

SPLIT REEL DOUBLE INERTIA 3 POINT AND 2 POINT SYSTEMS

DI/SR

USER MANUAL



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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Information correct as of: 11.01.2010

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A. Limitations of use

1. This product has been designed to restrain the passenger only and must only be used where the wheelchair has already been secured with a separate wheelchair tie-down system.
2. Unwin products are extensively tested using Unwin rail, and our full warranty normally only applies to Unwin equipment when used in Unwin branded rail. Unwin's 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 manual before using the equipment.
2. Regular inspection of all parts is recommended and only use the equipment if all mechanical parts are functioning smoothly and all components are in good condition. Replace parts where the webbing is contaminated or frayed.
3. 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.
4. If the equipment was used during an accident, it should be replaced immediately.
5. Do not attempt to modify the equipment, if there is a problem refer back to 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 meet the following requirements, refer to Unwin Safety Systems.

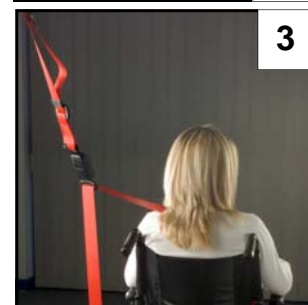
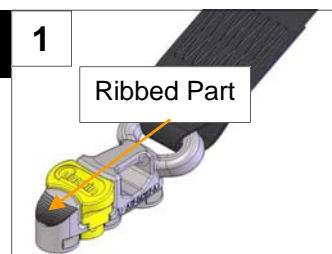
C. Before Using the Passenger Restraint

1. Position the wheelchair over the rail and apply the brakes.
2. Secure the wheelchair with a separate tie-down system before fitting the passenger restraint.
3. It is advisable that the systems use a suitably mounted rail on the wall of the vehicle for the third point anchorage.
4. The double inertia reel should be positioned on the window side of the vehicle, and the stalk on the aisle side with the yellow plungers positioned to the rear.
5. **IMPORTANT: Unwin recommends the use of a 3 point occupant restraint system to provide greater protection in case of an impact. However we also recognise that some vehicle layout/designs or specific postural or medical conditions do not allow that style of seatbelts to be used easily. This system is not ISO 10542 compliant if used in 2 point configuration. Before fitting the occupant restraint, ensure that the reversible stalk orange button is facing outside in relation to the wheelchair. If the orange button faces inside, turn the stalk 180° to sit in the right position.**

D. Fitting the 3 Point Passenger Restraint

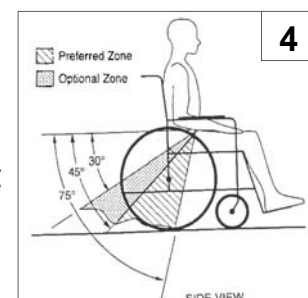
Wheelchairs without armrests or with armrests removed

1. It is acceptable to use restraint either for left hand or right hand use. The double inertia reel should be fitted to the rail adjacent to the 3rd point anchorage.
2. Match inertia reel ATF feet with cut-out sections of the rail and locate into the 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. Repeat operation with Stalk.
IMPORTANT: Check the plungers are fully engaged on both sides.
3. Ensure the Comfort Clip (Fig 2) is released, and the tongue & buckle separating the lap and shoulder belts is disengaged.
4. Release the third point tongue from the buckle.
5. If applicable, remove black plastic cover off the tongue on red webbing of double inertia and pull both tongues upwards to release the webbing from the inertia reel.
6. Insert the red webbing tongue into the buckle on the 3rd point fixing.
7. Position the webbing across the passenger, with the black webbing forming the lap belt and the red webbing the shoulder belt.
8. Insert the second tongue into the reversible stalk buckle. Adjust the height of the shoulder belt so that it clears the occupant's shoulder by approximately one inch.
9. Unlock Comfort Clip to take up the slack, then re-lock clip so that it rests on the reel cover.



