

PORTA-GANTRY[®] RAPIDE



Assembly & Operation

www.reidlifting.com



LIGHTWEIGHT | PORTABLE | SAFE

No. 1 in lightweight, portable, safe lifting solutions

CONTENTS

INTRODUCTION

CORRECT OPERATION:

- Inspection prior to initial operation
- Inspection before starting work
- Maximum capacity
- Notes for correct usage
- Danger zones
- Attaching the load
- Temperature range
- Regulations
- Maintenance/Repair
- Inspection/Maintenance

ASSEMBLY INSTRUCTIONS

DIMENSIONS

QUALITY & SAFETY

- Accreditations

INSPECTION RECORD

INTRODUCTION

All users must read these operating instructions carefully prior to the initial operation. These instructions are intended to acquaint the user with the PORTA-GANTRY RAPIDE and its key options to enable him/her to use it to the full extent of its intended capabilities.

The operating instructions contain important information on how to handle the PORTA-GANTRY in a safe, correct and economic manner. Acting in accordance with these instructions helps to avoid dangers, reduce repair costs and down time and to increase the reliability and lifetime of the PORTA-GANTRY.

Anyone involved in doing any of the following work with the gantry frame must read the operation instructions, be trained and competent in its safe use and act accordingly:

- operation, including preparation, trouble shooting during operation and cleaning
- maintenance, inspection, repair
- transport

Apart from the operating guide, health & safety and the accident prevention act valid for the respective country and area where the gantry frame is used, the commonly accepted regulations for safe and professional work must be adhered to.

It is incumbent on the user or instigator of work with the equipment that all users have suitable medical and physical capabilities. Likewise the competent person should ensure there is a rescue plan in place in the event of an emergency that could occur during the work.

N.B. This document should form an element of the overriding Risk Assessment and Method Statement required for each lift.

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CORRECT OPERATION

Inspection prior to initial operation:

Each PORTA-GANTRY frame must be inspected prior to initial operation by a competent person. The inspection is visual and functional and shall establish that the structure is safe and has not been damaged by incorrect assembly, transport or storage. Inspections are instigated by the user.

Inspection before starting work:

The inspection procedure requires that a valid inspection/test certificate has been submitted to and checked by the user.

Before starting work inspect the gantry frame assembly and all load-bearing components for visual defects. Check the integrity of all profiles for denting and pin/bolt holes for wear and elongation. Furthermore, test the trolley for free movement along the beam and check the operation of the footing option.

Ensure that the overall WLL limit is adhered to – following the necessary Risk Assessment and Method Statement.

Maximum capacity:

The PORTA-GANTRY RAPIDE is designed to lift and lower loads up to the related capacity. The capacity indicated on the frame is the maximum working load limit (WLL) or safe working load (SWL) which must not be exceeded (definition is country dependent).

When being used as a personnel lifting anchor the user must use a body harness and retractable device or shock absorber to EN355, ANSI Z359.6-09 or CSA Z259.16-04 that limits the maximum allowed force (M.A.F.) to 6kN. Winches used with the PORTA-GANTRY RAPIDE should comply to EN1496:2006 or equivalent.

Only ONE person / load may be attached to ONE trolley in accordance with the WLL's.

The PORTA-GANTRY RAPIDE has different ratings depending upon the application as detailed in the table below:

| Application | WLL (kg) | Capacity |
|-----------------------|----------|-----------------|
| Fall Arrest | 140 | Up to 3 persons |
| Personnel positioning | 250 | Up to 3 persons |
| Goods | 500 | N/A |

The gantry has an up-rated capacity for personnel positioning. This is when the structure is to be used as an anchor for lifting persons that have a suitably low chance of falling through a free distance and only carried out following a comprehensive risk assessment.

While the PORTA-GANTRY RAPIDE has the capacities stated above it is only one part of a fall arrest system which is only as strong as its lowest rated component. Each lift must be properly planned and all weights clearly known along with the WLL's and constraints of all fall arrest system devices.

The capabilities stated in the table above are only applicable to the standard RAPIDE configuration. Bespoke versions of the RAPIDE are available tailored to specific lifting needs. If unsure about your system consult serial labels, information filled in on page 23 or consult your supplier. A custom RAPIDE is designated by a product number ending with a "C" found on the serial label attached to each A-frame and the beam. For custom designed RAPIDEs please contact your supplier for appropriate rating and capabilities.

In the event of simultaneous goods and personnel combined lifting or when being used as a fall arrest system in sub-zero AND wet conditions contact the supplier as capacities may be reduced.

