Form No. 3419-251 Rev C

53cm Mulching/Rear Bagging/Side Discharging Lawn Mower

Model No. 29732—Serial No. 402100000 and Up

Model No. 29734—Serial No. 402100000 and Up

Operator's Manual

Introduction

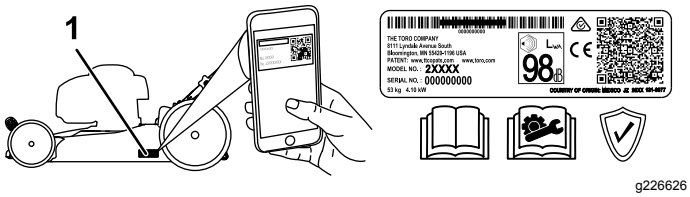
This rotary-blade, walk-behind lawn mower is intended to be used by residential homeowners. It is designed primarily for cutting grass on well-maintained lawns on residential properties. It is not designed for cutting brush or for agricultural uses.

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. Write the numbers in the space provided.

Important: **With your smartphone or tablet, scan the QR code on the serial number decal to access warranty, parts, and other product information.**



g226626

Figure 1

1. Model and serial number location

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.



g000502

Figure 2

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.

This product complies with all relevant European directives; for details, please see the separate product specific Declaration of Conformity (DOC) sheet.

Gross or 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 or J2723. As configured to meet safety, emission, and operating requirements, the actual engine torque on this class of mower will be significantly lower. Please refer to the engine manufacturer's information included with the machine.

Do not tamper with or disable safety devices on the machine, and check their proper operation regularly. Do not attempt to adjust or tamper with the engine speed control; doing so may create an unsafe operating condition, resulting in personal injury.

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CE

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Safety

This machine has been designed in accordance with EN ISO 5395:2013.

General Safety

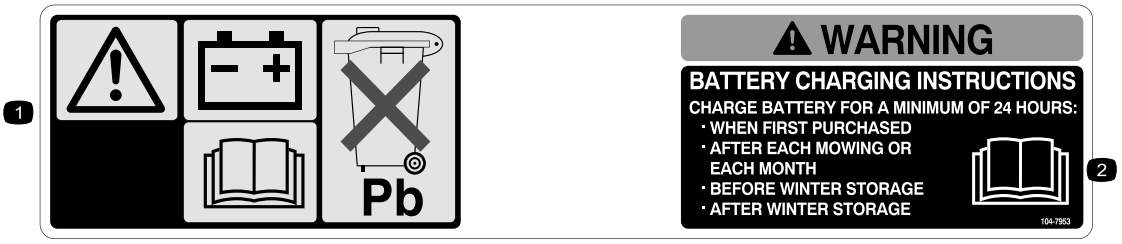
This product is capable of amputating hands and feet and of throwing objects. Always follow all safety instructions to avoid serious personal injury.

- Read, understand, and follow the instructions and warnings in this *Operator's Manual* and on the machine and attachments before starting the engine.
- Do not put your hands or feet near moving parts of or under the machine. Keep clear of any discharge opening.
- Do not operate the machine without all guards and other safety protective devices in place and functioning properly on the machine.
- Keep bystanders and children out of the operating area. Do not allow children to operate the machine. Allow only people who are responsible, trained, familiar with the instructions, and physically capable to operate the machine.
- Stop the machine, shut off the engine, remove the ignition key (if equipped), and wait for all moving parts to stop 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.

Safety and Instructional Decals

Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or missing.

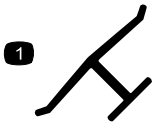


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104-7953

Electric-Start Model Only

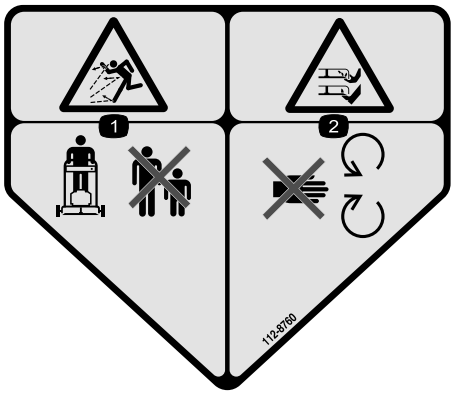
1. Warning—read the *Operator's Manual* for information on charging the battery; contains lead; do not discard.
2. Read the *Operator's Manual*.



decaloemmarkt

Manufacturer's Mark

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



decal112-8760

112-8760

1. Thrown object hazard—keep bystanders away.
2. Cutting/dismemberment hazard of hand or foot, mower blade—stay away from moving parts.



decal117-4143

117-4143

1. Warning—read the *Operator's Manual*.
2. Thrown object hazard—keep bystanders away.
3. Cutting/dismemberment hazard of hand or foot, mower blade—disconnect the spark-plug wire and read the *Operator's Manual* before performing maintenance.
4. Cutting/dismemberment hazard of hand or foot, mower blade—stay away from moving parts; keep all guards and shields in place.
5. Cutting/dismemberment hazard of hand or foot, mower blade—do not operate up and down slopes; only operate across slopes; shut off the engine and wait for all moving parts to stop before leaving the machine; pick up debris before mowing; look behind and down 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 key into the electric-start ignition (if equipped) until you are ready to start the engine.**

1

Unfolding the Handle

No Parts Required

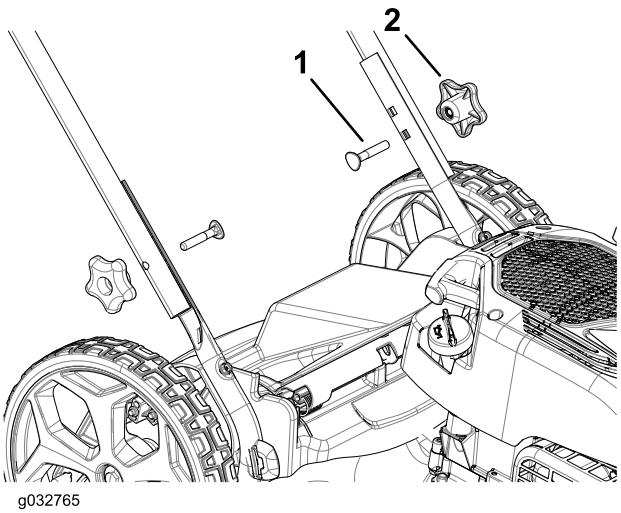
Procedure

⚠ 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 handle knobs and bolts from the machine housing (Figure 3).
2. Attach the handle to the machine housing (Figure 3).

