



User Guide

Excavator Mechanical Pipe Lifter



Product Information

Overview

The Conquip Excavator Mechanical Pipe Lifter is an excavator attachment used for fast and safe handling of pipe sections. This device can be used for unloading delivery vehicles, transporting around site and placement.

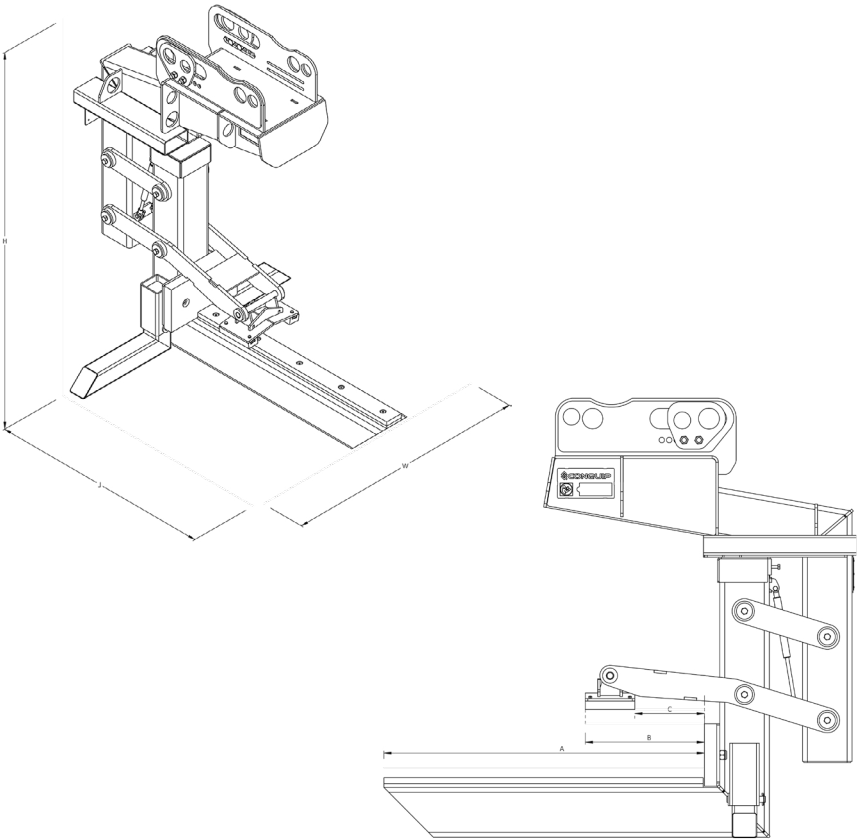
The mechanically operated clamp with a grip ensures that the pipe is held securely while in transport. The pipe lifter avoids the need for ground workers to be in the trench during pipe installation and replaces traditional slinging methods for unloading trucks.

Key Benefits

- Integrated fork pockets for easy transportation short distances around site.
- Adjustable pin centres to suit any quick hitch.
- Integrated rubber production buffers to prevent damage to pipe sections.
- Long clamping arm to prevent damage to pipe sections.
- Removable in-built stand so it can sit upright in position for the quick hitch to connect.
- Excavator Mechanical Pipe Lifter 4000 can be supplied with 65 or 80mm pins to suit 13-22T excavators.
- Excavator Mechanical Pipe Lifter 6000 can be supplied with 90, 100 or 110mm pins to suit 30-50T excavators.
- Large lifting capacity of 4000kg or 6000kg working load limit, depending on the model.

