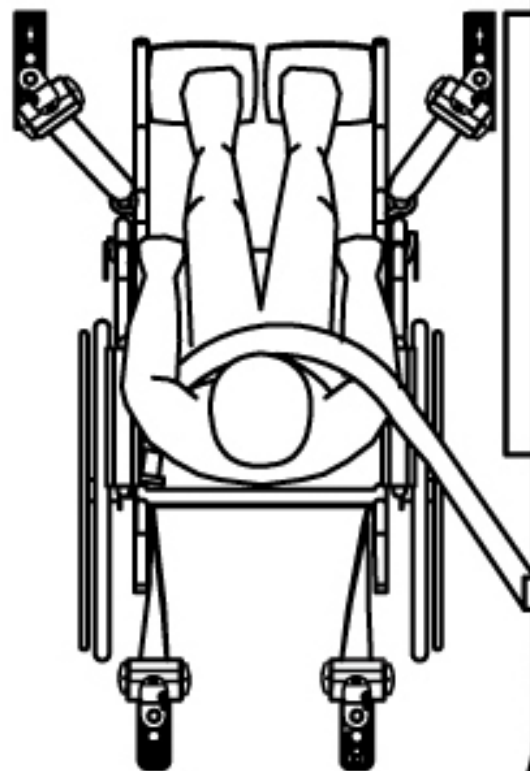


Installation Instructions

Vehicle Anchorages & Accessories for
4-Point Wheelchair Securement Systems



Applicable to QRT, Q-5000 and M-Series Securement Systems

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

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**PRIOR TO INSTALLING, PLEASE CAREFULLY
READ ALL INSTRUCTIONS AND WARNINGS**

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Introduction

Q'Strait's 4-Point wheelchair & occupant securement systems, when used as recommended, provide the safest means of transportation for wheelchair passengers unable to transfer from their wheelchairs when traveling in motor vehicles. Each component has been designed, engineered and tested to work as one comprehensive system.

This guide is provided to assist with the installation of securement system components into vehicles' floors and walls. If you have any questions or problems relating to your installation, please contact your nearest Q'Strait office.

Compliance with Regulations and Standards

All Q'Strait Securement 4-Point Securement Systems and components, including QRT, Q-5000 and M-Series, comply with all applicable parts of related safety regulations and standards including ADA, FMVSS & CMVSS 209/210/222/302, CSA Z605 & D409, AS2942, and CE Directive 93/42/EEC. In addition, all systems are crash tested to 30mph (48kph), 20G, and fully comply with voluntary standards SAE J2249* and ISO 10542*.

Note: * Systems mounted to A-Track anchorage do not meet crash testing standards.
* Only designated M-Series systems are crash tested to applicable SAE and ISO standards. Contact your nearest Q'Strait office for more information.

System Checklist

Each Q'Strait system and its components are designed and engineered as a complete, integrated securement system to provide wheelchair passengers with maximum transportation safety.

In general, the following parts make a complete wheelchair / passenger securement system. Please verify to ensure all parts are included. If anything is missing, contact your nearest Q'Strait office or distributor.

- ☐ Wheelchair Tiedown Retractors or Manual Tiedowns (4)
- ☐ Occupant Lap Belt⁺ (1)
- ☐ Occupant Shoulder Belt⁺ (1) & mounting hardware
- Note: ⁺ Occupant lap and shoulder belt may be a combination lap/shoulder belt*
- ☐ Installation Instructions (1)
- ☐ Driver / Operator Instructions (1)
- ☐ In-vehicle Instruction Label (1)
- ☐ Warranty Registration Card (1)

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Wheelchair Location Recommendations

IMPORTANT

The following are recommendations for the layout of designated Wheelchair Locations:

- **TIEDOWNS SHOULD ONLY BE INSTALLED SO WHEELCHAIR PASSENGERS ARE FACING FORWARD.** Note: Wheelchair passengers may face rearward when in compliance with ADA.
- Wheelchair Locations should be situated as close to the accessible entrance as practical with an unobstructed path to each location (if multiple locations are provided).
- Ensure there is sufficient space to allow driver/attendant the ability to move around Wheelchair Location, and to properly secure wheelchair passengers.
- Check for wall clearance, allowing space for installation of floor anchorages and shoulder belt (Figure 1)
- Wheelchair passenger Frontal Clear Zone (FCZ) requirements (Figure 2) are based on potential movements of the passenger during a crash.
- Recommended distances between anchorage points and vehicle interior components are necessary to prevent wheelchair passenger injuries within the designated FCZ.
- To reduce possibility of head and chest injuries to wheelchair passengers, vehicle interior components should not be located in the designated Wheelchair Location unless they comply with impact requirements of FMVSS 201 or equivalent.

