



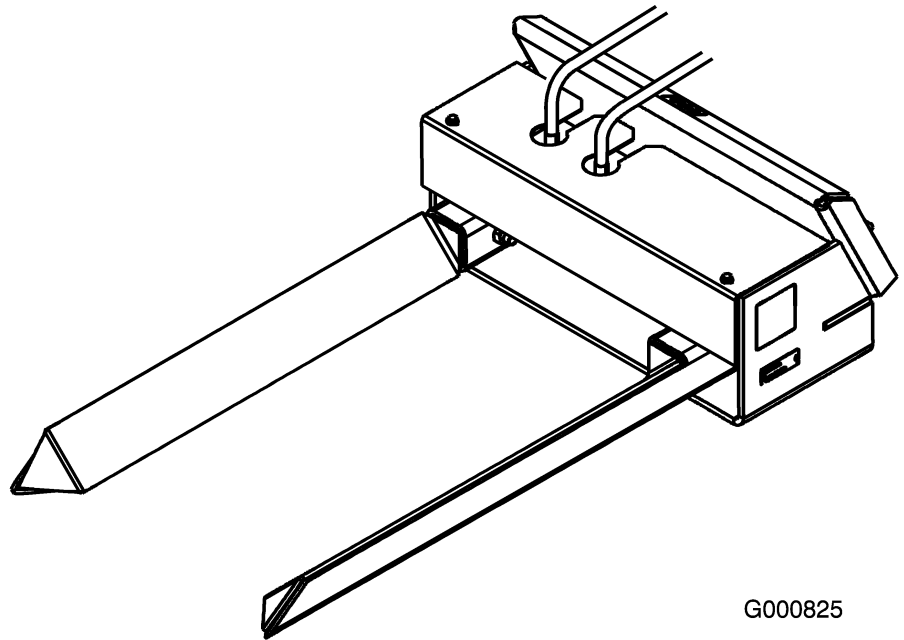
Count on it.

Operator's Manual

Tree Forks

For Compact Utility Loaders

Model No. 22438—Serial No. 240000001 and Up



G000825

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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.

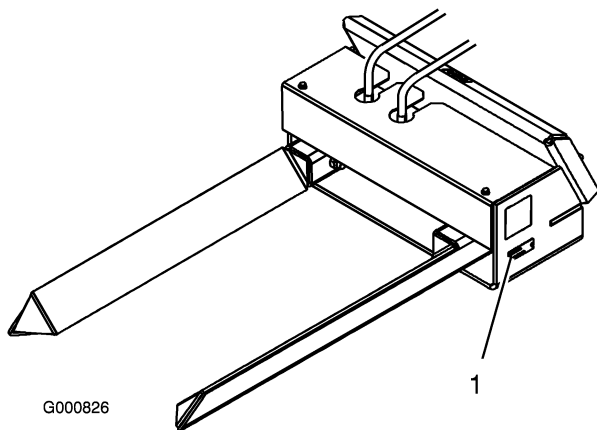


Figure 1

1. Location of the model and serial numbers

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

1. Safety alert symbol.

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

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.



There may be buried power, gas, and/or telephone lines in the work area. If you dig into them you or bystanders may be injured by electrical shock or explosion.

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



There may be overhead power lines in the work area. If you touch them with a tree or other object you are transporting, you or bystanders may be seriously injured by electrical shock.



When the engine is off, attachments in the raised position can gradually lower, possibly pinning or injuring you or bystanders.

Always lower the attachment lift before you stop the engine.



When going up or down hill, the machine can become unstable and tip, pinning or seriously injuring you or bystanders.

Operate up and down slopes with the heavy end of the machine up hill. An empty fork will make the rear end heavy and a loaded fork will make the front end heavy.



If you step off of the platform (wheeled traction units only) with the load raised, the machine could tip forward pinning or injuring bystanders.

Lower the loader arms before stepping off of the platform.



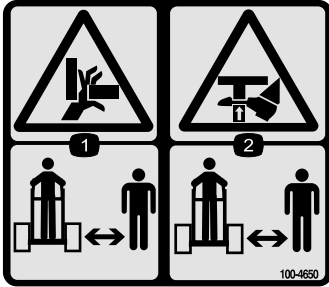
If you do not keep the load level while lifting, you could dump it on yourself, resulting in injury.

