



YARDWORKS^{TM/MC}

Self-propelled Lawn Mower

models: 060-1662-4 | 060-1663-2 | 060-1664-0 | 060-1665-8 | 060-1667-4 | 060-1670-4 | 060-0189-8 | 399-1930-2 | contact us: 1.866.523.5218



IMPORTANT:

Read and follow all safety rules and operating instructions before using this product.

Instruction Manual



**KIDS AND MOWERS
DON'T MIX!**
Tragic accidents can happen. You can **SEVERELY INJURE** or **KILL** a child with a lawn mower.



Please leave children indoors and supervised!

CONGRATULATIONS

Congratulations on your purchase of a new lawn mower. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service centre/department.

PLEASE READ AND RETAIN THIS INSTRUCTION MANUAL. These instructions will enable you to assemble and maintain your lawn mower properly. **ALWAYS observe the "SAFETY RULES".**

The instruction manual was designed to conveniently help you get your purchase ready to use so there's less risk of damaging it and to provide you with enough information for you to get familiar with your product's controls and features to operate it safely. This manual however, is NOT a replacement for you reading your complete owner's manual and all the details it covers, such as mower maintenance, adjustments and storage.

THE OPERATOR'S MANUAL FOR YOUR PARTICULAR PRODUCT IS AVAILABLE BY CALLING 1.866.523.5218.

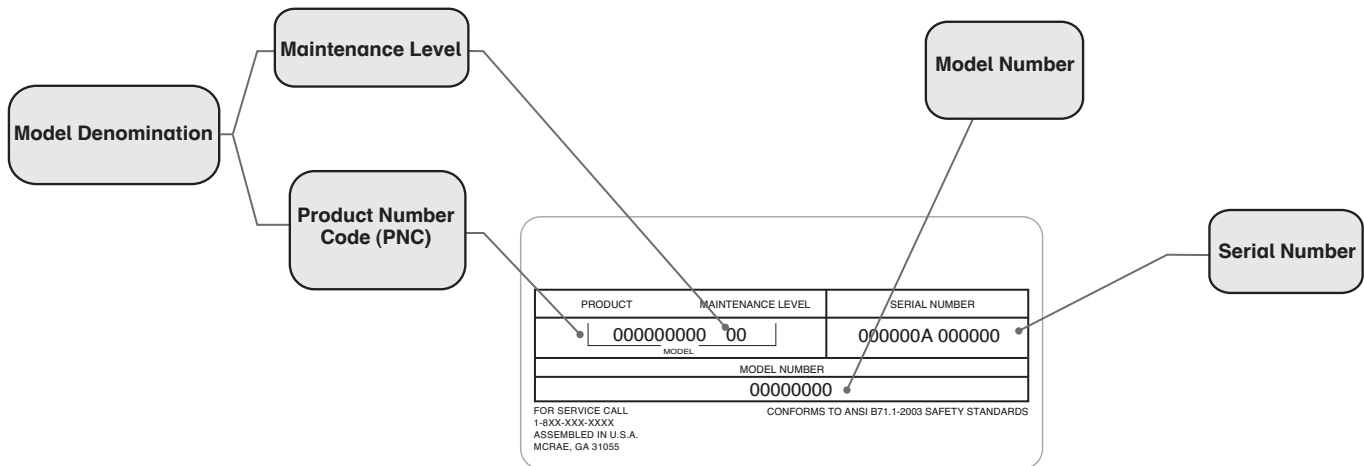


CAUTION: The operation of any lawn mower can result in foreign objects thrown into the eyes, which can result in severe eye damage. **ALWAYS** wear safety glasses or eye shields while operating your lawn mower or performing any adjustments or repairs. We recommend standard safety glasses or a wide vision safety mask worn over spectacles.



Please read **this manual** carefully and make sure you understand the instructions before using the machine.

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Before you call for parts and/or service, please have the model number and serial number of your lawn mower available. The model serial plate is located on the rear of the lawn mower housing.

Your serial plate will look similar to the serial plate shown above.

IMPORTANT PRODUCT REGISTRATION INFORMATION

Please record your machine model and serial number, with the date of purchase, in the space provided below:

Model Number: _____

Serial Number: _____

Date of Purchase: _____

GENERAL IGNITION SWITCH



Oil



Fuel



Engine Off



Engine On

THROTTLE



Choke



Fast



Slow

SAFETY

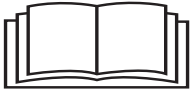


DANGER: KEEP HANDS AND FEET AWAY (See SAFETY section, page 5)

*These symbols may appear on your lawn mower or in the literature supplied with the product. Learn and understand their meaning.

**HAZARD ALERT**

The hazard alert symbol informs the user of potential hazards.

**READ THE OPERATOR'S MANUAL(S)**

Read, understand, and follow all instructions in the manual(s) before attempting to assemble and operate.



Wear hearing protection.

**DANGER — ROTATING BLADES**

To reduce the risk of injury, keep hands and feet away. Do not operate unless discharge cover or grass catcher is in its proper place. If damaged, replace immediately.

**DANGER — BYSTANDERS**

Do not mow when children or others are around.



Look down and behind before and while backing.

**DANGER — ROTATING BLADES**

Never operate the machine without proper guards, plates, or other safety protective devices in place.

**DANGER — HAND/ FOOT CUT**

Keep hands and feet away from rotating parts.

**DANGER — THROWN DEBRIS**

Remove objects that can be thrown by the blade in any direction. Wear safety glasses.

**DANGER — SLOPES**

Use extra caution on slopes. Do not mow slopes greater than 15°.

**WARNING—GASOLINE IS FLAMMABLE**

Allow the engine to cool at least two minutes before refueling.

**WARNING— CARBON MONOXIDE**

Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.

**WARNING— HOT SURFACE**

Engine parts, especially the muffler, become extremely hot during operation. Allow engine and muffler to cool before touching.

GLOSSARY OF SAFETY SYMBOLS



Failure to follow instructions could result in serious injury or death. The safety alert symbol is used to identify safety information about hazards which can result in death, serious injury and/or property damage.



