

ENGLISH

# *User and Service Manual*

## *Cruiser*

---

Fixed-Tilt Wheelchair



READ INSTRUCTION BEFORE USING

SAVE THIS BOOK FOR FUTURE REFERENCE

 **Convaid**

# Customer Service Support

Toll Free: 1-844-US Mobility (844-876-6245)  
Phone: (310) 618-0111  
Fax: (310) 618-8811  
Email: sales@convaid.com  
International Email: international@convaid.com  
Website: www.convaid.com

Technical assistance or repair information hours are:  
Monday-Friday, 6 a.m. to 4:30 p.m. PST

## Before Calling:

**Please fill in the following. Customer Service will be able to help you more quickly if the information indicated below is readily available.**

**Serial number of chair:** \_\_\_\_\_

**Model of chair:** \_\_\_\_\_

**Date purchased:** \_\_\_\_\_

**Dealer name:** \_\_\_\_\_

## Notice:

The information contained in this document is subject to change without notice.

No part of this document may be photocopied, reproduced, transmitted, transcribed, stored in a retrieval system or translated to another language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise without the prior written consent of Convoid.

Use only Convoid accessories and parts on Convoid products. Convoid parts are not interchangeable with other manufacturers' products. Replace any worn parts immediately.

*Table of Contents*

<b>Product Overview</b>	
Definition of Symbols.....	1
Cruiser Overview.....	3
Specifications.....	4
Cruiser Product Line.....	5
Warnings.....	6
<hr/>	
<b>Setting Up</b>	
Contents in the box.....	9
How To Remove Chair from box.....	9
Preparing the Chair for Use.....	9
Unfolding the Chair.....	10
Folding the Chair .....	11
Lifting/Carrying the Chair.....	12
<hr/>	
<b>Fitting Guide</b>	
Seat Back Height .....	13
Seat Width.....	13
Seat Depth.....	14
Seat Depth Tubes Replacement.....	14
Attaching Support Strap for Seat Extension Tubes.....	15
Two Piece Seat.....	15
<hr/>	
<b>Wheels</b>	
Quick Release Wheels.....	16
Anti-Shimmy Adjustment.....	16
Locking and Unlocking.....	17
Attendant Hand Brake.....	18
<hr/>	
<b>Operating</b>	
Three-Point Positioning Belt.....	19
Depth Adjustable Crotch Strap.....	20
H-Harness with Padded Covers.....	20
Seat Back Angle Adjustment.....	21
Footplate Height Adjustment.....	23
Angle Adjustable Footplates.....	24
Foot Positioners.....	25
Footplate Securement Strap.....	25
Footplate Depth Adjustment.....	25
Caster Locks.....	26
Calf Panel.....	26
Anatomic Back Support Frame.....	26

**Accessories & Options**

Swing-Away Lateral Support with Scoliosis Strap.....	27
Lateral Trunk Support.....	28
Full Torso Swing-Away Support Vest.....	30
Lateral Thigh Support (Adductor).....	30
Medial Thigh Support (Abductor).....	31
Padded Headwings.....	31
Headrest Extension.....	32
Occi-Headwing.....	32
Adjusting the Pelvic Belt Strap.....	34
Adjusting the Crotch Strap.....	34
Seat Cushions.....	35
Upper Extremity Support Surface (Tray).....	37
Saddle Bags.....	38
Under Seat Storage Basket.....	38
Headrest Cover (Canopy).....	39
Heavy-Duty Reinforced Upholstery.....	40
Reducer Seat Insert.....	40
Rear Anti-Tip Tubes.....	40
Utility Bag.....	41

**Transit Models**

Transit Models.....	42
Transportation Mode Instructions.....	43
Recommended Clear Zones in Vehicle.....	45
Providing Clear Space & Padding.....	45
Cruiser Transit Anchor Installation.....	46
Proper Use of Equipment.....	48
Restraining the Wheelchair Occupant .....	50
Using Postural Belts & Supports.....	52
Trays & Other Wheelchair Components.....	52
WTORS Manufacturers.....	53