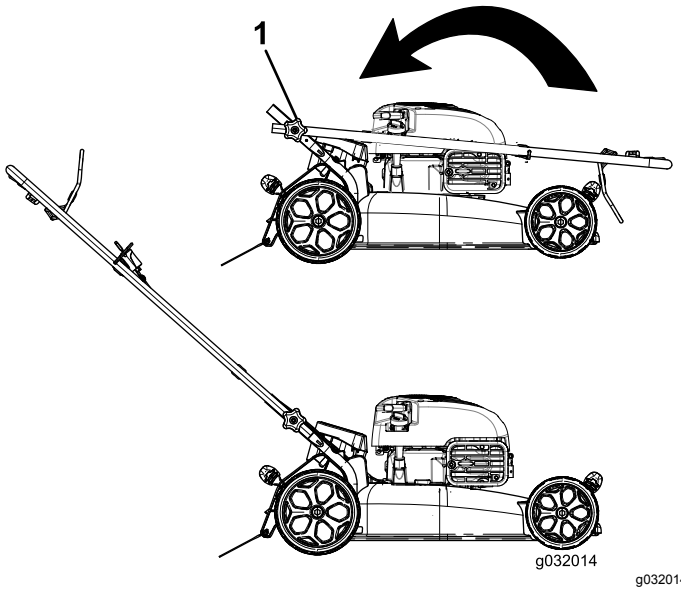


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Figure 3

1. Bolt
2. Knob

3. Move the handle to the operating position (Figure 4).

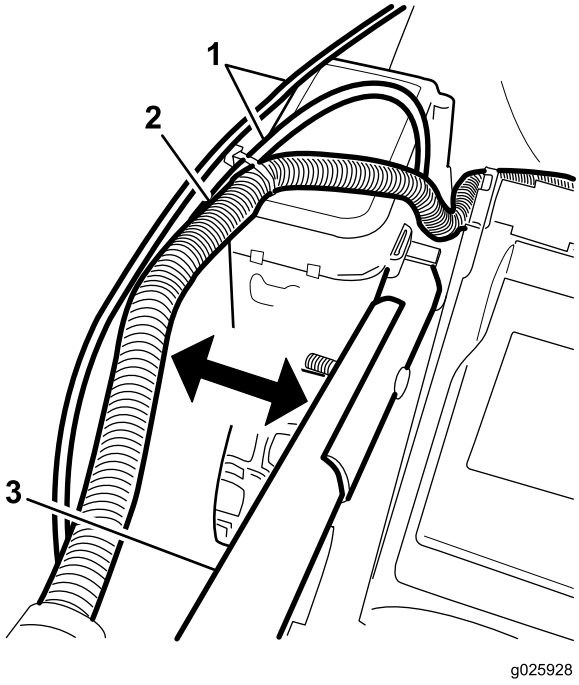


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Figure 4

1. Handle knob (2)

Important: **Route the cables to the outside of the handle as you unfold the handle (Figure 5).**



g025928

Figure 5

Electric-start model shown

1. Cables
2. Wire harness (electric-start model only)
3. Handle

4. Install the handle knobs and tighten them firmly by hand.

2

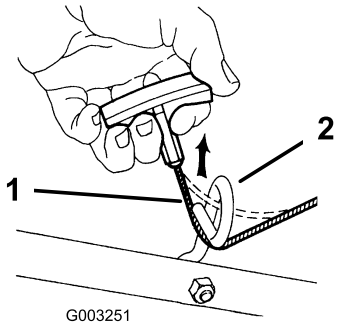
Installing the Recoil-Starter Rope in the Rope Guide

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 6).



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Figure 6

1. Recoil-starter rope
2. Rope guide

3

Filling the Engine with Oil

No Parts Required

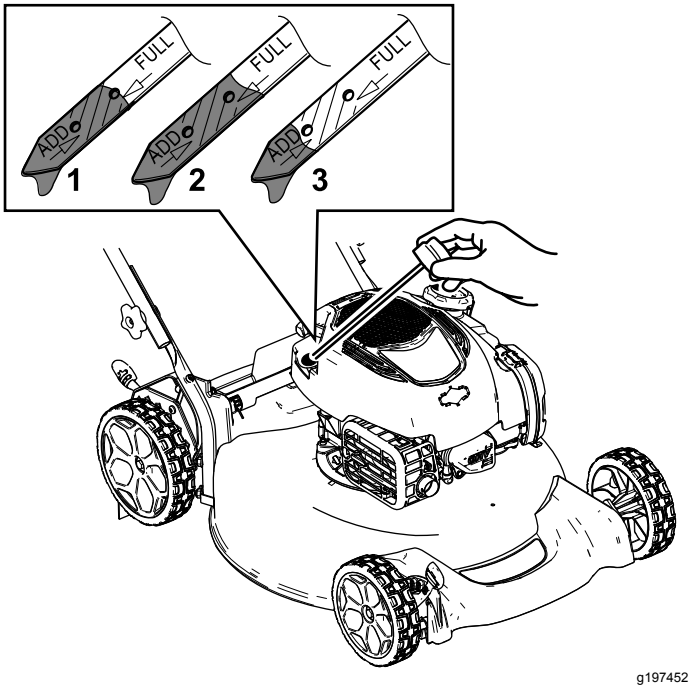
Procedure

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

Engine Oil Specifications

Engine oil capacity	0.44 L (15 fl oz)
Oil viscosity	SAE 30 or SAE 10W-30 detergent oil
API service classification	SJ or higher

1. Move the machine to a level surface.
2. Remove the dipstick by rotating the cap counterclockwise and pulling it out (Figure 7).



g197452

Figure 7

1. Full
2. High
3. Add

3. Carefully pour about 3/4 of the engine capacity of oil into the oil-fill tube.
4. Wait 3 minutes for the oil to settle in the engine.
5. Wipe the dipstick clean with a clean cloth.
6. Insert the dipstick into the oil-fill tube, then remove the dipstick.

7. Read the oil level on the dipstick (Figure 7).
   - If the oil level on the dipstick is too low, carefully pour a small amount of oil into the oil-fill tube, wait 3 minutes, and repeat steps 5 through 7 until the oil on the dipstick is at the correct level.
   - If the oil level on the dipstick is too high, drain the excess oil until the oil on the dipstick is at the correct level; refer to Changing the Engine Oil (page 16).

   Important: **If the oil level in the engine is too low or too high and you run the engine, you may damage the engine.**
8. Install the dipstick into the oil-fill tube securely.

4

Charging the Battery

No Parts Required

Procedure

Electric-Start Model Only

Refer to Charging the Battery (page 17).

