



Quattro Express

These instructions are applicable to all Quattro Express tiedown systems.

USER INSTRUCTIONS



Read instructions fully before use.

It is recommended that training be given on the proper use of this product.

**Retain this manual for future reference.
Include it with the product in the event of transfer to new users.
Additional copies are available upon request.**

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Quattro Parts



The picture above shows a pair of Quattro Express with Tongue & Buckle and Solo fittings. However, these instructions apply to all models in the Quattro Express range. For the full range of products applicable see section H.

Quattro is manufactured to be used in pairs. Ensure the correct part is used when restraining a wheelchair.

A. Limitations of use

1. This product is sold as a pair and depending on requirements, it can be used as a 4 point system, a 4 point combined system, or as either front or rear straps alongside the following products:

As a front strap in conjunction with the rear assemblies for:

- Rear webbing restraints
- Combined Systems
- Gemini

As a rear strap in conjunction with:

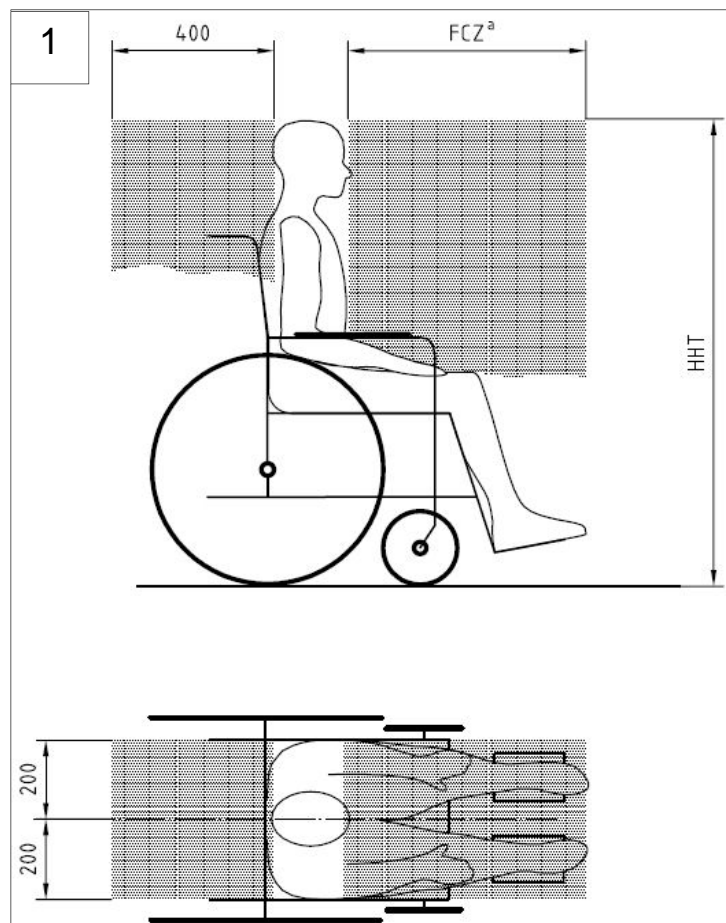
- A pair of static front straps for Rail systems (WWR/LRF)
 - A pair of static front straps for Solo systems (SF/QE)
2. Some wheelchairs need specific restraints, e.g. Buggy type wheelchairs. If in doubt please contact Unwin or the wheelchair supplier.
 3. Some wheelchair frames are too large for the Karabiner to close around them, in these situations our D-ring straps (DR120) or our Tongue & Buckle version should be used.
 4. Unwin products are extensively tested using Unwin rail, and our full warranty normally only applies to Unwin equipment when used in Unwin branded rail. Unwins have also participated in test programs with manufacturers of structural rail products and will support warranty on the Unwin products when used in conjunction with such jointly tested systems. For further details on specific applications please contact the Sales Office. In other situations using rail products for which Unwin has not participated in joint test programs, a limited Unwin warranty will apply.

B. General Guidance

1. Please read this entire manual before using the equipment.
2. Regular inspection of all parts is recommended. Only use the equipment if all mechanical parts are functioning smoothly and all components are in good condition.
3. Replace parts where the webbing is contaminated or frayed.
4. Items attached to the wheelchair in front of the occupant, other than footrests should be removed and secured in the vehicle during transport to reduce the potential for injury.
5. If the equipment has been used during a vehicle collision, it must be replaced immediately.
6. Do not attempt to modify the equipment. If you experience a problem, please contact Unwin Safety Systems for technical advice.
7. Avoid contact with corrosive liquids and keep the webbing away from sharp edges.