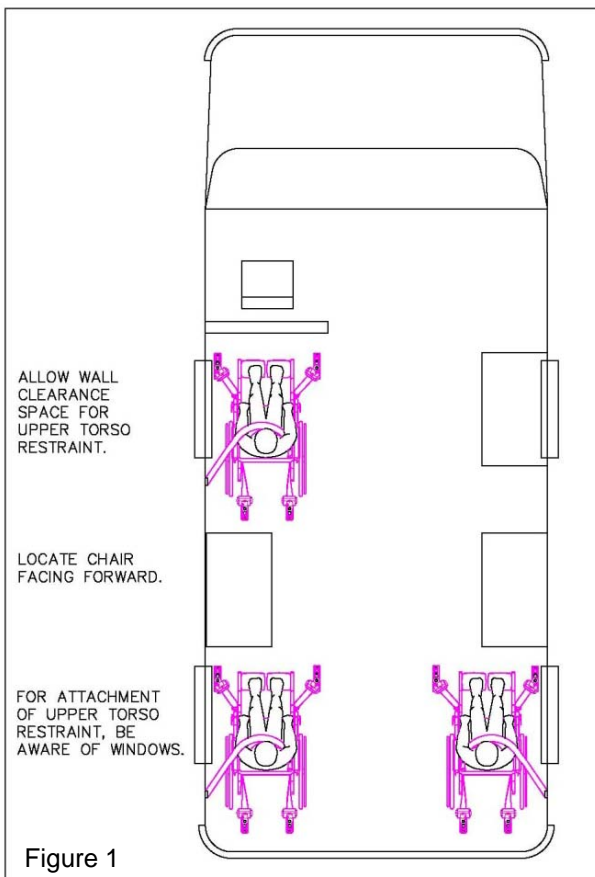


Figure 1

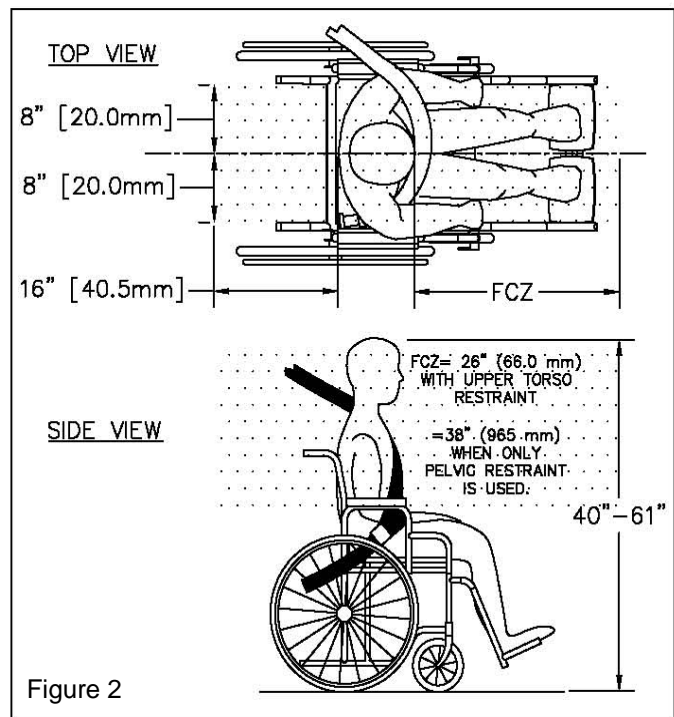


Figure 2

Recommended Frontal Clear Zones (FCZ): Seated Head Height (SHT) ranges from 40" (1,016mm) for a 6-year old child to 61" (1,550mm) for a tall adult. Note: We strongly recommend the use of lap and shoulder belts to reduce possibility of head and chest impacts with vehicle components. FCZ may not be achievable with wheelchair-seated drivers.

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Floor Anchorage Installation

The following instructions are for Q'Straint's most common floor anchorages. If the floor anchorage received is not included in these instructions, contact Customer Satisfaction at your nearest Q'Straint office or visit our website at www.qstraint.com/support to download additional instructions.

Floor Anchorage Layout Recommendations

The following are the recommended best installation practices and distances (center-to-center) between floor anchorages (Refer to Figure 3):

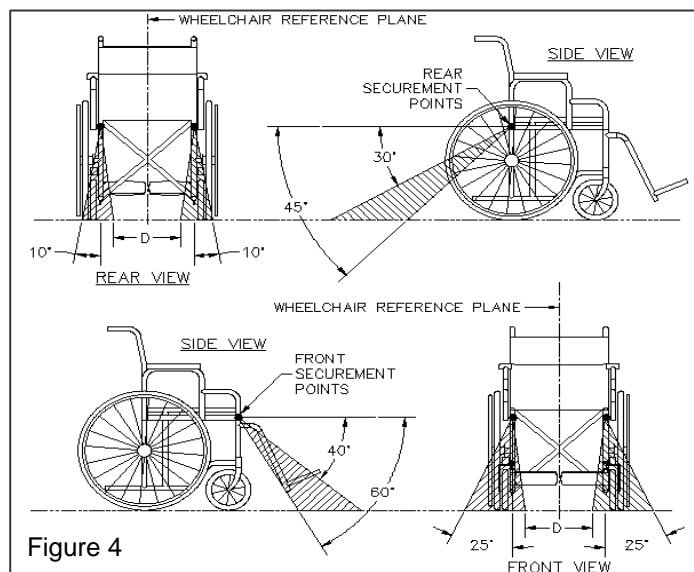
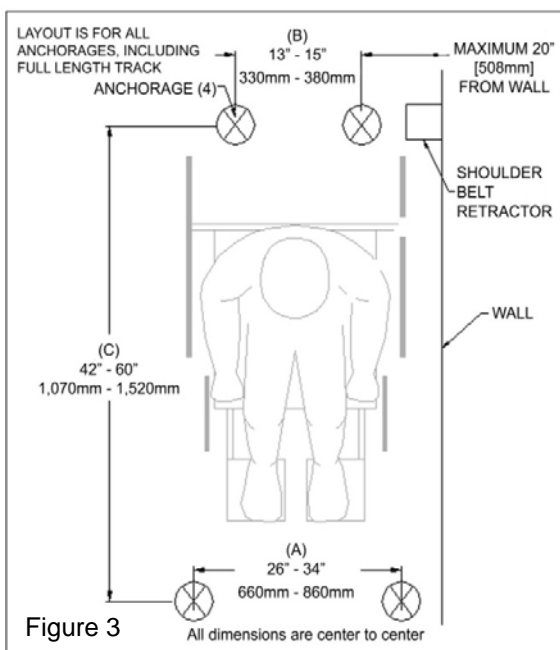
- (A) Front to Front = 26" - 34" (660 - 860mm)
- (B) Rear to Rear = 13" - 15" (330 - 380mm)
- (C) Front to Rear = 42" - 60" (1,070 - 1,520mm)*

*** Important Note:** For public transit vehicle installations, 'Front to Rear' clear area spacing of 48" – 75" (1,220 – 1,900mm) is safe, acceptable and ADA approved. However, spacing greater than 60" (1,520mm) may cause operational difficulties with wheelchair tiedowns and we recommend using webbing loops or extenders in the event wheelchair passengers may have a very small mobility aid.

Note: Recommended distances are based on common wheelchair sizes. Exceptionally large or small wheelchairs may require anchorage spacing that differs from our recommendation. Consider optimal tiedown angles (Figure 4) to determine exact placement of floor anchorages.

Other Items to consider when determining floor anchorage placement:

- Tiedowns should never pass through wheels of the wheelchair
- Tiedowns should have a clear path from floor anchorages to the wheelchair frame without infringing on any parts of the wheelchair (E.g. footrests)
- Optimal angle of tiedowns for crash protection and maximum stability of the wheelchair are illustrated in Figure 4.



