Form No. 3405-894 Rev B

Super Recycler® Lawn Mower

Model No. 20381—Serial No. 316000001 and Up

Model No. 20384—Serial No. 316000001 and Up

Operator's Manual

Introduction

This rotary-blade, walk-behind lawn mower is intended to be used by residential homeowners. It is designed primarily for cutting grass on well-maintained lawns on residential properties. It is not designed for cutting brush or for agricultural uses.

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

You may contact Toro directly at www.Toro.com for product and accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 identifies the location of the model and serial numbers on the product.

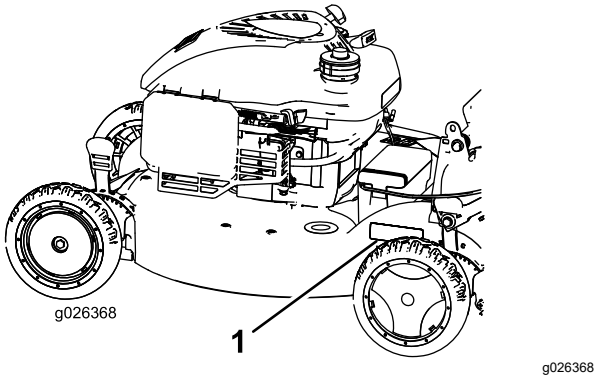


Figure 1

1. Model and serial number plate

Write the product model and serial numbers in the space below:

Model No. _____

Serial No. _____

This manual identifies potential hazards and has safety messages identified by the safety alert symbol (Figure 2), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 2

1. Safety alert symbol

This manual uses 2 words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

It is a violation of California Public Resource Code Section 4442 or 4443 to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the engine is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire.

This spark ignition system complies with Canadian ICES-002

The enclosed *Engine Owner's Manual* is supplied for information regarding the US Environmental Protection Agency (EPA) and the California Emission Control Regulation of emission systems, maintenance, and warranty. Replacements may be ordered through the engine manufacturer.

Net Torque: The gross or net torque of this engine was laboratory rated by the engine manufacturer in accordance with the Society of Automotive Engineers (SAE) J1940. As configured to meet safety, emission, and operating requirements, the actual engine torque on this class of mower will be significantly lower. Go to www.Toro.com to view specifications on your mower model.

© 2025—The Toro® Company
8111 Lyndale Avenue South
Bloomington, MN 55420

Register at www.Toro.com.

Original Instructions (EN)
Printed in the USA
All Rights Reserved

3405-894

⚠ WARNING

CALIFORNIA
Proposition 65 Warning

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Use of this product may cause exposure to chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Contents

Introduction 1
Safety 3
General Safety 3
Safety and Instructional Decals 4
Setup 7
1 Assembling and Unfolding the Handle 7
2 Installing the Recoil-Starter Rope in the Rope Guide 8
3 Filling the Engine with Oil 8
4 Charging the Battery 8
5 Assembling the Grass Bag 9
Product Overview 10
Operation 10
Before Operation 10
Before Operation Safety 10
Filling the Fuel Tank 11
Checking the Engine-Oil Level 11
Adjusting the Handle Height 11
Adjusting the Cutting Height 12
During Operation 12
General Safety 12
Slope Safety 13
Starting the Engine 13
Using the Self-Propel Drive 13
Stopping the Engine 14
Recycling the Clippings 14
Bagging the Clippings 15
Side-Discharging the Clippings 16
Operating Tips 17
After Operation 18
After Operating Safety 18
Cleaning the Machine 18
Folding the Handle 19
Maintenance 21
Recommended Maintenance Schedule(s) 21
Maintenance Safety 21
Preparing for Maintenance 21
Replacing the Air Cleaner 22
Changing the Engine Oil 22
Charging the Battery 23
Replacing the Fuse 23
Lubricating the Wheel Gears 24
Replacing the Blade 24
Adjusting the Self-Propel Drive 25
Storage 25
Preparing the Machine for Storage 25
Removing the Machine from Storage 26

Safety

General Safety

This product is capable of amputating hands and feet and of throwing objects. Always follow all safety instructions to avoid serious personal injury.

Using this product for purposes other than its intended use could prove dangerous to you and bystanders.

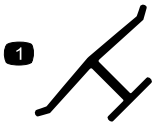
- Read and understand the contents of this Operator's Manual before you start the engine. Ensure that everyone using this product knows how to use it and understands the warnings.
- Do not put your hands or feet near moving components of the machine.
- Do not operate the machine without all guards and other safety protective devices in place and working on the machine.
- Keep clear of any discharge opening. Keep bystanders a safe distance from the machine.
- Keep children out of the operating area. Never allow children to operate the machine.
- Stop the machine, shut off the engine, and remove the electric-start button before servicing, fueling, or unclogging the machine.

Improperly using or maintaining this machine can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety-alert symbol, which means Caution, Warning, or Danger—personal safety instruction. Failure to comply with these instructions may result in personal injury or death.

You can find additional items of safety information in their respective sections throughout this manual.

Safety and Instructional Decals

Important: **Safety and instruction decals are located near areas of potential danger. Replace damaged decals.**



decaloemmarkt

Manufacturer's Mark

1. This mark indicates that the blade is identified as a part from the original machine manufacturer.



decal94-8072

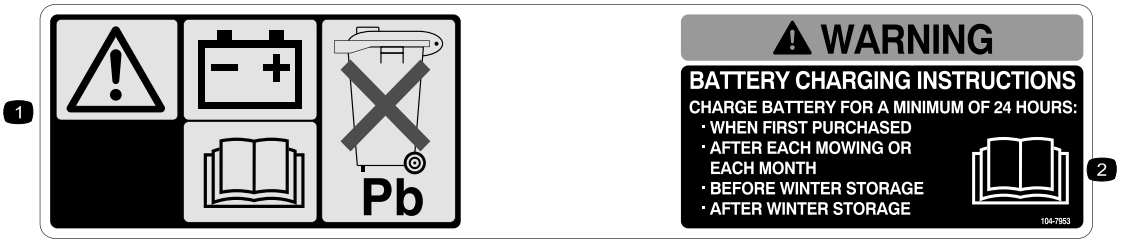
94-8072



decal104-7403

104-7403

Electric-start model only



decal104-7953

104-7953

Electric-start model only

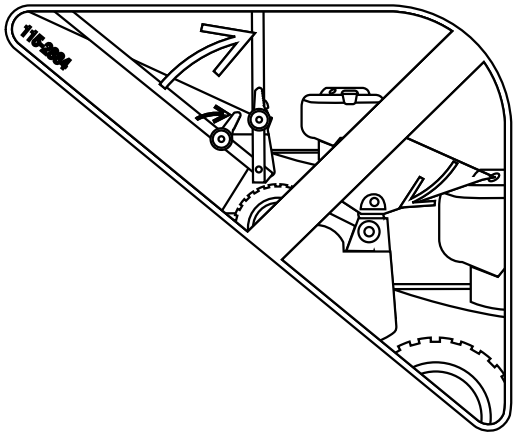
1. Warning—read the *Operator's Manual* for information on charging the battery; contains lead; do not discard.
2. Read the *Operator's Manual.*



decal112-8867

112-8867

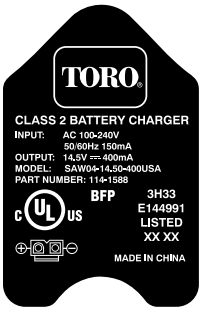
1. Lock
2. Unlock



decal115-2884

115-2884

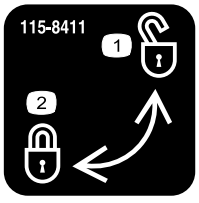
Handle Position Adjustment



decal115-2896

115-2896

Electric-start model only



decal115-8411

115-8411

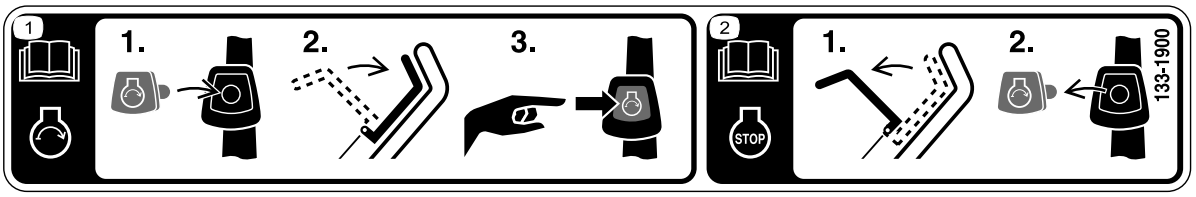
1. Unlocked
2. Locked

CALIFORNIA SPARK ARRESTER WARNING

Operation of this equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. The operator should contact local fire agencies for laws or regulations relating to fire prevention requirements. 117-2718

decal117-2718

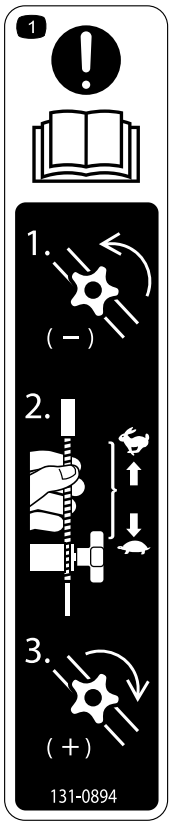
117-2718



decal133-1900

133–1900

1. Read the *Operator's Manual* for more information on starting the engine—1) Insert the electric-start button into the ignition; 2) Engage the blade-control bar; 3) Push the electric-start button to start the engine.
2. Read the *Operator's Manual* for more information on stopping the engine—1) Release the blade-control bar; 2) Remove the electric-start button from the ignition.

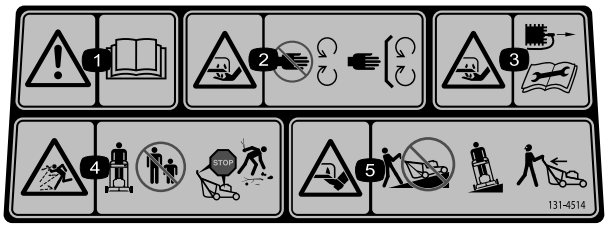


decal131-0894

131-0894

Traction Adjustment

1. Attention; read the *Operator's Manual*—1) Loosen the knob by turning it counter clockwise; 2) Pull the cable(s) away from the engine to decrease the traction, or push the cable(s) toward the engine to increase the traction; 3) Tighten the knob by turning it clockwise.



decal131-4514b

131-4514

1. Warning—read the *Operator's Manual*.
2. Cutting/dismemberment hazard of hand, mower blade—stay away from moving parts; keep all guards and shields in place.
3. Cutting/dismemberment hazard of hand, mower blade—disconnect the spark-plug wire before performing maintenance.
4. Thrown object hazard—keep bystanders away; shut off the engine before leaving the operating position; pick up any debris before mowing.
5. Cutting/dismemberment hazard of foot, mower blade—do not operate up and down slopes; operate side to side on slopes; look behind you when moving in reverse.

