



CRANE ATTACHMENTS

HEIDEN TRASH GRAPPLE ATTACHMENT

HC30-TGX SERIES

Operating and Maintenance Manual



WARNING

For safe operation, read these rules and instructions carefully to avoid accidents that could result in Death or Serious Injury.

Heiden, Inc.

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Proudly Made in USA

Thank You

Our sincere appreciation to you on the purchase of a quality Attachment that has been designed and manufactured in the USA by Heiden, Inc. Product experience of over 60 years is the cornerstone of our company and our goal is to provide you with a heavy duty Attachment that will give you years of satisfaction and operation.

Our record of successful and satisfied customers is a testament of the concern for quality and designed strength that we place into each and every product we build.

This manual expresses the need for safe operation and maintenance of your Attachment from Heiden, Inc. It is important that you and all of your operators of this Attachment become familiar with the operation, maintenance and safety instructions found in this manual, as well as in the manual that accompanied the truck that will power your Attachment . Add some common sense to the items mentioned in these manuals as a recipe for safe operation.

We invite you to look at more of our innovative products on our website:

<https://www.heidencrane.com/> or contact your local dealer to find out more.

Sincerely,
Management and Employees
Heiden, Inc.

Important Information

Record your Attachment and Dealer information here for future reference

MODEL #: _____

TYPE: _____

SERIAL #: _____

DEALER NAME: _____

DEALER PHONE:(____)-____-_____

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1 Introduction

1.1 General

- ⇒ This manual contains instructions for operating and servicing your Attachment . The information contained in this manual is essential for proper use and maintenance of your Attachment .
- ⇒ If more complex repairs and maintenance are required for your Attachment , it is recommended that you contact your dealer to find a qualified technician that can execute the necessary work. Heiden, Inc recommends that only qualified technicians service and repair your Attachment . Failure to do so could cause your Attachment to not operate properly and cause serious injury or death.
- ⇒ This manual contains important information and instruction for operating your Attachment safely and efficiently. This manual should be kept on hand and read by any individual that will operate your Attachment . If your manual becomes lost or becomes dirty that it is impossible to read, please contact your dealer or Heiden for a replacement manual.
- ⇒ If you sell your Heiden Attachment please pass this manual over to the new owner.
- ⇒ Heiden, Inc continually works to improve its products and this could result in changes to your Attachment that are not covered in this manual. If you need the latest information about your Attachment or have questions about this manual, please contact your dealer or Heiden, Inc.
- ⇒ Regular maintenance and proper operation of your Attachment are the key to ensuring a long useful life of your Attachment and safety of the operator. Therefore strictly observe the guidelines contained in this manual.
- ⇒ All rights reserved.

WARNING!



- **Designates possible dangerous situation.**
- **Instructions must be observed and followed.**
- **Disregarding this information may result in serious injury or death.**
- **Disregarding the operating instructions may result in accidents, downtime and may void the warranty.**

1.2 Identification Plate

- ⇒ Locate the Identification Plate on top of your Attachment . This plate will have the Model number and Serial number of your Attachment . This information is important when contacting your dealer/Heiden, Inc with questions or if you need to order replacement parts for your Attachment .



1.3 Purpose of Heiden Trash Grapple Attachment

- ⇒ Your Heiden Trash Grapple Attachment is intended to be used for a variety of different types of cleanup. The HC30 Series Trash Grapple Attachment comes with continuous rotation rotators for easy manipulation of everything you pick up.
- ⇒ An HC30 Series Trash Grapple Attachment is well suited for municipalities and curbside pickup, recycling centers and also for disaster/storm cleanup.

2 Warranty

- ⇒ Your Attachment has a 12 month warranty that starts from the date of delivery. The warranty applies to failure from manufacturer defect or failure when operated within normal operating conditions. The warranty **does not** cover failure from the following:
 - Operator error.
 - Operating outside of normal operating conditions.
 - Failure caused by modifications not authorized by Heiden, Inc.
- ⇒ Your Attachment has been checked at Heiden's facility before its delivery to your dealer. It can be taken into immediate use after complete installation on your rig and inspection of the installation. The warranty is only effective during the warranty period if all maintenance procedures have been carried out according to the schedule set out in this manual.

