





Lightning Pushchair

Owner's Manual - Maintenance Guide Lightning Pushchair

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Stealth Products is committed to 100% customer satisfaction. Your complete satisfaction is important to us. Please contact us with feedback or suggestions to help us improve the quality and usability of our products.

You may reach us at:





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General

Read and understand all instructions prior to the use of the product. Failure to adhere to instructions and warnings in this document may result in property damage, injury, or death. Product misuse or failure to follow instructions will void the warranty.

Immediately discontinue use if any function is compromised, if parts are missing or loose, or if any component shows signs of excessive wear. Consult with your supplier for repair, adjustment, or replacement.

All persons responsible for fitting, adjustment, and daily use of the devices discussed in these instructions must be familiar with and understand all safety aspects of the devices mentioned. In order for our products to be used successfully, you must read and understand all instructions and warnings, and maintain our products according to our instructions on care and maintenance.

The installation instructions will guide you through this product's options and possibilities.

Instructions are written with the expressed intent of use with standard configurations. They also contain important safety and maintenance information, as well as describe possible problems that can arise during use. For further assistance, or more advanced applications, please contact your supplier or **Stealth Products** at (512) 715-9995 or toll free at (800) 965-9229.

Always keep the operating instructions in a safe place so they may be referenced as necessary. All information, pictures, illustrations, and specifications are based on the product information that was available at the time of printing. Pictures and illustrations shown in these instructions are representative examples and are not intended to be exact depictions of the various parts of the product.

These products are designed to be fitted, applied, and installed exclusively by a healthcare professional trained for these purposes. The fitting, application, and installation by a non-qualified individual could result in serious injury.

Warranty

Our products are designed, manufactured, and produced to the highest of standards. If any defect in material or workmanship is found, Stealth Products will repair or replace the product at our discretion. Any implied warranty, including the implied warranties of merchantability and fitness for a particular purpose, shall not extend beyond the duration of this warranty. **Stealth Products** does not warrant damage due to, but not limited to: misuse, abuse, or misapplication of product, and/or modification of product without written approval from **Stealth Products**, **LLC**. Any alteration or lack of serial number, where applicable, will automatically void all warranty.

Stealth Products, **LLC** Is liable for replacement parts only. **Stealth Products**, **LLC** is not liable for any incurred labor costs.

Stealth Products warrants against failure due to defective materials or workmanship:

Covers: 2 years

Hardware: 5 years

Electronics: 3 years

In the event of a product failure covered by our warranty, please follow the procedures outlined below:

Call Stealth Products at (512) 715-9995 or toll free at (800) 965-9229.

Request a Return Authorization (RA) form from the Returns Department and follow the documentation instructions.

You can download additional copies of this manual by accessing the Stealth website (*https://stlpro.site/stealth-docs*) and searching "*P91D420*" in the search bar at the top of the page.

Supplier Reference

Supplier:	
Telephone:	
Address:	
Purchase Date:	
Model:	

Warning Labels

Warnings are included for the safety of the user, client, operator, and property. Please read and understand what the signal words **DANGER**, **WARNING**, **CAUTION**, **NOTICE**, and **SAFETY** mean, and how they could affect the user, those around the user, and property.

A DANGER	Identifies an imminent situation which, if not avoided, may result in severe injury , death , and property damage .
	Identifies a potential situation which, if not avoided, may result in severe injury , death , and property damage .
	Identifies a potential situation which, if not avoided, may result in minor to moderate injury and property damage .
NOTICE	ldentifies important information not related to injury, but possible property damage .
SAFETY	Indicates steps or instructions for safe practices, reminders of safe procedures, or important safety equipment that may be necessary.

Limited Liability

Stealth Products, LLC accepts no liability for personal injury or damage to property that may arise from the failure of the user or other persons to follow the recommendations, warnings, and instructions in this manual.

Stealth Products does not hold responsibility for final integration of final assembly of product to end user. **Stealth Products** is not liable for user death or injury.

Testing

Initial setup and driving should be done in an open area free of obstacles until the user is fully capable of driving safely.