C. Before using the Quattro Express system

1. Ensure that the wheelchair is appropriate for the tiedown being used.
2. Position the wheelchair, facing forward, centrally between the Unwin rail, or the four floor anchors, if using a model with Solo fixings. Ensure the wheelchair brakes are applied and the wheelchair cannot roll.
3. To minimise the potential for head injuries in an impact, it is recommended to allow a clear space of at least 400 mm behind and 650 mm for 3 point systems or 950mm for 2 point systems in front of the head of the wheelchair user when positioning the chair for transit. A height provision ranging from 1200mm to 1550mm should be made, depending on the size of the passenger. There should also be 200 mm of clear space either side of the wheelchair centre line. If these clear space dimensions cannot be provided, then any object that protrudes into the wheelchair space should be well padded.
4. Electric wheelchairs may require an additional strap to secure the batteries.

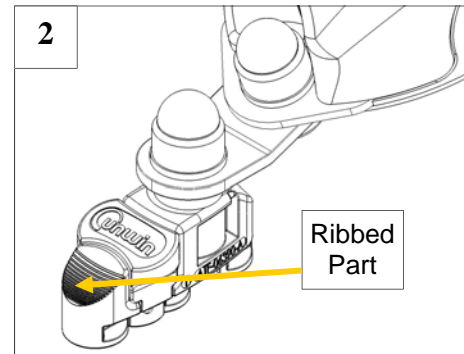


D. Using the Quattro Express as a front strap

1. Ensure that the Quattro Express front tie-downs are fitted with the tensioning handles facing inwards, and, where appropriate, the Karabiner gates facing outwards.

2. Using ATF in Unwin rail: Press on the ribbed part of the ATF (Fig 2) and push firmly towards the wheelchair until the yellow clip drops and locks into the rail. Install the second clip. The position of this must be in line with the first.

IMPORTANT: Check the plungers are fully engaged on both sides.



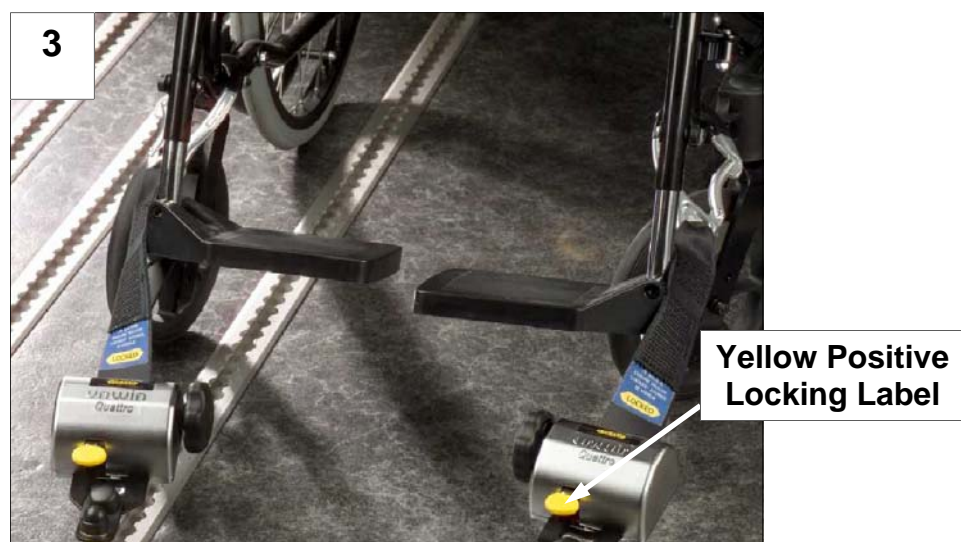
3. Using Solo: Attach the front straps onto the front anchor points by aligning the button within the cleat to the slot on the floor anchors. Slide the cleat fully home and rotate the assembly through 90°.

4. Extend the webbing and attach the Karabiner or Tongue & Buckle (dependant on model) around the main frame of the wheelchair creating an angle of around 45° (Fig 1).

