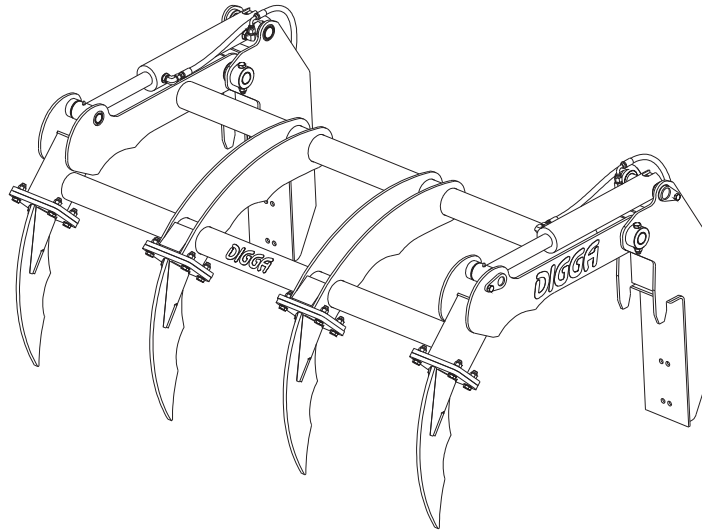


# GRAPPLE

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# OPERATOR'S MANUAL



MY.DIGGA.COM



DECAL IS APPLIED TO THE  
ATTACHMENT

MY.DIGGA.COM



DECAL TO BE APPLIED TO  
WINDOW OF MACHINE

**ACCESS OPERATOR MANUALS RISK ASSESSMENTS AND MORE**

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# To the Purchaser

Thank you and congratulations on the purchase of your new Digga Grapple.

This product was carefully designed and manufactured to give you years of dependable service. It is mandatory to read these instructions to keep the equipment running in top working condition.

## Before Operation

Inspect the attachment for shipping damage and if any damage does exist, do not operate until the damaged parts have been replaced or repaired. The primary responsibility for safety with this equipment falls to the operator. Make sure the equipment is operated only by trained individuals that have read and understood this manual. If there is any portion of this manual or function you do not understand, contact your local authorized Digga dealer or the manufacturer to obtain further assistance. Keep this manual available for reference. Provide the manual to any new owners and/or operators.

## About This Manual

This manual has been designed to help you do a better and safer job. **Read this manual carefully and become familiar with its contents before connecting and operating this unit.**

## Service

Use only manufacturer replacement parts. Substitute parts may not meet the required standards.



## CAUTION

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Never allow anyone to operate this attachment without reading the “Safety precautions” and “Operating instructions” sections of this manual. Always choose hard and level ground to park the vehicle on and set the brake, so the unit cannot roll.

<b>MODELS COVERED IN THIS MANUAL</b>
<b>GRAPPLE</b>
<b>RB-000058</b> (FITS 68", 75", 81" & 87" ROCK BUCKETS)

Your Digga Grapple model provides important information about the product. Compare the model engraved on the serial plate to the list above.

# Product Identification

**Your Digga Grapple is a user serviceable part.** When servicing or assembling your product, use only genuine Digga replacement parts. Substitute parts may not meet the standards required for safe and dependable operation. Use of non genuine Digga parts will void warranty and Digga accept no liability what so ever for consequential or special damages. All service must be performed by qualified professionals. Contact your local Digga dealer for details. To facilitate warranty or service, record the model and serial number of your unit in the space provided on this page. This information may be obtained from the identification plate located on the product.

<b>DIGGA</b> www.digga.com	<input type="checkbox"/>	Digga Australia PTY LTD 4 Octal St, Yatala QLD 4207 Australia
Model	<input type="text"/>	
Name	<input type="text"/>	
Serial No.	<input type="text"/>	
Flow (max)	<input type="text"/>	
Pressure (max)	<input type="text"/>	
Power (max)	<input type="text"/>	RPM (max) <input type="text"/>
Approx. Oil Capacity	<input type="checkbox"/>	Yr. Manufact <input type="text"/> Weight <input type="text"/>
		DE-00631 MADE IN AUSTRALIA

