Assembly & Operation details for PORTA-GANTRY system:

PORTA-GANTRY system delivered Flat Packed on a Pallet:

- 2 x A-Frames
- 1 Trolley

Beam shipped separately
Gantry Tool Set:
- Ratchet handle 1/2” sq drive
- 24mm socket
- 24mm combination spanner
- 14mm long series allen key

A-Frame prior to assembly

Assemble each A-Frame by:
- Position Legs & bolt in place
- Attaching leg brace

The unit is most easily assembled with the A-Frames at their lowest height setting and this is the recommended position to start from.

Apply the castor brakes.

Put brakes on only with protective footwear **DO NOT USE HANDS.**

Lock casters in position in line with the A-Frame Tie Bar, as shown:
Pre Assembly visual check:

- Beam
- Trolley
- 2 x A-Frames
- Tool Set

Cheek Plates bolts 1 & 2

Lay the two A-Frames a beam length apart on a flat surface in line with each other with the castor wheels outward and brakes on.

Lay the beam on the A-Frames, resting on Bolt 1 on each cheek plate
Offer one end of the beam to the rear bolt-hole on the cheek-plate (Bolt 1) and insert a bolt. Put on plain & spring washers and nut, finger tight.

Visual check

Thread beam trolley over the other end of the beam and lock with friction brake at approximately centre position.

Assess whether the lifting device (usually chain block / hoist) needs to be attached to the trolley at this stage or when fully assembled. Heavier hoists are best attached at this stage.
Offer the beam to the rear bolt-hole on the cheek-plate (Bolt 1) and insert a bolt. Put on plain & spring washers and nut finger tight.

Visual check

Visual check
With the help of another person, scissor the beam and A-Frame into position (using the first bolt as a hinge)

BE CAREFUL NOT TO TRAP ANY HANDS IN THIS OPERATION

Insert the second bolt into the cheek-plate. Tighten both bolts. (Do not over tighten).
Visual check

Move trolley to other end of beam, opposite to the end to be raised, and secure by tightening the trolley knob.

(For additional safety whilst the beam is at such an angle a spare bolt can be temporarily be placed in an adjustment point on the beam to prevent the trolley slipping down the beam)
Repeat the scissor activity at the opposite end of the gantry.

Insert and tighten the final beam bolt.

If the hoist is not already attached to the suspension point on the trolley, do so now (using stepladder if height setting requires).

*If this is not safe, disassemble the gantry and re-start adding the hoist prior to raising the A-Frames.*
The gantry is now erect at its lowest height setting.

**Tighten all bolts.**

*(If raising the beam height – leave the two height adjustment bolts loose on each upright – see next image)*

Decide on the height required (always using the lowest setting for the work in hand).

Adjust the upright position at one A-Frame (a 2 man operation – one on the bolts and one on the upright) by removing 2xUpright securing bolts, moving the upright to the appropriate setting by lifting from the strut handle. Re-secure with bolts, nuts & washers (Do not over tighten).

Repeat the height adjustment at the opposite end.

N.B. Ensure the beam is horizontal prior to any lift – see Method Statement.

Release trolley brake and wheel brakes to position the structure over the lifting point.
Inspection prior to initial operation:

Each gantry frame must be inspected prior to initial operation by a competent person. The inspection is visual and functional and shall establish that the A frame is safe and has not been damaged by incorrect assembly, transport or storage. Inspections should be made by a representative of the manufacturer or the supplier although the company can assign its own suitably trained personnel. Inspections are instigated by the user.

Inspection before starting work:

The inspection procedure requires that a valid 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. Furthermore, test the trolley for free movement along the beam.

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

INSPECTION/MAINTENANCE:

Regular inspections:
To ensure that the gantry frame remains in safe working order they are to be subjected to regular inspections by a competent person. Inspections are to be annual unless adverse working conditions 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 may only be carried out by an approved specialist workshop that uses original spare parts.

Inspections are instigated by the user.

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 rating must NOT be exceeded – risk assessment & method statement must consider additional loading in “wet lift” situations

Danger zones:

- Do not lift or transport loads while personnel are in the danger zone.
- Do not allow personnel to pass under a suspended load.
- After lifting, a load must not be left unattended for a long period of time.
- Start moving the load down the beam only after it has been attached correctly and all personnel are clear of the danger zone.
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.

NOTES FOR CORRECT USAGE

- Do not throw the gantry frame 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 above.
- The beam must be horizontal prior to any lift.
- Do not use the gantry frame if the trolley does not run freely along the beam.
- Attach hoist only to the lifting point on the trolley.
- Avoid side pull. Lift only when load chain(s) form a straight and vertical line between load and lifting attachment point on the gantry trolley.
- Do not allow load to swing.
- Only raise and lower loads when foot brakes are ‘on’.

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.

N.B.

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