

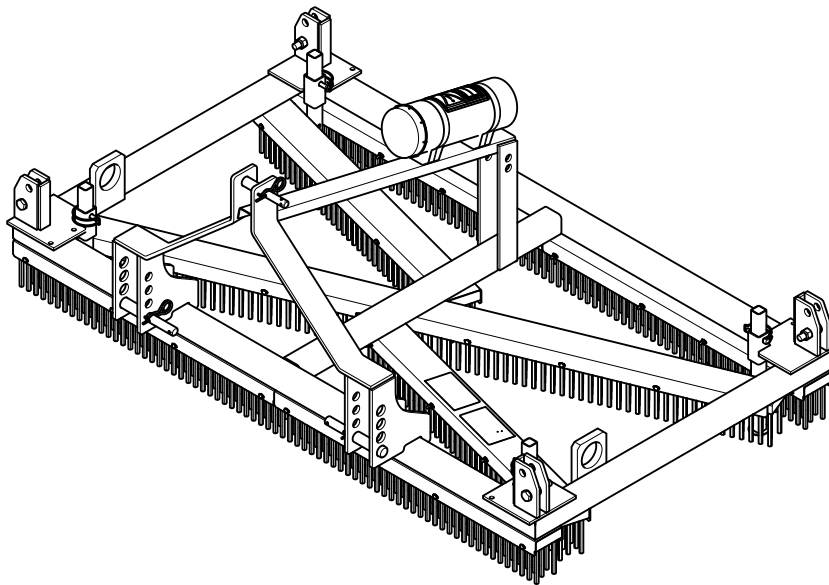
BULLS-EYE™

Operator's Manual

QuickGroom 710

Model No. 46405AA—Serial No. 321000001 and Up

Model No. 46405BA—Serial No. 321000001 and Up



⚠ WARNING

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. _____

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

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.

Introduction

This machine is a tow-behind attachment intended to be used by professional, hired operators in commercial applications. It is designed primarily to brush and incorporate topdressing materials on natural grass and synthetic turf. With optional accessories, it can also be used to decompact synthetic turf and remove metallic objects. 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/Bullseye for product safety and operation training materials, accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Bullseye parts, or additional information, contact an Authorized Service Dealer or Bullseye 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.

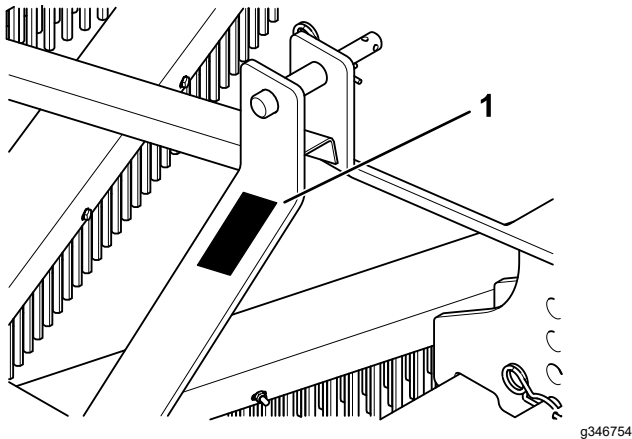


Figure 1

1. Model and serial number location

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Safety

General Safety

This product is capable of causing personal injury. Always follow all safety instructions to avoid serious personal injury.

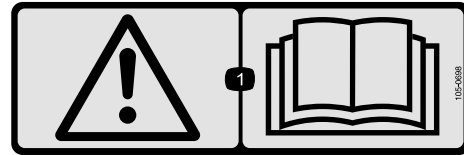
- Read and understand the contents of both this *Operator's Manual* and the operator's manual of the traction unit before using this machine. Ensure that everyone using this product knows how to use this machine and the traction unit and understands the warnings.
- Use your full attention while operating the machine. Do not engage in any activity that causes distractions; otherwise, injury or property damage may occur.
- Do not 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 the machine away from bystanders while it is moving.
- Keep children out of the operating area. Never allow children to operate the machine.
- Stop the machine, shut off the engine, engage the parking brake of the traction unit, remove the key, and wait for all moving parts to stop before servicing, fueling, or unclogging the machine.

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

Safety and Instructional Decals



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



105-0698

decal105-0698

1. Warning—read the *Operator's Manual*.

 **WARNING:** Cancer and Reproductive Harm • www.P65Warnings.ca.gov.
For more information, please visit www.ttcocAProp65.com

133-8061

decal133-8061



144-7905

decal144-7905

1. Thrown object hazard—keep bystanders away.
2. Warning—remove the key, secure the machine from movement, and read the *Operator's Manual* before performing maintenance.

Setup

1

Removing the Machine from the Pallet

No Parts Required

Procedure

The machine is shipped vertically on the pallet. Use the following instructions to remove it from the pallet.

