

Count on it.

# Operator's Manual

# **String Mower**

Model No. 58620—Serial No. 322006065 and Up



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.

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.

Please refer to the engine manufacturer's information included with the machine.

#### **A 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.

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.

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

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.

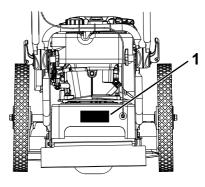


Figure 1

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1. Model and serial number location

Model No.	
Serial No. <sub>-</sub>	

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

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.

## Introduction

This machine is intended to be used by residential homeowners to trim grass as needed outdoors. Using this product for purposes other than its intended use could prove dangerous to you and bystanders.

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.

Visit www.Toro.com for product safety and operation training materials, accessory information, help finding a dealer, or to register your product.

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# Safety

This machine has been designed in accordance with EN 14910:2007+A1:2009.

#### **General Safety**

This product is capable 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 or under the machine.
- 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. Local regulations may restrict the age of the operator. 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, 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 A, which means Caution, Warning, or Danger—personal safety instruction. Failure to comply with these instructions may result in personal injury.

## **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.

▲ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov For more information, please visit www.ttcoCAProp65.com **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 loca fire agencies for laws or regulations relating to fire prevention requirements.

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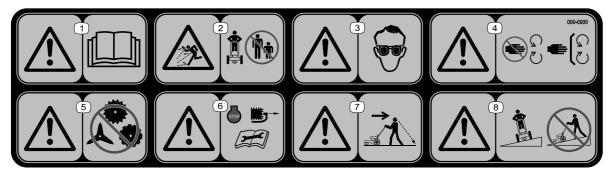
133-8062



decal144-4838

144-4838

1. Install the line.



decal144-4840

#### 144-4840

- Warning—read the Operator's Manual.
- 2. Thrown object hazard—keep bystanders away.
- Warning—wear eye protection.
- Warning—stay away from moving parts; keep all guards and shields in place.
- 5. Warning—do not install other cutting devices on the machine.
- Warning—shut off the engine and disconnect the spark plug and read the Operator's Manual before performing maintenance.
- 7. Warning—look behind you when operating the machine in reverse.
- Warning-do not operate up and down slopes; operate side to side on slopes.

# Setup

#### **Loose Parts**

Use the chart below to verify that all parts have been shipped.

Procedure	Description	Qty.	Use	
1	No parts required	-	Raise the handle.	
2	Discharge chute Screw	1 4	Install the discharge chute.	
3	Engine oil	1	Add oil to the engine.	



## Raising the Handle

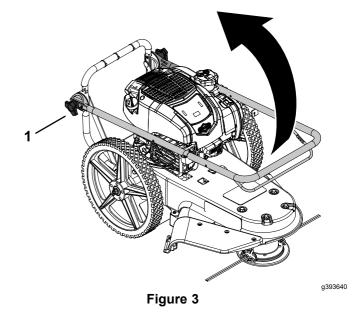
No Parts Required

#### **Procedure**

- Hold the handle with 1 hand and use the other to loosen both handle-adjustment knobs until the ratchet teeth are disengaged. Do not remove the knobs.
- 2. Raise the handle and adjust it to the desired position and align the ratchet teeth. Ensure that both sides are level.

*Important:* Ensure the cables are not pinched between the upper and lower handles.

Tighten the knobs and ensure that the handle pivots lock in place.



1. Handle-adjustment knob (2)

# **Installing the Discharge Chute**

#### Parts needed for this procedure:

1	Discharge chute
4	Screw

#### **Procedure**

Install the discharge chute to the mower deck as shown.

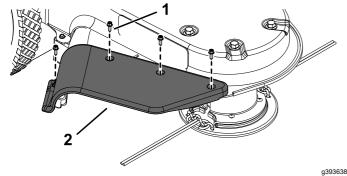


Figure 4

- 1. Screw (4)
- 2. Discharge chute



#### **Adding Oil to the Engine**

#### Parts needed for this procedure:

1 Engine oil
--------------

#### **Procedure**

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

- 1. Move the machine to a level surface.
- 2. Carefully pour about 3/4 of the engine capacity of oil into the oil-fill tube.
- 3. Wait 3 minutes for the oil to settle in the engine.
- 4. Wipe the dipstick clean with a clean cloth.

