



# Over-the-Tire Tracks

Model No. 22431

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## Operator's Manual

**IMPORTANT:** Read this manual carefully. It contains information about your safety and the safety of others. Also become familiar with the controls and their proper use before you operate the product.

# Introduction

We want you to be completely satisfied with your new product, so feel free to contact your local Authorized Service Dealer for help with service, genuine replacement parts, or other information you may require.

Whenever you contact your Authorized Service Dealer or the factory, always know the model number of your product. This number will help the Service Dealer or Service Representative provide exact information about your specific product.

The warning system in this manual identifies potential hazards and has special safety messages that help you and others avoid personal injury, even death. DANGER, WARNING and CAUTION are signal words used to identify the level of hazard. However, regardless of the hazard, be extremely careful.

**DANGER** signals an extreme hazard that will cause serious injury or death if the recommended precautions are not followed.

**WARNING** signals a hazard that may cause serious injury or death if the recommended precautions are not followed.

**CAUTION** signals a hazard that may cause minor or moderate injury if the recommended precautions are not followed.


Two other words are also used to highlight information. “Important” calls attention to special mechanical information and “Note” emphasizes general information worthy of special attention.

The left and right side of the machine is determined by sitting on the seat in the normal operator’s position.

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# Safety

Improper use or maintenance by the operator or owner 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 the instruction may result in personal injury or death.

## Safe Operating Practices

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

### DANGER

#### POTENTIAL HAZARD

- When moving, the tracks can pinch and grab hands, feet, or other extremities.

#### WHAT CAN HAPPEN

- Caught extremities could be removed or seriously injured, and death could result.

#### HOW TO AVOID THE HAZARD

- Keep clear of the tracks during operation.

## General Operation

1. Read, understand, and follow all instructions in the traction unit and attachment operator's manual, in the video and on the machine before starting.
2. Allow only responsible adults who are familiar with the instructions to operate the machine.
3. Do not operate machine or attachments while wearing sandals, tennis shoes, sneakers or shorts. Always wear long pants and substantial shoes. Wearing safety glasses, safety shoes, hearing protection and a hard hat are advisable and may be required by some local ordinances and insurance regulations.
4. Be sure the area is clear of other people before operating machine. Stop the machine if anyone enters the area.
5. Never carry passengers on attachments or on traction unit.
6. Always look down and behind before and while backing.
7. Do not place feet under the platform.
8. Slow down before turning. Sharp turns on any terrain may cause loss of control.
9. Never leave a running machine unattended. Always lower loader arms, stop engine, and remove key before dismounting.
10. Do not exceed rated operating capacity, as machine may become unstable which may result in loss of control.
11. Do not carry load with arms in a raised position. Always carry loads close to the ground. Do not step off platform with load raised.
12. Never jerk the control levers, use a steady motion.

13. Keep hands, feet, hair and loose clothing away from any moving parts while engine is running.
14. Stop the engine before leaving the operator's position.
15. Operate only in daylight or good artificial light.
16. Do not operate the machine while under the influence of alcohol or drugs.
17. Watch for traffic when operating near or crossing roadways.
18. Use extra care when loading or unloading the machine onto a trailer or truck.
19. Do not touch equipment or attachment parts which may be hot from operation. Allow to cool before attempting to maintain, adjust or service.

## Slope Operation

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. All slopes require extra caution.

### DO

- Operate up and down slopes greater than 5°, not across.
- Operate up and down slopes with the heavy end of the machine uphill. Weight distribution changes. An empty bucket will make the rear of the machine the heavy end and a full bucket will make the front of the machine the heavy end. Most other attachments will make the front of machine the heavy end.
- Remove obstacles such as rocks, tree limbs, etc. from the work area. Watch for holes, ruts or bumps, as uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Before starting, put pump selector valve in slow (turtle) position so that you will not have to stop or shift while on the slope.
- Follow the manufacturer's recommendations for wheel weight or counterweights to improve stability.
- Use only Toro approved attachments. Attachments can change the stability and the operating characteristics of the machine. Warranty may be voided if used with un-approved attachments.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction proceed slowly straight down the slope.
- Check carefully for overhead clearances (i.e. branches, doorways, electrical wires) before driving under any objects and do not contact them.