DANGER indicates a hazard which, if not avoided, **WILL result in death or serious injury.**



WARNING indicates a hazard which, if not avoided, **COULD result in death or serious injury.**



CAUTION indicates a hazard which, if not avoided, **COULD result in minor or moderate injury.**

CAUTION when used without the alert symbol, indicates a situation that **could result in damage to the lawn mower and/or engine.**



HOT SURFACES indicates a hazard which, if not avoided, **could result in death, serious injury and/or property damage.**



FIRE indicates a hazard which, if not avoided, **could result in death, serious injury and/or property damage.**

SAFE OPERATION PRACTICES FOR PEDESTRIAN CONTROLLED LAWN MOWERS



DANGER: 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.



WARNING: This mower is equipped with an internal combustion engine and should **NOT** be used on or near any unimproved forest-covered, brush-covered, or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or provincial laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. A spark arrester for the muffler is available through your nearest authorized service centre/department.



CAUTION: Muffler and other engine parts become extremely hot during operation and remain hot after engine has stopped. To avoid severe burns on contact, stay away from these areas.

I. CHILDREN



WARNING: CHILDREN CAN BE SERIOUSLY INJURED OR KILLED BY THIS EQUIPMENT. Carefully read and follow all of the safety instructions below.

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

- Keep children out of the mowing area and in the watchful care of a responsible adult **other than** the operator.
- Be alert and turn machine off if a child enters the area.
- Before and while backing, look behind and down for small children.
- Children should be a minimum of 12 years of age before operating a pedestrian-controlled lawn mower and a minimum of 16 years of age before operating a riding lawn mower.
- Use extra care when approaching blind corners, shrubs, trees or other objects that may block your view of a child.
- **NEVER OPERATE THE MOWER WHEN CHILDREN ARE PRESENT.**

II. SLOPE OPERATION

Slopes are a major factor related to slip and fall accidents which can result in severe injury. All slopes require extra caution. If you feel uneasy on a slope, do not mow it.

- Mow across the face of slopes: **NEVER** up and down. Exercise extreme caution when changing direction on slopes.
- Watch for holes, ruts, bumps, rocks or other hidden objects. Uneven terrain could cause a slip and fall accident. Tall grass can hide obstacles.
- **DO NOT** mow near drop-offs, ditches, or embankments. You could lose footing or balance.
- **DO NOT** mow on wet grass or excessively steep slopes. Poor footing could cause a slip and fall accident.

III. GENERAL OPERATION

- Read, understand, and follow all instructions on the machine and in the instruction manual before starting.
- **DO NOT** put hands or feet near rotating parts or under the machine. Keep clear of the discharge opening at all times.
- Allow only responsible adults familiar with the instructions to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc. which could be picked up and thrown by the blades. Stay behind the handles while the engine is running.
- Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
- **DO NOT** operate the mower when barefoot or while wearing sandals. **ALWAYS** wear substantial footwear.

- **DO NOT** pull mower backwards unless absolutely necessary. **ALWAYS** look down and behind before and while moving backwards.
- **NEVER** direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blades when crossing gravel surfaces.
- **DO NOT** operate machine without the entire grass catcher, discharge chute or other safety devices in place and working.
- See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.
- **NEVER** leave a running machine unattended.
- Stop the engine (motor) and wait until the blade comes to a complete stop before cleaning the mower, removing the grass catcher, or unclogging the discharge guard.
- Operate machine only in daylight or good artificial light.
- **DO NOT** operate the machine while under the influence of alcohol or drugs.
- **NEVER** operate machine in wet grass. **ALWAYS** be sure of your footing; keep a firm hold on the handle and walk; **NEVER** run.
- Disengage the drive system on mowers so equipped before starting the engine (motor).
- If the equipment should start to vibrate abnormally, stop the engine (motor) and check for the cause immediately. Vibration is generally a warning of trouble.
- **ALWAYS** wear eye protection when operating machine.

IV. SERVICE

SAFE HANDLING OF GASOLINE

- To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapours are explosive.
- Extinguish all cigarettes, cigars, pipes and other sources of ignition.
- Use only an approved gasoline container.
- **NEVER** remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- **NEVER** fuel the machine indoors.
- **NEVER** store the machine or fuel container where there is an open flame, spark or pilot light such as on a water heater or other appliances.
- **NEVER** fill containers inside a vehicle or on a truck or trailer bed with plastic liner. **ALWAYS** place containers on the ground away from your vehicle when filling.

- Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the 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.
- If fuel is spilled on clothing, change clothing immediately.
- NEVER overfill fuel tank. Replace gas cap and tighten securely.

GENERAL SERVICE

- NEVER operate machine in a closed area.
- Keep all nuts and bolts tight to ensure the equipment is in safe working condition.
- NEVER remove or tamper with any safety devices. Check their proper operation regularly. NEVER do anything to interfere with the function of a safety device or to reduce the protection offered by the safety device.
- Keep machine free of grass, leaves, or other debris buildup. Clean oil or fuel spillage and remove any fuel-soaked debris. Allow machine to cool before storing.
- If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before restarting.

PREPARING THE ENGINE

- **IMPORTANT:** This lawn mower is shipped WITHOUT OIL OR GASOLINE in the engine.
- **NOTE:** Gasoline containing up to 10% ethanol (E10) is acceptable for use in this machine. The use of any gasoline exceeding 10% ethanol (E10) will void the product warranty.

V. CUSTOMER RESPONSIBILITIES

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your lawn mower.
- Wear proper personal protective equipment (PPE) while operating this machine, including (at a minimum) sturdy footwear, eye protection and hearing protection. DO NOT mow in shorts and/or open-toed footwear.

- NEVER attempt to make any adjustments or repairs while the engine (motor) is running. Disconnect the spark plug wire and ground against the engine to prevent unintended starting.
- Check grass catcher components and the discharge chute frequently, and replace with manufacturer's recommended parts when necessary.
- Mower blade is sharp. Wrap the blade or wear gloves and use extra caution when servicing it.
- DO NOT change the engine governor setting or overspeed the engine.
- Maintain or replace safety and instruction labels as necessary.

- ALWAYS let someone know you are outside mowing.
- NEVER allow children in the vicinity of any operating mower, even if the blades are off. Children should be under the supervision of a responsible adult **other than** the operator for the duration of the mowing operation.
- Follow the instructions under "Maintenance" and "Storage" sections of the operator's manual.



