

**AHM**

# Mini Excavator 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](mailto: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.



# Safety Information

## 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.



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

## General Safety

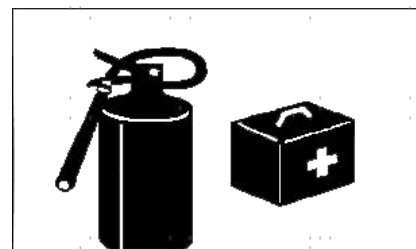
### **Danger**

- **ALWAYS** follow federal, state, and local laws, codes, and regulations concerning the use of construction machinery.
- Follow all other applicable instructions and precautions as stated in your excavator's manual.
- Read this manual before actually attaching this grapple to your compatible excavator. Familiarize yourself with the instructions that provide crucial information on the installation, operation, and maintenance.
- **ONLY** use with compatible excavator models. Though this grapple has a wide fitment, **DO** research compatibility before actually mounting this grapple. For details, see **Specifications**.
- **DO NOT** operate, inspect, or maintain the excavator 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.
- Operating heavy equipment requires your full attention. Avoid distractions and remain focused on the task at hand.
- **IMMEDIATELY** cease to use and contact Customer Service if the grapple shows any sign of anomalies or malfunctions, say noise, vibration, breakage, etc. **NEVER** attempt to resume use if the issues remain unsolved.

## Personal Safety

### Warning

- **DO NOT** wear loose clothes or accessories that may get caught into the moving parts of your excavator in operation. Wear clothes that are oil-repellent. Replace them if grim or grease has started to build up. Fabrics coated or soaked with grim can burn in proximity to heated machinery.
- **ALWAYS** use personal protective equipment (PPE) suitable to your task. Always wear ANSI and OSHA-approved eye, breathing, and hand protection while using this product. Nonslip and steel-toe footwear is also highly recommended. Other equipment such as ear, head, and body protection may also be necessary depending on your work, work environment, and other equipment.
- **ALWAYS** keep a fire extinguisher and first-aid kit in an easily accessible place. Familiarize yourself with the protocols for using the first-aid kit and operating the fire extinguisher. Ensure that you provide training to other individuals who will be operating the excavator. This ensures that everyone is prepared to handle potential emergencies effectively.
- Display the contact details of the nearest Emergency Room (ER) prominently in the operator's area. Make sure that all personnel operating the excavator are well-informed about this information.
- Keep your hands and feet away from the moving components and attachment.



## 1.4 Operational Safety

### Danger

- **ALWAYS** remain focused on the task at hand. Operating heavy equipment requires your full attention.
- **ONLY** operate the grapple from the excavator's cabin.
- Use two or more persons to attach the grapple to the excavator's arm.
- **NEVER** operate the excavator in an area with people present. You should maintain at least 100 yards of distance between the grapple and people, animals, or property.
- **DO NOT** use the grapple as a hoist. The grapple is not intended to lift an object. To do so may cause the excavator to turn over.
- 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 excavator. Contact with power lines may cause serious injury or death.

- **NEVER** lift heavy objects above the excavator's cabin or over or across any personnel on the work site.

### **Warning**

- **DO NOT** drop the grapple rapidly toward an object. Sudden impact may result in structural failure and possible serious injury or death.
- **NEVER** suddenly stop when lowering or lifting the excavator boom to prevent loss of control over the machine and/or load, which may result in serious injury or death.
- **DO NOT** operate underwater. Do not allow the cylinder to go underwater. Otherwise, the cylinder **WILL** be damaged from chronic rust.
- **DO NOT** dismount from a moving excavator with this grapple or leave the excavator with this grapple unattended with the engine running.

Stop the excavator, place all the control rods in neutral, set the parking brake, shut off the engine, and make sure **ALL** moving parts have been stopped before dismounting the excavator for any reason.

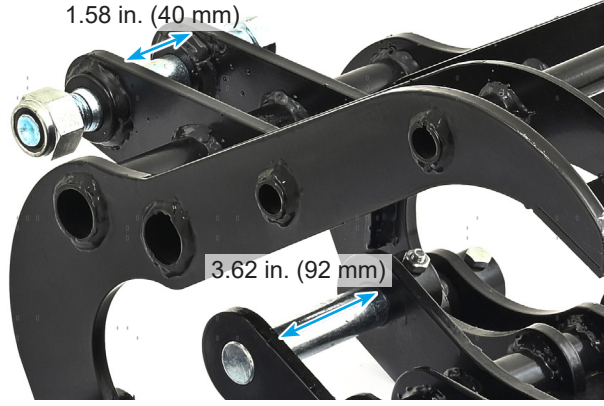
- Keep all bystanders away from the work area, especially children.
- Transport the excavator with the grapple at the slowest speed possible, and with the excavator boom at the lowest position to avoid tipping or upsetting, which may result in serious injury or death.

## Maintenance Safety

### **Warning**

- **ALWAYS** lower the attachment to the ground and shut off the engine before any maintenance.
- Wear personal protective equipment (PPE) appropriate and adequate for the work at all times.
- **ONLY** use the recommended lubricant for the grapple. For the specific type, see Maintenance.
- **DO NOT** make any alterations to the grapple.

