

# User Guide **Excavator Forks**



## Product Information **Overview**

The Conquip Excavator Forks attachment is designed to enable an excavator to lift palletised material. This is especially useful if space is restricted and budget is limited, as it ensures you only need one machine on site.

Available in three sizes, to suit excavators ranging from 5 to 50 tonnes

#### **Key Benefits**

- Quick and simple to attach, with adjustable pin centres and different pin sizes to suit any model of excavator quick hitch.
- Ability to see through the unit allows clear visibility of pallet/load for the excavator operator.
- Fork tines can be folded over the unit for compact storage.
- 'Floating' forks allow for easier placement and easier lifting on uneven surfaces.
- Excavator Forks 1000 can be supplied with 45, 50 or 60mm pins to suit 5 to 9 tonne excavators.
- Excavator Forks 2500 can be supplied with 65 or 80mm pins to suit 13 to 22 tonne excavators.
- Excavator Forks 4000 can be supplied with 90, 100 or 110mm pins to suit 30 to 50 tonne excavators.
- Forks sit as a free standing unit, flat to the ground when unattached.
- Manufactured in the UK from British and EU steel.
- Can be supplied with anti-slide plate and backrest for extra load stability.

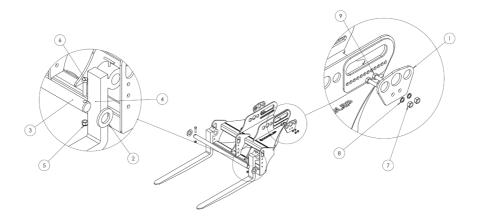
#### Product Information Specification

Item	Product Code	
Excavator Forks 1000	EA010AP-01000	
Excavator Forks 2500	EA010AQ-02500	
Excavator Forks 4000	EA010AP-04000	

<sup>1</sup>Working Load Limit

Product Code	Height	Width	Length	Weight	WLL1
EA010AP-01000	540mm	1010mm	1930mm	195kg	1000kg
EA010AQ-02500	620mm	1225mm	2310mm	375kg	2500kg
EA010AP-04000	745mm	1390mm	2740mm	540kg	4000kg

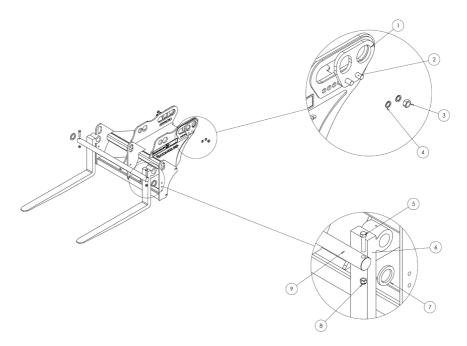
#### **Excavator Forks 1000**



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	ZZ130057	Adjustment Plate	2
2	ZZ960080	Fork Pin Washer	2
3	ZZ130063	50mm Fork Mount Pin	1
4	ZZ130062	1T Excavator Fork	2
5	NS800121	M16 Nyloc Nut	2
6	NS800852	M16x75 Hex Head Set Screw 8.8	2
7	NS800380	M16 Full Nut	4
8	NS800249	M16 Spring Washer	4
9	NS800581	M16x50 Hex Head Set Screw 8.8	4

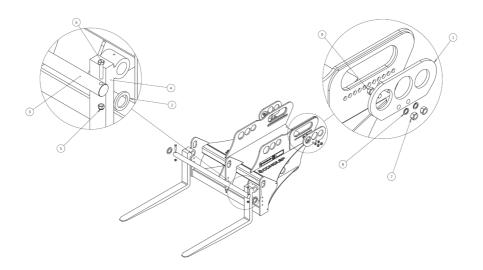
#### **Excavator Forks 2500**



Item Number	Part Number	Description	Quantity
1	ZZ130137	Adjustment Plate	2
2	NS800878	M20x50 Hex Head Set Screw 8.8	4
3	NS800280	M20 Full Nut	4
4	NS800886	M20 Spring Washer	4
5	NS800349	M16x80 Hex Head Set Screw 8.8	2
6	ZZ130025	Excavator Fork	2
7	ZZ960233	Fork Pin Washer	2
8	NS800121	M16 Nyloc Nut	2
9	ZZ130054	60mm Fork Mount Pin	1

## Product Information **Parts Diagram**

#### **Excavator Forks 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	ZZ130090	Adjustment Plate	2
2	ZZ960233	Fork Pin Washer	2
3	ZZ130088	60mm Fork Mount Pin	1
4	ZZ130025	2T Excavator Fork	2
5	NS800121	M16 Nyloc Nut	2
6	NS800389	M16x80 Hex Head Set Screw 8.8	2
7	NS800280	M20 Full Nut	4
8	NS800886	M20 Spring Washer	4
9	NS800878	M20x50 Hex Head Set Screw 8.8	4

#### **Important Usage Notes**

- If there is a slinger / signaller they should not be positioned underneath the load and should remain visible to the driver.
- Operators should allow for any rough or sloping ground when assessing the method of operating.

