



## OMNI L-TRACK INSTALLATION GENERAL INFORMATION

This guide is provided to assist with the installation of OMNI track. If you have any questions or problems relating to your installation, please contact your nearest Q'Straint or Sure-Lok office. Please note the following:

1. The proper location of L track elements, within the securement area, is outlined in Fig. 1 (lengthwise) and Fig. 2 (widthwise).
2. Plan for routing of floorboards and trimming of floor coverings as required. It is recommended to use track as a template to mark center holes to be drilled.
3. Q'Straint and Sure-Lok recommend high-strength, plated fasteners per ASTM F835 or equal. It is recommended to use 5/16" or 8mm fasteners. Q'Straint and Sure-Lok offer 5/16" x 3" special high-strength fasteners with enhanced corrosion resistance as compared to standard zinc-plated bolts. Our fasteners have a special coating under the heads to seal out moisture and insulate electrically. These come in kit form with high-strength lock nuts and FMVSS 209 compliant backup washers. Ask for part number FE201006. Recommended torque for fasteners is 25 FT-LBS (34 Nm). Ensure that a minimum of 2 threads protrude beyond the nut.
4. Select appropriate backing washers or backing plates as needed depending on the specific style of the vehicle's floor structure and required vehicle regulations.
5. Consider the corrosion potential of surrounding elements and the long term effect of exposure to anticipated environmental influences. In addition, with any aluminum assembly, great care must be taken to avoid galvanic corrosion that is triggered by dissimilar materials or other sources of galvanic potential in the installation.
6. Inspect the underside of the vehicle floor and note utilities, frames, cross-members, fuel tanks or other possible obstructions before beginning installation.

In order to assist our customers with a successful installation, we provide the following information regarding potential corrosion problems and suggested solutions.

**Environmental Corrosion:** For optimal corrosion protection from atmospheric contaminants and solutions of salts, which are commonly found in floor areas of public transportation vehicles, a surface protection should be added to the aluminum L track. There is a range of suitable protection that can be applied. Anodizing and/or powder coating or epoxy paint are systems that have been used successfully.

**Galvanic Corrosion:** To avoid galvanic corrosion, a careful review of the materials used in the installation must be done. Stainless steel fasteners or other stainless steel elements in the installation will set up a significant galvanic potential that will result in destructive degradation of the aluminum material of the L track. Other materials or conditions may also provide a destructive galvanic potential in an installation. These must be eliminated or adequately electrically insulated.

**Floorboard Corrosion:** There are some chemicals, which are present in common materials used in construction of public transportation vehicle floors that can be corrosive to aluminum. Exterior grade or marine grade plywood contains copper arsenic, among other chemicals, to preserve the wood. This chemical is very corrosive to aluminum and an adequate barrier must be provided between the floorboards and the track. Application of a suitable paint and/or plastic film barrier has been used successfully to separate the aluminum track from the corrosive elements of the floorboard material.