Safety Rules

- Immediately discard any plastic wrapping.
- Never allow children to fold, assemble, or disassemble the push chair.
- Do not exceed the push chair's weight capacity. Excessive weight may cause a hazardous, unstable condition if the approved load is exceeded.
- Falling or sliding out of the chair presents risks for serious injury. Exercise caution.
- Always use a seat belt.



Incorrect installation of the **Lightning** push chair or its accessories may cause damage to the hardware and/or injury to the user.

- Never leave the chair unattended.
- Never use the push chair if it becomes damaged. Discontinue use immediately.
- Always engage the brakes when stopping or releasing the chair handle.
- Accessories or parcels placed in or on the push chair may render it unstable. Exercise caution.
- Avoid burn risks. Never put hot liquids on the working tray.
- Folding and unfolding the chair poses risks of finger entrapment. Exercise caution.
- After unfolding the chair, ensure the latch has engaged and the chair is locked before transferring the user into it.

Intended Use

The **Lightning** push chair is intended for use as a pediatric mobility base. Designed to be highly durable, portable, and convenient, the **Lightning** push chair is lightweight and easily folded, transported, and stored.

The **Lightning** push chair is crafted from 7000 series aluminum, commonly used in the aircraft industry due to it's excellent strength-to-weight ratio. The **Lightning** is available in two models, two colors, and three sizes.

Lightning Standard Push Chair Features



ip-up adjustments for these areas

Extension - Fore/Aft - Angle - Lateral

Features of all Lightning Models

Both the Lightning Standard and the Lightning Special Edition models are available in three sizes (11", 14" and 16")

11" Lightning Standard:

- Lightweight. Frame weighs only 25 lbs.
- Folds easily for transport.
- Can support up to 86 lbs.
- Adjustable seat and back angle to accommodate client's needs.

14" Lightning Standard:

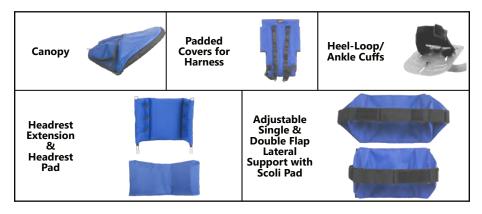
- Lightweight. Frame weighs only 27 lbs.
- Folds easily for transport.
- Can support up to 120 lbs.
- Adjustable seat and back angle to accommodate client's needs.

16" Lightning Standard:

- Lightweight. Frame weighs only 28 lbs.
- Folds easily for transport.
- Can support up to 150 lbs.
- Adjustable seat and back angle to accommodate client's needs.

Special Edition Features

The Lightning Special Edition model features all of the options of the Lightning Standard model, plus additional add-ons, including:



Specifications

	11″ Model	14" Model	16″ Model
Overall Height (Push Handle)	36″	36″	38″
Overall Width	19.5″	24″	25″
Seat Angle Settings	30°	30°	30°
Seat Depth	10-12″	12-14″	16-18″
Seat to Floor	20″	21″	22″
Seat to Foot Plate (Standard Extension Range in 1" Increments)	1-12″	1-17″	1-17″
Back Angle Settings	85°, 90°, 95°	85°, 90°, 95°	85°, 90°, 95°
Headrest Extension	+6" height	+6" height	+6" height
Front Wheels	6″	6″	6″
Rear Wheels	10″	10″	10″
Overall Weight of Chair (without Rigging)	25 lbs.	27 lbs.	28 lbs.
Weight Capacity	86 lbs.	120 lbs.	150 lbs.

Preparations

Only a qualified service technician should install the Lightning and its accessories.



Tools

Use the proper tools to install and adjust the Lightning push chair to the desired position for the user. Ensure all torque specifications are followed.



The use of improper tools may cause damage to the device. Not tightening to the torque specifications can cause components to fail or cause discomfort to the user.

Installation Plan

Set up an installation plan before beginning the installation. This plan should take into account:

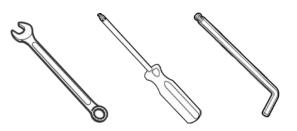
- Where the Lightning will be placed as well as applicable laterals and support cushions.
- How the Lightning will be operated, including the folding and locking functions.
- Sufficient clearance of and for other hardware and accessories.