CAUTION: An Operator Presence Control is installed on this lawn mower in order to minimize the risk of blade contact injury. DO NOT under any circumstances attempt to defeat the function of the operator control. The blade turns when the engine is running.

ASSEMBLY/PRE-OPERATION

CAUTION: Read complete **INSTRUCTION MANUAL** before operating this machine.

IMPORTANT: THIS LAWN MOWER IS SHIPPED WITHOUT OIL OR GASOLINE IN THE ENGINE.

Your new lawn mower has been assembled at the factory with the exception of those parts left unassembled for shipping purposes. All parts such as nuts, washers, bolts, etc., necessary to complete the assembly have been placed in the parts bag. To ensure safe and proper operation of your lawn mower, all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to ensure proper tightness.

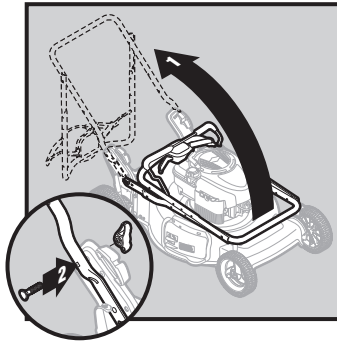
SETUP**TO REMOVE LAWN MOWER FROM CARTON**

1. Remove loose parts included with mower.
2. Cut down two end corners of carton and lay end panel down flat.
3. Remove all packing materials except padding between upper and lower handle and padding holding operator presence control bar to upper handle.
4. Roll lawn mower out of carton and check carton thoroughly for additional loose parts.

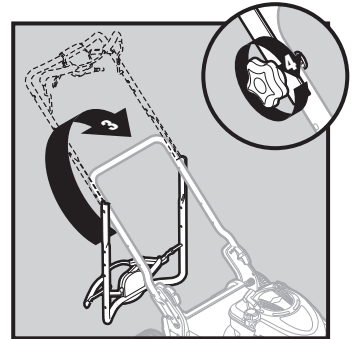
HOW TO SET UP YOUR LAWN MOWER

IMPORTANT: Unfold handle carefully to avoid pinching or damaging the control cables.

1. Raise handles until lower handle section locks into place in mowing position.
2. Insert handle bolts into lower handle. Install and tighten **knobs** to secure the handle.



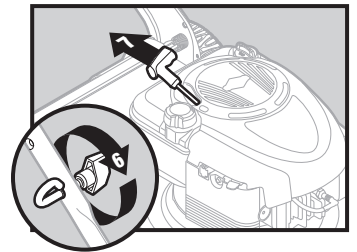
3. Remove protective padding, raise upper handle section into place on lower handle.
4. Tighten **knobs** to secure the handle.



5. Remove handle padding holding **operator presence control bar** to upper handle (IF EQUIPPED).

NOTE: For some models, the lawn mower handle can be adjusted for your mowing comfort. Refer to the "TO ADJUST HANDLE" section of the operator's manual.

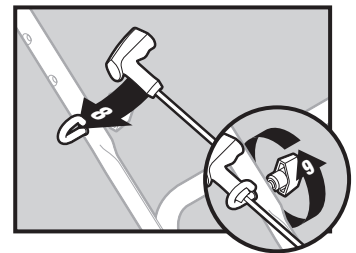
6. Loosen knob on upper handle.
7. Slowly pull engine **starter handle**.



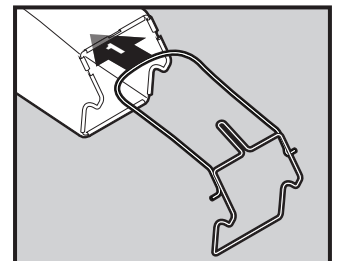
8. Slip starter rope into loop on upper handle.

NOTE: Make sure loop is facing UP.

9. Tighten **knob**.

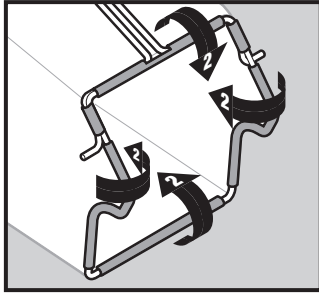
**TO ASSEMBLE THE GRASS CATCHER**

1. Put the **grass catcher** frame into the grass bag with the rigid part of the bag on the bottom. Make sure the frame handle is outside of the bag top.



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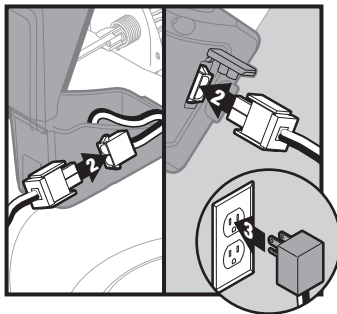
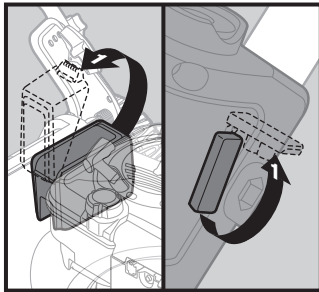
2. Slip the vinyl bindings over the frame.



TO PREPARE BATTERY (IF EQUIPPED)

NOTE: Your battery must be charged before you can start your lawn mower using the electric start.

1. Open the **battery box** or the **battery port**.
2. Connect the battery charge connector (male) to the harness connector (female).
3. Plug the battery charger into a 110 V AC (60 Hz) outlet.
4. Leave the battery charger connected for 24 hours before starting your engine using the electric starter.
5. After charging, disconnect the harness connector (female) from the battery charger connector (male).



Connect the battery charger to the battery as needed.

IMPORTANT: THE ENGINE WILL NOT RECHARGE YOUR BATTERY. The battery will need to be recharged periodically.



CAUTION: ALWAYS disconnect the harness connector to prevent accidental starting when transporting or storing your lawn mower after the season.

At the end of the mowing season, the battery should be charged for 48 hours to protect the battery during winter storage.

PREPARING THE ENGINE BEFORE STARTING

CHECK ENGINE OIL LEVEL

CAUTION: DO NOT overfill engine with oil, or it will smoke heavily from the muffler on startup.