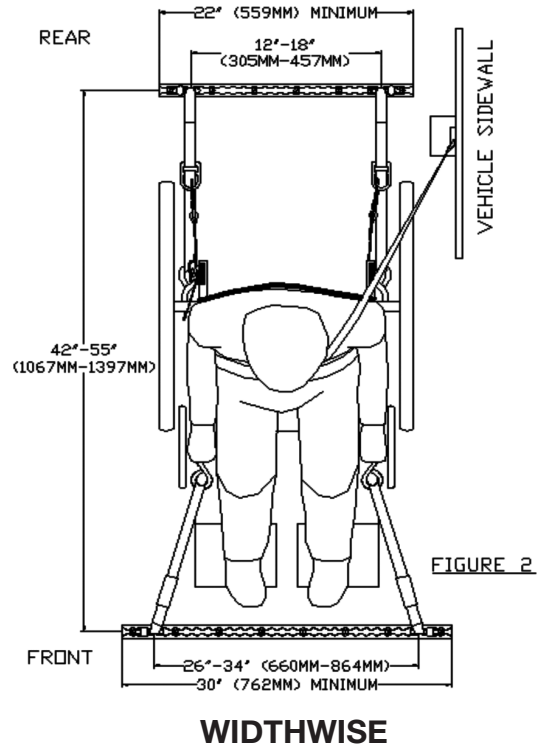
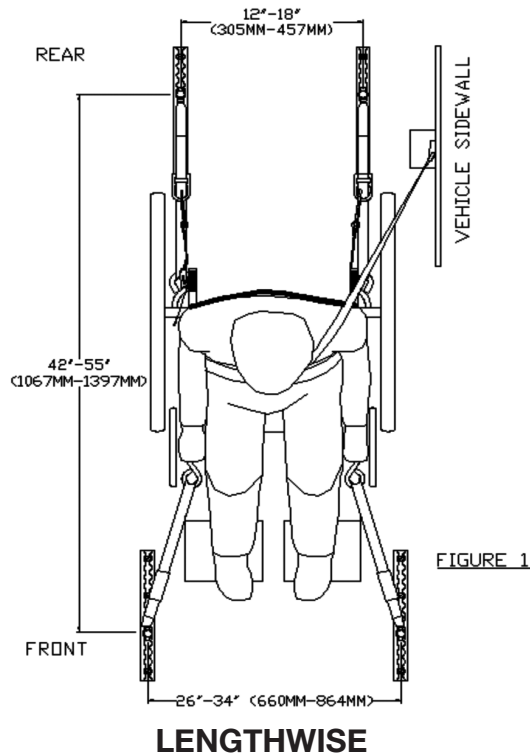
**Chemical Corrosion:** Other chemicals or corrosive solutions may be carried into the vehicle during operation and exposed to the aluminum L track. In order to minimize corrosion from this potential, the track should be cleaned periodically by the operator. The cleaning operation needs to include adequate drying by vacuuming or equivalent after the cleaning process.

**Moisture Traps:** Gaps between the track and the flooring materials, between the fastener head and the track, or between the backing plate and the floor, that can allow water to become trapped in these areas, should be caulked or otherwise filled to preclude the entrance of water. Trapped moisture will accelerate the potential for corrosion that may exist and must be avoided.

Although we have attempted to be as thorough as possible, there is always the possibility of unknown or unforeseen corrosion potential that may have come into effect in a given installation. Because of this, it must remain the responsibility of the company or group doing the design of the installation as to the acceptability of the final result.

## Series L Track Orientation Recommended Installation:

Use a minimum of four fasteners or fasteners at 4”(102mm) intervals, whichever provides the greater number of fasteners. Use flat head socket screws per ASTM F835 or equivalent. Minimum size is 5/16” (8mm). Q’Straint and Sure-Lok offer special screws to minimize corrosion potential. Series L Track Installation Hardware Kit, part number FE201006 includes 5/16” diameter 82° countersunk fasteners. Use appropriate back-up washers as needed to comply with local and/or Federal requirements.



# Safety Information

The vehicle floor and sidewall structures, where the system anchorages are attached, shall have equal or greater strength than the system being installed.

All systems shall be installed and operated with the occupant in a forward-facing orientation within the vehicle.

The installation and operation of the system shall be reviewed and approved by a qualified person that has expertise in securing mobility aids and positioning occupant restraints.

Any system components, including anchorages, which are suspected to have been in use during an impact from which the vehicle must be towed, should be replaced.

For information regarding proper system operation, refer to the operation instructions included with each system.

Inspect underside of the vehicle floor and note utilities, frames, cross-members, fuel tanks or other possible obstructions before beginning installation.

Vehicle anchor points may require reinforcement. The installer or manufacturer is responsible for ensuring anchorages are installed into suitable floor and wall structures; floor and wall strength must meet applicable performance requirements outside the scope of this document.

Any deviation from these recommendations in regard to system configuration, installation and operation instructions shall be the responsibility of the installer

This information is not all inclusive and will not cover or represent every installation. For further information, contact us at the location listed below.

## For further information contact

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