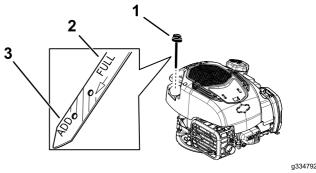


Figure 5

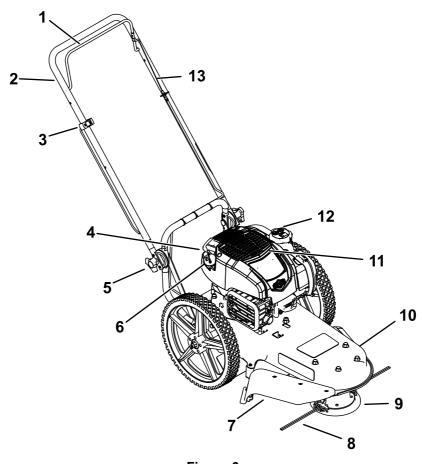
- 1. Dipstick
- 2. Full

- 3. Add
- 5. Insert the dipstick into the oil-fill tube, then remove the dipstick.
- 6. Read the oil level on the dipstick (Figure 5).
  - 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 4 through 6 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.

- 7. Install the dipstick into the oil-fill tube securely.
- 8. Recycle the used oil properly.

## **Product Overview**



g393639

Figure 6

- 1. Mower bail
- 2. Upper handle
- 3. Engine on/off switch
- 4. Recoil start handle
- 5. Handle-adjustment knob
- 6. Oil dipstick and filler neck
- 7. Discharge chute
- 8. Mower line
- 9. Mower head
- 10. Mower deck
- 11. Debris screen
- 12. Fuel cap

13. Adjustment cable

# **Specifications**

**Note:** Specifications and design are subject to change without notice.

Length	137 cm (54 inches)
Width with discharge chute installed	62 cm (24 inches)
Width without chute installed	54.5 cm (21.5 inches)
Height	99 cm (39 inches)
Weight	31 kg (68 lb)
Cutting width	56 cm (22 inches)

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.

# **Operation**

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

# **Before Operation Before Operation Safety**

#### **General Safety**

- Do not allow children or untrained people to operate or service the machine. Local regulations may restrict the age of the operator.
- Shut off the machine and wait for all moving parts to stop before you leave the operator's position.
   Allow the machine to cool before adjusting, fueling, unclogging, servicing, cleaning, or storing the machine.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- Check that all guards and safety devices, such as deflectors, are in place and functioning properly.
   Do not operate the machine unless they are functioning properly.
- Know how to shut off the engine quickly.
- Inspect the machine frequently to ensure that it is in safe working condition and that engine-mounting bolts and other fasteners are properly tightened.
- 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.
- Contact with the moving string lines will cause serious injury. Do not put your hands or feet near them.

#### **Fuel Safety**

- Use extreme care in handling fuel. It is extremely flammable and its vapors are explosive.
- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Use only an approved fuel container.
- Do not remove the fuel cap or add fuel to the tank while the engine is running.
- Allow the engine to cool before filling the fuel tank.
- Do not fill the fuel tank indoors.
- Do not store the machine or fuel container where there is an open flame, spark, or pilot light, such as on a water heater or other appliance.
- Do not fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place

- containers on the ground, away from the vehicle before filling.
- Remove the machine from the truck or trailer before filling the fuel tank. If this is not possible, then add fuel from a portable container rather than from a fuel-dispenser nozzle.
- Keep the fuel-dispenser nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If you spill fuel on your clothing, change your clothing immediately.
- Do not overfill the fuel tank. Replace the fuel cap and tighten it securely after fueling.
- If you spill fuel, do not attempt to start the engine; move the machine away from the spill and avoid creating a source of ignition until the fuel vapors have dissipated.
- Store fuel in a fuel 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.

## **Adding Fuel**

#### **Fuel Specifications**

Туре	Unleaded gasoline
Minimum octane rating	87 (US) or 91 (research octane; outside the US)
Ethanol	No more than 10% by volume
Methanol	None
MTBE (methyl tertiary butyl ether)	Less than 15% by volume
Oil	Do not add to the fuel

Use only clean, fresh (no more than 30 days old), fuel from a reputable source.

#### **Using Stabilizer/Conditioner**

Use fuel stabilizer/conditioner in the machine to keep the fuel fresh longer when used as directed by the fuel-stabilizer manufacturer.

