Form No. 3429-947 Rev B



Count on it.

**Operator's Manual** 

## Brush Cutter TXL 2000 Tool Carrier

Model No. 22534-Serial No. 318000001 and Up



#### 

#### CALIFORNIA

Proposition 65 Warning Use of this product may cause exposure to chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Model	No	
mouci	110.	-

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.

## Introduction

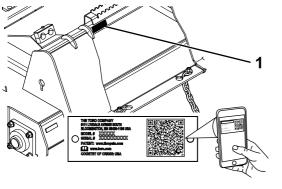
This brush cutter attachment is intended to be used on a Toro tool carrier. It is designed primarily to level brush, tall weeds, saplings, and small trees and heavy vegetation up to 7.6 cm (3 inches) in diameter. Using this product for purposes other than its intended use could prove dangerous to you 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.

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 mobile device, you can scan the QR code on the serial number decal (if equipped) to access warranty, parts, and other product information.





1. Model and serial number location



g000502

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.

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# Safety

### **General Safety**

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

- Do not raise the loader arms while this attachment is installed; always keep the attachment close to the ground, with the loader arms retracted, and the chains installed.
- Read and understand the content of this *Operator's Manual* before starting the engine.
- Use your full attention while operating the machine. Do not engage in any activity that causes distractions; otherwise, injury or property damage may occur.
- Never allow children or untrained people to operate the machine.
- Keep your hands and feet away from the moving components and attachments.
- Do not operate the machine without the guards and other safety protective devices in place and working on the machine.
- Keep bystanders and pets away from the machine.
- Stop the machine, shut off the engine, and remove the key 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  $\clubsuit$ , 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 safety information where needed throughout this *Operator's Manual*.

### **Slope Safety**

- Operate the machine up and down slopes with the heavy end of the machine uphill. Weight distribution changes with attachments. This attachment makes the front of machine the heavy end.
- Keep the attachment in the lowered position with the loader arms retracted when on slopes. Raising the attachment or extending the loader arms on a slope affects the stability of the machine.
- Slopes are a major factor related to loss of control and tip-over accidents, which can result in severe injury or death. Operating the machine on any slope or uneven terrain requires extra caution.

- Establish your own procedures and rules for operating on slopes. These procedures must include surveying the site to determine which slopes are safe for machine operation. Always use common sense and good judgment when performing this survey.
- Slow down and use extra care on hillsides. Ground conditions can affect the stability of the machine.
- Avoid starting or stopping on a slope. If the machine loses traction, proceed slowly, straight down the slope.
- Avoid turning on slopes. If you must turn, turn slowly and keep the heavy end of the machine uphill.
- Keep all movements on slopes slow and gradual. Do not make sudden changes in speed or direction.
- If you feel uneasy operating the machine on a slope, do not do it.
- Watch for holes, ruts, or bumps, as uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use caution when operating on wet surfaces. Reduced traction could cause sliding.
- Do not operate the machine near drop-offs, ditches, embankments, or bodies of water. The machine could suddenly roll over if a wheel or track goes over the edge or the edge caves in. Maintain a safe distance between the machine and any hazard.
- Do not remove or add attachments on a slope.
- Do not park the machine on a hillside or slope.

## **Brush Cutter Safety**

- Wear appropriate clothing including eye protection; hearing protection; protective gloves; long pants; and substantial, slip-resistant footwear.
- Keep clear of any discharge opening. Keep bystanders and pets at least 61 m (200 feet) away from the machine.
- Always inspect the attachment 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.
- The blade is sharp; contacting the blade can result in serious personal injury. Shut off the engine, remove the ignition key, and wait for all moving parts to stop before leaving the operating position.
- Do not raise the attachment to a height to expose yourself or others to the rotating blade

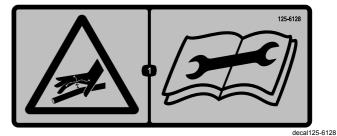
# Maintenance and Storage Safety

- Check fasteners at frequent intervals for proper tightness to ensure that the equipment is in safe operating condition.
- Refer to the *Operator's Manual* for important details if you store the attachment for an extended period of time
- Maintain or replace safety and instruction labels, as necessary.