DE-000631

**Model:** \_\_\_\_\_

**Serial Number:** \_\_\_\_\_

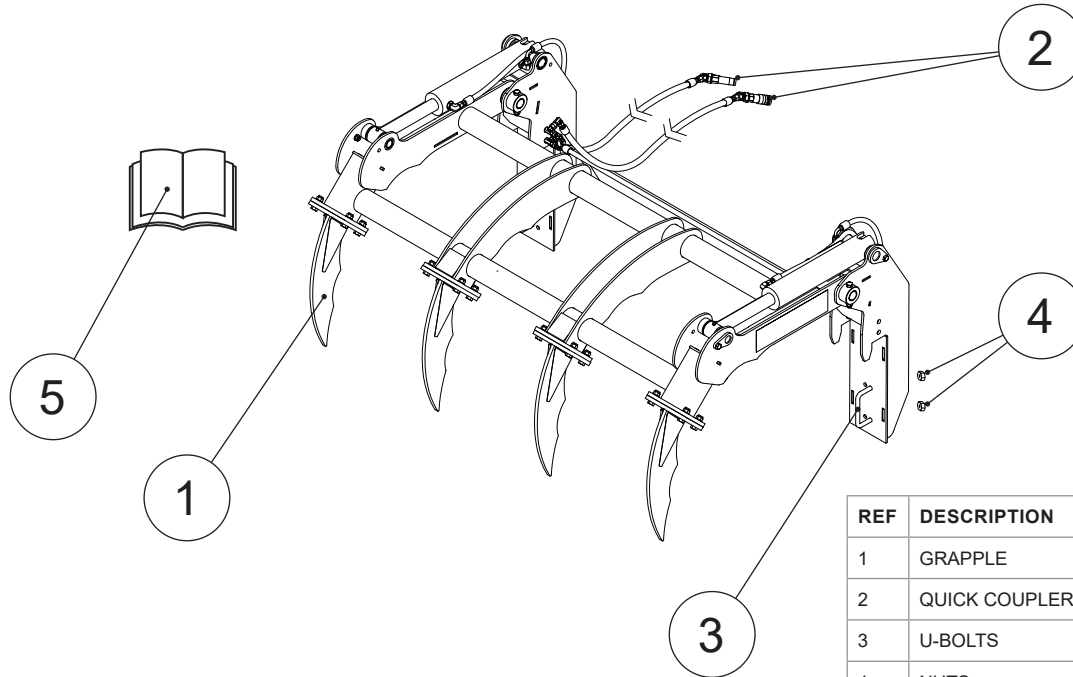
**Purchase Date:** \_\_\_\_\_

## NOTE

The parts department needs this information to ensure accurate parts can be sent to the authorized service agent.

## Preparation for use

To avoid any inconvenience before operation, please check that you have received the following items which you may have ordered. Items may differ depending on type of machine the Grapple is to be fitted to.



REF	DESCRIPTION	QTY
1	GRAPPLE	1
2	QUICK COUPLERS	2
3	U-BOLTS	2
4	NUTS	4
5	OPERATOR'S MANUAL	1

## Safety Precautions - General Information

You must understand all safety statements shown on your attachment and in this manual. Especially note the information called out by the designations shown below. Follow these safety precautions, when operating or maintaining the attachment.

### **DANGER**

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The **DANGER** designation indicates an imminently hazardous situation that, if not avoided, will result in death.

### **WARNING**

---

The **WARNING** designation indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

### **CAUTION**

---

The **CAUTION** designation indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury or property damage.

### **NOTE**

You will also see information called out with the **NOTE** designation. This additional safety or general information is important to the maintenance and operation of your loader.

During day-to-day operation of your attachment, you will encounter a variety of situations beyond those listed in this manual. We encourage you to assess the risk present at any job site and in every work task before beginning work. Apply appropriate risk mitigation strategies to make safety a first priority at all times, and if these are not sufficient, stop the job and immediately seek the help of a qualified safety consultant.



# Safety Precautions - General Information

## Know where utilities are

- Observe overhead electrical and other utility lines. Be sure the equipment will clear them.
- Before starting any digging project, lodge an enquiry with BYDA (Before you Dig Australia) or your local utilities location service for the identification of buried electrical, telephone, cable wires, gas, water and sewer lines are likely to be present. Unintentionally disrupting these hidden hazards while working with your loader can result in dangerous situations and property damage.
- Only commence works after having received and studied the underground plans and information thoroughly. Never begin work until the work area has been fully marked for underground utilities.
- For more information about digging best practices access [www.byda.com.au](http://www.byda.com.au). Many countries offer a similar service which advises the location of underground services in your area. If available use this service prior to digging, drilling, trenching or any form of excavating and earthmoving.



## **CAUTION**

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**You must ensure that underground utilities have been officially marked before working in the area. Markings must be valid according to state law or practice.**

## Exposure to Respirable Crystalline Silica Dust Along with Other Hazardous Dusts

- It is recommended to use dust suppression, dust collection, and if necessary personal protective equipment during the operation of this or any other machine attachment that may cause high levels of dust.

# Safety Precautions - General Information

## Remove Paint Before Welding or Heating

- Hazardous fumes/dust can be generated when paint is heated by welding, soldering, or using a torch.
- Do all work outside or in a well ventilated area and dispose of paint and solvent properly.
- Remove paint before welding or heating. When sanding or grinding paint, avoid breathing the dust. Wear an approved respirator. If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from the area. Allow fumes to disperse at least 15 minutes before welding or heating.

## End of Life Disposal

- At the completion of the useful life of the Grapple, drain all hydraulic oil and dismantle it, by separating the different materials (rubber, steel, plastic, etc.). Follow all federal, state and local regulations for recycling and disposal of the fluid and components.

# Safety Precautions - General Information

## Operating the Grapple

- The primary responsibility for safety with this equipment falls to the operator. Make sure that the equipment is operated only by trained individuals, who have read and understood this manual.
- An operator must not use drugs or alcohol, which can change his or her alertness or coordination. An operator taking prescription or over-the-counter drugs should seek medical advice on whether or not he or she can safely operate the equipment.
- Don't hurry the learning process or take the unit for granted.
- It is the skill, care, common sense, and good judgment of the operator that will determine how efficiently and safely the job is performed.
- Visually inspect your equipment, ensure correct assembly and installation is done and never operate the equipment that is not in proper working order.
- Know the capabilities of your equipment and practice its operation to become familiar with the controls, emergency shut down procedures, and the way it handles on your machine.
- Follow all safety decals and keep them clean. Replace them, if they become worn, damaged or illegible.
- Do not paint over, remove or deface any safety signs or warning decals on your equipment.
- Operate only from the operator's station and operate only in daylight or with sufficient artificial light.
- Always carry loads close to the ground and do not exit the machine with the loader arms raised.
- Do not exceed rated operating capacity (ROC) of the host machine, as machine may become unstable resulting in loss of control. Overloading or exceeding the manufacturers specifications will also void all warranty.
- Always lower the loader arms or the machine boom to the ground, shut off the engine and remove the key before getting off the unit.
- Remove the Grapple from the parent machine before transporting to and from the job site.
- Never use the attachment on a machine that is not equipped with a cab rollover protective structure (ROPS) and/or falling object protective structure (FOPS), and operator restraints (seat belts or equivalent devices).