Wheelchairs with fixed armrests

1. Release the Comfort Clip (Fig 2) and the buckle separating the lap and shoulder belts, undo the third point tongue from the buckle.
2. Position the black webbing around the occupant's pelvic area, threading it through the armrests if necessary.
3. If applicable, remove the black plastic cover off the tongue on the red webbing of the double inertia and insert into the buckle on the third point fixing.
4. Position the red shoulder belt on the occupant at about mid shoulder point (Fig 4) and adjust the height so that it clears the occupant's shoulder by approximately one inch.
5. Unlock the Comfort Clip to take up the slack, then re-lock the clip so that it rests on the reel cover.
6. It is essential that the lap belt anchor point should be positioned to achieve belt angles of 30° or more to the horizontal and preferably between 45° and 75° in order to fit low across the pelvis and/or over the upper thighs to reduce the possibility of the seat belt loading the abdomen. (Fig 4).



E. Fitting the 2 Point Passenger Restraint

Wheelchairs without armrest or with armrest removed.

1. Ensure the Comfort Clip is released (Fig 1) and the tongue & buckle separating the lap and shoulder belts is disengaged.
2. Pull the metal tongue on the black webbing upwards to release the webbing from both inertia reels.
3. Position the webbing across the occupant with the black webbing forming the lap belt and the red webbing forming the shoulder belt.
4. Insert the tongue fixed to the black webbing into the reversible stalk buckle. Adjust for comfort by raising the webbing on the shoulder by two finger widths, unlock the Comfort Clip to take up the slack, then re-lock the clip so that it rests on the reel cover.

E. Fitting the 2 Point Passenger Restraint

Wheelchairs with fixed armrests

1. It is acceptable to use restraint either for left hand or right hand use.

2. Match inertia reel ATF feet with cut-out sections of the rail and locate into the rail. Press on ribbed part of the ATF (Fig 1) and push firmly towards the wheelchair until yellow clip drops and locks into the rail.

Repeat

operation with stalk. **IMPORTANT: Check plungers are fully engaged on both sides.**

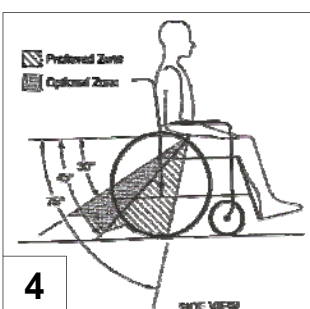
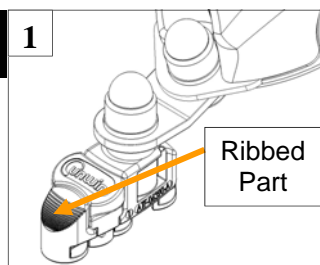
3. Ensure the Comfort Clip is released (Fig 2) and undo the buckle to separate the lap and shoulder belts.

4. Position the black webbing around the occupant's pelvic area, threading it through the armrests if necessary and fit to the metal tongue into the reversible stalk buckle.

5. Pull all of the red webbing out of inertia reel and secure with Comfort Clip. Position shoulder belt on the occupant at about mid shoulder point (Fig 3).

6. Adjust for comfort by raising webbing on shoulder by two finger widths, unlock Comfort Clip to take up the slack, then re-lock the clip so that it rests on reel cover.

7. It is essential that the lap belt anchor point should be positioned to achieve belt angles of 30° or more to the horizontal and preferably between 45° and 75°, in order to fit low across the pelvis and/or over the upper thighs to reduce the possibility of the seat belt loading the abdomen (Fig 4).



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F. Removing and storing

1. Release Comfort Clip and disconnect the tongue from the stalk.
2. Remove the restraint by unclipping the lap and shoulder belts.
3. If applicable, disconnect shoulder belt from the third point fixing and allow webbing to retract back evenly into the inertia reel housing.
4. If applicable replace the black plastic cover on the red webbing tongue.
5. Lift yellow retaining ATF clip fully and pull away from the wheelchair to remove the reel and stalk from the rail.
6. Re-secure 3rd point fixing tongue and buckle and remove from the wall rail.
7. The wheelchair restraint should now be removed following the instructions supplied with that product.

G. Maintenance

1. Regularly inspect the equipment 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 passenger restraint, use warm soapy water and a clean soft cloth. Rinse with clear water, and allow to air dry.
4. To disinfect use a mild spray disinfectant - do not use products containing bleach.
IMPORTANT: when cleaning or disinfecting do not immerse buckles or rail fittings in disinfectant or water.
5. 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.