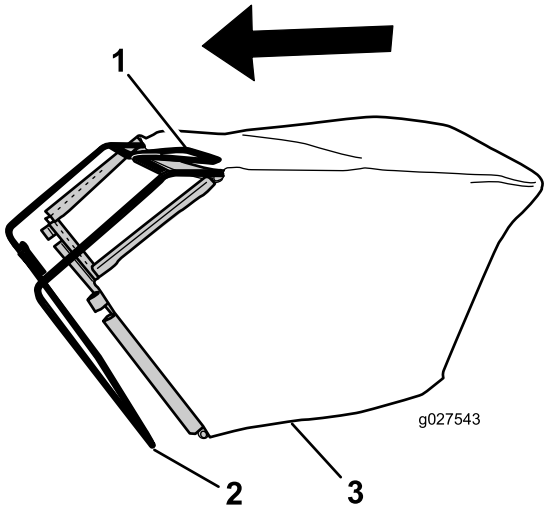
5

Assembling the Grass Bag

No Parts Required

Procedure

1. Slip the grass bag over the frame as shown in Figure 8.



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Figure 8

1. Handle
2. Frame
3. Grass bag

Note: Do not slip the bag over the handle (Figure 8).

2. Hook the bottom channel of the bag onto the bottom of the frame (Figure 9).

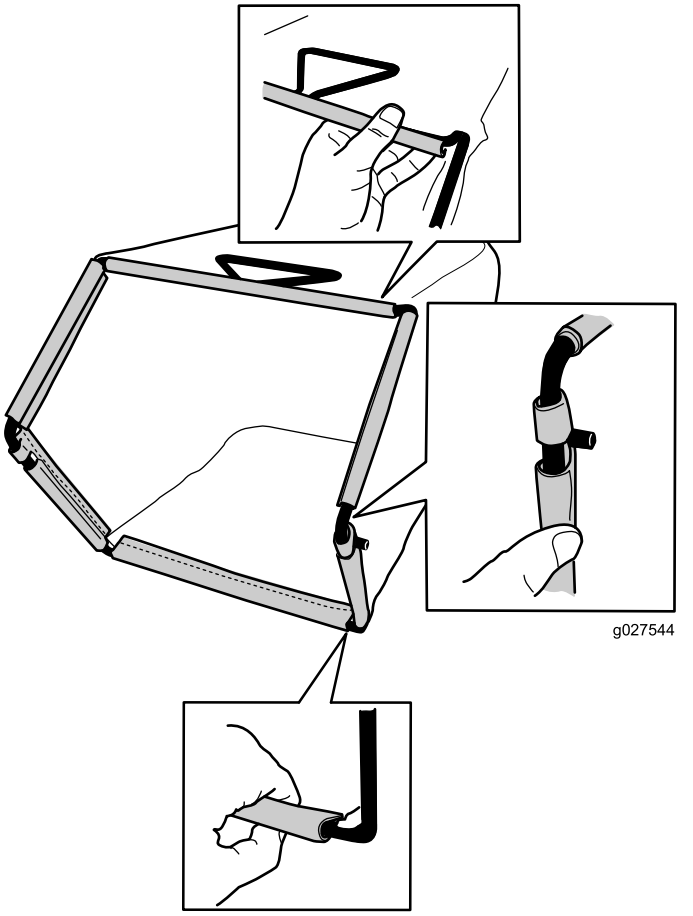


Figure 9

3. Hook the top and side channels of the bag onto the top and sides of the frame, respectively (Figure 9).

Product Overview

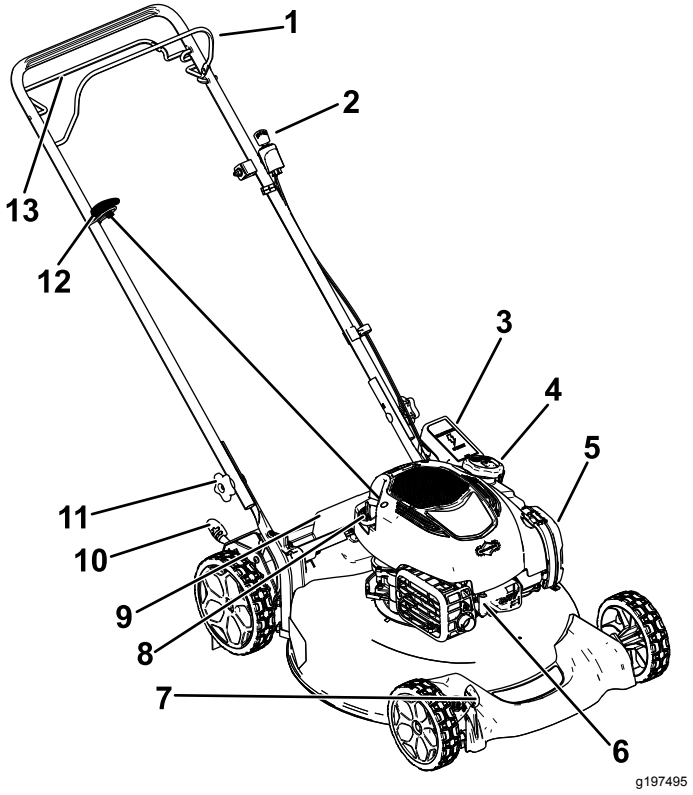


Figure 10

Electric-start model shown

1. Blade-control bar
2. Ignition key (electric-start model only)
3. Battery (electric-start model only)
4. Fuel-tank cap
5. Air filter
6. Spark plug
7. Front cutting-height lever
8. Oil fill/ dipstick
9. Rear deflector
10. Rear cutting-height lever
11. Handle knob (2)
12. Recoil-start handle
13. Self-propel drive bar

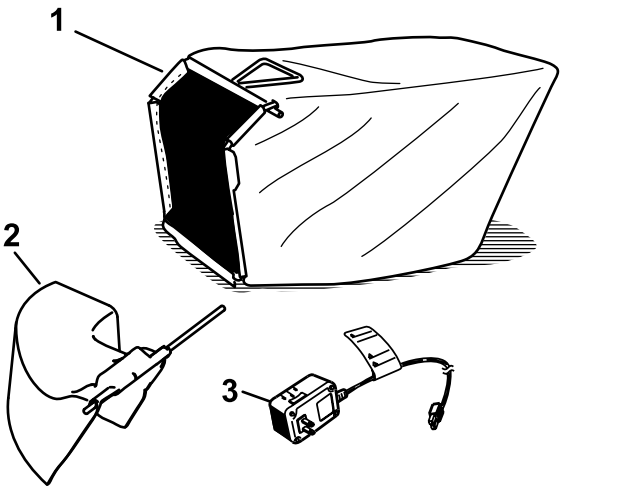


Figure 11

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

Specifications

Model	Weight	Length	Width	Height
29732	34 kg (76 lb)	140 cm (55 inches)	56 cm (22 inches)	102 cm (40 inches)
29734	39 kg (85 lb)	140 cm (55 inches)	56 cm (22 inches)	102 cm (40 inches)

Operation

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

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 could interfere with the operation of the machine or 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 ignition key (electric-start model only), and wait for all moving parts to stop.
  - Do not put your fingers under the housing when adjusting the cutting height.