3 Safety

3.1 General

- ⇒ If any of the information contained in this manual is contrary to your locally effective laws and standards, the local laws should be observed.
- ⇒ Your Attachment should only be operated and serviced by individuals who have been properly trained for the purpose.

3.2 Observe Safety Instructions

- ⇒ Carefully read and make sure you understand all the safety instructions in this manual.
- ⇒ Learn how to properly operate your Heiden Attachment and its controls. Never allow an untrained person to operate your Heiden Attachment.
- ⇒ Keep your Attachment in good working condition. Any unauthorized modifications of your Attachment can impair its functionality and safe working.
- ⇒ Immediately stop using your Attachment if cracks are found in the structure. Do not use until proper repairs can be made by a qualified technician.
- ⇒ **The minimum safe distance from your operating Heiden Attachment is 75 yards.**

3.3 Before and During Work

- ⇒ Always check before starting to work to make sure that nobody is standing in any location where there is a risk to bodily injury or life.
- ⇒ Observe and make sure you are operating at safe distances from power lines.
- ⇒ Note the density and the slant on the ground. Always observe the job site plan.
- ⇒ **Never allow anyone to enter the 75 yard danger zone.** Stop the machine immediately if someone steps into this zone during operation.
- ⇒ Never leave the machine unsupervised when the engine is running.
- ⇒ When you handle long items note that they cause excess loads and increase the diameter of the danger zone.
- ⇒ Never stand or walk under any items being lifted.
- ⇒ Leave room for rotated, tilted and horizontally moved items.
- ⇒ Never exceed the machine's approved tilting load.

3.4 Safe Maintenance



- ⇒ **NOTE: carrying out any maintenance on your Attachment with the base machine's engine running is absolutely prohibited!**
- ⇒ **Never touch any pressurized hydraulic hoses. Never tighten leaking couplings when the machine is running. Hydraulic oil flowing under high pressure is dangerous to life.**
- ⇒ Read more about Safe Maintenance procedures in Section 4.2 of the manual.

3.5 Safety Labels

⇒ Regularly check the condition of all warning labels and make sure that they are in proper condition and visible. Replace any damaged labels.

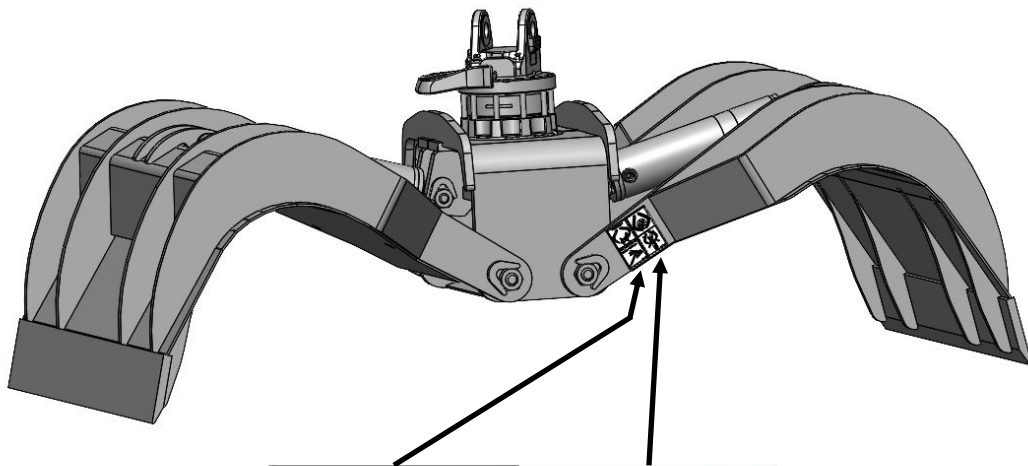
Label HC652186

⇒ Never stand or work near the jaws of the Attachment when the engine is running. You can get crushed between the Attachment jaws. When you perform any work around your Attachment always stop the engine of the base machine and disconnect power with the main switch to avoid accidents.