NOTE:

1. We recommend the use of a load-sensing device on all lifts.
2. The Gantry should NOT be moved under load. Any deviation from this should be supported by a risk assessment and method statement.
3. The WLL (or SWL) rating must NOT be exceeded – risk assessment & method statement must consider additional loading in “wet lift” situations.
4. Ensure suitable winches and connection plates are used for all applications – see winch bracket installation on pg14

NOTES FOR CORRECT USAGE

- Due care and attention should be practiced when transporting and storing gantry to avoid damage.
- Do not throw the gantry or its components down or stack items on top of it. Always place properly on the ground avoiding damage to the equipment.
- Assemble only as instructed (ensure all pins and bolts are present and fitted correctly as per instructions).
- We recommend that gloves should be worn when using this equipment.
- We recommend single person assembly to avoid conflicting actions.
- Set up the gantry at a safe distance from the hazard and subsequently move the structure into place.
- The beam must be horizontal prior to any lift and A-frames vertical and parallel to each other.
- Do not use the gantry frame if the trolley does not run freely along the beam.
- Trolleys have the ability to be locked into position on the beam for certain applications. e.g. when gantry is used as a restraint point.

- Attach hoist only to the lifting point on the trolley.
- Avoid side pull. Lowering and lifting should only be carried out when the load chain/lifeline form a straight and vertical line between the load and lifting attachment point on the trolley.
- Do not allow load to swing.
- When lifting keep the load low to the ground.
- NEVER walk away from structure whilst still being connected.
- Only raise and lower loads when castor brakes are engaged.
- When using the gantry as a fall arrest anchor the required clearance of the fall arrest device should be considered - refer to device O&M and consider the height adjustment on the gantry.
- Before the gantry is used consideration must be given to the potential effects of the lifelines over sharp edges, chemical reagents, electrical conductivity, cutting, abrasion, climatic exposure and the effect of offset forces as a result of pendulum falls.
- The gantry is not to be moved under load except when a Competent Person or authority approves a risk assessment and a method statement for a particular reason.

Warning:

- The equipment shall not be used outside its limitations, or for any purpose other than that for which it is intended.
- Only one lifeline should be used with each sheave and they should never cross paths with each other.
- Do not lift or transport loads while personnel are in the danger zone.

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- Do not allow personnel to pass under a suspended load.
- When gantry is used with multiple persons attached working procedures should dictate that individual lifelines do not cross and become tangled.
- It is NOT recommended to mix the use of the gantry with personnel and goods lifting concurrently.
- After lifting, a load must not be left unattended for a long period of time.
- Start moving the load along the beam only after it has been attached correctly and all personnel are clear of the danger zone.
- Be aware of hazards when setting up/folding down, eg. hands/fingers trapped in rotating parts.
- It is essential for safety that the PORTA-GANTRY RAPIDE is withdrawn from use immediately should:
 - 1) any doubt arise about its condition for safe use or;
 - 2) it has been used to arrest a fall and not be used again until confirmed in writing by a competent person that it is acceptable to do so.

Attaching the load:

The operator must ensure that the hoist is attached in a manner that does not expose him or other personnel to danger by the hoist, chain(s) or the load.

Temperature range:

The PORTA-GANTRY RAPIDE can be operated in ambient dry temperatures between -20° and +55°C (-4°F to 131°F). Consult your supplier in case of extreme working conditions.

If used in sub-zero and wet conditions, fall arrest appliances characteristics may change.

Regulations:

The PORTA-GANTRY RAPIDE complies with the following regulations:

PPE Directive 89/686/EEC, Machinery Directive 2006/42/EC, The Provision and Use of Work Equipment Regulations 1998 (S.I. 1998 No. 2306), The Lifting Operations and Lifting Equipment Regulations 1998 (S.I. 1998 No. 2307), and/or safety regulations of the respective country for using manual lifting equipment must be strictly adhered to. EN795:1997, ANSI Z359.1-2007 and CSA Z259.16-04 certified.

INSPECTION/MAINTENANCE:

Regular inspections:

To ensure that the gantry frame remains in safe working order it must be subjected to thorough periodic inspections by a competent person. Inspections are to be 6 monthly for personnel lifting and 12 monthly for goods only unless adverse working conditions or profile of use dictate shorter periods. The components of the gantry frame are to be inspected for damage, wear, corrosion or other irregularities. To check for worn parts it may be necessary to disassemble the gantry frame.

Repairs should only be carried out by an approved specialist workshop that uses original spare parts.

Inspections are instigated by the user. If detailed information is required on inspection and test criteria, please refer to your supplier's technical department.

Please refer to pg 23 for the equipment inspection sheet.

Maintenance/Repair:

In order to ensure correct operation not only the operations instructions, but also the conditions for inspection and maintenance must be complied with. If defects are found **stop** using the PORTA-GANTRY immediately.

No alterations or additions to the equipment should be made without the written consent of the manufacturer. Any repair shall only be carried out in accordance with the manufacturer's procedures.

It is recommended to maintain the equipment in a clean and dry manner. Cleaning is suggested using a sponge or cloth with warm, soapy water (using diluted domestic washing up liquid), rinsing and allowing to dry.

Marking:

The serial labels indicate:

- The product identification number.
- The products unique serial number.
- The goods WLL of the device.
- The year of manufacture.
- The standards to which the device is approved.
- CE 0088: Notified body number (currently LRQA) who are responsible for approving Reid Lifting's quality control system.



Read the operating and maintenance instructions.