#### 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.

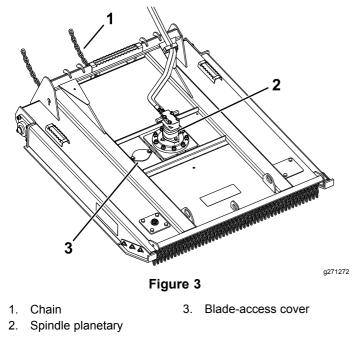




1. High pressure fluid hazard, injection into the body—read the *Operator's Manual* before performing maintenance.



## **Product Overview**



### **Specifications**

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

Cutting width	152 cm (60 inches)	
Cutting capacity (diameter)	10 cm (4 inches)	
Depth	208 cm (82 inches)	
Width	167 cm (66 inches)	
Height	76 cm (30 inches)	
Weight	669 kg (1,474 lb)	

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.

# Installing and Removing the Attachment

Refer to the *Operator's Manual* for the traction unit for the installation and removal procedure.

*Important:* Before installing the attachment, position the machine on a level surface, ensure that the mount plates are free of any dirt or debris, and ensure that the pins rotate freely. If the pins do not rotate freely, grease them.

**Note:** Always use the traction unit to lift and move the attachment.

#### A WARNING

If you do not fully seat the quick-attach pins through the attachment mount plate, the attachment could fall off the machine, crushing you or bystanders.

Ensure that the quick-attach pins are fully seated in the attachment mount plate.

#### A WARNING

Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid injected into the skin must be surgically removed within a few hours by a doctor familiar with this form of injury; otherwise, gangrene may result.

- Ensure that all hydraulic-fluid hoses and lines are in good condition and all hydraulic connections and fittings are tight before applying pressure to the hydraulic system.
- Keep your body and hands away from pinhole leaks or nozzles that eject high-pressure hydraulic fluid.
- Use cardboard or paper to find hydraulic leaks; never use your hands.

#### A CAUTION

Hydraulic couplers, hydraulic lines/valves, and hydraulic fluid may be hot. If you contact hot components, you may be burned.

- Wear gloves when disconnecting the hydraulic couplers.
- Allow the machine to cool before touching hydraulic components.
- Do not touch hydraulic fluid spills.

#### **Connecting the Chains**

#### A DANGER

Raising the brush cutter could expose you or others to blade contact and thrown debris, causing injury or death.

- Do not raise or extend the loader arms while the brush cutter is installed.
- Always keep the chains connected to the traction unit.
- 1. Loop the left and right chains through the left and right tie-down loops, respectively (Figure 4).
- 2. Insert the end of the chain through the retainer plate (Figure 4) and adjust the length of the chain so that the rear of the brush cutter cannot be lifted higher than 30 cm (12 inches) above the ground.

## *Important:* Adjust both chains to the same length.

3. Secure the chain by pulling it to the edge of the retainer plate (Figure 4).

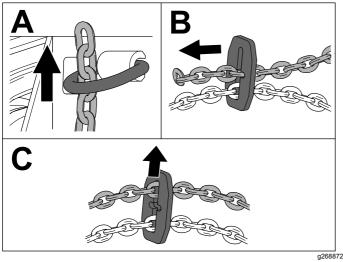
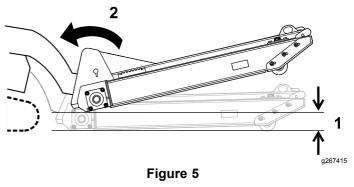


Figure 4

### **Transport Position**

When transporting an attachment, keep the attachment as close to the ground as possible, no more than 15 cm (6 inches) above the ground, and keep the loader arms retracted. Tilt it rearward.