Preferred locations and angles of tiedowns from wheelchair securement points to vehicle anchor points. Front tiedowns should be angled out for lateral stability when possible. D=12" (305 mm)

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

IMPORTANT

- Before installing floor anchorages check with local transportation and regulatory authorities for minimum/maximum Wheelchair Location space and emergency exit requirements.
- Inspect underside of the vehicle floor and note utilities, frames, cross-members, fuel tanks or other possible obstructions before beginning installation.
- Recommended distance between the wall and the nearest rear floor anchorage should not exceed 20" (510mm). Greater distance from the wall may prevent proper shoulder belt use, increasing the risk of wheelchair passenger injury.
- Do not install anchorages or any system component into unsound materials such as corroded metal, wood, plastic or fiberglass panels without suitable reinforcement.
- If not using Q'Strait provided hardware, use only minimum Grade 8 hardware coated for adequate protection against corrosion per ISO 7253 or ASTM B117.
- Vehicle anchor points may require reinforcement. The installer or manufacturer is responsible for ensuring anchorages are installed onto suitable floor and wall structures; floor and wall strength must meet applicable performance requirements outside the scope of this document.
- Modifications to the backing plate must only be made where necessary as smaller plate size reduces the floor load distribution. Always leave a minimum of 0.6" (15mm) adjacent the bolt hole in the plate.

Slide 'n Click Pocket (Part # Q8-7580-A)

1. Determine location of anchorages per Figures 3 & 4.
2. Route an area in floor for each pocket; 1.34" (34mm) diameter x 0.44" (11mm) deep.
3. Insert pocket and use as template to mark center hole for drilling.
4. Remove pocket and drill 3/8" (10mm) hole through floor.
5. Clean out debris and place sealant in floor opening. Reinstall pocket.
6. Pass 3/8" (10mm) bolt through pocket and floor.
7. From underneath vehicle floor, place backing plate and washer over bolt. Sealant may be used between backing plate and floor if desired.
8. Securely fasten bolt and lock nut as shown in Figure 5, ensuring at least 2 – 3 threads are sticking out. *Use of a thin wall socket screw is recommended. **Recommended torque = 35 FT/LB (47 N.m.).***

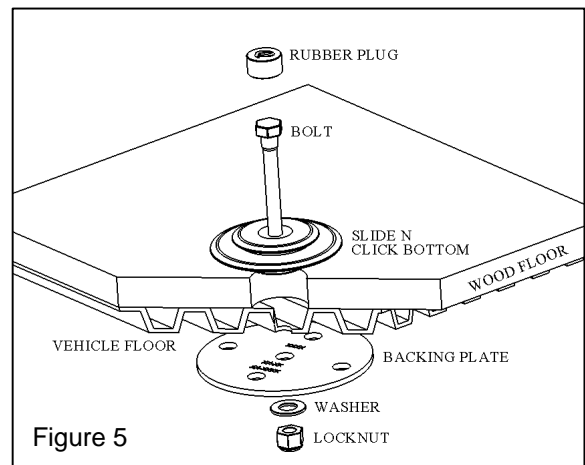


Figure 5

Retrofit Slide 'n Click Pocket (Part # Q8-7583-A) - For replacing Q'Strait Flat-hook Pocket

1. Remove Flat-hook pocket and hardware from vehicle floor. Discard old hardware.
2. Insert retrofit Slide 'n Click pocket and use as a template to mark center hole for drilling.
3. Remove pocket and drill 3/8" (10mm) hole through floor.
4. Clean out debris and place sealant in floor opening. Reinstall pocket.
5. Pass 3/8" (10mm) bolt through pocket and floor.
6. From underneath vehicle floor, place backing plate and washer over bolt. Sealant may be used between backing plate and floor if desired.
7. Securely fasten bolt and lock nut as shown in Figure 5, ensuring at least 2 – 3 threads are sticking out. *Use of a thin wall socket screw is recommended. **Recommended torque = 35 FT/LB (47 N.m.).***

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Oval L-Pocket (Part # Q5-7571-A)

1. Determine location of anchorages per Figures 3 & 4.
Pockets can be installed perpendicular or parallel to wheelchair location.
2. Use pocket as a template to mark center hole to be drilled.
3. Remove pocket and drill 3/8" (10mm) hole through floor.
4. Clean out debris and pass 3/8" (10mm) bolt through pocket and floor.
5. From underneath vehicle floor, place backing plate and washer over bolt. Sealant may be used between backing plate and floor if desired.
6. Securely fasten bolt and lock nut as shown in Figure 6, ensuring at least 2 – 3 threads are sticking out.
Recommended torque = 35 FT/LB (47 N.m.).

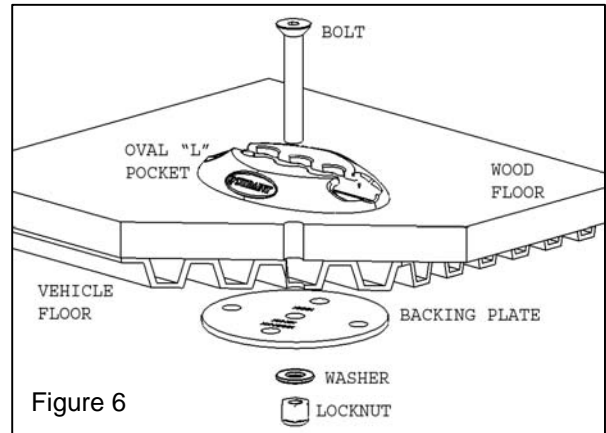


Figure 6

Covered L-Pocket (Part # Q5-7570-A)

1. Determine location of anchorages per Figures 3 & 4.
Pockets can be installed perpendicular or parallel to wheelchair location, with cover opening away from wheelchair location (recommended).
2. Route an area in floor for each pocket; 5.0" (127mm) long x 1.4" (36mm) wide x 0.4" (10mm) deep.
3. Insert pocket and use as a template to mark two (2) center holes to be drilled.
4. Remove pocket and drill two 5/16" (8mm) holes through floor.
5. Clean out debris and place sealant in floor opening. Reinstall pocket.
6. Pass 5/16" (8mm) bolts (included) through pocket and floor.
7. From underneath vehicle floor, place backing plates and washers over bolts. Sealant may be used between backing plate and floor if desired.
8. Securely fasten bolts and lock nuts as shown in Figure 7, ensuring at least 2 – 3 threads are sticking out.
Recommended torque = 35 FT/LB (47 N.m.).