Setup

Important: **Remove and discard the protective plastic sheet that covers the engine and any other plastic or wrapping on the machine.**

Important: **To prevent accidental starting, do not insert the electric-start button into the electric starter switch until you are ready to start the engine.**

1

Assembling and Unfolding the Handle

No Parts Required

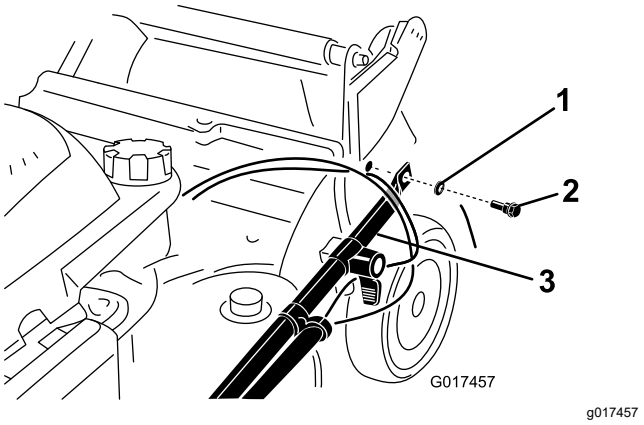
Procedure

⚠ WARNING

Assembling and unfolding the handle improperly can damage the cables, causing an unsafe operating condition.

- **Do not damage the cables when assembling and unfolding the handle.**
- **Ensure that the cables are routed to the outside of the handle.**
- **If a cable is damaged, contact an Authorized Service Dealer.**

1. Raise the rear of the machine housing to its highest cutting-height setting by moving the 2 rear cutting-height levers all the way forward. Refer to Adjusting the Cutting Height (page 12).
2. Attach the handle ends to the machine housing with 2 washers and 2 handle bolts (Figure 3), **but do not tighten the handle bolts.**



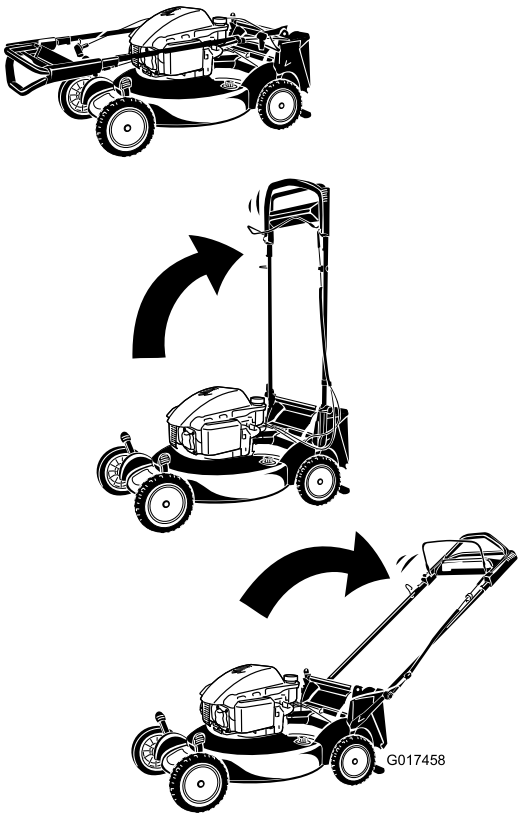
g017457

Figure 3

1. Washer
2. Handle bolt
3. Handle end

Important: **Route the cables to the *outside* of the handle (Figure 3).**

3. Rotate the handle rearward (Figure 4).



g017458

Figure 4

4. Lock the handle at your desired height. Refer to Adjusting the Handle Height (page 11).
5. Torque the handle bolts to 14 to 17 N·m (120 to 160 in-lb).

6. Adjust the cutting height. Refer to Adjusting the Cutting Height (page 12).

2

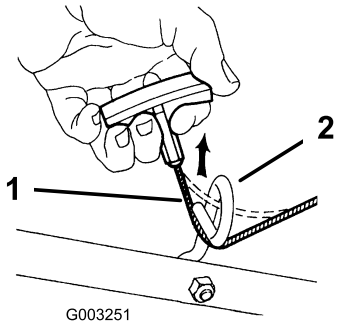
Installing the Recoil-Starter Rope in the Rope Guide

No Parts Required

Procedure

Important: **To start the engine safely and easily whenever you use the machine, install the recoil-starter rope in the rope guide.**

Hold the blade-control bar to the upper handle and pull the recoil-starter rope through the rope guide on the handle (Figure 5).



g003251

Figure 5

1. Recoil-starter rope
2. Rope guide

3

Filling the Engine with Oil

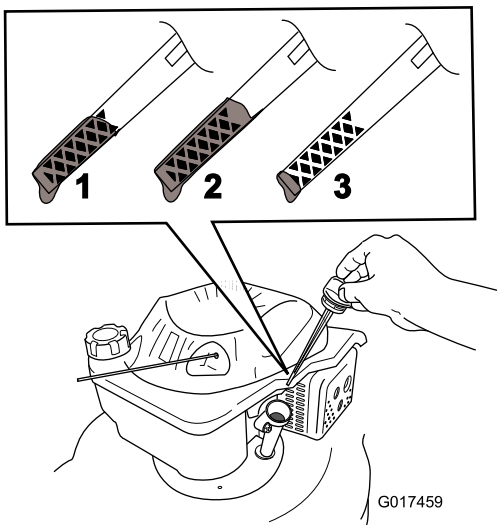
No Parts Required

Procedure

Important: **Your machine does not come with oil in the engine. Before starting the engine, fill the engine with oil.**

1. Move the machine to a level surface.
2. Remove the dipstick (Figure 6) and pour about 3/4 of the crankcase capacity of oil into the oil-fill tube.

Note: Max. fill: 0.59 L (20 oz), type: SAE 30 or SAE 10W-30 detergent oil with an API service classification of SF, SG, SH, SJ, SL, or higher.



g017459

Figure 6

1. The oil level is at its maximum.
2. The oil level is too high—remove oil from the crankcase.
3. The oil level is too low—add oil to the crankcase.

3. Wipe off the dipstick end with a clean cloth.
4. Insert the dipstick into the oil-fill tube, but **do not** screw it in.
5. Remove the dipstick and read the oil level on the dipstick (Figure 6).
   - If the oil level is too low, add a small amount of oil slowly to the oil-fill tube, and then repeat steps 3 through 5 until the oil level on the dipstick is correct.
   - If the oil level is too high, drain the excess oil until the oil level on the dipstick is correct. To drain the excess oil, refer to Changing the Engine Oil (page 22).

     Important: **If the oil level in the crankcase is too low or too high and you run the engine, you may damage the engine.**
6. Install the dipstick securely.

Important: ***Change the engine oil after the first 5 operating hours*****; change it yearly thereafter. Refer to Changing the Engine Oil (page 22).**

4

Charging the Battery

No Parts Required

Procedure

Electric-start model only

Refer to Charging the Battery (page 23).

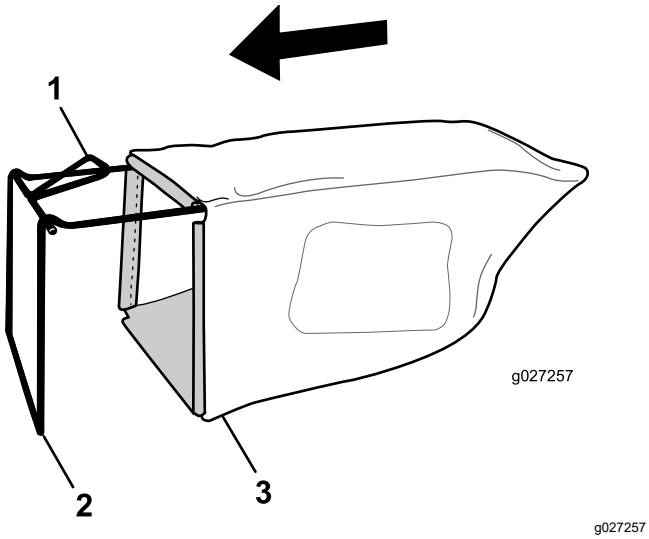
5

Assembling the Grass Bag

No Parts Required

Procedure

1. Slip the grass bag over the frame as shown in Figure 7.



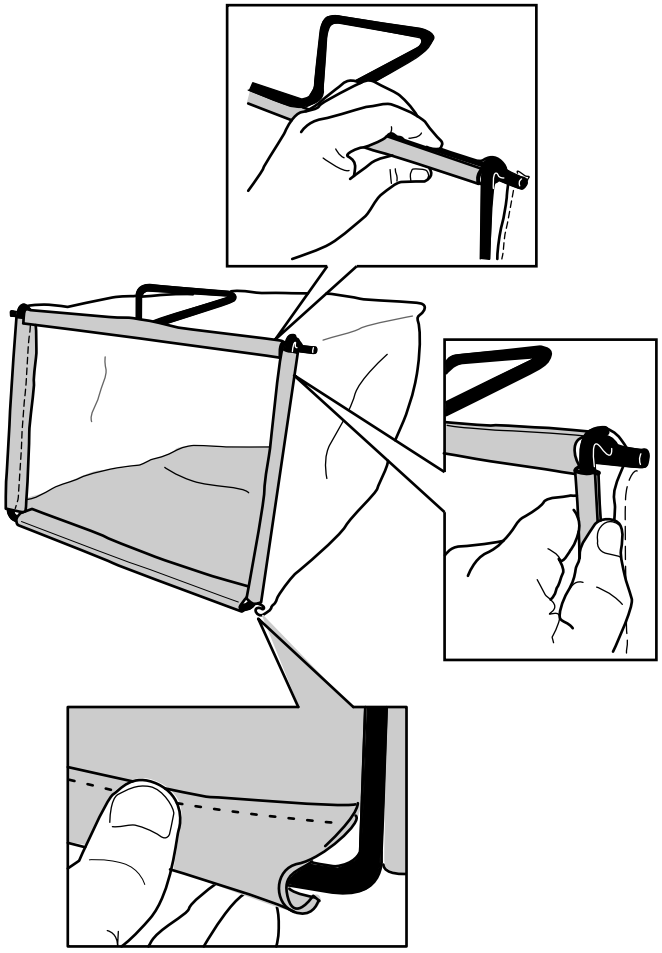
g027257

Figure 7

1. Handle
2. Frame
3. Grass bag

Note: Do not slip the bag over the handle (Figure 7).