⇒ Hydraulic oil under high pressure can escape from a damaged hose or connection. Oil can easily penetrate skin, which can cause severe injury or death. Never touch any hydraulic hoses or connections when the machine is running. Do not use your hand to search for leaks.

Label HC652187

⇒ Designed to pick logs orientated horizontally.



3.6 Working with Oils and Chemicals

- ⇒ **IMPORTANT: Always take notice of any environmental aspects. Close all couplings with plugs so that no oil can leak onto the ground to contaminate it.**
- ⇒ Skin exposure to oil can cause rashes. Avoid skin contact with oil. Use protective gloves. If any oil gets onto your skin, immediately wash it off. Avoid inhaling oil vapors.
- ⇒ Keep the hydraulic system clean.
- ⇒ Carefully clean the area surrounding the object being serviced before starting any maintenance procedures.



- ⇒ **NOTE: The output and pressure of the hydraulic oil must never exceed the maximum value of 3000 psi established for your Attachment. Exceeding this value can cause structural defects, lead to injuries and could result in property damage.**

4 Maintenance

4.1 General

- ⇒ It is advisable to have any adjustments and repairs performed by a qualified specialist that is familiar with your Heiden Attachment. Contact your local dealer to have adjustments and repairs done to your Attachment.
- ⇒ Use only original spare parts when servicing your Attachment. Contact your local dealer to order your parts and have them installed on your Attachment.
- ⇒ Always keep the area and the device absolutely clean when servicing it.
- ⇒ Daily monitor the functioning of your Attachment in order to find any loose or missing items, hydraulic leaks, hose wear, etc.
- ⇒ Make sure that there is enough hydraulic oil in the system that is powering your Attachment. Too little oil can cause malfunctions, damage the pump, rotator and/or cylinders. Too little oil will also reduce the lubricating properties of the oil.

4.1 General (cont)

- ⇒ However, where the base machine is concerned, we advise that you consult the machine's own maintenance manual(s).
- ⇒ Heiden Inc. cannot assume any liability for modifications of the Attachment structure or hydraulic systems, which do not conform to the original installation.
- ⇒ **IMPORTANT:** Note that when you perform e.g. the 1000 Hour Maintenance, you also need to carry out all maintenance procedures scheduled to be performed Daily or after every 80 hours of work.

4.2 Safe Maintenance



- ⇒ **NOTE: Maintenance and repair work should be carried out only by qualified technicians or maintenance workshops, using the appropriate tools and lifting devices.**
- ⇒ **NOTE: Always turn off the machine before starting any maintenance work.**
- ⇒ **NOTE: Never touch any pressurized cylinders or hoses and never stand around them.**
- ⇒ **NOTE: Never tighten leaking couplings when the machine is running. Hydraulic oil flowing, spurting out under high pressure is dangerous to life!**

- ⇒ When you perform any work around your Heiden Attachment always stop the engine of the base machine and disconnect power with the main switch to avoid accidents.
- ⇒ If you leave the machine, lower the Attachment firmly on the ground. It is prohibited to work under any unsupported Attachment or boom.
- ⇒ Never let any inexperienced person enter the cabin of the base machine when the Attachment is being inspected, serviced or repaired.
- ⇒ Never exceed the operating pressure of 3000 psi . Never adjust the hydraulic pressure without a pressure gauge.
- ⇒ Connect and disconnect the pressure gauge always when the system is not pressurized, if at all possible.

4.3 Lubrication Instructions

- ⇒ Never perform lubrication when the machine is running.
- ⇒ The Attachment needs lubrication either **daily or every 16 hours of work**. The most suitable time to lubricate the machine is when the shift ends or operator changes.
- ⇒ The grease penetrates into the zerk easier when the machine is warm.
- ⇒ When greasing the zerks always wipe the zerk head clean before greasing.
- ⇒ Release pressure from the cylinders and make sure the Attachment is resting on the ground and not hanging, this will make injecting grease into the zerks easier.
- ⇒ Inject grease until the grease coming out of the joint is clean.
- ⇒ Wipe off any excess grease that has come out.
- ⇒ Never dispose of empty grease cartridges and rags/hand towels into the environment.

