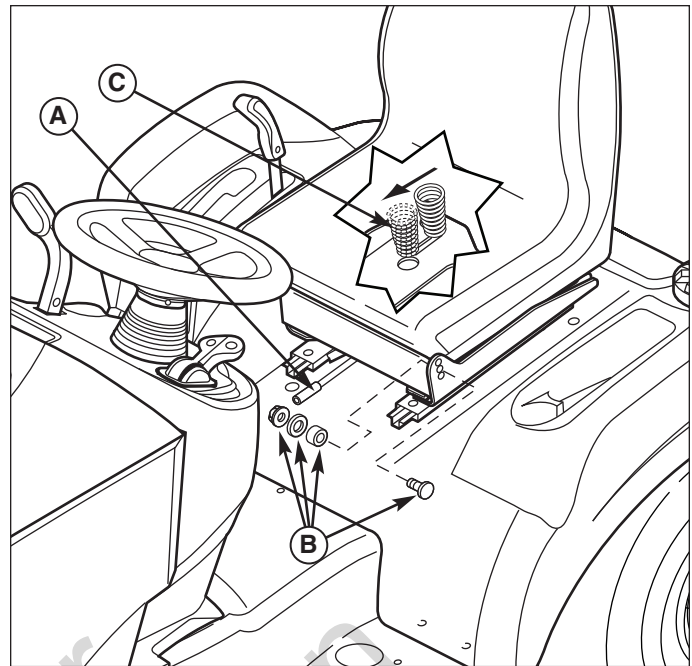


Figure 10. Seat Adjustment

A. Seat Adjustment Lever

B. Carriage Bolt, Spacer, Washer, and Nut

C. Seat Spring



## Mower Gauge Wheels (Select Models)

The mower gauge wheels can be placed in several positions depending on the height of cut. When using higher cutting heights, set the wheels in the lower position. When using lower cutting heights, set the wheels in the upper position. To adjust:

### PIVOTING GAUGE WHEELS

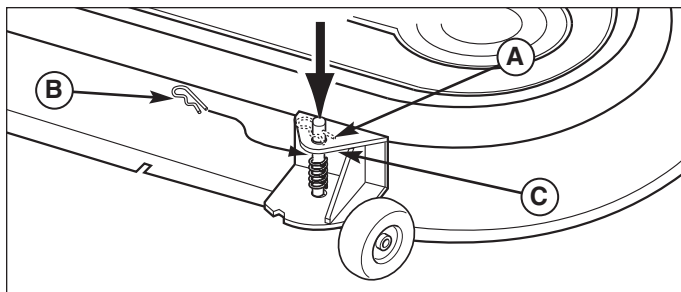
1. Remove the hair pin clip (A, B, Figure 11).
2. For upper position, install the pin (A) through the spindle above the bracket (C). For the lower position, push down on the top of the spindle, and install the hair pin clip (B) below the top of the bracket (C).

### SLIDING BRACKET GAUGE WHEELS

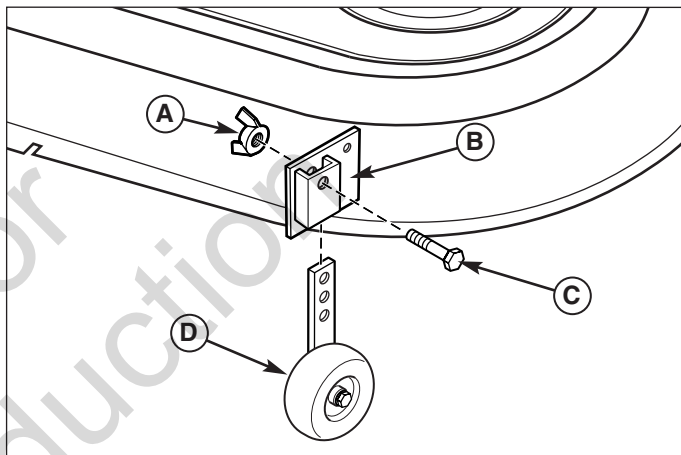
1. Remove the nylock wing nut (A, Figure 12) from capscrew (C). Slide out capscrew (C) from gauge wheel bracket (B). Change position of gauge wheel assembly to desired height.
2. Insert capscrew (C) through gauge wheel bracket (B) and gauge wheel assembly (D). Tighten nylock wing nut (A). Repeat Steps 1 & 2 for all gauge wheels.

