

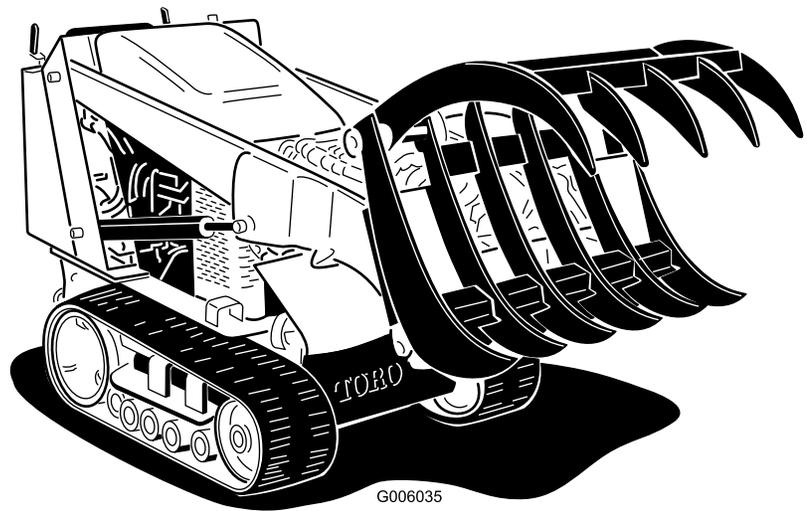


Count on it.

Operator's Manual

Grapple Rake
For Compact Utility Loaders

Model No. 22521—Serial No. 270000001 and Up



G006035

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. The model and serial numbers are located on a plate on the attachment frame, in front of the mount plate. Write the numbers in the space provided.

Model No. _____
Serial No. _____

This manual identifies potential hazards and has safety messages identified by the safety alert symbol (Figure 1), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 1

1. Safety alert symbol

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

Contents

Introduction	2
Safety	3
Stability Ratings.....	4
Safety and Instructional Decals	4
Product Overview	5
Specifications	5
Operation	6
Lifting Objects.....	6
Digging/Raking with the Upper Jaw.....	6
Digging with the Lower Jaw	6
Maintenance	7
Recommended Maintenance	
Schedule(s)	7
Greasing the Pivot Joints	7
Storage	8

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 those in the traction unit Operator's Manual. 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.



The attachment can crush and break legs, arms, and other body parts.

- Never go near the attachment while it is in operation.
- Keep all bystanders and pets a safe distance from the attachment.
- Always close the jaws of the attachment when not in use.



There may be buried power, gas, and/or telephone lines in the work area. Shock or explosion may occur if you dig into them.

Have the property or work area marked for buried lines and do not dig in marked areas.



There may be overhead power lines in the work area. Shock may occur if you touch a power line with a tree or other object that you are transporting.

Survey and mark the area where there are overhead power lines, and do not transport trees or tall objects under the power lines.



When the engine is off, attachments in the raised position can gradually lower. Someone nearby may be pinned or injured by the attachment as it lowers.

- Always lower the attachment lift each time you shut off the traction unit.
- Always close the grapple's jaws each time you shut off the traction unit.



If you step off of the platform with the load raised, the machine could tip forward. Someone nearby may be pinned or injured.

Lower the load before stepping off of the platform.



If you lift a long object off center, it could cause the machine to tip sideways. Someone nearby may be pinned or injured.

Always grab and lift long items near the center.



Lifting uneven, heavy objects can cause the machine to become unstable and tip forward. Someone nearby may be pinned or injured.

When lifting an object, keep it as low to the ground as possible.



When going up or down hill, the machine could overturn if the heavy end is toward the downhill side. Someone may be pinned or seriously injured by the machine if it overturns.

Operate up and down slopes with the heavy end of the machine uphill. Carrying a load with the attachment will make the front end heavy.

Stability Ratings

To determine the degree of slope you can traverse with the attachment installed on a traction unit, find the stability rating for the hill position you want to travel in the appropriate table below, then find the degree of slope for the same rating and hill position in the Stability Data section of the traction unit *Operator's Manual*.



Exceeding the maximum recommended slope can cause the traction unit to tip, crushing you or bystanders.

Do not drive the traction unit on a slope steeper than the maximum recommended slope, as determined in the following tables and the traction unit *Operator's Manual*.

Important: If you have a wheeled traction unit (i.e., not a TX), use the counterweight on the platform while using the attachment, or the traction unit will become unstable.