2. Hook the bottom channel of the bag onto the bottom of the frame (Figure 8).



g027258

Figure 8

3. Hook the top and side channels of the bag onto the top and sides of the frame, respectively (Figure 8).

Product Overview

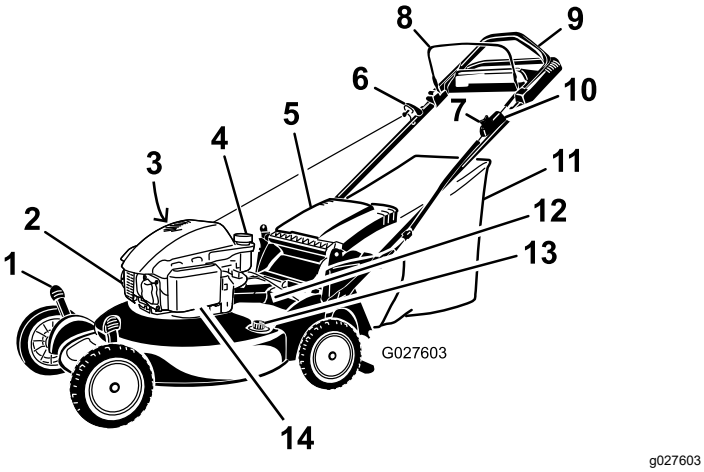


Figure 9

1. Cutting-height lever (4)
2. Spark plug
3. Oil fill/Dipstick (not shown)
4. Fuel tank cap
5. Discharge deflector
6. Recoil start handle
7. Adjustment knob for the self-propel drive
8. Blade-control bar
9. Upper handle
10. Electric-start button(electric-start model only)
11. Grass bag
12. Battery (electric-start model only)
13. Washout port
14. Air filter

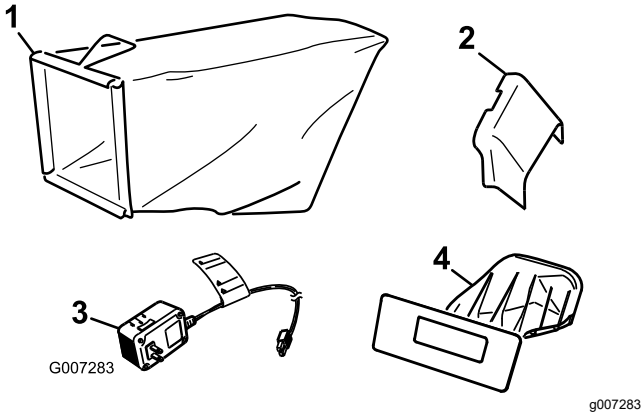


Figure 10

1. Grass bag
2. Side-discharge chute
3. Battery charger (electric-start model only)
4. Rear-discharge plug (installed)

Operation

Before Operation

Before Operation Safety

General Safety

- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- Check that all guards and safety devices, such as deflectors and/or grass catcher, are in place and working properly.
- Always inspect the machine to ensure that the blades, blade bolts, and cutting assembly are not worn or damaged.
- Inspect the area where you will use the machine and remove all objects that the machine could throw.
- Adjusting the cutting height may bring you into contact with the moving blade, causing serious injury.
  - Shut off the engine, remove the electric-start button, and wait for all moving parts to stop.
  - Do not put your fingers under the housing when adjusting the cutting height.

Fuel Safety

⚠ DANGER

Fuel is extremely flammable and highly explosive. A fire or explosion from fuel can burn you and others and can damage property.

- **To prevent a static charge from igniting the fuel, place the container and/or machine directly on the ground before filling, not in a vehicle or on an object.**
- **Fill the fuel tank outdoors, in an open area, when the engine is cold. Wipe up any fuel that spills.**
- **Do not handle fuel when smoking or around an open flame or sparks.**
- **Store fuel in an approved container and keep it out of the reach of children.**

⚠ WARNING

Fuel is harmful or fatal if swallowed. Long-term exposure to vapors can cause serious injury and illness.

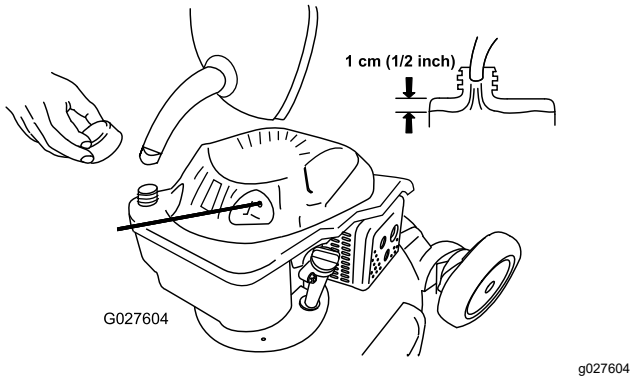
- **Avoid prolonged breathing of vapors.**
- **Keep your hands and face away from the nozzle and the fuel-tank opening.**
- **Keep fuel away from your eyes and skin.**

Filling the Fuel Tank

- For best results, use only clean, fresh, unleaded gasoline with an octane rating of 87 or higher ((R+M)/2 rating method).
- Oxygenated fuel with up to 10% ethanol or 15% MTBE by volume is acceptable.
- **Do not** use ethanol blends of gasoline, such as E15 or E85, with more than 10% ethanol by volume. Performance problems and/or engine damage may result, which may not be covered under warranty.
- **Do not** use gasoline containing methanol.
- **Do not** store fuel either in the fuel tank or in fuel containers over the winter unless fuel stabilizer has been added to the fuel.
- **Do not** add oil to gasoline.

Important: **To reduce starting problems, add fuel stabilizer to the fuel all season, mixing it with gasoline less than 30 days old.**

Fill the fuel tank with fresh unleaded regular gasoline from a major name-brand service station (Figure 11).



g027604

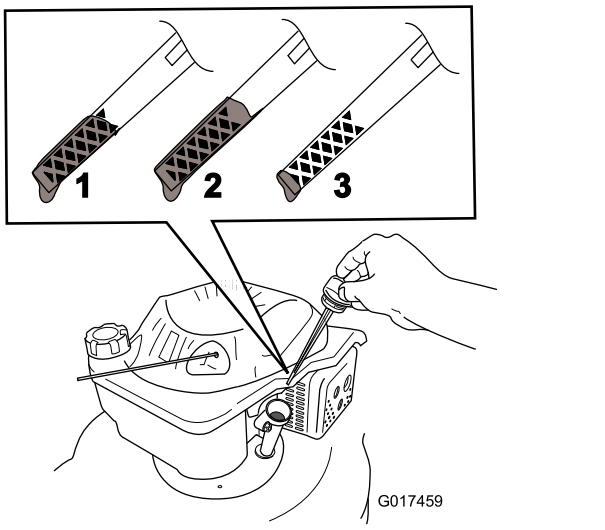
Figure 11

Checking the Engine-Oil Level

Service Interval: Before each use or daily

Max. fill: 0.59 L (20 oz), type: SAE 30 or SAE 10W-30 detergent oil with an API service classification of SF, SG, SH, SJ, SL, or higher.

1. Move the machine to a level surface.
2. Remove the dipstick (Figure 12).



g017459

Figure 12

1. The oil level is at its maximum.
2. The oil level is too high—remove oil from the crankcase.
3. The oil level is too low—add oil to the crankcase.

3. Wipe off the dipstick end with a clean cloth.
4. Insert the dipstick into the oil-fill tube, but **do not** screw it in.
5. Remove the dipstick and read the oil level; refer to Figure 12.
   - If the oil level is too low, add a small amount of oil slowly to the oil-fill tube, and then repeat steps 3 through 5 until the oil level on the dipstick is correct.
   - If the oil level is too high, drain the excess oil until the oil level on the dipstick is correct. To drain the excess oil, refer to Changing the Engine Oil (page 22).

     Important: **If the oil level in the crankcase is too low or too high and you run the engine, you may damage the engine.**
6. Install the dipstick securely.

Adjusting the Handle Height

You may raise or lower the handle to a position comfortable for you.

Rotate the handle lock, move the handle to 1 of 3 positions, and lock the handle into position (Figure 13).

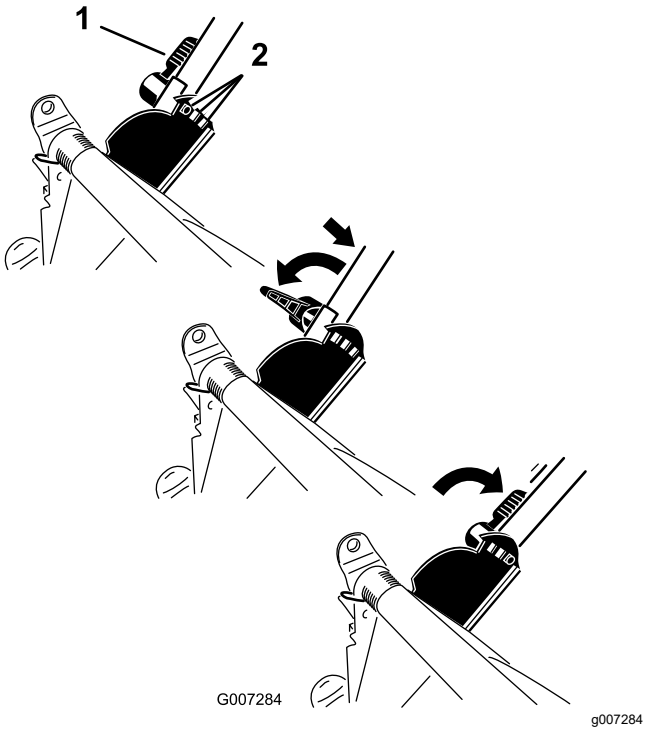


Figure 13

1. Handle lock
2. Handle positions

Adjusting the Cutting Height

⚠ WARNING

Adjusting the cutting height may bring you into contact with the moving blade, causing serious injury.