## Safety Precautions - General Information

- Establish and maintain a minimum 6 meters (20 feet) exclusion zone around the working area. No person other than the operator should enter the work zone, while the parent machine's engine is running.
- Do not allow site workers to climb on the attachment at any time, including while stationary, in operation or being moved.
- Avoid steep hillside operation which could cause the machine to overturn. Consult your machine operator's and safety manual for maximum allowable incline.
- Reduce speed when driving over rough terrain, on a slope or turning to avoid overturning the machine.
- Travel only with the Grapple in a safe transport position to prevent the uncontrolled movement.
- Drive slowly over rough ground and on slopes.
- Tether any accessory connected to the Grapple with a chain if necessary, to prevent uncontrolled swinging of the attachments.
- Do not drive close to ditches and excavations, etc., as cave in could result.
- Flow and pressure gauges, fittings, and hoses must have a continuous operating pressure rating of at least 25% higher than the highest pressure of the system.
- All operations must be stopped in the event of local thunderstorm or lightning activity. During operation, weather conditions shall be monitored, operations shall cease during electrical storms or when electrical storms are imminent. Ground personnel and bystanders.
- Be alert to others in the work area. Be sure others know when and where you will be working.
- Loose fitting clothing, long hair, jewellery and equipment which might become entangled in moving equipment are prohibited while working near the Grapple .
- Operators, helpers, and other personnel working near the attachment must wear steel-toe safety shoes, safety glasses, and hard hats as a minimum. Hearing protection, respirators, and personal protective clothing will be specified in the site-specific Health and Safety Plan.
- The Grapple shall be cleaned only when the mechanism is in neutral and stopped; long-handled shovels shall be used to move debris from the Grapple. Materials heavier than 10 kg must be moved mechanically or by using at least two people.

# Safety Precautions - General Information

- The Grapple shall be used only for its designed intent and shall not be loaded beyond its rated capacity. Overloading or exceeding the manufacturers specifications will void all warranty.



## **CAUTION**

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Wait for the mechanism completely stop before making any adjustments or cleaning.



## **DANGER**

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During Grapple operation, maintain a minimum “no-work zone” buffer of 10 feet (3 meters) from any overhead electrical service and 6 feet (2 meters) from any underground service . All bystanders should be kept at a minimum of 20 feet (6 meters) away from the working area of the Grapple.

### **Storing your Grapple**

- Seal hydraulic couplers from contaminants and secure all hydraulic hoses off the ground to help prevent damage.
- Clean the unit thoroughly by removing all mud, dirt, grease, etc..
- Inspect for visible signs of wear, breakage, or damage. If required, order any damaged parts and perform the necessary repairs to avoid delays upon removal from storage.
- Apply grease to all grease nipple points.
- Coat liberally with grease all connecting pins to prevent rust and reduce wear.
- Tighten loose nuts, cap screws, and hydraulic connections.
- Replace safety decals that are damaged or in an unreadable condition.
- Store unit in a dry and protected place, as leaving the unit outside will materially shorten its life.

# Safety Precautions - General Information

## Maintaining the Grapple

- All maintenance should be performed with the engine turned off, parking brakes applied, machine arms lowered, and hydraulic pressure relieved.
- Lock out and tag out the equipment before repairs or maintenance is performed.
- Only properly trained and qualified individuals are permitted to perform repairs and maintenance.
- If lift arms must be left raised for any reason, use a positive lift arm lock to secure the arms in place. Serious damage or personal injury could result from lift arms accidentally lowering.
- Never adjust a relief valve for pressure higher than recommended by the machine's manufacturer.

## Transporting the Grapple

- When transporting your attachment, follow all local government regulations that may apply along with any equipment safety precautions provided in this manual.
- It is the responsibility of the operator that safe systems of work are employed while handling this attachment.
- No tie down points are provided on the attachment and its the responsibility of the operator to ensure that the attachment is firmly fastened without causing any damage to it.
- Do not attach tie down accessories around cylinders or in any way that may damage hoses or hydraulic components.
- Attachment should be well secured, when being moved or in transit and furthermore prior to moving, storing, loading/unloading, or parking.
- Verify that all tie down accessories (chains, slings, ropes, shackles, etc.) are capable of maintaining attachment stability during transporting and are attached in such a way to prevent unintended engagement or shifting of the unit.
- Use extra care when loading or unloading the attachment on to a trailer or truck and disconnect hydraulic couplers during the transportation. No responsibility for loss or damage to persons or property in any regard can be attributed to Digga.