Language:

It is essential for the safety of the user that if this product is re-sold outside the original country of destination the reseller shall provide instructions for use, maintenance, for periodic examination and for repair in the language of the country in which the product is to be used.



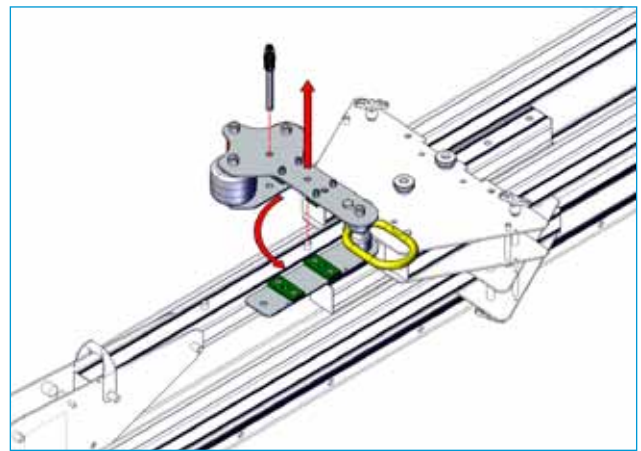
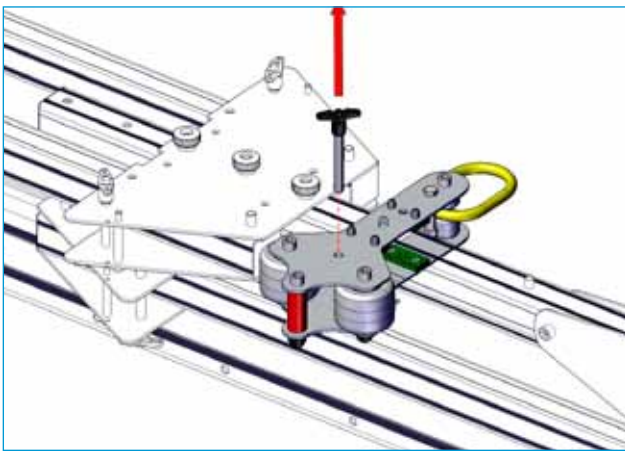
Equipment capacity warning label: refer to maximum capacity section for rating explanations.

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Trolley Stow and Removal

There are 2 location points on the upper and lower uprights to enable storing of trolleys. The lower upright is only accessible when the upper is rotated out of the way.

1. Remove pin from trolley. For sheaved trolley 2 pins need to be removed
2. Rotate underside plate to open the trolley and lift off stow pin



For trolleys stowed on underside upright, if stow pins available, removal can only take place when the upper A-frame assembly is rotated out of the way, or when gantry is set up.

Trolley Storing

- To stow trolley reverse process 1—2.
- If storing on underside upright, store before collapsing or before the upper A-frame assembly is rotated to its final position.
- Note which side the pins are inserted on the upper upright as above. For the lower upright, pins are inserted from other side to avoid interferences with folding i.e. from opposite side as above.

Gantry Set-Up

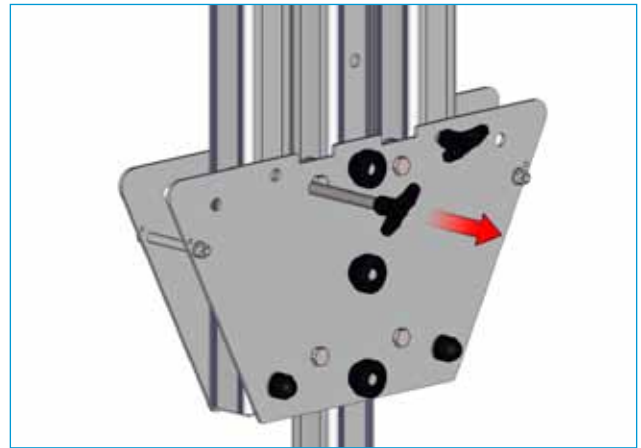
Pre set-up checks

- Ensure castors are locked
- Allow sufficient clearance for gantry frame rotation. If sufficient space not available see steps 11 to 17.

3. Rotate first leg assembly to a vertical position.



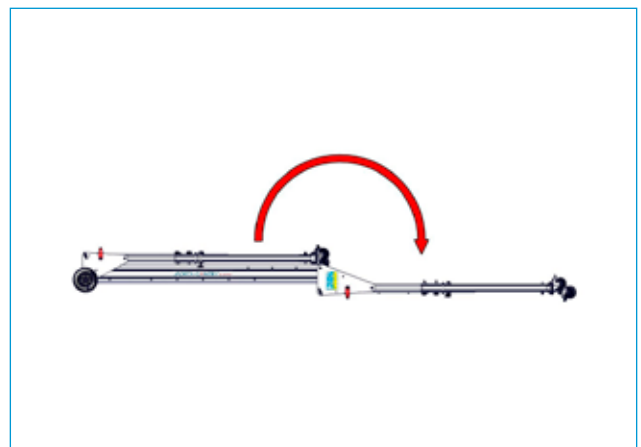
4. While in this vertical position remove ball lock pin from its stow hole.