Fuel Safety

- 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.
  - Do not remove the fuel cap or add fuel to the tank while the engine is running or hot.
  - If you spill fuel, do not attempt to start the engine. Avoid creating a source of ignition until the fuel vapors have dissipated.

  - Store fuel in an approved container and keep it out of the reach of children.
- 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.

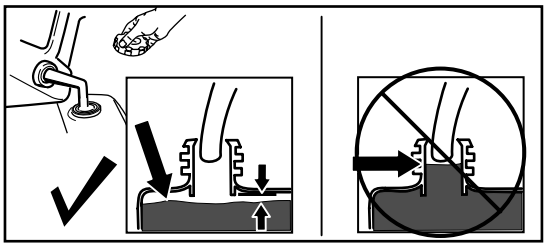
Filling the Fuel Tank

- 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.

Fill the fuel tank with fresh unleaded regular gasoline from a major name-brand service station (Figure 12).

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

Refer to your engine owner's manual for additional information.



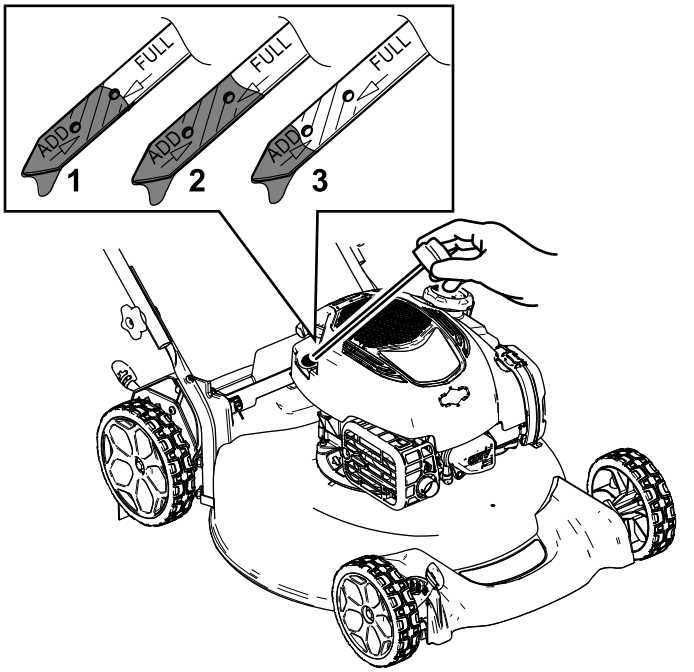
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Figure 12

Checking the Engine-Oil Level

Service Interval: Before each use or daily

1. Move the machine to a level surface.
2. Remove the dipstick by rotating the cap counterclockwise and pulling it out (Figure 13).



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Figure 13

1. Full
2. High
3. Add

3. Wipe the dipstick clean with a clean cloth.
4. Insert the dipstick into the oil-fill tube, then remove the dipstick.
5. Read the oil level on the dipstick (Figure 13).
   - If the oil level on the dipstick is too low (Figure 13), carefully pour a small amount of SAE 30 or SAE 10W-30 detergent oil into the oil-fill tube, wait 3 minutes, and repeat steps 3 through 5 until the oil on the dipstick is at the correct level. For the oil type, refer to Changing the Engine Oil (page 16).
   - If the oil level on the dipstick is too high (Figure 13), drain the excess oil until the oil on the dipstick is at the correct level; refer to Changing the Engine Oil (page 16).

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

Adjusting the Cutting Height

Adjust the cutting height as desired. Set all the cutting-height levers to the same height. To raise and lower the machine, refer to Figure 14.

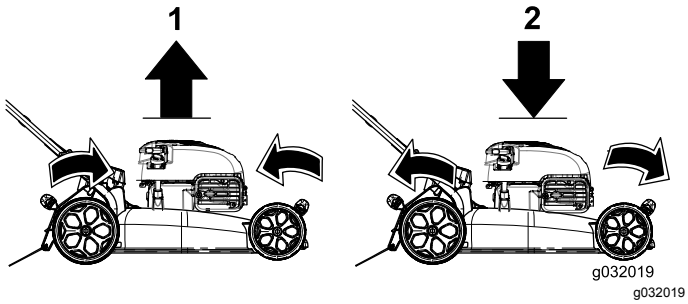


Figure 14

1. Raise the machine
2. Lower the machine

Important: **The cutting height settings are 32 mm (1-1/4 inch); 44 mm (1-3/4 inch); 57 mm (2-1/4 inches); 70 mm (2-3/4 inches); 83 mm (3-1/4 inches); 95 mm (3-3/4 inches).**

During Operation

During Operation Safety

General Safety

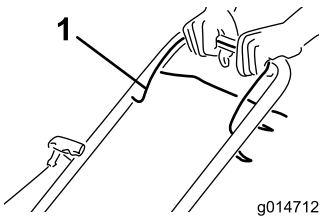
- Wear appropriate clothing, including eye protection; long pants; slip-resistant, substantial footwear; and hearing protection. Tie back long hair, secure loose clothing, and do not wear loose jewelry.
- Do not operate the machine while ill, tired, or under the influence of alcohol or drugs.
- The blade is sharp; contacting the blade can result in serious personal injury. Shut off the engine, remove the ignition key (electric-start model only), 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.
- Keep bystanders, especially small children, out of the operating area. Stop the machine if anyone enters the area.
- Always look down and behind you before moving the machine in reverse.
- 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. Avoid mowing in wet 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 the machine to overturn or cause you to lose your balance or footing.
- If the machine strikes an object or starts to vibrate, immediately shut off the engine, remove the key (if equipped), wait for all moving parts to stop, and disconnect the wire from the spark plug before examining the machine for damage. Make all necessary repairs before resuming operation.
- Before leaving the operating position, shut off the engine, remove the ignition key (electric-start model only), 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 chute frequently for any wear or deterioration 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.
- Mow with caution near drop-offs, ditches, or embankments.

Starting the Engine

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

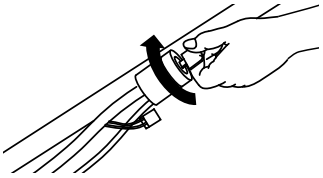


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Figure 15

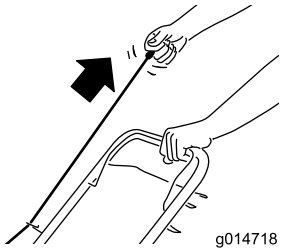
1. Blade-control bar

2. Insert the key into the electric starter (if equipped) and turn it; refer to Figure 16) or pull the recoil-start handle (Figure 17).