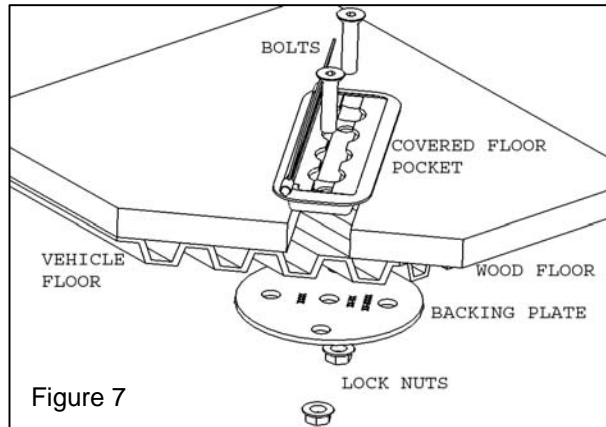


Figure 7

Flat-Hook Pocket (Part # Q5-7560-5A)

1. Determine location of anchorages per Figures 3 & 4.
Triangular 'point' on floor pockets must face in towards wheelchair location.
2. Route an area in floor for each pocket; 3" (76mm) diameter x 0.52" (13mm) deep.
3. Insert pocket and use as a template to mark center hole to be drilled.
4. Remove pocket and drill 3/8" (10mm) hole through floor.
5. Clean out debris and place sealant in floor opening. Reinstall pocket.
6. Pass 3/8" (10mm) bolt through pocket and floor.
7. From underneath vehicle floor, place backing plate and washer over bolt. Sealant may be used between backing plate and floor if desired.
8. Securely fasten bolt and lock nut as shown in Figure 8, ensuring at least 2 – 3 threads are sticking out. **Recommended torque = 35 FT/LB (47 N.m.).**

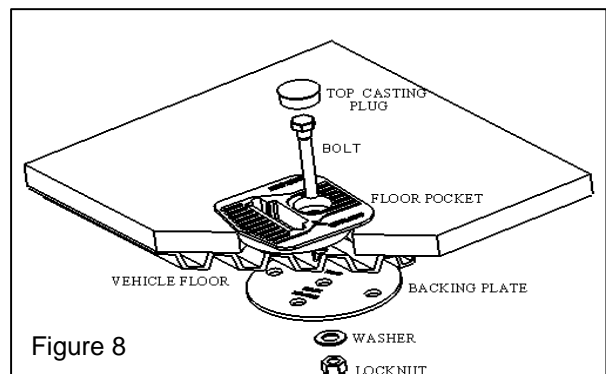


Figure 8

Securely fasten bolt and lock nut as shown in Figure 8, ensuring at least 2 – 3 threads are sticking out. **Recommended torque = 35 FT/LB (47 N.m.).**

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

A-Plate (Part # MA-7560)

1. Determine location of anchorages per Figures 3 & 4. *Floor Plates can be installed perpendicular or parallel to wheelchair location.*
2. Use plate as a template to mark three (3) center holes to be drilled.
3. Remove plate and drill three (3) 5/16" (8mm) holes through floor.
4. Clean out debris and pass 5/16" (8mm) bolts through pocket and floor.
5. From underneath vehicle floor, place backing plates and washers over bolts. Sealer may be used between backing plate and floor if desired.
6. Securely fasten the bolts and lock nuts as shown in Figure 9, ensuring at least 2 – 3 threads are sticking out. **Recommended torque = 35 FT/LB (47 N.m.).**

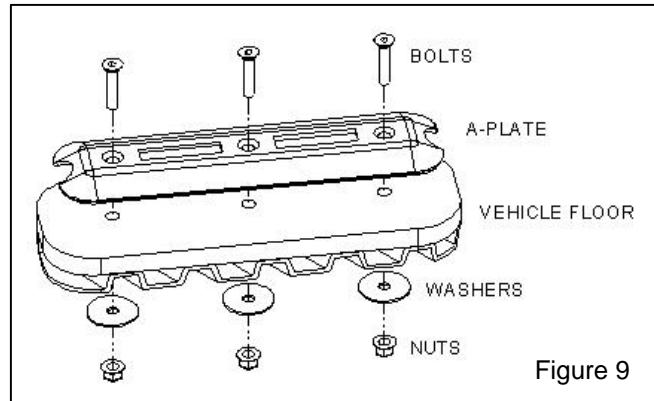


Figure 9

Aluminum L-Track

3 Profiles: Regular, Flange & Surface Rail. Contact your nearest Q'Strait office for part numbers.

IMPORTANT

- If not using Q'Strait provided hardware, only use minimum 5/16" (8mm) Grade 8, flat head, 82 degree, countersunk bolts coated for adequate protection against corrosion per ISO 7253 or ASTM B117.

1. Determine location of anchorages per Figures 3 & 4. *L-Track can be installed perpendicular or parallel to wheelchair location; includes full-length track.*
2. If **recessing track** into floor (Figure 10a), route area in floor for each track; 1.42" (36mm) wide x 1/2" (13mm) deep and proceed to Step 4.
3. If **surface mounting** track onto floor (Figure 10b), place track on floor and proceed to Step 5.
4. Clean out debris and place track in routed areas.
5. With track in position, use as a template to mark center holes to be drilled.
6. Remove track and drill 5/16" (8mm) holes through floor per track drilling pattern.. *Note: Standard track drilling pattern = holes every 4" (102mm).*
7. Place sealant in floor openings (recessed track only) and reinstall track.
8. Pass 5/16" (8mm) bolts through track and floor.
9. From underneath vehicle floor, place backing plates and washers over bolts. Sealant may be used between backing plate and floor if desired.
10. Securely fasten bolts and lock nuts as shown in Figures 10a & 10b, ensuring at least 2 – 3 threads are sticking out. **Recommended torque = 35 FT/LB (47 N.m.).**