**Miscellaneous**

Fabric Removal.....	54
Adjustable Tension Back.....	54

**Scout Options**

Wheel Lock Adjustment & Hand Brakes.....	56
--	----

**Important Information**

Maintenance, Operating & Safety Instructions.....	61
Warranty.....	67

## READ BEFORE USE

Read manual completely before use and fully understand its content. Familiarize yourself with the handling and functions of the product before use and practice them. Any caregiver that is going to operate this chair should also read the manual in full.

You are responsible for the safety of the user. The safety of the user could be affected if you do not follow the instructions in this manual. Nevertheless, not all possible circumstances and unpredictable situations can be covered by this manual. Reason, care, and circumspection are not features of the product; they are required of persons who use the product. If instructions are not clear and further explanation is necessary, please contact your Convaid provider. If you do not follow all instructions and warnings, damage to the chair or serious injury may occur. The latest version of all instructions and product safety notice are available on the Convaid website [www.convaid.com](http://www.convaid.com) and can be printed in larger sizes. Additional video instructions are also available for reference purposes.

## DEFINITION OF SYMBOLS



### **WARNING!**

The word "WARNING" and/or the symbol shown above indicates practices that are unsafe or dangerous and could result in serious injury or death to the occupant of this chair or others.



### **WARNING! READ INSTRUCTION MANUAL!**

Additional symbols are defined throughout this manual along with operating instructions.



This symbol indicates potential finger entrapment.



This symbol indicates correct lifting points for safe moving and handling.



This symbol indicates manufactured date.



This symbol indicates maximum user's weight.



This symbol indicates a wheelchair which cannot be used in motor vehicle as vehicle seat. This wheelchair does not comply with WC19 (RESNAWC-4:2012 or ISO7176-19:2008) and cannot be used as a vehicle seat to transport the user in a vehicle.



This symbol indicates a wheelchair which can be used in motor vehicle as vehicle seat. This wheelchair complies with WC19 (RESNAWC-4:2012 and ISO7176-19:2008) and can be used as a vehicle seat to transport the user in a vehicle.



This symbol indicates the position of an anchor point when using a 4 -point tiedown system(WTORS) during transit.

## CHOOSE THE RIGHT CHAIR & SAFETY OPTIONS

There are several options available to meet the needs of the wheelchair user. Make sure that your (and your health care provider's) choice of chair and other added options takes into account the user's comfort, positioning, physical limitations, and hazards that may be encountered during daily use. Operating the manual wheelchair outside of the recommendations provided by the manufacturer can lead to a dangerous situation.

The wheelchair is not suitable for jogging, running, skating or similar activities. Swiveling front wheels tend to wobble at higher speeds and can cause a sudden stop, and the wheelchair can tip over. Use the wheelchair only at regular walking speed. Under no circumstance should you let go of the push handle while pushing.

The durability of this product is five years when it is used with proper care and maintenance according to the user's manual.