### DO NOT

- Do not operate machine on hillsides or slopes exceeding 15°.
- Avoid turning on slopes. If you must turn, turn slowly and keep the heavy end of the machine uphill.
- Do not operate near drop-offs, ditches, or embankments. The machine could suddenly turn over if a wheel goes over the edge of a cliff or ditch, or if an edge caves in.
- Do not operate on wet grass. Reduced traction could cause sliding.
- Do not park machine on a hillside or slope without lowering the loader arms and attachment to the ground and chocking the wheels.
- Do not try to stabilize the machine by putting your foot on the ground.

## Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the work activity. Never assume that children will remain where you last saw them. The following requirements must be followed to prevent injury to children.

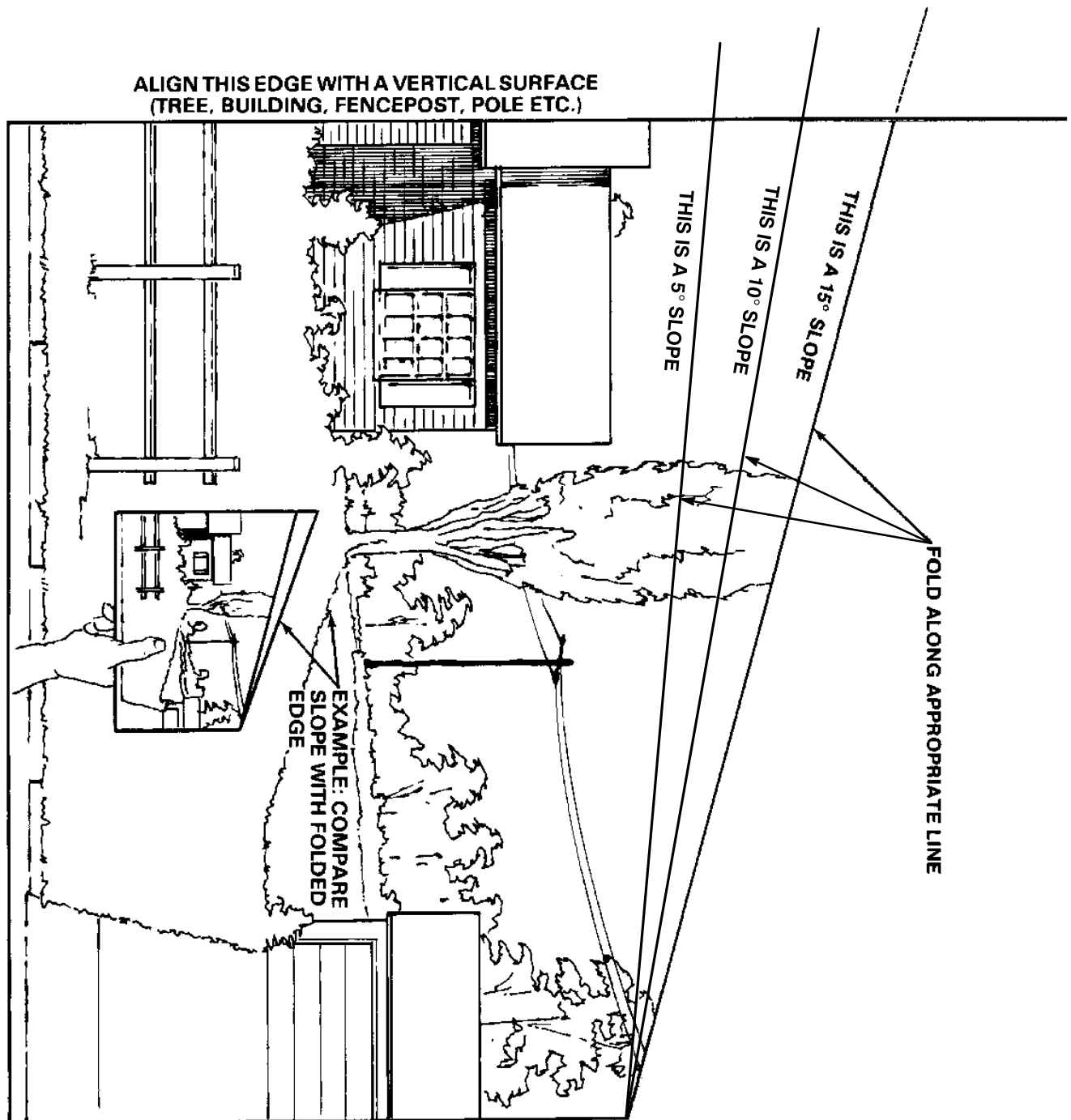
1. Keep children out of the work area and under the watchful care of another responsible adult.
2. Be alert and turn the machine off if children enter the area.
3. Before and while backing, look behind and down for small children.
4. Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
5. Never allow children to operate the machine.
6. Use extra care when approaching blind corners, shrubs, trees, the end of a fence or other objects that may obscure vision.
6. Keep the machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage. Allow the machine to cool before storing.
7. Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
8. Use only genuine replacement parts to ensure that original standards are maintained.
9. Keep body and hands away from pin hole leaks or nozzles that eject high pressure hydraulic fluid. Use cardboard or paper to find hydraulic leaks. Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid accidentally injected into the skin must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