4.4 Recommended Grease

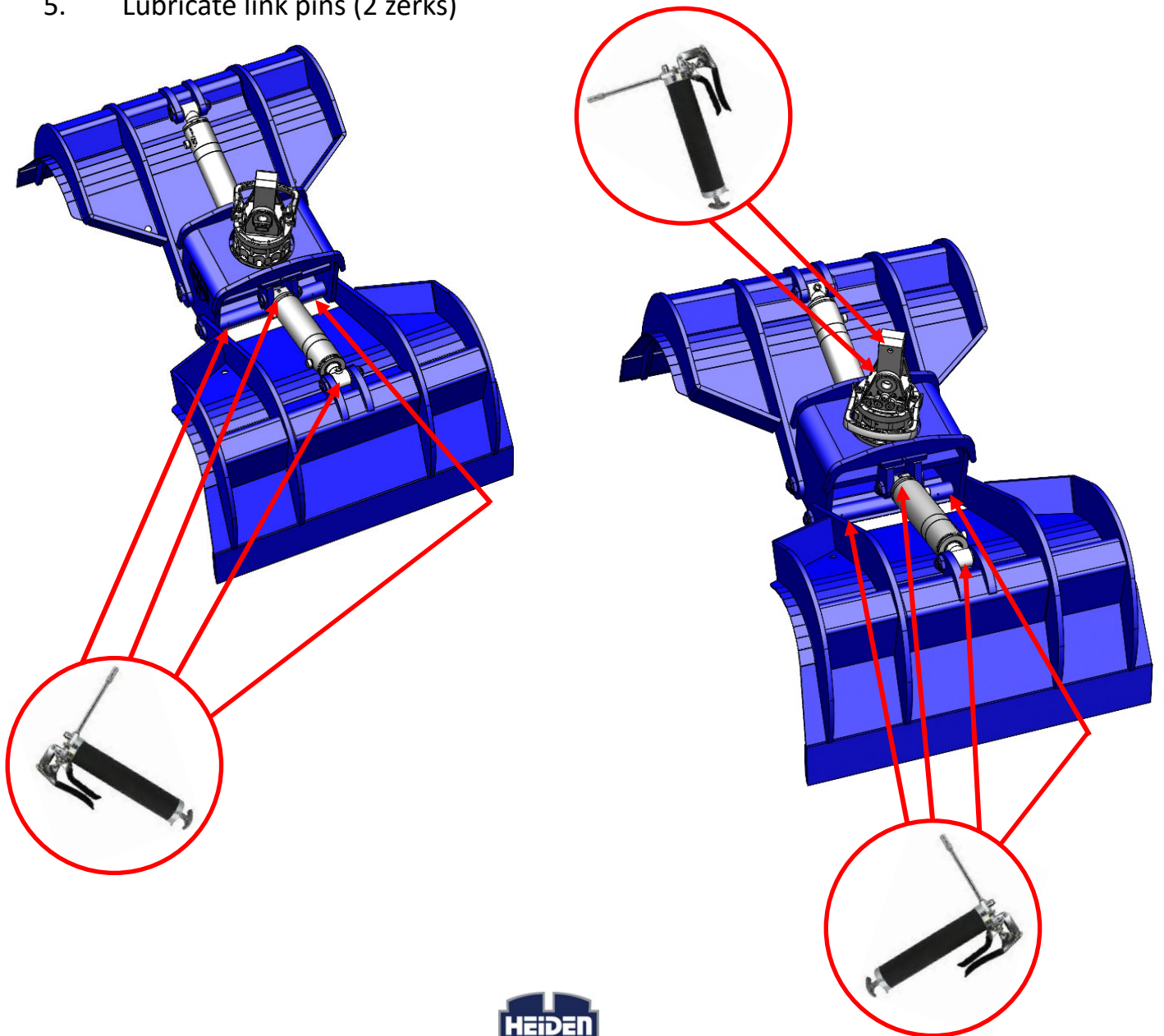
- ⇒ Lubriplate LTR-2: Heavy Duty, Tacky, Red, Lithium Complex Grease