- **Stop the engine and wait for all moving parts to stop.**
- **Do not put your fingers under the housing when adjusting the cutting height.**

⚠ CAUTION

If the engine has been running, the muffler will be hot and can severely burn you. Keep away from the hot muffler.

Adjust the cutting height as desired. Set all 4 wheels to the same height.

Note: To raise the machine, move all 4 cutting height levers forward; to lower the machine, move them all rearward (Figure 14).

A = 3 cm (1-1/4 inches)
B = 4 cm (1-3/4 inches)
C = 6 cm (2-1/4 inches)
D = 7 cm (2-3/4 inches)
E = 8 cm (3-1/4 inches)
F = 10 cm (3-3/4 inches)
G = 11 cm (4-1/4 inches)

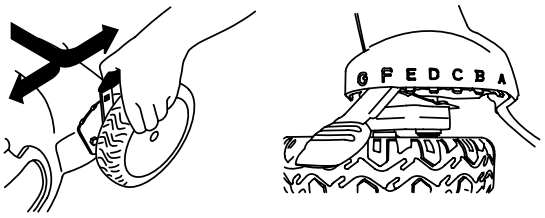


Figure 14

During Operation

General Safety

- Wear appropriate clothing, including eye protection; slip-resistant, substantial footwear; and hearing protection. Tie back long hair, secure loose clothing, and do not wear jewelry.
- Do not operate the machine while ill, tired, or under the influence of alcohol or drugs.
- The blade is sharp; contacting the blade can result in serious personal injury. Shut off the engine, remove the electric-start button, and wait for all moving parts to stop before leaving the operating position.
- When you release the blade-control bar, the engine should shut off and the blade should stop within 3 seconds. If not, stop using your machine immediately and contact an Authorized Service Dealer.
- Operate the machine only in good visibility and appropriate weather conditions. Do not operate the machine when there is the risk of lighting.
- Wet grass or leaves can cause serious injury if you slip and contact the blade. Mow only in dry conditions.
- Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could cause a slip-and-fall accident.
- Stop the machine and inspect the blades after striking an object or if there is an abnormal vibration in the machine. Make all necessary repairs before resuming operation.
- Before leaving the operating position, shut off the engine, remove the electric-start button, and wait for all moving parts to stop.

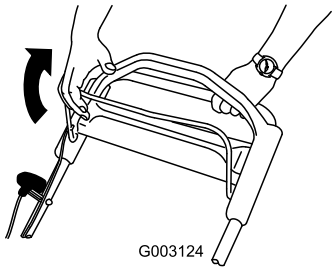
- If the engine has been running the muffler will be hot and can severely burn you. Keep away from the hot muffler.
- Check the grass catcher components and the discharge guard frequently and replace them with the manufacturer's recommended parts when necessary.
- Use accessories and attachments approved by The Toro Company only.

Slope Safety

- Mow across the face of slopes; never up and down. Use extreme caution when changing direction on slopes.
- Do not mow on excessively steep slopes. Poor footing could cause a slip-and-fall accident.
- Do not mow near drop-offs, ditches, or embankments. You could lose your footing or balance.

Starting the Engine

1. Pull the blade-control bar to the handle (Figure 15).

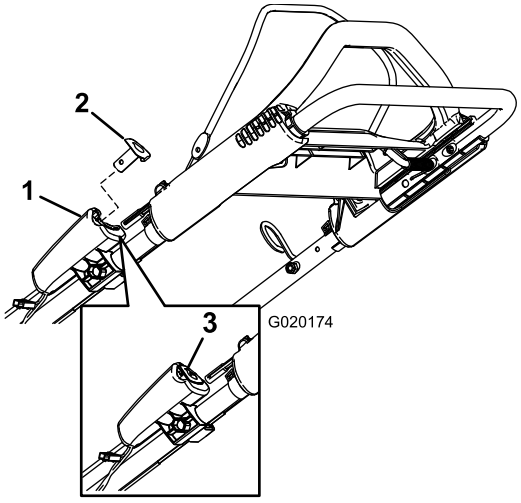


g003124

Figure 15

2. Push the electric-start button (electric start model only) (Figure 16) or pull the recoil-start handle (Figure 17).

   Note: If the electric-start button has been removed, insert it in the electric starter; refer to Figure 16 (electric-start model only).

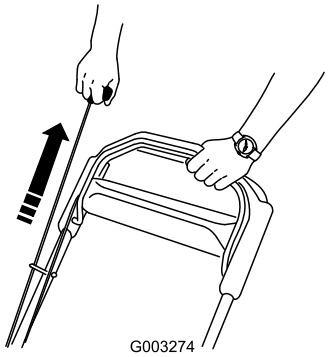


g020174

Figure 16

Electric-start model only

1. Electric-starter
2. Electric-start button
3. Electric-start button (installed)



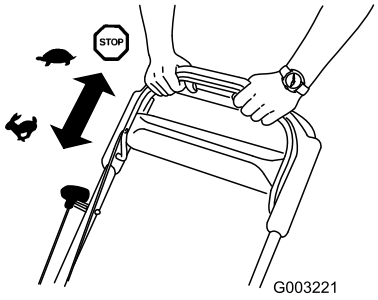
g003274

Figure 17

Note: If the machine does not start, contact an Authorized Service Dealer.

Using the Self-Propel Drive

To operate the self-propel drive, simply walk with your hands on the upper handle and your elbows at your sides, and the machine will automatically keep pace with you (Figure 18).



g003221

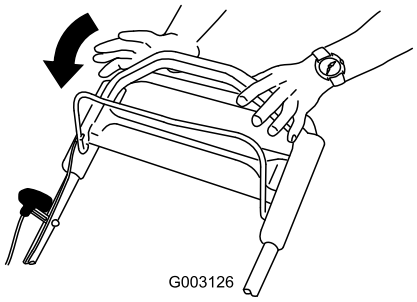
Figure 18

Stopping the Engine

Release the blade-control bar (Figure 19).

Note: Remove the electric-start button whenever you leave the machine (electric-start model only).

Important: **When you release the blade-control bar, the blade should stop within 3 seconds. If it does not stop properly, stop using your machine immediately and contact an Authorized Service Dealer.**



g003126

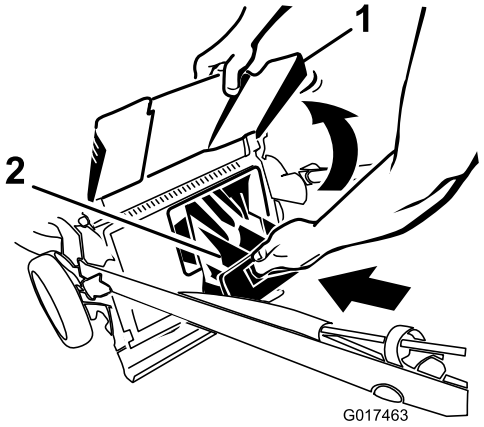
Figure 19

Recycling the Clippings

Your machine comes from the factory ready to recycle the grass and leaf clippings back into the lawn.

If the grass bag is on the machine, remove it; refer to Removing the Grass Bag (page 15) before recycling the clippings. If the side-discharge chute is on the machine, remove it and lock the side-discharge door; refer to Removing the Side-Discharge Chute (page 17) before recycling the clippings.

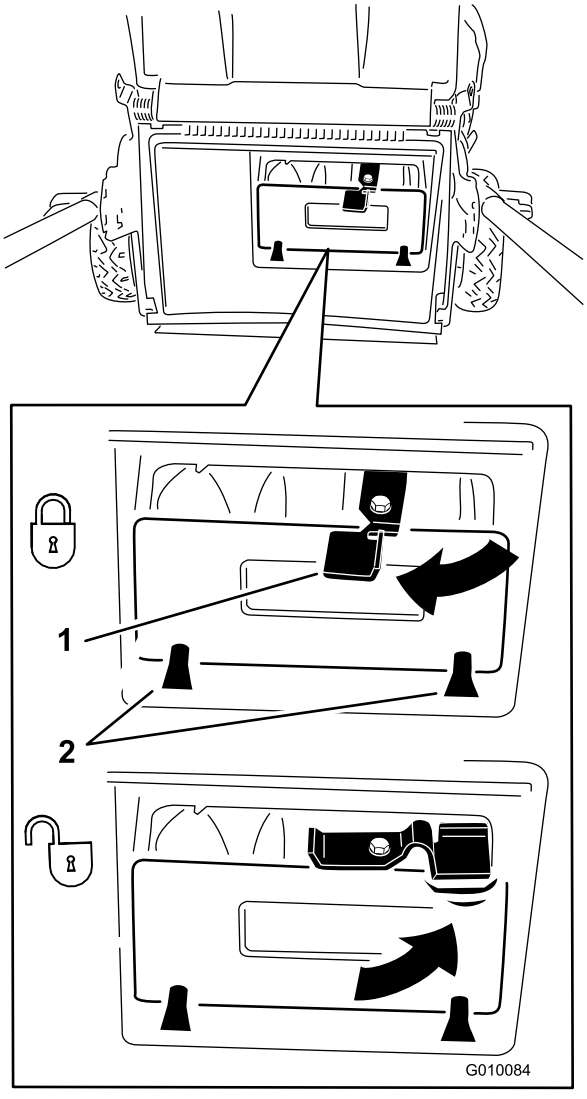
Important: **Ensure that the rear-discharge plug is locked in place. To lock the plug: Raise the discharge deflector (Figure 20), firmly push the plug in until it snaps into place behind the tabs, and rotate the lever on the plug to the left (Figure 21).**



g017463

Figure 20

1. Discharge deflector
2. Rear-discharge plug



g010084

Figure 21

1. Lever
2. Tabs

Note: To unlock the plug, rotate the lever on the plug to the right (Figure 21).

Bagging the Clippings

Use the grass bag when you want to collect grass and leaf clippings from the lawn.

Note: Ensure the bag is seated in the correct position.

If the side-discharge chute is on the machine, remove it and lock the side-discharge door; refer to Removing the Side-Discharge Chute (page 17) before bagging the clippings.