- When lifting the attachment, tilt it forward to keep it level and prevent it from spilling backwards.
- Carry the load level and as low to the ground as possible.

Safety and Instructional Decals

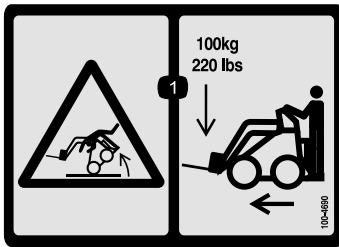


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



100-4650

1. Crushing hazard of hand—keep bystanders a safe distance from the machine.
2. Crushing hazard of foot—keep bystanders a safe distance from the machine.



100-4690

1. Tipping hazard—maximum load capacity is 220 lb (100 kg) when transporting.

Product Overview

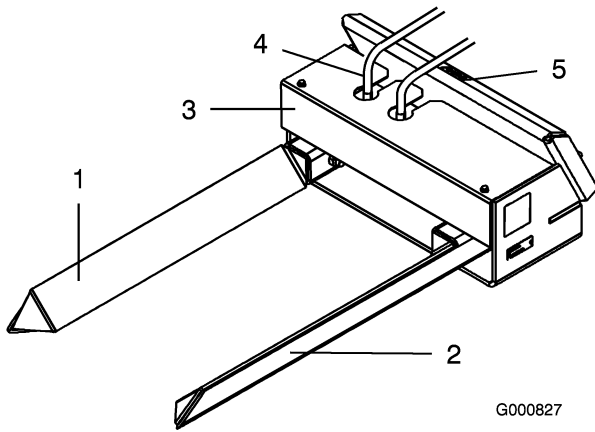


Figure 3

- | | |
|--------------------|--------------------|
| 1. Stationary tine | 4. Hydraulic hoses |
| 2. Moveable tine | 5. Receiver plate |
| 3. Cover | |

Specifications

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

Width	24.5 inches (62 cm)
Length	45 inches (114 cm)
Height	12.5 inches (32 cm)
Weight	169 lb (77 Kg)
Fork length	43 inches (109 cm)
Maximum load	220 lb (100 Kg)

Stability Ratings

To determine the degree of slope you can traverse with the fork installed on a traction unit, find the stability rating for the hill position you want to travel in the appropriate table, 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*.

Important: If your traction unit has a rear operator's platform, the counter weight must be used on the platform while using the fork, or the traction unit will become unstable.



If you exceed the maximum recommended slope, the traction unit could tip, crushing you or bystanders.

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

Stability without a load:

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

Stability with a load:

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

Operation

Note: Refer to your traction unit *Operator's Manual* for complete instructions on installing/removing attachments onto/from the traction unit and connecting/disconnecting hydraulic hoses.

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

Using the Tree Forks

The tree fork is an excellent tool for transporting balled and container grown trees and shrubs. You can also use the fork to move rocks under 220 lb (100 Kg).

1. If your traction unit has a speed selector and a flow divider, move the speed selector to the fast (rabbit) position and the flow divider to the 10 to 11 o'clock position.
2. Pull the auxiliary hydraulics lever to the operator grip to open the tines if necessary.
3. Drive forward, positioning the object to be moved between the fork tines.
4. Push the auxiliary hydraulics valve away from the operator grip to close the fork tines around the object.

Important: Be careful not to squeeze a pot or root ball too tightly. Using the full force of the tines on a tree may damage the root ball.

5. Raise the loader arms to lift the object. Keep it as close to the ground as possible.
6. Drive to the location where you want the object and lower it into place.
7. Release the object by pulling the auxiliary hydraulics lever to the operator grip.

Transporting the Tree Forks

1. Place the forks on a trailer or truck capable of carrying it.
2. Securely tie the forks to the trailer or truck using tie straps appropriate for the weight of the forks and for highway use.

Operating Tips

- Position the tree as close as possible to the fork frame to maximize lifting capability.

- Never attempt to lift more than the rated capacity of the traction unit.
- When transporting a load, keep the fork as close to the ground as possible.
- To ease the placement of a tree into a hole, pick up the tree near the top of the ball or container.
- The fork can also be used to lift, transport, and position small boulders and rocks.