⚠ DANGER

The attachment is unstable and could swing when lifted, injuring anyone beneath it or around it.

- Refer to the lifting machine operator's manual to ensure that it is rated to lift the attachment.
- Ensure the lift height is kept to a minimum and only high enough to remove the shipping material.
- Do not crawl under the attachment.

1. Place the pallet on level ground.
2. Attach lifting cables to the crossbar and pallet.

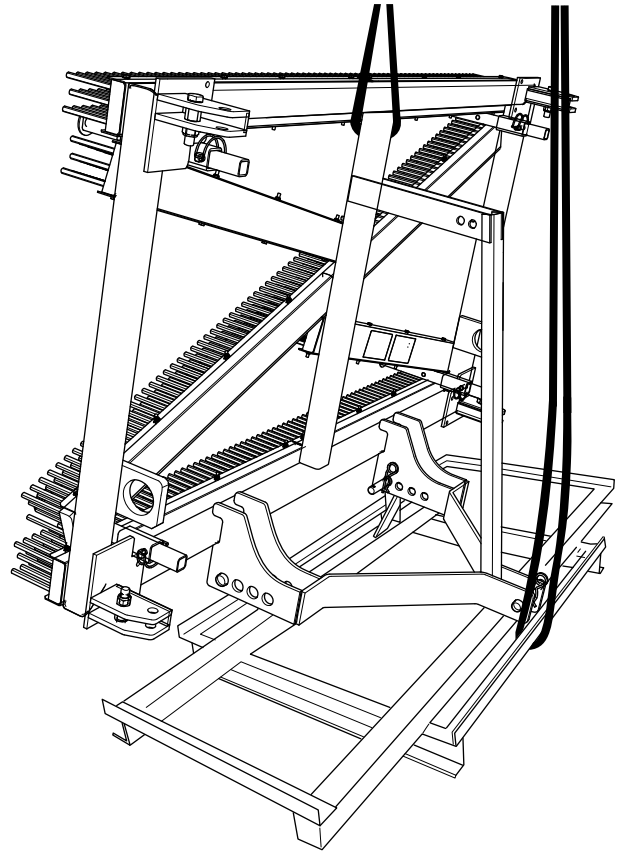


Figure 3

g367141

3. Lift the attachment and pallet off the ground 50 mm (2 inches).
Important: Ensure that the lifting cable does not slide on the pallet.
4. Gently lower the attachment in a controlled way as shown in [Figure 4](#) until it is on the ground.
5. Remove the upper 3-point hitch pins and carefully rotate the pallet around the lower 3-point hitch pins.
6. Remove the lower 3-point hitch pins and remove the pallet.
7. Install the hitch pins.

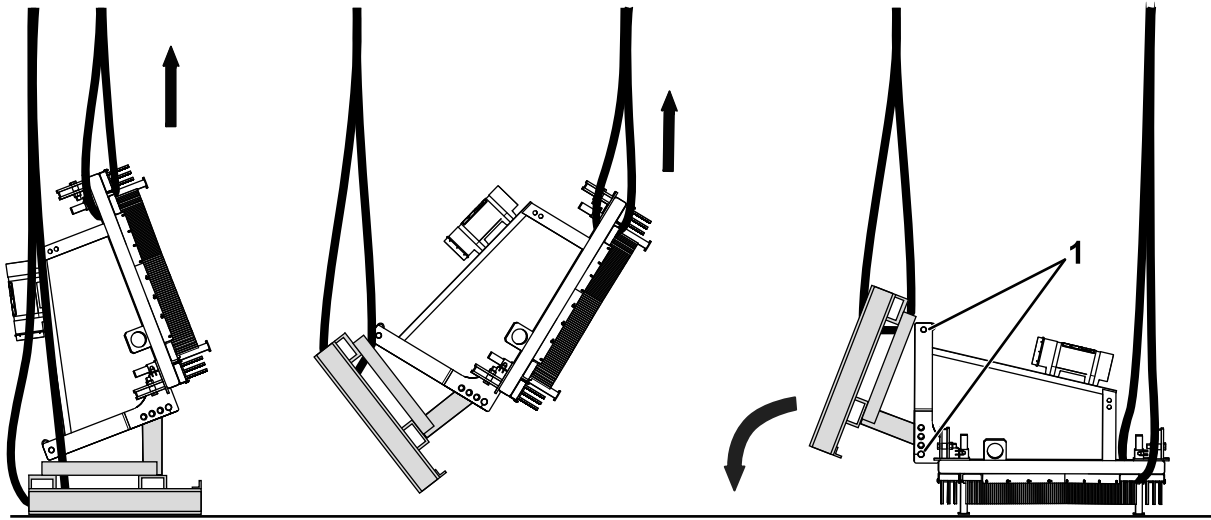


Figure 4

g367256

1. 3-point hitch pins (3)

2

Installing the *Operator's Manual* Tube

Parts needed for this procedure:

1	<i>Operator's Manual</i> tube
2	Plate
2	Bolt (M8)
2	Washer
2	Locknut (M8)

Procedure

1. Cut the cable ties securing the *Operator's Manual* tube to the attachment.
2. Remove the cap from the tube.
3. Install the tube to the frame as shown.

