



Limited Slip Differential Lock Kit

CT Series Turf Mower or Groundsmaster® 3400 Series Traction Unit

Model No. 02904—Serial No. 400000000 and Up

Installation Instructions

This kit provides a limited slip differential to improve traction when traction is reduced in certain ground conditions.

⚠ WARNING

CALIFORNIA Proposition 65 Warning

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

Important: Use of the limited slip differential lock kit is not recommended for machines that are operated for extended periods on the road. If you anticipate operating the machine on the road extensively, request that your dealer/distributor service provider limit the ground speed of the machine to 16 km/h (10 mph).

Preparing to Install the Limited Slip Differential Lock Kit

Preparing the Machine

1. Park the machine on a level surface.
2. Disengage and lower the cutting units.
3. Engage the parking brake.
4. Shut off the engine and remove the key from the key switch.
5. Wait for all moving parts to stop.
6. Allow the engine to cool completely.

Opening the Hood

1. Insert the hood key into the lock for the hood and rotate the lock 90° counterclockwise (Figure 1).
2. Press the button of the hood latch (Figure 1).

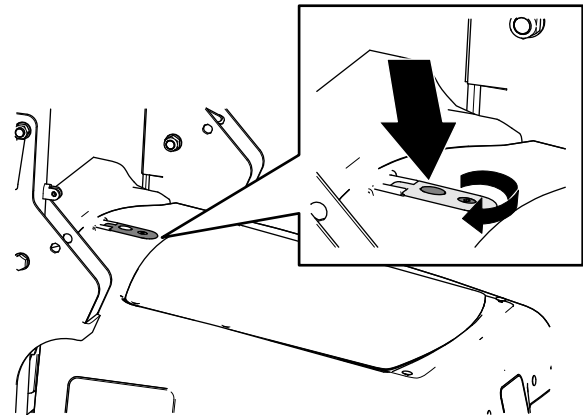
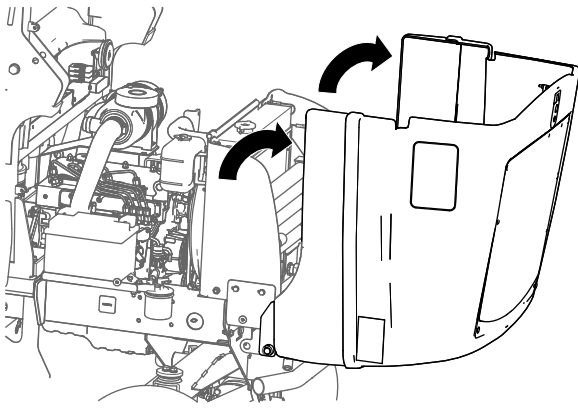


Figure 1

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3. Carefully rotate the hood back and down (Figure 2).





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Figure 2

Machines with a Top Mounted Hood Latch

Disconnecting the Battery

⚠ WARNING

CALIFORNIA Proposition 65 Warning

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.

⚠ WARNING

Battery terminals or metal tools could short against metal machine components, causing sparks. Sparks can cause the battery gases to explode, resulting in personal injury.

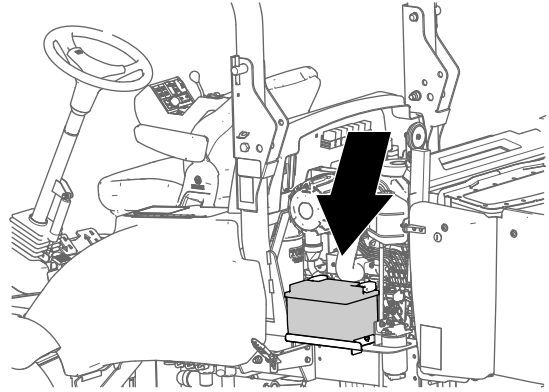
- When disconnecting or connecting the battery, do not allow the battery terminals to touch any metal parts of the machine.
- Do not allow metal tools to short between the battery terminals and metal parts of the machine.

⚠ WARNING

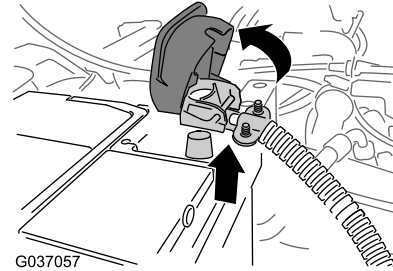
Incorrect battery cable routing could damage the machine and cables, causing sparks. Sparks can cause the battery gases to explode, resulting in personal injury.

- Always disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
- Always connect the positive (red) battery cable before connecting the negative (black) cable.