# Product Overview Fixed-Tilt Cruiser



\*Sizes: 10, 12, 14 and 16 only

# CONVAID USER'S GUIDE

Cruiser	CX10	CX12	CX14	CX16	CX18
Overall Length	1220 mm	1120 mm	1250 mm	1320 mm	1400 mm
Overall Width	560 mm	600 mm	650 mm	700 mm	720 mm
Overall Height	940 mm	970 mm	940 mm	1020 mm	970 mm
Folded Length	1190 mm	1220 mm	1190 mm	1350 mm	1270 mm
Folded Width	380 mm	380 mm	410 mm	410 mm	380 mm
Folder Height	430 mm	430 mm	430 mm	430 mm	430 mm
Weight of Chair	12.3 kg	12.3 kg	12.7 kg	14.5 kg	13.6 kg
Pivot Width	1100 mm	1180 mm	1150 mm	1340 mm	1410 mm
Seat Angle	30°	30°	30°	30°	30°
Seat Depth	150-280 mm	200-330 mm	250-380 mm	280-410 mm	360-530 mm
Seat Width	250 mm	300 mm	350 mm	400 mm	450 mm
Seat to Floor	580 mm	640 mm	530 mm	580 mm	660 mm
Seat Back Angle	85°/90°/95°	85°/90°/95°	85°/90°/95°	85°/90°/95°	85°/90°/95°
Seat Back Height	530 mm	560 mm	635 mm	690 mm	635 mm
Seat to Footplate	130-530 mm	130-635 mm	100-560 mm	100-560 mm	200-580 mm
Weight Capacity	34 kg	34 kg	45.5 kg	77 kg	114 kg
Transit Weight Capacity	30 kg	30 kg	45.5 kg	77 kg	77 kg
Push Handle Adjustment	710-1090 mm	740-1170 mm	740-1170 mm	780-1220 mm	N/A
Material (frame)	Steel / Aluminum				
Material (plastic)	Fiber glass strengthened polyamide				
Material (cushion)	Fire-resistance foam*				
Material (fabrics)	Fire-resistance nylon, polyester*				

\* Resistance to ignition of upholstered parts complies to BS-EN 1021-1 and -2



## Cruiser Product Line



Cruiser



Cruiser 18



Cruiser Scout

## General Warnings



**WARNING:** The operator/caregiver must read and understand this manual prior to operating this equipment. If you are unable to understand any part of the manual, contact your supplier for assistance.



**WARNING:** Please keep packaging material away from children. Plastic packaging presents the danger of suffocation.



**WARNING:** The chair is only intended to carry one user at a time. Do not carry more than one user at a time.



**WARNING:** The weight carried by the Cruiser chair must never exceed the total weight capacity of the chair. (Maximum occupant size plus any items carried.) When using the chair in transit, all accessories must be removed from the chair and secured separately.



**WARNING:** If the user's weight is less than 50lbs (22.7kg), the use of anti-tip tubes is encouraged.



**WARNING:** To avoid tipping, do not hang item from the push handle.



**WARNING:** To reduce the risk of an accident:

- ALWAYS carefully read the User Guide and get comfortable operating the chair.
- ALWAYS watch for obstacles and avoid them as often as possible.
- MAKE SURE that the chair operates properly. Repair any problems before use.
- ALWAYS verify that the quick release axles are locked so that the back wheels do not come off
- ALWAYS secure the user into the chair during use.



**WARNING:** Pay particular attention when on slopes and inclines to prevent:

- The user from falling out of the chair.
- The chair from tipping over.
- The chair from rolling away.



**WARNING:** Do not go up or down stairs without the assistance of another person or with user in the chair. If devices such as ramps or elevators are available, please use them. If they are not available, then the chair should be carried over the obstacle by two people without the user in the chair.



**WARNING:** Always secure user with belt first, before making any other adjustments.



**WARNING:** Before removing the user from the chair and before returning the user to it, always engage the wheel locks. Never remove or place user without engaging the wheel locks.



**WARNING:** Never leave the user unattended in the chair even when they are strapped in and the wheel locks are engaged.



**WARNING:** Do not stand on the foot support when getting into or out of the chair.



**WARNING:** When the user reaches for objects in front, to the side, or behind the chair, be sure that they do not lean out of the chair too far since the shift in the center of gravity might cause the chair to tilt or tip over.



**WARNING:** Positioning belts should never be used as a safety restraint device in a motor vehicle when transporting chair with occupant. An additional WC19 (ISO 7176-19) compliant automotive type seat belt is required when the chair is used in transport vehicles.



**WARNING:** During transit, a five-point harness should be used for occupant weight less than 51lb (23kg).



**WARNING:** Do not use the chair unless it has proper tire pressure. (Front 36 psi/ Rear 30 psi, 248kPa/200kPa, 2.5BAR/2.0BAR) Do not over inflate the tires. Failure to follow these instructions may cause the tire to explode and cause harm. Tire size and maximum pressure are listed on the wheel.