## Important: Do not use fuel additives containing methanol or ethanol.

Add the amount of fuel stabilizer/conditioner to fresh fuel as directed by the fuel-stabilizer manufacturer.

#### Filling the Fuel Tank

Fill the fuel tank as shown in Figure 7.

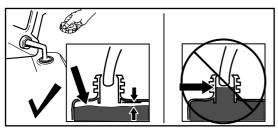


Figure 7

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# Adjusting the Handle Height and Angle

- 1. Holding the handle with 1 hand, loosen both handle-adjustment knobs until the ratchet teeth are disengaged. Do not remove the knobs.
- 2. Adjust the handle to the desired position and align the ratchet teeth. Ensure that both sides are level.
- 3. Tighten the knobs.

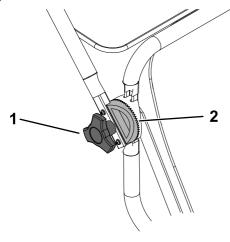


Figure 8

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1. Handle-adjustment knob

2. Ratchet teeth

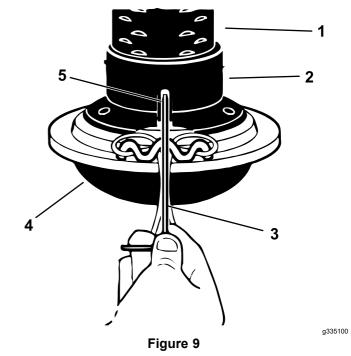
# Performing Daily Maintenance

Before starting the machine each day, perform the Each Use/Daily procedures listed in Maintenance (page 12).

#### **Adjusting the Height of Cut**

You can adjust the height of cut from 38 to 76 mm (1-1/2 to 3 inches). The recommended cutting height for most yards is 51 mm (2 inches).

- 1. Move the machine to a level surface, shut off the engine, and wait for all moving parts to stop.
- 2. Disconnect the spark-plug wire from the spark plug.
- 3. Use an Allen wrench (5 mm) to loosen the 2 capscrews.
- 4. Adjust the mower head to the desired height.
- 5. Tighten the capscrews.
- 6. Connect the spark plug.



- 1. Height-of-cut positions
- 2. Mower head
- 3. Allen wrench
- 4. Height guide
- 5. Capscrews

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#### **During Operation**

#### **During Operation Safety**

#### **General Safety**

- Wear appropriate clothing, including eye protection; long pants; substantial, slip-resistant footwear; and hearing protection. Tie back long hair and do not wear loose clothing or loose jewelry.
- Use your full attention while operating the machine. Do not engage in any activity that causes distractions; otherwise, injury or property damage may occur.
- Do not operate the machine while ill, tired, or under the influence of alcohol or drugs.
- Keep bystanders out of the operating area. Keep small children out of the operating area and under the watchful care of a responsible adult who is not operating the machine. Stop the machine if anyone enters the area.
- Always look down and behind you before moving the machine in reverse or pulling the machine toward you.
- Operate the machine only in good visibility and appropriate weather conditions. Do not operate the machine when there is the risk of lightning.
- Wet grass or leaves can cause injury if you slip and fall. Avoid mowing in wet conditions.
- Use extreme care when approaching blind corners, shrubs, trees, or other objects that may block your view.
- Do not direct the discharge material toward anyone. Avoid discharging material against a wall or obstruction; material may ricochet toward you. Stop the machine when crossing gravel surfaces.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could cause you to lose your balance or footing.
- If the machine strikes an object or starts to vibrate, immediately shut off the engine, 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.
- Do not pick up or carry the machine while the engine is running.
- Always shut off the machine, wait for all moving parts to stop, and allow the machine to cool before adjusting, servicing, cleaning, or storing it.

- If the engine has been running, it will be hot and can severely burn you. Keep away from the hot engine.
- Operate the engine only in well-ventilated areas.
   Exhaust gases contain carbon monoxide, which is an odorless, deadly poison.
- Do not change the engine governor settings or overspeed the engine.
- When shutting off the engine, reduce the throttle setting and, if the engine is equipped with a shut-off valve, shut off the fuel.
- Shut off the machine if you must tilt it to transport it when crossing surfaces other than grass and when transporting it to and from the operating area.
- Do not engage the bail when starting the engine.
- Start the engine carefully according to the instructions and keep your feet away from the cutting line.
- Do not tilt the machine when starting the engine unless it is necessary. If you must tilt the machine, do not tilt it more than necessary and lift only the part that is away from you.
- Never replace the cutting lines with metal parts.
- Never adjust or repair the machine while the engine is running. Always wear eye protection whenever you make adjustments or repairs.

