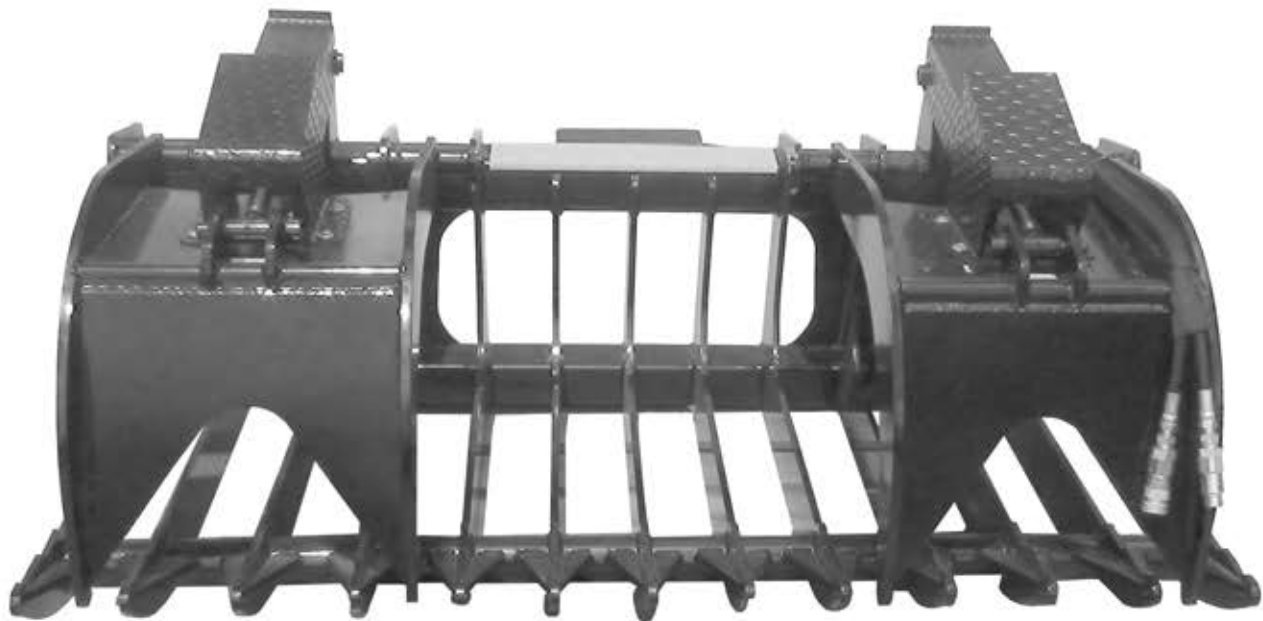


# **GROUND FORCE**

## **Root Grapple**

**HAR-RG66, HAR-RG72, HAR-RG84, HAR-RGG84**

# **Operation and Safety Manual**



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# Safety Symbols & Equipment Signs

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This is the safety alert symbol. When you see this symbol on your equipment or in this manual, be alert to the potential for personal injury or injury to others.



This symbol means to take notice. Following this symbol is useful and important information.

## Warning



Before using your new machine, you and all other operators should completely read through this manual. Failure to fully understand how to operate this machine and take safety precautions could lead to serious injury and death.



These signs should remain on the machine always, **DO NOT** remove. If the signs ever becomes lost or damaged they should be replaced.

**DANGER**

**MOVING MACHINERY  
KEEP HANDS AND  
FEET CLEAR**

# General Safety Instructions

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**Read through entire manual**



**Always keep the manual in a safe and easily accessible place.**



**Make sure to replace all missing or damaged decals.**



**Do not make unauthorized modifications to machine which could decrease it's stability and life or cause injury and possibly death. We also encourage you to only use authorized replacement parts from Harleman Mfg. which were made specifically for this machine.**



**If there is any part of this guide you do not understand feel welcome to call our shop at any time. The number is 417-876-3011.**



**Never use alcohol or drugs while using this machine, doing so could lead to serious injury or death.**



**Anyone under the age of 18 should not operate this machine.**

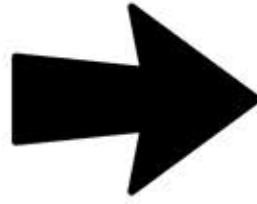


**Always wear relevant safety apparel. If using a skidsteer with an open cab you should always wear safety glasses and protective head gear. You never know when stray debris may ricochet your way.**

# Attaching the machine

## Part A

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# Attaching the machine

## Part B

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- ! The skid steer must be equipped with a compatible Standard Universal Quick Mount Hitch and Front Auxiliary Hydraulics to connect and operate the machine.



