Form No. 3407-658 Rev A

22in Recycler® Lawn Mower

Model No. 20370—Serial No. 312000001 and Up
Model No. 20371—Serial No. 312000001 and Up
Model No. 20377—Serial No. 312000001 and Up
Model No. 20378—Serial No. 312000001 and Up

Operator's Manual

Replacement parts are available from an Authorized Service Dealer or at www.shoptoro.com.

Introduction

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.

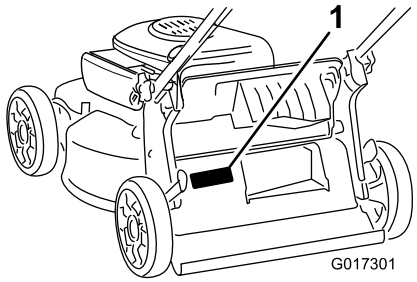


Figure 1

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.

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.

Important: This engine is not equipped with a spark arrester muffler. It is a violation of California Public Resource Code Section 4442 to use or operate the engine on any forest-covered, brush-covered, or grass-covered land. Other states or federal areas may have similar laws.

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.

For models with stated engine horsepower, the gross horsepower of the engine was laboratory rated by the engine manufacturer in accordance with SAE J1940. As configured to meet safety, emission, and operating requirements, the actual engine horsepower on this class of lawn mower will be significantly lower.

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Safety

This lawn mower meets the CPSC blade safety requirements for walk-behind rotary lawn mowers and the B71.1 specifications of the American National Standards Institute.

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.

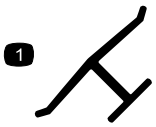
- Read and understand the contents of this *Operator's Manual* before you start the engine. Ensure that everyone using this product knows how to use it and understands the warnings.
- Do not put your hands or feet near moving components of the machine.
- Do not operate the machine without all guards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

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.



Manufacturer's Mark

1. Indicates the blade is identified as a part from the original machine manufacturer.



94-8072



112-8867

1. Lock
2. Unlock



114-7982

1. Warning—read the *Operator's Manual*.
2. Thrown object hazard—keep bystanders a safe distance away from the machine.
3. Cutting/dismemberment hazard of hand or foot, mower blade—remove the ignition key and read the instructions before servicing or performing maintenance.
4. Cutting/dismemberment hazard of hand or foot, mower blade—stay away from moving parts.
5. Cutting/dismemberment hazard of hand or foot, mower blade—do not operate up and down slopes; operate side to side on slopes; shut off the engine before leaving the operating position; and look behind you when backing up.

Setup

Important: Remove and discard the protective plastic sheet that covers the engine.

1

Installing 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 from the machine housing (Figure 3).

   Important: Route the cables to the outside of the handle knobs as you install the handle.

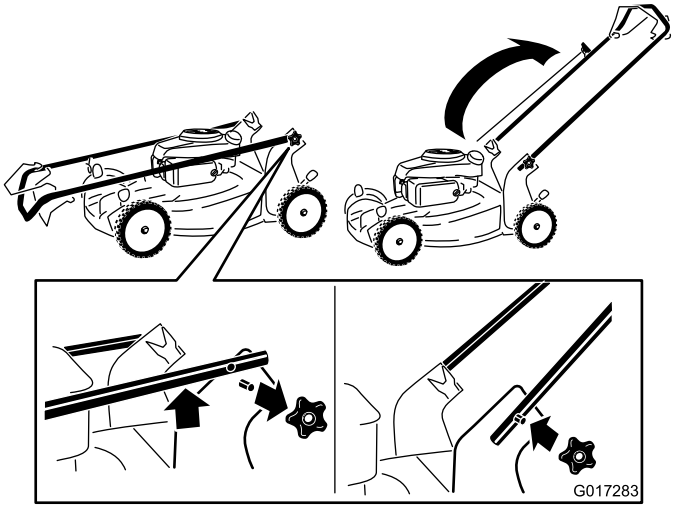


Figure 3

2. Move the handle to the operating position.
3. Install and tighten the handle knobs that you removed in step 1 (Figure 3).

2

Filling the Engine with Oil

No Parts Required

Procedure

Your machine does not come with oil in the engine.

