Form No. 3424-841 Rev A

TORO®

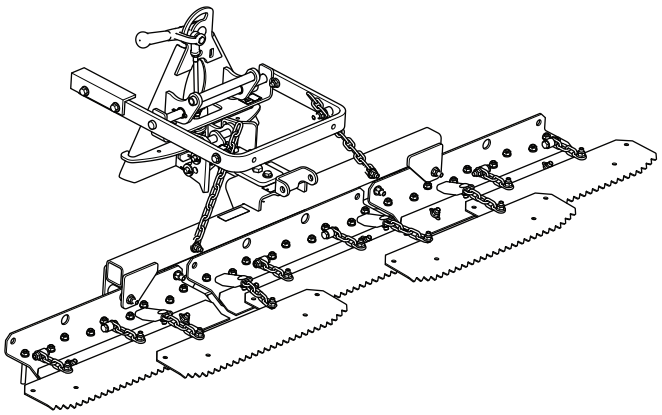
Count on it.

Operator's Manual

Tooth Rake

Sand Pro®/Infield Pro® 3040 and 5040 Traction Unit

Model No. 08751—Serial No. 400000000 and Up



Register at www.Toro.com.
Original Instructions (EN)

CE

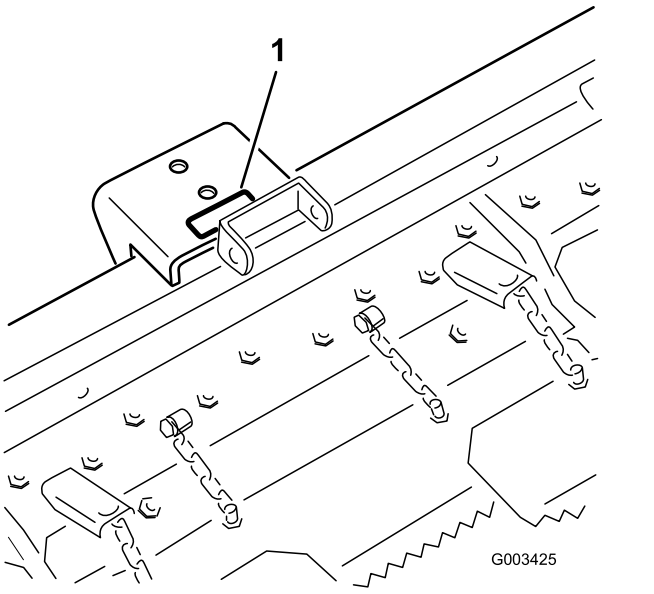
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Introduction

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

You may contact Toro directly at www.Toro.com for product and accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.



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Figure 1

1. Model and serial number location

Model No. _____

Serial No. _____

This manual identifies potential hazards and has safety messages identified by the safety-alert symbol (Figure 2), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



g000502

Figure 2

Safety-alert symbol

This manual uses 2 words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

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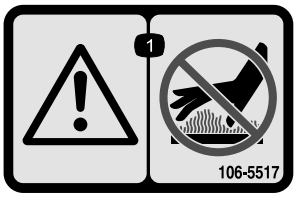
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Bloomington, MN 55420

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Safety

Safety and Instructional Decals

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



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1. Warning—do not touch the hot surface.

Setup

Loose Parts

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

Procedure	Description	Qty.	Use
1	Tooth rake assembly Drawbar Bolt (1/2 x 1-3/4 inch) Flange nut (1/2 inch) Hex nut (1/2 inch) Flange-head bolt (3/8 x 1 inch) Flange nut (3/8 inch) Attachment adapter assembly Cotter pin Lift arm assembly Pivot bar Bolt (3/8 x 1-1/4 inches) Locknut (3/8 inch)	1 1 1 1 1 1 1 1 2 1 1 1 1	Assemble the rake.
2	Bolt (3/8 x 2-1/2 inches) Washer (3/8 x 7/8 inch) Spacer Locknut (3/8 inch)	2 4 2 2	Mount the tooth rake to the traction unit.
3	No parts required	–	Adjust the link assembly.