4.5 Regular Maintenance

⇒ **IMPORTANT:** Note that when you perform e.g. the 1000 Hour Maintenance, you also need to carry out all maintenance procedures scheduled to be performed Daily or after every 80 hours of work.

4.5.1 Daily Maintenance or Maintenance Every 16 Hours

1. Check for any possible oil leaks.
2. Visually check the condition of the structure and pivot pin nuts.
3. Lubricate hydraulic cylinder bearings (4 zerks)
4. Lubricate jaw bearings (4 zerks)
5. Lubricate link pins (2 zerks)



4.5.2 Weekly Maintenance or Maintenance Every 80 Hours

1. Check the pivot pin nuts.
2. Check the condition of hydraulic cylinder rods and check for any oil leaks.
3. Check the hydraulic hoses for any damage.

4.5.3 Maintenance Every 1000 Hours

1. Check the cylinder bearings, replace if necessary.
2. Check the jaw bearings, replace if necessary.
3. Check the hydraulic cylinder gaskets, replace if necessary.
4. Check for any possible cracks and/or excessive wear.
5. Replace any worn or missing warning labels.

4.6 Removal and Mounting of Hydraulic Cylinders

1. Completely open jaws of Attachment and place on level surface.
2. Disconnect the hydraulic hoses and close the couplings with plugs.
3. Remove the locking nuts from the pivot pins.
4. Tap the pivot pins out. Use a plastic or brass hammer and appropriate punch.
5. Assemble in the reverse order.

IMPORTANT: ALWAYS discard old locknuts and use new locknuts when reinstalling pivot pins.

4.7 Removal and Mounting of Attachment Jaws

1. Completely open jaws of Attachment and place on level surface.
2. Make sure head of Attachment is fully supported.
3. Remove the locking nuts from the jaw pins.
4. Remove the locking nuts from pivot pin connected to jaws.
5. Tap jaw and pivot pins out. Use a plastic or brass hammer and appropriate punch.
6. Assemble in the reverse order.

IMPORTANT: ALWAYS discard old locknuts and use new locknuts when reinstalling jaw and pivot pins.

⇒ **NOTE: Any of the items listed above that need to be replaced or fixed needs to be carried out by a qualified technician.**