### FIXED BRACKET GAUGE WHEELS

1. Remove the locknut (B, Figure 13), gauge wheel (C), washers (D), and shoulder bolt (E). Change position of gauge wheel to desired height.
2. Insert shoulder bolt (E) through washers (D) gauge wheel (C), and gauge wheel bracket (A). Secure with locknut (B). Repeat Steps 1 & 2 for all gauge wheels.



**Figure 11. Pivoting Gauge Wheel Adjustment**  
**A. Hair Pin (Upper Position)**  
**B. Hair Pin (Lower Position)**  
**C. Gauge Wheel Bracket**

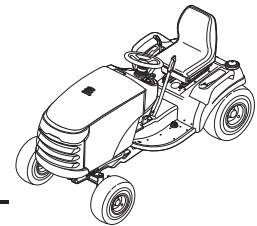


**Figure 12. Sliding Bracket Gauge Wheel Adjustment**  
**A. Nylock Wing Nut**                      **C. Capscrew**  
**B. Gauge Wheel Bracket**              **D. Gauge Wheel**



**Figure 13. Fixed Bracket Gauge Wheel Adjustment**  
**A. Gauge Wheel Bracket**              **D. Washers**  
**B. Locknut**                                **E. Shoulder Bolt**  
**C. Gauge Wheel**

# Specifications



## ENGINE

### 23 HP\* Briggs & Stratton

<b>Make</b>	Briggs & Stratton
<b>Model</b>	Twin Vanguard (386777)
<b>Horsepower</b>	23
<b>Displacement</b>	38 cu in. (622 cc)
<b>Electrical System</b>	Alternator: 12 volt, 16 amp Battery: 340 CCA
<b>Oil Capacity</b>	48 oz (1.4 L)

### 25 HP\* Kohler

<b>Make</b>	Kohler
<b>Model</b>	Command (CV730S)
<b>Horsepower</b>	25
<b>Displacement</b>	44.0 cu in. (725 cc)
<b>Electrical System</b>	Alternator: 12 volt, 15 amp Battery: 500 CCA
<b>Oil Capacity</b>	2 qt (1.9 L)

### 27 HP\* Kohler

<b>Make</b>	Kohler
<b>Model</b>	Command (CV740S)
<b>Horsepower</b>	27
<b>Displacement</b>	44.0 cu in. (725 cc)
<b>Electrical System</b>	Alternator: 12 volt, 15 amp Battery: 500 CCA
<b>Oil Capacity</b>	2 qt (1.9 L)

## CHASSIS

<b>Fuel Tank Cap</b>	Capacity: 4.0 Gallons (15,1 L)
<b>Rear Wheels</b>	Tire Size: 24 x 12 -12 Inflation Pressure: 6-8 psi (,41-,55 bar)
<b>Rear Wheels</b>	Tire Size: 23 x 10.50 -12 Inflation Pressure: 6-8 psi (,41-,55 bar)
<b>Front Wheels</b>	Tire Size: 16 x 6.50-8 Inflation Pressure: 15 psi (1.0 bar)

## K71 TRANSMISSION

<b>Type</b>	Hydrostatic Tuff Torq K71
<b>Hydraulic Fluid</b>	10w 30 Premium Engine Oil
<b>Capacity</b>	4.8 qt (4,6 L)
<b>Speeds</b>	Forward: 0-7.2 MPH (0-11.6 km/h)
<b>@ 3400 rpm</b>	Reverse: 0-4.5 MPH (0-7.2 km/h)
<b>Continuous Torque Output</b>	410 ft-lbs (554 Nm)
<b>Drawbar Rating</b>	440 lbs (200 Kg)
<b>Maximum Weight on Axle</b>	728 lbs (330 Kg)

## K66 TRANSMISSION

<b>Type</b>	Hydrostatic Tuff Torq K66
<b>Hydraulic Fluid</b>	10w 30 Premium Engine Oil
<b>Capacity</b>	2.6 qt (2,5 L)
<b>Speeds</b>	Forward: 0-5.8 MPH (9.3 km/h)
<b>@ 3400 rpm</b>	Reverse: 0-3.5 MPH (5.6 km/h)
<b>Continuous Torque Output</b>	310 ft-lbs (419 Nm)
<b>Drawbar Rating</b>	440 lbs (200 Kg)
<b>Maximum Weight on Axle</b>	697 lbs (316 Kg)