5. Open leg and insert aircraft/ball-lock pin into second hole securing the leg in its open position. Repeat for second leg.



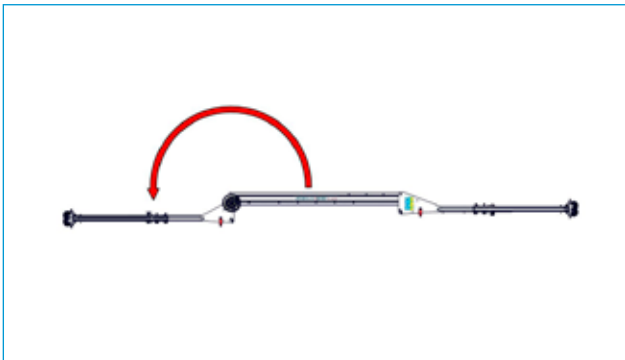
6. Continue rotation of leg assembly until it comes to rest on ground.



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No. 1 in lightweight, portable, safe lifting solutions

7. Repeat steps 3-6 for second leg assembly.



8. Scissor leg assembly until aircraft/ball-lock pin is adjacent to beam.
Remove pin and continue scissor until stops engage beam and holes are aligned.

Be careful not to trap hands between beam and cheek plates!



9. Replace pin into hole ensuring the pin is fully engaged through hole.
A gentle rocking motion can be used to induce alignment.

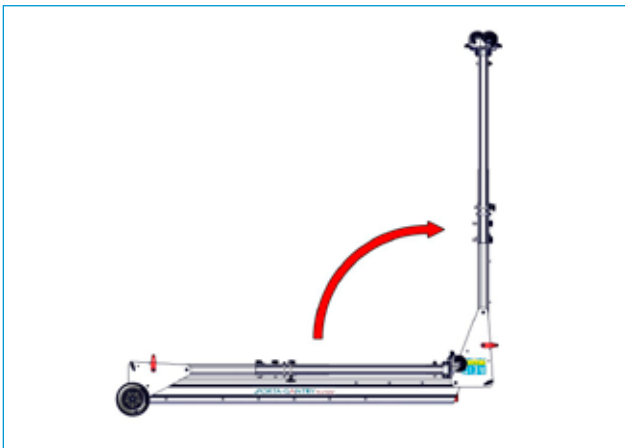


10. Repeat steps 8 and 9 for opposite leg assembly.

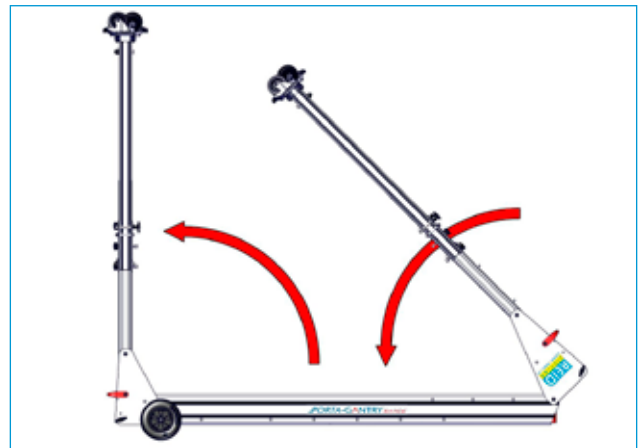


Confined Space Set-Up

11. Rotate top leg assembly to vertical position.



12. Rotate second leg assembly to vertical position and place first leg assembly back down.



13. Open legs as in steps 4 and 5.



14. Rotate leg assembly around as in steps 8 and 9.
Be careful not to trap hands between beam and cheek plates!



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15. Rotate second leg assembly to vertical position and open legs as in steps 4 and 5.



16. Rotate leg assembly around as in steps 8 and 9.
Be careful not to trap hands between beam and cheek plates!



Alternative Confined Space Set-Up

If space is further limited for set up then the legs can be removed.

17. Remove legs from the upright and rotate as per step 14
While legs removed they can be opened and assembled back onto gantry as in step 14
Repeat 17 for opposite leg assembly and assemble as per step 15



Ensure all quick release bolts are hand tight and aircraft/ball-lock pins are secure.