1. Be sure lawnmower is level.
2. Remove oil dipstick from oil fill spout.
3. Empty contents of motor oil (provided) into the engine through the fill spout.
4. Pour oil slowly. DO NOT overfill. Wait one minute to allow oil to settle. Insert and tighten dipstick, then remove it to check oil level.

IMPORTANT: Check oil level before each use. Add oil if needed. Fill to "Full" line on dipstick.

ADD GASOLINE

Fill fuel tank to bottom of tank filler neck. DO NOT overfill. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane.

DO NOT mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

CAUTION: Wipe off any spilled oil or fuel. DO NOT store, spill or use gasoline near an open flame.

Alcohol-blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Empty the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. NEVER use engine or carburetor cleaner products or permanent damage may occur.

PRODUCT SPECIFICATIONS

Gasoline Capacity and Type:	Unleaded Regular (Maximum 10% ethanol)
Oil Type (API: SG-SL)	SAE 30 (above 32°F/0°C) SAE 5W30 (below 32°F/0°C)
Oil Capacity	See engine manual for more information.
Spark Plug	See engine manual.
Blade Bolt Torque	Std 9/16" hex = 35-40 ft-lb. (47-54 Nm)

IMPORTANT NOTE: Gasoline containing up to 10% ethanol (E10) is acceptable for use in this machine. The use of ANY gasoline exceeding 10% ethanol (E10) violates federal law and will void the product warranty.

START-UP CHECKLIST

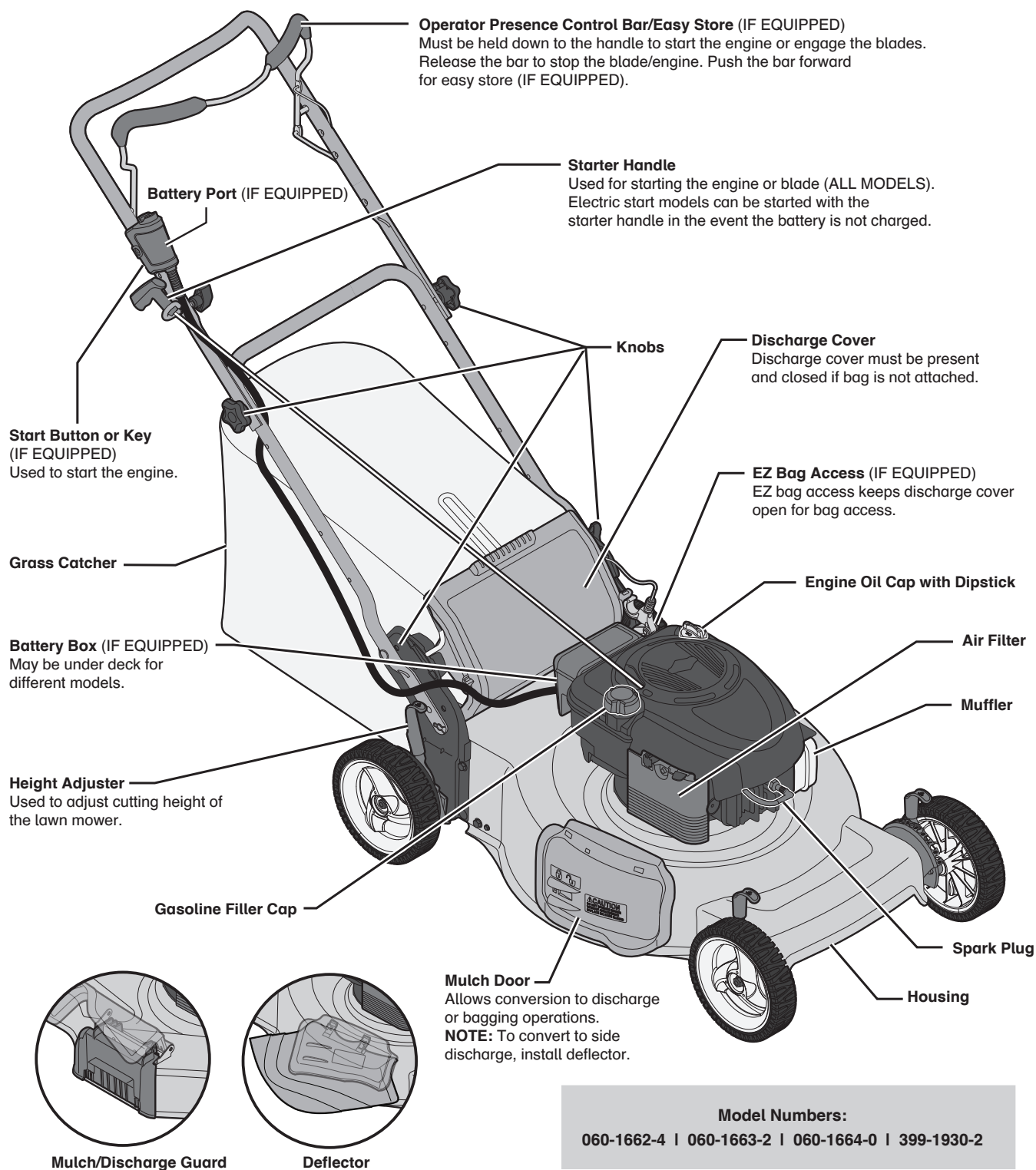
Before you start up your new mower, we wish to ensure that you receive the best performance and satisfaction from this quality product.

PLEASE REVIEW THE FOLLOWING CHECKLIST:

- All assembly instructions have been completed.
- No remaining loose parts in the carton.
- The battery is properly prepared and charged (IF EQUIPPED).
- Before starting to mow, make sure the area is clear of debris or objects that may be thrown by the blades.
- Check the engine oil level before starting the machine.
- Ensure a responsible adult, other than the operator, is supervising children in a safe location **AWAY FROM THE MOWING AREA** before starting the mower.
- Be sure the Operator Presence Control (OPC) is working properly. See Page 13.

