



Quattro

These instructions are applicable to all Quattro tiedown systems.

USER INSTRUCTIONS



Read instructions fully before use.

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

**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



This picture shows a pair of Quattro with Tongue & Buckle and Solo fittings. However, these instructions apply to all models in the Quattro 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

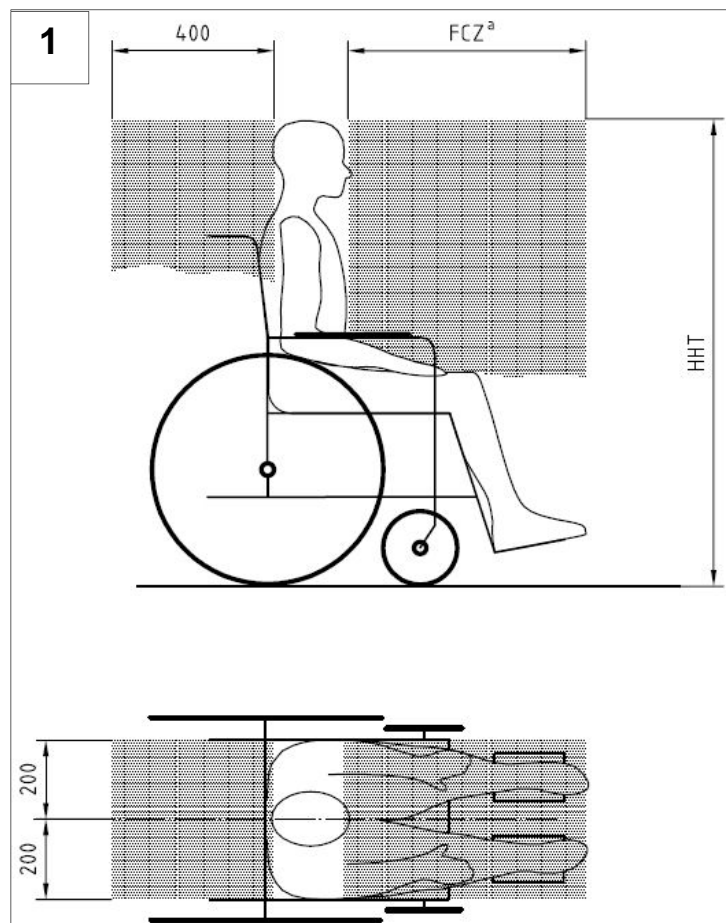
1. This product is sold as a pair and depending on requirements, it can be used as a 4 point system, a 4 point combined system, or either as front or rear straps alongside the following products:
 - **As a front strap in conjunction with** the rear assemblies for:
 - Rear Webbing Restraints
 - Combined Restraint Systems
 - Gemini
 - **As a rear strap in conjunction with:**
 - A pair of static front straps for rail fixing (QHD/LRF)
 - A pair of static front straps for solo fixing (SF/QHD)
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 Tongue & Buckle version or our D-ring straps (DR120) 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. This reduces 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 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. (See Figure 1)
If these clear space dimensions cannot be provided then any structure protruding into this space should be adequately padded.
4. Electric wheelchairs may require an additional strap to secure the batteries.