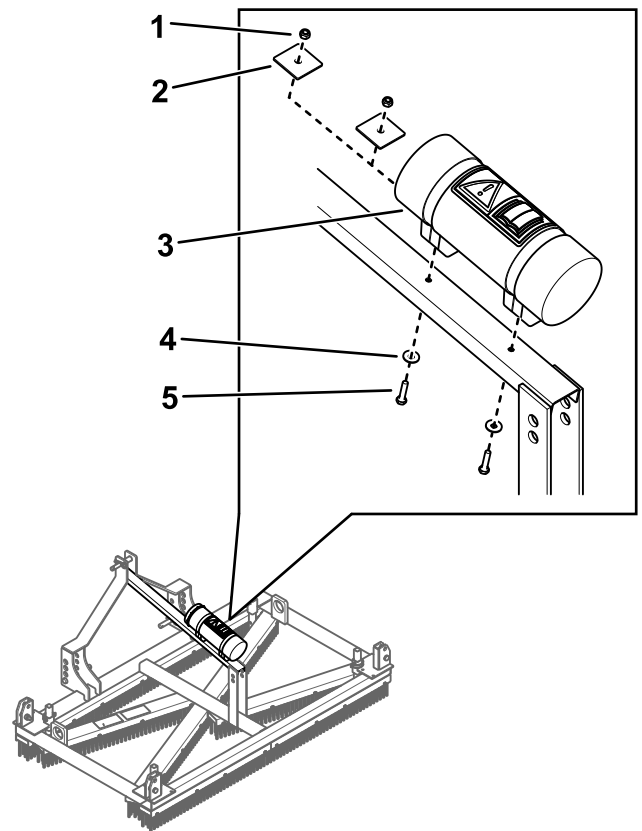


Figure 5

g367289

1. Locknut (2)
2. Plate (2)
3. *Operator's Manual* tube
4. Washer (2)
5. Bolt (2)

3

Inspecting the Machine

No Parts Required

Checking the Traction Unit Requirements

Use the following list as a reference:

- Refer to [Specifications \(page 6\)](#) for the minimum horse power and minimum lifting capacity for the traction unit.
- The traction unit must have a category I or II 3-point hitch.
- Adequate front-end weight (ballast) to offset the weight of the machine.
- Check the tire air pressure of the traction unit.

Adjust the tire air pressure as needed.

Important: Do not exceed the maximum or minimum tire inflation pressures as recommended by the tire manufacturer.

Checking the Ballast Requirements

⚠ WARNING

Mounting the machine to the rear of the traction unit decreases the weight on its front axle. Failure to add required ballast may result in an accident and severe injury or death.

- To ensure adequate steering control and stability, you may need to add ballast to the front of the traction unit.
- Refer to the traction unit operator's manual for ballast requirements.

Product Overview

Specifications

Specifications and design are subject to change without notice.

Traction Unit Requirements

Lifting capacity	500 kg (1,103 lb)
Minimum output-power rating	22 Kw (30 hp)
Tow system	3-point hitch, category 1 or 2

Attachment Specifications

Width	1.8 m (71 inches)
Length	77.5 cm (31 inches)
Height	150 cm (59 inches)
Maximum transport and working speed	12 km/h (7.5 mph)
Maximum capacity	21,600 m ² /h (232,500 ft ² /h)
Weight	150 kg (331 lb)

Attachments/Accessories

A selection of Bullseye approved attachments and accessories may be available for use with the machine to enhance and expand its capabilities. Contact your Authorized Service Dealer or authorized Bullseye distributor or go to www.Toro.com/Bullseye for a list of all approved attachments and accessories.

To ensure optimum performance and continued safety certification of the machine, use only genuine Bullseye replacement parts and accessories. Replacement parts and accessories made by other manufacturers could be dangerous, and such use could void the product warranty.

Note: The Wing Kit and Towable Lift Kit are not compatible together.

Operation

Before Operation

Before Operation Safety

- Never allow children or untrained people to operate or service the machine. Local regulations may restrict the age of the operator. The owner is responsible for training all operators and mechanics.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- Know how to stop the machine and shut off the engine of the traction unit quickly.
- Ensure that the guards and shields are properly installed and maintained. Replace missing, damaged, or worn guards and shields before using the machine.
- Inspect the area where you will use the machine and remove all objects that the machine could strike.
- Ensure that your traction unit is suitable for use with an implement of this weight by checking with your traction unit supplier or manufacturer.
- Shut off the machine, shut off the engine and remove the key of the traction unit, and wait for all moving parts to stop before making any adjustments to the machine.