1. Lift the cover of the negative battery cable (Figure 3).



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Figure 3

2. Remove the negative battery cable from the battery (Figure 3).

Note: Position the negative battery cable where it cannot contact the negative battery post.

3. Lift the cover of the positive battery cable.

Note: Lifting the cover will loosen the battery cable terminal from the positive battery post.

4. Remove the positive battery cable from the battery.

Raising the Operator's Platform

Move the platform latch handle to the unlock position and tilt the operator's platform forward as shown in [Figure 4](#).

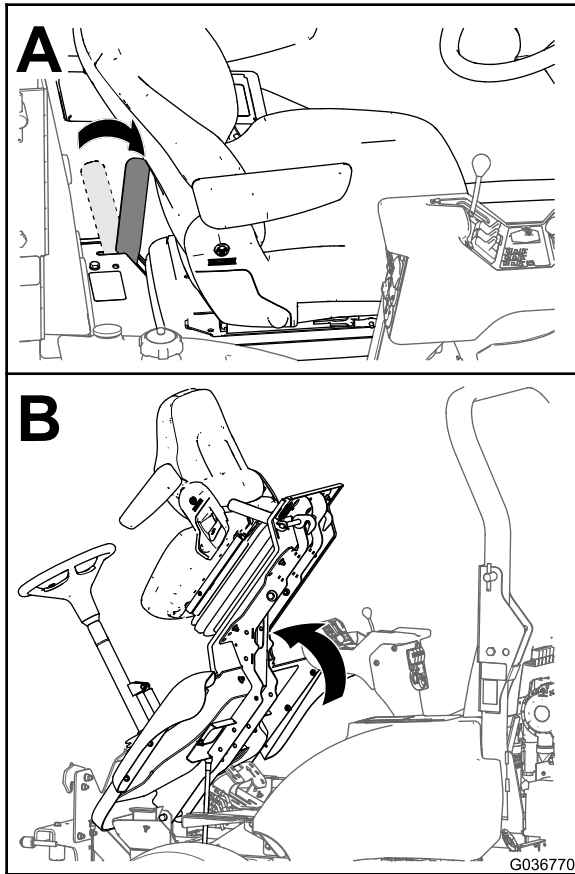


Figure 4

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Installing the Limited Slip Differential Valve