#### **Slope Safety**

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

#### **Starting the Engine**

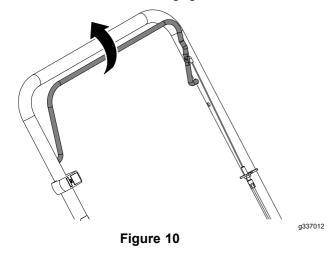
- 1. Set the engine on/off switch to the ON position.
- Pull the recoil-start handle.

**Note:** When you pull the recoil-start handle, pull it lightly until you feel resistance, then pull it sharply. Allow the rope to return to the handle slowly.

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

#### **Engaging the Mower Head**

- 1. After starting the engine, hold the mower bail against the handle to start mower head.
- 2. Push the machine forward to mow.
- Release the bail to disengage the mower head.



## **Shutting Off the Engine**

- 1. Release the mower bail.
- Move the engine on/off switch to the OFF position.
- 3. Wait for all moving parts to stop before leaving the operating position.

#### **Operating Tips**

- When mowing tall and thick weeds or grass, operate the machine at a slower walking speed.
- Frequently remove grass buildup under the mower; refer to Removing Debris from the Machine (page 19).
- For best results and increased line life, mow using the ends of the line by moving slowly through thick or heavy weeds.
- Shorter mower lines increase job time. Replace the mower lines when they are worn to less than half their original length.
- Mower head contact with concrete, asphalt, and harder surfaces may cause premature wear to the height guide and lines.

#### After Operation

#### **After Operation Safety**

#### **General Safety**

- Always shut off the machine, wait for all moving parts to stop, and allow the machine to cool before adjusting, servicing, cleaning, or storing it.
- Clean grass, debris, and excessive grease from the machine to help prevent fires. Clean up oil or fuel spills.
- 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.
- · Secure the machine from rolling.

#### **Maintenance**

#### **Maintenance Safety**

- Shut off the machine and wait for all moving parts to stop before you leave the operator's position.
   Allow the machine to cool before adjusting, fueling, unclogging, servicing, cleaning, or storing it.
- Disconnect the spark-plug wire from the spark plug before performing any maintenance procedure.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep all nuts, bolts and screws tight to ensure that the machine is in safe working condition.

- Replace a faulty muffler.
- Tipping the machine may cause the fuel to leak.
   Fuel is flammable and explosive, and can cause personal injury. Run the engine dry or remove the fuel with a hand pump; never siphon the fuel.
- Inspect the machine regularly and replace worn or damaged parts. Ensure that parts are not bent, damaged, or loose.
- To ensure optimum performance 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.

#### Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure	
Before each use or daily	<ul> <li>Check the mower lines. Replace the line when it is half the original length.</li> <li>Remove debris from the machine.</li> <li>Check the mower head engagement.</li> <li>Check and tighten fasteners.</li> </ul>	
Every 2 hours	Check the belt tension.	
Every 25 hours	<ul> <li>Service the air filter; service it more frequently in dusty operating conditions.</li> <li>Lubricate the jackshaft assembly.</li> </ul>	
<ul> <li>Change the engine oil per engine manufacturer requirements</li> <li>Service the air cleaner.</li> <li>Empty the fuel tank.</li> </ul>		
Yearly	<ul> <li>Replace the air filter; replace it more frequently in dusty operating conditions.</li> <li>Change the engine oil per engine manufacturer requirements.</li> </ul>	

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

## Pre-Maintenance Procedures

## **Preparing for Maintenance**

- 1. Move the machine to a level surface, shut off the engine, and wait for all moving parts to stop.
- 2. Disconnect the spark-plug wire from the spark plug.

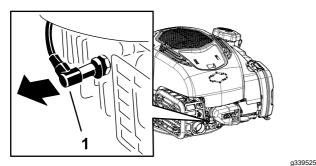


Figure 11

- 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 mower line, 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.