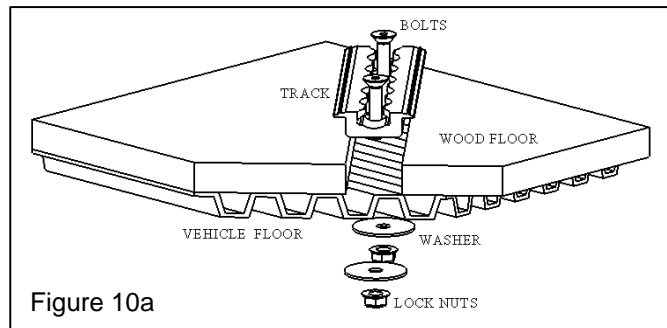


Figure 10a

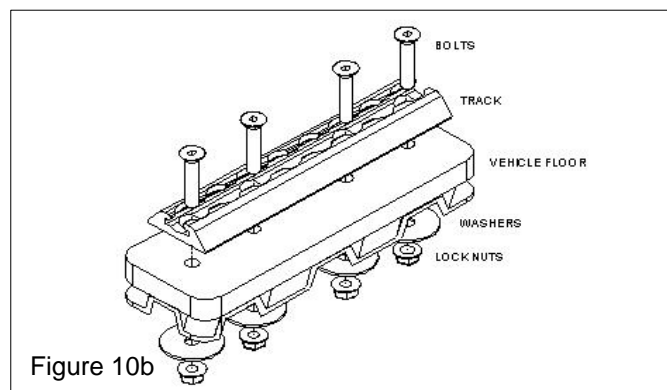


Figure 10b

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Shoulder Belt Anchorage Installation

Q'Strait provides several styles of shoulder belts for a variety of applications. This section describes the placement and installation instructions for fixed, retractable and combination shoulder belts.

IMPORTANT

- Lap belts must always lie against the bony structure of the wheelchair occupant's body and must never infringe on any component of the wheelchair such as armrests, panels, wheels, frames, etc. (Figure 11)
- Do not install anchorages or any system component into unsound materials such as corroded metal, wood, plastic or fiberglass panels without suitable reinforcement.
- If not using Q'Strait provided hardware, use only minimum Grade 8 hardware coated for adequate protection against corrosion per ISO 7253 or ASTM B117.
- Vehicle anchor points may require reinforcement. The installer or manufacturer is responsible for ensuring anchorages are installed onto suitable floor and wall structures; floor and wall strength must meet applicable performance requirements outside the scope of this document.

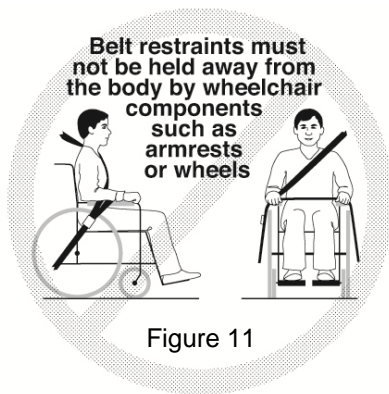


Figure 11

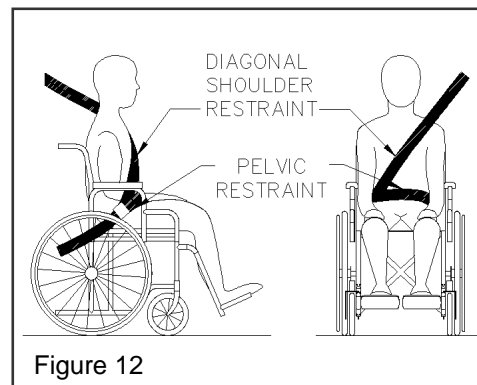


Figure 12

Installing Lower Retractable Shoulder Belt Anchorage

IMPORTANT

- Inspect underside of vehicle floor and note any utilities, frames, cross-members, fuel tanks or other possible obstructions before beginning installation.
- Modifications to the backing plate must only be made where necessary as smaller plate size reduces the floor load distribution. Always leave a minimum of 0.6" (15mm) adjacent the bolt hole in the plate.

Mounting Direct to Floor

1. Determine mounting location of shoulder belt in Wheelchair Location (Figure 2). In general, lower anchorage point should be adjacent to or slightly behind rear floor anchorages.
2. Place retractor base in position, and use as a template to mark hole to be drilled.
3. Drill 3/8" (10mm) hole through floor in center of L-bracket, and pass bolt through L-bracket and floor. We recommend the use of a sealant between floor and bracket.
4. From underneath the vehicle floor, place the backing plate and washer over the bolt. Sealant may be used between backing plate and floor if desired.
5. Securely fasten the lock nut as shown in Figure 13, ensuring at least 2 – 3 threads are sticking out. **Recommended torque = 35 FT/LB (47 N.m).**

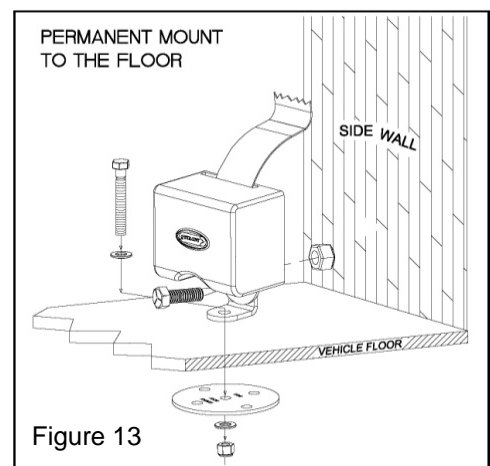


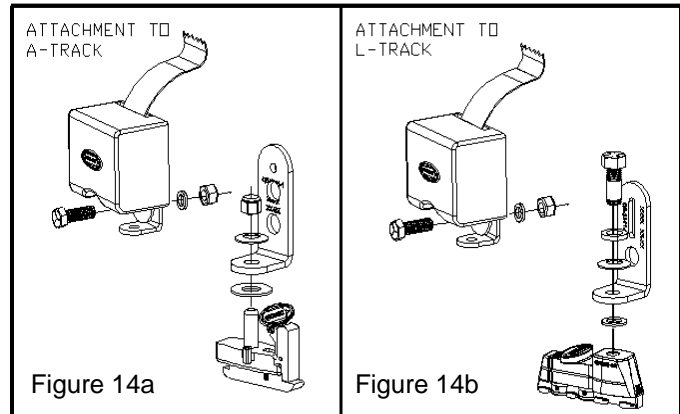
Figure 13

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Mounting to Fittings (L-Track, A-Track)

1. Determine mounting location of shoulder belt in Wheelchair Location (Figure 2); in general, lower anchorage point should be adjacent to or slightly behind rear floor anchorages.
2. Install the appropriate floor anchorage per 'Floor Anchorage Instructions' section.
3. Fasten retractor base to applicable Fitting using bracket and hardware as shown in Figures 14a, 14b. **Recommended torque = 50 FT/LB (67 N.m.).**
4. Secure shoulder belt and fitting assembly into appropriate floor anchorage.