#### Using with an Excavator

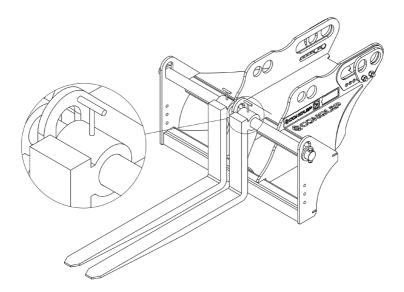
- 1. Select relevant size pins to match your machine's quick hitch.
- 2. Fit front pin to correct sized hole on the Excavator Forks.
- 3. Adjust the position of rear pin to suit the quick hitch- follow the quick hitch operating guidelines and set the pins to the maximum centres for the unit.
- 4. Ensure the quick hitch pins have the retaining bolts and washers and they are 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. Adjust the fork width to suit the job by sliding the forks along the top bar. Position the forks in the widest practical position.
- 7. Tighten the fork tine retaining screws to fix the position. The forks on this unit are floating, pivoting around the top rail.
- 8. When lifting or setting down loads always operate the forks in a horizontal plane.
- 9. When traveling with a load keep it in the lowest practicable position and maintain driver visibility.
- 10. Once the Excavator Forks are no longer needed, lower to the ground and release from the quick hitch.

#### **Important Storage Notes**

- Ensure the Excavator Forks are stored on a flat surface.
- Correct PPE must be worn when following the storage steps, including gloves and steel toe cap boots.
- Before attempting to store the Excavator Forks, Conquip recommend removing the rear operating pins from the hitch.
- Each fork tine must be lifted by two operatives. Do not attempt to lift alone.

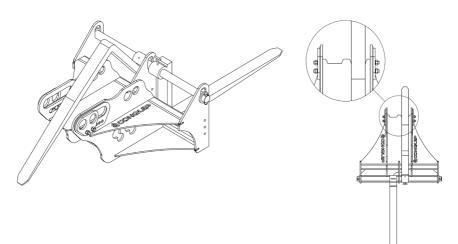
#### **Storage Instructions**

1. Loosen the fork tine retaining screws and move the fork tines into the centre so they are positioned within the internal width of the adjustment plates.



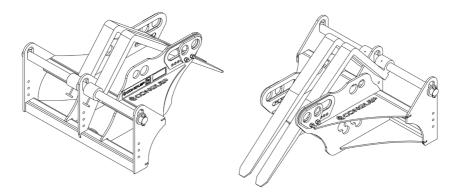
## Original Working Instructions **Storage Instructions**

- 2. With an operative positioned either side of the Excavator Forks, slowly lift one of the fork tines by the toe and arch it over the body of the unit.
- side of the e fork body
- 3. Carefully place the fork tine in the designated fork parking recess. Ensure to keep fingers clear of any area between the fork tine and the body of the forks when you are lowering the fork tine into position. (see image on page 11 for potential finger trap points)



## Original Working Instructions **Storage Instructions**

4. Repeat steps 1-3 for the other fork tine until they are both resting in the designated parking recesses.



5. Conquip recommend storing the Excavator Forks in a secure, closed off area to prevent them from becoming a trip hazard.

#### **Returning to Service**

- 1. When the Excavator Forks are required again, two operatives stand either side of the forks and lift each fork tine (one at a time) by the toe, up and over the body of the unit until they are flat on the ground.
- 2. Take care to avoid any finger traps when you are lifting and re-positioning the fork tines.
- 3. Loosen the fork tine retaining screws and move the fork tines to the required width for operation.

#### **Excavator Forks Potential Finger Traps**

When storing the Excavator Forks (Fig.1, Fig.2) and returning them to service (Fig.3), there are a few areas where personnel could trap their fingers. Conquip advise taking care during these operations and to always wear the correct PPE to avoid any risk of injury.

Fig.1

Fig.2

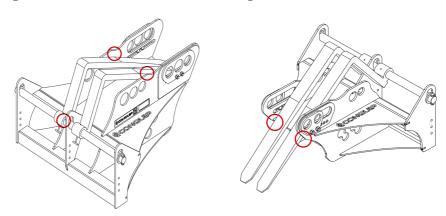
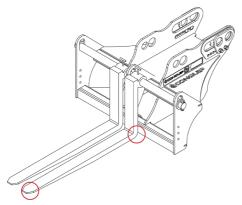


Fig.3



#### 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.

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#### 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.

#### **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 0800 116 076 Email us at sales@conquipgroup.co.nz www.conquipgroup.co.nz

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