5 Storage and Decommissioning of the Attachment

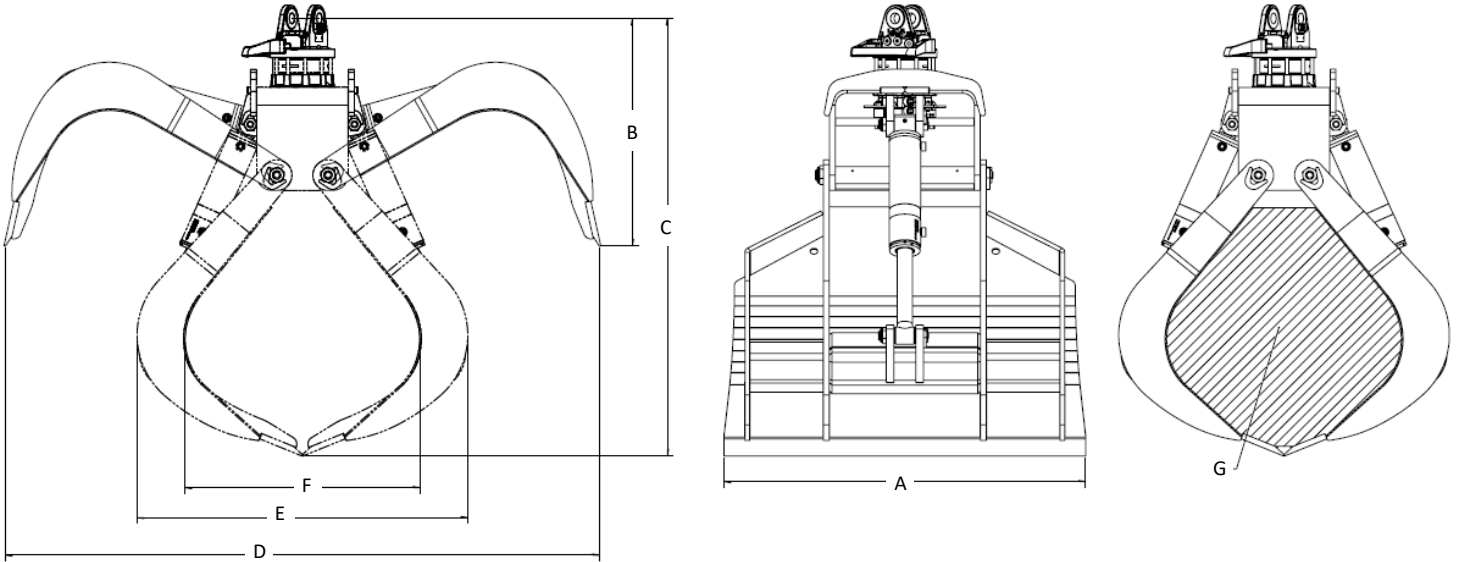
5.1 Storage

- ⇒ **IMPORTANT: Always protect the environment. Collect any waste oil drained from the system and make sure that it is disposed of properly.**
- ⇒ Have any worn or damaged parts repaired or replaced by a qualified technician.
- ⇒ Wash the Attachment and spot-paint worn places to avoid corrosion. Replace any worn or damaged warning labels.
- ⇒ Coat the entire device with a thin coat of corrosion inhibitor. In particular, coat the visible part of the hydraulic cylinder rods.
- ⇒ Inject grease in all the grease zerks (See section 4.5.1)
- ⇒ Store the Attachment in a dry protected area.

5.2 Dismantling and Decommissioning of the Attachment

- ⇒ After the Attachment has reached the end of its useful life, its parts can be mostly recycled.
- ⇒ The steel parts are fully recyclable. Contact your local steel recycling facility to do this.
- ⇒ Hydraulic cylinders contain oil, which needs to be drained and disposed of appropriately. Other than the gaskets, the cylinders are made of steel.
- ⇒ Hydraulic hoses should be disposed of in accordance to your local rules and regulations.

