# Mini Skid Steer Loader Hydraulic Grapple User Manual



Read Carefully Before Use Keep for Future Reference

## **Contact Us**

Thank you for choosing our products! If you have any questions or comments, contact us at **help@cs-supportpro.com** and we'll resolve your issue ASAP!

For a .pdf copy of the latest version of these instructions, use the appropriate app on your smartphone to scan the QR code to the right.



## Preface

hank you for purchasing this grapple. We are thrilled to provide you with guidance on operating and maintaining this powerful grapple attachment.

Your safety as an operator of our product is important to us. Therefore, before you assemble, operate, or maintain this heavy piece of machinery, read and understand this manual thoroughly. By prioritizing safety, you're not only protecting yourself but also creating a secure environment for your team and work site.

Your satisfaction with the performance and longevity of our product is also important to us. The longevity can be prolonged by proper assembly, operation, and maintenance as instructed in this manual.

May this manual equip you with the knowledge and confidence to make the most of this grapple, and may you find success and satisfaction in using this grapple. Here's to many fruitful and enjoyable experiences ahead!

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# **1.Symbol Guide**

## Symbol Guide

The following symbols and safety signal words are used in this manual. **DO** obey the accompanying messages to avoid possible injury or death.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

Note

Indicates practices or situations which **MAY** result in the malfunction of, or damage to equipment.

## **2.Safety Information**

## 2.1 General Safety

#### Danger

- **ALWAYS** follow federal, state, and local laws, codes, and regulations concerning the use of construction machinery.
- **ALWAYS** follow all other applicable instructions and precautions as stated in your skid steer loader's manual.
- Read and understand this manual before actually attaching this grapple to your compatible skid steer loader. Familiarize yourself with the instructions that provide crucial information on the assembly, operation, and maintenance.
- Before assembly, follow the manual of your skid steer loader to run a routine check of all major parts, especially the hydraulic system.
- **ONLY** use with compatible skid steer loader models. Though this grapple has a wide fitment, compatible with most models weighing around 2205 lbs. (1 metric ton), **DO** research compatibility before actually working with this grapple. For details, see **Specifications**.
- **DO NOT** operate, inspect, or maintain the skid steer loader when your faculties or judgment are impaired by alcohol, drugs, medicines, fatigue, or lack of sleep. **NEVER** allow any persons under such conditions to operate, inspect, or maintain this heavy machinery.
- **IMMEDIATELY** cease to use and contact Customer Service if the grapple shows any sign of anomalies or malfunctions, such as noise, vibration, breakage, and so on. **NEVER** attempt to resume using the grapple if the issues remain unsolved.

## 2.2 Operation Safety

#### Danger

- **ALWAYS** remain focused on the task at hand. Operating heavy equipment requires your full attention.
- **ALWAYS** wear personal protective equipment (PPE) appropriate and adequate for operation. Flying debris can cause injury.
- **ONLY** operate the grapple from the skid steer loader's driver area.
- **ONLY** use this grapple to handle loose materials such as manure, bedding, hay, posts, fencing, and other hard-to-manage materials.
- **NEVER** lift heavy objects above the operator's platform or over or across any personnel on the work site.
- **NEVER** lift hoist, or carry humans on any part of the skid steer loader or loader attachments. Failure to heed may result in serious injury or even death.
- **NEVER** suddenly stop when lowering or lifting the loader boom to prevent loss of control over the machine and/or load, which may result in serious injury or death.
- Be extremely careful when working on inclines or near loose fill, rocks, and holes as they can cause tipping or upsetting which may result in serious injury or death.
- Be certain to avoid overhead electrical wires when operating the skid steer loader. Contact with power lines may cause serious injury or death.
- Transport the skid steer loader with the grapple at the slowest speed possible, and with the loader boom at the lowest position to avoid tipping or upsetting, which may result in serious injury or death.

#### **A**Caution

- **DO NOT** drop the grapple rapidly toward an object. Sudden impact may result in structural failure and possible serious injury or death.
- DO NOT operate the grapple with its cylinder fully extended or depressed. Prolonged time of
  over-extension or depression incurs excess wear and tear, thus shortening the service life of
  the cylinder.
- **DO NOT** operate the grapple underwater. Otherwise, the hydraulic system **WILL** be damaged.
- **DO NOT** dismount from a moving skid steer loader with this grapple or leave the skid steer loader with this grapple unattended with the engine running.
- Keep all bystanders away from the work area, especially children.