# Engine Maintenance

## **Servicing the Air Filter**

Service Interval: Every 25 hours

Yearly

1. Unclip the top of the air-filter cover.

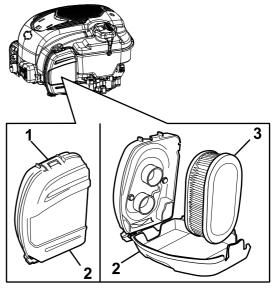


Figure 12

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- 1. Clip
- 2. Air-filter cover
- 3. Air filter
- 2. Remove the air filter.
- 3. Inspect the air filter.

**Note:** If the air filter is excessively dirty, replace it with a new filter. Otherwise, gently tap the air filter on a hard surface to loosen debris.

- 4. Install the air filter.
- 5. Use the clip to install 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	

\*There is residual oil in the crankcase after you drain the oil. Do not pour the entire capacity of oil into the crankcase. Fill the crankcase with oil as directed in the following steps.

- Move the machine to a level surface.
- 2. Refer to Preparing for Maintenance (page 13).
- 3. Remove the dipstick by rotating the cap counterclockwise and pulling it out.

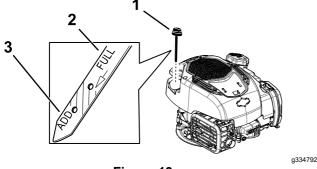


Figure 13

1. Dipstick

3. Add

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

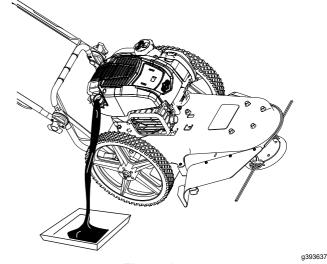


Figure 14

- 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.
  - 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.

#### **Servicing the Spark Plug**

Ensure that the air gap between the center and side electrodes is correct before installing the spark plug.

Use a spark plug wrench for removing and installing the spark plug(s) and a gapping tool/feeler gauge to check and adjust the air gap. Install a new spark plug(s) if necessary.

Type: Champion RN9YC or equivalent

Air gap: 0.75 mm (0.03 inch)

#### Removing the Spark Plug

1. Disconnect the spark-plug wire from the spark plug.

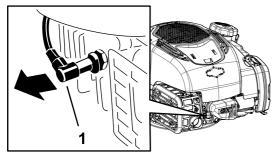


Figure 15

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- 1. Spark-plug wire
- 2. Clean around the spark plugs to prevent dirt from entering the engine and potentially causing damage.
- 3. Remove the spark plug.

#### **Checking the Spark Plug**

Important: Do not clean the spark plug(s). Always replace the spark plug(s) when it has a black coating, worn electrodes, an oily film, or cracks.

If you see light brown or gray on the insulator, the engine is operating properly. A black coating on the insulator usually means the air cleaner is dirty.

Set the gap to 0.75 mm (0.03 inch).

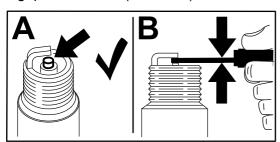


Figure 16

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#### **Installing the Spark Plug**

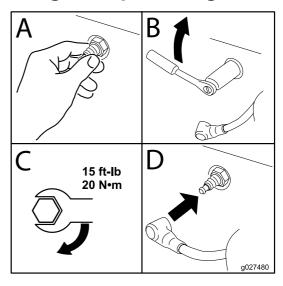


Figure 17

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# Drive System Maintenance

# Removing and Installing the Wheels

**Service Interval:** Every 25 hours—Lubricate the jackshaft assembly.

Remove and install the wheels as shown.

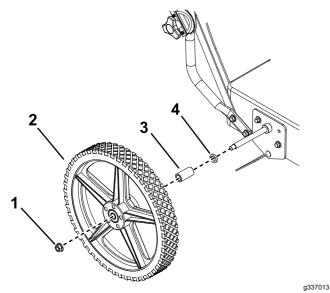


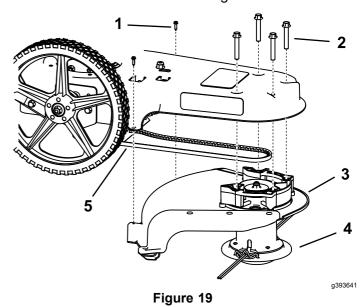
Figure 18

- 1. Axle nut
- 2. Wheel

- 3. Spacer
- 4. Lockwasher

#### **Replacing the Drive Belt**

1. Remove the 2 fasteners securing the rear of the shield to the mower housing.



- . Rear fastener (2)
- 2. Front fastener (4)
- 3. Shield

- 4. Mower head
- 5. Drive belt
- 2. Remove the 4 fasteners securing the front of the shield and mower head to the mower housing.
- 3. Raise the front of the mower housing, loosen the mounting bolt on the drive pulley, and remove the "V" pulley from the idler bracket.