# Safety - Working with the Attachment

## Complete a Risk Assessment

Your Digga Grapple is a versatile machinery attachment, capable of performing its tasks in a safe and effective manner. To ensure the safety of operators and others, it is important to document the work at hand for hazard and risk. Before beginning work, complete a risk assessment. The following steps provide a framework for this activity:

1	<b>DOCUMENT THE ACTIVITY</b> Assemble those involved in the activity. Write down the tasks required for the activity in step-by-step form.
2	<b>IDENTIFY THE HAZARDS</b> Next to each task, identify what part of the task may cause injury to those engaged in the task or others in the vicinity. Rate the consequences and likelihood of the hazard using the risk assessment matrix.
3	<b>DOCUMENT THE CONTROL MEASURES</b> Using the results from the risk assessment matrix, determine which hazards require attention. List all mitigation measures that are required to eliminate or minimize those hazards.
4	<b>IDENTIFY THE RESPONSIBLE PERSON</b> Document the name of the person responsible for implementation of the mitigation measure.
5	<b>MONITOR AND REVIEW</b> Ensure that the activity is supervised and that the documented process is being followed.

## NOTE

Remember, Personal Protection Equipment (PPE) provides a level of protection during work, but PPE is the last level of hazard control and prevention. Always refer to the hierarchy of hazard control, when planning a safety process.

# Safety - Working with the Attachment

**Take Extreme Care When Dealing with Hydraulics - Whilst Assembling, Operating, Maintaining or Performing any work on or near this product.**

- Hydraulic fluid under pressure can penetrate the skin and may develop gangrene or other permanent disabilities. **Hydraulic leaks under pressure may not be visible!**
- If any fluid penetrates the skin, **get immediate medical attention!**
- Wear safety glasses, protective clothing, and use a sound piece of cardboard or wood when searching for hydraulic leaks. **Do not use your hands!**
- Before connecting or disconnecting hydraulic hoses, read your machine or power unit's operator manual for detailed instructions on connecting and disconnecting hydraulic attachments.
- Ensure that all parts meet the specifications for this product when installing or replacing hydraulic hoses or fittings.
- After connecting hydraulic lines:
  - Slowly and carefully raise the loader's arm(s) and cycle the rollback/dump cylinders to check hose clearances and to check for any interference.
  - Operate the hydraulics on this product to ascertain open and closed.
  - Ensure that the hoses cannot interfere with or actuate the quick-attach mechanism.
  - Ensure that hoses will not be pinched, or get tangled, in any equipment.
- Do not lock the auxiliary hydraulics in the "ON" position.
- Refer to host machine operator's manual and this manual for procedures and service intervals, then inspect and maintain the entire hydraulic system to ensure that the fluid remains clean, that all devices function properly, and that there are no fluid leaks.

## **NOTE**

**For any additional safety information please see "Risk Management Booklet". To obtain a copy of this document please contact Digga Head Office.**



# Safety - Working with the Attachment

## When Mounting this Product to Your Machine

- Refer to the operator's manual of your host machine for any special or detailed mounting instructions regarding quick-attach mechanism.
- This product should fit onto a Digga Rock Bucket, which in turn fits onto the quick-attach frame or hitch (machine mount). If this product does not fit properly, contact your Digga dealer before operating.
- Where enabler 'Dead Man' controls are installed it is illegal to disengage, tamper with, or remove them.



## **WARNING**

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Never place any part of your body into the mounting plate, frame, hitch or loader holes. A slight movement of the power unit and this product could cause serious injury.

## When Adjusting Servicing or Repairing this Product

- Do not make any modifications to your Digga Grapple.
- When making repairs use only competent service agents and use only genuine Digga parts. For fasteners, hydraulic hoses, or hydraulic fittings, use only properly rated parts.
- Replacement parts must also have safety signs attached.



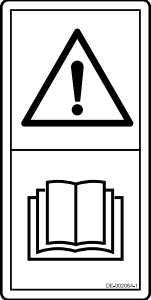
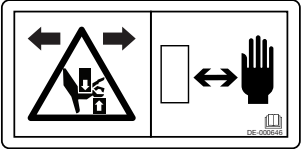




## **CAUTION**

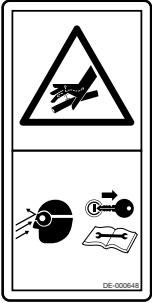
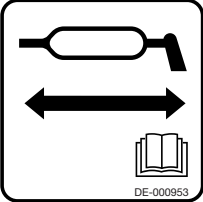


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Wait for all moving parts to stop completely before making any adjustments or cleaning.

