Q'STRAINT®

THINKING **BEYOND** SAFETY

QRT®-1 SERIES

USER INSTRUCTIONS

A SECURE WHEELCHAIR

1. Place wheelchair facing forward in securement area; apply wheel locks or turn power off.

2. Attach tie-downs into floor anchorages (**Fig. 1**) and ensure they are locked in.

3. Attach the four tie-down hooks to solid frame members or weldments, **near seat level**. Ensure tie-downs are fixed at approximately 45 degrees, and are within angles shown in (**Fig. 2**). Do not attach hooks to wheels, plastic, or removable parts of wheelchair.

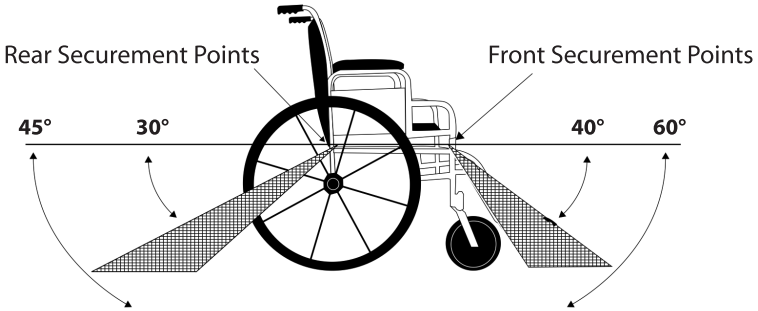
4. Ensure all tie-downs are locked and properly tensioned. If necessary, rock wheelchair back and forth or manually tension retractor knobs (if present) to take up additional webbing slack.

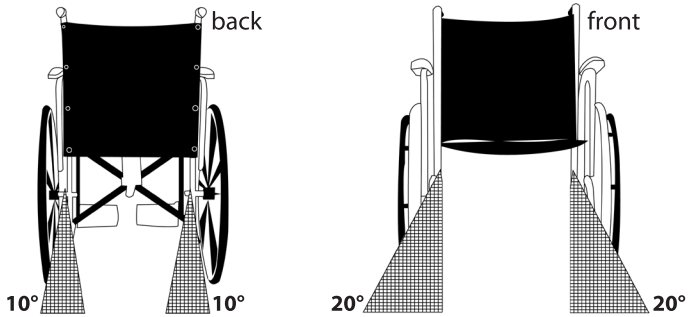
WARNING:

- Do not allow webbing to get twisted inside retractors.
- Wheelchair accessories and equipment should be properly secured or removed from wheelchair and secured in the vehicle during transportation.
- Whenever possible, items attached to wheelchair in front of the passenger should be removed and secured separately during transportation.

FIG. 1: Floor Anchorages

FIG. 2: Tie-Down Angles





B SECURE PASSENGER

1. **Attach Lap Belts** - Use integrated stiffeners to feed belts through openings between seat backs and bottoms, and/or armrests to ensure proper belt fit around occupant.

   a. On the aisle side, attach belt **with female buckle** 1 to rear tie-down pin connector (**Fig. 4**); ensuring buckle rests on passenger's hip.

   b. On the window-side, attach belt **with male tongue** 2 to rear tie-down pin connector (**Fig. 4**) and insert into female buckle 1 .

2. **Attach Shoulder Belt** - Extend shoulder belt over passenger's shoulder and across upper torso (**Fig. 3**), and fasten pin connector 3 onto lap belt 2 .

Note: Combination lap/shoulder belts serve as both window-side lap belt and shoulder belt.

3. Ensure belts are adjusted as firmly as possible, but consistent with user comfort.

WARNING:

- Lap and shoulder belt should not be held away from passenger's body by wheelchair components or parts such as the wheelchair's wheels, armrests, panels or frame (**Fig. 5**).
- Never rely on wheelchair's lap belt or a postural support belt unless properly approved & crash tested.
- Ensure belt webbing is not twisted while being worn by passenger.
- Occupant belts should always bear upon the bony structure of passenger's body and be worn low across the front of the pelvis, with the junction between lap and shoulder belts located near passenger's hip.

FIG. 3: Occupant Restraints

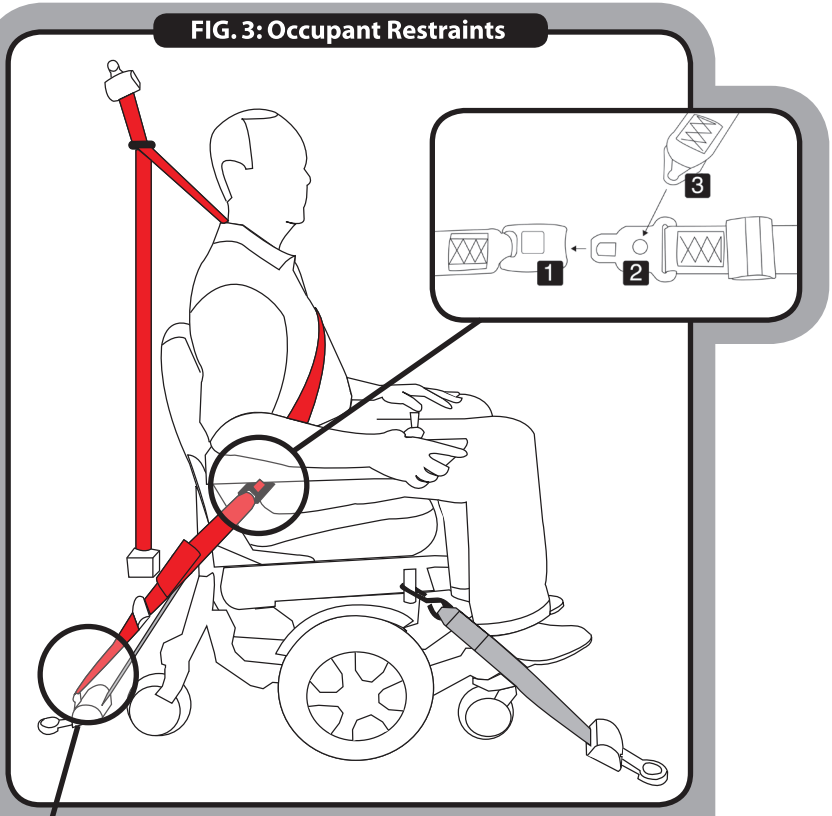
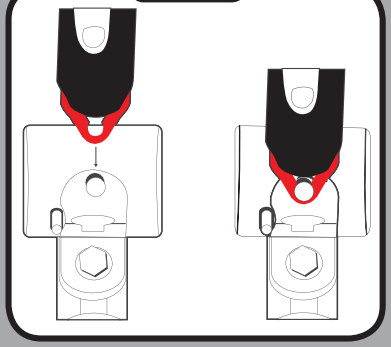
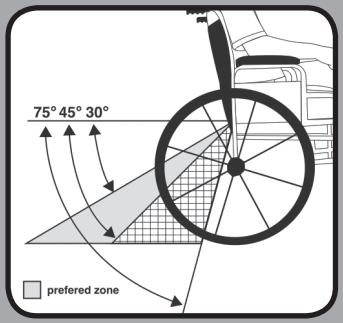