Installing the Grass Bag

1. Route the starter rope around the lower-rope guide (Figure 22).

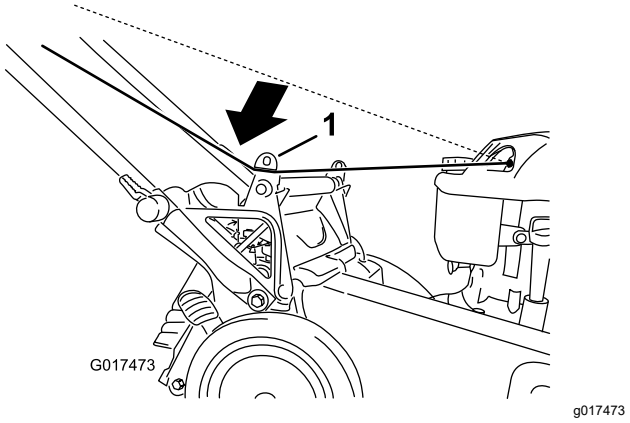


Figure 22

1. Lower-rope guide

Note: The lower-rope guide releases the starter rope when you pull the recoil-start handle.

2. Raise and hold up the discharge deflector (Figure 23).

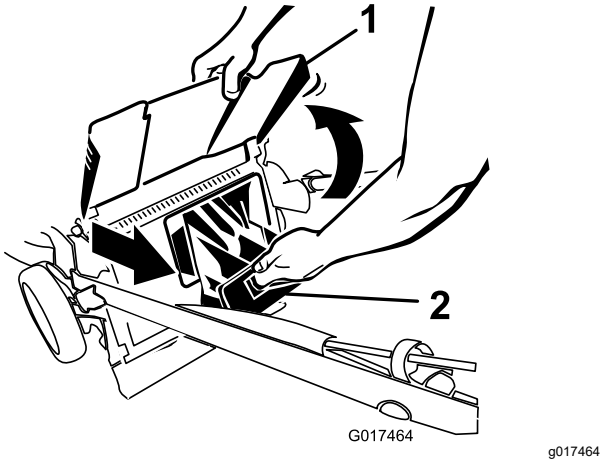


Figure 23

1. Discharge deflector 2. Rear-discharge plug

3. Pull out the rear-discharge plug (Figure 23).

4. Hang the upper front edge of the bag on the notches (Figure 24).

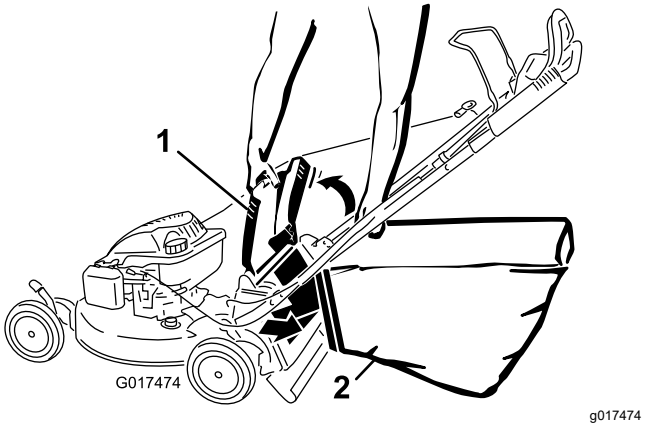


Figure 24

1. Discharge deflector 2. Grass bag

Note: Ensure that the grass bag is securely installed onto the machine.

5. Lower the discharge deflector.

Removing the Grass Bag

1. Route the starter rope around the lower-rope guide (Figure 25).

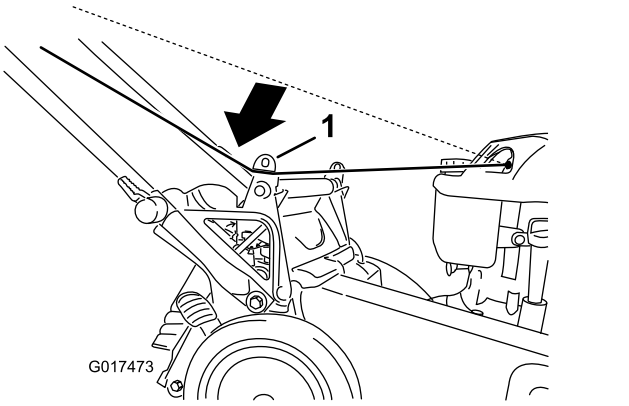


Figure 25

1. Lower-rope guide

Note: The lower-rope guide releases the starter rope when you pull the recoil-start handle.

2. Raise and hold up the discharge deflector.
3. Remove the grass bag.
4. Install the rear-discharge plug (Figure 26).

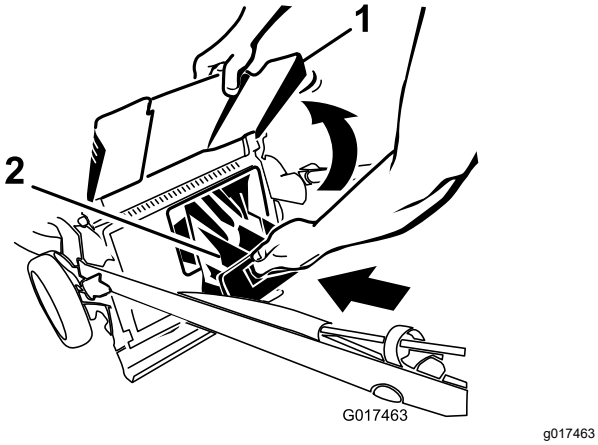


Figure 26

1. Discharge deflector
2. Rear-discharge plug

Important: **Ensure that the rear-discharge plug is locked in place. To lock the plug, firmly push the plug in until it snaps into place behind the tabs, and rotate the lever on the plug to the left (Figure 27).**

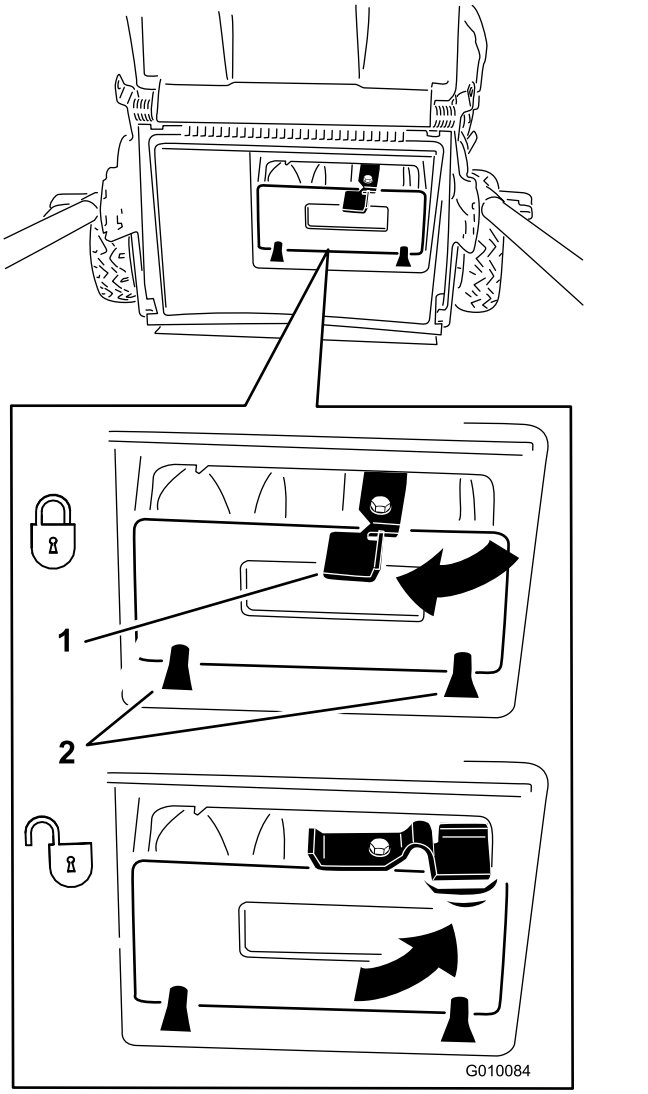


Figure 27

1. Lever
2. Tabs

Note: To unlock the plug, rotate the lever on the plug to the right (Figure 27).

5. Lower the discharge deflector.

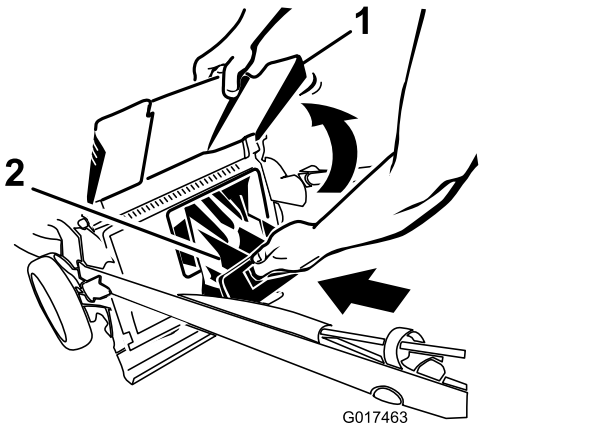
Side-Discharging the Clippings

Use the side-discharge feature for cutting very tall grass.

If the bag is on the machine, remove it and insert the rear-discharge plug; refer to Removing the Grass Bag (page 15) before side-discharging the clippings.

Important: **Ensure that the rear-discharge plug is locked in place. To lock the plug: Raise the discharge deflector (Figure 28), firmly push the plug in until it snaps into place behind the tabs,**

and rotate the lever on the plug to the left (Figure 28).



g017463

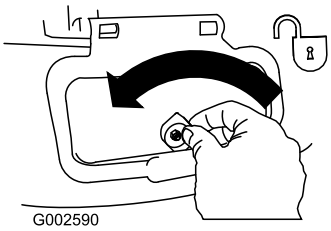
Figure 28

1. Discharge deflector
2. Rear-discharge plug

Note: To unlock the plug, rotate the lever on the plug to the right (Figure 27).

Installing the Side-Discharge Chute

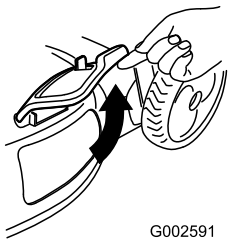
1. Unlock the side-discharge door (Figure 29).



g002590

Figure 29

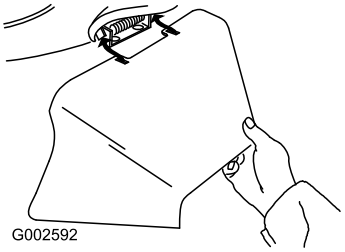
2. Lift open the side-discharge door (Figure 30).



g002591

Figure 30

3. Install the side-discharge chute and close the door onto the chute (Figure 31).



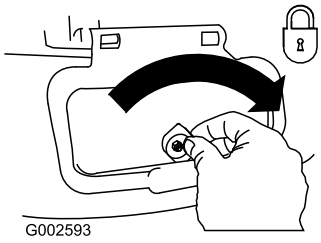
g002592

Figure 31

Removing the Side-Discharge Chute

To remove the side-discharge chute, reverse the steps above.