# Specifications

<b>Max. Opening Angle</b>	120°
<b>Max. Opening Distance</b>	25.6 in. (650 mm)
<b>Hinge Pin Diameter</b>	0.98 in. (25 mm)
<b>Hinge Pin Hole Spacing</b>	
<b>Length</b>	15.4 in. (390 mm)
<b>Width</b>	15.8 in. (400 mm)
<b>Height</b>	13.4 in. (340 mm)
<b>Net Weight</b>	52.9 lb. (24 kg)

# Product Diagram



# Installation

## Warning

- **ALWAYS** use personal protective equipment (PPE) suitable to your task. Always wear ANSI and OSHA-approved eye, breathing, and hand protection, such as goggles and work gloves. Nonslip and steel-toe footwear is also highly recommended. Other equipment such as ear, head, and body protection may also be necessary depending on your work, work environment, and other equipment.
- **ONLY** mount the grapple with the help of more than 2 persons or with the assistance of a working, easily controllable, and reliable hoist. Doing it alone risks serious personal injuries.
- Keep your fingers clear of possible pinching points while mounting the grapple.

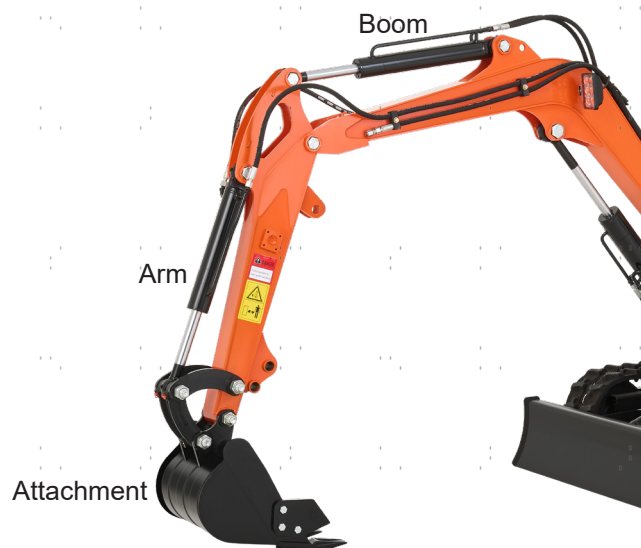
## Tools Needed:

- Adjustable Wrench
- Hammer

## Removing the Current Attachment

**Note:** This chapter only provides general guidance on the excavator's current attachment removal. For more specific information, refer to your excavator's manual or your attachment's manual.

1. Start the engine of the excavator following the normal protocols.
2. Park the excavator on level ground as shown, with the boom horizontal, the arm vertical, and lowering the attachment to the ground.



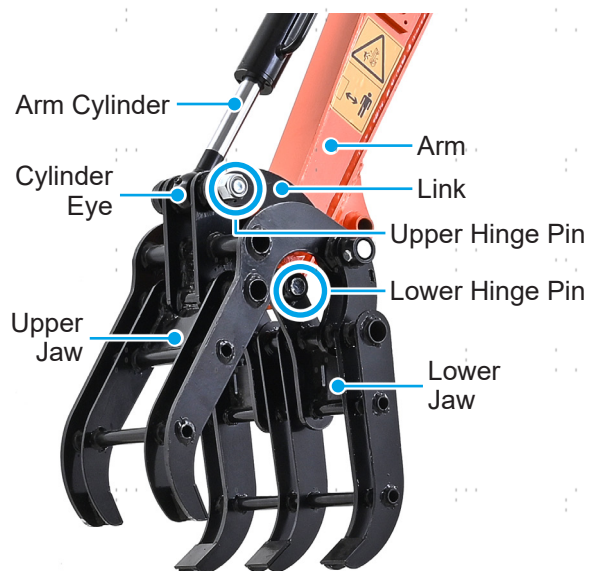
3. Shut off the engine.
4. Wait until the engine and hydraulic oil have cooled to ambient temperature.
5. Remove the bolts from the two pins connecting the attachment.



6. Tap out the pins with a hammer, keeping them clean.
7. Start the engine, raise the boom, and remove the current attachment.

## Attaching the Grapple

1. Remove the upper hinge pin with its nut and the lower hinge pin with its bolt and nut on the grapple.
2. Use 2 or more people or a hoist to stand the grapple up on a level surface.
3. Start the engine of the excavator following the normal protocols.
4. Drive the excavator to the rear of the grapple.
5. Align the upper hinge pin holes with the eye of the excavator's arm cylinder, and align the lower hinge pin holes with the hole on the bottom of the excavator's arm by moving the boom and arm.
6. Shut off the engine.
7. Insert the removed upper hinge pin through the link holes, upper hinge pin holes, and the eye of the arm cylinder, and secure the pin with its removed nut.
8. Insert the removed lower hinge pin through the lower hinge pin holes and the hole on the bottom of the arm, and secure the pin with its removed bolt and nut.
9. Restart the engine and test the grapple by opening and closing its jaws.



# Operation

 **Warning**

- ***NEVER** allow anyone to operate the grapple until they have carefully read and understood this manual.*
- *Before operating, carefully check for hazards and obstructions.*
- *Keep all bystanders away from the work area, especially children.*

1. Drive your excavator close to the target pile.
2. Fully open the grapple.
3. Adjust the excavator's boom and arm positions to allow the grapple to enter the target pile slowly.
4. After entering the target pile, close the grapple slowly until it securely grips the target pile.
5. Transport with the load at the lowest position to the dumping site.

# Maintenance

 **Danger**

***ALWAYS** lower the grapple to the ground and shut off the engine before any maintenance.*

 **Warning**

***ALWAYS** wear PPE appropriate and adequate for maintenance.*

- Periodically clean the grapple, removing all mud and dirt.
- 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.
- Apply a light coating of oil to all exposed metal parts to prohibit corrosion.
- Periodically check the fasteners, retightening as needed.
- Repaint parts where paint is worn or scratched to prevent rust.
- Inspect for visible signs of wear, breakage, or damage. Replace or repair damaged components.
- 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.