Gantry Stowage

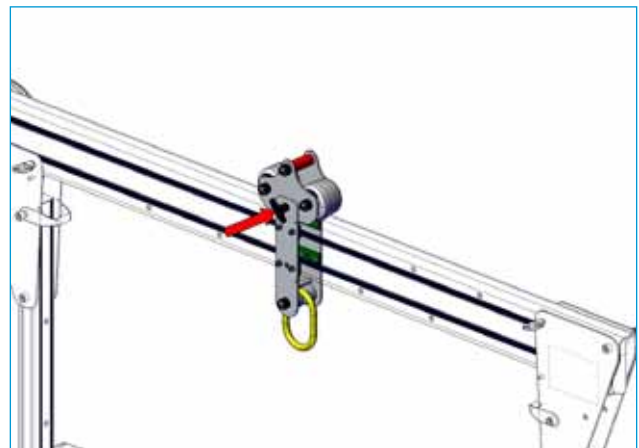
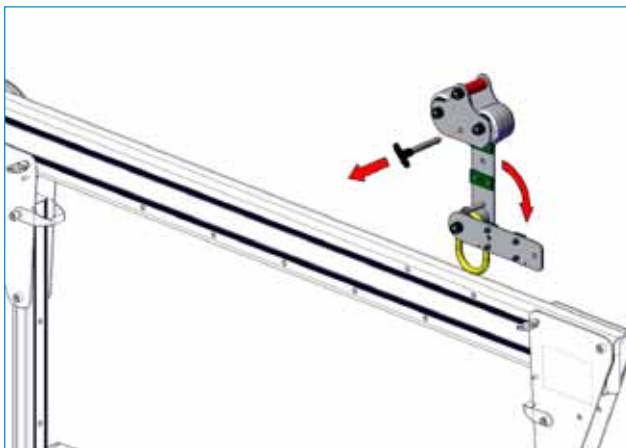
To collapse gantry reverse steps 10 to 1 for normal collapse or 16 to 11 and 2 to 1 for confined space.

18. When collapsing gantry ensure to stow beam aircraft/ball-lock pins in cheek plate holes to ensure they do not become damaged.



Master-link/Close-Coupled Trolley Installation

19. Remove pin.
Open trolley and present to beam with plate rotated through 90°.
20. Close trolley plate encapsulating the beam and insert aircraft/ball-lock pin.
Observe pin is properly engaged through holes.



Be careful not to allow plate to swing open uncontrolled.

If trolleys are required to be locked into position then an additional pin is available to provide trolley lock-off.

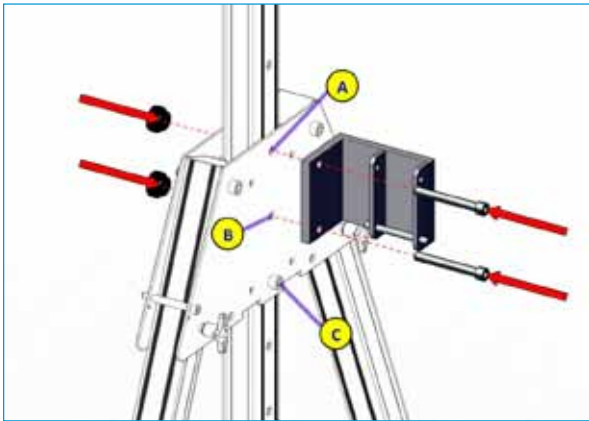
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Winch Bracket Installation

Never install winch bracket while gantry is under load. Only install winches which are approved by REID for use with the *PORTA-GANTRY RAPIDE* and a suitable interface / mounting plate supplied.

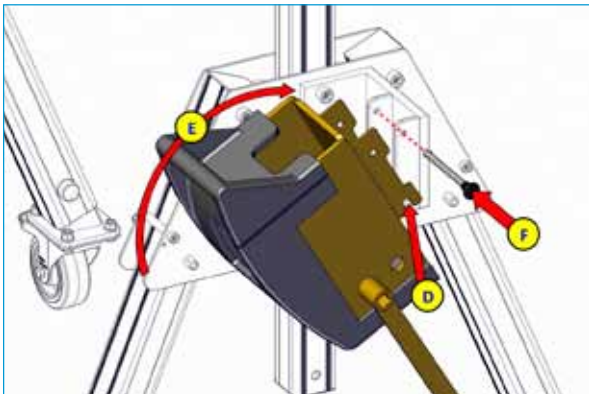
Winch can be installed on both sides of gantry and on either bolts A and B or B and C. Ensure winch bracket and quick release knobs are hand tight.

21. Remove existing bolt, A **or** C.
Present bracket to gantry as shown (with locating pin at bottom) and insert new, longer bolts securing the winch with the quick release knobs provided.



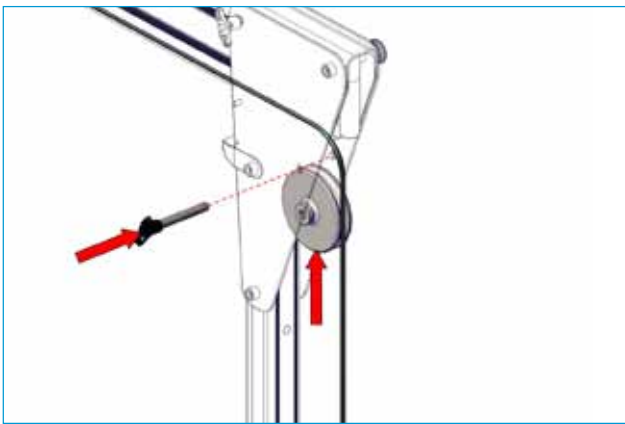
Winch Installation

22. Place winch onto locating pin, D.
Rotate winch to align holes, E.
Place retaining pin into holes, F.
Observe pin is securely engaged.