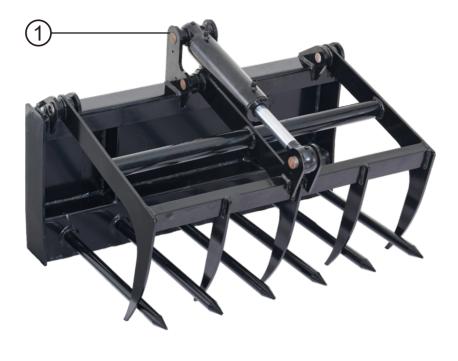
### 2.3 Maintenance Safety

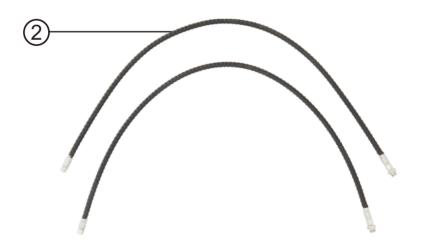
- Before maintenance, lower the attachment to the ground, shut off the engine, and relieve pressure in the hydraulic system.
- ALWAYS wear PPE appropriate and adequate for maintenance. Escaping hydraulic oil under pressure can penetrate the skin. NEVER use any part of your body to check for hydraulic leaks.
- **ONLY** use the recommended lubricant for the grapple. For the specific type, see **Maintenance**.

# **3. Specifications**

Name		Mini Skid Steer Loader Hydraulic Grapple		
	Material	Steel		
Grapple	Weight	319.7 lbs.	145 kg	
	Dimensions	37.8×23.4×30.5 (in.) 960×595×775 (mm) 37.8 37.8 37.8 37.8 37.8 30.5 30.5 30.5		
	Quick Attach Coupler - Size	600×240 (mm)		
	Quick Attach Coupler - Axis Pin Hole Diameter	18.6 mm		
	Quick Attach Coupler - Axis Pin Hole Spacing	370 mm		
Hydraulic Hose	Length	4.9 ft.	1.5 m	
	Size	G1⁄2"		
Compatible Skid Steer Loader Specs.	Weight	Around 2205 lbs.	Around 1 metric tons	
	Mount Plate - Axis Pin Diameter	18.6 mm		
	Mount Plate - Axis Pin Spacing	370 mm		
	Hydraulic Hose Size	G½"		

# 4. Package list





No.	Item	Qty.
1	Grapple	1
2	Hoses	2

# 5.Assembly

#### **Pre-Assembly Checklist**

Ensure that at least three people are available during assembly.

Ensure that the personnel wear PPE appropriate and adequate for assembly.

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Ensure that the grapple crate stands upright.

Ensure that all components are included by checking **Package list**.

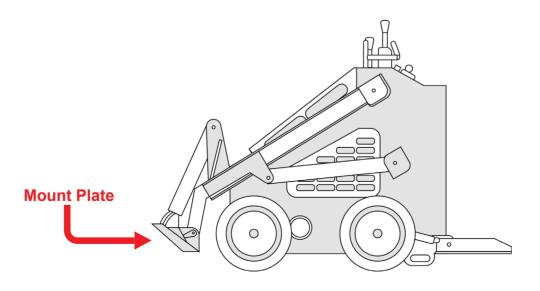
Ensure that the skid steer loader is compatible by checking **Specifications**.

### 5.1 Grapple Assembly

#### 🕂 Warning

- Ensure that the grapple and the mount plate are free of dirt and debris.
- Use level ground to assemble the grapple. If the ground is not level, use wood blocks to help.
- 1. Remove the current attachment on the skid steer loader.
  - a. Start the engine of the skid steer loader following the normal protocols.
  - b. Stand the attachment vertically by pushing the right control rod left a small amount.
  - c. Lay the attachment on the level ground by pushing the left control rod left.
  - d. Shut the engine.

e. Release the coupler locking mechanism by pulling the lock pin handles as shown on the mount plate away from the center of the attachment.