1

Assembling the Rake

Parts needed for this procedure:

1	Tooth rake assembly
1	Drawbar
1	Bolt (1/2 x 1-3/4 inch)
1	Flange nut (1/2 inch)
1	Hex nut (1/2 inch)
1	Flange-head bolt (3/8 x 1 inch)
1	Flange nut (3/8 inch)
1	Attachment adapter assembly
2	Cotter pin
1	Lift arm assembly
1	Pivot bar
1	Bolt (3/8 x 1-1/4 inches)
1	Locknut (3/8 inch)

Procedure

1. Loosely mount the drawbar to the front hole in the hanger assembly (Figure 3) with a bolt (1/2 x 1-3/4 inches), flange nut (1/2 inch) and a hex nut (1/2 inch).

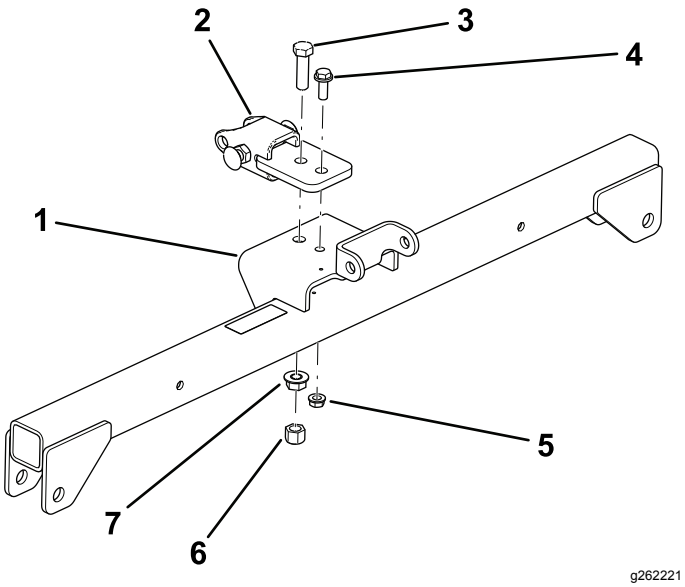


Figure 3

1. Hanger assembly
2. Drawbar
3. Bolt (1/2 x 1-3/4 inches)
4. Bolt (3/8 x 1 inch)
5. Flange nut (3/8 inch)
6. Hex nut (1/2 inch)
7. Flange nut (1/2 inch)

2. Loosely mount the tongue tube to the rear hole in the hanger assembly with a flange-head bolt (3/8 x 1 inch) and a flange nut (3/8 inch).

   Torque the nuts as follows:

   - Flange nut (1/2 inch)—104 to 126 N·m (77 to 93 ft-lb)
   - Hex nut (1/2 inch)—91 to 113 N·m (67 to 83 ft-lb)
   - Flange nut (3/8 inch)—22 to 27 N·m (16 to 20 ft-lb)

3. Align the lift arm with the bracket on the attachment adapter (Figure 4) and connect them using the pivot bar as illustrated in Figure 5.

   Note: When moving the attachment adapter, use the handle provided on the back of the adapter (Figure 4).