Important: Do not bend the belt guides.

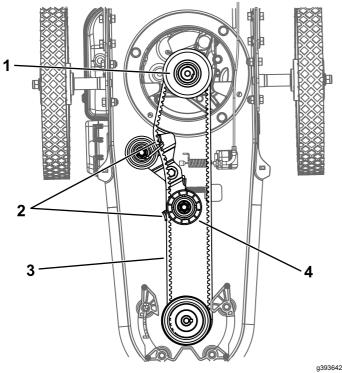


Figure 20

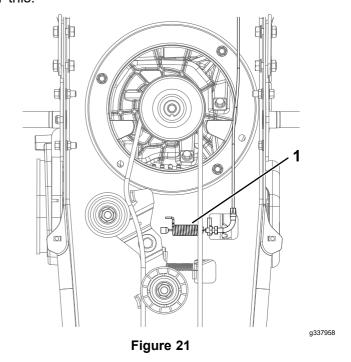
- 1. Drive pulley
- 2. Belt guide
- 3. Drive belt
- 4. "V" pulley
- 4. Remove the drive belt and install a new one.
- 5. Install the "V" pulley to the idler bracket.
- 6. Tighten the mounting bolt on the drive pulley.
- 7. Secure the mower head and the shield (Figure 19).

# **Adjusting the Drive Belt Tension**

Service Interval: Every 2 hours

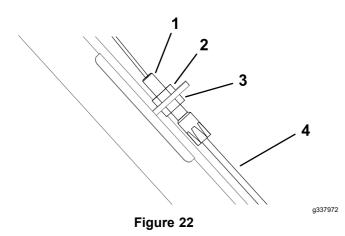
Maintain proper belt tension to improve machine performance. Engage the drive lever and ensure that the spring extends 3 to 6 mm (1/8 to 1/4 inch). If it does not, adjust the belt tension.

**Note:** You may hear a short buzzing sound after releasing the engagement lever while using the machine. This is normal and is caused by the teeth of the cogged belt contacting the wire belt guide to stop rotation. You do not need to adjust the belt tension for this.



1. Spring

 Loosen the upper jam nut on the adjustment cable.

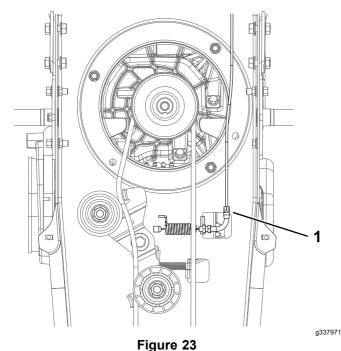


- 1. Barrel nut
- 2. Upper jam nut
- 3. Lower jam nut
- 4. Adjustment cable
- Tighten the lower jam nut in 3 mm (1/8 inch) increments.

**Note:** A higher number of barrel-nut threads below the bracket increases the tension on the belt.

#### Important: Do not overadjust the tension.

- 3. Engage the drive lever and verify that the spring extends 3 to 6 mm (1/8 to 1/4 inch); adjust the jam nut again as needed.
- 4. Tighten the bottom jam nut.
- 5. If the mower still does not properly engage after adjusting the cable, adjust the jam nut for the second cable under the mower deck.



1. Jam nut

#### Mower Maintenance

#### **Replacing the Mower Line**

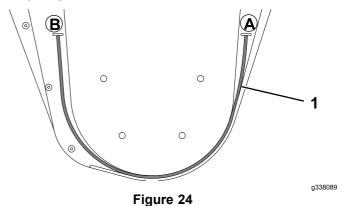
**Service Interval:** Before each use or daily—Check the mower lines. Replace the line when it is half the original length.

Use a 4 mm (0.155 inch diameter) mower line, with a length of 55 cm (21-1/2 inches).

Important: Do not allow the line lengths to vary more than 2.5 cm (1 inch). Otherwise, the mower head may not be balanced and vibrate during operation.

**Note:** Keep the mower line moist to extend its life, maintain flexibility, and ease replacement. Store extra line in water.