1. Remove the dipstick (Figure 4).

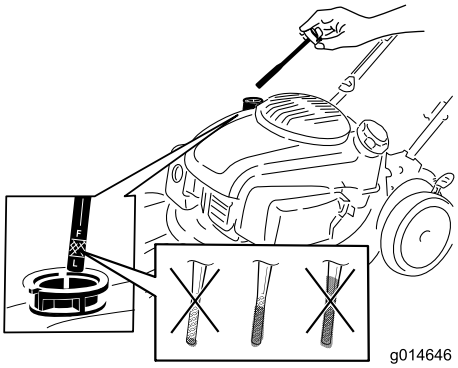


Figure 4

2. **Slowly** pour oil into the oil-fill tube until the oil level reaches the Full line on the dipstick (Figure 4). **Do not overfill.** (Max. fill: 0.65 L (22 oz), type: 10W-30 or SAE 30 detergent oil with an API service classification of SJ or higher.)

   Note: Each time you check the oil level, remove the dipstick and wipe it clean, insert it into the oil filler neck (but **do not** screw it in), then remove it again and check the level (Figure 4).

   Note: If you overfill the engine, pour some oil out of it; refer to Changing the Engine Oil (page 13).

3. 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 13).

Product Overview

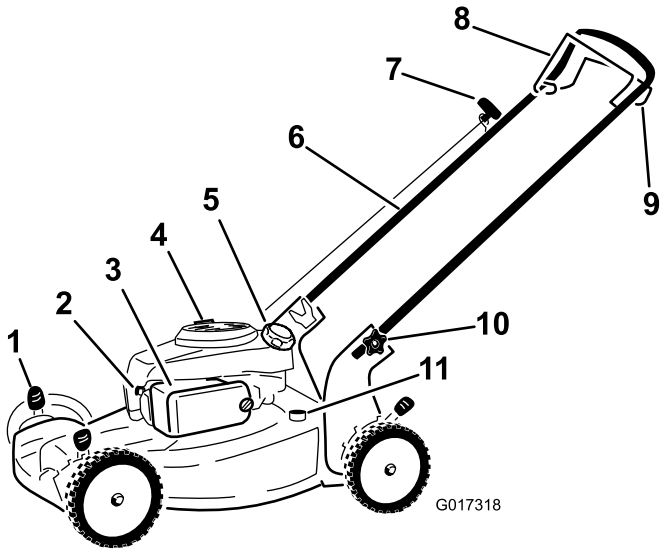


Figure 5

1. Cutting-height lever (4)
2. Spark plug
3. Air filter (not shown)
4. Oil fill/dipstick
5. Fuel-tank cap
6. Handle
7. Recoil-start handle
8. Blade-control bar
9. Self-propel-drive bar
10. Handle knob (2)
11. Washout port

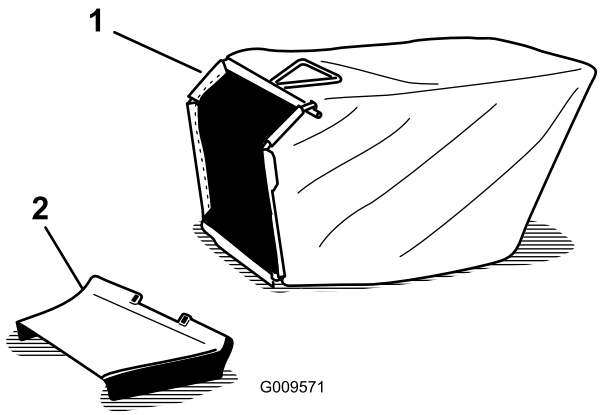


Figure 6

1. Grass bag
2. Side-discharge chute

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 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

⚠ DANGER

Gasoline is extremely flammable and explosive. A fire or explosion from gasoline can burn you and others.

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

Fill the fuel tank with fresh unleaded regular gasoline from a major name-brand service station (Figure 7).

Use unleaded regular gasoline suitable for automotive use (87 pump octane minimum). Leaded regular gasoline may be used if unleaded regular is not available.

Note: Never use methanol, gasoline containing methanol, or gasohol containing more than 10% ethanol because the fuel system could be damaged. Do not mix oil with gasoline.