# Safety - Decal Labels

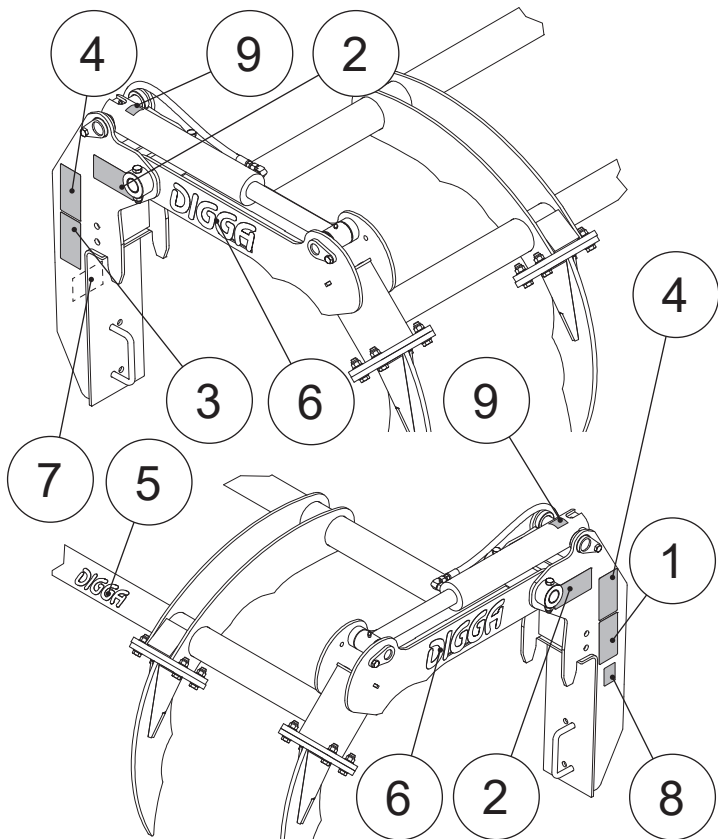
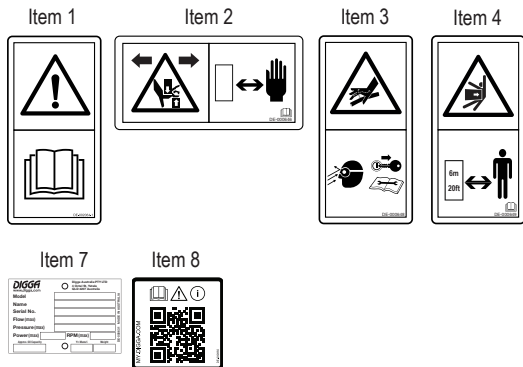
This section provides a glossary of safety labels found on your Digga Grapple. These labels are important! Become familiar with both their meaning and location prior to operating the attachment. Ensure that each label is clean, visible, and legible at all times. To clean the decal, use a soft cloth, water, and soap. Avoid the use of solvents, gasoline, or other harsh chemicals, as these may damage the decal. If a label has been damaged or removed, it must be replaced.

READ OPERATOR'S MANUAL	PINCH POINT HAZARD	CRUSH HAZARD
		
<p> <b>DANGER</b></p> <p>Completely read and understand this operator's manual before using your attachment. Keep the manual with the attachment at all times.</p>	<p> <b>WARNING</b></p> <p>Keep hands and body parts at a safe distance from actuating parts.</p>	<p> <b>DANGER</b></p> <p>Keep bystanders 6m (20ft) away from the equipment.</p>

HIGH PRESSURE FLUID	GREASE POINT	MY.DIGGA.COM
 <p>The decal features a triangular warning symbol with a hand being struck by a high-pressure jet. Below this, there are smaller icons showing a hydraulic hose, a nozzle, and a person wearing eye protection. The text 'DE-000643' is visible at the bottom right of the decal.</p>	 <p>The decal shows a grease gun nozzle with a double-headed arrow below it, indicating the greasing point. At the bottom right, there is an icon of an open book and the text 'DE-000953'.</p>	 <p>The decal contains a QR code. Above the QR code are icons for a manual, a warning triangle, and an information symbol. The text 'MY.DIGGA.COM' is written vertically on the left side of the QR code area.</p>
<p> <b>WARNING</b></p> <p>Pressure injection risk of injury: This machine operates on high-pressure hydraulic fluid. Always wear eye protection and shut-off the engine before performing maintenance on this machine. Refer to page 16.</p>	<p><b>NOTE</b></p> <p>Grease all 6x greasing points every 10 working hours. Refer to "Visual inspection and greasing" on page 28.</p>	<p><b>NOTE</b></p> <p>Scan the QR-code to access: <a href="http://my.digga.com">my.digga.com</a></p> <p>Find manuals, safety information, guides and more.</p>

# Safety - Decal Locations

ITEM	ORDER CODE	DESCRIPTION	QTY
1	DE-002064-1	READ MANUAL	1
2	DE-000646	PINCH POINT HAZARD	2
3	DE-000648	HYDRAULIC PRESSURE FLUID	1
4	DE-000649	CRUSH HAZARD / KEEP AWAY	2
5	DE-000047	DIGGA LOGO (45MM)	1
6	DE-000049	DIGGA LOGO (80MM)	2
7	DE-000631	SERIAL TAG	1
8	DE-000850	MY.DIGGA.COM	1
9	DE-000953	GREASE POINTS	2



The key feature of your Digga Grapple is low maintenance. It contains user serviceable parts. When servicing your product remember to use only genuine Digga replacement parts. Use of non-genuine Digga parts will void warranty and Digga will accept no liability what so ever for consequential damages as a result thereof.



### **DANGER**

---

**Safety first!! Read and understand the safety instructions before beginning any maintenance.**

#### **Before First Use**

Inspect the Grapple for shipping damage. If damage does exist, do not operate until the damaged parts have been replaced or repaired.

Ensure that all pivot points on the Grapple are greased, including the cylinder mounting pins. See page 28.

#### **Before Each Use**

- Make sure that all nuts and bolts are in place and properly tightened.
- Make sure that all other fasteners are in place and are performing their specified function.
- Make sure that all hydraulic fittings are tightened and that there are no leaks in any fittings or hoses.
- Make sure that all safety signs are in place, are clean, and are legible (see "Safety - Decal Labels" on page 19).
- Check for wear and tear on pins, grapple teeth and replace any damaged parts and excessively worn parts.
- Use only manufacturer recommended replacement parts. Other parts may be substandard in fit and quality.
- Ensure any damage or excessively worn parts are replaced.
- Always wear safety goggles or glasses when inspecting equipment.

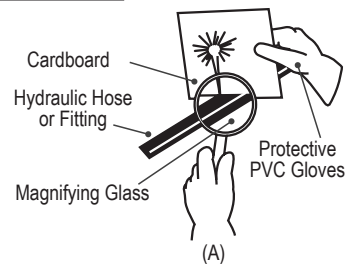
#### **Every 10 hours of use**

- Grease all nipples and pivot points.