Product Information Specification

Item	Product Code
Excavator Mechanical Pipe Lifter 4000	EA015AD-04000



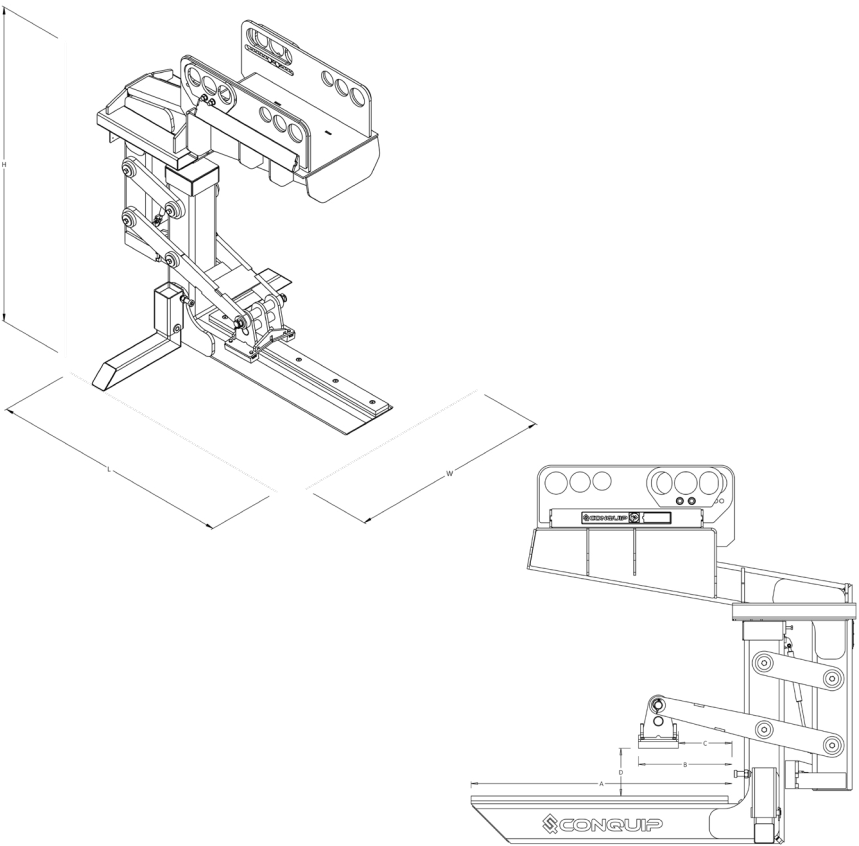
¹Working Load Limit

Product Code	Height	Width	Length	Weight	WLL ¹
EA015AD-04000	1770mm	1420mm	1920mm	590kg	4000kg

Product Code	Lower Boom Length	Clamping Arm Length	Clamp to Buffer Length
EA015AD-04000	1300mm	480mm	280mm

Product Information Specification

Item	Product Code
Excavator Mechanical Pipe Lifter 6000	EA015AE-06000



¹Working Load Limit

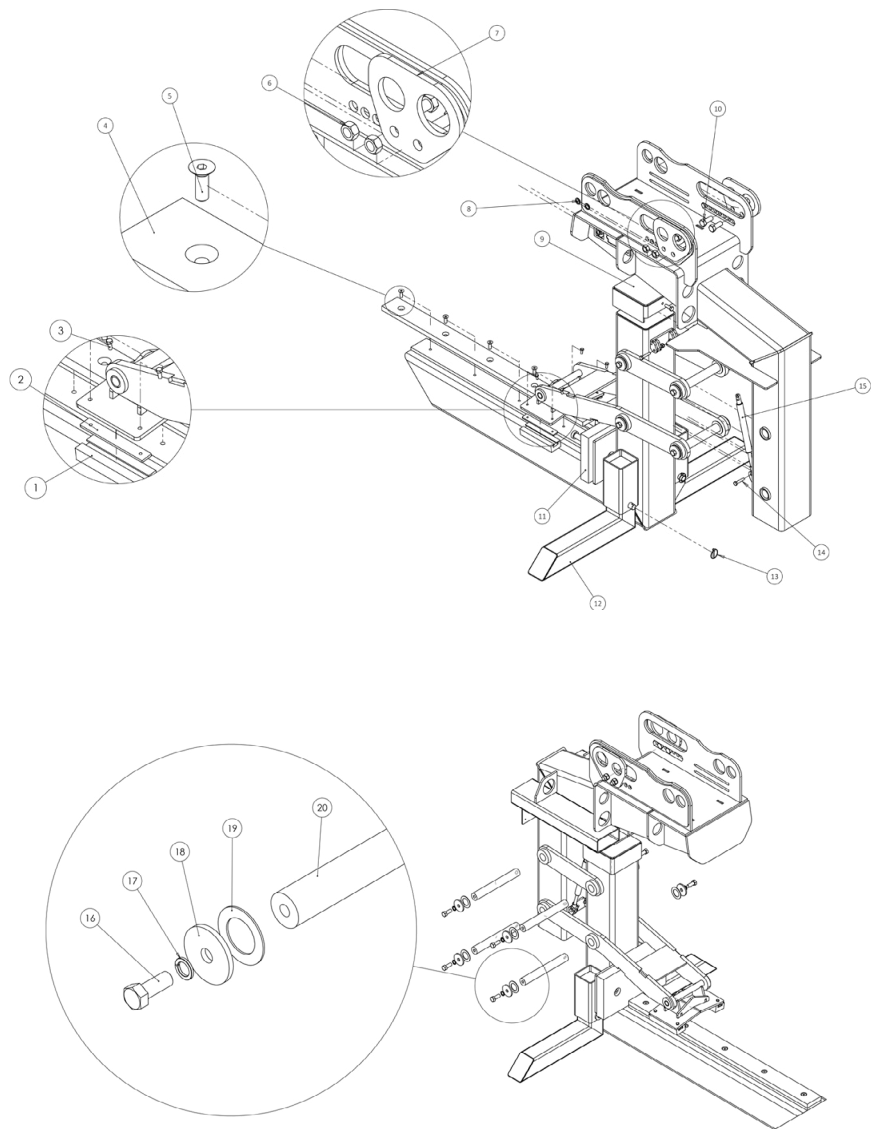
Product Code	Height	Width	Length	Weight	WLL ¹
EA015AE-06000	1910mm	1460mm	1940mm	910kg	6000kg