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Figure 16



g014718

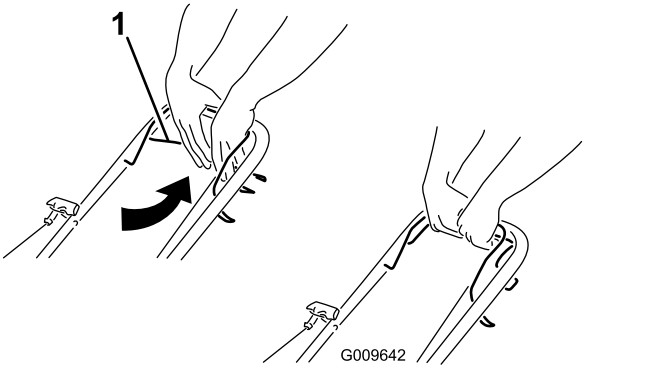
Figure 17

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

Using the Self-propel Drive

Self-Propel Model Only

To operate the self-propel drive, squeeze the self-propel-drive bar (Figure 18) to the handle and hold it.



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Figure 18

1. Self-propel-drive bar

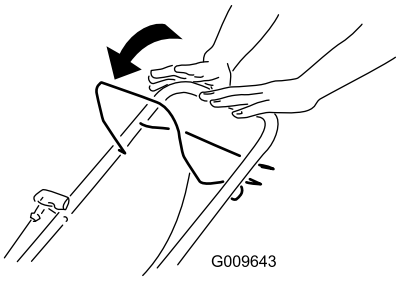
To disengage the self-propel drive, release the self-propel-drive bar.

Note: The maximum self-propel ground speed is fixed. To reduce the ground speed, increase the space between the self-propel-drive bar and the handle.

Shutting Off the Engine

Service Interval: Before each use or daily

To shut off the engine, release the blade-control bar (Figure 19).



g009643

Figure 19

Note: Remove the key (if equipped) whenever you leave the machine.

Important: **When you release the blade-control bar, the engine should shut off and the blade should stop within 3 seconds. If they do not, stop using your machine immediately and contact an Authorized Service Dealer.**

Mulching the Clippings

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

If the grass bag is on the machine, remove it before mulching the clippings. Refer to Removing the Grass Bag (page 12).

Bagging the Clippings

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

Installing the Grass Bag

1. Lift up the rear deflector (Figure 20).

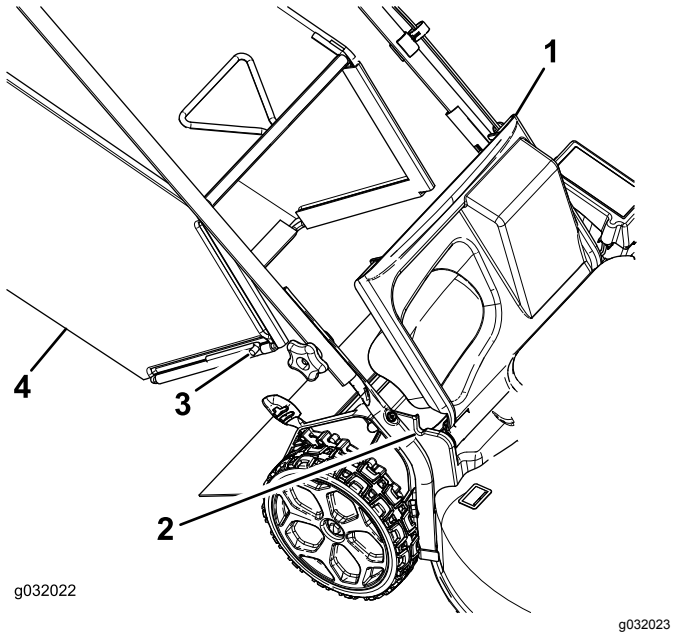


Figure 20

1. Rear deflector
2. Notch in the handle bracket (2)
3. Rod end (2)
4. Grass bag

---

2. Insert the rod ends of the grass bag into the notches in the handle brackets (Figure 20).
3. Allow the rear deflector to rest on the bag.

Removing the Grass Bag

1. Lift up the rear deflector (Figure 20).
2. Lift the grass-bag handle out from the notches on the handle brackets and remove the bag from the machine.
3. Close the rear deflector.

Side-Discharging the Clippings

Installing the Side-Discharge Chute

1. Lift up the rear deflector (Figure 21).

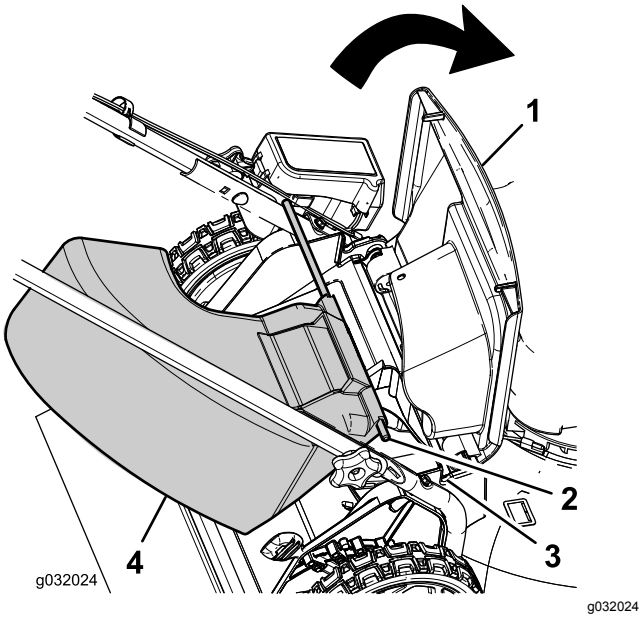


Figure 21

1. Rear deflector	3. Notch in the handle bracket (2)
2. Rod end (2)	4. Side-discharge chute

Note: If the grass bag is on the machine, remove it; refer to Removing the Grass Bag (page 12).

2. Insert the rod ends of the side-discharge chute into the notches on the handle brackets (Figure 21).
3. Allow the rear deflector to rest on the chute.

Removing the Side-Discharge Chute

1. Lift up the rear deflector (Figure 21).
2. Lift the side-discharge chute out form the notches on the handle brackets and remove the chute from the machine.
3. Close the rear deflector.