## Service

1. Stop the engine and disconnect spark plug wire(s) before performing any service, repairs, maintenance or adjustments.
2. Perform all maintenance with the loader arms in the lowered position. If any maintenance or repair requires the loader arms to be in the raised position, secure the arms in the raised position with the loader arm hydraulic cylinder locks included with machine.
3. Never run a machine inside a closed area.
4. Keep nuts and bolts tight. Keep equipment in good condition.
5. Never tamper with safety devices. Check safety systems for proper operation before each use.

# Slope Chart

Read all safety instructions on pages 2–4.



# Specifications

## General Specifications:

Overall width	4 inches (10.1 cm)
Overall length	89 inches (226 cm)
Weight (per track)	144 lbs (65.3 Kg)
Track thickness	0.250 inches (6.3 mm)

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



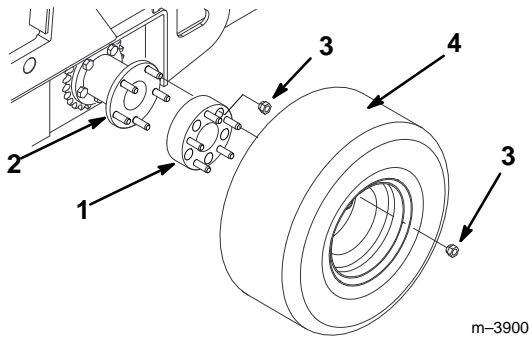
# Installation

## Loose Parts

DESCRIPTION	QTY.	USE
Wheel spacers	4	Install on wheels
Lug nuts (20 provided with the wheel spacers and 20 on the traction unit)	40	
Over-the-tire track assembly	2	Install on traction unit
Bolt	4	
Locknut	4	
Warranty Registration Card	1	Read before use
Operator's Manual	1	

## Preparing the Traction Unit

1. Put the traction unit up on blocks and remove the wheels.
2. Slide the wheel spacers onto the studs on the wheel hub and secure them with lug nuts (Fig. 1). Torque the lug nuts to 55 in-lbs (75 N·cm).
3. Install the wheels on the studs on the wheel spacers and secure them with lug nuts (Fig. 1). Torque the lug nuts to 55 ft-lbs (75 N·cm).