## Before Use

### WARNING

Escaping fluid under pressure as low as 100 PSI can have sufficient force to penetrate the skin up to 4" (100mm) away causing serious personal injury. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands to search for suspected leaks (A). Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak and use heavy duty PVC protective gloves. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.



### WARNING

Always wear the correct PPE, when operating or performing maintenance on this attachment. If a hydraulic fluid injection injury occurs, seek emergency medical attention immediately. Explain to medical staff that the injury is the result of pressurized fluid injection. Remember that even if the point of entry appears as a minor pin hole, this potentially could be a major injury, especially if not treated in time.

# Commissioning Procedure

The Digga Grapple can only be used when attached to a Rock Bucket, which in turn attaches to the tool bar/quick-attach mechanism of your Machine. Due to this arrangement, thorough knowledge of the machinery controls are necessary for machine operation. Read and understand your machine operator's manual for information regarding machine operation before attempting to use the Grapple. When a Grapple is purchased from Digga or a Digga Dealer/Distributor the Grapple must be mounted onto a Digga Rock Bucket. Warranty will be void if the Grapple is fitted to any rock bucket other than a Digga Rock Bucket without receiving written confirmation from your Digga Dealer.

Check the work site and identify the extent of the work to be carried out and note any possible hazards or constraints. Overhead cables, underground utilities, services, etc. Check with relevant service providers on the location of these before commencement of any work (see "Know where utilities are" on page 9). Review the job at hand and determine the Grapple is appropriate for the intended conditions. For example: Do not use the Rock Bucket and Grapple to carry people or as a lifting device.



## **DANGER**

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**Follow all standard safety practices and refer to your machine operator's manual for instructions on installing the Grapple onto your Machine. Carefully plan the operation and conduct a Risk Assessment before commencing the installation. Refer to "Complete a Risk Assessment" on page 15.**

### **Installation instructions**

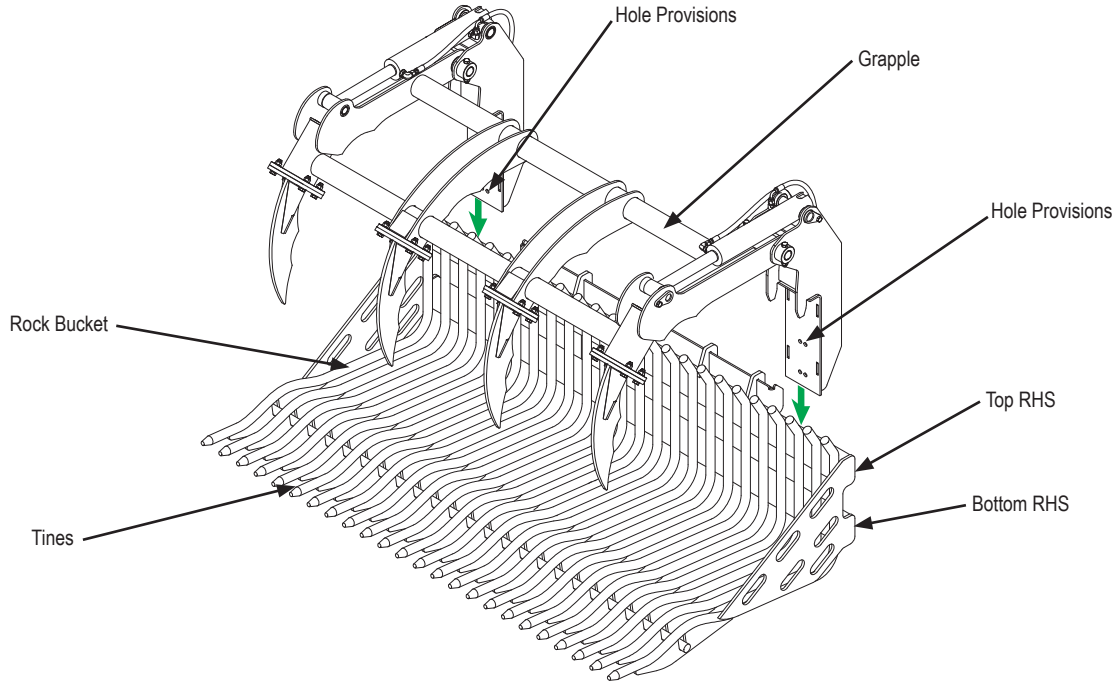
1. Remove the shipping banding from around the Grapple and Frame.
2. Unfasten the 2x u-bolts from the Grapple.
3. Move the Rock Bucket to a flat and firm ground, and detach it from the host machine.
4. Ensure the Rock Bucket is stable. Add weights to the front of the bucket or clamp it to the ground to prevent rolling during Grapple installation.
5. Use mechanical assistance (e.g., forklift, crane, hoist) to lift the Grapple from the frame and lower it over the top RHS (Rectangular Hollow Section) of the Rock Bucket.