Operating Tips

General Mowing Tips

- Inspect the area where you will use the machine and remove all objects that the machine could throw.
- Avoid striking solid objects with the blade. Never deliberately mow over any object.
- If the machine strikes an object or starts to vibrate, immediately shut off the engine, remove the key (if equipped), disconnect the wire from the spark plug, 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 51 mm (2 inches) unless the grass is sparse or it is late fall when grass growth begins to slow down.
- 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.
- Wet grass and leaves tend to clump on the yard and can cause the machine to plug or the engine to stall. Avoid mowing in wet conditions.
- 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.

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, mow at a higher cutting height and then again at the desired cutting height.
- Slow down your mowing speed if the machine does not cut the leaves finely enough.

After Operation

After Operation 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 ignition key (if equipped) before loading the machine for hauling.
- Use care when loading or unloading the machine.
- Secure the machine from rolling.

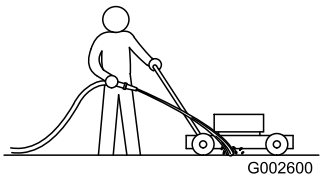
Cleaning under the Machine

Service Interval: After each use

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

1. Lower the machine to its lowest cutting-height setting.
2. Move the machine onto a paved level surface.
3. With the engine running and the blade engaged, spray a stream of water in front of the **right**, rear wheel (Figure 22).

   Note: The water will splash into the path of the blade, cleaning out the clippings.



g002600

Figure 22

4. When no more clippings come out, stop the water and move the machine to a dry area.
5. Run the engine for a few minutes to dry the underside of the machine.

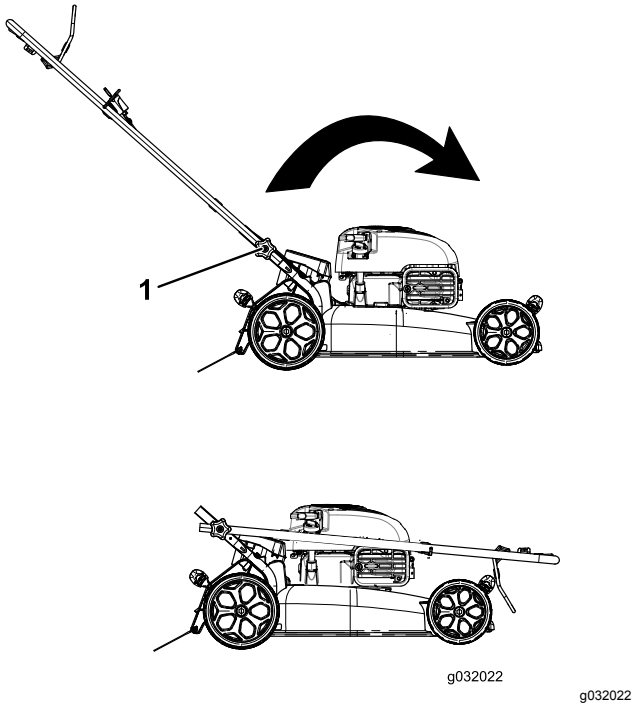
Folding the Handle

⚠ 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 ignition key (if equipped).
2. Loosen the handle knobs until you can move the handle freely (Figure 23).



g032022

Figure 23

1. Handle knob (2)

3. Move the handle forward as shown in Figure 23.

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
Before each use or daily	• Check the engine-oil level. • Ensure that the engine shuts off within 3 seconds after releasing the blade-control bar.
After each use	• Clean grass clippings and dirt from under the machine.
Every 25 hours	• Service the air filter; service it more frequently in dusty operating conditions. • Charge the battery for 24 hours (if equipped).
Yearly	• Change the engine oil. • Replace the blade or have it sharpened (more frequently if the edge dulls quickly). • Clean the engine by removing dirt and debris from its top and sides; clean it more frequently in dusty operating conditions.
Yearly or before storage	• Empty the fuel tank before repairs as directed and before yearly storage.

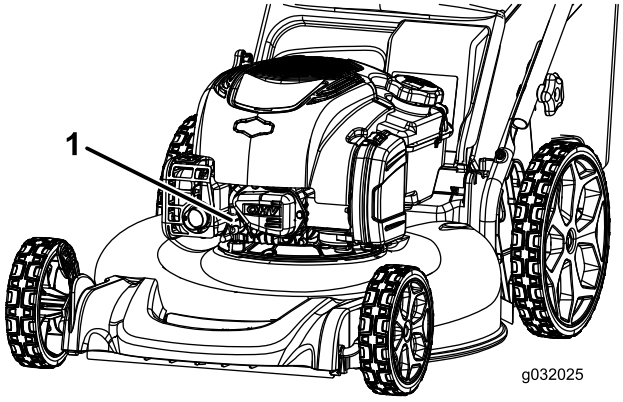
Important: **Refer to your engine manual for additional maintenance procedures.**

Maintenance Safety

- Disconnect the spark-plug wire from the spark plug and remove the ignition key (electric-start model only) 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. Do not repair or alter the blade(s).
- 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.
- To ensure optimum performance and continued safety certification of the machine, use only genuine Toro replacement parts and accessories. Replacement parts and accessories made by other manufacturers could be dangerous, and such use could void the product warranty.

Preparing for Maintenance

1. Shut off the engine, remove the ignition key (if equipped), and wait for all moving parts to stop.
2. Disconnect the spark-plug wire from the spark plug (Figure 24).



g032025

Figure 24

1. Spark-plug wire

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

Servicing the Air Filter

Service Interval: Every 25 hours/Yearly (whichever comes first)

1. Pull the tab to open the air-filter cover (Figure 25).

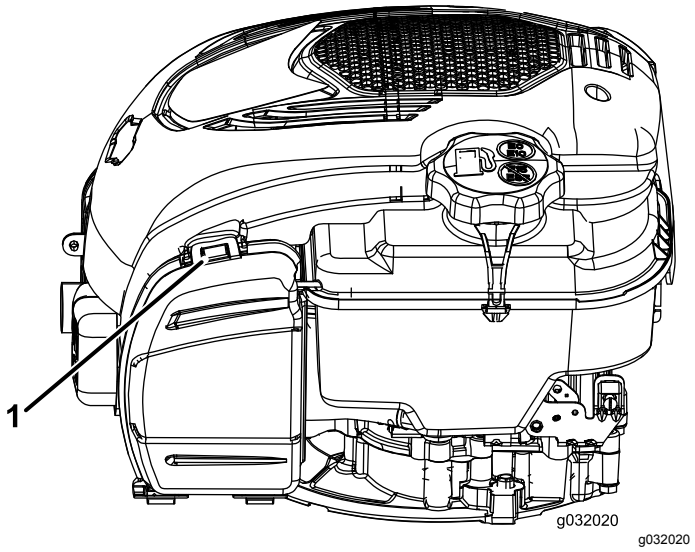


Figure 25

1. Tab

2. Replace the air filter.
3. Close the air-filter cover.

Changing the Engine Oil

Service Interval: Yearly

Changing the engine oil is not required, but if you want to change the oil, use the following procedure.