- Remove the worn mower line from the line retainer.
- 2. Cut new mower line to 55 cm (21-1/2 inches) or using the length guide (Figure 24) as follows:
  - Place 1 end of the line at 1 mark on the shield.
  - B. Bend the line along the raised portion of the shield to the second mark.
  - C. Cut the line at the second mark.



- 1. Length guide
- 3. Thread the ends of the new mower line through the outer loops (Figure 25).
- 4. Cross the ends over the line retainer and threat them through the center hole.
- 5. Ensure that the ends of the line are even.

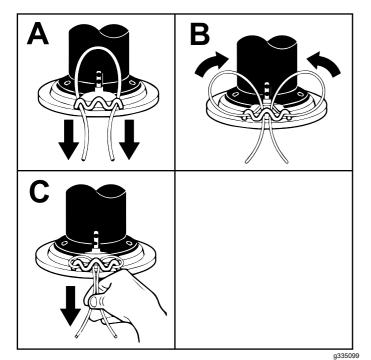


Figure 25

# Cleaning

# **Removing Debris from the Machine**

Regular cleaning and washing increases the lifespan of the machine. Clean the machine directly after use.

Check before cleaning that the fuel tank cap is properly in place to avoid getting water in the tank.

Important: You can wash the machine with mild detergent and water. Do not pressure-wash the machine. Avoid excessive use of water, especially near the engine.

# **Storage**

#### **Storage Safety**

- Always shut off the machine, wait for all moving parts to stop, and allow the machine to cool before adjusting, servicing, cleaning, or storing it.
- Never store the machine with fuel in the tank inside a building where fumes may reach an open flame or spark.

#### **Storing the Machine**

For storage over 30 days, prepare the machine as follows:

- 1. Park the machine on a level surface, disengage the mower head, and shut off the engine.
- 2. Remove debris from the machine and engine.

Important: You can wash the machine with mild detergent and water. Do not pressure-wash the machine. Avoid excessive use of water, especially near the engine.

- Remove and discard line or store it in a sealed container.
- 4. Service the air filter; refer to Servicing the Air Filter (page 13).
- 5. Prepare the machine for storage for over 30 days as follows:
  - A. Add fuel stabilizer/conditioner to fresh fuel in the tank. Follow mixing instructions from the fuel stabilizer manufacturer. Do not use an alcohol-based stabilizer (ethanol or methanol).
  - B. Run the engine to distribute conditioned fuel through the fuel system for 5 minutes.
  - C. Shut off the engine, allow it to cool, and drain the fuel tank.
  - D. Start the engine and run it until it shuts off.
  - E. Dispose of fuel properly. Recycle the fuel according to local codes.

Important: Do not store fuel containing stabilizer/conditioner longer than the duration recommended by the fuel-stabilizer manufacturer.

6. Remove and check the condition of the spark plug; refer to Servicing the Spark Plug (page 15). With the spark plug removed from the engine, pour 30 ml (2 tablespoons) of engine oil into the spark plug hole. Install the spark plug. Do not install the wire on the spark plug.

- Check and tighten all fasteners. Repair or replace any part that is damaged.
- Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
- Store the machine in an upright position in a clean, dry garage or storage area. Keep it out of reach of children or other unauthorized users. Cover the machine to protect it and keep it clean.