Important: **Lock the side-discharge door after you close it (Figure 32).**



g002593

Figure 32

Operating Tips

General Mowing Tips

- Clear the area of sticks, stones, wire, branches, and other debris that the blade could hit.
- Avoid striking solid objects with the blade. Never deliberately mow over any object.
- If the machine strikes an object or starts to vibrate, immediately stop the engine, disconnect the wire from the spark plug, remove the electric-start button, and examine the machine for damage.
- For best performance, install a new blade before the cutting season begins.
- Replace the blade when necessary with a Toro replacement blade.

Cutting Grass

- Cut only about a third of the grass blade at a time. Do not cut below the 54 mm (2-1/8 inch) setting unless the grass is sparse or it is late fall when grass growth begins to slow down. Refer to Adjusting the Cutting Height (page 12).

- When cutting grass over 15 cm (6 inches) tall, mow at the highest cutting height setting and walk slower; then mow again at a lower setting for the best lawn appearance. If the grass is too long, the machine may plug and cause the engine to stall.
- Mow only dry grass or leaves. Wet grass and leaves tend to clump on the yard and can cause the machine to plug or the engine to stall.
- Be aware of a potential fire hazard in very dry conditions, follow all local fire warnings, and keep the machine free of dry grass and leaf debris.
- Alternate the mowing direction. This helps disperse the clippings over the lawn for even fertilization.
- If the finished lawn appearance is unsatisfactory, try 1 or more of the following:
  - Replace the blade or have it sharpened.
  - Walk at a slower pace while mowing.
  - Raise the cutting height on your machine.
  - Cut the grass more frequently.
  - Overlap cutting swaths instead of cutting a full swath with each pass.
  - Set the cutting height on the front wheels a notch lower than the rear wheels. For example, set the front wheels at 54 mm (2-1/8 inches) and the rear wheels at 64 mm (2-1/2 inches).

Cutting Leaves

- After cutting the lawn, ensure that half of the lawn shows through the cut leaf cover. You may need to make more than a single pass over the leaves.
- If there are more than 13 cm (5 inches) of leaves on the lawn, set the front cutting height 1 or 2 notches higher than the rear cutting height.
- Slow down your mowing speed if the machine does not cut the leaves finely enough.

After Operation

After Operating Safety

General Safety

- Clean grass and debris from the machine to help prevent fires. Clean up oil or fuel spills.
- Allow the engine to cool before storing the machine in any enclosure.
- Never store the machine or fuel container where there is an open flame, spark, or pilot light, such as on a water heater or on other appliances.

Hauling Safety

- Remove the electric-start button before loading the unit for hauling.
- Use care when loading or unloading the machine into a trailer or truck.
- Use full-width ramps for loading the machine into a trailer or truck. Do not exceed a 15° angle between the ramp and the trailer or truck.
- Tie the machine down securely using straps, chains, cable, or ropes. Both front and rear straps should be directed down and outward from the machine.

Cleaning the Machine

Service Interval: Before each use or daily

⚠ WARNING

The machine may dislodge material from under the machine.

- **Wear eye protection.**
- **Stay in the operating position (behind the handle) when the engine is running.**
- **Do not allow bystanders in the area.**

For best results, clean the machine soon after you have completed mowing.

1. Move the machine onto a flat paved surface.
2. Stop the engine and wait for all moving parts to stop before leaving the operating position.
3. Lower the machine to its lowest cutting-height setting. Refer to Adjusting the Cutting Height (page 12).
4. Attach a garden hose that is connected to a water supply to the washout port on the machine (Figure 33).

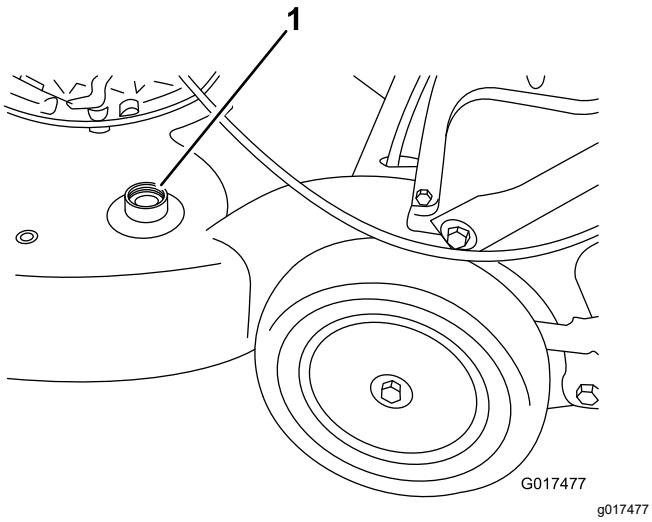


Figure 33

1. Washout port

5. Turn the water on.
6. Start the engine and run it until there are no more clippings that come out from under the machine.
7. Stop the engine.
8. Shut off the water and disconnect the garden hose from the machine.
9. Start the engine and run it for a few minutes to dry the underside of the machine.

Folding the Handle

⚠ WARNING

Folding or unfolding the handle improperly can damage the cables, causing an unsafe operating condition.

- **Do not damage the cables when folding or unfolding the handle.**
- **If a cable is damaged, contact an Authorized Service Dealer.**

1. Remove the electric-start button (Figure 34).

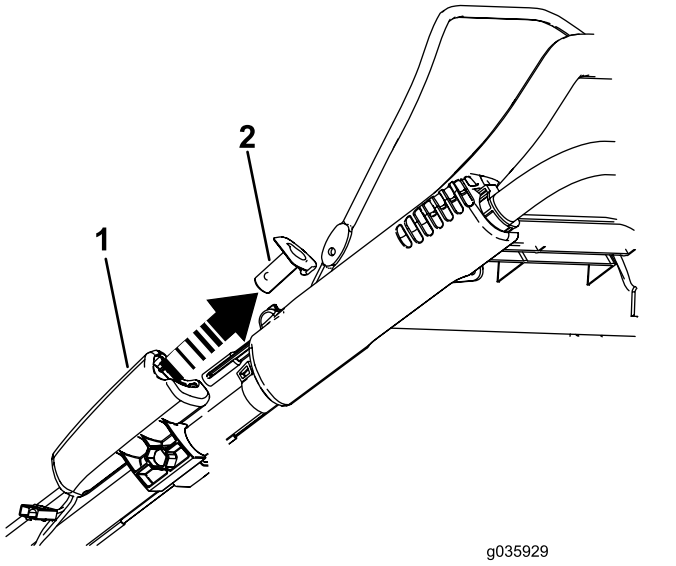


Figure 34

1. Electric starter
2. Electric-start button

2. Rotate the handle forward (Figure 35).

   Important: **Route the cables to the outside of the handle knobs as you fold the upper handle.**

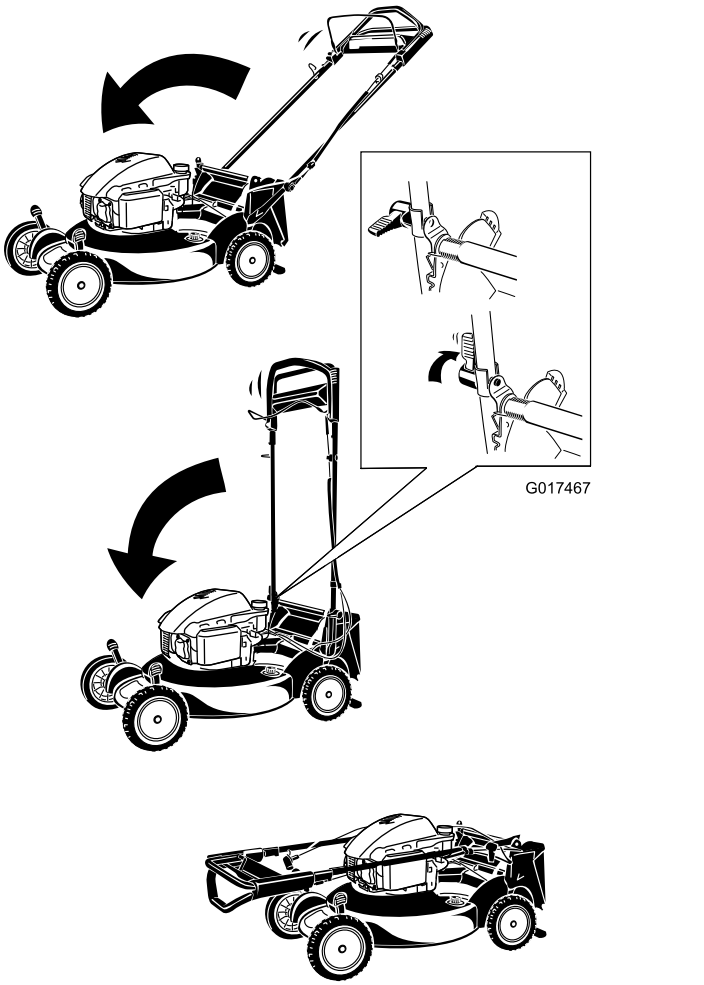


Figure 35

3. To unfold the handle, refer to 1 Assembling and Unfolding the Handle (page 7).

Maintenance

Note: Determine the left and right sides of the machine from the normal operating position.

Recommended Maintenance Schedule(s)

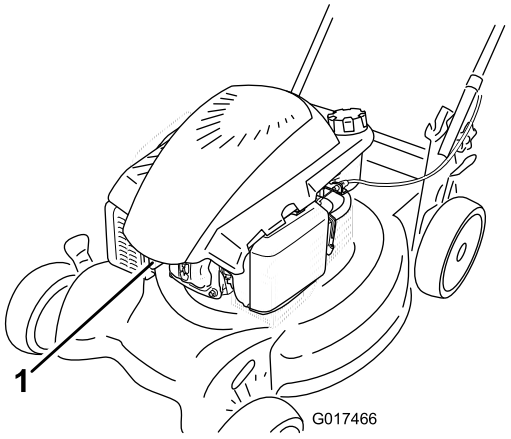
Maintenance Service Interval	Maintenance Procedure
After the first 5 hours	• Change the engine oil.
Before each use or daily	• Check the engine oil level. • Clean grass clippings and dirt from under the machine. • Ensure that the engine stops within 3 seconds after releasing the blade-control bar.
Every 25 hours	• Charge the battery. • Lubricate the rear wheel gears. • Replace the blade or have it sharpened (more frequently if the edge dulls quickly).
Before storage	• Charge the battery. • Empty the fuel tank before repairs as directed and before annual storage.
Yearly	• Replace the air filter; replace it more frequently in dusty operating conditions. • Change the engine oil.