**WARNING:** Ensure the wheels are installed properly. You will hear a “click” when wheel locks into place.



**WARNING:** Do not leave/store the chair in direct sun/heat over a long \ period of time. Check the temperature of the chair prior to usage.



**WARNING:** Removable accessories that can be removed without tools will not cause adverse effects on wheelchair.



**WARNING:** CX-18 exceeds the maximum recommendation width. Use caution when entering/exiting small space.



**WARNING:** The Cruiser could lose its flame resistant characteristics when using aftermarket seating or cushions.



**WARNING:** For occupant safety, the seat belt should be used at all times.

- Do not leave user unattended.
- Do not strap user too tight.
- Straps should not interfere with breathing or circulation.
- Always apply wheel locks before letting go of the chair.
- If front edge of seat is at or forward of the point where tires touch the floor, avoid using front of seat tubes for support during entry or exit from chair to prevent tipping.
- Avoid using footplates for weight support during exit or entry of the chair.

## ***Chair Set Up & Adjustment***

### **Contents in the Box**

---

#### **List of items included in the box:**

- Left and right footplates
- Accessories as ordered
- Cruiser as ordered
- Allen wrench (5/32")
- User's guide

#### **Tools needed:**

- 5/32" Allen wrench
- 3/8" Wrench
- 7/16" Wrench
- Phillips Screwdriver

### **How to Remove Chair from Box**

---

1. Place box flat on the floor.
2. Verify that package is in good shape and that no damage has occurred during shipping.
3. Remove the chair base, seating module and accessories from the packaging material.
4. Check to make sure that your order is complete.

### **Preparing the Chair for Use**

---

Once you have all components as ordered, the directions for use in this User Guide will guide you through the process of preparing the chair for use:

Convaid recommends the initial fitting, adjustments, and setup take place with the help of your Convaid Representative and/or Convaid Service Dealer. However, if the instructions contained in this manual are followed carefully, a caregiver or attendant will be able to set up and assemble the chair.

## Unfolding the Chair



Fig. 1

**Note:** One-Piece Push Handle will unfold as the chair opens.

1. Lay chair flat on ground and unbuckle closure strap. Fig.2
2. Stand chair on front caster, grasp side of Push Handle and push down on Seat Tube. Fig.3
3. Press down firmly on seat tubes to ensure the chair is completely unfolded. Fig.4
4. Using your foot, push down on Lower Rear Lock Brace until it locks into a straight position. Fig.5
5. Press grey buttons on each side of Push Handle at the same time, and rotate Push Handle to desired height. Fig. 6,7
6. Swing footplates down into position. Fig. 8,9

**NOTE:** For Planar Seat and Back installation & instruction, see page 50.



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9

## Folding the Chair

1. Swing footplates to the side. Fig.10,11
2. Press grey buttons on each side of Push Handle and rotate Push Handle down completely. Fig.12,13
3. Unlock Rear Lock Brace by kicking up on center of brace with foot. Fig.14
4. Grasp one side of Push Handle and pull up on seat fabric or seat tube with opposite hand. Fig.15,16
5. Lay chair back onto Push Handle. Push down on tubing above front tires until chair is folded. Fig.17
6. Buckle closure strap. Fig.18

**NOTE:** Always properly secure the Cruiser in a safe location when transporting Cruiser as a cargo in vehicle.



Fig. 10



Fig. 11



Fig. 12



Fig. 13



Fig. 14



Fig. 15



Fig. 16



Fig. 17



Fig. 18

## Lifting/Carrying the Chair

---

To Lift/Carry the Chair:

1. To safely lift or carry the chair, always use both hands.
2. With one hand hold the chair by the front x- brace bar. Fig. 19
3. With the other hand hold the chair by the back x-brace. Fig. 20