Understanding the Traction Unit Controls

Familiarize yourself with the operation of the following traction unit controls before operating the machine:

- 3-point hitch (raise/lower)
- Clutch
- Throttle
- Gear selection
- Parking brake

Important: Refer to the traction unit operator's manual for operating instructions.

Connecting to a 3-Point Hitch

Connecting the Lower Link Arms

1. Ensure that the attachment is positioned on a level surface.
2. Remove the hairpin cotters and hitch pins from the attachment.

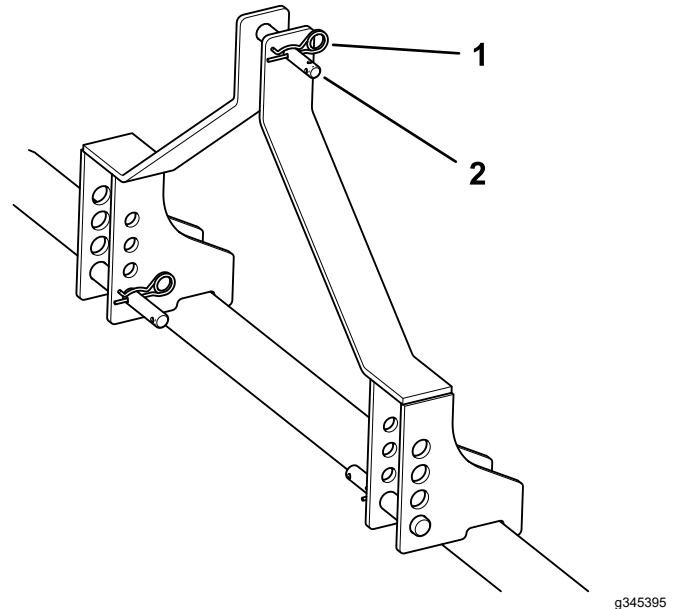


Figure 6

1. Hairpin cotter (3)
 2. Hitch pin (3)
-
3. Back the traction unit squarely up to the attachment so that you can attach the lower connecting arms to the frame.
 4. Engage the parking brake, shut off the engine, and remove the key from the ignition. Wait for the engine and all moving parts to stop before leaving the operator's seat.
 5. Secure the right and left lower link arms to the frame using the hitch pins.

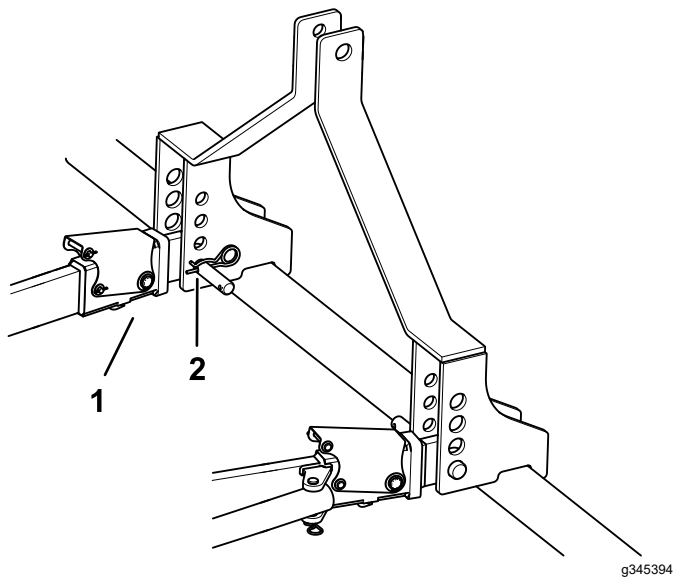


Figure 7

1. Lower link arm (2)
2. Hitch pin and hairpin cotter (2)

6. Secure the lower link arms to the hitch pins using the hairpin cotters.

Note: For maximum ground clearance, install the hitch pins in the lower mounting holes of the hitch plate for the attachment.