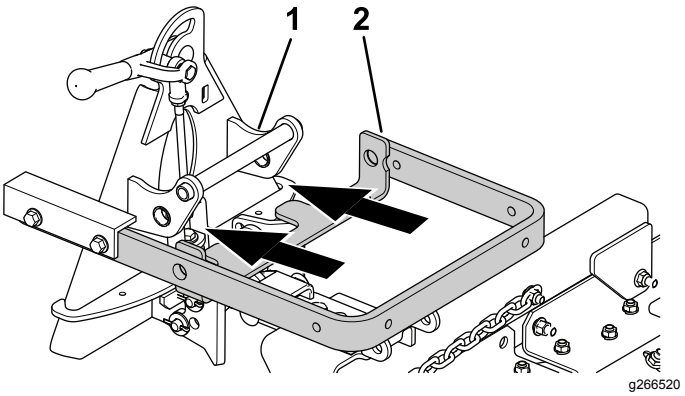


Figure 4

1. Attachment adapter
2. Lift arm

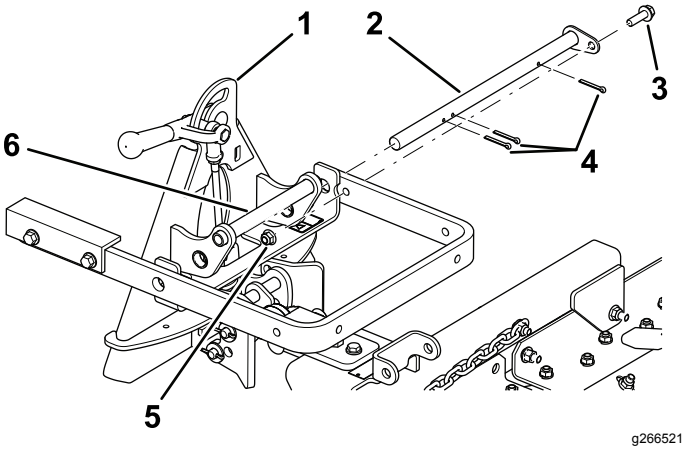


Figure 5

1. Attachment adapter
2. Pivot bar
3. Cotter pins
4. Bolt (3/8 x 1-1/4 inches)
5. Locknut (3/8 inch)
6. Handle

4. Secure the pivot bar (Figure 5) with 3 cotter pins and a bolt (3/8 x 1-1/4 inches) and locknut (3/8 inch).

2

Mounting the Tooth Rake to the Traction Unit

Parts needed for this procedure:

2	Bolt (3/8 x 2-1/2 inches)
4	Washer (3/8 x 7/8 inch)
2	Spacer
2	Locknut (3/8 inch)

Procedure

1. Remove any attachment from the rear of the machine.
2. Lower the traction unit adapter and back the traction unit into position in front of the attachment adapter.

   Note: Make sure the locking lever is pivoted to the left (unlocked position) as viewed from the rear of the machine.
3. Slide the attachment adapter onto the traction adapter.

   Important: **The long arm of the lift arm assembly must be under the traction unit rear frame assembly (Figure 6).**

   ⚠ CAUTION

   You could pinch your fingers between the attachment and traction unit adapters.

   Always lift and move the attachment using the handle on the back of the attachment adapter (Figure 6).
4. Pivot the locking lever to the right to lock the adapters together.
5. Secure the top link of each chain to the outside of the lift arm (Figure 6) using a bolt (3/8 x 2-1/2 inches), 2 washers (3/8 x 7/8 inch), a spacer, and a locknut (3/8 inch).

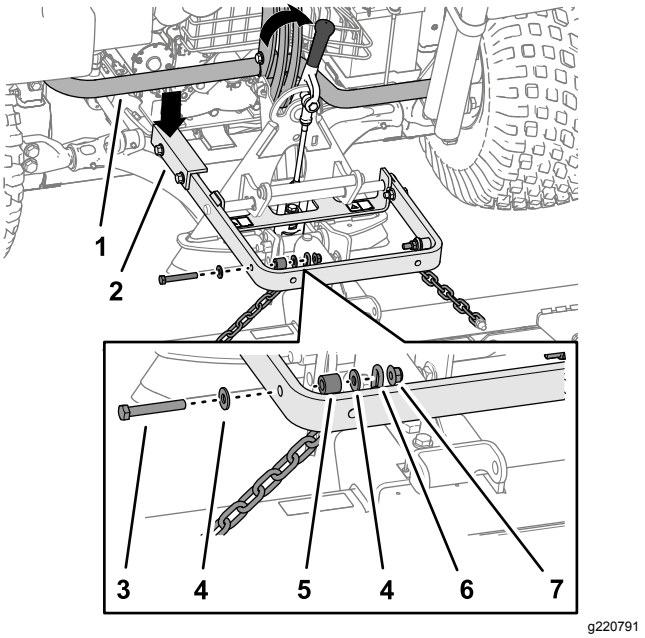


Figure 6

1. Tube frame of the traction unit
2. Long arm of the lift arm assembly
3. Bolt (3/8 x 2-1/2 inches)
4. Washer (3/8 x 7/8 inch)
5. Spacer
6. Chain
7. Locknut (3/8 inch)

Note: For proper operation of the rake, the chains must be slack when the rake is in the lowered (operating) position.