Stability With a Load

Orientation	Stability Rating
Front Uphill 	C
Rear Uphill 	D
Side Uphill 	C

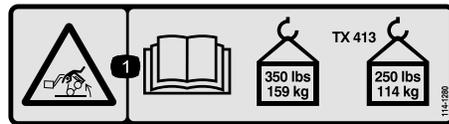
Stability Without a Load

Orientation	Stability Rating
Front Uphill 	D
Rear Uphill 	C
Side Uphill 	C

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 lost.



114-1280

1. Tipping hazard, exceeding rated load capacity can cause instability—read the *Operator's Manual*; do not exceed maximum load capacity of 350 lb (159 Kg); for TX 413 models, do not exceed maximum load capacity of 250 lb (114 Kg).



114-1281

1. Warning; crushing hazard, grapple—keep bystanders a safe distance from the machine.

Product Overview

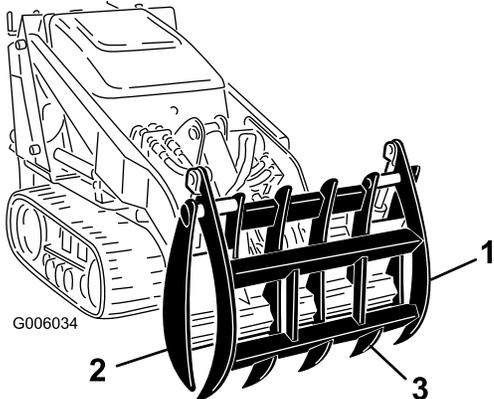


Figure 2

- 1. Upper jaw
- 2. Lower jaw
- 3. Tooth

Specifications

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

Width	34.5 inches (87.6 cm)
Length	18 inches (46 cm)
Height	30 inches (76 cm)
Weight	265 lb (120 Kg)

Operation

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

Refer to your traction unit *Operator's Manual* for procedures to install an attachment, connect hydraulic hoses, and remove an attachment.

Lifting Objects

Use the attachment to grab and lift heavy objects such as logs and rocks.

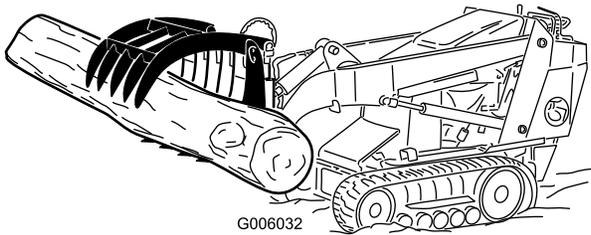


Figure 3

Never lift more than the rated lift capacity of the attachment as listed on the decals. When transporting a load, keep it as close to the ground as possible.

Important: If you are lifting more delicate or hollow items, such as crates, close the jaws with care so as not to crush the item being moved.

Digging/Raking with the Upper Jaw

To dig or rake using the upper jaw, open the jaws all the way, and tilt the attachment forward until the upper jaw teeth touch (or penetrate) the ground. Drive the machine rearwards. If the teeth are on the ground, this will rake up loose sticks and other debris, which you can then grab with the jaws. If the teeth penetrate the ground, this will dig furrows in the earth, breaking up the sod.

Note: You can also perform this operation with the jaws closed, because the upper teeth protrude through the lower jaw.

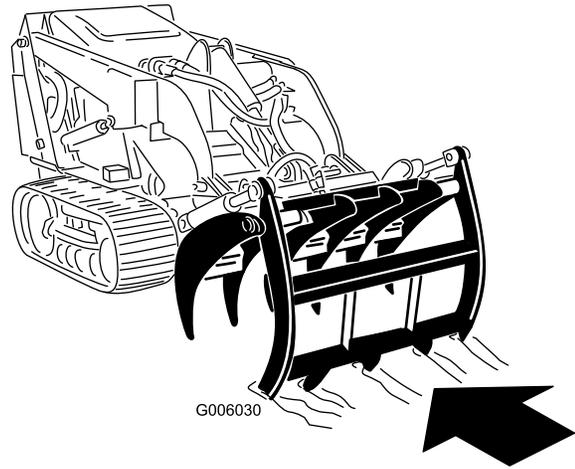


Figure 4

You can also use this method to rip out bushes. Place the upper jaw teeth into the ground on the far side of the bush and then close the jaws around the bush and roots, ripping the bush out of the ground.

