



Four Point Wheelchair Restraint W120, W120T

USER OPERATING 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.

Unwin House, The Horseshoe, Coat Road, Martock
Somerset, UK
Tel: +44 (0)1935 827740 Fax: +44 (0)1935 827760
Email: sales@unwin-safety.co.uk
www.unwin-safety.com

© 2010 C.N. UNWIN LTD. ALL RIGHTS RESERVED



UI1416C



CONTENTS

- A. Limitations of Use
- B. General Guidance
- C. Before using the restraint
- D. Fitting the front straps
- E. Fitting the rear straps
- F. Removing and Storing
- G. Maintenance

A. LIMITATIONS OF USE

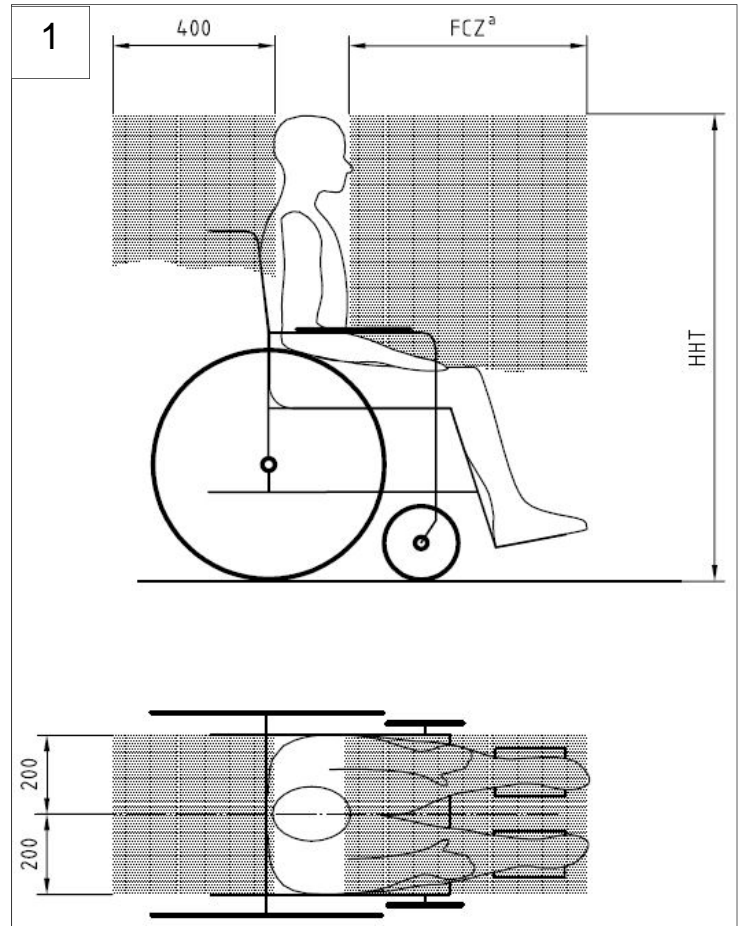
1. The standard four point restraint has been tested in excess of ISO 10542 standard requirements and can restrain a wheelchair weight of up to 120kg. The rear straps can be fitted with either karabiners or tongue and buckle.
2. **This product has been designed as a four point tiedown system, therefore the front or rear straps must not be used on their own.**
3. **An independent occupant restraint must always be used for the seat occupant.**
4. Some wheelchairs need specific restraints, i.e. Buggy type wheelchairs. If in doubt please contact Unwin or the wheelchair manufacturer.
5. Some wheelchair frames are too large for the karabiner to close around them. In these situations our D-ring straps (DR120) or an alternative restraint system should be used.
6. Unwin products are extensively tested using Unwin Rail and our full warranty applies to Unwin equipment fitted and used in accordance with our instructions. Unwins have also participated in test programs with other manufacturers 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 where Unwin has not participated in joint test programs, a limited Unwin warranty will apply.