Note: Make sure that all the finishing rakes overlap properly, laying flat with none of the chains tangled or twisted.

3

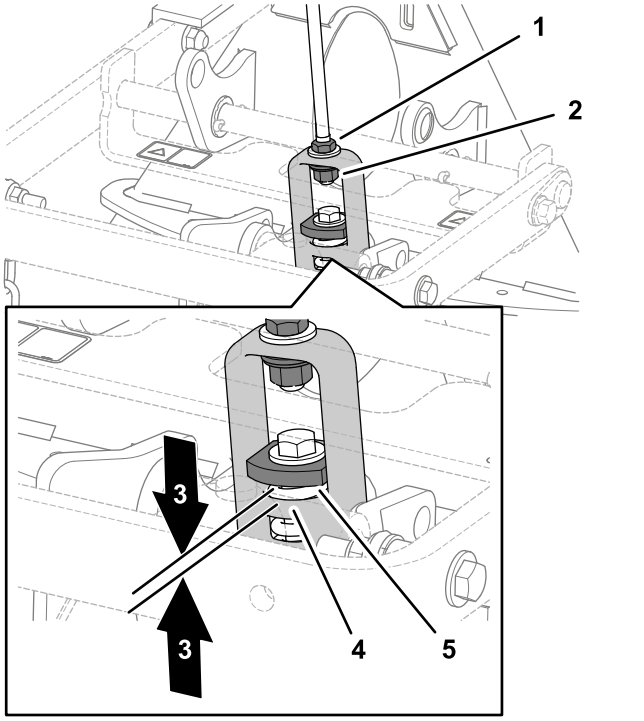
Adjusting the Link Assembly

No Parts Required

Procedure

1. With the rake mounted and secured on the traction unit, raise the attachment.
2. Measure the gap between the heavy washer and the shoulder of the lift yoke on the attachment adapter as shown in Figure 7.

   Note: The link is adjusted correctly if you measure a gap—1.5 to 2 mm (0.060 to 0.080 inch) between the heavy washer and the lift-yoke shoulder (Figure 7).



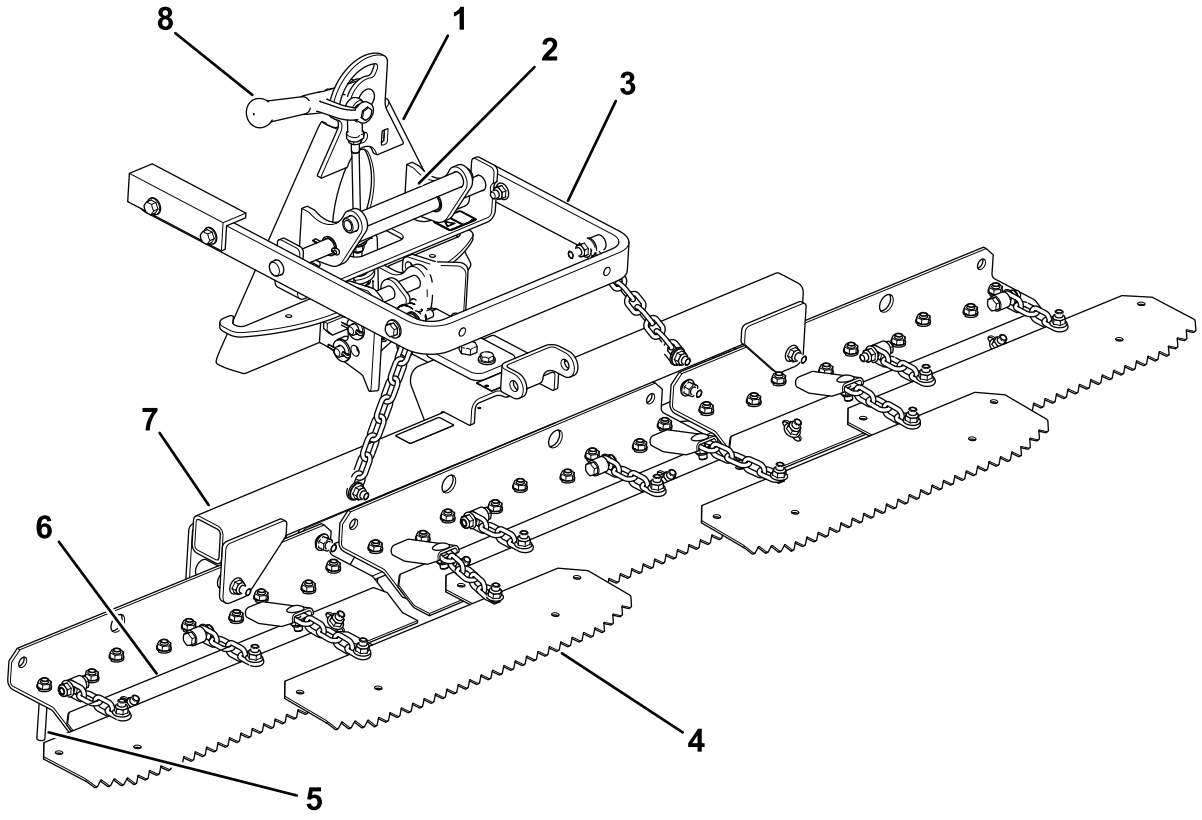
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Figure 7