5. The self-tensioning mechanism will automatically remove any slack in the webbing. **IMPORTANT: The yellow positive locking label must be clearly visible, to ensure that the reel is safely locked into place (Fig 3).**

6. Pull the wheelchair backward to ensure the front straps are tensioned.

7. The rear tie-down option should now be fitted as described in section E.

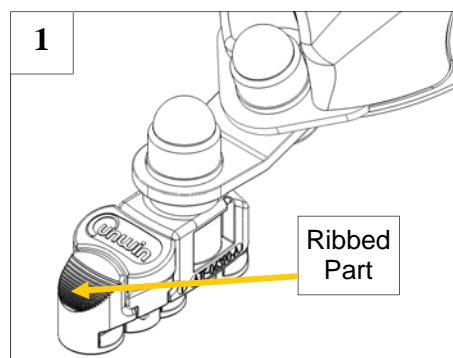


E. Using The Quattro Express as a rear strap

1. Fit the appropriate front straps following the instructions supplied with that product.
2. Ensure that the Quattro Express rear tie-downs are fitted with the tensioning handles facing inwards, and, where appropriate, the Karabiner gates facing outwards

3. Using ATF in Unwin rail: Press on the ribbed part of the ATF (Fig 1) and push firmly towards the wheelchair until the yellow clip drops and locks into the rail. Install the second clip. The position of this must be in line with the first.

IMPORTANT: Check the plungers are fully engaged on both sides.



4. Using Solo: Attach the rear straps onto the rear anchor points by aligning the button within the cleat to the slot on the floor anchors. Slide the cleat fully home and rotate the assembly through 90°.
5. Pull the Quattro Express webbing and attach the Karabiner, or Tongue & Buckle to the main frame of the wheelchair to create an angle of about 45°. The self-tensioning mechanism will automatically remove any slack in the webbing. Repeat operations for the other side.

6. **IMPORTANT: The yellow positive locking label must be clearly visible, to ensure that the reel is safely locked into place (Fig 2).**



7. Final tensioning is achieved by turning the tensioning handles until the webbing is equally taught on each Quattro Express (Fig 3). **IMPORTANT: Following final tensioning check, ensure the yellow positive locking label is still visible (Fig 2).**

9. A passenger restraint should now be fitted, either as a separate item or as part of a combined wheelchair tie-down and occupant restraint.



F. Removing and Storing

1. Remove Passenger Restraint as indicated in the instructions supplied with the product.
2. Before releasing the restraint ensure the wheelchair brakes are applied.
3. Tightened the handle slightly to release the tension in the system, and then press the yellow release button of one of the rear Quattro Express to remove the Karabiner or Tongue & Buckle from wheelchair (Fig 4). Release the yellow button.



4. Whilst still holding the Karabiner or Tongue & Buckle, let the webbing retract gently in to the Quattro Express metal housing cover.
IMPORTANT: Do not release the Karabiner or Tongue & Buckle when the webbing is retracting, as you might damage the self tensioning mechanism. Repeat the above for each strap.
5. Lift the yellow retaining ATF clip fully and pull away from the wheelchair to remove the front straps from the rail. Repeat on opposite side.
6. Store the restraint safely to avoid damage and to prevent it becoming a projectile in an accident. This can be achieved by using wall mounted storage rails or a stowage box.

G. Maintenance

1. Regularly inspect the Quattro Express for damage, wear or malfunction. If any problems are identified, replace them immediately.
2. All webbing and components can be cleaned as necessary, but care should be taken to prevent contamination of the webbing with polish, oils and chemicals.
3. To clean the Quattro Express, use warm soapy water and a clean soft cloth. Rinse with clear water, and allow to air dry.
To disinfect use a mild spray disinfectant - do not use products containing bleach. **IMPORTANT: when cleaning or disinfecting do not immerse buckles, retractors or rail fittings in disinfectant or water.**
4. If the vehicle is involved in an accident when any restraints are deployed, remove them from service and replace them immediately. If in doubt please contact Unwin Safety Systems.

H. Product Range

Quattro Express Range for Rail Systems

For use on the front of wheelchair only:

- Pair of Static Front Strap for Quattro Express System (WWR/LRF)

For use on the front and rear of wheelchair:

- Pair of Quattro Express with Karabiner (QE/2K)
- Pair of Quattro Express with Tongue & Buckle (QE/2T)

Quattro Express Range for Solo Systems

For use on the front of wheelchair only:

- Pair of Static Front Strap for Quattro Express System (SF/QE)

For use on the front and rear of wheelchair:

- Pair of Quattro Express with Karabiner (SQE/2K)
- Pair of Quattro Express with Tongue & Buckle (SQE/2T)



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