6 Technical Data

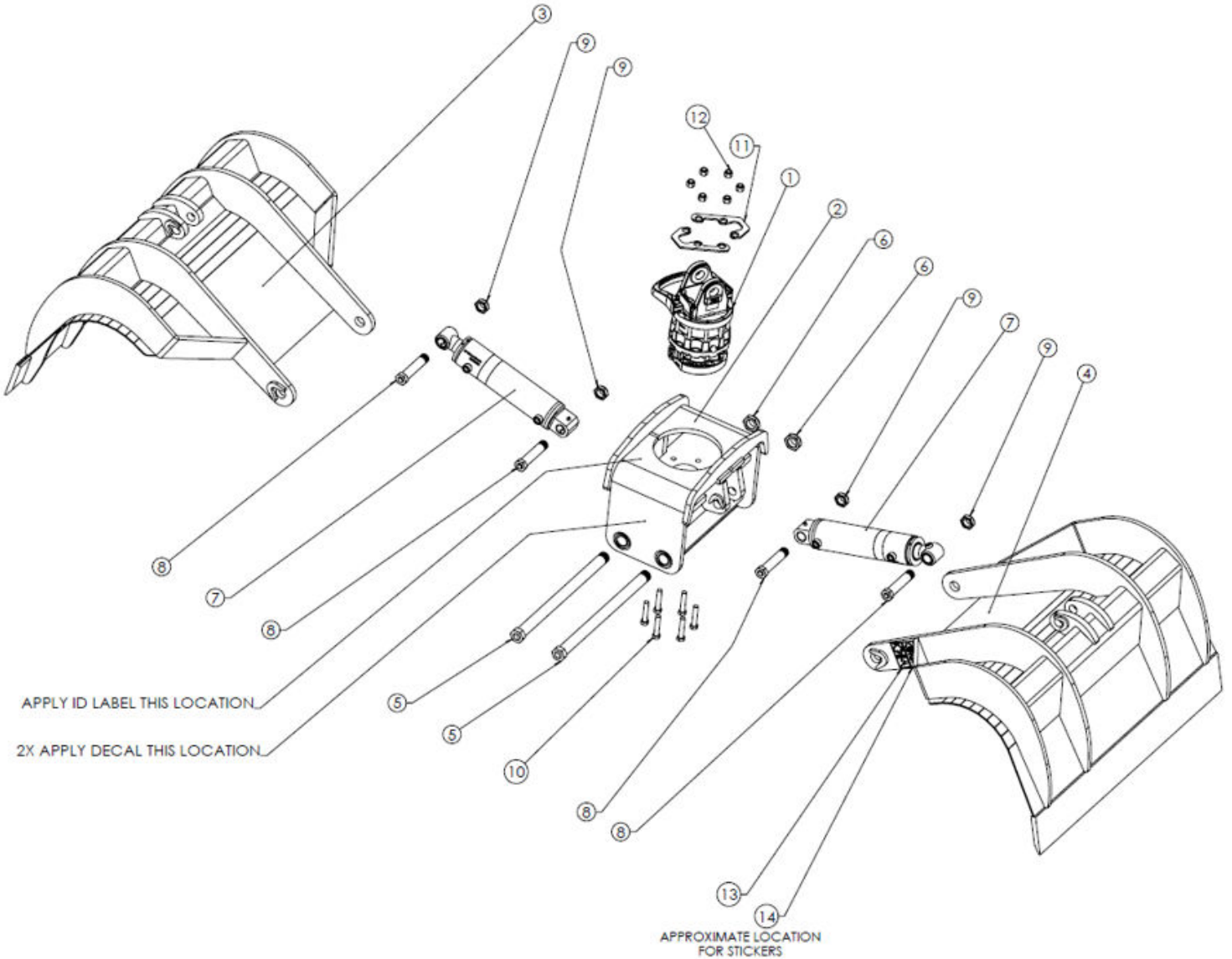


HEIDEN, INC MODEL NO.	WEIGHT W/ROT.	MAX OPER. PRESSURE	A	B	C	D	E	F	G (AREA)
HC30-TGX-78/48	1260 lb*	3000 psi	47.5"	29.87"	57.39"	78"	43.43"	30.86"	4.7 ft ²

* Weight with rotator is with rotator supplied by Heiden, Inc.
Weight will vary if customer does not get rotator from Heiden, Inc.

7 Trash Grapple Attachment Parts Breakdown

7.1 HC30-TGX 78/48



7 Trash Grapple Attachment Parts Breakdown

7.1 (cont) HC30-TGX 78/48

ITEM #	QTY	DESCRIPTION
1	1	ROTATOR
2	1	30 SERIES HEAD
3	1	TGX TRASH JAW
4	1	TGX TRASH JAW
5	2	JAW PIN
6	2	JAW PIN NUT
7	2	CYLINDER
8	4	CYLINDER PIN
9	4	CYLINDER PIN NUT
10	6	BOLT GRADE 8 HHCS
11	2	ROTATOR NUT PLATE
12	6	NYLON LOCKNUT
13	1	HC652186 LABEL
14	1	HC652187 LABEL

⇒ **NOTE:** Locate the Identification Plate on top of your Attachment. This plate will have the Model number and Serial number of your Attachment. This information is important when contacting your dealer/Heiden, Inc with questions or if you need to order replacement parts for your Attachment.



NOTES:



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