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

Engine Oil Specifications

Engine oil capacity	0.44 L (15 fl oz)
Oil viscosity	SAE 30 or SAE 10W-30 detergent oil
API service classification	SJ or higher

1. Move the machine to a level surface.
2. Refer to Maintenance Safety (page 15).
3. Remove the dipstick by rotating the cap counterclockwise and pulling it out (Figure 26).

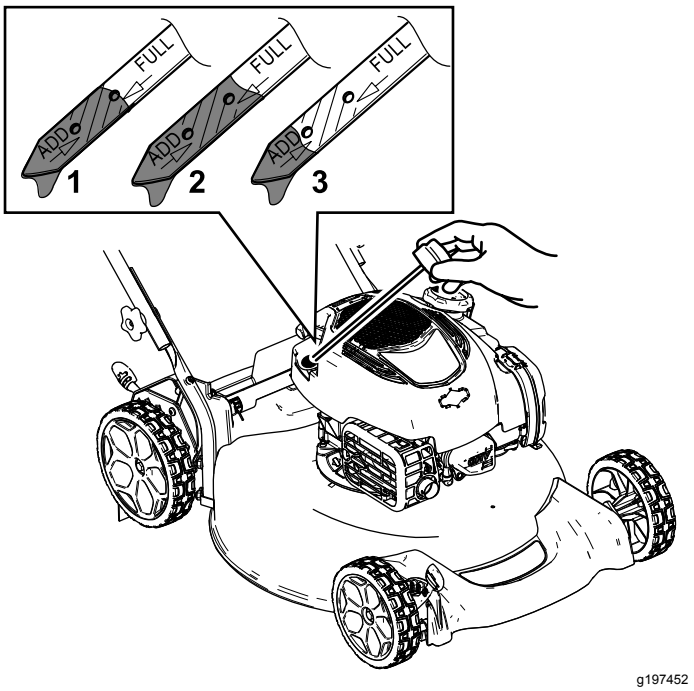
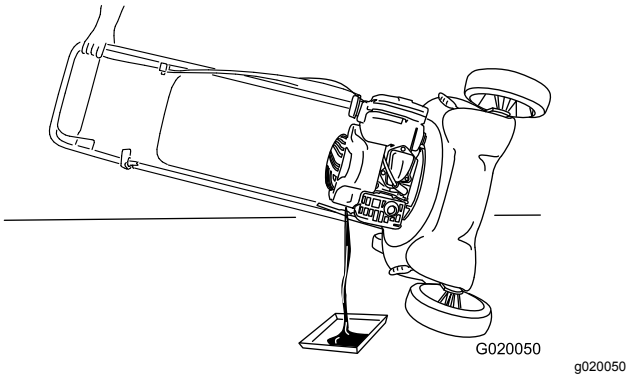


Figure 26

1. Full
2. High
3. Add

4. Tip the machine onto its side (so that the air filter is up) to drain the used oil from the oil-fill tube (Figure 27).



g020050

Figure 27

5. After draining the used oil, return the machine to the operating position.
6. Carefully pour about 3/4 of the engine capacity of oil into the oil-fill tube.
7. Wait 3 minutes for the oil to settle in the engine.
8. Wipe the dipstick clean with a clean cloth.
9. Insert the dipstick into the oil-fill tube, then remove the dipstick.
10. Read the oil level on the dipstick (Figure 26).
    - If the oil level on the dipstick is too low, carefully pour a small amount of oil into the oil-fill tube, wait 3 minutes, and repeat steps 8 through 10 until the oil level on the dipstick is correct.
    - If the oil level on the dipstick is too high, drain the excess oil until the oil level on the dipstick is correct.

    Important: **If the oil level in the engine is too low or too high and you run the engine, you may damage the engine.**
11. Install the dipstick into the oil-fill tube securely.
12. Recycle the used oil properly.

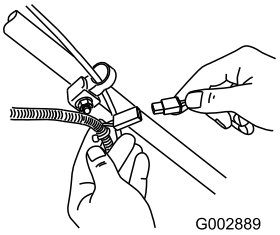
Charging the Battery

Electric-Start Model Only

Service Interval: Every 25 hours

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 room temperature (22°C or 70°F) whenever possible.

1. Connect the charger to the wire harness located below the ignition key (Figure 28).



g002889

Figure 28

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:

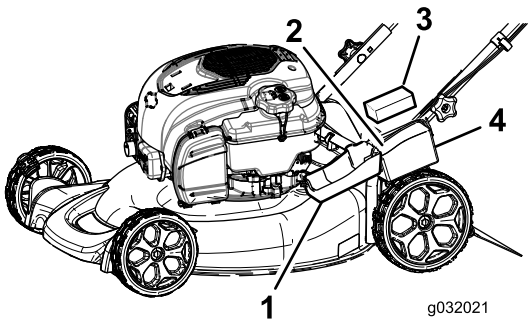
- A red light indicates that the charger is charging the battery.
- A green light indicates that the charger is fully charged or the charger is disconnected from the battery.
- A flashing light that alternates between red and green indicates that the battery is nearly fully charged. This state lasts 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 run with the electric starter, the fuse may be blown. Replace it with a 40 A plug-in type fuse.

1. Unclip the battery cover and remove it (Figure 29).

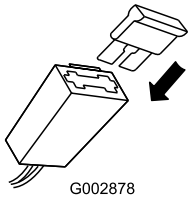


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Figure 29

1. Battery cover
2. Foam
3. Battery
4. Fuse holder

2. Insert the fuse into the fuse holder (Figure 30).



g002878

Figure 30

3. Install the battery cover.

Replacing the Blade

Service Interval: Yearly

***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.**

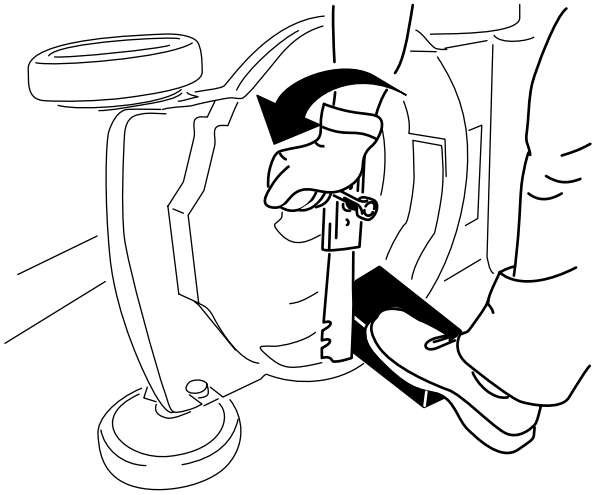
Examine the blade whenever you run out of fuel. If the blade is damaged or cracked, replace it immediately. If the blade edge is dull or nicked, have it sharpened and balanced, or replace it.