Note: Retractor in mounted position must be at a zero (0) degree rotation with respect to the bracket arm to ensure proper webbing movement.

Installing Upper Anchorage

IMPORTANT

- Shoulder belt upper anchorage or guide support should always be positioned so that:
 - belt webbing always lies across the center of wheelchair passenger's shoulder (Figure 12), and
 - it extends upward and rearward of the wheelchair occupant's shoulder level to avoid any downward forces on the spine.
- Do not use the triangle wall bracket (as shown in Figure 15) with Retractable Shoulder Belts

Mounting Direct to Wall (i.e. Fixed Shoulder Belt)

1. Determine mounting location for shoulder belt in Wheelchair Location (Refer to Figure 2); in general, shoulder belt anchorage point should be adjacent to or slightly behind rear floor anchorages.
2. **For Retractable Shoulder Belts, verify anchorage is directly above the lower anchorage (i.e. straight vertical line) to prevent webbing from rubbing on the cover as it exits the retractor base.**
3. Measure and determine proper mounting height of upper anchorage based on style of shoulder belt:
 - a. **With Height Adjustor** (Figure 16 shows examples): Mount upper anchorage 61" (1,550mm) or more from the floor
 - b. **Without Height Adjustor**: Mount Upper Anchorage 46" – 48" (1,170 – 1,220mm) from the floor.

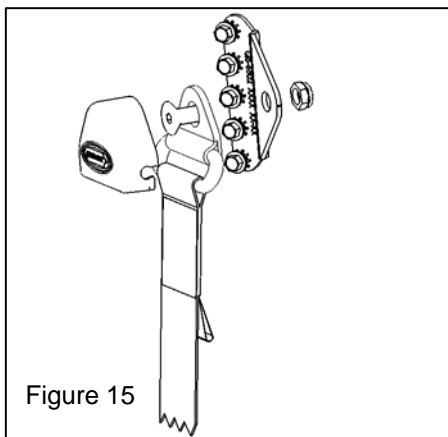


Figure 15

4. Verify triangular bracket mounting location is on a solid frame member of vehicle's wall.

Note: A series of in-line rivets or screws usually indicate the location of frame members of the wall structure.

5. Place triangular bracket on mounting location ensuring the triangular 'point' is facing in towards the wheelchair location. Use bracket as a template to mark holes to be drilled.
6. Drill five pilot/start holes into the solid frame member of the vehicle wall structure. Replace triangular bracket and secure using the supplied 1/4" (6.5mm) hardware (see Figure 15).
7. Make sure shoulder belt is secure, but has ability to swivel and snap plastic cover into place.

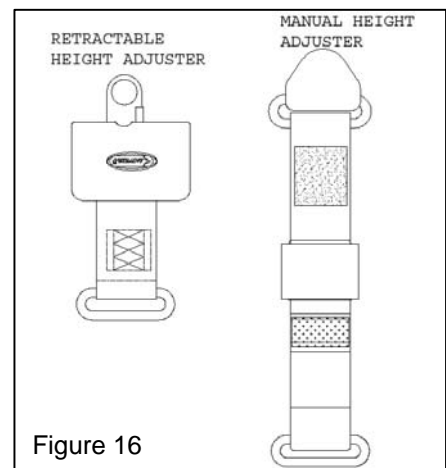


Figure 16

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Accessories Installation

IMPORTANT

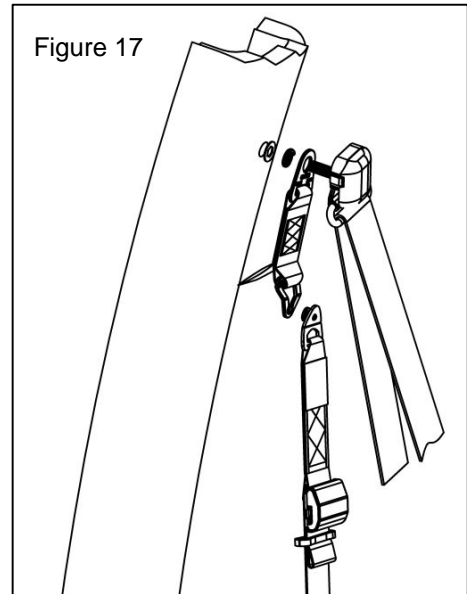
- If not using Q'Strait provided hardware, use only minimum Grade 8 hardware coated for adequate protection against corrosion per ISO 7253 or ASTM B117.

Shoulder Belt Adapter (Part # S5-6410-S)

The shoulder belt adaptor is used only in conjunction with Q5-6410-BLK-P; it is used in place of the OEM lap/shoulder belt as required for wheelchair passengers. The OEM-style belt may still be used for ambulatory passengers when required. To install:

1. Remove OEM upper anchor and bolt from the vehicle's pillar.
2. Pass the bolt through the OEM belt bracket and shoulder belt adapter (S5-6410-S). Place several drops of 'thread lock' on the bolt and re-insert it into the threaded anchor on the vehicle's pillar (as shown in Figure 17).

Note: Refer to OEM specifications for proper torque values and verify shank length for proper thread engagement.

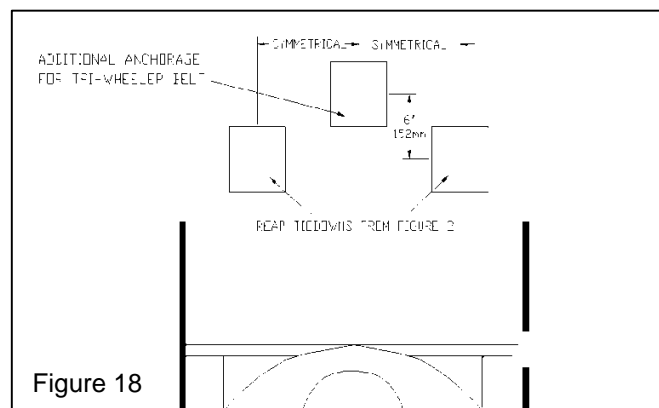


Tri-Wheeler Tiedown Anchorages

Note: Installing a fifth anchor point is recommended for securing tri-wheelers and scooters. Contact your nearest Q'Strait office for part numbers.

