

Multi-Purpose Tool Sitework Systems Attachment Model No. 22423 – 890001 & Up

Operator's Manual

Contents

	Page
Introduction	. 2
Safety	. 2
Safety Decals	. 3
Specifications	. 3
Stability Ratings	. 4
Installation	
Loose Parts	. 5
Installing the Frame on the Traction Unit	. 5
Installing Accessories onto the Frame	. 6
Removing the Frame from the Traction Unit	. 6
Operation	. 7
Boom Jib Operation	
Scarifier/Ripper Operation	. 7
Hitch Operation	
Maintenance	
Service Interval Chart	. 8
Replacing Scarifier Teeth Tips	. 8
Storage	_

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 Dealer or the factory, always know the model and serial numbers of your product. These numbers will help the Dealer or Service Representative provide information about your product. You will find the model and serial number on a plate located on the back of the frame.

For your convenience, write the product model and serial numbers in the space below.

Model No: _	
Serial No	

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.

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 A symbol, which means CAUTION, WARNING, or DANGER—"personal safety instruction." Failure to comply with the instruction may result in personal injury or death.



DANGER



POTENTIAL HAZARD

• There may be buried power, gas, and/or telephone lines in the work area.

WHAT CAN HAPPEN

• Shock or explosion may occur.

HOW TO AVOID THE HAZARD

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



DANGER



POTENTIAL HAZARD

There may be overhead power lines in the work area.

WHAT CAN HAPPEN

• Shock may occur if a power line is touched by a tree or other object that is being transported.

HOW TO AVOID THE HAZARD

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

A

WARNING



CAUTION



POTENTIAL HAZARD

• When the engine is off, attachments in the raised position can gradually lower.

WHAT CAN HAPPEN

 Someone nearby may be pinned or injured by the attachment as it lowers.

HOW TO AVOID THE HAZARD

 Always lower the attachment lift each time you shut off the traction unit.

A

WARNING



POTENTIAL HAZARD

 When going up or down hill, the machine could overturn if the heavy end is toward the downhill side.

WHAT CAN HAPPEN

 Someone may be pinned or seriously injured by the machine if it overturns.

HOW TO AVOID THE HAZARD

 Operate up and down slopes with the heavy end of the machine uphill. Carrying a load with the multi-purpose tool will make the front end heavy.

POTENTIAL HAZARD

• If you step off of the platform with the load raised, the machine could tip forward.

WHAT CAN HAPPEN

• Someone nearby may be pinned or injured.

HOW TO AVOID THE HAZARD

 Lower the load before stepping off or the platform.

Safety Decals

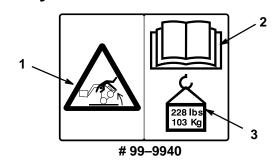


Figure 1

- Machine roll-over—
 exceeding rated load
 capacity can cause
 instability
- 2. Read operator's manual
- 3. Maximum load capacity

Specifications

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

Frame	
Width	24 inches (61 cm)
Length	4 inches (10 cm)
Height	10 inches (25 cm)
Weight	40 lbs (18 Kg)
Boom jib (1)	
Width	0.63 inches (1.6 cm)
Length	32.4 inches (82.3 cm)
Height	9.4 inches (23.9 cm)
Weight	23.2 lbs (10.5 Kg)
Chain	35 links, approximately 2.5 ft (76 cm), with S-hook ends

Scarifier teeth (3)				
Width (with tip)	2.0 inches (5.1 cm)			
Width (without tip)	0.63 inches (1.6 cm)			
Length	13.0 inches (13.0 cm)			
Height	11.7 inches (29.7 cm)			
Weight (each)	9.0 lbs (4.1 Kg)			
Tips	Replaceable, cast iron spear points			
Ball hitch (1, ball not included) (Suitable for mounting balls with 1 inch (2.5 cm) diameter mounting studs)				
Width	3.0 inches (7.6 cm)			
Length	8.4 inches (21.3 cm)			
Height	9.4 inches (23.9 cm)			
Weight	7.5 lbs (3.4 Kg)			

Stability Ratings

To determine the degree of slope you can traverse with the multi-purpose tool 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.