Maintenance

Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
Before each use or daily	<ul style="list-style-type: none"> Grease the bearings.
Every 100 hours	<ul style="list-style-type: none"> Check the hydraulic hoses.
Before storage	<ul style="list-style-type: none"> Grease the bearings. Check the hydraulic hoses. Paint chipped surfaces.
Every 2 years	<ul style="list-style-type: none"> Replace the hydraulic hoses.



If you leave the key in the ignition switch, someone could accidentally start the engine and seriously injure you or other bystanders.

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

Greasing the Bearings

1. Disconnect the attachment from the traction unit; refer to the traction unit *Operator's Manual*.
2. Remove the two bolts securing the cover and remove it (Figure 4).

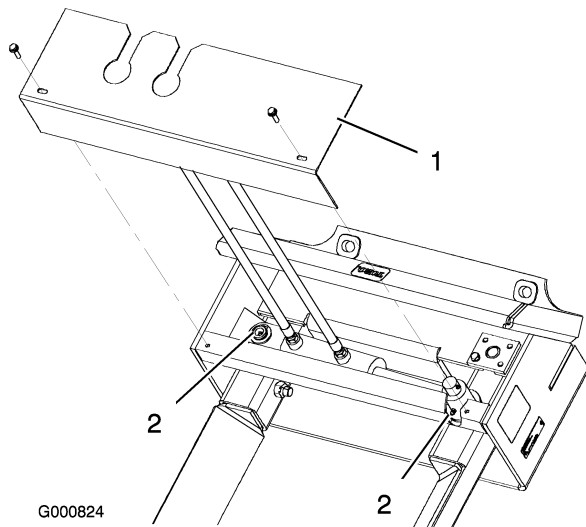


Figure 4

1. Cover
2. Grease fitting

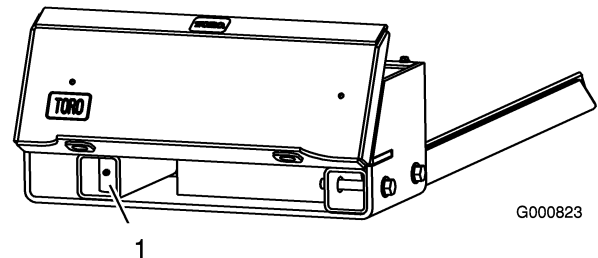


Figure 5

1. Grease fitting
4. Connect a grease gun to each fitting (Figure 4 and Figure 5).
5. Pump grease into the fittings until grease begins to ooze out of the bearings.
6. Wipe up any excess grease.

3. Clean the grease fittings (Figure 4 and Figure 5) with a rag. Make sure to scrape any paint off of the front of the fitting(s).

Checking the Hydraulic Hoses

After every 100 operating hours, check the hydraulic hoses for leaks, loose fittings, kinked lines, loose mounting supports, wear, weather, and chemical deterioration. Replace the hydraulic hoses every 1500 hours or 2 years, whichever comes first. Make necessary repairs before operating.



Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid 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.

- **Keep your body and hands away from pin hole leaks or nozzles that eject high pressure hydraulic fluid.**
- **Use cardboard or paper to find hydraulic leaks, never use your hands.**

Storage

1. Before long term storage, wash the attachment with mild detergent and water to remove dirt and grime.
2. Check and tighten all bolts, nuts, and screws. Repair or replace any part that is damaged or worn.
3. Ensure that all hydraulic couplers are connected together to prevent contamination of the hydraulic system.
4. Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
5. Store the attachment in a clean, dry garage or storage area. Cover it to protect it and keep it clean.

Troubleshooting

Problem	Possible Cause	Corrective Action
Fork does not open and close.	<ol style="list-style-type: none">1. Hydraulic coupler not completely connected2. Defective hydraulic coupler3. An obstruction in a hydraulic hose4. Auxiliary valve on the traction unit is not opening.5. Defective hydraulic cylinder(s)	<ol style="list-style-type: none">1. Check and tighten all couplers.2. Check couplers and replace any that are defective.3. Find and remove the obstruction.4. Repair the valve.5. Replace or repair any defective cylinders.



Count on it.