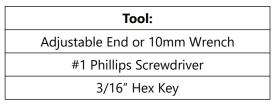


Any connection must always be secured with all delivered screws. Only use the screws provided in the package.

Required Tools

Below are the tools needed to complete installation and adjustments on the Lightning Push Chair:





Note: Tools are not provided.

Folding and Carrying the Lightning

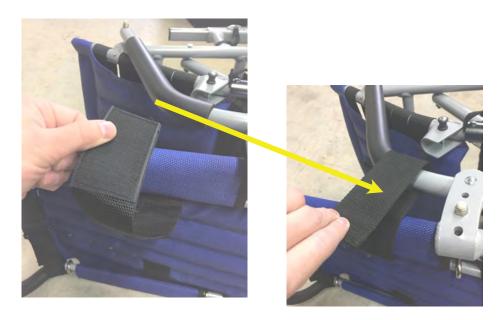


Step One: Grasp the push chair handle(s). Use your foot to depress the folding lock mechanism, and continue to depress the mechanism while pushing the back of the push chair toward its seat.



Step Two: Lay the folded chair on its left side, so that the carrying handle is face-up.

Step Three: Unlatch the hook-and-loop strap from the back of the chair. Loop the strap under then back over the chair's armrest, then fasten the hook-and-loop strap to the back of the chair.

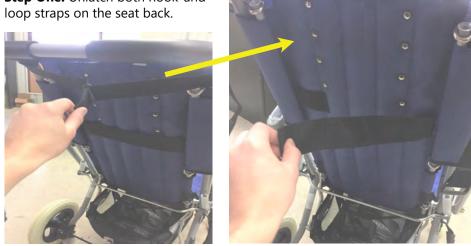


Step Four: Having secured the hook-and-loop strap around the armrest, lift the push chair by its plastic carrying handle.



Adjusting the Seat Back Angle

In order to adjust the back angle, the chair's back upholstery must first be removed.



Step One: Unlatch both hook-and-



Step Two: Remove the accessory tubes from both sides of the back.



Step Three: Remove the back upholstery from the chair.

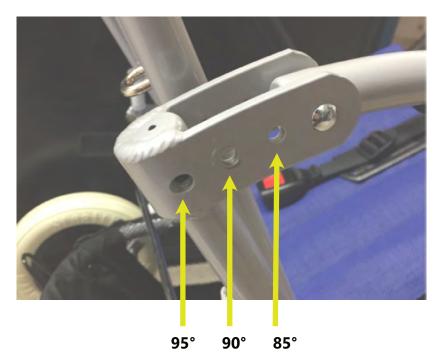
Installation Instructions

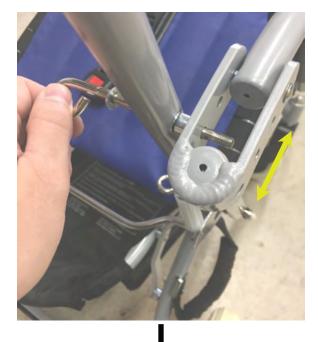
Adjustment Nut



Step Four: Using an adjustable crescent or 10mm wrench, remove both adjustment nuts from either side of the chair.

The seat back can be set to the following angles:





Step Five: Move each side of the seat back to the desired angle, then replace and tighten the adjustment nuts.



Installation Instructions

Installing Foot Plates

Step One: On each side of the push chair, locate the locking pin, pictured to the right.

Locking Pin





Step Two: Insert each foot plate rod into the grooved receiver tracks on each side of the chair.

Installation Instructions



Step Three: Adjust each foot plate to the desired height. When in the desired location, secure each foot plate by inserting the locking pin into the corresponding hole on the receiver track.

Foot Plate Depth Adjustment

Step One: Swing each foot plate out, away from the chair.



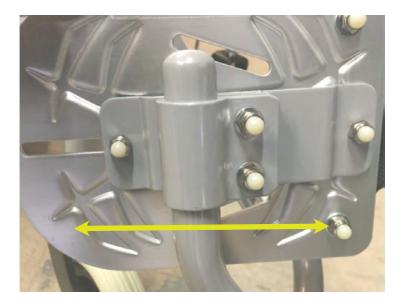


Step Two: On each foot plate, use an adjustable crescent or 10mm wrench to loosen the two depth adjustment nuts, pictured to the right.