Product Code	Lower Boom Length	Clamping Arm Length	Clamp to Buffer Length
EA015AE-06000	1309mm	470mm	270mm

Product Information

Parts Diagram

Excavator Mechanical Pipe Lifter 4000



Product Information

Parts Diagram

Excavator Mechanical Pipe Lifter 4000

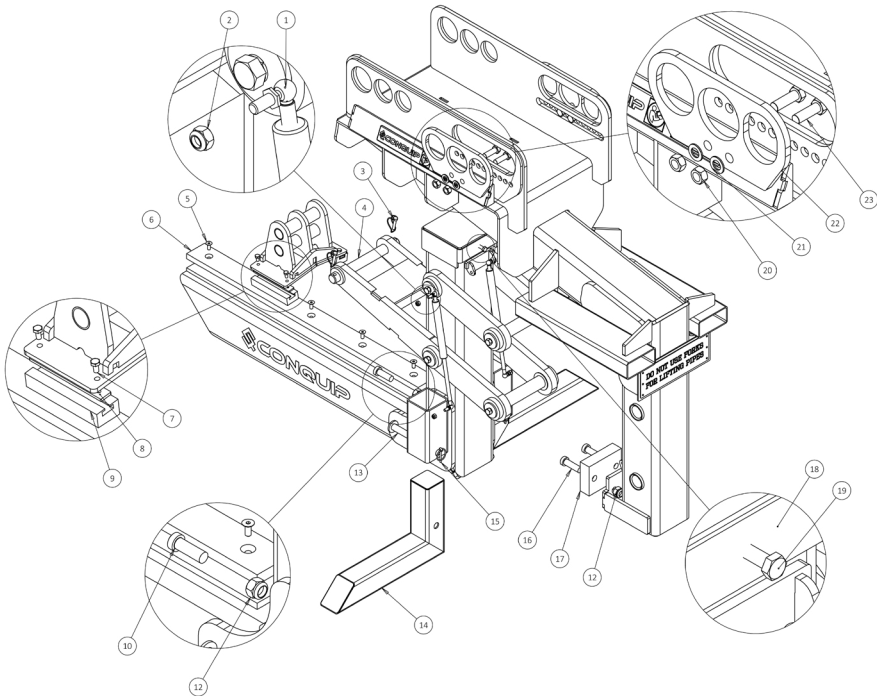
NOTE: These parts are for this model, they may differ for previous versions. Please contact Conquip with any queries.

Item Number	Part Number	Description	Quantity
1	EA015AD-04000-03-09	Rubber Grip	2
2	EA015AD-04000-03-10	Clamp Plater For Rubber Grip	2
3	NS800160	M8x20 Hex Head Bolt 8.8	4
4	EA015AD-04000-02-06	Support For Horizontal Rubber	1
5	NS800365	M12 x 35 Countersunk Socket Screw	5
6	NS800280	M20 Full Nut	4
7	ZZ130137	Type 2 Adjustment Plate	2
8	NS800886	M20 Spring Washer	4
9	EA015AD-04000-09	Clamp Plate	1
10	NS800878	M20x50 Hex Head Set Screw 8.8	4
11	EA015AD-04000-02-08	Polyurethane Buffer – 450x250x50mm	1
12	EA015AD-04000-04	Feet Assembly	2
13	ZZ990010	Linch Pin 4.5mm	2
14	NS800815	M10x50 Hex Head Set Screw 8.8	4
15	ZZ960113	Gas Strut 1750N	2
16	NS800379	M16x40 Hex Head Bolt 8.8	8
17	NS800249	M16 Spring Washer	8
18	EA015AD-04000-12	Washer	8
19	EA015AD-04000-11	Washer	8
20	EA015AD-04000-10	Pivot Pin	4