⚠ WARNING

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

Wear gloves when servicing the blade.

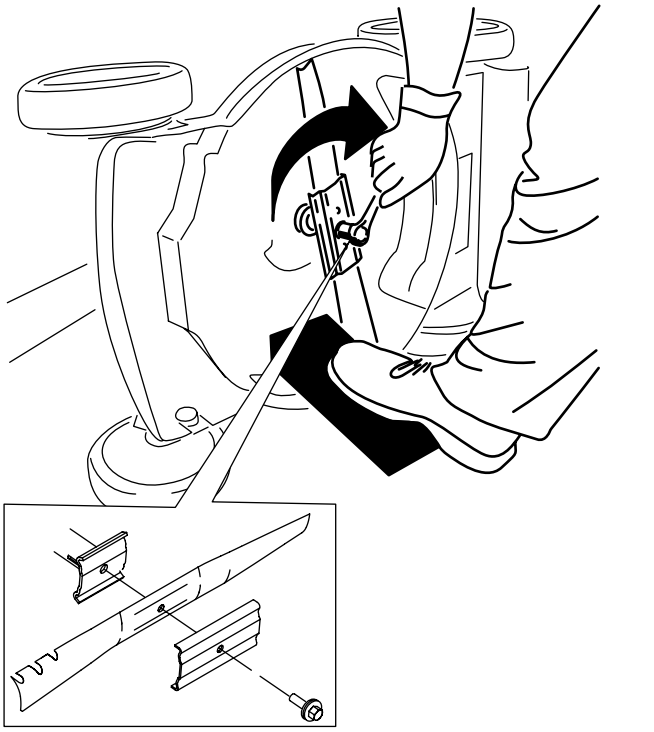
1. Refer to Preparing for Maintenance (page 15).
2. Tip the machine onto its side with the air filter up.
3. Use a block of wood to hold the blade steady (Figure 31).



g231389

Figure 31

4. Remove the blade, saving all mounting hardware (Figure 31).
5. Install the new blade and all mounting hardware (Figure 32).



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Figure 32

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

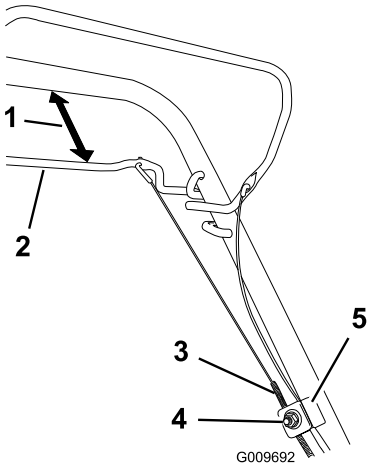
6. **Use a torque wrench to tighten the blade bolt to 82 N·m (60 ft-lb).**

   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 cable.

1. Loosen the cable-support nut (Figure 33).



g009692

Figure 33

1. 25 to 38 mm (1 to 1-1/2 inches)
2. Self-propel-drive bar
3. Cable jacket
4. Cable-support nut
5. Cable support

2. Hold the self-propel-drive bar 25 to 38 mm (1 to 1-1/2 inches) from the handle (Figure 33).
3. Pull down the cable jacket (toward the machine) until there is no slack in the cable (Figure 33).
4. Tighten the nut on the cable support.
5. Release the self-propel-drive bar and ensure that the cable is loose.

   Note: The cable must be loose with the self-propel drive bar in the released position; otherwise, the machine may creep when you disengage the bar.

Storage

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

Preparing the Machine for Storage

1. On the last refueling of the year, add fuel stabilizer (such as Toro Premium Fuel Treatment) to the fuel as directed on the label.
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 shuts off from running out of fuel.
4. Start the engine again and allow it to run until it shuts off. When you can no longer start the engine, it is sufficiently dry.
5. Disconnect the wire from the spark plug and connect the wire to the retaining post (if equipped) and remove the ignition key (if equipped).
6. Remove the spark plug, add 30 ml (1 fl oz) of engine oil through the spark-plug hole, and pull the recoil-starter rope slowly several times to distribute oil throughout the cylinder to prevent cylinder corrosion during the off-season.
7. Loosely install the spark plug.
8. Tighten all nuts, bolts, and screws.
9. **Electric-start models only:** Charge the battery for 24 hours, then unplug the battery charger and 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. Refer to Charging the Battery (page 17).

Removing the Machine from Storage

1. **Electric-start models only:** Charge the battery for 24 hours; refer to 4 Charging the Battery (page 6).
2. Check and tighten all fasteners.
3. Remove the spark plug and spin the engine rapidly by pulling the recoil-start handle to blow the excess oil from the cylinder.
4. Install the spark plug and tighten it with a torque wrench to 20 N·m (15 ft-lb).
5. Perform any maintenance procedures; refer to Maintenance (page 15).
6. Check the engine-oil level; refer to Checking the Engine-Oil Level (page 9).
7. Fill the fuel tank with fresh fuel; refer to Filling the Fuel Tank (page 9).
8. Connect the wire to the spark plug.

Notes:

Notes:

Notes:

European Privacy Notice

The Information Toro Collects
Toro Warranty Company (Toro) respects your privacy. In order to process your warranty claim and contact you in the event of a product recall, we ask you to share certain personal information with us, either directly or through your local Toro company or dealer.

The Toro warranty system is hosted on servers located within the United States where privacy law may not provide the same protection as applies in your country.

BY SHARING YOUR PERSONAL INFORMATION WITH US, YOU ARE CONSENTING TO THE PROCESSING OF YOUR PERSONAL INFORMATION AS DESCRIBED IN THIS PRIVACY NOTICE.

The Way Toro Uses Information
Toro may use your personal information to process warranty claims, to contact you in the event of a product recall and for any other purpose which we tell you about. Toro may share your information with Toro's affiliates, dealers or other business partners in connection with any of these activities. We will not sell your personal information to any other company. We reserve the right to disclose personal information in order to comply with applicable laws and with requests by the appropriate authorities, to operate our systems properly or for our own protection or that of other users.

Retention of your Personal Information
We will keep your personal information as long as we need it for the purposes for which it was originally collected or for other legitimate purposes (such as regulatory compliance), or as required by applicable law.

Toro's Commitment to Security of Your Personal Information
We take reasonable precautions in order to protect the security of your personal information. We also take steps to maintain the accuracy and current status of personal information.

Access and Correction of your Personal Information
If you would like to review or correct your personal information, please contact us by email at legal@toro.com.

Australian Consumer Law

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