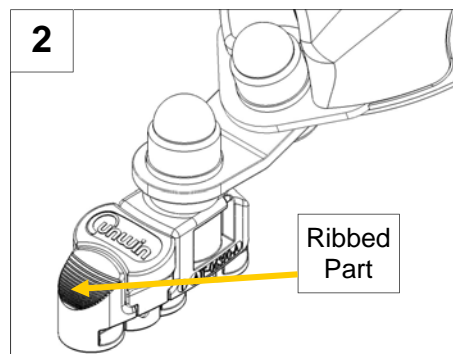


D. Using the Quattro as a front strap

1. Ensure that the Quattro 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.



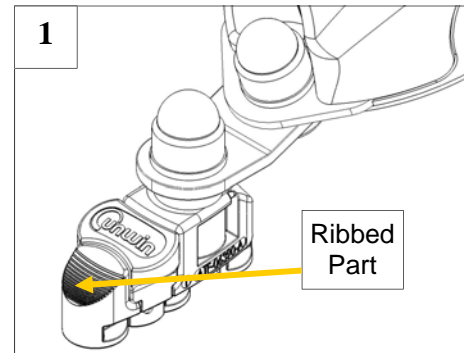
3. Using Solo: Attach the front straps onto the front anchor points by aligning the button within the cleat to the slot on the floor anchors. Slide the cleat fully home and rotate the assembly through 90°.
4. Press the Quattro release button and extend the webbing. Attach the Karabiner or Tongue & Buckle (depending on model) around the frame of the wheelchair.
5. Press the Quattro release button to take up the slack on the webbing and create an angle of around 45° (Fig 1).
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 Quattro as a rear strap

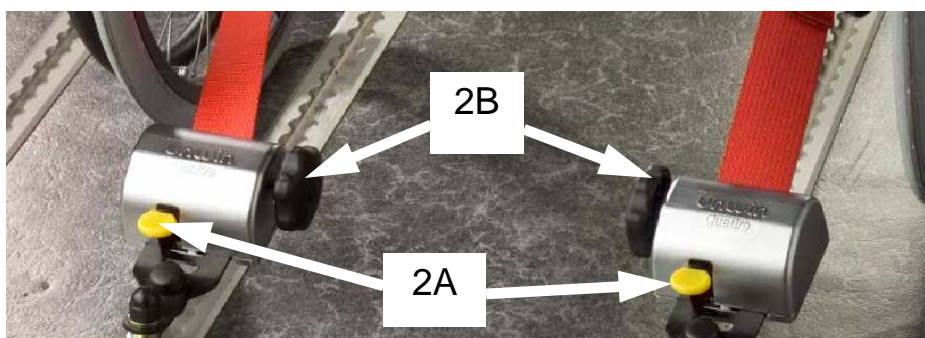
1. Fit the appropriate front straps following the instructions supplied with that product.
2. Ensure that the Quattro rear tie-downs are fitted with the tensioning handles facing inwards, and, where appropriate, the Karabiner gates facing outwards

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. Press the yellow button (Fig 2A) to release the webbing and attach the Karabiner or Tongue & Buckle to the frame of the wheelchair creating an angle of about 45°.
6. Press the Quattro release button to take up the slack in the webbing (fig 1A). Repeat operation on the other side.
7. Final tensioning is achieved by turning the tensioning handles until the webbing is equally taut on each Quattro (fig 2B).
8. A passenger restraint should now be fitted, either as a separate item or as part of a combined wheelchair tiedown and occupant restraint.



F. Removing and storing

1. Remove Occupant Restraint as indicated in the product's user instructions.
2. Before releasing the wheelchair restraint ensure the chair's 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 standard Quattro reels to allow you to remove the Karabiner or Tongue & Buckle from the wheelchair. To unfasten the Tongue & Buckle, press the red button.
4. Guide the webbing as it retracts into the Quattro housing reel.
5. Release the yellow button. Repeat for opposite side.
6. 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.
7. Store the restraint safely off the floor to avoid it becoming a projectile or being damaged in the event of an accident. This can be achieved by using wall mounted storage rails or a stowage box.

G. Maintenance

1. Regularly inspect the Quattro for damage, wear or malfunction. If any problems are identified replace it immediately.
2. All webbing and components can be cleaned as necessary. Care should be taken to prevent contamination of the webbing with polish, oils and chemicals.
3. To clean the Quattro 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 Range for Rail Systems

For use on the front of wheelchair only:

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

For use on the front and rear of wheelchair:

- Pair of Quattro with metal cover and Karabiner (QHD/2K)
- Pair of Quattro with metal cover and Tongue & Buckle (QHD/2T)
- Pair of Quattro with plastic cover and Karabiner (Q/2K)
- Pair of Quattro with plastic cover and Tongue & Buckle (Q/2T)

Quattro Range for Solo Systems

For use on the front of wheelchair only:

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

For use on the front and rear of wheelchair:

- Pair of Quattro with metal cover and Karabiner (SQHD/2K)
- Pair of Quattro with metal cover and Tongue & Buckle (SQHD/2T)

Handy Safety Systems:

- 4 Point Quattro Solo with Anchors (KIT-05894-A)



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