FIG. 4





C RELEASE PASSENGER

1. Carefully remove passenger's shoulder and lap belts (Reverse Step B above).

2. **<u>Unhook front and rear tie-downs</u>** from wheelchair by pressing red release levers on retractors, or activating any remote release or time-delay equipment.

3. Unlock wheels or turn power on, and direct or move passenger out of wheelchair securement area.

MAINTENANCE & CARE

- Always keep belts clean and off the floor by using a storage device such as the Q'Straint wall pouch. One (1) storage device per wheelchair location is recommended.
- All systems and components should be regularly inspected, cleaned, and maintained.
  - Clean webbing periodically with mild soap & water. After cleaning, fully extend belts (and position them to prevent water from entering retractors) until completely dry. Take care to prevent contamination of the webbing with polishes, oils or other chemicals (particularly battery acid).
  - Occasionally lubricate any buckles or fittings, being careful not to contaminate the webbing.
  - Clean bolt threads and re-apply permanent thread locker if bolts are adjusted.
- Frayed, contaminated or damaged webbing should be replaced immediately.
- Systems or components showing signs of missing parts, excessive damage or wear, or are suspected to have been in use during a vehicle accident from which the vehicle has been towed, should be replaced.

WARNINGS

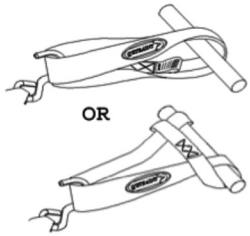
- Systems should only be used with forward facing wheelchairs
- Q'Straint 4-Point Securement systems and components comply with all applicable requirements of related safety regulations and standards including ADA, FMVSS & CMVSS 209/210/222/302, CSA Z605 & D409, AS-2942-1994, CE Directive 93/42/EEC, and SAE J2249* & ISO 10542*, 2007/46/EC, 2001/85/EC.

  * Systems are dynamically crash tested to 30mph (48kph), 20g, using an 85kg forward facing surrogate wheelchair and a 76.3kg Anthropomorphic Test Dummy (ATD). The ATD is restrained by both lap (pelvic) and shoulder (upper-torso) restraints; **use of only a lap restraint may compromise the performance of the system.**

  *'A'-Series track have not been tested to comply with SAE J2249 & ISO 10542.
- Wheelchair Securement System should be used as shown in these instructions.
- Do not mix parts and components from other manufacturers to make a complete system.
- Report all potential damage and defects to your supervisor.
- In the event of any questions relating to method of installation and/or use of wheelchair & occupant securement systems (and components), please consult your nearest Q'Straint office.
- For additional instruction and details, please refer to User Instruction Booklet for 4-Point Systems (Part # Q5-1160).

Having trouble with hard-to-reach securement points?

Q'Straint recommends our **Webbing Loops.** (Part #Q5-7580)



Webbing Loops are the perfect solution when securement points on wheelchairs are too difficult to reach with hooks.

For more information, visit Qstraint.com

We began with a simple question:
How can wheelchair passengers be safely secured in vehicles?

The question was answered by a team of specialists from Queens University in Ontario, Canada (hence the crown in our corporate logo). Realizing that wheelchair passengers have very unique safety needs, their research lead to the development of the world's first fully integrated 4-point wheelchair passenger securement system.

Now a quarter of a century later, Q'Straint continues to build on a tradition of innovation and a reputation for excellence, by developing the world's highest quality, most state-of-the-art wheelchair passenger safety solutions for both public and private transportation.

Q'STRAINT®

THINKING **BEYOND** SAFETY

Q'Straint America
4031 NE 12th Terrace
Oakland Park, FL 33334
Tel: 800-987-9987
Fax: 954-986-0021
Email: qstraint@qstraint.com

Q'Straint Europe
72-76 John Wilson Business Park
Whitstable, Kent, CT5 3QT
United Kingdom
Tel: +44 (0)1227 773035
Fax: +44 (0)1227 770035
Email: info@qstraint.co.uk

Q'Straint Australia
Tramanco Pty Ltd.
21 Shoebury Street,
Rocklea, Australia, QLD. 4106
Tel: +61 7 3892 2311
Fax: +61 7 3892 1819
Email: info@tramanco.com.au

Q5-1160-QRT rev. a