1. Jam nut
2. Adjustment nut
3. 1.5 to 2 mm (0.060 to 0.080 inch)
4. Lift-yoke shoulder
5. Heavy washer

3. If the gap is not correct, loosen the jam nut and tighten or loosen the adjustment nut on the link assembly as needed to change the gap (Figure 7).

Product Overview



g262222

Figure 8

1. Attachment adapter
2. Handle
3. Lift arm
4. Finishing rake
5. Prong
6. Trowel
7. Tooth rake hanger
8. Locking lever

Operation

Read this section on raking before raking a trap. There are many conditions that determine the adjustments to the tooth-rake attachment. The texture and depth of the sand, moisture content, weeds, and the amount of compaction all can vary from course to course, or even from trap to trap at the same course. Make the adjustments on the rake for optimum results in your area.

Training Period

Practice raking in a large, level trap on the course. Practice starting, stopping, turning, raising, and lowering the rake; entering and leaving the trap; etc. Practice at a moderate engine speed and a slow ground speed. This training period will help you to gain confidence operating the machine.

Note: Do not back up the traction unit with the attachment lowered. Damage to the attachment will occur.

Raking Tips

If the sand is deep enough, you can rake right up to the edge of the trap in level areas.

If the sand feathers out to the turf, stay far enough away from the edge to avoid disturbing the underlying soil.

Do not rake too close to a short, steep bank. The sand will merely flow down into the bottom of the trap.

Some touchup with a hand rake may be necessary on steep banks, small pockets, etc.

Raking Pattern

Rake the trap according to the pattern shown in Figure 9. This pattern avoids unnecessary overlap, holds compaction to a minimum, and leaves a neat, attractive pattern the in sand.

Enter the trap straight into the long dimension, where the bank is the least severe. Drive through the center

of the trap almost to the end, turn to either direction as sharp as you can, and come right back next to the first pass. Spiral outward as shown in the drawing, and leave the trap at a right angle in a level area.

Leave steep, short banks and small pockets for touch-up with a hand rake.