Fig. 19



Fig. 20

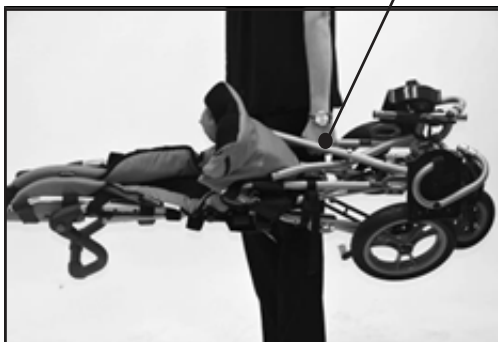


Fig. 21

**! WARNING:** Always secure the chair with the closure strap when transporting the chair.



## Fitting Guide

Convaid's lightweight, folding chairs are designed to be more than just a convenient chair. Order the correct size chair by first determining the user's height, weight and seating measurements. Properly-fitted, Convaid chairs will provide years of comfortable use. As your child grows, refer back to this Fitting Guide to adjust the dimensions of the chair.

Correct seating and positioning encourages good posture, which in turn aids circulation, breathing and digestion. Please take the time to properly adjust the chair to fit the user. If the user is not correctly positioned, check the accessories section of this manual to see if one or more of our accessories would help to facilitate posture or consult a physical therapist. Improper seating can cause problems. Please consult a physical therapist or doctor for additional guidance.

### Seat Back Height



Seat back height varies according to chair type and seat width. Headrest extensions are available when extra height is needed to support the head. To determine the seat back height, measure the distance from the seat to the top of the shoulder or the upper part of the head. Fig.22

Fig. 22

### Seat Width

Seat width



Proper seat width enables the user to sit comfortably and prevents problems from developing. While user is seated on a flat surface, measure the distance from hip to hip. Fig.23  
The user should have enough room to prevent hips and thighs from rubbing against the frame. However, the chair should not be too wide or the user will slide around and posture could be affected. The seat width measurement for the Cruiser is taken from the inside of the arm rest tubes. Fig.23

Fig. 23

## Seat Depth

---

Measure the distance from the most posterior portion of the buttocks to the back of the knee. Subtract from that measurement 1-2" (25-51mm) to allow adequate clearance between the seat and the back of the knee. Fig.24



Fig. 24

### To change seat depth:

1. Partially fold the chair to relieve fabric tension. Undo the Velcro® back panel of the two-piece seat.
2. Grasp end of seat tube, press spring button and move seat tube until spring button relocates into the desired hole.
3. Repeat for other side of seat.



Fig. 25

## Seat Depth Tube Replacement

---

1. To change seat tubes or remove the seat tubes, press spring button. To install new seat tubes, press spring button and release when desired setting is achieved Repeat for opposite side. Fig.26,27
2. Reinstall fabric. Repeat for opposite side.

**Note:** For Cruiser Planar model, skip step 2.



Fig. 26



Fig. 27

## Attaching Support Strap for Seat Extension Tubes

1. Remove Seat Upholstery. Fig.28,29
2. Change and Install Seat Depth Tubes. Fig.30
3. Press spring button and move Seat Depth Tube to desire setting. Fig.30
4. Install Support Strap. Note: Make sure rough, shiny side of strap is facing out. Fig.31-34
5. Install Seat Upholstery. Fig.35



Fig. 28



Fig. 29



Fig. 30



Fig. 31



Fig. 32



Fig. 33



Fig. 34



Fig. 35

FOR TEXTILENE UPHOLSTERY: Only Applicable to: CX 14-18

Make sure the seat depth tube inserts into the black web loop located on the inside corner of the textilene upholstery. Fig.36-38



Fig. 36



Fig. 37



Fig. 38

## Two-Piece Seat

The lower seat panel is attached to the back panel with Velcro®. It is used to take up slack in the seat panel after seat depth adjustments have been made. Fig. 39