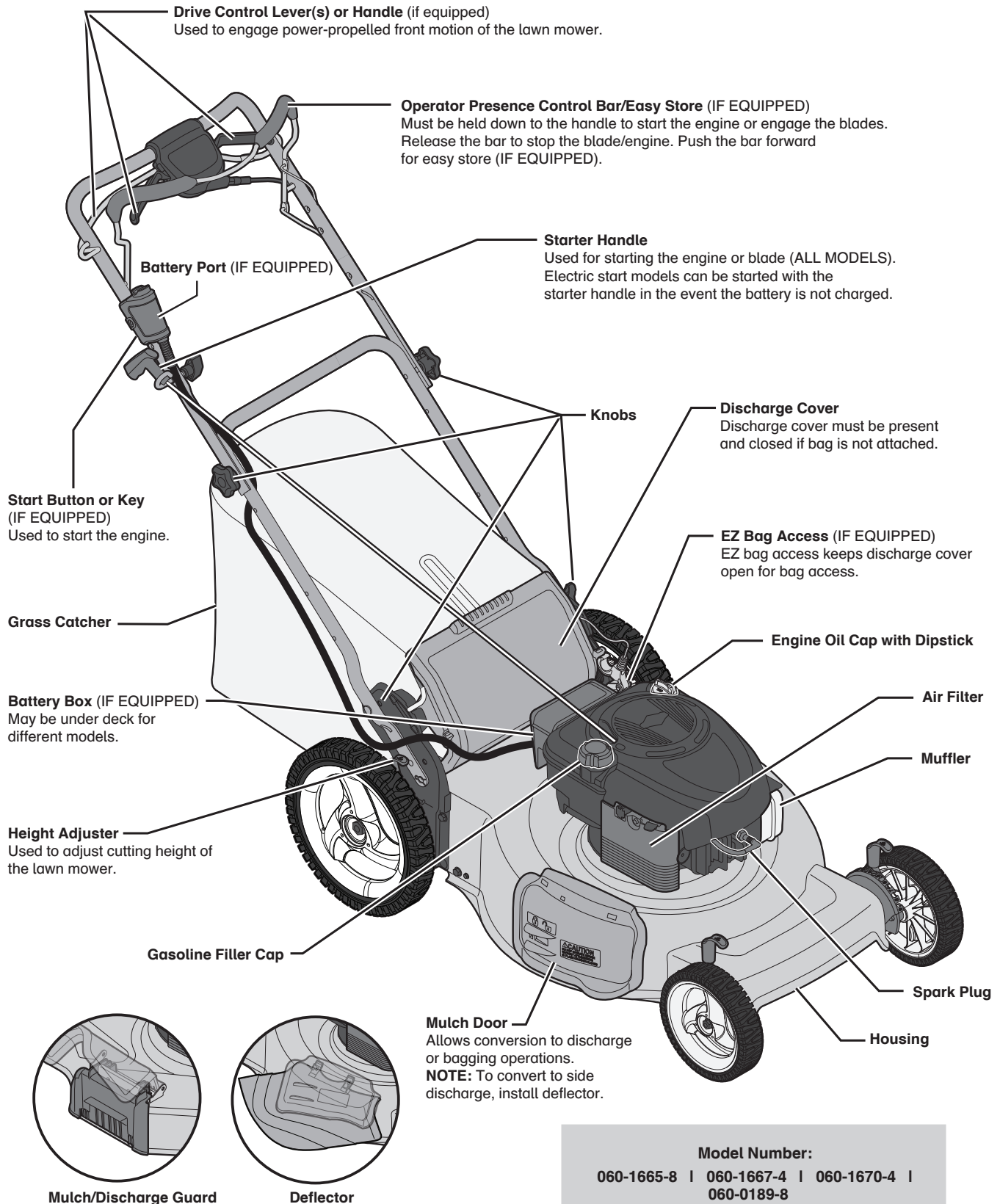
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Compare the illustrations with your lawn mower to familiarize yourself with the locations of various controls and adjustments. Save this instruction manual for future reference. Not every model of lawn mower will have all these features.



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Know Your Lawn Mower



Model Number:

060-1665-8 | 060-1667-4 | 060-1670-4 |
060-0189-8

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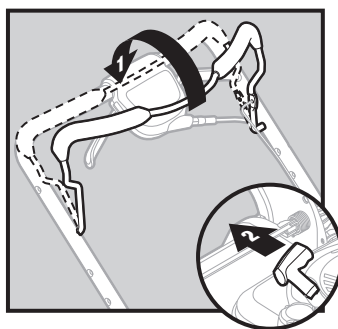
TO START THE ENGINE

NOTE: Due to protective coatings on the engine, a small amount of smoke may be present during the initial use of the lawn mower. This is normal.

NOTE: Your engine may be equipped with an automatic choke system. No priming or choking is required before starting for these models. On other models, either a choke lever or a priming bulb is provided. Use this to start a cold engine.

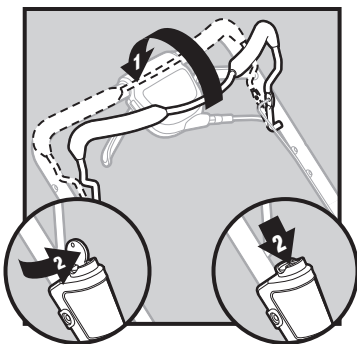
TO START THE ENGINE USING STARTER ROPE

1. Turn fuel shut-off valve to ON position (if equipped).
See engine manual for more information.
2. To start the engine using the starter rope, hold the **operator presence control bar** down to the upper handle.
3. Pull the **starter handle** (at the end of the starter rope) quickly. **DO NOT** allow the starter rope to snap back.



TO START THE ENGINE USING THE KEY START (IF EQUIPPED)

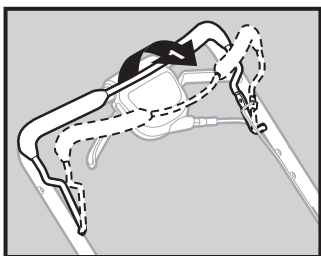
1. Turn fuel shut-off valve to ON position (if equipped).
See engine manual for more information.
2. To start the engine, hold the **operator presence control bar** down to the handle.
3. Turn the **start key** or press the **start button**.



