

Tomahawk Grapple Attachment

TOMAHAWK

Tomahawk Grapple Attachment
Operation and Maintenance Manual

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Document History

The table below lists all revisions of the Tomahawk Grapple Attachment Operation and Maintenance Manual.

<u>Document Revision</u>	<u>Summary of Changes</u>	<u>Publication Date</u>
First Publication	First Revision	04/07/14

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Tomahawk Grapple Attachment

About this Manual

This manual contains information about the usage and maintenance required for the equipment. This document must be available for review by the operator before using the attachment to ensure proper safety, maintenance, and usage.

Hazard Notices Used in this Manual

The following hazard notices are used in this document:

Note- Notes are used to indicate important information. This information may be repeated in other areas of the manual.

Caution- Cautions are used to indicate a potentially hazardous situation which, if not avoided, may result in damage to equipment or other property.

Warning- Warnings are used to indicate a potentially hazardous situation which, if not avoided, could result in serious injury or death.

Danger- Danger is used to indicate a potentially hazardous situation which, if not avoided, will result in serious injury or death.

Terminology

Power Unit: The Tomahawk Grapple Attachment can be attached to many different pieces of equipment; therefore the term "Power Unit" will be used. A power unit is any equipment, tractor, or skid steer providing power to the attachment.

Safety

Safety Notices

Before operating or conducting maintenance on this equipment, it is important to wear proper protection. Recommended safety equipment when operating and maintaining this equipment includes earplugs, eye protection, and a hard hat.

NOTE: Additional safety equipment may be required depending on the environment and work site conditions.

Only qualified and trained personnel should operate, maintain, and service this attachment. It is recommended that this equipment be inspected regularly for leaks, cracks, or other conditions that may impair proper usage of the equipment. Verify that all repairs have been completed and inspected prior to using the attachment under load.

It is the responsibility of the user to follow all local, state, and federal safety regulations. Improper use of this equipment may result in personal injury, property damage, and/or damage to the equipment.

Modifications to Equipment

Any modifications made to this equipment may void any warranty and relieve the manufacturer of liability of any resulting injury or damage.

Tomahawk Grapple Attachment

About the Tomahawk Grapple Attachment

The Tomahawk Grapple Attachment is intended for use in materials handling. The primary use of the Tomahawk Grapple Attachment includes land clearing, landscaping, demolition, construction, and grounds maintenance. Use of this equipment in any other manner is considered to be contrary to the intended use of the attachment.

Tomahawk Grapple Attachments

The Tomahawk Grapple Attachment is vital in the tree industry and is quickly becoming a necessity among contractors today. This unique Tomahawk Grapple Attachment is offered in a variety of sizes for a variety of applications.