Product Information

Parts Diagram

Excavator Mechanical Pipe Lifter 6000



Product Information

Parts Diagram

Excavator Mechanical Pipe Lifter 6000

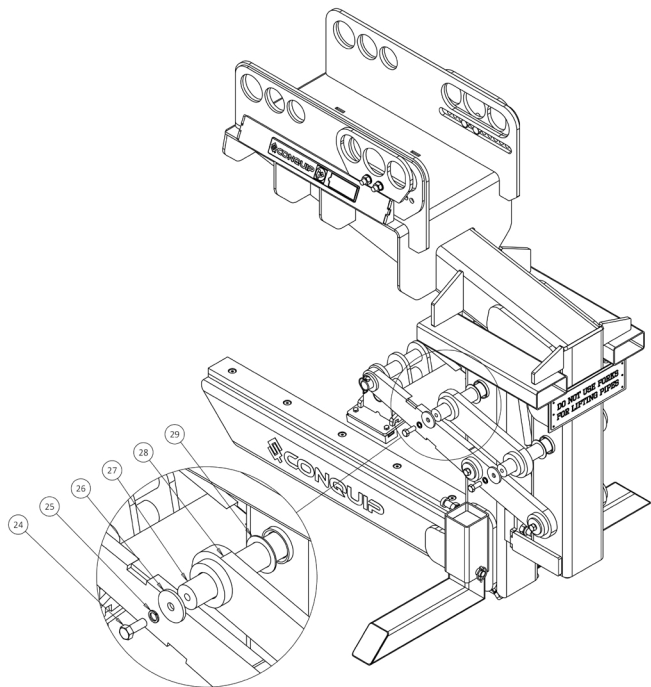
NOTE: These parts are for this model, they may differ for previous versions. Please contact Conquip with any queries.

Item Number	Part Number	Description	Quantity
1	Gas Strut 2200N	Gas Strut 2200N- Ball Joint Ends	2
2	NS800013	M10 Nyloc Nut	4
3	ZZ960102	10mm Locking Pin	2
4	EA015AE-06000-03-03	Adjustable Pin	1
5	Socket Screw	M12x30 Socket Countersunk Head Screw	5
6	EA015AE-06000-07	Polyurethane Buffer	1
7	Hex Head Screw	M10x20 Hex Head Set Screw 8.8	4
8	EA015AE-06000-03-02-05	Clamp Plate for Rubber Grip	2
9	EA015AE-06000-03-02-06	Rubber Grip	2
10	Cap Screw	M24 x 80 Low Head Cap Screw	2
11	EA015AE-06000-02-08	Rubber End Tile	1
12	NS800122	M24 Nyloc Nut	4
13	EA015AE-06000-06	Pin Assembly	2
14	EA015AE-06000-06	Feet Assembly	2
15	ZZ990009	Linch Pin 6mm x 42mm	2
16	Cap Screw	M24 x 80 Low Head Cap Screw	2
17	EA015AE-06000-01-23	Rubber End Tile	1
18	EA015AE-06000-09	Clamp Plate	1
19	NS800014	M12x35 Hex Head Bolt 8.8	1
20	NS800280	M20 Full Nut	4
21	NS800668	M20 Flat Washer	4
22	ZZ130151	Adjustment Plate	2
23	Hex Head Bolt	M20x60 Hex Head Bolt 8.8	2

Product Information

Parts Diagram

Excavator Mechanical Pipe Lifter 6000



Product Information

Parts Diagram

Excavator Mechanical Pipe Lifter 6000

Item Number	Part Number	Description	Quantity
24	NS800379	M16x40 Hex Head Bolt 8.8	8
25	NS800249	M16 Spring Washer	8
26	EA015AE-06000-08	Washer	8
27	EA015AE-06000-10	Pivot Pin	4
28	EA015AE-06000-05	Connector Top Bracket	2
29	EA015AE-06000-11	Washer	8

Original Working Instructions

Usage Instructions

Important Usage Notes

- Ensure the work area is firm and level and clear of all obstructions with adequate room around the unit for the operator to work safely.
- Be careful not to apply too much force when pushing pipe sections together to avoid breakage of pipes.
- Check that the quick hitch is securely attached to the excavator arm following the manufacturers' instructions and giving special attention to any safety features.
- Only lift one pipe section at a time.
- There are a number of Crush Points on the pipe lifter. Before using, please be aware of where these are and keep hands and feet clear of these areas at all times when in use.
- The excavator operator should never leave the excavator while a pipe is suspended or being gripped by the Excavator Mechanical Pipe Lifter.
- Do not use the 'in-built stand' for pushing or manoeuvring the pipe into place.
- The 4t Excavator Mechanical Pipe Lifter is designed for pipes with an internal diameter of 350mm or greater.