The skid steer must be equipped with an Operator Front Protective Door. Serious injury or death can result from a thrown object hitting an unprotected operator.

### Securing Equipment to the Skid Steer

1. With the engine completely shut down and the parking brake set, rotate the skid steer latch handles upward to the unlatched position. The latch handles must be completely raised to fully retract the hitch lock pins.
2. Start the skid steer and tilt the hitch mounting plate forward while guiding the mounting plate crest under the attachment saddle of the Grapple. Raise and roll back the mounting plate until the Grapple hitch plate is securely seated flat against the skid steer mounting plate.
3. With the Grapple fully supported by the skid steer boom, lower it to ground level. Slightly tilt the front of the Grapple upward about 2" from ground level. Turn off the engine, set the parking brake, and exit the skid steer. Push both latch handles downward to engage the hitch pins into the Grapple hitch retaining tabs. Now the Grapple hitch is securely attached to the mounting plate of the skid steer.

### Attaching the Hydraulic Lines

1. Before you connect hydraulic lines to the skid steer be sure that the hydraulic lines and quick couplers are of the same size and type.
2. With the skid steer completely shut down and secured in position and the Grapple resting at ground level, relieve auxiliary hydraulic pressure by moving the control levers back and forth several times.
3. When connecting the skid steer hydraulic lines to the Grapple, keep hoses, quick couplers, and swivels free of contamination. Clean dirt and other debris from the connections with a clean rag to prevent contamination of the hydraulic oil.



# How to operate

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1. After thoroughly reviewing the safety manual and the attachment procedures are complete, your Grapple is ready to use.
2. The Root Grapple is designed to move trees, brush, and various debris.
3. The Root Grapple; as it's name suggests, is great at ripping tree roots from the ground.
4. Stay alert and watch for potential hazards; such as powerlines, when pulling or moving brush and trees.

## Storage

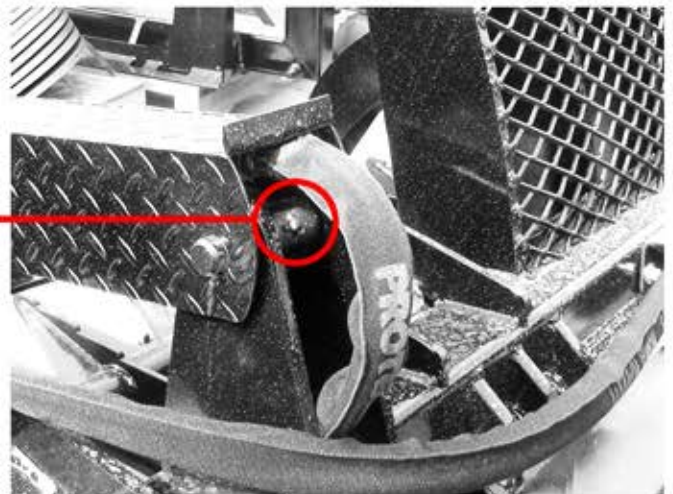
! Properly Cleaning and Storing your new machine is critical to maintaining it's appearance and ensuring years of service.



When not in use **always** make sure the machine is positioned flat on the ground.

1. Thoroughly clean all debris off the Grapple to prevent damage.
2. Check the Grapple for worn and damaged parts periodically. Perform repairs and make replacements immediately to prevent potential hazards.
3. Make sure to store the Grapple in a clean, dry place.
4. Keep the hydraulic hose ends from sitting in water, dirt and other contaminants. Connect the Grapple hydraulic lines together to prevent dirt and other contamination from entering the hydraulic system.
5. You can use spray touch-up enamel where necessary to prevent rust and to maintain the appearance of the Grapple.

There is a Grease Cert like the one shown in the picture on each end of the Grapple.





**Manufacturer of Drilling Equipment**

**Harleman Mfg., LLC**

**We dig your world!**