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

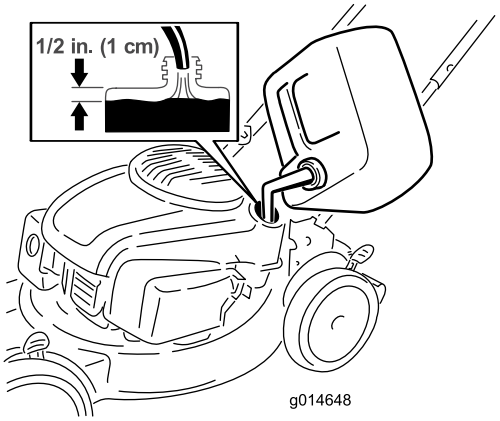


Figure 7

Checking the Engine-Oil Level

Service Interval: Before each use or daily

1. Remove the dipstick, wipe it clean, and insert it into the oil filler neck, but **do not** screw it in (Figure 8).

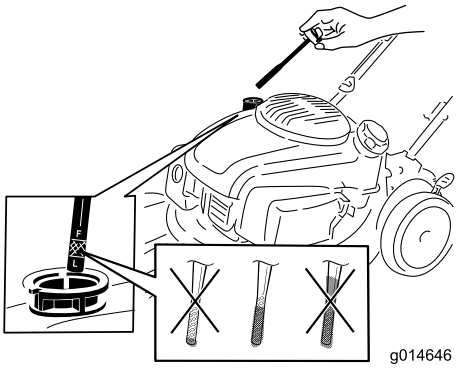


Figure 8

2. Remove the dipstick and check the oil level (Figure 8). If the oil level is below the Add mark on the dipstick, **slowly** pour oil into the oil-fill tube to raise the oil level to the Full mark on the dipstick. **Do not overfill.** (Max. fill: 0.65 L (22 oz), type: 10W-30 or SAE 30 detergent oil with an API service classification of SJ or higher.)

   Note: If you overfill the engine, pour some oil out of it as directed in Changing the Engine Oil (page 13).

3. Install the dipstick securely.

Adjusting the Cutting Height

⚠ WARNING

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

- **Shut off 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 the front wheels to the same height as the rear wheels.

Note: To raise the machine, move all the cutting-height levers rearward. To lower the machine, move all the cutting-height levers forward (Figure 9).

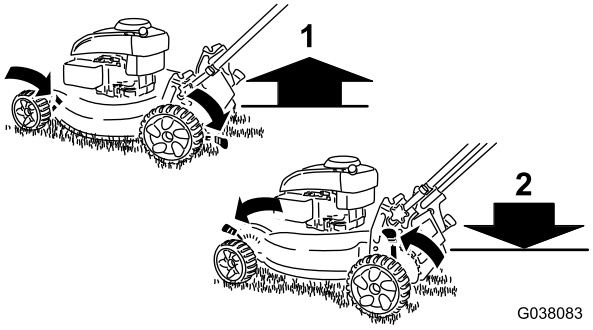


Figure 9

1. Raise the machine
2. Lower the machine

Note: The cutting height settings are 25 mm (1 inch); 35 mm (1-3/8 inches); 44 mm (1-3/4 inches); 54 mm (2-1/8 inches); 64 mm (2-1/2 inches); 73 mm (2-7/8 inches); 83 mm (3-1/4 inches); 92 mm (3-5/8 inches); and 102 mm (4 inches).

During Operation

During Operating Safety

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 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 key (electric start 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 guard frequently and replace them with the manufacturer's recommended parts when necessary.
- Use accessories and attachments approved by the 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. Hold the blade-control bar against the handle (Figure 10).