 No more than 15 cm (6 inches) above the ground

2. Tilt the attachment rearward.

### **Operating Tips**

- Do not cut material larger than 7.6 cm (3 inches) in diameter.
- To reverse the direction that the blades rotate, reverse the flow of hydraulics.
- Engage the hydraulics with the throttle at Low IDLE. When the blades rotate smoothly, increase the throttle to HIGH IDLE.

### *Important:* Do not cut material until the blades rotate smoothly.

- If the blades slow under load, decrease the traction speed or cut less material to maintain blade speed.
- For cutting tall grass and heavy vegetation, raise the front skid plates 2.5 to 5 cm (1 to 2 inches) and the back of the cutting deck 5 to 8 cm (2 to 3 inches) above the ground to allow material to exit the cutting deck more easily.

#### A WARNING

Tilting the brush cutter at an excessive increases the risk of debris thrown at you or bystanders.

## Do not tilt the brush cutter higher than recommended.

- For cutting large brush and small trees with a diameter up to 7.6 cm (3 inches), lower the back of the cutting deck to or near the ground and raise the front to 30 to 61 cm (12 to 24 inches) above the ground. Drive slowly.
  - You can use the attachment to bend over small trees. The blades will cut the tree as it bends the tree over.
  - To mulch the tree, raise the front and lower the back of the cutting unit, then drive forward over the tree. To mulch further, lower the front of the cutting unit to the ground and back up over the tree. Repeat as necessary.

## Maintenance

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

#### **A** CAUTION

If you leave the key in the switch, someone could accidently start the engine and seriously injure you or other bystanders.

Remove the key from the switch before you perform any maintenance.

#### **Recommended Maintenance Schedule(s)**

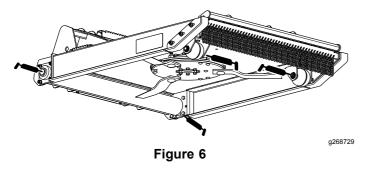
Maintenance Service Interval	Maintenance Procedure
Before each use or daily	<ul> <li>Grease the machine.</li> <li>Check the planetary fluid level.</li> <li>Check the blade carrier bolts. Apply thread-locking compound to loose bolts and torque to 183 to 223 N·m (135 to 165 ft-lb).</li> <li>Inspect the blades.</li> <li>Check the hydraulic lines for leaks, loose fittings, kinked lines, loose mounting supports, wear, weather, and chemical deterioration.</li> <li>Remove debris from the attachment.</li> </ul>
Every 50 hours	<ul> <li>Pressure wash the top and underside of the cutting deck.</li> </ul>

#### **Greasing the Brush Cutter**

Service Interval: Before each use or daily

Grease type: General-purpose grease

- 1. Park the machine on a level surface, engage the parking brake, and lower the loader arms.
- 2. Shut off the engine and remove the key.
- 3. Clean the grease fittings with a rag.
- 4. Grease the 2 rear roller bearings and 2 front caster fittings.



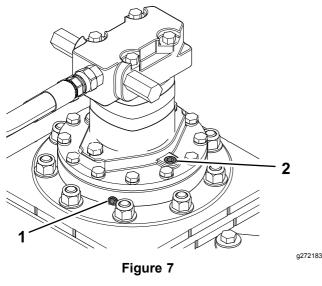
#### Checking the Planetary Fluid Level

Service Interval: Before each use or daily

Fluid Type: 80W-90 Gear Oil, API-GL-5 approved

#### Capacity: 0.41 L (14 fl oz)

- 1. Park the machine on a level surface, engage the parking brake, and lower the loader arms.
- 2. Shut off the engine and remove the key.
- 3. Remove the plug on the side of the bearing housing (Figure 7).



- 1. Check plug
- 2. Top plug
- 4. If no lubricant comes out of the hole, remove the top plug and add fluid until it comes out of the hole.
- 5. Install the plugs.