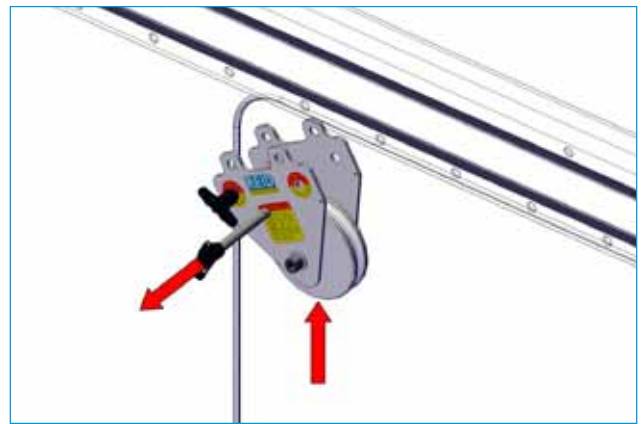


Sheave Trolley Installation

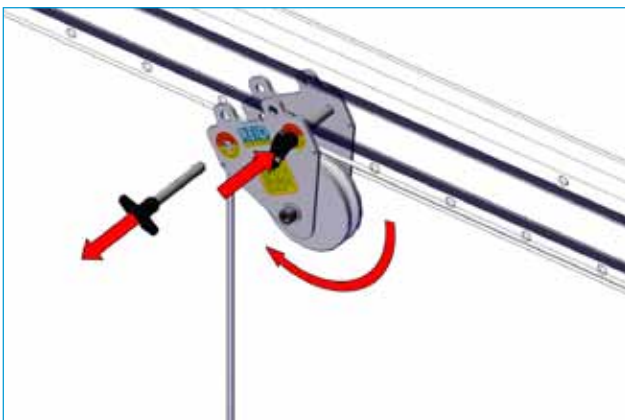
23. Thread rope through plates and capture rope between sheave and beam.
Secure sheave by aircraft/ball-lock pin.
Observe pin is securely engaged.



24. Present trolley to underside of beam
Capture rope between sheave and beam and insert pin as shown



25. Insert second pin as shown
Observe both pins are fully engaged

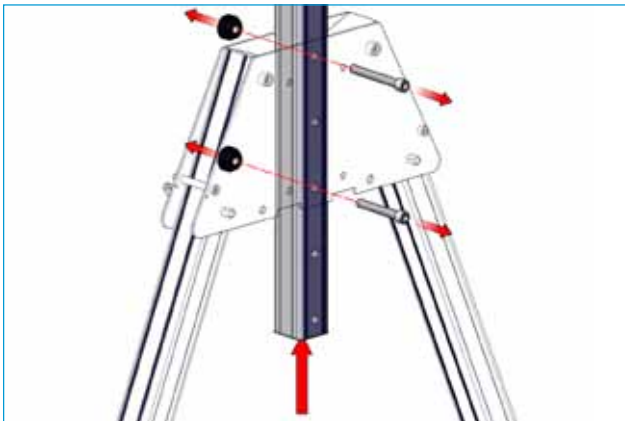


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Height Adjustment

Never adjust the height while the gantry is under load.

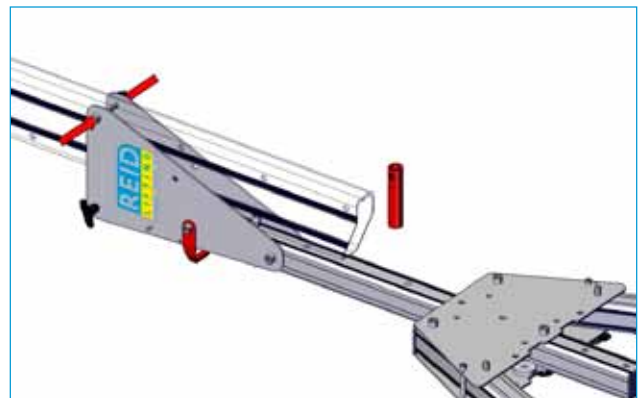
26. Take weight of gantry upright.
Remove bolts and adjust to the desired position.
Re-insert bolts and hand tighten quick release knobs
ensuring the gantry is secure.



Beam Width Adjustment

Beam width adjustment can take place during steps 6 or 7.

27. Remove quick release bolt and handle.
Store handle in safe place.
28. Move leg assembly to required position.
Re-insert bolt and hand tighten quick release knob.
Complete assembly of gantry as 8-10.



Changing the Foot Option

29. The foot option can be changed by removing the nut cap and undoing the bolts.
Tools required: 20mm spanner & 13mm allen key.
Tighten to 25Nm torque or until spring washer is fully depressed.



Foot Adjustment

Never adjust the height while the gantry is under load.

30. To increase height pull foot down until desired position is achieved.
31. To decrease height depress lever and push foot up to desired position.
Observe gantry is level.