Connecting the Upper Link

1. Connect the upper link to the lower hole in the bracket frame secure it with the link pin and the hairpin cotter.

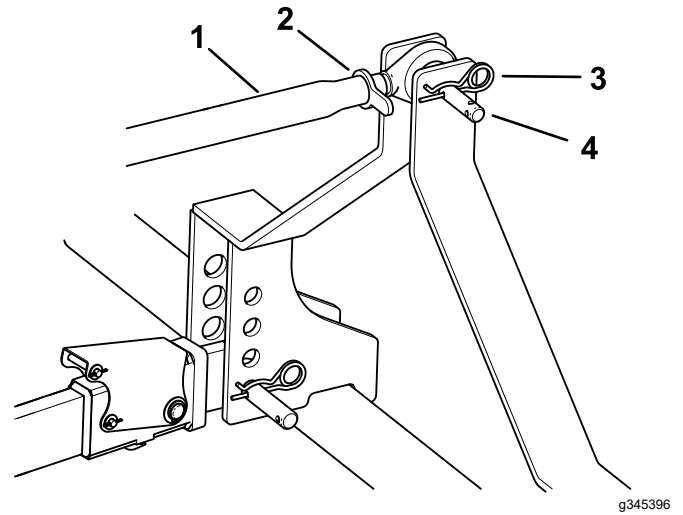


Figure 8

1. Upper link
2. Jam nut
3. Hairpin cotter
4. Link pin

2. Grease the threaded steel upper link tubes.
3. Rotate the upper link to tighten the link. Adjust it until the attachment is flat on the ground.
4. Tighten the jam nut to secure the upper link into position.
5. Start the traction unit and lift the attachment off the ground.
6. Raise the 4 storage legs.

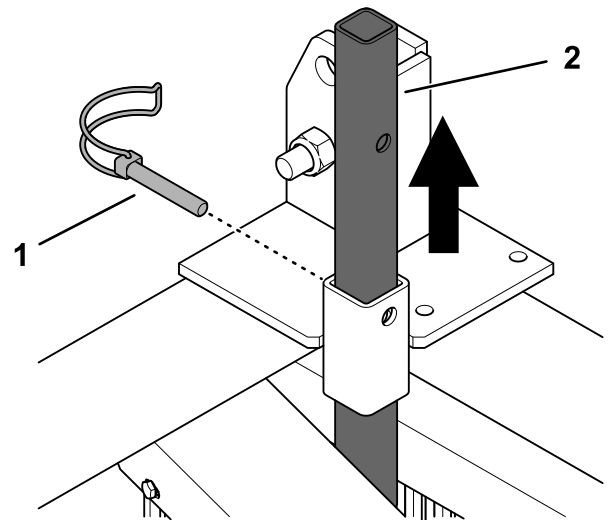


Figure 9

1. Adjustable leg
2. Pin

Transporting the Attachment

To begin transport operation, raise the machine. To avoid loss of control, traverse steep inclines slowly, approach rough areas at reduced speed and cross severe undulations carefully.

Important: Do not exceed transport speeds of 12 km/h (7.5 mph).

During Operation

During Operation Safety

- The owner/operator can prevent and is responsible for accidents that may cause personal injury or property damage.
- 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 when tired, ill, or under the influence of alcohol or drugs.
- Never carry passengers on the machine and keep bystanders and pets away from the machine during operation.
- Operate the machine only in good visibility to avoid holes or hidden hazards.
- Keep your hands and feet away from moving parts.
- Look behind and down before backing up to be sure of a clear path.
- Use care when approaching blind corners, shrubs, trees, or other objects that may obscure your vision.
- Stop the attachment whenever you are not using it.
- Stop the machine, shut off the engine, remove the key, wait for all moving parts to stop, and inspect the machine after striking an object or if there is an abnormal vibration in the machine. Make all necessary repairs before resuming operation.
- Slow down and use caution when making turns and crossing roads and sidewalks with the machine. Always yield the right-of-way.
- Reduce speed on rough roads and surfaces.
- When the attachment is connected to a traction unit and in the raised position, the weight of it affects stability, braking, and steering. Exercise caution when transporting between working areas.

- Never leave a running machine unattended.
- Before leaving the operating position, do the following:
 - Park the machine on a level surface.
 - Engage the parking brake.
 - Lower the attachment.
 - Shut off the engine and remove the key.
 - Wait for all moving parts to stop before leaving the machine.
- Do not operate the machine when there is the risk of lightning.
- Use Bullseye accessories, attachments, and replacement parts only.

Slope Safety

- Review the traction unit specifications to ensure that you do not exceed its slope capabilities.
- Slopes are a major factor related to loss of control and rollover accidents, which can result in severe injury or death. You are responsible for safe slope operation. Operating the machine on any slope requires extra caution.
- Review and understand the slope instructions in the manual and on the traction unit.
- Evaluate the site conditions to determine if the slope is safe for machine operation, including surveying the site. Always use common sense and good judgment when performing this survey.
- Review the slope instructions listed below for operating the machine on slopes and to determine whether you can operate the machine in the conditions on that day and at that site. Changes in the terrain can result in a change in slope operation for the machine.
- Avoid starting, stopping, or turning the machine on slopes. Avoid making sudden changes in speed or direction. Make turns slowly and gradually.
- Do not operate a machine under any conditions where traction, steering, or stability are in question.
- Remove or mark obstructions such as ditches, holes, ruts, bumps, rocks, or other hidden hazards. Tall grass can hide obstructions. Uneven terrain could overturn the machine.
- Be aware that operating the machine on wet grass, across slopes, or downhill may cause the machine to lose traction. Loss of traction to the drive wheels may result in sliding and a loss of braking and steering.
- Use extreme caution when operating the machine near drop-offs, ditches, embankments, water hazards, or other hazards. The machine could suddenly roll over if a wheel goes over the edge

or the edge caves in. Establish a safety area between the machine and any hazard.