Loosen to adjust depth

Step Three: Having loosened the depth adjustment nuts, slide each foot plate along its tracks to its desired position.



Step Four: When each foot plate is in its desired position, secure it in place by tightening the depth adjustment nuts.



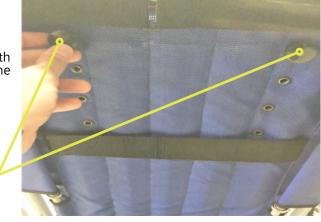
Tighten to secure

Using and Adjusting the Safety Harness

Step One: Adjust the groin strap to the length desired, then firmly cinch down the strap to secure it.



Step Two: Remove both hand screws from the seat back.



Step Three: On the front of the chair, remove the top strap pins and re-insert them in the desired locations. When the strap pins have been inserted in their desired locations, replace and firmly tighten both hand nuts.

Hand Screws



To lock and unlock the safety harness:

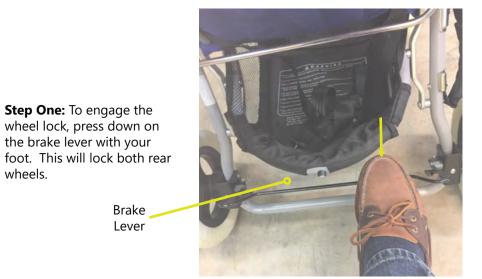
Lock: Insert both harness pins into the slots on the push button.



Unlock: Press the red push button and gently pull the harness straps away.



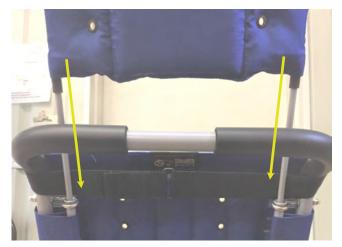
Engaging and Disengaging the Wheel Lock



Step Two: To disengage the wheel lock, place your foot under the brake lever and, using your foot, pull the lever upwards. This will unlock both rear wheels.



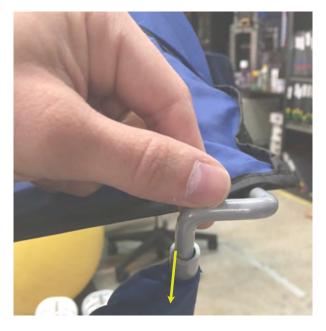
Installing the Headrest Extension



Insert both headrest extension rods into the accessory tubes on the seat backs.

Installing the Canopy Extension

Insert both canopy extension rods into the accessory tubes on the seat back. If the headrest extension is already in place, insert the canopy extension rods into the tubes on top of the headrest extension.



Installing the Padded Headrest



Step One: Slide the padded headrest over the headrest extension, as pictured to the right.

Step Two: On both the left and the right side, thread the lower cord of each pair of cords through the top eyelet of the headrest extension. Then, firmly tie the cords of each pair to one another.



Installation Instructions

Step Three: Having tied the padded headrest to the headrest extension, tighten and fasten both hook-and-loop straps.



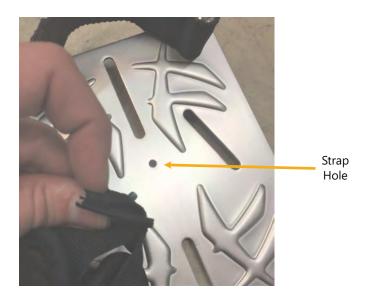
Installing the Ankle Cuffs

Step One: On each foot plate, use an adjustable crescent or 10mm wrench to loosen and remove the depth adjustment nuts. Then, remove each foot plate from its foot plate arm.



Loosen and remove depth adjustment nuts to remove foot plate

Step Two: Overlap each ankle cuff's straps until each strap's holes are aligned. Thread the provided screws through the hole of each strap overlap and into the top of each foot plate.