Digging with the Lower Jaw

To dig or rake using the lower jaw, open the jaws and lower the lower jaw teeth into the ground. Drive the machine forward. This will dig furrows in the earth, breaking up the sod, and will also push any debris ahead of the attachment.

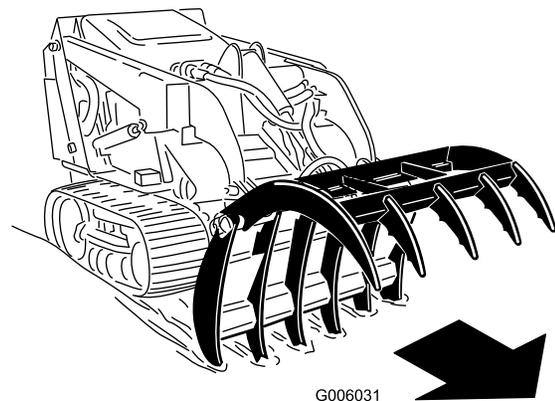


Figure 5

Maintenance

Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
Before each use or daily	<ul style="list-style-type: none">• Grease the pivot joints.
Before storage	<ul style="list-style-type: none">• Paint chipped surfaces.



If you leave the key in the ignition switch, someone could start the engine. Accidental starting of the engine could seriously injure you or other bystanders.

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

Greasing the Pivot Joints

Grease all pivot joints every 8 operating hours and immediately after every washing.

Grease Type: General-purpose grease.

1. Lower the loader arms, close the grapple jaws, and stop the engine. Remove the key.
2. Clean the grease fittings with a rag.
3. Connect a grease gun to each fitting (Figure 6).

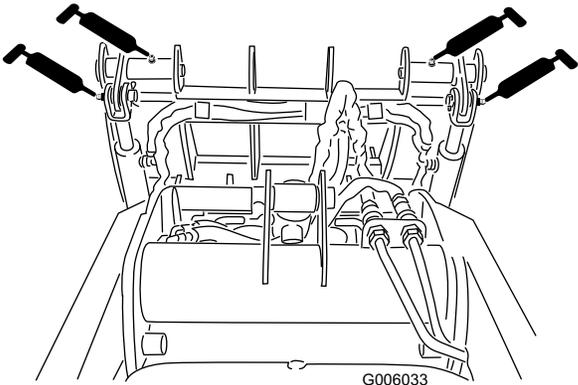


Figure 6

4. Pump grease into the fittings until grease begins to ooze out of the bearings (approximately 3 pumps).
5. Wipe up any excess grease.

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. 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.



The Toro Dingo® Product Line Warranty

A One-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 Dingo Product (“Product”) to be free from defects in materials or workmanship. The following time periods apply from the date the Product is delivered to the original retail purchaser:

Products	Warranty Period
All traction units and attachments	1 year or 1000 operational hours, whichever occurs first
All engines	2 years

Where a warrantable condition exists, we will repair the Product at no cost to you including diagnosis, labor, and parts.

Instructions for Obtaining Warranty Service

If you think that your Toro Product contains a defect in materials or workmanship, follow this procedure:

1. Contact any Authorized Dingo Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, access our website at www.Toro.com. U.S. Customers may also call 800-348-2424.
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer.

If for any reason you are dissatisfied with the Service Dealer’s analysis or with the assistance provided, contact us at:

LCB Customer Service Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
Toll Free: 888-577-7466 (U.S. customers)
Toll Free: 877-484-9255 (Canada customers)

Owner Responsibilities

You must maintain your Toro Product by following the maintenance procedures described in the *Operator’s Manual*. Such routine maintenance, whether performed by a dealer or by you, is at your expense. 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. 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 express 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, modified, or unapproved accessories

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. If all other remedies fail, you may contact us at Toro Warranty Company.

- Product failures which result from failure to perform required maintenance and/or adjustments
- 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, digging teeth, tines, spark plugs, tires, tracks, filters, chains, 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, or chemicals, etc.
- Normal “wear and tear” items. Normal “wear and tear” includes, but is not limited to, worn painted surfaces, scratched decals or windows, etc.
- Any component covered by a separate manufacturer’s warranty
- Pickup and delivery charges

General Conditions

Repair by an Authorized Toro Service 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.

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.

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.

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 you operator’s manual or contained in the engine manufacturer’s documentation for details.