- Identify hazards at the base of the slope. If there are hazards, mow the slope with a power walk-behind mower.
- If possible, keep the attachment lowered to the ground while operating on slopes. Raising the attachment while operating on slopes can cause the machine to become unstable.
- Use extreme caution with other attachments. These can change the stability of the machine and cause a loss of control. Always keep the machine in gear when going down slopes. Do not coast downhill (applicable only to gear-drive units).

Operating the Attachment

Important: Do not exceed 12 km/h (7.5 mph) while transporting or operating the attachment.

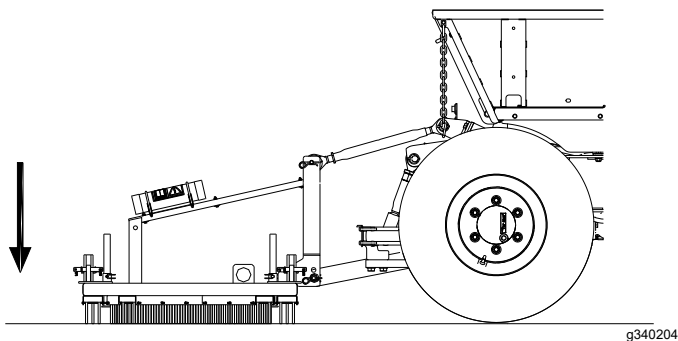


Figure 10

1. Raise the attachment and drive to the location where you will use the attachment and park the machine on a level surface.
2. Lower the attachment to the ground.
3. Engage the parking brake, shut off the engine, and remove the key from the traction unit.
4. Adjust the 3-point upper link until the attachment stands completely flat on the ground.
5. Drive the traction unit forward.
6. After operation, raise the attachment and drive to the next location as needed; refer to [Transporting the Attachment \(page 9\)](#).

Operating Tips

- Make very gradual turns. Never make sharp turns with the attachment.
- Do not use the attachment if the ground is too wet.
- Look backward frequently to ensure that the machine is operating properly, and alignment is maintained with previous passes.
- To optimize performance and life of the product, operate the attachment only when grooming the intended application area.
- Make multiple passes over the field either in the same or in different directions for improved grooming.

After Operation

After Operation Safety

- Park the tow vehicle on a level surface; engage the parking brake of the tow vehicle; shut off the engine; remove the key; and wait for all movement to stop before leaving the operator's position.
- Allow the machine to cool before storing the machine in any enclosure.
- Keep all parts of the machine in good working condition and all hardware tightened.
- Replace all worn, damaged, or missing decals.

Removing the Attachment

1. Park the machine on a level surface, engage the parking brake, shut off the engine, and remove the key from the traction unit.
2. Lower the 4 storage legs.

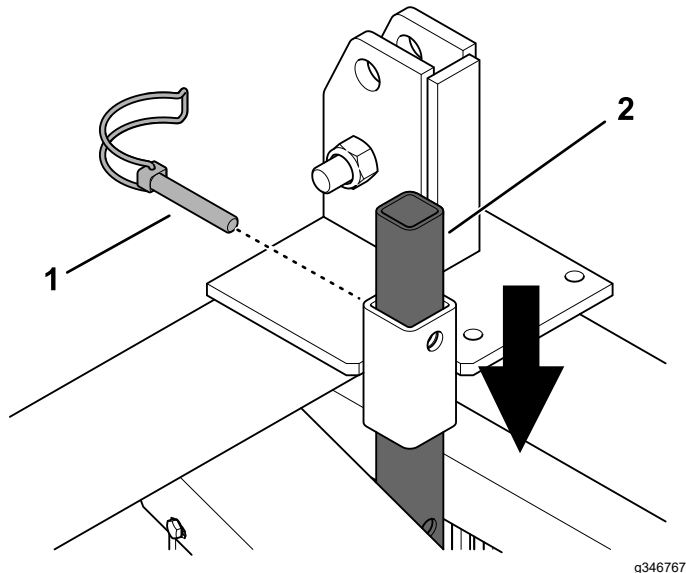


Figure 11

1. Lynch pin
2. Storage leg

3. Lower the attachment to the ground.
4. Secure the attachment from movement.
5. Loosen the upper link jam nut and rotate the upper link.