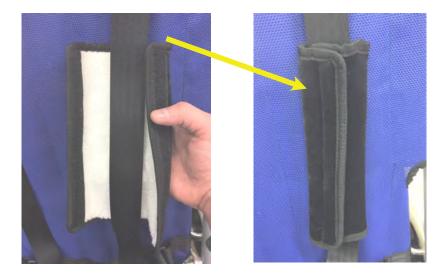
Step Three: On each foot plate's underside, fasten the provided nuts to each ankle cuff screw. Use a #1 Phillip's head screwdriver to tighten and secure each screw.

Step Four: Having secured the ankle cuffs to both foot plates, replace each foot plate on its foot plate arm and tighten its depth adjustment nuts.



Installing the Padded Harness Cover

Wrap each padded harness cover around the top straps of the safety harness, then fasten the covers' hook-and-loop patches.



Installing the Trunk Support Accessory

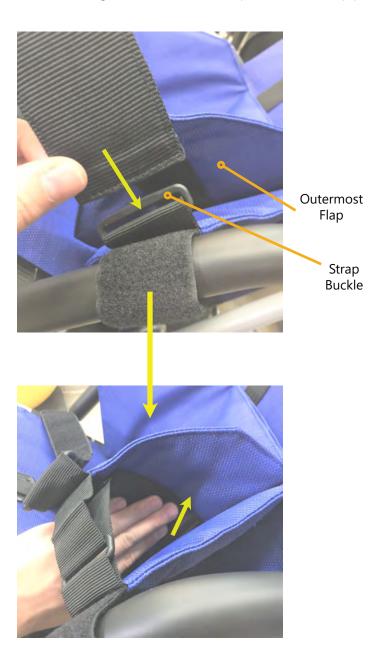
Step One: Place the trunk support accessory on the front of the seat back and fasten it around the back using the two rear hook-and-loop straps.



Step Two: On each side of the chair, wrap the strap connected to the innermost flap around the lower portion of the armrest tube, then fasten it to the flap's hook-and-loop patch.



Step Three: On each side of the chair, feed the strap connected to the outermost flap of the trunk support accessory through the available strap buckle, pulling the strap tight before fastening it to the outermost flap's hook-and-loop patch.



Step Four: Take the remaining, unattached strap and feed it through the strap buckle on the opposite side of the chair, then cinch it back toward itself and fasten it to its hook-and-loop strap.



Installation Instructions

Attaching the Work 'n Play Tray

Step One: Place the tray on top of the chair's armrest handles



Step Two: Insert the locking pin into the armrest, as pictured here. Do this on both sides of the chair.

Locking Pin

Be sure to remove both locking pins to detach the tray. Always ensure the tray is free of objects prior to detaching it.

A DANGER	Never put hot liquids on the tray. Doing so presents a serious burn risk to the user.
	Always remove the Work 'n Play tray when transporting a user in a moving vehicle.
	Work 'n Play trays have been tested to hold up to 15 lbs. Do not overload the tray.

Replacing Wheels

In order to replace both front or back wheels, perform the following steps:

Removal:

Step One: Using two adjustable crescent or 10mm wrenches, loosen and remove the nut and washer from the bolt securing the wheel to the wheel fork.





Step Two: Slide the bolt out of the fork and wheel. The wheel may now be removed.

Replacement:

Step One: Insert the bolt from the outside of the chair frame through the center of the wheel hub.





Step Two: Place the washer and nut on the bolt on the inside of the chair frame and use an adjustable crescent or 10mm wrench to tighten the bolt, securing the wheel.

General Guidelines

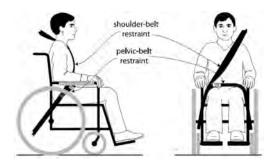
The Lightning Push Chair has met the requirements and provisions of RESNA WC-4:2012, Section 19 and ISO16840-4.

- Attach the tie-down straps only to the designated, labeled transit security points.
- Tighten the straps sufficiently to remove all slack. Never attach tie-downs to adjustable, moving, or removable parts of the wheelchair.
- Position the anchor points for the rear tie-down straps directly behind the rear securement points on the wheelchair.
- The front tie-down straps should anchor to floor points that are spaced wider than the wheelchair to provide increased lateral stability.

Before Transit

Clients who use wheelchairs should transfer to the vehicle seat and use the vehicle installed occupant restraint systems.