# **Troubleshooting**

Problem	Possible Cause	Corrective Action
The engine does not start.	The spark-plug wire is loose or disconnected.	Install the wire on the spark plug.
	The spark plug is wet, pitted, fouled, or the gap is incorrect.	Install a new, correctly gapped spark plug.
	3. The fuel tank is empty.	3. Fill the fuel tank.
	4. The air filter is dirty.	Replace the air filter.
	5. There is dirt in fuel filter.	5. Replace the fuel filter.
	6. The carburetor or fuel line is dirty.	6. Clean the carburetor or fuel line.
	7. The carburetor is out of adjustment.	7. Contact an Authorized Service Dealer
	The engine switch is in the OFF posiiton.	8. Move the switch to the ON position.
	<ol><li>Dirt, water, or stale fuel is in fuel system.</li></ol>	Contact an Authorized Service Dealer.
	10. The engine switch or wire is defective.	10. Inspect and replace damaged parts.
The engine runs poorly.	1. The spark plug is faulty.	Replace the spark plug.
	2. The air filter is dirty.	2. Replace the air filter.
	3. The carburetor is out of adjustment.	3. Contact an Authorized Service Dealer
	Dirt, water, or stale fuel is in fuel system.	Contact an Authorized Service Dealer.
	5. The engine cooling system is clogged.	Clean the debris screen and engine cooling fans.
The engine overheats.	The engine cooling system is clogged.	Clean the debris screen and engine cooling fans.
	2. The carburetor is out of adjustment.	2. Contact an Authorized Service Dealer
	3. The engine-oil level is low.	3. Add engine oil.
The engine does not shut off.	1. The engine on/off switch is damaged.	Inspect and replace damaged parts
	The wire disconnected from the engine on/off switch.	Inspect, repair, or replace damaged parts.
Mowing performance is poor.	The mower line length is too short.	Use the correct line length. When the line is less than half this length, replace it.
The mower vibrates.	The capscrews for the mower head are loose.	1. Tighten the capscrews.
	The mower line lengths are substantially different.	Adjust the mower line lengths to approximately equal lengths.
	3. A nut or bolt is loose.	Check all bolts and nuts, including engine bolts.
	4. The mower head is broken.	Replace broken parts.
The mower head does not retain line.	The mower line is not properly attached.	Attach the mower line correctly.
	2. The line retainer is broken.	Replace the mower head assembly.
	3. The mower line is not the correct size.	Use a mower line with a 4 mm (0.155 inch) diameter.

# **Notes:**

# **Notes:**

#### **California Proposition 65 Warning Information**

#### What is this warning?

You may see a product for sale that has a warning label like the following:



**WARNING:** Cancer and Reproductive Harm—www.p65Warnings.ca.gov.

#### What is Prop 65?

Prop 65 applies to any company operating in California, selling products in California, or manufacturing products that may be sold in or brought into California. It mandates that the Governor of California maintain and publish a list of chemicals known to cause cancer, birth defects, and/or other reproductive harm. The list, which is updated annually, includes hundreds of chemicals found in many everyday items. The purpose of Prop 65 is to inform the public about exposure to these chemicals.

Prop 65 does not ban the sale of products containing these chemicals but instead requires warnings on any product, product packaging, or literature with the product. Moreover, a Prop 65 warning does not mean that a product is in violation of any product safety standards or requirements. In fact, the California government has clarified that a Prop 65 warning "is not the same as a regulatory decision that a product is 'safe' or 'unsafe.'" Many of these chemicals have been used in everyday products for years without documented harm. For more information, go to https://oag.ca.gov/prop65/faqs-view-all.

A Prop 65 warning means that a company has either (1) evaluated the exposure and has concluded that it exceeds the "no significant risk level"; or (2) has chosen to provide a warning based on its understanding about the presence of a listed chemical without attempting to evaluate the exposure.

#### Does this law apply everywhere?

Prop 65 warnings are required under California law only. These warnings are seen throughout California in a wide range of settings, including but not limited to restaurants, grocery stores, hotels, schools, and hospitals, and on a wide variety of products. Additionally, some online and mail order retailers provide Prop 65 warnings on their websites or in catalogs.

#### How do the California warnings compare to federal limits?

Prop 65 standards are often more stringent than federal and international standards. There are various substances that require a Prop 65 warning at levels that are far lower than federal action limits. For example, the Prop 65 standard for warnings for lead is 0.5 μg/day, which is well below the federal and international standards.

#### Why don't all similar products carry the warning?

- Products sold in California require Prop 65 labelling while similar products sold elsewhere do not.
- A company involved in a Prop 65 lawsuit reaching a settlement may be required to use Prop 65 warnings for its products, but other companies
  making similar products may have no such requirement.
- The enforcement of Prop 65 is inconsistent.
- Companies may elect not to provide warnings because they conclude that they are not required to do so under Prop 65; a lack of warnings for a
  product does not mean that the product is free of listed chemicals at similar levels.

#### Why does Toro include this warning?

Toro has chosen to provide consumers with as much information as possible so that they can make informed decisions about the products they buy and use. Toro provides warnings in certain cases based on its knowledge of the presence of one or more listed chemicals without evaluating the level of exposure, as not all the listed chemicals provide exposure limit requirements. While the exposure from Toro products may be negligible or well within the "no significant risk" range, out of an abundance of caution, Toro has elected to provide the Prop 65 warnings. Moreover, if Toro does not provide these warnings, it could be sued by the State of California or by private parties seeking to enforce Prop 65 and subject to substantial penalties.