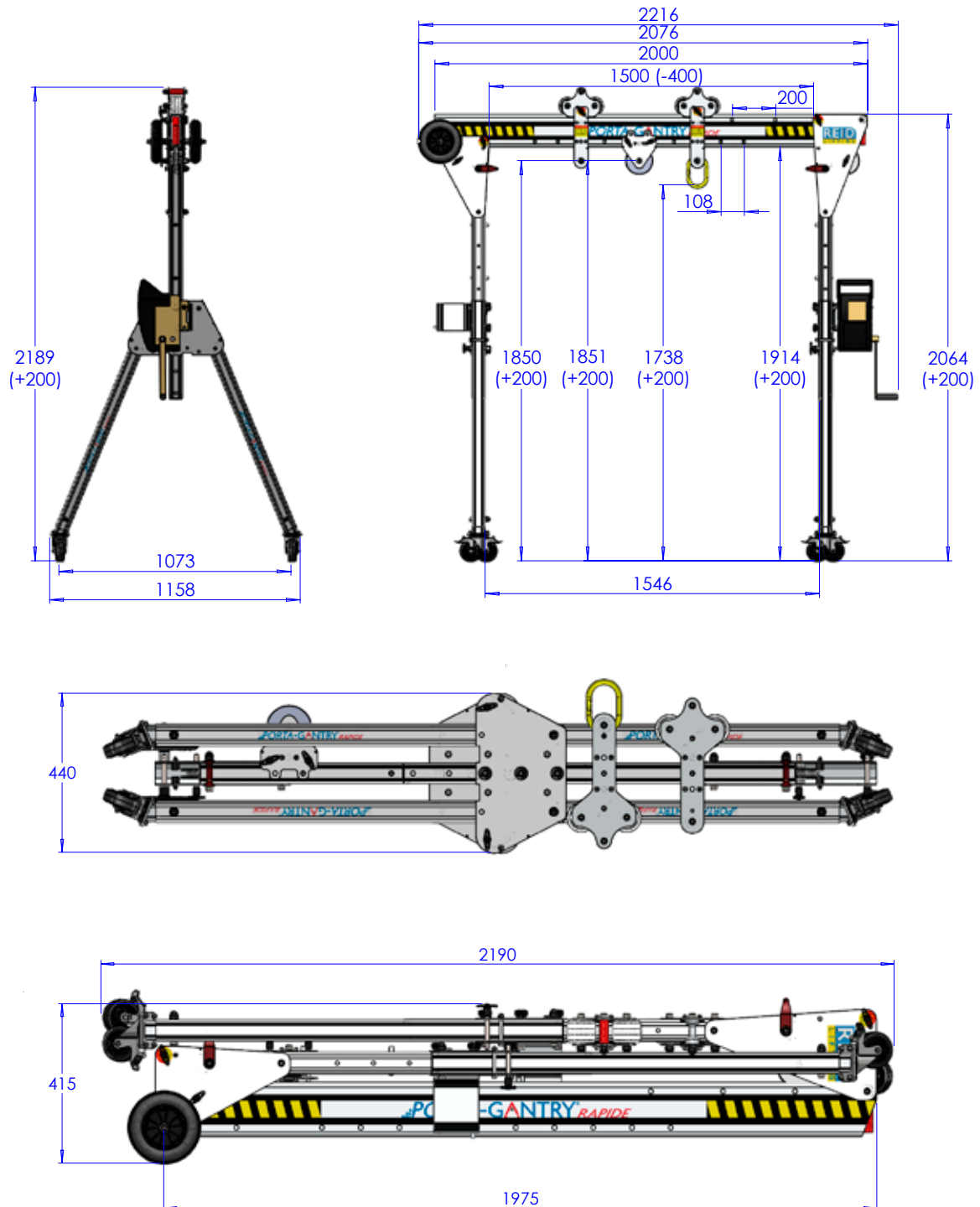
Pre-lift Checks

- Ensure all ball lock pins are fully engaged into their respective holes.
- Ensure all quick release knobs (on trap plates and at beam) are hand tight and secure.
- Ensure gantry is level.

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DIMENSIONS



Patent Pending



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Quality and Safety are key themes throughout this document and the REID Lifting ethos. It is with this in mind that we have undertaken external accreditations to ensure we stay focused on what is important to our clients and users and ahead of market trends and developments in Safety and Quality systems.

REID Lifting has been successfully audited by Lloyds Register (LRQA) for approval of its Integrated Management System combining quality systems management, environmental issues and the Health and Safety practices within the company.

REID Lifting holds the following certifications:

- **ISO 9001** - Specifies requirements for a quality management system for any organisation that needs to demonstrate its ability to consistently provide product that meets customer and applicable regulatory requirements and aims to enhance customer satisfaction.
- **ISO 14001** - Specifies the requirements for implementing environmental management systems throughout all areas of the company.
- **OHSAS 18001** - Occupational Health and Safety Managements Systems.
- **LEEA Membership** - REID Lifting Ltd is a full member of the Lifting Equipment Engineers Association (membership 000897). REID Lifting conforms to the main aims of the Association which is to achieve the highest standards of quality and integrity in the operations of members. Their entry qualifications are demanding and strictly enforced through technical audits based on the Technical Requirements for Members.