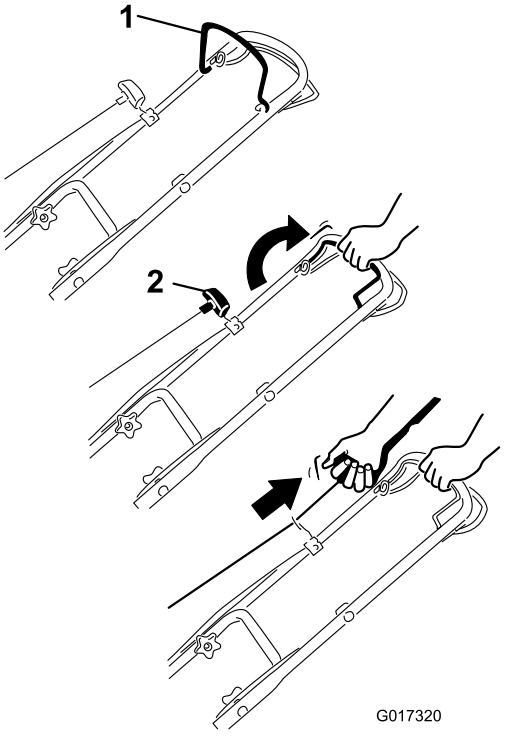


Figure 10

1. Blade-control bar
2. Recoil-start handle

2. Pull the recoil-start handle lightly until you feel resistance, then pull it sharply. Allow the rope to return to the handle slowly (Figure 10).

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

Using the Self-Propel Drive

To operate the self-propel drive, squeeze the self-propel-drive bar (Figure 11) toward the handle and hold it.

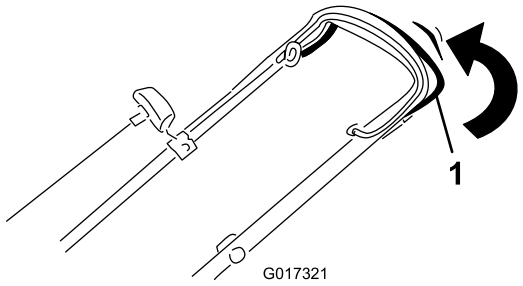


Figure 11

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

To shut off the engine, release the blade-control bar.

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.

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 before recycling the clippings; refer to Removing the Grass Bag (page 9). If the side-discharge chute is on the machine, remove it before recycling the clippings; refer to Removing the Side-Discharge Chute (page 10)

Bagging the Clippings

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

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

⚠ WARNING

A worn grass bag could allow small stones and other similar debris to be thrown toward you or bystander's, resulting in serious personal injury or death.

Check the grass bag frequently. If it is damaged, install a new Toro replacement bag.

If the side-discharge chute is on the machine, remove it before bagging the clippings; refer to Removing the Side-Discharge Chute (page 10).

⚠ WARNING

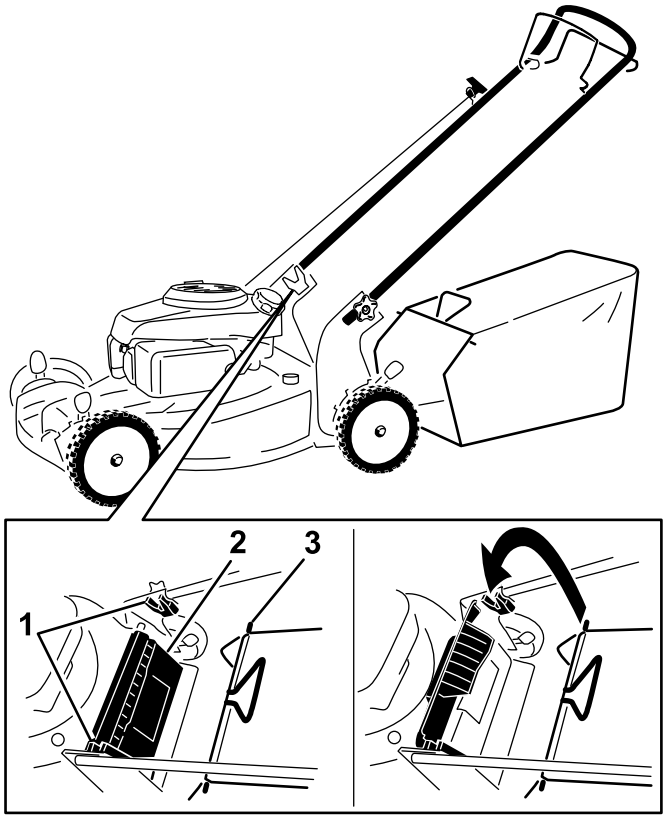
The blade is sharp; contacting the blade can result in serious personal injury.