Safe Pipe Lifting

To determine what length of pipe can be safely lifted by our Excavator Mechanical Pipe Lifter, we work on the pipe being 1.5 times the length of the unit's lower boom.

However, this is dependent on the diameter of the pipe- the smaller the diameter, the longer the pipe that can be lifted. The excavator deration chart must also be considered with regards to the weight of the load that you are lifting.

Set Up

1. Select the correct size pins for your machine's quick hitch.
2. Fit the front pin to the correct sized hole on the attachment, while the attachment is standing upright on its in-built stand.
3. Adjust position of the rear pin to suit the quick hitch - follow the quick hitch operating guidelines and set the pins to the maximum centres for the unit.

Original Working Instructions

Usage Instructions

4. Ensure the quick hitch pins have the retaining bolts correctly fitted.
5. Check for debris in the quick hitch locking mechanism and check the fit of the unit on the quick hitch. Do not use if not secure.
6. When moving pipes, operators should be aware that the pipes may roll and should have a method prepared for securing the pipes.

To Lift a Pipe

7. When it is safe to proceed, raise the pipe lifter until the tip is just below the crown of the pipe section, then insert the lower boom into the bore of the pipe until it is fully inserted and the rubber buffer at the back of the lifter is touching the pipe.
8. Raise the pipe lifter carefully and level, so that the boom comes in contact with the inside of the pipe.
9. Continue to slowly raise the pipe lifter, the action of the weight of the pipe on the boom will trigger the clamping arm to lower onto the pipe.
10. When the load is fully raised from the ground, or delivery vehicle, and clamped and stable, it is safe to proceed and transport the pipe section to its destination.
11. When travelling with a load, keep it in the lowest practicable position, to maintain driver visibility. Operators should allow for any rough or sloping ground when assessing the method of operating.
12. Carefully lower the pipe onto the ground or storage location, taking care of edges or other items on hard ground.
13. If laying pipes into a trench, the pipe lifter can be tilted up to 30° to allow the pipe to be lowered and placed accurately.
14. Once lowered to the ground, as the weight of the pipe transfers from the boom to the ground, the clamp will release, allowing the boom of the pipe lifter to be extracted from the pipe.
15. If laying pipework, the rubber buffers can be used to push the pipe sections together.

Original Working Instructions

Safety Instructions

Basic Safety

A site-specific Risk Assessment, and lift plan where applicable, must be completed by the responsible person before using this equipment to control risks, produce a safe system of work and ensure safety for you, your colleagues and others. Your risk assessment will determine the correct Personal Protective Equipment (PPE) for the task you are doing. You must use it. Conquip recommends that you should wear:

- Suitable clothing
- Gloves
- Hard hat
- Protective footwear (steel toecaps)
- Safety glasses



Important Safety Notes

- Read these instructions before using this equipment. If there is anything you do not understand or if you have any concerns do not use this equipment. Contact your supervisor or Conquip Engineering Group for advice.
- You must check that you have considered all the safety requirements for the task you are doing and that this equipment is suitable.
- You must protect bystanders and the general public by preventing access to the working area.
- Do not use this equipment if you are tired, unwell or under the influence of alcohol or drugs. If you are taking any medicine or undergoing treatment you should inform your supervisor.

Usage & Transportation

- Never unevenly load this equipment.
- The weight of the equipment, together with its attachments, must be added to the weight of the load when calculating the total load that will be imposed on the lifting apparatus / operating machine.
- This equipment must be used in conjunction with the load ratings of the lifting apparatus / operating machine. (Refer to the manufacturers' load ratings and original working instructions).
- Make sure you know how to use this equipment and understand all aspects of its operation in case of emergency.
- This equipment weighs more than 25kg. Do not lift or manhandle without machine assistance.
- Do not operate this equipment near overhead power lines.
- Take care in confined spaces, near ceilings or similar hazards. This equipment was designed for vertical lifting. Do not drag, or swing.
- Before operating this equipment, check that you have enough space for you to work safely and make sure that the working area is clear of hazards, obstructions and personnel.
- Before lowering equipment make sure that the landing zone is clear and capable of accepting the size and weight of the load.
- Crush Risk. Keep hands and feet clear of the equipment at all times to avoid injury.
- Do not exceed the maximum Working Load Limit (WLL) shown on the serial plate. Ensure that the WLL on the individual lift points is not exceeded.
- Before lifting, check that the load is secured, balanced and stable. Allow space for the equipment to move if the load shifts.
- Manoeuvre loaded or raised equipment carefully. Travel and turn slowly to avoid unit becoming unstable.