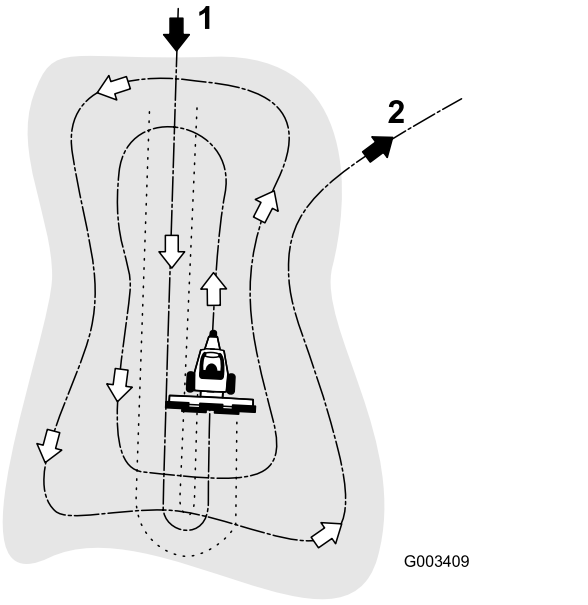


Figure 9

1. Enter a trap straight into the long dimension in a level area.
2. Exit a trap at a right angle in a level area.

Entering and Leaving the Trap

When entering the trap, do not lower the rake until the rake is over the sand. This avoids cutting the turf or dragging grass clippings or other debris into the trap. Lower the rake while the machine is moving.

When leaving the trap, start raising the rake when the front wheel leaves the trap. As the machine moves out, the rake lifts and does not drag sand out onto the grass.

You will soon gain, through experience and practice, the required timing for entering and leaving the trap properly.

Adjusting the Rake Angle

You can change the position of the rake to increase or decrease its aggressiveness in the sand. Mount the drawbar and the rake as shown in the following figures to attain the desired aggressiveness.

Setting the Least Amount of Tine Engagement

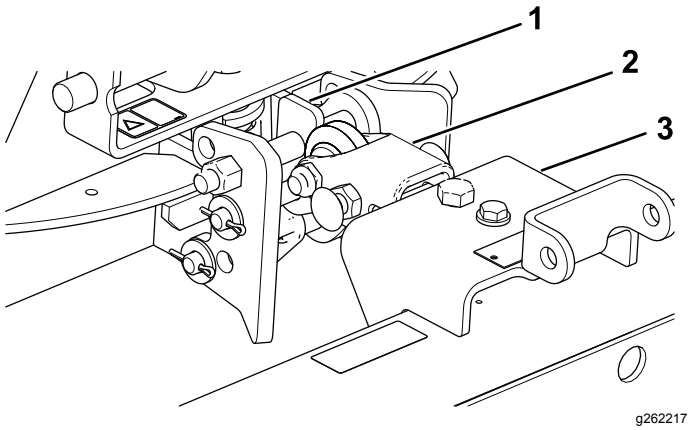


Figure 10

1. Flat on top
2. Drawbar
3. Rake

1. Mount the hitch assembly so that the flat side is on top (Figure 10).
2. Assemble the drawbar to the underside of the hanger assembly (Figure 10).

Setting the Maximum Amount of Tine Engagement

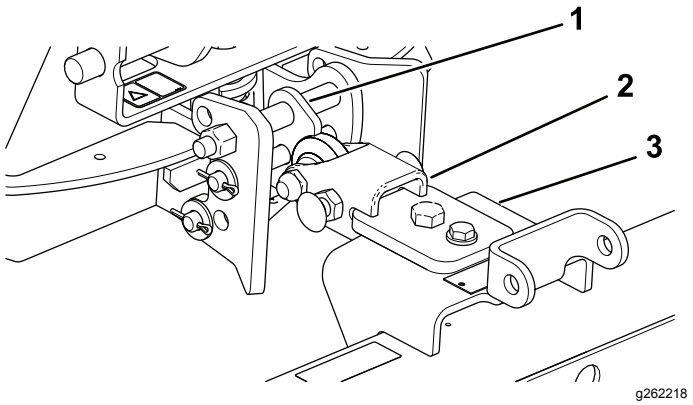


Figure 11

1. Angled on top
2. Drawbar
3. Rake

1. Mount the hitch assembly so that the angled side is on top (Figure 11).
2. Assemble the drawbar to the top side of the hanger assembly (Figure 11).

Adjusting the Trowels

You can adjust the length of the trowels to increase or decrease the amount of prong penetration.

Loosen the trowel mounting screws, move the trowel up or down to the desired position, and tighten the screws (Figure 12).