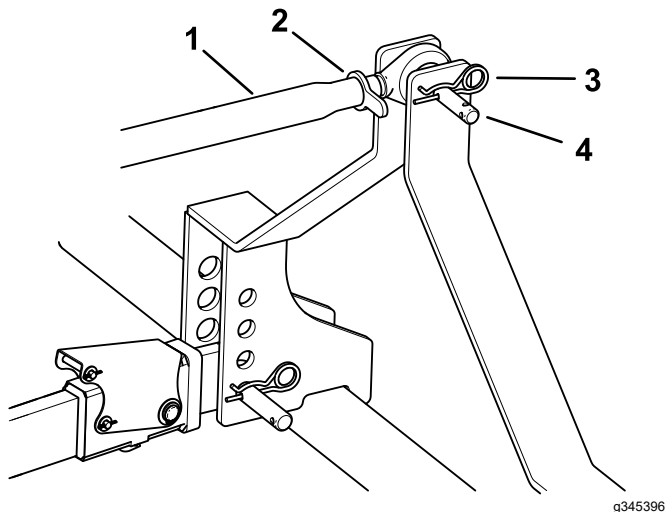


Figure 12

1. Upper link
2. Jam nut
3. Hairpin cotter
4. Link pin

6. Remove the upper link.
7. Remove the lower link arms.

Important: Ensure that the attachment does not slide off the traction unit and cannot roll away.

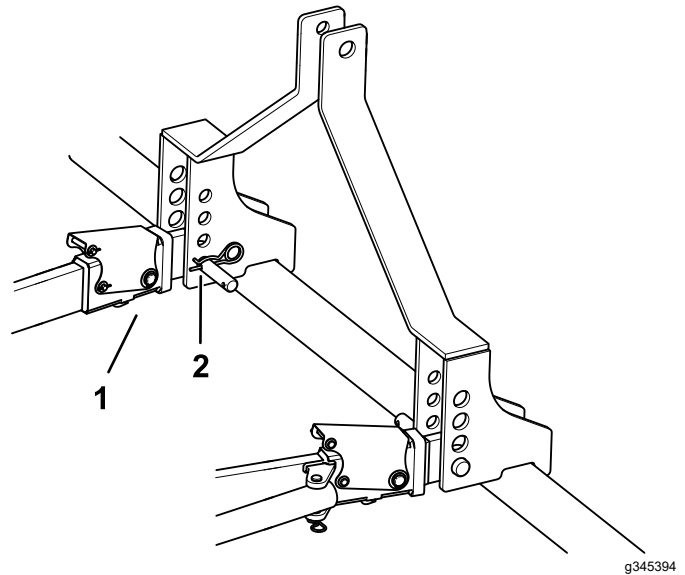


Figure 13

1. Lower link arm (2)
2. Hitch pin and hairpin cotter (2)

8. Start the traction unit and drive it away from the attachment.
9. Install the hitch pins to the attachment and secure them with the hairpin cotters.

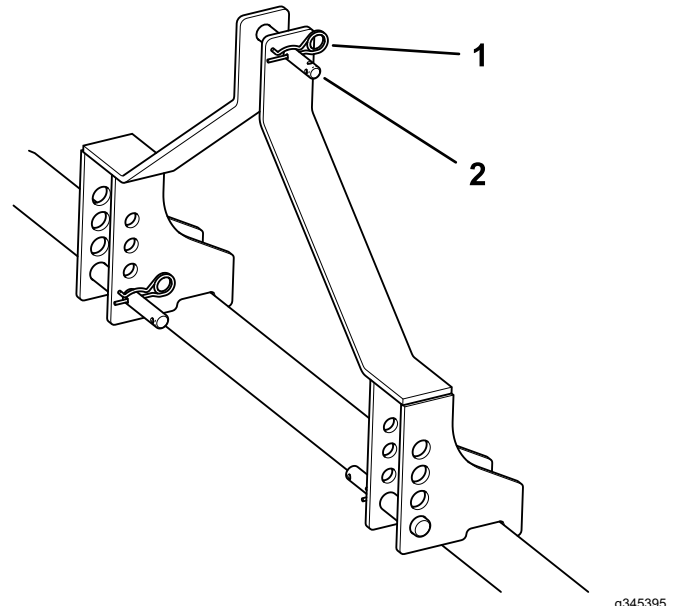


Figure 14

1. Hairpin cotter (3)
2. Hitch pin (3)

Important: When storing the attachment, do not allow the brush to touch the ground or other objects to avoid bending the bristles.