B. GENERAL GUIDANCE

1. Please read this manual before using the equipment.
2. Regular inspection of all parts is recommended and the equipment should be used only if all components are in good condition.
3. Replace equipment when the webbing becomes cut, contaminated or frayed.
4. Any restraints which have been subjected to a crash situation should, in the interest of safety, be replaced immediately.
5. Do not attempt to modify the equipment. If there is a problem please contact Unwin Safety Systems.
6. Avoid contact with corrosive liquids and keep the webbing away from sharp edges. Care should be taken to prevent contamination of the webbing with polishes, oils and chemicals.
7. If the proposed installation cannot be made to comply with the following requirements, please contact Unwin Safety Systems.

C. BEFORE USING THE RESTRAINT

1. Ensure that the wheelchair is appropriate for the tiedown being used.
2. Position the wheelchair, facing forward, centrally over the Unwin rail. 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.



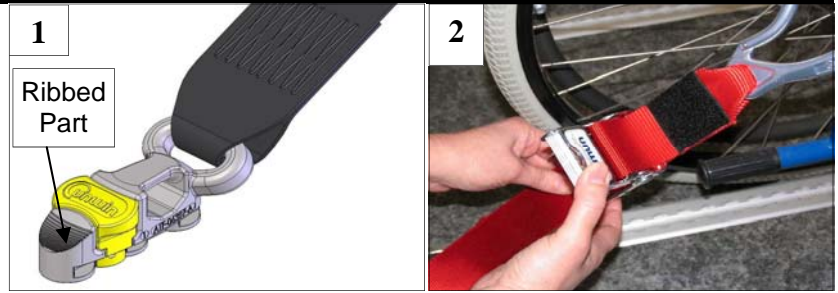
D. FITTING THE FRONT STRAPS

1. To attach the front straps into rail, match feet of the ATF with the cut-out sections of the rail and locate into the rail.
2. Press on the ribbed part of the ATF and push firmly towards the wheelchair until the yellow clip drops and locks into the rail.
3. Install the second tie-down. The position of its ATF must be in line with that of the first. **IMPORTANT: Check the plungers are fully engaged on both sides.**
4. With buckles facing outwards, connect the front straps to the front vertical framework of the wheelchair above the front castoring wheels (Fig 2).
IMPORTANT: Check both sets of buckle and tongue are fully clipped together.
5. Pull the wheelchair back to tension front tiedown straps and apply the wheelchair brakes if fitted.



E. FITTING THE REAR STRAPS

1. To attach the rear straps into rail, match feet of the ATF with the cut-out sections of the rail and locate into the rail.
2. Press on the ribbed part of the ATF (Fig 1) and push firmly towards the wheelchair until the yellow retaining clip drops and locks into the rail.



IMPORTANT: The yellow clips must face the rear of the vehicle.

3. Release over-centre buckles.
4. Attach the Karabiner or Snaplock Buckle to the rear main frame of the wheelchair to create an angle of approximately 45 degrees.
5. Pull the webbing through the over-centre buckle, removing the slack.
6. With free hand begin to close the buckle (Fig 2) and once the webbing is retained fully close the buckle using both hands.
7. Finally re-secure free webbing end onto the Velcro stowage point.

F. REMOVING AND STORING

1. Detach the Velcro, undo the over-centre buckle and release the webbing.
2. Unhook the Karabiners or press down the red part of the Snaplock to unfasten it from the wheelchair main frame.
3. Lift the yellow retaining clip fully and pull away from the wheelchair to remove the rear straps from the rail.
4. Release the brakes and push the wheelchair forward to loosen the front straps.
5. Lift the yellow retaining clip fully and pull away from the wheelchair to release the front straps.
6. Store the restraint safely off the floor to avoid damage and ensure that it does not become 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 restraint for damage, wear or malfunction. If any problems are identified replace it 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 straps 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 and do not use products containing bleach. **IMPORTANT: when cleaning or disinfecting do not immerse buckles or rail fittings in the disinfectant or water.**
4. If the vehicle is involved in an accident when any restraints are deployed, remove them from service and replace immediately. If in doubt please contact Unwin Safety Systems.