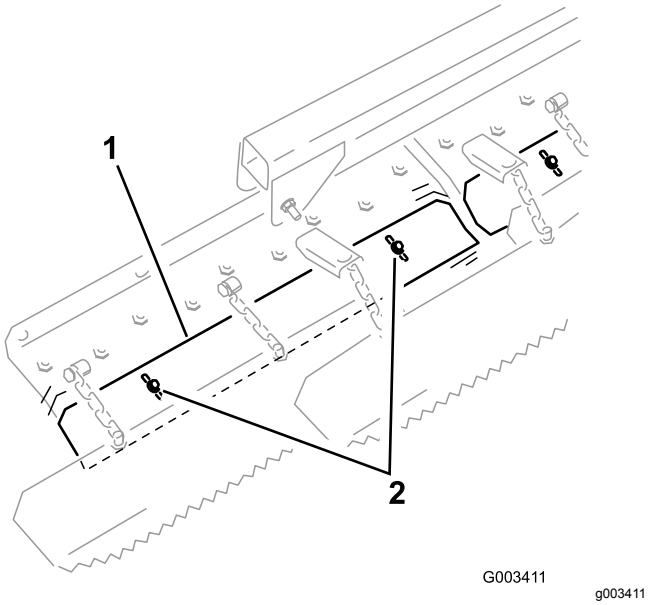


Figure 12

1. Trowel
2. Mounting screws

Adjusting the Rake Stop Bolts

Loosen the jam nuts and rotate the rake stop bolts (Figure 13) out to limit the side to side pivoting of the rake. Tighten the jam nuts to lock the adjustment.

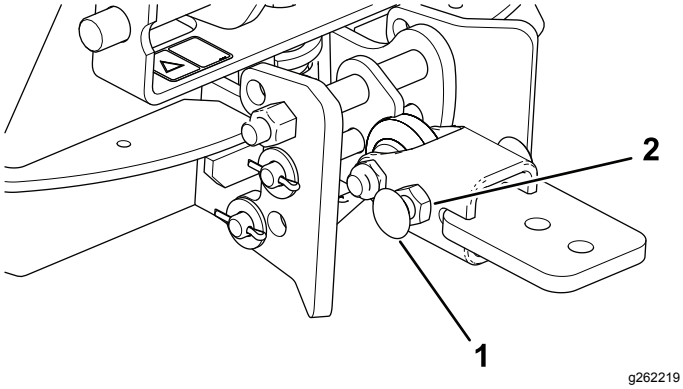


Figure 13

1. Stop bolt (2)
2. Jam nut (2)

Using Drag Weights

You can attach optional weights onto the finishing rakes if the sand is damp or coarse or if there are deep footprints in the traps. Order Part No. 18-7570 from your authorized Toro distributor.

Setting the Transport Position

Complete the following procedure to increase the height of the rake when transporting:

1. Lower the rake and lift assembly as low as possible.
2. Disconnect the chains from the lift arms and reconnect them higher.

Note: To ensure proper operation of rake, return the chains to the original slack position before operating the rake.

Inspecting and Cleaning the Rake and Traction Unit

After raking, clean the machine thoroughly. Because you use this machine primarily in sand and sand is extremely abrasive, wash off the sand after each use. If you clean the machine frequently (before the sand has a chance to cake), clean it with a stream of water from a hose with the nozzle removed. A high-pressure stream could drive the sand into wear areas, where it could act as a grinding compound.

Note: If the attachment adapter sticks to the traction unit adapter, insert a pry bar or screwdriver into the pry slot to disengage the parts (Figure 14).