Maintenance Safety

- Disconnect the spark-plug wire from the spark plug and remove the electric-start button before performing any maintenance procedure.
- Wear gloves and eye protection when servicing the machine.
- The blade is sharp; contacting the blade can result in serious personal injury. Wear gloves when servicing the blade.
- Never tamper with safety devices. Check their proper operation regularly.
- Tipping the machine may cause the fuel to leak. Fuel is flammable and explosive, and can cause personal injury. Run the engine dry to remove the fuel with a hand pump; never siphon the fuel.

Preparing for Maintenance

1. Stop the engine, remove the electric-start button, and wait for all moving parts to stop.
2. Disconnect the spark-plug wire from the spark plug (Figure 36) before performing any maintenance procedure.



g017466

Figure 36

1. Spark-plug wire

Important: **Before tipping the machine to change the oil or replace the blade, allow the fuel tank to run dry through normal usage. If you must tip the machine prior to running out of fuel, use a hand fuel pump to remove the fuel. Always tip the machine onto its side with the air filter up.**

3. After performing the maintenance procedure(s), connect the spark-plug wire to the spark plug.

Replacing the Air Cleaner

Service Interval: Yearly

1. Press down on the latch tabs on top of the air-cleaner cover (Figure 37).

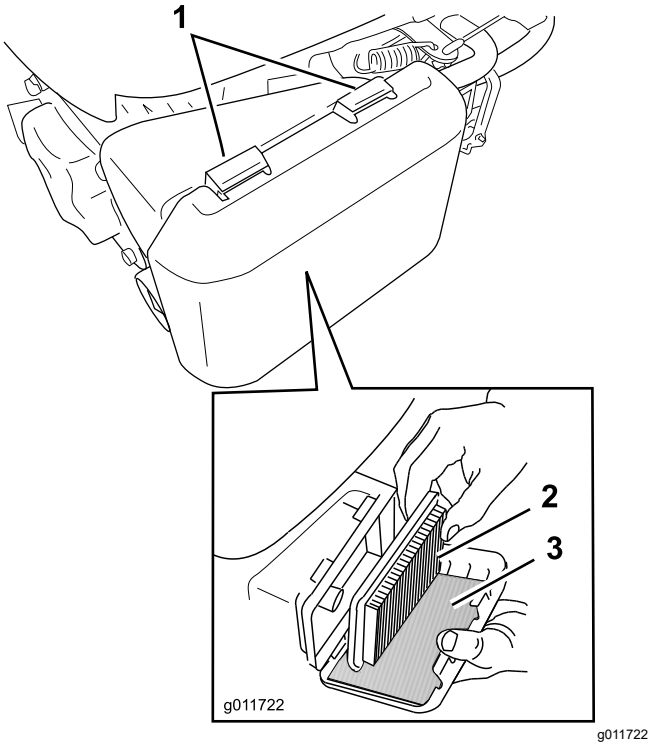


Figure 37

1. Latch tabs
2. Paper air filter
3. Foam pre-filter

2. Open the cover.
3. Remove the paper air filter and the foam pre-filter (Figure 37).
4. Inspect the foam pre-filter, and replace it if it is damaged or excessively dirty.
5. Inspect the paper air filter.
   A. If the paper air filter is damaged or is wet with oil or fuel, replace it.
   B. If the paper air filter is dirty, tap it on a hard surface several times or blow compressed air less than 207 kPa (30 psi) through the side of the filter that faces the engine.

   Note: Do not brush the dirt off the filter; brushing forces dirt into the fibers.
6. Remove dirt from the air cleaner body and cover using a moist rag (to trap the dirt and keep it from falling into the engine). **Do not wipe dirt into the air duct.**
7. Insert the foam pre-filter and the paper air filter into the air cleaner.
8. Install the cover.

Changing the Engine Oil

Service Interval: After the first 5 hours

Yearly

Run the engine a few minutes before changing the oil to warm it. Warm oil flows better and carries more contaminants.

1. Perform the pre-maintenance procedures; refer to Preparing for Maintenance (page 21).
2. Remove the dipstick.
3. Tip the machine onto its side, with the dipstick down, to drain the used oil out through the oil-fill tube (Figure 38).

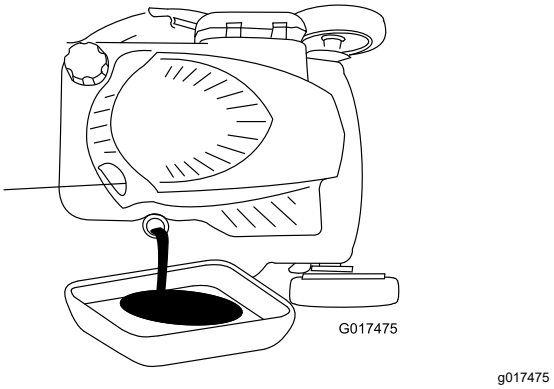
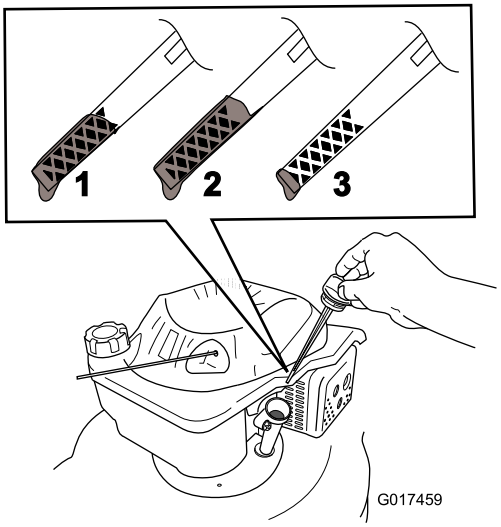


Figure 38

4. After draining the used oil, return the machine to the normal operating position.
5. Remove the dipstick and pour about 3/4 of the crankcase capacity of oil into the oil-fill tube.

   Note: Max. fill: 0.59 L (20 oz), type: SAE 30 or SAE 10W-30 detergent oil with an API service classification of SF, SG, SH, SJ, SL, or higher.
6. Wipe off the dipstick end with a clean cloth.
7. Insert the dipstick into the oil-fill tube, but **do not** screw it in.
8. Remove the dipstick and read the oil level on the dipstick (Figure 39).



g017459

Figure 39

1. The oil level is at its maximum.
2. The oil level is too high—remove oil from the crankcase.
3. The oil level is too low—add oil to the crankcase.

- If the oil level is too low, add a small amount of oil slowly to the oil-fill tube, and then repeat steps 6 through 8 until the oil level on the dipstick is correct.
- If the oil level is too high, drain the excess oil until the oil level on the dipstick is correct.

  Important: **If the oil level in the crankcase is too low or too high and you run the engine, you may damage the engine.**

9. Install the dipstick securely.
10. Recycle the used oil properly.

Charging the Battery

Service Interval: Every 25 hours

Before storage

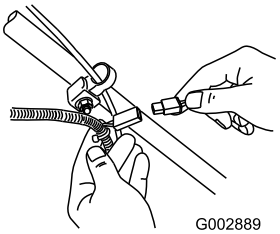
Electric-start model only

⚠ WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. *Wash hands after handling battery.*

Charge the battery for 24 hours initially, then monthly (every 25 starts) or as needed. Always use the charger in a sheltered area and charge the battery at a temperature between 0°C (32°F) and 41°C (105°F) whenever possible.

1. Connect the charger to the machine wiring harness located below the electric-start button (Figure 40).



g002889

Figure 40

2. Plug the charger into a wall outlet.

   Note: When the battery no longer holds a charge, recycle or dispose of the lead-acid battery according to local codes.

Note: Your battery charger may have a 2-color LED display that indicates the following states of charging:

- A red light indicates that the charger is charging the battery.
- A green light indicates that the charger is fully charged or the charger is disconnected from the battery.
- A flashing light that alternates between red and green indicates that the battery is nearly fully charged. This state lasts only a few minutes until the battery is fully charged.

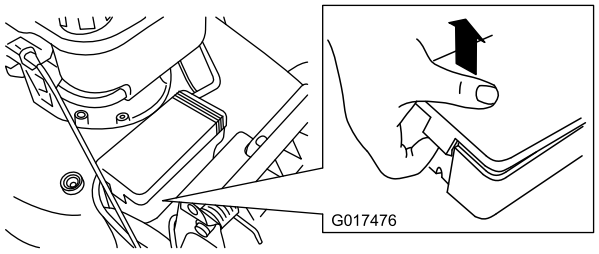
Replacing the Fuse

Electric-start model only

If the battery does not charge or the engine does not turn with the electric starter, the fuse may be blown. Replace it with a 40-amp plug-in type fuse.

Important: **You cannot start the machine with the electric starter or charge the battery unless you install the fuse.**

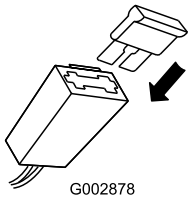
1. Refer to Preparing for Maintenance (page 21).
2. Unclip both ends of the battery cover and remove it (Figure 41).



g017476

Figure 41

3. Replace the fuse in the fuse holder (Figure 42).



g002878

Figure 42

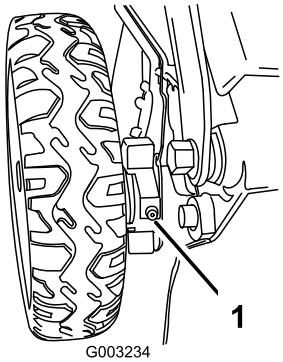
Note: Your machine comes with a spare fuse in the battery compartment.

4. Install the battery cover.

Lubricating the Wheel Gears

Service Interval: Every 25 hours

1. Wipe the grease fittings just inside the rear wheels with a clean rag (Figure 43).



g003234

Figure 43

1. Grease fitting

2. Install a grease gun onto each fitting and gently apply 2 or 3 pumps of #2 multi-purpose, lithium-base grease.

Replacing the Blade

Service Interval: Before each use or daily

Every 25 hours—Replace the blade or have it sharpened (more frequently if the edge dulls quickly).