Important: Only **retractable tri-wheeler tiedowns** should be used with QRT systems. Only **manual tri-wheeler tiedowns** should be used with Q-5000 and M-Series systems.

1. Mark location of anchorage being installed; **anchorage should be centered 6" (150mm) rearward of rear anchorages** (see Figure 18).
2. Follow 'Floor Anchorage Installation' instructions above for applicable anchorage being used (i.e. Pockets or Track)

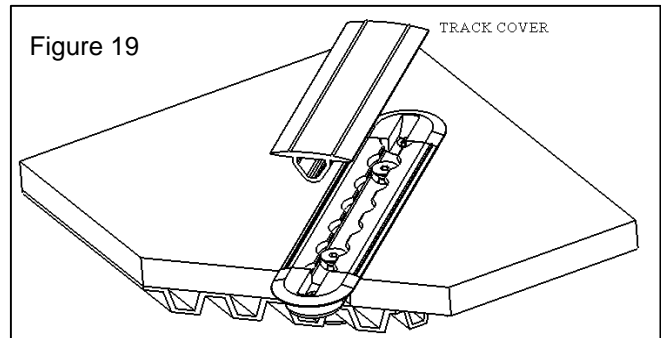


Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

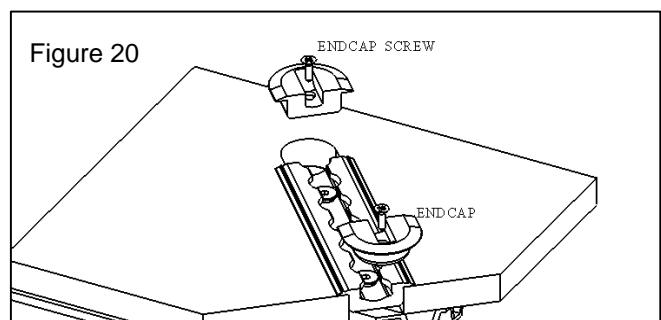
L-Track Cover (Part # Q5-7550-T60)

1. Clean out debris from L-Track cavity with pressurized air.
2. Place track cover onto L-Track and 'snap' into place (Figure 19).



L-Track End Caps (Part # Q5-7551-xx)

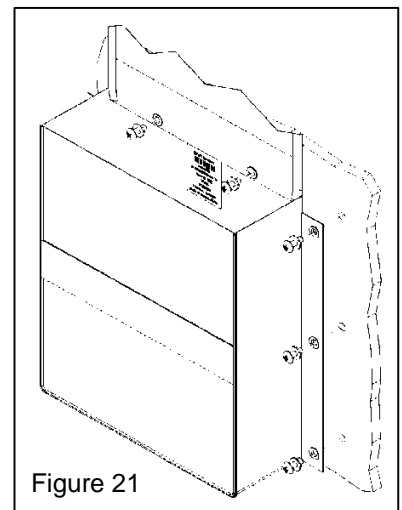
1. Route an area in vehicle floor 0.5" (13mm) deep and a semi-circular diameter of 1.42" (36mm) to match profile of end caps.
2. Clean out debris and install end caps before L-Track is fastened to floor; this gives end caps freedom to slide into place and can be adjusted if necessary.
3. Secure end caps to floor using end cap screws as shown (Figure 20).



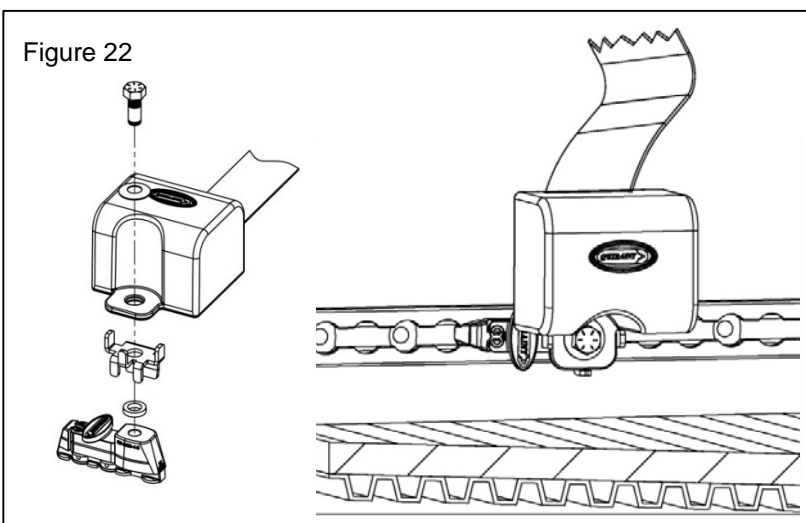
Wall Pouch (Part # Q5-8522)

1. Select a structurally sound area of vehicle (i.e. wall or under a flip-seat) to install Wall Pouch. Note: We recommend placing Wall Pouch near wheelchair locations for easy accessibility.
2. Fasten Wall Pouch using screws through each eyelet (Figure 21). We recommend 1/4" (6.5mm) screws and serrated washers (Grade 8).

Note: Do not overload wall pouch; it is designed to hold 4 wheelchair restraints, 1 lap belt and 1 shoulder belt.



L-Track Anti-Rotation Wall Bracket (Part # Q5-3211-2A)



1. Insert bolt through washers, retractor and anti-rotation bracket, into L-Track fitting as showing in Figure 22. **Recommended torque = 50 FT/LB (67 N.m.).**
2. Secure retractor/fitting assembly into wall mounted L-Track.

Note: Retractor in mounted position must be at 90 degrees to horizontal to ensure proper webbing movement.