Shut off the engine and wait for all moving parts to stop before leaving the operating position.

Installing the Grass Bag

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

1. Raise and hold up the rear deflector (Figure 12).



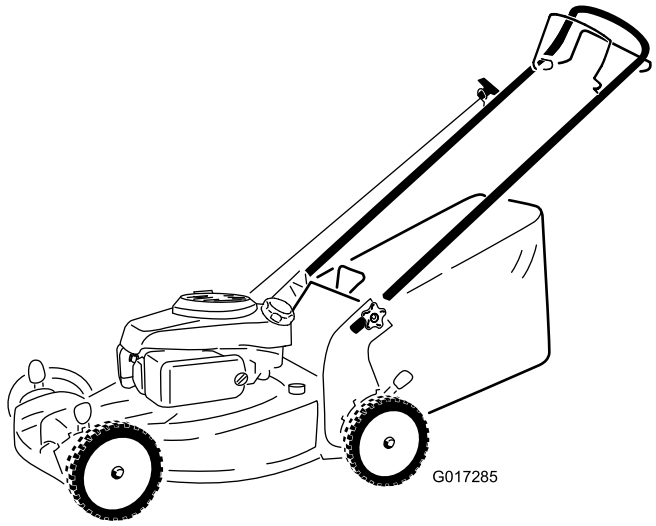


Figure 12

1. Notches
2. Rear deflector
3. Grass-bag pin (2)

2. Install the grass bag, ensuring that the pins on the bag rest in the notches on the handle (Figure 12).
3. Lower the rear deflector.

Removing the Grass Bag

To remove the bag, reverse the steps above.

Side-Discharging the Clippings

Use the side discharge for cutting very tall grass.

If the bag is on the machine, remove it before side-discharging the clippings.

⚠ WARNING

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

Shut off the engine and wait for all moving parts to stop before leaving the operating position.

Installing the Side-Discharge Chute

Lift up the side deflector and install the side-discharge chute (Figure 13).



Figure 13

Removing the Side-Discharge Chute

To remove the side-discharge chute, lift up the side deflector, remove the side-discharge chute, and lower the side-discharge deflector.

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 shut off the engine, 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 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 6).
- 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.

⚠ WARNING

Wet grass or leaves can cause serious injury if you slip and contact the blade. Mow only in dry 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, 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

- 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.

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. Loosen the handle knobs until you can move the upper handle freely.
2. Fold the upper handle forward as shown in Figure 14.

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

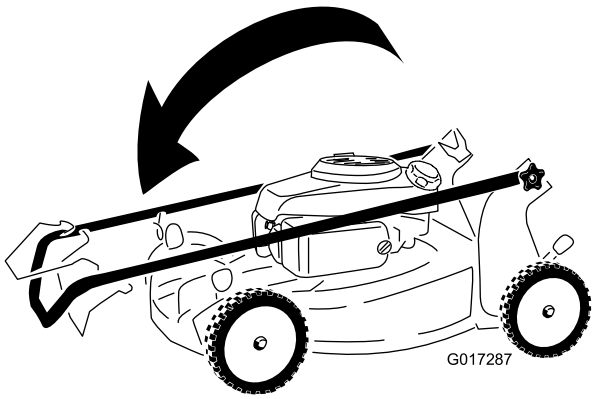


Figure 14

3. To unfold the handle, reverse the steps above.

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. • Ensure that the engine stops within 3 seconds after releasing the blade-control bar. • Clean grass clippings and dirt from under the machine.
Every 25 hours	• Check the air cleaner for dirty, loose, or damaged parts, and clean or replace them if necessary.
Every 50 hours	• Change the engine oil.
Every 100 hours	• Replace the air-cleaner element (more frequently when operating the machine in dusty or dirty operating conditions).
Before storage	• Empty the fuel tank before repairs as directed and before annual storage.
Yearly	• Replace the blade or have it sharpened; replace or sharpen it more frequently if the edge dulls quickly. • Clean the air-cooling system; clean it more frequently in dusty operating conditions. Refer to your engine operator's manual. • Refer to your engine operator's manual for any additional yearly maintenance procedures.