***Important:* *You will need a torque wrench to install the blade properly*. If you do not have a torque wrench or are uncomfortable performing this procedure, contact an Authorized Service Dealer.**

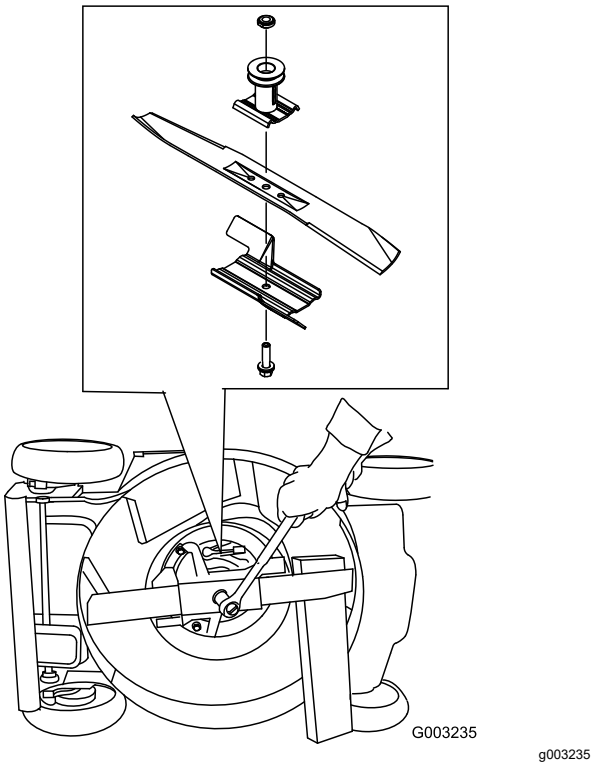
Examine the blade whenever you run out of gasoline. If the blade is damaged or cracked, replace it immediately. If the blade edge is dull or nicked, have it sharpened or replace it.

⚠ WARNING

The blade is sharp; contacting the blade can result in serious personal injury.

Wear gloves when servicing the blade.

1. Refer to Preparing for Maintenance (page 21).
2. Tip the machine onto its side with the air filter up.
3. Use a block a wood to hold the blade steady (Figure 44).



g003235

Figure 44

4. Remove the blade, saving all mounting hardware.
5. Install the new blade and all mounting hardware.

   ***Important:* Position the curved ends of the blade to point toward the machine housing.**

6. **Use a torque wrench to tighten the blade bolt to 82 N·m (60 ft-lb).**

   ***Important:* A bolt torqued to 82 N·m (60 ft-lb) is very tight. While holding the blade with a block of wood, put your weight behind the ratchet or wrench and tighten the bolt securely. This bolt is very difficult to overtighten.**

Adjusting the Self-Propel Drive

Whenever you install a new self-propel cable or if the self-propel drive is out of adjustment, adjust the self-propel drive.

1. Turn the adjustment knob counterclockwise to loosen the cable adjustment (Figure 45).

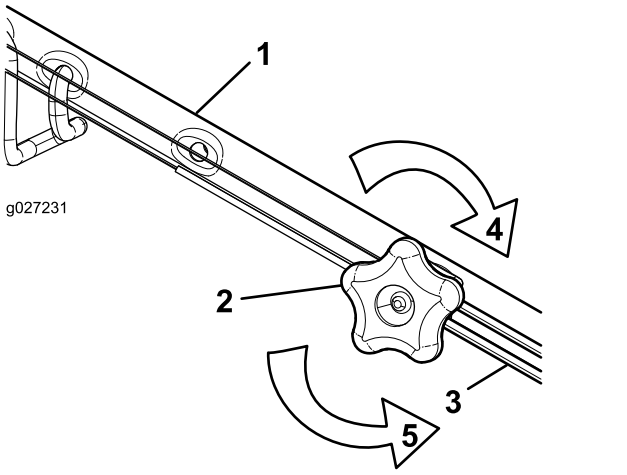


Figure 45

1. Handle (left side)
2. Adjustment knob
3. Self-propel-drive cable
4. Turn the knob clockwise to tighten the adjustment.
5. Turn the knob counterclockwise to loosen the adjustment.

2. Adjust the tension on the cable (Figure 45) by pulling it back or pushing it forward and holding that position.

   Note: Push the cable toward the engine to increase the traction; pull the cable away from the engine to decrease the traction.

3. Turn the adjustment knob clockwise to tighten the adjustment of the cable.

   Note: Tighten the knob firmly by hand.

Storage

Store the machine in a cool, clean, dry place.

Preparing the Machine for Storage

⚠ WARNING

Gasoline vapors can explode.

- **Do not store gasoline more than 30 days.**
- **Do not store the machine in an enclosure near an open flame.**
- **Allow the engine to cool before storing it.**

1. On the last refueling of the year, add fuel stabilizer to the fuel as directed by the engine manufacturer.
2. Dispose of any unused fuel properly. Recycle it according to local codes, or use it in your automobile.

   Note: Old fuel in the fuel tank is the leading cause of hard starting. Do not store fuel without stabilizer more than 30 days, and do not store stabilized fuel more than 90 days.
3. Run the machine until the engine stops from running out of fuel.
4. Start the engine again.
5. Allow the engine to run until it stops. When you can no longer start the engine, it is sufficiently dry.
6. Disconnect the wire from the spark plug and remove the electric-start button.
7. Remove the spark plug, add 30 ml (1 oz) of oil through the spark-plug hole, and pull the starter rope slowly several times to distribute oil throughout the cylinder to prevent cylinder corrosion during the off-season.
8. Loosely install the spark plug.
9. Tighten all nuts, bolts, and screws.
10. Charge the battery for 24 hours, then unplug the battery charger an store the machine in an unheated area. If you must store the machine in a heated area, you must charge the battery every 90 days (electric-start model only).

Removing the Machine from Storage

1. Check and tighten all fasteners.
2. Remove the spark plug and spin the engine rapidly using the starter to blow excess oil from the cylinder.
3. Install the spark plug and tighten it with a torque wrench to 20 N·m (15 ft-lb).
4. Perform any needed maintenance procedures; refer to Maintenance (page 21).
5. Check the engine-oil level; refer to Checking the Engine-Oil Level (page 11).
6. Fill the fuel tank with fresh gasoline; refer to Filling the Fuel Tank (page 11).
7. Connect the wire to the spark plug.
8. Charge the battery (electric-start model only).

Notes:

Notes:

Notes:

The Toro Warranty

A 5-Year Full Warranty (45 Day Limited Warranty for Commercial Use)

The Toro GTS Starting Guarantee

A 5-Year Full Warranty (Not Applicable for Commercial Use)

Super Recycler®Walk Power Mowers

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly promise to repair the Toro Products listed below if used for residential purposes* if it is defective in materials or workmanship or if it stops functioning due to the failure of a component; or if the Toro GTS (Guaranteed to Start) engine will not start on the first or second pull, provided the routine maintenance required in the *Operator's Manual* have been performed.

This warranty covers the cost of parts and labor, but you must pay transportation costs.

The following time periods apply from the date of purchase:

Products	**Warranty Period**
Super Recycler® Mowers	5 year full warranty
GTS (Guaranteed to Start)	5 year full warranty
Battery	1 year full warranty

Limited Warranty for Commercial Use

Gas-powered Toro Products used for commercial, institutional, or rental use, are warranted for 45 days against defects in materials or workmanship. Components failing due to normal wear are not covered by this warranty.

The Toro GTS (Guaranteed to Start) Starting Guarantee does not apply when the product is used commercially*.

Instructions for Obtaining Warranty Service

If you think that your Toro Product contains a defect in materials or workmanship, follow this procedure:

1. Contact any Authorized Toro Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, access our web site at www.Toro.com. You may also call the numbers listed in item #3 to use the 24-hour Toro Dealer locator system.
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer. The dealer will diagnose the problem and determine if it is covered under warranty.
3. If for any reason you are dissatisfied with the Service Dealer's analysis or with the assistance provided, contact us at:

   Customer Care Department, RLC Division
   Toro Warranty Company
   8111 Lyndale Avenue South
   Bloomington, MN 55420-1196
   Toll free at 888-865-5688 (U.S. customers)
   Toll free at 888-865-5705 (Canadian customers)

Owner Responsibilities

You must maintain your Toro Product by following the maintenance procedures described in the *Operator's Manual*. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

Items and Conditions Not Covered

There is no other express warranty except for special emission system coverage and engine warranty coverage on some products. This express warranty does not cover the following:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, oil changes, spark plugs, air filters blade sharpening or worn blades, cable/linkage adjustments, or brake and clutch adjustments
- Components failing due to normal wear
- Any product or part which has been altered or misused or neglected and requires replacement or repair due to accidents or lack of proper maintenance
- Pickup and delivery charges
- Repairs or attempted repairs by anyone other than an Authorized Toro Service Dealer
- Repairs necessary due to failure to follow recommended fuel procedure (consult *Operator's Manual* for more details)
  - Removing contaminants from the fuel system is not covered
  - Use of old fuel (more than one month old) or fuel which contains more than 10% ethanol or more that 15% MTBE
  - Failure to drain the fuel system prior to any period of non-use over one month
- Repairs or adjustments to correct starting difficulties due to the following:
  - Failure to follow proper maintenance procedures or recommended fuel procedure
  - Rotary mower blade striking an object
- Special operational conditions where starting may require more than two pulls:
  - First time starts after extended period of non-use over three months or seasonal storage
  - Cool temperature starts such as those found in early spring and late autumn
  - Improper starting procedures - if you are having difficulty starting your unit, please check the *Operator's Manual* to ensure that you are using the correct starting procedures. This can save an unnecessary visit to an Authorized Toro Service Dealer.

General Conditions

All repairs covered by these warranties must be performed by an Authorized Toro Service Dealer using Toro approved replacement parts. Repair by an Authorized Toro Service Dealer is your sole remedy under this warranty.

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental, or consequential damages in connection with the use of the Toro Products covered by these warranties, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under these warranties.

Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Countries Other than the United States or Canada

Customers who have purchased Toro products exported from the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.

Australian Consumer Law: Australian customers will find details relating to the Australian Consumer Law either inside the box or at your local Toro Dealer.

*Residential purposes means use of the product on the same lot as your home. Use at more than one location, or institutional or rental use, is considered commercial use, and the commercial use warranty would apply.