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

Unistrut® Anti-Rotation Wall Bracket (Part # Q5-3211-3A)

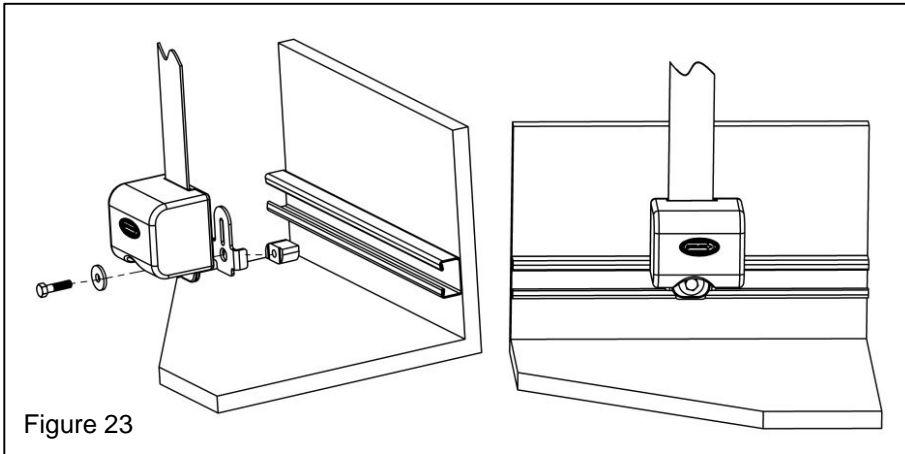


Figure 23

1. Place track nut into Unistrut® track (Figure 23).
2. Assemble shoulder belt retractor and shoulder belt adaptor.
Note: Ensure the slot in the adaptor aligns with the pin under the retractor.
3. Insert bolt into track nut (through washer, retractor and adaptor) and torque as required by OEM's specifications.

Note: Retractor in mounted position must be at 90 degrees to horizontal to ensure proper webbing movement.

Seat or Barrier Leg Bracket

Note: Contact your seating manufacturer or nearest Q'Strait office for applicable part numbers.

1. Drill 1/2" (12mm) mounting hole through square tubing of seat or barrier legs.
2. Place Anti-Rotation bracket in proper location and mount retractor to tubing using 1/2" (12mm) bolt, washer and lock nut as shown in Figure 24.
3. Tighten lock nut so retractor swivels vertically (with resistance) and follows natural belt path to attachment point on the wheelchair.
4. Ensure all lock nut threads are engaged with 2 - 3 threads showing outside of the lock nuts.

Note: Bolt head must be installed as shown in Figure 24 to allow for proper retractor function.

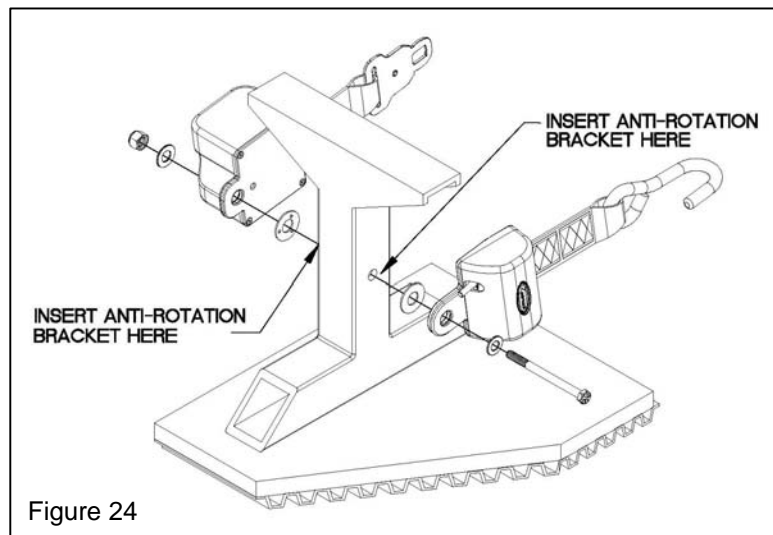


Figure 24

Q'STRAIT INSTALLATION INSTRUCTIONS

4-POINT WHEELCHAIR SECUREMENT SYSTEMS

WARNINGS

- **Do not alter or modify the system or components in any way without first consulting Q'Strait.**
- **The system is a complete, integrated system. Do not interchange or substitute any components.**
- **Q'Strait systems and components have been tested in a configuration similar to that recommended in these instructions. Any deviation from these recommendations is the responsibility of the installer.**
- **Systems and components should only be installed by an experienced technician.**
- **Installer is responsible for ensuring that installation meets all applicable regulations and standards.**
- **Do not install anchorages or any system component into unsound materials such as corroded metal, wood, plastic or fiberglass panels without suitable reinforcement.**
- **Regulations and standards in some countries require installation of a shoulder belt to be considered a compliant system.**
- **Verify with your local authorities for any specific local regulations, standards or requirements.**
- **All interior vehicle padding should comply with the requirements of FMVSS 201/302 and ISO 3795.**
- **Protect all webbing from contacting sharp corners and edges.**
- **If a head restraint is anchored to the vehicle, a vehicle anchored back restraint must be provided to minimize rearward deflection of the wheelchair seatback and thereby prevent injury.**
- **Airbags should be used only as a supplementary occupant restraint in combination with a wheelchair tiedown and belt type occupant restraint system compliant with requirements of SAE J2249 / ISO 10542.**
- **Airbags should be disconnected if the wheelchair passenger is positioned less than 7" (175mm) from the airbag module, or if any after-market device is installed so as to block or compromise deployment of the airbag.**
- **Report all potential damage and defects to your supervisor.**
- **Systems or components (including those permanently secured to floor or wall) suspected to have been in use during a vehicle impact from which the vehicle has been towed, should be replaced.**
- **In the event of any questions relating to the method of installation and/or use of wheelchair & occupant securement systems (or components), please consult your nearest Q'Strait office.**

MAINTENANCE & CARE

- **Always keep tiedowns and belts clean and off the floor by using a storage device such as Q'Strait's 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 and water.** After cleaning, fully extend the webbing (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 tiedown buckles at the hinges being careful not to contaminate the webbing.**
 - **Clean bolt threads and re-apply permanent thread locker if bolts are adjusted.**
- **Prevent contamination of webbing from contact with oil, gases, polishes and chemicals.**
- **Frayed, contaminated or damaged webbing should be replaced.**
- **Broken and worn components should be replaced.**
- **Systems or components (including those permanently secured to floor or wall) suspected to have been in use during a vehicle impact from which the vehicle has been towed, should be replaced.**



If you have any questions or need additional information,
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