



Kansas RTAP Fact Sheet

A Service of The University of Kansas Transportation Center for Rural Transit Providers

New Best Practice in Securing 3-Wheeled Scooters

By Anne Lowder

Do you ask customers that board your vehicle riding a 3-wheeled scooter if they would like to transfer to a seat? If so, you are following a recommended best practice, because 3-wheeled scooters are difficult to secure. However, if your customer does not want to move to a seat, you can't require it per the Americans with Disability Act (ADA). To address such situations, Q'Straint, a manufacturer of securement straps and devices, has updated its securement recommendations for 3-wheeled scooters. This article outlines Q'Straint's new recommendations.



Q'Straint recommends that securements for 3-wheeled scooters flare out wider in the back than in the front.

New best practice

The National Transit Institute's (NTI) goal for securing wheelchairs is to be able to limit the movement of the device during an incident and to protect the occupant. To meet NTI's goal, Q'Straint recommends that 3-wheeled scooters be secured differently than the way 4-wheeled mobility devices are secured. *Q'Straint's Q5-1160 SC Scooter Securement Instructions* were presented at the Q'Straint and SURE-LOK National Training Seminar in Ft. Lauderdale, Florida on October 1-2, 2014.

For a **4-wheeled mobility device**, NTI best practices state that the tie-downs be attached to the same frame component of the chair (base frame member or seat frame member of the chair). Ideally, both the front and rear tie-downs should be at a 30-45 degree angle. The front tie-downs should be anchored to the floor wider than the chair to stabilize the side-to-side tilting movement of the chair. The rear tie-downs should be anchored directly behind the mobility device to help contain the chair in the securement area and limit forward and back movement.

For a **3-wheeled mobility device**, Q'Straint recommends that the front and rear securement anchor configurations be reversed in terms of how wide they are set (see photo above).

The Americans with Disability Act specifies that "when the wheelchair or mobility aid is secured in accordance with manufacturer's instructions, the securement system shall limit the movement of an occupied wheelchair or mobility aid to no more than 2 inches in any direction under normal vehicle operating conditions." 36 CFR 1192.23 (d)(5)

The securement anchor points on a 3-wheeled scooter need to flare in the rear and be narrowly set on the front of the scooter.

Q'Straint instructor John Gross demonstrated why they were recommending this change by showing how following NTI's best practice for securement of a 4-wheeled device does not prevent a 3-wheeled scooter from moving beyond what is considered safe. He secured a 3-wheeled scooter with an additional strap looped around the front column of the scooter with the two front tie-downs secured by attaching to

either side of the additional strap. The front tie-down anchor points were flared. Gross was easily able to pull the scooter back and forth using that method of securement, with much more than the ADA-recommended two inches of movement.

Switching the anchor point configuration for a 3-wheeled scooter so the straps flare more widely at the rear and narrowly at the front lessens the scooter's movement to the two inches of movement under normal vehicle operations.

Summary

Securement of 3-wheeled scooters is difficult because of the lack of solid frame securement points. Q'Straint and National Transit Institute highly recommend that scooter occupants transfer to a bus seat if they can and will transfer. Explain to your customer why transferring to a seat makes good safety sense. Plus, it would be a more comfortable ride. However, agencies, under the ADA, cannot require a person to transfer. Q'Straint has provided some helpful guidance to improve safety for a passenger who prefers to remain in the 3-wheeled scooter. ●

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Sources

- Q'STRAIN: "2014 Q'STRAIN and SURE-LOK National Training Seminar". Fort Lauderdale, FL October 1-2, 2014.
- National Transit Institute. Advanced Mobility Device Securement Skills Workshop. Augusta, Kansas. October 28-29, 2014.
- US DOT Federal Transit Administration. <http://www.fta.dot.gov/documents/2011-23576.pdf> Accessed November 7, 2014
- Transportation for Individuals with Disabilities --Bus Stop Accessibility, Paratransit Plan Updates, Visitor Eligibility, and Equivalent Facilitation-- Final Rule. 49 CFR Parts 37 and 38. Federal Transit Administration. http://www.fta.dot.gov/12325_4118.html. Accessed November 7, 2014
- US DOT letter Re: Anderson, et al. v. Rochester-Genesee Regional Transp. Auth., et al., No. 01-9105 (2d Cir.) U.S. Department of Justice Civil Rights Division. <http://www.ada.gov/briefs/rochesbr.pdf> Accessed November 7, 2014