Important: Refer to your engine operator's manual for additional maintenance procedures.

Note: Replacement parts are available from an Authorized Service Dealer (go to www.Toro.com to find the nearest dealer) or at www.shoptoro.com.

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. Shut off the engine and wait for all moving parts to stop.
2. Disconnect the spark-plug wire from the spark plug (Figure 15) before performing any maintenance procedure.

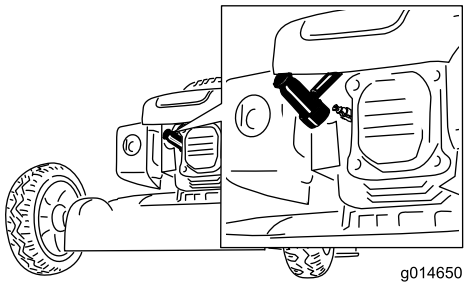


Figure 15

1. Spark-plug wire

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

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 dipstick down.

⚠ WARNING

Tipping the machine may cause the fuel to leak. Fuel is flammable, explosive and can cause personal injury.

Run the engine dry or remove the fuel with a hand pump; never siphon.

Servicing the Air Cleaner

Service Interval: Every 25 hours/Yearly (whichever comes first)—Check the air cleaner for dirty, loose, or damaged parts, and clean or replace them if necessary.

Every 100 hours/Yearly (whichever comes first)—Replace the air-cleaner element (more frequently when operating the machine in dusty or dirty operating conditions).

1. Perform the pre-maintenance procedures; refer to Preparing for Maintenance (page 12).
2. Unscrew and open the air-cleaner cover (Figure 16).

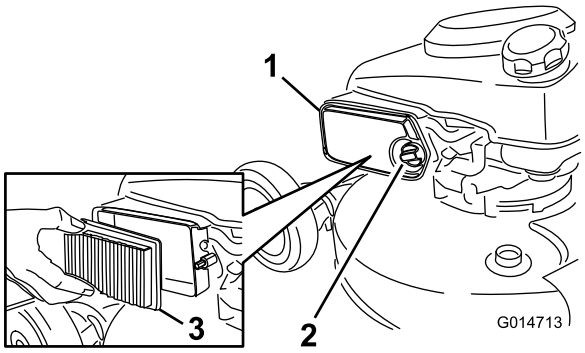


Figure 16

1. Screw
2. Air-cleaner cover
3. Air-cleaner element

3. Replace the air-cleaner element.
4. Install the air-cleaner cover.

Changing the Engine Oil

Service Interval: After the first 5 hours

Every 50 hours/Yearly (whichever comes first)

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 12).
2. Remove the dipstick (Figure 17).

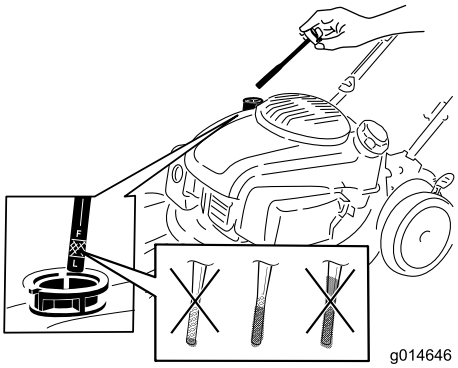


Figure 17

3. Tip the machine onto its side, with the air filter up, then remove the dipstick to drain the used oil out through the oil-fill tube (Figure 18).

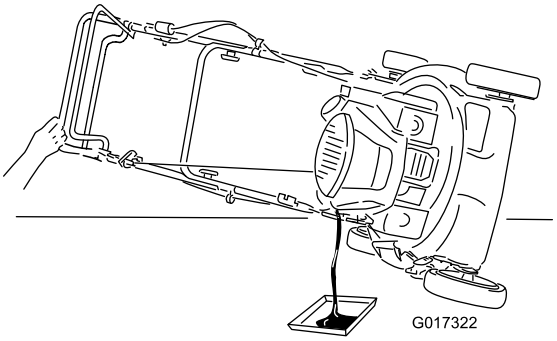


Figure 18

4. **Slowly** pour oil into the oil-fill tube until the oil level reaches the Full line on the dipstick (Figure 17). **Do not overfill.** (Max. fill: 0.65 L (22 oz), type: 10W-30 or SAE 30 detergent oil with an API service classification of SJ or higher.)