Personnel

- All personnel must wear relevant personal protective equipment.
- Do not wear loose clothing or jewellery and tie back long hair to avoid becoming tangled or trapped in this equipment. You must make everyone in the work area aware of what you are doing.
- All personnel involved in the lifting operation must be competent to do so and must have been briefed in conjunction with this User Guide available from Conquip Engineering Group, the manufacturer.

Equipment Maintenance & Cleaning

- It is mandatory that the equipment is thoroughly examined regularly, by a qualified engineer, to ensure compliance with relevant regulation/s. (Conquip recommend to carry out thorough examination every six months).
- This product may incorporate various loose and detachable items of lifting gear. Refer to the separate requirements for the safe use of those items.
- When not being used, store the unit in a clean, upright condition and in a safe place where it will be protected from thieves and unauthorised users.
- This equipment must be inspected by the responsible person before each use and then regularly, as determined by your risk assessment or working practice. If you have any concerns about condition or suitability do not use.

Disclaimer

Warranty

The products supplied by Conquip Engineering Group are all guaranteed by a 12 month warranty.

Apart from where exceptions apply, Conquip Engineering Group promises to repair or replace any fault which the Company considers to be due to defective material or workmanship within 12 months of the date of sale, at no additional cost.

- Faults arising from unauthorised alterations (see modifications section below for full details).
- Damage caused by abuse, neglect, misuse or falling.
- Damage caused because of failure to follow transportation, storage, loading, cleaning or operating instructions.
- Replacement or repair of components due to fair wear and tear.
- Any consequential damage or wear arising from the use or fitting of additional or non-standard parts.

Modifications

If any third-party modifications or alterations, involving drilling, welding, cutting or distortion of materials in any form, are to be carried out on the product, Conquip Engineering Group must provide full written approval prior to the work being carried out.

Alterations, modifications, additions or repairs must be carried out by Conquip Engineering Group's recognised distributors, if they are not carrying out the work themselves.

Conquip Engineering Group operate a continuous improvement policy and therefore reserve the right to alter technical specifications and user guide details at any point without notice.

Conquip Engineering Group will not cover or reimburse any transportation and/or shipment costs to and from their premises or their recognised agents, or any material and/or labour costs for repair, replacement or assessment against a warranty claim.

Conquip Engineering Group and/or their directors, employees, insurers or recognised agents will not be held liable for consequential damages, losses or expenses relating to the inability to use the product correctly for its purpose.

EC Declaration of Conformity

In accordance with EN ISO 17050-1:2004

Declaration: As defined by the Machinery Directive 2006/42/EC and subsequent amendments

We, CONQUIP ENGINEERING GROUP, herewith declare that the following indicated equipment meets the fundamental health and safety requirements concerning the EU guide line(s), due to their design and manufacture.

This declaration will be rendered null and void if the machine is changed without our approval.

Signed:



Dated: 2022

Garry Critchley, Managing Director

Product Code(s):	EA015AD-04000
EC Directive/ Regulation:	2006/42/EC, Lifting Operations and Lifting Equipment Regulations 1998 Provision and Use of Work Equipment Regulations 1998
Harmonised Standards:	BS EN ISO 12100:2010
General Description/ Designation:	Excavator Mechanical Pipe Lifter – EA015AD-04000 Excavator Mechanical Pipe Lifter – EA015AE-06000
WLL:	EA015AD-04000 = 4000kg EA015AE-06000 = 6000kg

Important Notes

- This User Guide is for this Conquip product only.
- Any movements of the product must be thoroughly planned before the work commences to identify potential hazards and assess risk.
- All personnel involved in lifting and transportation of this product must have read this User Guide and must be properly briefed.
- You must be competent, alert and medically fit when using this equipment. If you have a medical condition, a mental or physical disability, you must seek advice from a medical professional before using this equipment.

Talking to us is easy

We're here to help

Call us on 0845 520 1101

Email us at sales@cqegroup.com

www.cqegroup.com

Conquip Engineering Group

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