# Commissioning Procedure



## DANGER

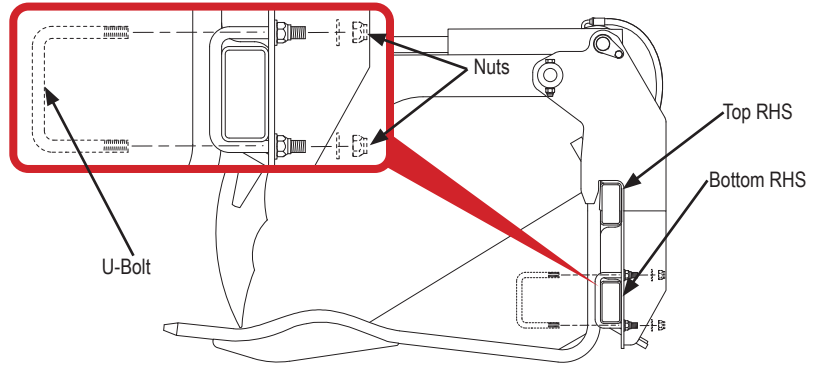
Ensure that the lifting equipment has the capacity to support the weight of the Grapple and is suitable for the intended operation.





# Commissioning Procedure

6. Ensure the Grapple is at the cross centre of the Rock Bucket.
7. Secure the Grapple to the Rock Bucket using the 2x u-bolts over the Bottom RHS. There are 2 pairs of hole provisions for the u-bolts on each arm of the Grapple. Use the pair that best suits to avoid interference with the Rock Bucket tines.
8. Tighten the nuts to 77 Nm (57 ft-lb).
9. Attach the Rock Bucket/Grapple assembly to the host machine.



## **NOTE**

It is important to make sure the locking mechanism on your quick attach is engaged, therefore locking the attachment onto the machine.

10. Lower the unit to the ground and remove the key from the parent machine.
11. Relieve any pressure from the hydraulic system. After ensuring no foreign matter on the hydraulic couplers, connect the supply and return couplers to the mating hydraulic quick couplers of your machine.
12. Route the hoses to avoid pinching or chafing.
13. Carefully raise the Rock Bucket/Grapple assembly and cycle the tilt and grapple cylinders to check clearances and verify that all mounting procedures have been successfully completed.
14. The machine is now ready for use.

# Operating Instructions

## Grapple Operation

1. Ensure the floor of the Rock Bucket is horizontal and level with the ground.
2. Open the Grapple.
3. Align the Rock Bucket with the material to be moved, scoop under the material and tilt the bucket up once sufficient volume has filled the bucket.
4. Close the Grapple to grab the material.
5. It is important to keep the loaded Rock Bucket as low as practical to avoid loader instability.

## **NOTE**

**Avoid carrying loads off the centre of the bucket, as it might damage the attachment and machine's hydraulic system.**

### **When the attachment is not on the parent machine**

It is a requirement that safe systems of work are employed when handling any attachments. Complete compliance with all safety issues is compulsory and all due care and attention must be observed at all times in any method of moving, transporting or storing any such device when not attached to a parent machine. We recommend attachments are well secured when being moved or in transit and furthermore prior to moving, storing, loading/unloading or parking it is suggested that the attachment is strapped/secured to a pallet or enclosed in a suitable container to minimize any movement or loss of the load during such activity. NO responsibility for loss or damage to persons or property in any regard can be attributed to Digga.

## Transporting the attachment

1. Follow all federal, state and local regulations when transporting the unit on public roads.
2. Use extra care when loading or unloading the machine onto a trailer or truck. Disconnect hydraulic couplers during transportation.

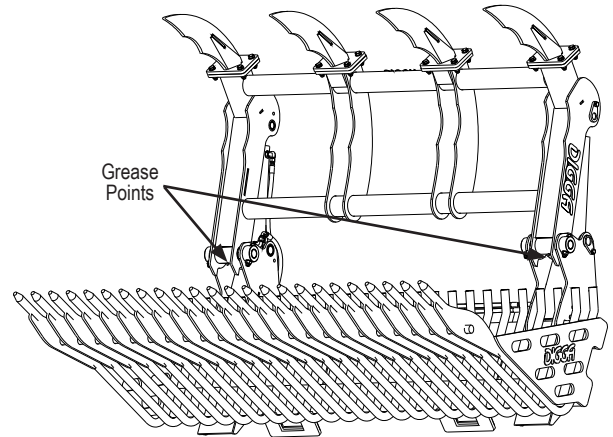
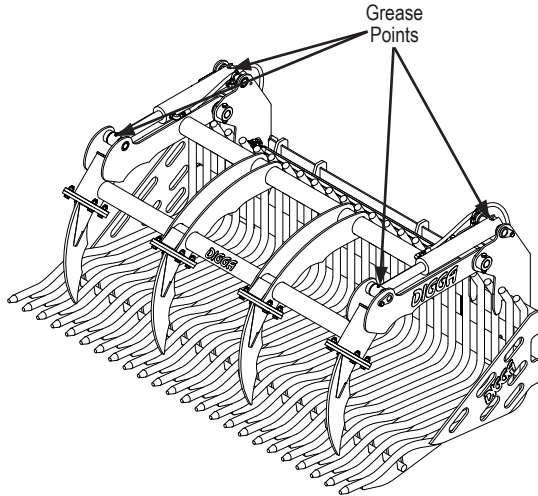
## Removal and Storage

1. Set the attachment on the ground and follow the standard shut down procedure in your loader operators manual.
2. With the loader OFF, disengage the attachment lock pins, release hydraulic pressure from the auxiliary hydraulic system and disconnect the hydraulic couplers from the loader.
3. Start the machine's engine and make sure that the lift arm is lowered and in contact with the loader frame.
4. Roll the attachment mechanism forward and slowly back up until the attachment is free from the machine.
5. Remove and store the attachment in a dry and protected place. Leaving the Grapple attachment outside will materially shorten its life.