POTENTIAL HAZARD

• Exceeding the maximum slope can cause the traction unit to tip.

WHAT CAN HAPPEN

• If the traction unit tips, you or bystanders could be crushed.

HOW TO AVOID THE HAZARD

• Do not drive the the traction unit on a slope steeper that the maximum slope.

Stability With a Loaded Boom Jib

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

IMPORTANT: The multi-purpose tool with the boom jib installed is rated for use with the counterweight. Do not use the boom jib without the counterweight or the traction unit will become unstable.

Stability With an Unloaded Boom Jib

Orientation	Stability Rating
Front Uphill	_
	Ш
Rear Uphill	В
Side Uphill	В

IMPORTANT: The multi-purpose tool with the boom jib installed is rated for use with the counterweight. Do not use the boom jib without the counterweight or the traction unit will become unstable.

Stability With the Scarifier Teeth

Orientation	Stability Rating
Front Uphill	ח
	ט
Rear Uphill	ם
	В
Side Uphill	
	C

Note: The multi-purpose tool with the scarifier teeth installed is rated for use without the counterweight. If you use the counterweight, the traction unit will be less stable in the front and side uphill positions.

Stability With the Hitch

Never attempt to move a trailer on any slope. Because of this, there are no stability ratings for the hitch. Always use the counterweight when pulling trailers.

Installation

Loose Parts

DESCRIPTION	QTY.	USE		
Frame	1	Install on traction unit		
Boom jib	1	Install on frame		
Lifting chain	1	iristali on irame		
Scarifier teeth	3	Install on frame		
Hitch	1	Install on frame		
Clevis pin	3	Secure boom jib, scarifier teeth, and hitch to		
Hairpin cotter	3	the frame		

Installing the Frame on the Traction Unit

IMPORTANT: Before installing, ensure that the mount plates are free of any dirt or debris.

- 1. Ensure that the frame is positioned on a level surface with enough space behind it to accommodate the traction unit.
- **2.** Move pump control lever to slow (turtle) position. Start engine.

- Slowly push the attachment tilt lever forward to tilt the mount plate forward.
- **4.** Position mount plate into the upper lip of the receiver plate on the frame (Fig. 2).

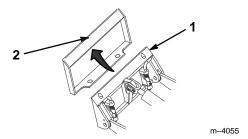


Figure 2

- 1. Mount plate
- 2. Receiver plate
- **5.** Raise the loader arms while tilting back the mount plate at the same time.

IMPORTANT: The attachment should be raised enough to clear the ground and the mount plate should be tilted all the way back.

- **6.** Stop the engine.
- **7.** Engage the quick attach pins (Fig. 3).

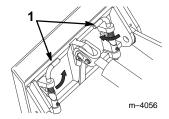


Figure 3

1. Quick attach pins (shown in engaged position)

Installing Accessories onto the Frame

All accessories (scarifier teeth, boom jib, and hitch) are installed into the slots in the frame in the same way. The boom jib and hitch should always be installed in the center position. The scarifier teeth can be installed in any or all of the three positions (up to 3 teeth may be installed at one time). Figure 4 illustrates a scarifier tooth being installed.

- 1. Slide the slot on top of the accessory onto the top bar of one of the three accessory positions (Fig. 4).
- **2.** Swing the bottom of the accessory into the frame and secure it with a clevis pin (Fig. 4).
- **3.** Secure the pin with a hairpin cotter (Fig. 4).

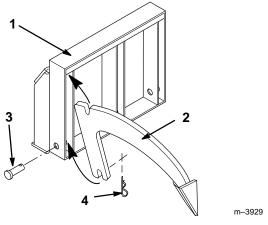


Figure 4

1. Frame

- 3. Clevis pin
- 2. Accessory
- 4. Hairpin cotter"
- **4.** Repeat steps 1 through 3 for the remaining accessory positions if needed.