Conformité Européenne (CE)

REID Lifting's products have been designed, tested and approved (as appropriate) by the Conformité Européenne (French for European Conformity). This certifies that REID Lifting's products meet the demands of the European Directives regarding Health and Safety requirements.

The EC type-examination for this device has been carried out by SGS United Kingdom Ltd, 202b, Worle Parkway, Weston-super-Mare, BS22 6WA, United Kingdom (CE body no. 0120) in accordance with article 10 of the PPE Directive.

The EC quality assurance system for this device has been carried out by Lloyd's Register Quality Assurance Limited, Hiramford, Middlemarch Office Village, Siskin Drive, Coventry, CV3 4FJ, United Kingdom (CE body no. 0088) in accordance with article 11B of the PPE Directive.

The Queen's Award for Enterprise Innovation:

REID Lifting Ltd has been awarded this prestigious award for innovative design and development of lightweight, portable and safe lifting solutions.



TESTING

Testing and Technical File review are integral parts of our design and manufacturing process – to externally verify the products, where appropriate, using government approved Notified Bodies.

All REID Lifting products are type tested at NAMAS accredited laboratories and every individual system is tested to 150% of WLL rating. Full product design & development Technical Files are available for inspection.



ACCREDITATIONS

PRODUCT IPR

Design Rights apply to all REID Lifting Ltd products REID PATENTS in place, or pending, for:

- PORTA-GANTRY
- PORTA-GANTRY RAPIDE
- T-DAVIT
- SNAPPER

All product names are Trade Marks of REID Lifting Ltd:

- PORTA-GANTRY
- PORTA-GANTRY RAPIDE
- PORTA-DAVIT
- PORTA-BASE
- T-DAVIT
- PORTA-QUAD
- SNAPPER
- PORTA-LIFTER Manhole Lifter
- PORTA-BEAM



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DECLARATION OF CONFORMITY

We the undersigned:

REID LIFTING LIMITED

Registered in England No. 3896652.

Registered Office: Unit 1 Severnlink, Newhouse Farm Industrial Estate, Chepstow, Monmouthshire, NP16 6UN United Kingdom.

Tel: +44 (0)1291 620796

Fax: +44 (0)1291 626490

www.reidlifting.com

sales@reidlifting.com

Hereby declare that the design, construction and marketing of the equipment described below is in accordance with the PPE Directive (89/686/EEC), Machinery Directive (2006/42/EC) and the regulations transposing it into national law.

Description of Equipment: PORTA-GANTRY RAPIDE

Type of Equipment: Mobile Gantry and Trollies

Identification: PORTA-GANTRY RAPIDE decaled on beam and legs with unique serial numbers applied to beam, each A-frame and trolley.

Notified Body Approval: SGS United Kingdom Ltd, 202b, Worle Parkway, Weston-super-Mare, BS22 6WA, United Kingdom (CE body no. 0120)
Certificate No. GB12/85476

National Regulations: The Provision and Use of Work Equipment Regulations 1998 (S.I. 1998 No. 2306)
The Lifting Operations and Lifting Equipment Regulations 1998 (S.I. 1998 No. 2307)

Harmonised Standards: BS EN ISO 12100:2010 - Safety of machinery — General principles for design — Risk assessment and risk reduction
EN 1999-1-1:2007 + A1:2009 - Eurocode 9: Design of aluminium structures – Part 1-1: General Structural rules
EN 795 Class B: 1997 – Protection against falls from a height – Transportable, temporary anchor devices

National Standards: BS 8437:2005 - Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace
BS 7883:2005 - Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795

American Regulations: Occupational Safety and Health Standards 1910.66

American Standards: ANSI Z359.1-2007 - Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components
ANSI Z359.6-2009 - Specifications and Design Requirements for Active Fall Protection Systems

Canadian Regulations: Canadian Occupational Health and Safety Regulations SOR/86-304

Canadian Standards: CSA Z259.16-04 - Design of active fall-protection systems

Place of issue: Chepstow, United Kingdom

Signature:



Date of issue: 24th April 2012

Name:

N. P. Battersby

Position:

Director

All information is provided Commercial in Confidence, meant for the addressee only.
REID Lifting and all product names are rights protected. Product design rights apply.

INSPECTION



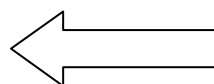
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INSPECTION RECORD

REID LIFTING
REID Lifting Limited

Product No: *PGRS00500CA* **A**
Serial No: *12 01 10979* **B**
WLL: *500kg Goods* **C**
Year of Manufacture: *2012* **D**
Standards: *EN795:1997; ANSI Z359.1-07; CSA Z259.16-04*

CE 0088 Manufactured in the UK



* Insert data from serial numbers found on product into table below

| | | | |
|---|--------------|-----------|----------|
| Product number(s) * A | | | |
| Serial number(s) * B | | | |
| WLL * C | | | |
| Year of manufacture * D | | | |
| | | | |
| Name of user | | | |
| Date of purchase | | | |
| Date of first use | | | |
| Periodic Examination and Repair History | | | |
| Date | Inspected by | Pass/Fail | Comments |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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