   Note: Each time you check the oil level, remove the dipstick and wipe it clean, insert it into the oil filler neck (but **do not** screw it in), then remove it again and check the level of the dipstick.

   Note: If you overfill the engine, pour some oil out of it.
5. Install the dipstick securely.
6. Dispose of the used oil properly at a local recycling center.

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 12).
2. Tip the machine onto its side with the air filter up.
3. Use a block of wood to hold the blade steady (Figure 19).

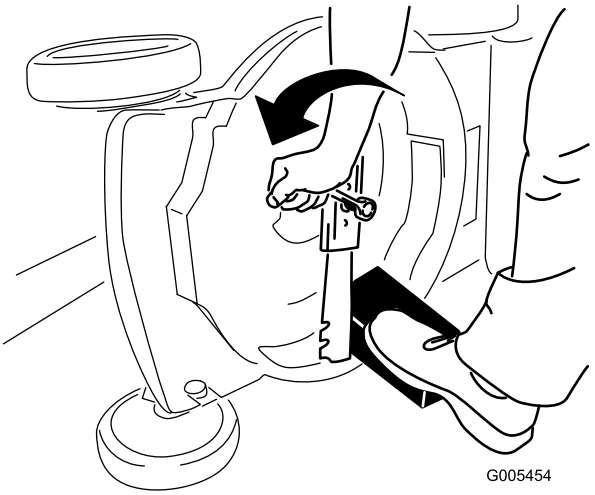


Figure 19

4. Remove the blade, saving all mounting hardware (Figure 19).
5. Install the new blade and all mounting hardware (Figure 20).

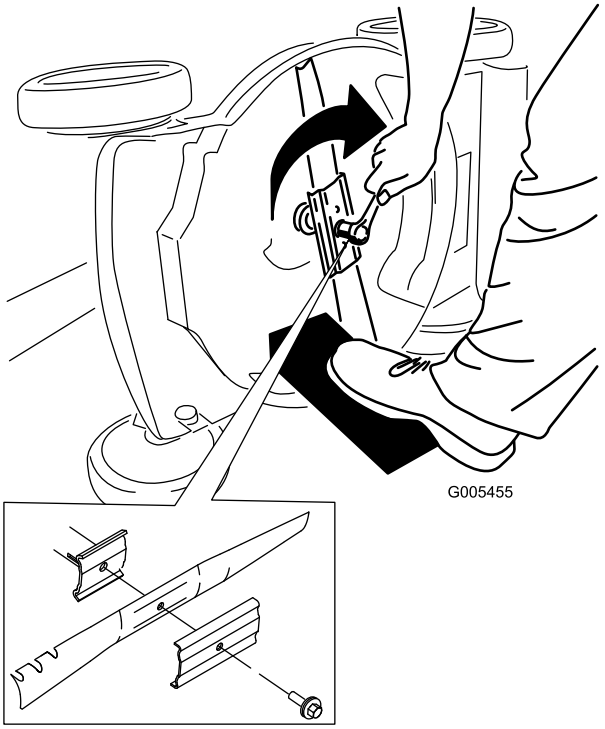


Figure 20

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 Cable

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 21).

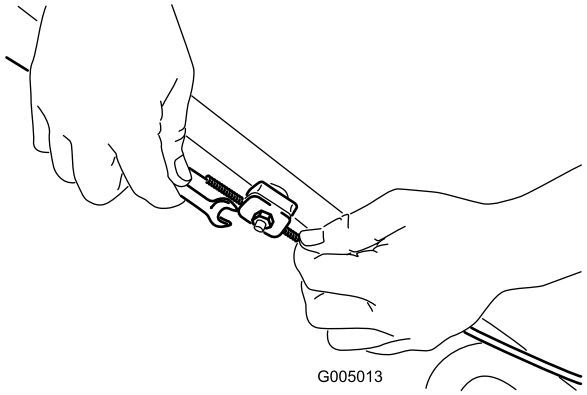


Figure 21

This figure is simplified for the purpose of clarity.