IMPORTANT NOTE: DO NOT CRANK THE ENGINE MORE THAN FIVE CONTINUOUS SECONDS EACH TIME YOU TRY TO START. WAIT FIVE TO 10 SECONDS BETWEEN EACH ATTEMPT TO START.

TO STOP THE ENGINE AND BLADE

1. To stop the engine, release the **operator presence control bar**.
2. Turn fuel shut-off valve to OFF position (if equipped).
See engine manual for more information.



TO SET THE MOWER CUTTING HEIGHT

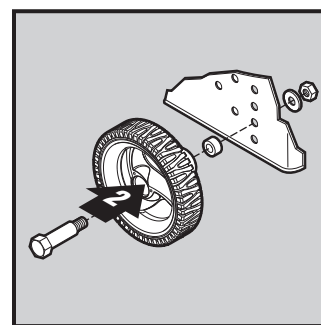
IMPORTANT NOTE: MAKE SURE ENGINE AND BLADE ARE STOPPED.

Adjust the cutting height to suit your requirements. The middle position is suitable for most lawns. Raise the wheels for low cut and lower the wheels for a high cut. See page 15 of this manual for a grass height cutting guide.

NOTE: For shipping purposes the rear wheels on your lawn mower may not be adjusted to the same position as the front wheels. Before operating the mower adjust all wheels to the same cutting height.

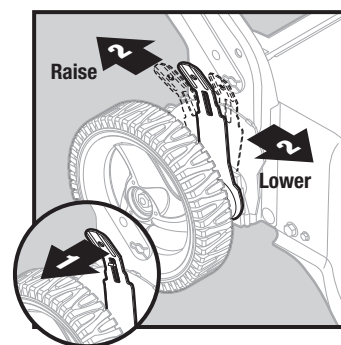
MANUAL ADJUSTMENT MODELS

1. Remove the wheel, bolt, and hardware and reassemble in the desired adjustment hole.
2. Reinstall the wheel components in the same order in which they were removed. Tighten all hardware securely.
3. Make sure all the wheels are at the same height.



QUICK ADJUSTMENT MODELS

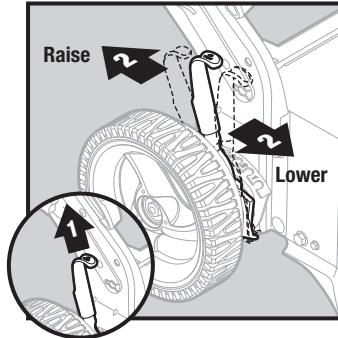
1. To change the cutting height, squeeze the **height adjuster lever** toward the wheel.
2. Move the wheel up or down to the desired position and release the lever to lock the wheel in position. Be sure all the wheels are at the same height.



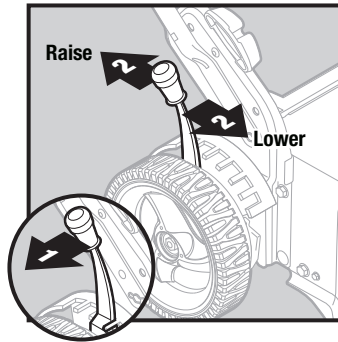
NOTE: The height adjuster is properly positioned when the plate tab inserts into the hole in the lever. 9-position adjusters (IF EQUIPPED) allow the lever to be positioned between the plate tabs.

QUICK PIN MODELS

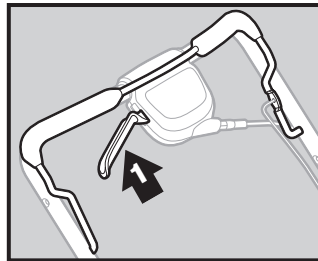
1. To change the cutting height, pull the **height adjuster** lever up.
2. Move the lever backwards or forward to the desired position and release the lever to lock the wheel in position. Be sure all the wheels are at the same height.

**SINGLE POINT HEIGHT ADJUSTMENT MODELS**
All four wheels are adjusted by a single lever.

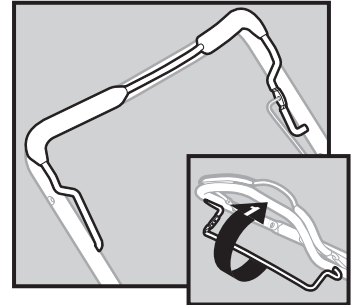
1. Pull **height adjuster** toward wheel.
2. To raise the mower, move the lever forward to desired position. To lower the mower, move the lever toward the rear.

**DRIVE CONTROL (IF EQUIPPED)****DRIVE CONTROL LEVER(S)**

1. Self-propelling is controlled by holding the **operator presence control bar** down to the handle and pulling the **drive control lever(s)** rearward to the handle. The further toward the handle the lever is pulled, the faster the machine will travel.
2. To stop forward motion without stopping the engine, release the **drive control lever(s)** or handle only. Hold the **operator presence control bar** down against the handle to continue mowing without self-propelling.

**DRIVE CONTROL HANDLE**

1. Self-propelling is controlled by holding the **operator presence control bar** down to the handle and pulling the **drive control handle** to the handle.
2. To stop forward motion without stopping the engine, release the **drive control handle**. Hold the **operator presence control bar** down against the handle to continue mowing without self-propelling.



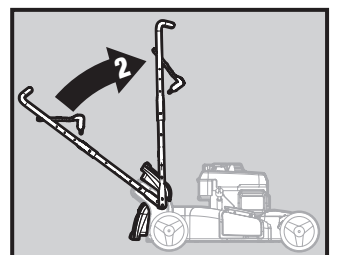
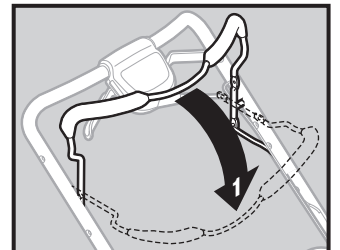
NOTE: After releasing the drive control if the mower will not roll backwards, push the mower forward slightly to disengage the drive wheels.