- Prior to transporting, always check the tie-downs and hardware.
- On tie-downs and restraints, look for tears and worn webbing straps. Replace as necessary.
- Look for damaged hooks or loose tie-down hardware.



Belt Placement

• The pelvic belt should be worn low, across the front of the pelvis near the junction of the pelvis and the thighs.

- The belt restraint buckle of three-point belt restraints should be placed in contact with the occupant's body and away from wheelchair components.
- The junction of the shoulder belt and pelvic belt of three-point belt restraints should be located near the hip opposite the shoulder over which the diagonal belt crosses and not near the mid-line of the occupant.



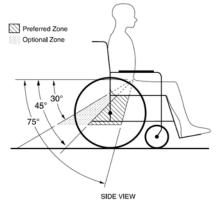
Belt restraints should not be routed outside the wheelchair, over the wheelchair wheels, or over the wheelchair arm supports and should not be held away from the body by wheelchair components or parts.

SAFETY

Belt restraints should not be worn twisted or in a manner that reduces the area of contact of the belt webbing with the occupant.

Both pelvic belt and shoulder belt restraints that comply with RESNA WC-4:2012, Section 18 and/or 4.6, 5.2, 5.3 of RESNA WC-4:2012, Section 19 should be used to limit occupant movement in a crash and reduce the likelihood of occupant ejection from the vehicle and/or injurious contact of the occupant with the vehicle interior.

The pelvic belt should be angled between 30° to 75° horizontally when viewed from the side, and ideally between 45° to 75° horizontally, as shown in the figure to the right.





Back supports with adjustable recline angles should not be tilted back more than 30° to the vertical during travel in vehicles unless necessary for the medical and postural needs of the occupant. SAFETY

Belt restraints should be adjusted as snugly as possible, consistent with user comfort.

Trays

Wheelchair mounted rigid trays that are not specifically designed for use during travel in motor vehicles should be:

- Removed and secured separately in the vehicle, or if not possible, secured to the wheelchair so they will not break free in a crash.
- Positioned with a gap of at least 3 in. (7.6 cm) between the back edge of the tray and the wheelchair occupant's abdomen and/or chest so as not to interfere with proper belt-restraint use.
- Fitted with energy-absorbent padding between the back edge of the tray and the wheelchair occupant.

User Safety

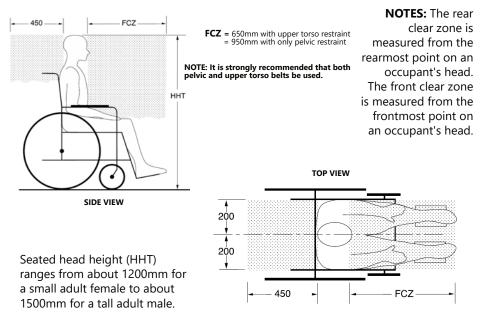
The use of a postural pelvic belt attached to the wheelchair base or seat frame is encouraged during travel, but these belts should be positioned so that they do not interfere with the proper positioning of crash-worthy belt restraints, and they should not be relied on for occupant protection in crash situations unless the postural belt has been designed to comply with, and perform to, the requirements of 4.6, 5.2, and 5.3 of RESNA WC-4:2012, Section 19. For children that weigh less than 23kg (51lb), the Lightning Pushchair is provided with a five-point harness restraint that is designed for use as a crash-worthy motor vehicle restraint.

The WC19-approved Lightning Push Chair has been designed to accommodate the proper use of vehicle-anchored belt restraints and the ratings of the seating system with regard to ease of properly positioning vehicle-anchored belt restraints on the wheelchair passenger, and the degree to which proper positioning of the belt restraints can be achieved.



Alterations or substitutions should not be made to the seating system, or its parts and components, without consulting the manufacturer. Sufficient forward and rearward clear space should be provided around the wheelchair occupant.

The forward clear space needs to be larger when a shoulder-belt restraint is not used.



All measurements are in millimeters

Preparing the Lightning for Transport

- Ensure the user is correctly strapped in the seat with the five-point safety harness. Check that the safety harness has been properly adjusted.
- During transportation, the headrest extension must be fitted.
- Remove the following items, if fitted:
 - Work 'n Play tray Canopy
 - Shopping Basket Rain Hood

\Lambda WARNING

Failure to detach the hardware as detailed could lead to serious injury or death.