# Servicing the Cutting Blades

#### **Blade Safety**

A worn or damaged blade can break, and a piece of the blade could be thrown at you or bystanders, resulting in serious personal injury or death.

- Inspect the blades periodically for wear or damage.
- Use care when checking the blades. Wrap the blade or wear gloves, and use caution when servicing the blades. Only replace or sharpen the blades; never straighten or weld them.

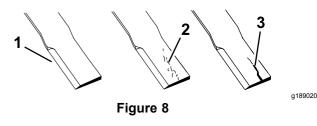
# Before Inspecting or Servicing the Blades

- 1. Park the machine on a level surface and disengage the auxiliary hydraulics.
- 2. Shut off the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
- 3. Disconnect the attachment hydraulic couplers from the traction unit and connect the couplers together.

#### **Inspecting the Blades**

#### Service Interval: Before each use or daily

- 1. Inspect the cutting edges (Figure 8).
- 2. If the edges are not sharp or have nicks, remove and sharpen the blade; refer to Sharpening the Blades (page 10).
- 3. Inspect the blade.
- 4. If you notice any crack or wear, immediately install a new blade (Figure 8).



3. Crack

- 1. Cutting edge
- 2. Wear

#### **Replacing the Blades**

Replace the blades if they hit a solid object, are out of balance, or are bent.

# *Important:* Replace all the blades at the same time to maintain consistent wear and weight balance.

 Loosen the 2 bolts securing the blade-access cover and move the cover out of the way (Figure 9).

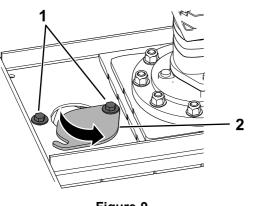


Figure 9

- 1. Bolts
- 2. Blade-access cover

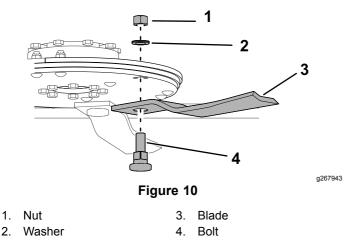
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2. Turn the flywheel until you see the blade nut. Remove the blade nut.

**Note:** The square neck on the bolt prevents the bolt from spinning. The blade will drop after you remove the nut.

3. With assistance from another person, install a new blade, nut, washer, and bolt (Figure 10).

## *Important:* Use new hardware when installing a new blade.

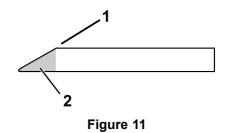


- 4. Repeat the procedure for the other blades.
- 5. Close the access cover and tighten the bolts (Figure 9).

#### Sharpening the Blades

Remove the blades as described in Replacing the Blades (page 10) and use a file to sharpen the cutting edge at the end of the blade (Figure 11).

**Note:** Maintain the original angle. Ensure the cutting edge is 0.8 to 1.6 mm (1/32 to 1/16 inch) thick.



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1. Sharpen at the original 2. Cutting edge angle

# Checking the Hydraulic Lines

Service Interval: Before each use or daily

#### A WARNING

Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid injected into the skin must be surgically removed within a few hours by a doctor familiar with this form of injury; otherwise, gangrene may result.

- Keep your body and hands away from pinhole leaks or nozzles that eject high-pressure hydraulic fluid.
- Use cardboard or paper to find hydraulic leaks; never use your hands.

#### **Removing Debris**

#### Every 50 hours

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

Use care when using a high-pressure sprayer, because it can damage decals, the planetary, and the hydraulic system.

# Storage

- 1. Before long-term storage, wash the attachment with mild detergent and water to remove dirt and grime.
- 2. Paint all scratched or bare metal surfaces.

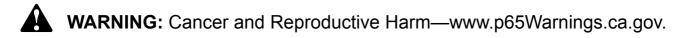
**Note:** Paint is available from your Authorized Service Dealer.

3. Store the attachment in a clean, dry garage or storage area. Cover it to protect it and keep it clean.

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

#### What is this warning?

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



#### 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.