<p>Excessive Velcro® overlap lifts seat fabric and pushes hips forward, creating poor posture and reducing effective seat depth. Fig.39</p>	<p>Wrong</p>	<p>Correct Velcro® adjustment provides room for hips, and makes greater use of seat depth.</p>	<p>Correct</p>
---	--------------	--	----------------

# Wheels

## Quick Release Wheels

---

### TIRE REMOVAL

1. To remove, press down and hold the Rear Wheel Locking Pin. Grasp wheel and pull. Fig.40,41
2. No tools are required to remove tire. Fig. 42



Fig. 40



Fig. 41



Fig. 42

**! WARNING:** Ensure the wheels are installed properly. You will hear a “click” when wheel locks into place.

### TIRE INSTALLATION

Slide wheel onto rear axle and push with ball of hand until it clicks into place.



Fig. 43



Fig. 44

## Anti-Shimmy Adjustment

---

If the front wheels develop a shimmy, use a wrench to tighten the stem nut. Adjust the stem nut clockwise until the shimmy disappears. Fig. 45



Fig. 45

## Locking and Unlocking

Convaid manufactures two types of wheel locks: hand operated and foot operated. Check to see which type of wheel locks is on your chair.

**WARNING:** Proper care and maintenance must be taken to ensure proper function of the foot operated brakes.

**WARNING:** When operating the wheel lock, do not use excessive force to engage the locks with your foot. Only light pressure is needed to fully engage the locks.

**WARNING:** Teflon spray should be applied to brake components weekly to ensure proper operations.

**WARNING:** Excessive force or poor maintenance will cause premature failure for foot operated brakes.

### Foot Operated Wheel Locks

#### To Release Lock:

Lift upward on wheel lock.  
Fig.46



Fig. 46

#### To Lock:

Press downward on wheel lock Fig.47

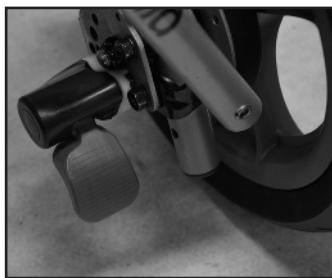


Fig. 47

## For All Cruiser Size 18 and Cruisers with Scout Option

### Toggle Wheel Locks

**To Release Lock:**

Pull up on red handle. Fig.48



Fig. 48

**To Lock:**

Pull down on red handle. Fig.49



Fig. 49



Fig. 50



**WARNING:** Be careful not to get your fingers caught

### Attendant Hand Brake

---

Handbrakes help to maintain control of the chair when going down an incline. A moderate squeeze to the lever will slow the chair; a firm squeeze will stop the chair.

Fig.51



Fig. 51

# Operating Instructions

## Three-Point Positioning Belt

The three-point positioning belt is optional with every Convaid chair. Adjust the belt so the user stays securely in position. The quick-release buckle is attached to the crotch strap, and joins the crotch strap to both belts.