TO CONVERT MOWER

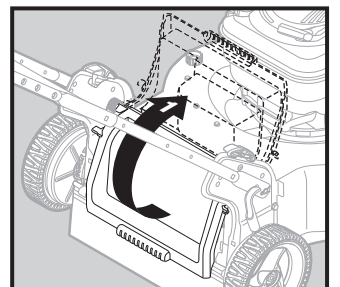
Your lawn mower may have been shipped ready to be used as a mulcher. To convert to bagging or discharge modes:

EZ STORE (IF EQUIPPED)

1. Push the **operator presence control bar** forward.
2. Lift handle. This will allow easy removal and replacement of the **grass catcher**.

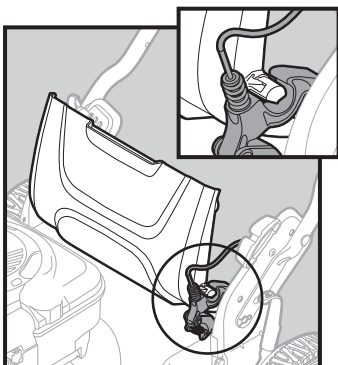
**REAR BAGGING**

1. Lift rear door of the lawn mower.

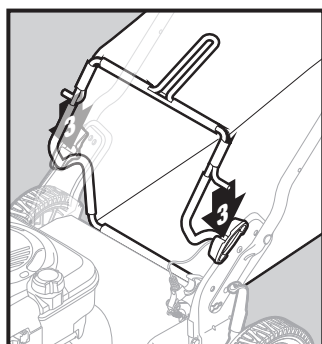


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2. Ensure that the rear door locks into the **EZ bag access** (IF EQUIPPED).

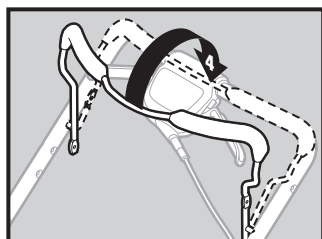


3. Place the **grass catcher** frame hooks onto the grass bag brackets.

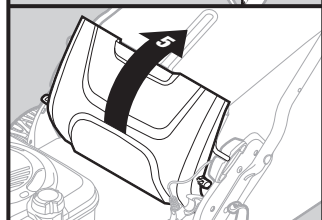


NOTE: For clarity, rear door is not shown.

4. Pull the **operator presence control bar** down to the upper handle.



5. Rear door will release from the **EZ bag access** (IF EQUIPPED) and rest on **grass catcher**.



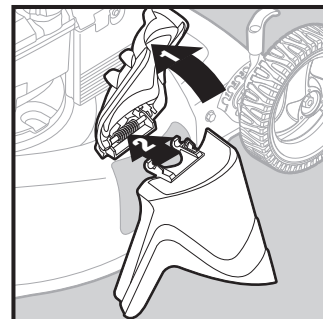
NOTE: DO NOT force the door shut. ALWAYS use the **operator presence control bar**.

6. Ensure that rear door covers any gap between mower deck and bagging unit.
7. To convert to mulching or discharging operation, remove **grass catcher** and close the rear door.

SIDE DISCHARGING

IMPORTANT: THE REAR DOOR (IF EQUIPPED) MUST BE CLOSED.

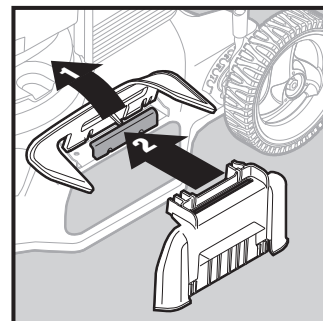
1. Open the **mulch door**.
2. Install the discharge deflector under the door as shown. The mower is now ready for discharging operation.



NOTE: To convert to mulching or bagging operation, side mulch door must be closed and if equipped with a latch, the latch should be in the locked position.

MULCH/DISCHARGE GUARD

1. Open the **mulch door**.
2. Install the **mulch/discharge guard** under the door as shown. The mower is now ready for mulching operation.



SIMPLE STEPS TO REMEMBER WHEN CONVERTING YOUR LAWN MOWER

FOR MULCHING

- The rear door is closed.
- The mulch door is closed, and if equipped with a latch, the latch is locked.

FOR REAR BAGGING

- The grass catcher is installed.
- The mulch door is closed, and if equipped with a latch, the latch is locked.

FOR SIDE DISCHARGING

- The rear door is closed.
- The discharge deflector is installed.



CAUTION: DO NOT run your lawn mower without the rear door closed or an approved grass catcher properly installed. **NEVER** attempt to operate the mower with the rear door removed or propped open. Serious injury may result from operating the mower with the rear discharge open.

MOWING TIPS

CAUTION: DO NOT use de-thatcher blade attachments on your mower. Such attachments are hazardous, will damage your mower, and could void your warranty.

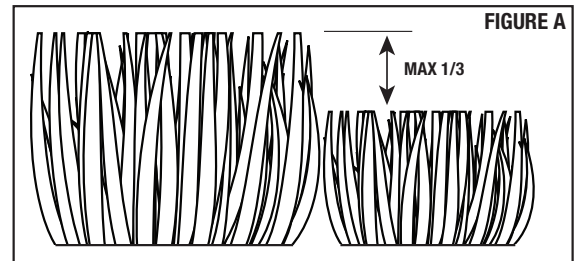
- Under certain conditions, such as very tall grass, it may be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of grass clippings. It may also be necessary to reduce ground speed and/or run the lawn mower over the area a second time.
- For extremely heavy cutting, reduce the width of cut by overlapping previously cut path and mow slowly.
- For better grass bagging and most cutting conditions, the engine speed should be set in the fast position.
- Pores in cloth grass catchers can become filled with dirt and dust with use and catchers will collect less grass. To prevent this, regularly hose catcher off with water and let dry before using.
- Keep top of engine around starter clear and clean of grass clippings and chaff. This will help engine air flow and extend engine life.

MULCHING MOWING TIPS

IMPORTANT: For best performance, keep mower housing free of built-up grass and trash. See “Cleaning” in the Maintenance section of the operator’s manual.

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. ALWAYS mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.

- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried, yet the newly-cut area will not be exposed to direct sunlight.
- For best results, adjust the lawn mower cutting height so that the lawn mower cuts off only the top one-third of the grass blades (Figure A). If the lawn is overgrown it will be necessary to raise the height of cut to reduce pushing effort and to keep from overloading the engine and leaving clumps of mulched grass. For extremely heavy mulching, reduce your width of cut by overlapping previously cut path and mow slowly.



- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across (perpendicular) to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week, then east to west the next week. This will help prevent matting and graining of the lawn.

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THE OPERATOR'S MANUAL FOR YOUR PARTICULAR PRODUCT IS AVAILABLE BY CALLING 1.866.523.5218.

		Before Each Use	After Each Use	Every 10 Hours	Every 25 Hours or Season	Every 100 Hours	Before Storage
LAWN MOWER	Check for loose fasteners	X					X
	Clean/inspect grass catcher*	X	X				X
	Check tires	X					
	Clean drive wheels***	X					
	Clean lawn mower****		X				X
	Clean under drive cover***			X			
	Check drive belt/pulleys***				X		
	Check/sharpen/replace blade				X ₃		
	Lubrication				X		
	Clean and recharge battery**				X		X ₄
ENGINE	Check engine oil level	X ₅					
	Change engine oil				X _{1,2}		
	Clean air filter				X ₂		
	Inspect muffler				X		
	Replace spark plug					X	
	Replace air filter paper cartridge					X ₂	
	Empty fuel system or add stabilizer						X

* (if so equipped)

** Electric-start mowers

***Power-propelled mowers

**** Use a scraper to clean under deck

NOTES: (1) Change more often when operating under a heavy load or in high ambient temperatures. (2) Service more often when operating in dirty or dusty conditions. (3) Replace blades more often when mowing in sandy soil. (4) Charge 48 hours at end of season. (5) And after each 5 hours of use.

TO EXAMINE THE BLADE

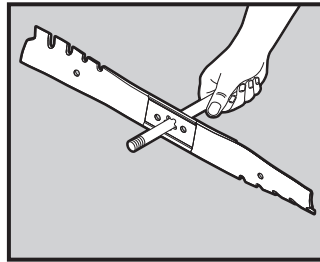


WARNING: ALWAYS stop the engine before you do work on the blade. The blade continues to rotate after the throttle has been released. Make sure that the blade is fully stopped and disconnect the spark plug before you start work.



CAUTION: For best results, keep the blade sharpened. Replace damaged blades immediately. DO NOT use a mower with damaged blade.

- Examine the blade for cracks and other damage. A damaged blade must always be replaced.
- Always make sure that the blade is correctly ground and balanced. To examine blade balance, use a 5/8" (16 mm) diameter steel bolt, pin or a cone balancer. Obey the instructions included with the balancer.
- DO NOT use a nail to balance the blade. The lobes of the center hole are not centered.
- Move the blade onto an unthreaded part of the steel bolt or pin, and hold the bolt or pin parallel to the ground. If the blade is balanced, it stays in the horizontal position. If one of the two ends of the blade moves down, sharpen the heavy end until the blade is correctly balanced.



NOTE: The blades must be balanced after sharpening. DO NOT sharpen or balance the blade on your own. Speak to an approved service workshop.

TO REPLACE THE BLADE

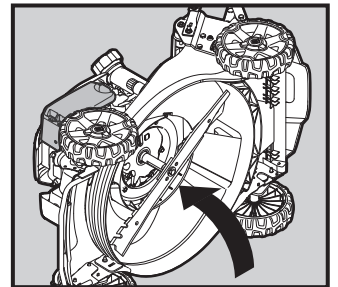


WARNING: Use gloves and/or wind the blade with a heavy cloth to prevent injury to your hands.

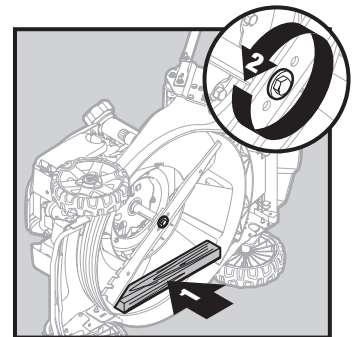


CAUTION: Only use a replacement blade from an approved manufacturer. Using a blade not approved by the manufacturer is dangerous and can cause damage to the product and void the warranty.

1. Always disconnect the spark plug before you do maintenance.
2. Always empty the fuel tank before you put the product on its side. Empty the fuel tank by operating the machine until the tank is empty.
3. Turn the product on its side. When the product is tilted, make sure that the air filter is always put in the highest position.



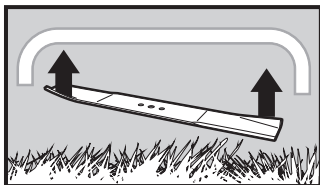
4. Use a wood block between the blade and the mower housing to prevent the blade from turning when removing the blade bolt.
5. Remove the blade bolt by turning the bolt counterclockwise.
6. Remove the blade. Make sure that the blade adapter is not damaged. Examine the blade bolt for damage and make sure the engine shaft is not bent.



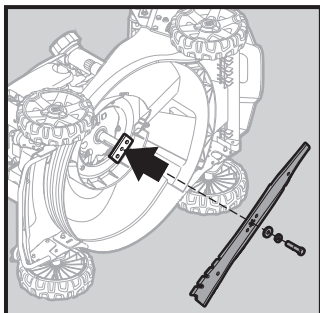
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TO ASSEMBLE THE BLADE

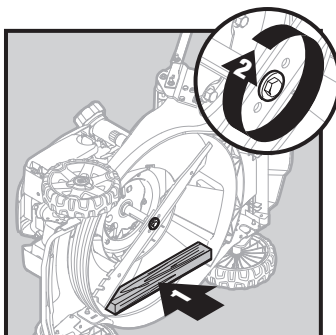
1. Put the blade adapter on the engine crankshaft. Make sure the key in the adapter and crankshaft keyway are aligned.



2. Always attach the blade with the angled ends pointing up in the direction of the engine.



3. Use a block of wood between the blade and product housing. Tighten the blade bolt and turn it clockwise.
4. Always tighten the bolt with a torque of 35-40 ft lbs (47-54 Nm).



5. Make sure the spark plug cable is disconnected from the engine.



CAUTION: To prevent accidental start, always disconnect the spark plug cable and put the wire where it cannot touch the spark plug.

6. Pull the blade around by hand and make sure it rotates freely.



YARDWORKS^{TM/MC}

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