1. Clean the area around the traction manifold of debris ([Figure 5](#)).

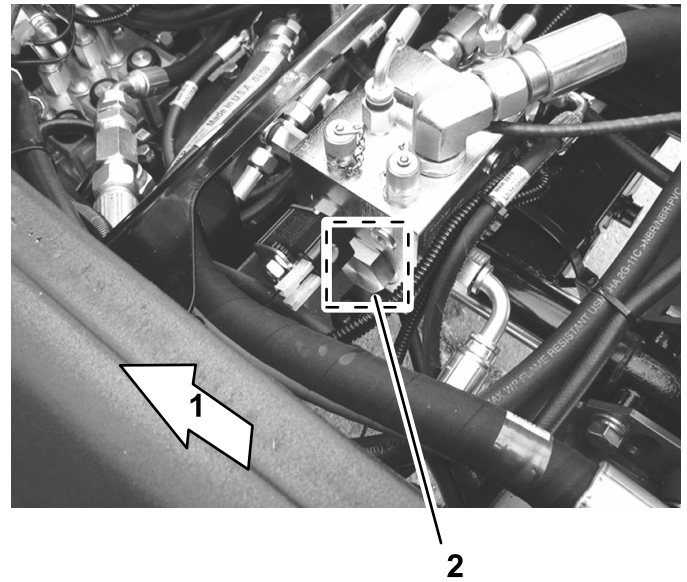


Figure 5

1. Front of the machine
2. Plug (traction manifold)

2. Remove the plug from the port at left side of the traction manifold ([Figure 6](#)).

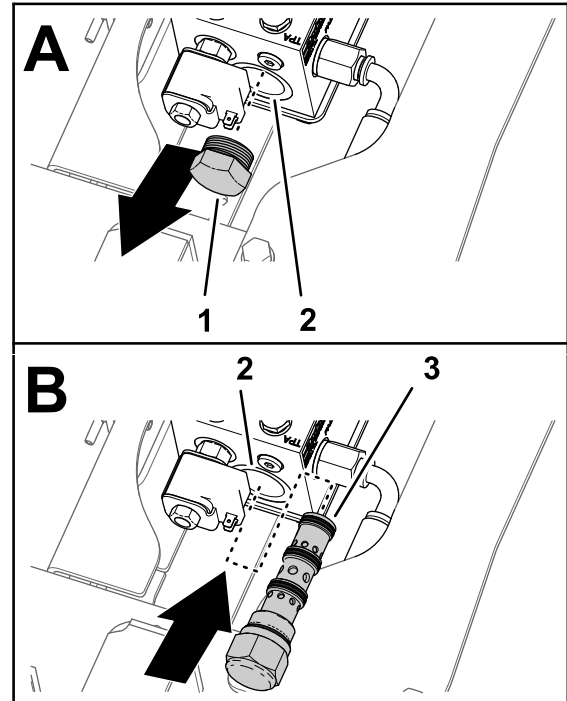


Figure 6

1. Plug (traction manifold)
2. Manifold port
3. Limited slip differential valve

3. Insert the limited slip differential valve into the traction manifold and thread the valve in by hand (Figure 6).
4. Check that the O-ring on the limited slip differential valve has not moved out of place.
5. Torque the valve to 136 to 149 N·m (100 to 110 ft-lb).

Finishing Installing the Kit

Lowering the Operator's Platform

1. Lower the platform carefully; refer to Figure 4 in [Raising the Operator's Platform](#) (page 3).
2. Move the locking-latch handle toward the front of the mower as the platform nears the fully lowered position; refer to Figure 4 in [Raising the Operator's Platform](#) (page 3).

Note: This ensures that the latch hooks clear the locking bar.

3. Fully lower the platform and move the locking handle toward the rear of the mower (Figure 7) until the latch hooks fully engage the locking bar.

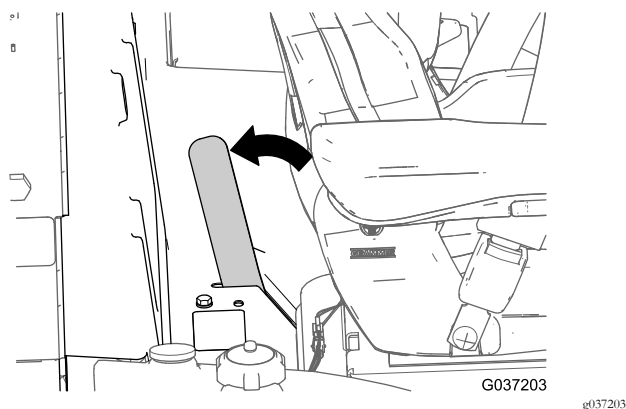


Figure 7

Connecting the Battery Cables

⚠ WARNING

Incorrect battery cable routing could damage the machine and cables, causing sparks. Sparks can cause the battery gases to explode, resulting in personal injury.

- Always disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
 - Always connect the positive (red) battery cable before connecting the negative (black) cable.
1. Connect the positive battery cable to the battery post; refer to [Disconnecting the Battery](#) (page 2).
 2. Align the insulator cover of the battery-cable terminal and close the cover; refer to [Disconnecting the Battery](#) (page 2).

Note: Closing the cover will tighten the battery cable terminal from the positive battery post.

3. Connect the negative battery cable to the battery post; refer to [Figure 3](#) in [Disconnecting the Battery](#) (page 2).
4. Align the insulator cover of the battery-cable terminal and close the cover; refer to [Figure 3](#) in [Disconnecting the Battery](#) (page 2).

Note: Closing the cover will tighten the battery cable terminal from the negative battery post.

Checking the Hydraulic Fluid

Check the hydraulic fluid level in the tank—add hydraulic fluid as needed; refer to [Checking the Hydraulic Fluid](#) in the *Operator's Manual* for your machine.

Applying the Serial Label and Lowering the Hood

1. Apply the serial label to the left frame rail, adjacent to the machine serial label.
2. Close and secure the hood; refer to [Opening the Hood \(page 1\)](#).
3. Rotate the lock 90° clockwise to the LOCK position; refer to [Opening the Hood \(page 1\)](#).

Operation

Using the Limited Slip Differential Lock

The limited slip differential valve operates automatically, it prevents the front wheels rotating considerably faster than the rear wheels. Because of the 4 wheel drive on demand transmission system, slip in the front wheels will cause the drive to engage for the rear wheels.

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 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:

Commercial Products Service Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
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, brakes pads and linings, clutch linings, blades, reels, bed knives, tines, spark plugs, castor wheels, tires, filters, belts, and certain sprayer components such as diaphragms, nozzles, and check valves, etc.
- Failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices,

contamination, use of unapproved coolants, lubricants, additives, fertilizers, water, or chemicals, etc.

- 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.

Note Regarding Deep Cycle Battery Warranty:

Deep cycle 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.

Maintenance is at Owner's Expense

Engine tune-up, lubrication cleaning and polishing, replacement of Items and Conditions Not Covered 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.

Countries Other than the United States or Canada

Customers should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.