# Maintenance

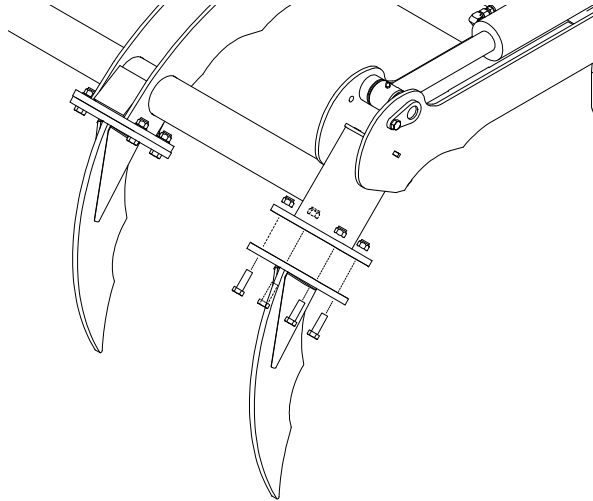
## Visual inspection and greasing

1. Ensure that all moving pivot points are greased every 10 working hours using the 6x grease nipples indicated.
2. Check attachment for any hydraulic oil leaks from hoses, fittings and hydraulic cylinders. Repair or replace as required.
3. Check that the grapple is pivoting correctly and operating as per design.
4. If the hydraulic cylinders are leaking contact your nearest Digga Dealer or contact the Digga Service Department.



## Teeth replacement

If any of the grapple teeth are bent and need replacing, remove the 4 X M12x35 long bolts. Repair or replace the tooth and tighten the bolts to 77Nm (57 ft-lb) torque.



# Spare Parts

For further information on spare parts, please contact one of the Digga sales offices shown below, or contact your local authorised Digga dealer.

## DIGGA INTERNATIONAL SALES OFFICES

### ASIA PACIFIC

#### DIGGA HEAD OFFICE - BRISBANE

4 Octal St, Yatala QLD 4207  
Phone: +61 7 3807 3330  
Email: [info@digga.com](mailto:info@digga.com)

#### DIGGA NEW SOUTH WALES

19 Mckay Close,  
Wetherill Park, NSW 2164  
Phone: 1300 2 DIGGA  
Email: [nsw@digga.com](mailto:nsw@digga.com)

#### DIGGA VICTORIA

17-21 Babbage Dr,  
Dandenong, VIC 3175  
Phone: 1300 2 DIGGA  
Email: [vic@digga.com](mailto:vic@digga.com)

Web: [www.digga.com](http://www.digga.com)

### NORTH AMERICA

#### DIGGA NORTH AMERICA

2325 Industrial Parkway SW  
Dyersville IA 52040  
Phone: + 1 563 875 7915  
Email: [infous@digga.com](mailto:infous@digga.com)

Web: [www.diggausa.com](http://www.diggausa.com)

### EUROPE

#### DIGGA EUROPE

Unit 1, Nexus Park  
Plenty Close  
Newbury, RG14 5RL  
England, United Kingdom  
Phone: +44 (0) 1488 688 550  
Email: [infouk@digga.com](mailto:infouk@digga.com)

Web: [www.diggaeurope.com](http://www.diggaeurope.com)

## Grapple

<b>Trouble</b>	<b>Possible Cause</b>	<b>Remedy</b>
Grapple not operating	Hydraulic hoses not connected to host machine.	Ensure hoses are connected.
Oil Leak	Hydraulic fittings not properly tightened.	Ensure that all hydraulic hoses and fittings are tight and not leaking.
Hydraulic cylinders are leaking around shaft.	Cylinder seals require replacement.	Contact Digga or your local Digga Dealer.
Grapple operating slowly (opening and closing)	Insufficient flow of hydraulic oil reaching hydraulic cylinders.	Increase the engine RPM of host machine.
		Ensure that hoses are not pinched, kinked or restricting oil flow.





## Warranty Statement

All new Digga products are warranted to be free from defects in materials or workmanship, for a period of twelve (12) months from date of original purchase, which may cause failure under normal usage and service when used for the purpose intended. Digga Australia Pty Ltd warrants its equipment for a period of twelve (12) months dating from delivery to the original user.

In the event of failure (excluding cable, ground engaging parts such as sprockets, digging chain, bearings, teeth, tamping and demolition heads, blade cutting edges, pilot bits, auger teeth, auger heads ), if after examination, Digga determines failure was due to defective material and/or workmanship, parts only will be repaired or replaced. Digga may request defective product or products be returned prepaid to them for inspection at their place of business or to a location specified by Digga. The warranty will be considered void if the product or any part of the product is modified or repaired in any way not expressly authorized by Digga, or if closed components are disassembled prior to return. Closed components include hydraulic cylinders. Any goods returned to Digga by the customer under warranty or repair must have all freight charges prepaid for on the customers account.

Any claims under this warranty must be made within fifteen (15) days after the Buyer learns of the facts upon which such claim is based. All claims not made in writing and received by Digga outside the time period specified above shall be deemed waived.

### **Damage or failure through operator abuse or negligence voids warranty.**

This warranty is in lieu of all other warranties expressed or implied and there are no warranties of merchantability or of fitness for a particular purpose. In no event shall Digga be liable for consequential or special damage. Digga's liability for any and all losses and damages to buyer, resulting from any cause whatsoever, including Digga's negligence, irrespective of whether such defects are discoverable or latent, shall in no event exceed the purchase price of the particular products with respect to which losses or damages are claimed, or, at the election of Digga, the repair or replacement of defective or damaged products.