2. Pull down the cable jacket (toward the machine) until there is no slack in the cable (Figure 22).

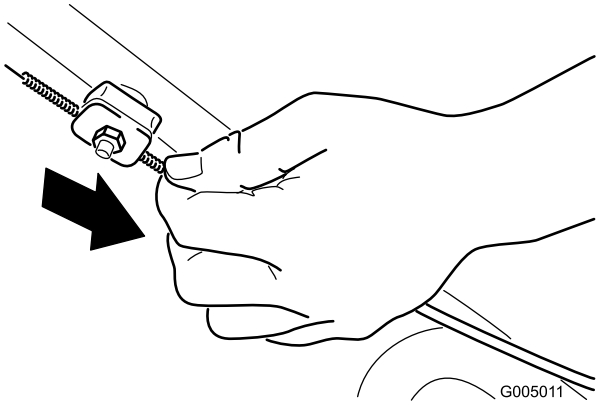


Figure 22

This figure is simplified for the purpose of clarity.

3. Tighten the nut on the cable support.

Cleaning the Machine

Service Interval: Before each use or daily

⚠ WARNING

The machine may dislodge material from under the machine housing.

- **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. Lower the machine to its lowest cutting height setting. Refer to Adjusting the Cutting Height (page 6).
2. Move the machine onto a flat paved surface.
3. Wash out the area under the rear deflector where the clippings go from the housing to the grass bag.

   Note: Wash out the area with the bag-on-demand in both the fully forward and fully rearward positions.
4. Attach a garden hose that is connected to a water supply to the washout port on the machine housing (Figure 23).

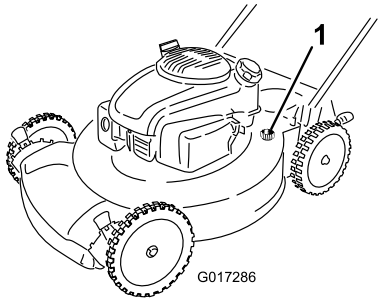


Figure 23

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 housing.
7. Shut off 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 housing to prevent it from rusting.
10. Allow the engine to cool before storing the machine in an enclosed area.

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 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.
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.

Removing the Machine from Storage

1. Remove the spark plug and spin the engine rapidly by pulling the recoil-start handle to blow the excess oil from the cylinder.
2. Install the spark plug and tighten it with a torque wrench to 20 N·m (15 ft-lb).
3. Connect the wire to the spark plug.

Notes:

Notes:

Notes:

The Toro Total Coverage Guarantee

A 2-Year Full Warranty (45 Day Limited Warranty for Commercial Use)

The Toro GTS Starting Guarantee

A 3-Year Full Warranty (Not Applicable for Commercial Use)

22 in Recycler®
20 in Mulcher/Bagger
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 Product 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
22 in Recycler and 20 in Mulcher/Bagger and Attachments	2 - year full warranty
GTS (Guaranteed to Start)	3 - year full warranty
Engine	3 - 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, or if a normal, able-bodied adult can no longer start your product's engine in one or two pulls, follow this procedure:

1. Contact any Authorized Toro Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, refer to the *Yellow Pages* of your telephone directory (look under “Lawn Mowers”) or 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
   The Toro Company
   8111 Lyndale Avenue South
   Bloomington, MN 55420-1196
   Toll free at 866-214-9807 (U.S. customers)
   Toll free at 866-214-9808 (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
- Any product or part which has been altered or misused and requires replacement or repair due to accidents or lack of proper maintenance
- Repairs necessary due to failure to use fresh fuel (less than one month old), or failure to properly prepare the unit prior to any period of non-use over one month
- Pickup and delivery charges
- Operational misuse, neglect, or accidents
- Repairs or attempted repairs by anyone other than an Authorized Toro Service Dealer
- Repairs or adjustments to correct starting difficulties due to the following:
  - failure to follow proper maintenance procedures
  - rotary mower blade striking an object
  - contaminants in the fuel system
  - improper fuel (consult your *Operator's Manual* if in doubt)
  - failure to drain the fuel system prior to any period of non-use over one month
- 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, 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.

*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.