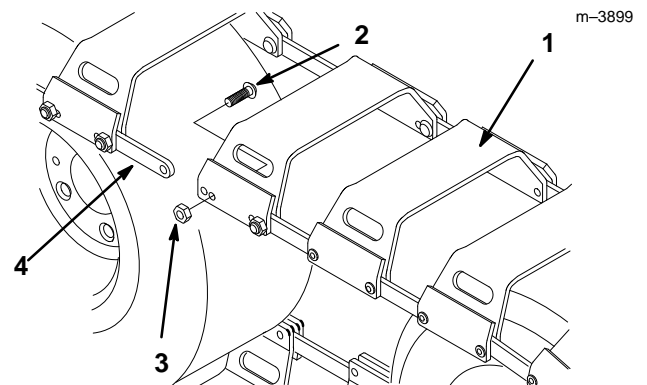


**Figure 1**

- |                 |            |
|-----------------|------------|
| 1. Wheel spacer | 3. Lug nut |
| 2. Wheel hub    | 4. Wheel   |

## Installing the Tracks

1. Lay one track on a level surface.
2. Drive the traction unit onto the track until both wheels on one side are centered in the track.
3. Pull the front and rear of the track up and over the tires.
4. Connect the track by installing (2) bolts and (2) locknuts through the connector links on both sides of the track (Fig. 2).

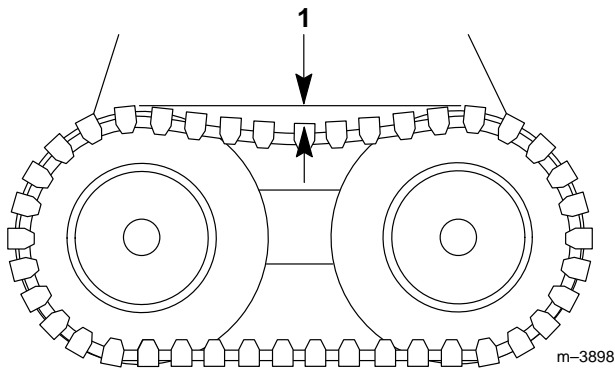


**Figure 2**

- |          |                   |
|----------|-------------------|
| 1. Track | 3. Locknut        |
| 2. Bolt  | 4. Connector link |

4. Return the traction unit to the ground.

5. Repeat steps 1 through 4 for the other side of the traction unit.
6. Drive the traction unit for a few minutes to loosen the tracks.
7. Lay a long, straight bar across the top of each track. There should be 1" to 3" of slack in the top span of the track below the bar (Fig. 3).



**Figure 3**

1. 1" to 3"

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8. If there is too much or too little slack in the track, adjust the track tension; refer to Adjusting Track Tension, page 9.

## Removing the Tracks

1. Stop the traction unit so that one of the bolted connector links on a track is in the middle of the top span.
2. Remove the bolts and nuts from the connector links and lay the track flat.
3. Drive slowly off of the track.
4. Place the bolts and nuts in the holes in the connector for storage.
5. Repeat steps 1 through 4 for the other track.

## Operating Tips

Avoid operating on asphalt or concrete surfaces as damage may occur to the surface, as well as excessive wear on the tracks.

# Maintenance

## Service Interval Chart

Service Operation	Each Use	5 Hours	25 Hours	200 Hours	Storage Service	Notes
Track tension—check and adjust			X			

### CAUTION

#### POTENTIAL HAZARD

- If you leave the key in the ignition switch, someone could start the engine.

#### WHAT CAN HAPPEN

- Accidental starting of the engine could seriously injure you or other bystanders.

#### HOW TO AVOID THE HAZARD

- Remove the key from the ignition switch before you do any maintenance.