### To Buckle:

Slide the metal clasps on the belt strap into the sides of the buckle. Fig.52

### To Release:

Press the grey button on the buckle and pull out the clasps. Fig.52



Fig. 52

**WARNING:** Be careful not to get your fingers caught with the clasps or hooks. Fig.53

**WARNING:** Always secure user with belt first, before making any other adjustments.

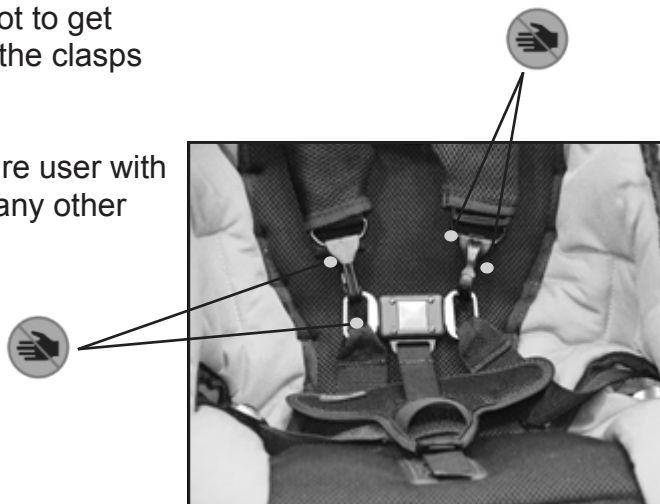


Fig. 53

## Depth Adjustable Crotch Strap

The crotch strap can be adjusted by threading the strap through the desired slot. Fig.54



Fig. 54

## H-Harness with Padded Covers

H-harness shoulder straps help the user retain upright trunk position. To adjust, insert the bolt at the end of the strap through the grommet hole in the seat back. Grommet choice should be level with or higher than the top of the shoulders. Choose a hole that will keep the user secure without the strap rubbing against the face or neck.

Secure the strap with the threaded knob. Fig.55,56



Fig. 55

Shoulder pads for the H-harness are standard. The pads come equipped with a snap buckle for easy attachment. Fig.58



Fig. 56



**WARNING:** Keep fingers away from the adjustment holes.



Fig. 57



Fig. 58



## Seat Back Angle Adjustment

Cruiser seat back angle can be adjusted in 5 degrees increments from 85~95 degrees relative to the seat base angle. These adjustments can be performed without hand tools by following the directions below. Fig.59

**! WARNING:** Check knob regularly to ensure tightness as it may come loose during use.

**! WARNING:** Remove user prior to adjusting the seat back angle

1. Turn knob on inner seat back tube counter-clockwise to fully remove from J-bolt. Fig.60
2. Keep track of the all hardware position (coved washers, Seatbelt brackets and closure straps) for re-assembly.Fig.60
3. Remove J-bolt from seat tube and catch all hardware that may fall out in the process.
4. Install J-bolt into desire seat back angle position with proper hardware. Fig.61,63
5. Reinstall all hardware (coved washers, seatbelt brackets and closure straps) to proper position. Fig.60
6. Insert the head of J-bolts into unused remaining holes to lock bolt in place. Fig.61,63
7. Reinstall knob and apply blue Loctite onto the treads of the J-bolt and hand tighten knob. Fig.62
8. Repeat same steps above for the other seat back tube and both seat back tubes must be set to the same angle.

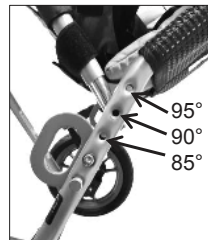


Fig. 59

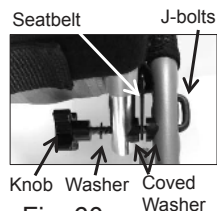


Fig. 60

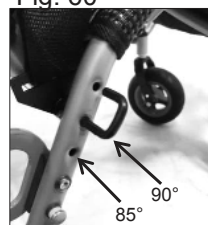


Fig. 61



Fig. 62

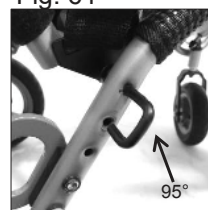


Fig. 63

## **CX-18 Seat Back Angle Adjustment**

---

1. Turn knob on inner seat back tube counter-clockwise to fully remove from J-bolt.
2. Remove J-bolt from seat tube and catch all hardware that may fall out in the process.
3. Install J-bolt into desire seat back angle position with proper hardware. Fig. 64
4. Leave the J-bolt head hanging downwards outside of the tube. Fig 64
5. Reinstall knob and apply blue Loctite onto the treads of the J-bolt and hand tighten knob.