Storage

Storage Safety

- Before adjusting, cleaning, storing, or repairing the machine, park the it on a level surface; engage the parking brake of the traction unit; shut off the engine; remove the key; and wait for all movement to stop before leaving the traction unit.
- Store the machine on the storage stands positioned on a firm, level surface so that it does not sink or tip over.
- Store the machine away from areas of human activity.
- Do not allow children to play on or around the stored machine.

Preparing the Machine for Storage

Important: Do not use brackish or reclaimed water to clean the machine.

When the machine is stored for a long period, do out the following procedure:

1. Clean off any dirt or grease that may have accumulated on the machine or any of the moving parts.
2. Lubricate all grease fittings.
3. Touch up any scratches on the painted surfaces.
4. Replace any missing or damaged decals.
5. Store the machine inside a dry, secure building. Inside storage reduces maintenance, gives a longer working life, and increases the residual value of the machine. If inside storage is not available, cover the machine with a heavy sheet or tarpaulin and secure it tightly.

Note: To conserve space in storage, remove the tow bar, tilt the attachment, and store it vertically on the storage stands.

Important: When storing the attachment, do not allow the brush to touch the ground or other objects to avoid bending the bristles.

Troubleshooting

Problem	Possible Cause	Corrective Action
The attachment loosened too little material.	1. The working depth is set too shallow. 2. The infill material is too compacted.	1. Increase the working depth. 2. Drive multiple passes over the turf, each with a deeper setting.
The appearance of the field is poor.	1. The working depth is set too deep. 2. The drag brush does not drag over the ground. 3. The drag brush is damaged.	1. Decrease the working depth. 2. Ensure that the chains are fully extended or change the length of the upper link. 3. Replace or repair the drag brush.

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 do we include this warning?

Our company 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. We provide 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 our products may be negligible or well within the "no significant risk" range, out of an abundance of caution, we have elected to provide the Prop 65 warnings. Moreover, if we do 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.



Warranty Statement

One-Year Limited Warranty

Conditions and Products Covered

Your Bullseye product ("Product") is warranted to be free from defects in materials or workmanship for 1 year. Where a warrantable condition exists, we will repair the Product at no cost to you including diagnostics, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

Instructions for Obtaining Warranty Service

You are responsible for notifying the distributor or authorized dealer from whom you purchased the Product as soon as you believe a warrantable condition exists. If you need help locating a distributor or authorized dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Bullseye Commercial Products Service Department
8111 Lyndale Avenue South
Bloomington, MN 55420-1196

952-888-8801 or 800-952-2740

Items and Conditions Not Covered

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. This warranty does not cover the following:

- Product failures which result from the use of non-Bullseye replacement parts, or from installation and use of non-Bullseye branded accessories and products, or unapproved modifications to the Product, accessory, or replacement part.
- Product failures which result from failure to perform recommended maintenance and/or adjustments.
- Product failures which result from misusing the Product or using it in an abusive, negligent, or reckless manner.
- Parts consumed through use that are not defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, blades, reels, rollers and bearings (sealed or greasable), bed knives, spark plugs, castor wheels and bearings, tires, filters, belts, and discs, seed element castings, rotors, brushes, scrapers, fraze blades, rake tines, PTO's, and draw bars.
- Failures caused by outside influence, including, but not limited to, weather, natural disaster, storage practices, contamination, use of unapproved fuels, coolants, lubricants, additives, fertilizers, water, or chemicals.
- Failure or performance issues due to the use of fuels (e.g. gasoline, diesel, or biodiesel) that do not conform to their respective industry standards.
- Normal noise, vibration, wear and tear, and deterioration. Normal "wear and tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows.

Parts

Parts scheduled for replacement, as required maintenance, are covered for the same warranty period as the product warranty. Parts replaced under this warranty are covered for the duration of the original product warranty. Bullseye may retain all parts being replaced. Bullseye will make the final decision whether to repair any existing part or assembly or replace it. Bullseye may use remanufactured parts for warranty repairs.

Maintenance is at Owner's Expense

Engine tune-up, lubrication, cleaning and polishing, replacement of filters, coolant, and completing recommended maintenance are some of the normal services Bullseye products require that are at the owner's expense.

General Conditions

Repair by an Authorized Distributor or Dealer is your sole remedy under this warranty.

Neither Bullseye, nor any company involved in the manufacture, distribution, or sale of a Bullseye product shall be liable for indirect, incidental or consequential damages arising out of or related to the sale or use of the Product, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty. Except for the emissions warranty referenced below, if applicable, there is no other express or implied warranty.

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

Note Regarding Emissions Warranty

The emissions control system on your Product may be covered by a separate warranty from the engine manufacturer, meeting requirements established by the U.S. Environmental Protection Agency (EPA) and/or the California Air Resources Board (CARB). The hour limitations set forth above do not apply to the emissions control system warranty. Refer to the engine emission control warranty statement supplied with your product or contained in the engine manufacturer's documentation.