Tools and Components Needed

Tools Required:

- 3/16" Hex Key

Components:

- Four (4) tie-down assemblies which include:
 - One (1) handle-threaded clamp
 - One (1) through clamp
 - Four (4) 1/4-20 x 3/4" screws

Front Clamp:

Assembly Instructions

Step One: Separate the four (4) through-clamps from the handle-threaded clamp by removing the four (4) screws.

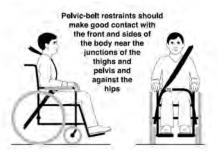
Step Two: Loosely position the handle-threaded clamp and the through-clamps to the front left and right bars, as pictured below.

Step Three: Loosely position the handle-threaded clamp and the through-clamps to the rear left and right bars, as pictured below.

Back Clamp:

(**Note:** Always ensure the handle-threaded clamps face outside the chair) Use a 3/16" hex key to tighten all screws to 6.3 lb-ft.

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Attaching the Lightning to a Vehicle

Step One: Position the assembly in the vehicle over the floor track. The front of the Lightning should face the front of the vehicle (i.e. in the direction of travel).

Step Two: Apply the chair's brakes.

Step Three: Attach the front restraints to the floor tracks and the front handle-threaded clamps, making sure they are all in-line with floor tracks. Attach the rear restraints to the floor track and the rear handle-threaded clamps.

Step Four: Follow the operating instructions for the specific type of tie-downs you are using. Ensure the tie-downs are secure and have been pulled back.



Note: To release the chair, reverse the directions above, detaching the straps.

First Time Use

Dealer Assistance

During first-time use by the client, it is advised that the dealer or service technician not only assemble the product, but also explain the configuration of user positioning to the customer (i.e., the user and/or the attendant). If needed, the dealer can make final adjustments.

The **Lightning** push chair should only be prescribed and fitted by qualified professionals.

User Testing

WARNING

It is important that the customer be fully aware of the installation of the Lightning push chair, including how to use it and how it can be adjusted to fit the client comfortably. As a dealer, proceed as follows:

• Explain and show the customer how you have executed the installation and explain the function.

Have the user test the position of the seating system.

- Is the hardware in the proper position for the client?
- Can the user safely operate all controls with minimal effort?

If needed, make any adjustments to the positioning. Explain to the customer possible problems and how to address them.

Conditions of Use

The Lightning push chair is intended for use as installed by the dealer, in accordance to the installation instructions in this manual.

- The foreseen conditions of use are communicated by the dealer or service technician to the user and/or attendant during the first-time use.
- If the usage conditions change significantly, please contact your dealer or a qualified service technician to avoid unintended damage.



Failure to comply with these warnings could result in serious bodily injury.

Frame:

- Wipe daily with a damp cloth and dry thoroughly. Never put away wet.
- For stains, wipe with a damp cloth and warm, soapy (mild soap) water.
- When cleaning the frame, fold and open the chair and check that all movements through the folding range are free and undamaged.



Do not use furniture polish on the frame. Do not immerse harness, straps, or accessories in water, wash in a machine, or tumble dry.

Upholstery:

- Remove the seat and back upholstery from the chair.
- Remove the harness and support boards from the upholstery.
- Machine wash upholstery in cold water on a delicate cycle.
- Line dry or lay flat and allow to dry thoroughly before reassembly.
- Check the upholstery and straps for wear.

Harness and Accessories:

- Remove the harness and accessories from the chair.
- Wipe harness and accessories with a clean, damp cloth and dry thoroughly. Check the condition of the harness, stitching, and buckle while cleaning.

SAFETY	Check, repair, and/or replace
SAFETT	nuts, bolts, screws, and pivots as needed

Additional Maintenance

- Check for any foam breakdown and/or metal coming through the foam.
- Examine tires for sharp objects, cuts, or splits, and check the operation of the brakes.
- Examine casters and wheels for free rotation, security, and accumulation of fluff or grit.
- Examine wheel bearings and casters/suspension for excessive wear.



Failure to comply with these warnings could result in serious bodily harm.

Notes	