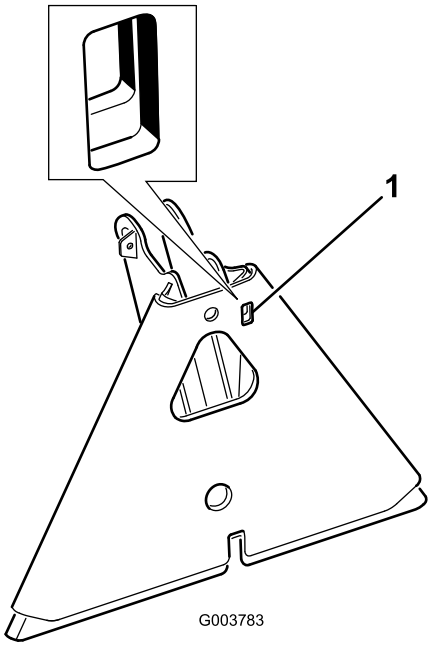


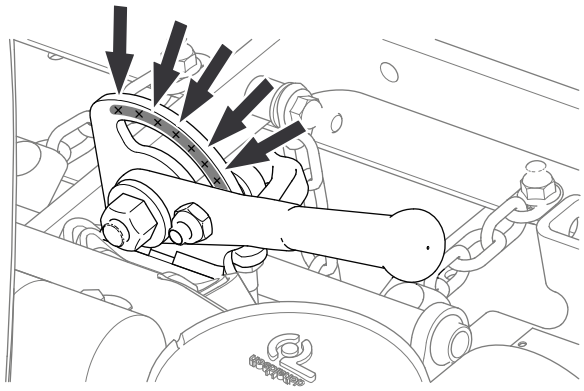
Figure 14

1. Pry slot

Maintenance

Greasing the Attachment Adapter

If the locking lever on the attachment adapter does not pivot freely and easily, apply a light coat of grease to the area shown in Figure 15.



g220788

Figure 15

Notes:

Notes:

Notes:

European Privacy Notice

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

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

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

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

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

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

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

Australian Consumer Law

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

The Toro Warranty

A Two-Year Limited Warranty

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly warrant your Toro Commercial product ("Product") to be free from defects in materials or workmanship for two years or 1500 operational hours*, whichever occurs first. This warranty is applicable to all products with the exception of Aerators (refer to separate warranty statements for these products). 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.
* Product equipped with an hour meter.

Instructions for Obtaining Warranty Service

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

Toro Commercial Products Service Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196

952–888–8801 or 800–952–2740
E-mail: commercial.warranty@toro.com

Owner Responsibilities

As the Product owner, you are responsible for required maintenance and adjustments stated in your *Operator's Manual*. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

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-Toro replacement parts, or from installation and use of add-on, or modified non-Toro branded accessories and products. A separate warranty may be provided by the manufacturer of these items.
- Product failures which result from failure to perform recommended maintenance and/or adjustments. Failure to properly maintain your Toro product per the Recommended Maintenance listed in the *Operator's Manual* can result in claims for warranty being denied.
- Product failures which result from operating the Product in an abusive, negligent, or reckless manner.
- Parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, brake pads and linings, clutch linings, blades, reels, rollers and bearings (sealed or greasable), bed knives, spark plugs, castor wheels and bearings, tires, filters, belts, and certain sprayer components such as diaphragms, nozzles, and check valves, etc.
- Failures caused by outside influence. Conditions considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved fuels, coolants, lubricants, additives, fertilizers, water, or chemicals, etc.
- 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, etc.

Parts

Parts scheduled for replacement as required maintenance are warranted for the period of time up to the scheduled replacement time for that part. Parts replaced under this warranty are covered for the duration of the original product warranty and become the property of Toro. Toro will make the final decision whether to repair any existing part or assembly or replace it. Toro may use remanufactured parts for warranty repairs.

Deep Cycle and Lithium-Ion Battery Warranty:

Deep cycle and Lithium-Ion batteries have a specified total number of kilowatt-hours they can deliver during their lifetime. Operating, recharging, and maintenance techniques can extend or reduce total battery life. As the batteries in this product are consumed, the amount of useful work between charging intervals will slowly decrease until the battery is completely worn out. Replacement of worn out batteries, due to normal consumption, is the responsibility of the product owner. Battery replacement may be required during the normal product warranty period at owner's expense. Note: (Lithium-Ion battery only): A Lithium-Ion battery has a part only prorated warranty beginning year 3 through year 5 based on the time in service and kilowatt hours used. Refer to the *Operator's Manual* for additional information.

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 Toro products require that are at the owner's expense.

General Conditions

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

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of the Toro Products covered by this warranty, 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 warranty. All implied warranties of merchantability and fitness for use are limited to the duration of this express 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 engine warranty:

The Emissions Control System on your Product may be covered by a separate warranty 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 for details

Countries Other than the United States or Canada

Customers who have purchased Toro products exported from the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer.

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