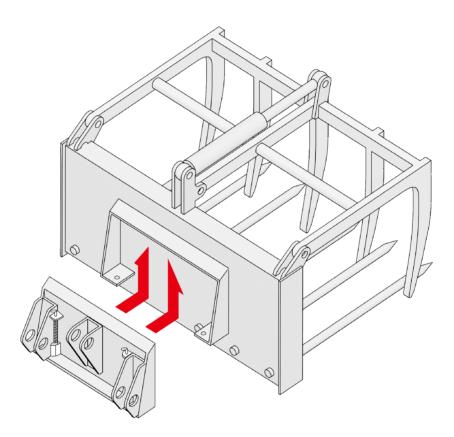
f. Remove the freed attachment using at least two people.

2. Assemble the grapple.

#### 🕂 Warning

Use at least three people to move the grapple. If possible, use a forklift.

- a. Unpack the crate and lay the grapple on a level surface.
- b. Start the engine of the skid steer loader following the normal protocols.
- c. Drive the skid steer loader to the rear of the grapple.
- d. Use the loader to hook the grapple's quick attach coupler into the loader's mount plate. Tilt the coupler backward a small amount until it is fully engaged in the mount plate.



- e. Stop the engine and engage the parking brake.
- f. Secure the coupler locking mechanism by pulling the lock pin handles on the mount plate to the center of the attachment.

### 5.2 Hydraulic Hose Connection

#### **M**Warning

- Use **EXTREME** care when handling the hydraulic hoses, which may remain hot enough to cause skin burns.
- Ensure that the hydraulic couplers are free of dirt and debris.
- 1. Shut the engine.
- 2. Push and pull all the control rods several times so that there is no residual pressure at the hydraulic couplers.
- 3. Ensure that all controls are in the neutral position.
- 4. Wait until the engine and hydraulic oil have cooled to ambient temperature.
- 5. Connect the male coupler of one hydraulic hose to the female coupler on the loader by inserting the male coupler.
- 6. Connect the other end of the hydraulic hose to one of the ports on the grapple. Either port works.
- 7. Connect the female coupler of the other hydraulic hose to the male coupler on the loader by inserting the female coupler.



- 8. Connect the other end of the hydraulic hose to the left port on the grapple.
- 9. Test the grapple and make sure you have enough hose length to perform the full range of the loader's operating heights, but be careful not to over-extend the cylinders.

# 6.Operation

#### A Warning

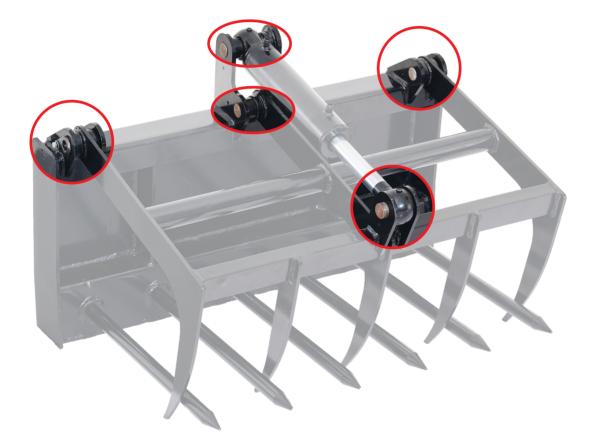
- **NEVER** allow anyone to operate the grapple until they have carefully read and understood this manual.
- ONLY use this grapple for its intended purposes, handling loose and lightweight material.
- Before operating, carefully check for hazards and obstructions.
- Keep all bystanders away from the work area, especially children.
- 1. Fully open the grapple, approach, and enter the target pile slowly. Tilt the fork part of the grapple as necessary.

Note: Raise the grapple only enough to permit maneuvering. Never lift off center.

- 2. After entering the target pile, close the grapple slowly.
- 3. Transport with the load at the lowest position.

## 7. Maintenance

- Clean dirt and grease that may have accumulated on the grapple. Scrape off compacted dirt and then wash thoroughly with a garden hose.
- Repaint parts where paint is worn or scratched to prevent rust.
- Check all parts for wear and loosen fit before each use, and replace as necessary.
- Dispose of the used material and waste products from the replacement appropriately.
- Store this grapple in a safe and secure place away from direct sunlight and inaccessible to children.
- Apply general-purpose lithium base grease to all moving parts by using your grease gun every 10 hours of operation, or more frequently during heavy use.



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