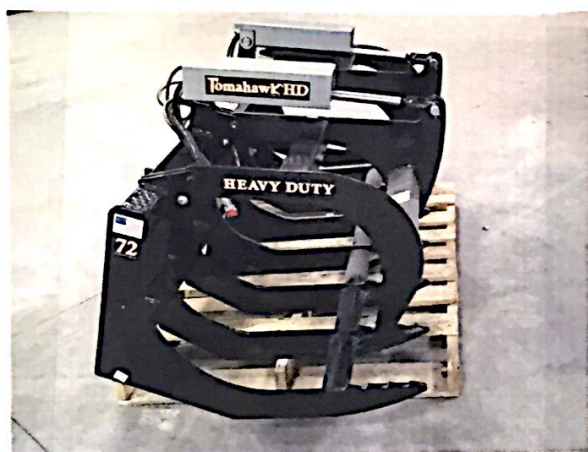


Figure 1 -Tomahawk Root Grapple

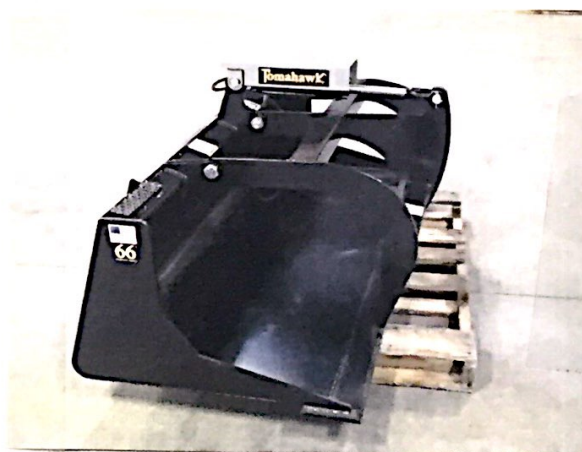


Figure 2 -Tomahawk Grapple Bucket

Root Grapple

With the Tomahawk Root Grapple, you can perform three jobs in one. In a single pass the Root Grapple rakes away debris, keeps it in a manageable pile to move around with ease, and the round bottom bar provides the necessary tool for backfill. The wide tine opening makes easy loading of logs, brush, rocks, demolition debris, and many other materials into the large bucket area. It is ideal for separating dirt from rock, lumber, or building materials with ease. The larger capacity means less loading and cost saving in both time and energy. Hydraulic cylinders operate independently to adjust for uneven loads. Tines curve upward in order to slide across the land without damaging topsoil or catching utility lines or cables.

Grapple Bucket

The Tomahawk Grapple Bucket accomplishes many of the same jobs as the Root Grapple and also has a cutting edge for scraping smooth surfaces.

Tomahawk Grapple Attachment

Attaching the Tomahawk Grapple Attachment to the Power Unit

NOTE: Before attempting to attach the Tomahawk Grapple Attachment to the power unit, verify that all hydraulic couplings are compatible.

WARNING- Improper attachment to the power unit may cause personal injury.

CAUTION- All hydraulic connections must be clean and free of debris before making any connection.

1. Place the Tomahawk Grapple Attachment on a level surface.
2. Position and align the power unit to the rear of the attachment, within proximity of the front of the power unit.
3. Insert and connect the power unit into the attachment.
4. Connect the hydraulic lines from the attachment to the power unit.
5. Close latches (or other locking mechanism) to secure the attachment to the power unit.
6. Using the power unit, raise and move the attachment to ensure hydraulic lines are clear of air and operate properly.
CAUTION- Hydraulics should operate in an even and smooth manner. Hydraulic movement that is not even and smooth may indicate that air is in the hydraulic lines.
7. Lower the attachment to ground level.
8. Inspect that the attachment is mounted properly and securely. If the attachment does not meet this requirement, follow the instructions to remove the Tomahawk Grapple Attachment and reattach using the instructions above.

Removing the Tomahawk Grapple Attachment from the Power Unit

WARNING- Improper disconnection may result in personal injury or damage to the attachment and power unit.

CAUTION- All hydraulic connections must be clean and free of debris before disconnection.

1. Using the power unit, lower the attachment to the ground.
2. To prevent contamination, remove any dirt and debris from the couplings. Disconnect the hydraulic connection between the attachment and the power unit.
NOTE: Hydraulic connections must be disconnected before disengaging latches to prevent damage to the power unit or the attachment.
3. Disengage the power unit latches (or other locking mechanism) from the attachment.
4. Move the power unit away from the attachment.

Tomahawk Grapple Attachment

Operation and Maintenance

Equipment Inspection

It is recommended to inspect the equipment for damage and wear before use. Use the following list as a guideline during equipment inspection.

- Check all hardware connections to the power unit for damage or fatigue such as cracks or other structural flaws.
- Check that all latches or locks are closed.
- Check that all hydraulic fittings are tight and free of leaks.
- Check that all hydraulic lines are free of leaks, holes, or cracks.
WARNING- Do not use hands to check for hydraulic leaks. Keep body parts away from leaking hydraulic lines and couplings that are under pressure.
- Check that the tires on the power unit are in good condition and have proper load ratings.

NOTE: Replace any damaged hardware, hoses, and fittings before using equipment.

Usage Guidelines

Before each use do the following:

- Perform daily maintenance as indicated in the Daily Maintenance Schedule.
- Inspect the attachment by performing a walk around.
- Use the Tomahawk Grapple Attachment for materials handling only.

DANGER- Keep all body parts away from the attachment when in use. The upper tines may open or close unexpectedly, causing serious bodily injury or death.

Inspect the attachment daily before use. It is also recommended to inspect the attachment after extreme use or damage. Use the following inspection checklist as a guideline.

Inspection Checklist

- ☐ Are all the safety notices and warning decals in their proper locations and visible?
- ☐ Are there any visible hydraulic leaks?
- ☐ Are any cracks visible in the Tomahawk Grapple Attachment structure?
- ☐ Are the tines worn or bent?
- ☐ Have all the grease fittings (grease zerks) been greased?
- ☐ Are the bolts holding the pins secure and tight?
- ☐ Has the power unit been properly inspected for hydraulic leaks and proper tire inflation?
- ☐ Has the power unit been properly maintained?