## K664 TRANSMISSION

<b>Type</b>	Hydrostatic Tuff Torq K664
<b>Hydraulic Fluid</b>	10w 50 Synthetic Engine Oil
<b>Capacity</b>	5.4 qt (5,11 L)
<b>Speeds</b>	Forward: 0-5.8 MPH (9.3 km/h)
<b>@ 3400 rpm</b>	Reverse: 0-3.5 MPH (5.6 km/h)
<b>Continuous Torque Output</b>	310 ft-lbs (419 Nm)
<b>Drawbar Rating</b>	440 lbs (200 Kg)
<b>Maximum Weight on Axle</b>	697 lbs (316 Kg)

## DIMENSIONS

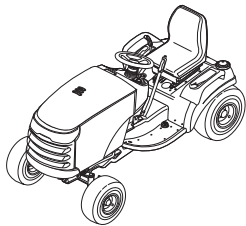
### Prestige / 1800 / 2800 / 500 Series

<b>Overall Length</b>	75" (190,5 cm)
<b>Overall Width</b>	41" (104 cm)
<b>Height</b>	At Top of Seat: 50" (127 cm)
<b>Weight</b>	
<b>Tractor</b>	666 lbs (302 kg)
<b>44" &amp; 50" Mower Deck</b>	125 lbs (57 kg)
<b>54" Mower Deck</b>	192 lbs (87 kg)

### Conquest / 1700 / 2700 / 400 Series

<b>Overall Length</b>	75" (190,5 cm)
<b>Overall Width</b>	39" (99 cm)
<b>Height</b>	At Top of Seat: 50" (127 cm)
<b>Weight</b>	
<b>Tractor</b>	586 lbs (266 kg)
<b>44" Mower Deck</b>	112 lbs (51 kg)
<b>50" Mower Deck</b>	125 lbs (57 kg)

*\*Briggs & Stratton Models: The gross power rating for individual gas engine models is labeled in accordance with SAE (Society of Automotive Engineers) code J1940 (Small Engine Power & Torque Rating Procedure), and rating performance has been obtained and corrected in accordance with SAE J1995 (Revision 2002-05). Torque values are derived at 3060 RPM; horsepower values are derived at 3600 RPM. Actual gross engine power will be lower and is affected by, among other things, ambient operating conditions and engine-to-engine variability. Given both the wide array of products on which engines are placed and the variety of environmental issues applicable to operating the equipment, the gas engine will not develop the rated gross power when used in a given piece of power equipment (actual "on-site" or net horsepower). This difference is due to a variety of factors including, but not limited to, accessories (air cleaner, exhaust, charging, cooling, carburetor, fuel pump, etc.), application limitations, ambient operating conditions (temperature, humidity, altitude), and engine-to-engine variability. Due to manufacturing and capacity limitations, Briggs & Stratton may substitute an engine of higher rated power for this Series engine.*



# Parts & Accessories

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## Replacement Parts

Replacement parts are available from your authorized dealer. Always use genuine service parts.

## Maintenance Items

Many convenient and helpful service and maintenance items are available from you authorized dealer. Some of these items include:

Engine Oil	Tire Sealant
Touch-Up Paint	Degrimer/Degreaser
Grease Gun Kit	Gas Stabilizer
8 oz. Grease Tube	

## Optional Accessories

Snowthrower Cab	Gas Cans
Snowthrower Attachments	Rear Weight Carrier
42" Dozer/Snow Blade	Front Weight Carrier
Rear Wheel Weights	Triple Bag Collector
Tire Chains	Turbo Collector
Twin Bag Grass Catcher	Tiller
Dump Cart	
Hour Meter Kit	

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[www.simplicitymfg.com](http://www.simplicitymfg.com)



[www.snapper.com](http://www.snapper.com)



[www.MasseyLawn.com](http://www.MasseyLawn.com)



[www.AGCOLawn.com](http://www.AGCOLawn.com)

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