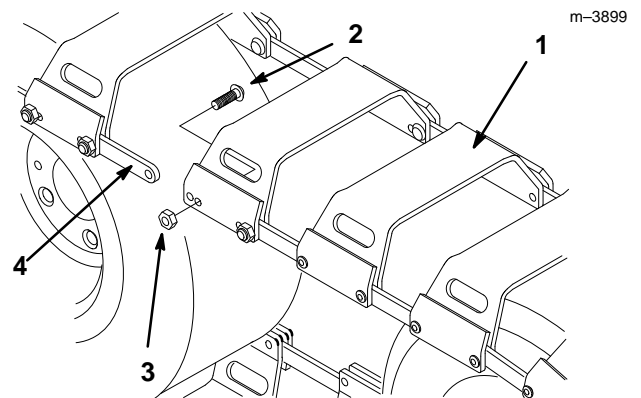
## Adjusting Track Tension

Check the tension of the tracks every 25 operating hours by laying a long, straight bar across the top of each track. There should be 1" to 3" of slack in the top span of the track below the bar (Fig. 3). If the chain needs adjustment, complete the following procedure:

**Note:** When you adjust the traction drive chain, the track may also need to be adjusted.

1. Park the traction unit so that one of the four bolted connector links is in the middle of the top span.
2. Remove the bolts from the connector and reconnect them through the inner holes of the track section to tighten the track (Fig. 4).

**Note:** To loosen the track you can move a connector installed in an inner hole to the outer hole.



**Figure 4**

- |          |                   |
|----------|-------------------|
| 1. Track | 3. Locknut        |
| 2. Bolt  | 4. Connector link |

3. Check the track tension and repeat steps 1 and 2 for one of the other adjustable track sections if additional tensioning is required.

## **Storage**

1. Before long term storage, wash the traction unit with mild detergent and water to remove dirt and grime from the entire machine.
2. Check the condition of the tracks and tighten all bolts and nuts. Repair or replace any part that is damaged or worn.
3. Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
4. Store the tracks in a clean, dry garage or storage area. Cover it to protect it and keep it clean.







# The Toro SiteWork™ Systems Product Line

## One Year Limited Warranty

The Toro Company warrants your Toro SiteWork™ Systems Product ("Product") to be free from defects in materials or workmanship for the period of time listed below. Where a warrantable condition exists, Toro will repair the Product at no cost to you including diagnosis, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

**Warranty Duration: One year or 500 operational hours, whichever occurs first.**

### Owner Responsibilities:

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

### Instructions for Obtaining Warranty Service:

You are responsible for notifying the Toro SiteWork Systems Distributor or Authorized Toro SiteWork Systems Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists.

If you need help locating a Toro SiteWork Systems Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Toro LCG Products Service Department  
8111 Lyndale Avenue South  
Minneapolis, MN, 55420-1196  
Telephone: (612) 888-8801  
Facsimile: (612) 887-8258

### Maintenance Parts:

Parts scheduled for replacement as required maintenance ("Maintenance Parts"), are warranted for the period of time up to the scheduled replacement time for that part.

### Items/Conditions Not Covered:

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. The items / conditions listed below are not covered by this warranty:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, modified, or unapproved accessories are not covered.
- Product failures which result from failure to perform required maintenance and/or adjustments are not covered.
- Product failures which result from operating the Product in an abusive, negligent or reckless manner are not covered.

- This warranty does not apply to 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, digging teeth, tines, spark plugs, tires, filters, chains, etc.
- This warranty does not apply to 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, or chemicals, etc.
- This warranty does not apply to normal "wear and tear" items. Normal "Wear and Tear" includes, but is not limited to, worn painted surfaces, scratched decals or windows, etc.

### Other Legal Disclaimers:

The above remedy of product defects through repair by an authorized distributor or dealer is the purchaser's sole remedy for any defect. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**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 the express warranty.**

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

**The Toro Company is not liable for indirect, incidental or consequential damages in connection with the use of the Product, including any cost or expense of providing substitute Product or service during periods of malfunction or non-use.**

Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

**Note to California residents:** 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), 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 California Emission Control Warranty Statement printed in your Owner's Manual or contained in the engine manufacturer's documentation for details.