Removing the Frame from the Traction Unit

- Start the engine and lower the frame to the ground or onto a trailer.
- 2. Stop the engine.
- **3.** Disengage the quick attach pins by turning them to the outside.
- **4.** Start the engine, tilt the mount plate forward, and back the traction unit away from the frame.

Operation

The multi-purpose tool can be used in 3 different operating modes, as follows:

- Boom jib (Fig. 5)
- Scarifier/ripper (Fig. 6)
- Hitch (Fig. 7)

Boom Jib Operation

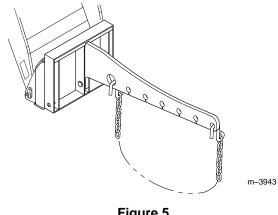


Figure 5

With the boom jib installed, the multi-purpose tool can be used to lift and transport various items, such as balled trees. Secure the item being lifted as close as possible to the boom jib frame using the provided lifting chain.

Always use the lifting chain provided to secure items to the boom jib.

Never lift more than the rated lift capacity of the traction unit. When transporting a load, keep it as close to the ground as possible.

The counterweight attachment is required when using the boom jib.



WARNING



POTENTIAL HAZARD

• Pulling tree stumps and other items can weaken the chain.

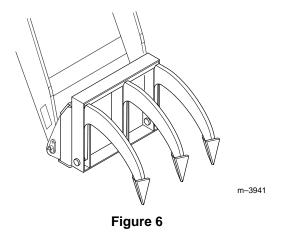
WHAT CAN HAPPEN

 The chain could break and snap back, causing serious injury.

HOW TO AVOID THE HAZARD

• Do not attempt to pull tree stumps and other large objects with the boom jib.

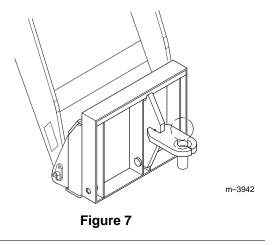
Scarifier/Ripper Operation



With the scarifier teeth installed, the multi-purpose tool can be used to loosen hard packed ground. Lower the teeth to the ground by lowering the attachment arms and tilting the attachment plate forward. Move the traction unit slowly backward while lowering the teeth into the ground. Several shallow passes may be necessary to thoroughly break up the ground.

The teeth can also be used to hook and tear out bushes and roots. It is also useful for raking up debris and brush.

Hitch Operation



With the hitch installed, the multi-purpose tool can be used to move trailers. You can install a ball hitch of proper size for your trailer, or you can use the hitch without a ball to tow trailers with hitches that require a pin for attachment.

Never attach a trailer to the hitch that has a tongue weight greater than the rated lift capacity of the traction unit. Never try to move a trailer on a slope.

The counterweight attachment is required when using the hitch to move trailers.

When crossing on or near a public road or street, always follow traffic laws and regulations, especially those pertaining to slow moving vehicles. The traction unit and accessories are not designed for use on public roads or streets.



WARNING



POTENTIAL HAZARD

 Pulling trailers or other objects using a rope, chain or cable can cause the rope, chain, or cable to break under tension.

WHAT CAN HAPPEN

• The rope, chain, or cable could break and snap back, causing serious injury.

HOW TO AVOID THE HAZARD

• Do not attempt to pull trailers or other objects with a rope, chain, or cable.

Maintenance

Service Interval Chart

Service Operation	Each Use	5 Hours	25 Hours	200 Hours	Storage Service	Notes
Scarifier teeth tips-inspect			Х		Х	Replace if damaged or worn
Chipped surfaces—paint					Х	

A 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.

Replacing Scarifier Teeth Tips

Inspect the scarifier teeth tips every 25 operating hours for damage or wear. Replace any damaged or worn tips, as follows:

- 1. Remove the roll pin securing the tip to the end of the scarifier tooth and remove the tip.
- 2. Install a new tip onto the end of the scarifier tooth and secure it with the roll pin.

Storage

- 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.