Fig. 64

## Footplate Height Adjustment

Seat-to-footplate height is measured from the back of the knee to the bottom of the heel. Feet or heels should rest comfortably on top of footplate. Fig. 65

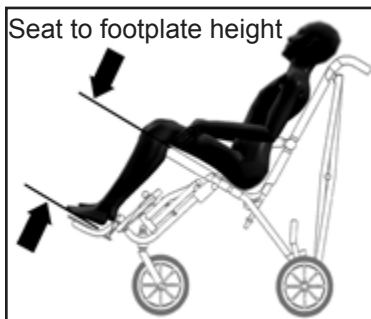


Fig. 65

All Convaid footplates are height adjustable. Footplates swing away for access or folding.



Fig. 66

Pull on ring to remove detent pin holding footplate in place. Move footplate up or down, realign holes and install detent pin through holes in tube. Fig.66

### Additional Footplate Height Adjustment

In the event that the footplate minimum height adjustment described above is inadequate, additional adjustments can be made.

1. Pull out detent pin and remove the footplate extension tube from the frame. Fig.67
2. Press the spring button, then pull the foot plate assembly apart. Fig.68
3. Insert the footplate into the opposite end of the footplate extension and reassemble. Fig.69
4. Using an Allen wrench (included), remove both bolts from the housing bracket on the frame. Flip the bracket upside down and replace bolts. Fig.70,71
5. Return the footplate extension tube to the housing bracket and secure with detent pin. Fig.72



Fig. 67



Fig. 68



Fig. 69



Fig. 70



Fig. 71



Fig. 72



**WARNING:** Keep fingers away from adjustment holes

Fig. 73

## Angle Adjustable Footplates

---

Angle adjustable footplates can be moved fore and aft, sideways, and rotated vertically and horizontally. To adjust the angle, loosen the bolts on the footplate and move to desired position. Retighten the bolts. Fig.74-79



Fig. 74



Fig. 75



Fig. 76



**WARNING:** Keep fingers away from slots.



Fig. 77



Fig. 78



Fig. 79

## Foot Positioners

Foot Positioners may be crisscrossed over the foot to secure the whole foot Fig.80 or can be converted into simple ankle straps. To attach foot positioner, thread strap through footplate as shown in Fig.81,82, then bolt strap to underside of footplate.



Fig. 80



Fig. 81



Fig. 82

## Footplate Securement Strap

The securement strap holds individual footplates together to prevent them from flipping up and down. To secure the footplates, buckle the left and right strap together. Fig.83



Fig. 83

## Footplate Depth Adjustment

All Cruiser chairs offer adjustable footplate depth. Use the Allen wrench to loosen the two bolts located on the top of the footplate. Slide footplate forward or rearward to desired depth. Retighten bolts. Fig.84



Fig. 84

## Caster Locks

Caster locks hold the swivel wheels in a forward facing position to prevent the wheels from turning side to side. (For 2"/50mm wide tires only) Fig. 85



Fig. 85

## Calf Panel

1. Lay Calf Panel flat and unfasten the Velcro straps. Fig.86
2. Attach Velcro straps a round Footrest Extension Tube.
3. Position Calf Panel across chair and attach Velcro Straps around opposite Footrest Extension Tube. Fig.87,88



Fig. 86



Fig. 87



Fig. 88

## Anatomic Back Support Frame

The anatomic back support frame stabilizes the neck and head in a functional position to assist the development of neck and head righting reflexes.

The anatomic back frame is optional from the factory and must be ordered with the chair.

Remove the adjustable stiffeners located inside the fabric seat back to custom form to the desire contour with a heat gun. Fig.89



Fig. 89

## Additional Accessories

Convaid offers a wide variety of accessories to help properly position the user.

**Note:** Convaid's chairs provide a semi-contour fit around the body. The user must be fitted correctly into the chair to achieve optimal posture and comfort.

### Swing-Away Lateral Support with Scoliosis Strap

#### Single Flap

Adjustable trunk support stabilizes the trunk and maintains mid-line positioning. It can be pulled to one side for scoliosis correction if used with scoliosis strap. Scoliosis strap comes standard with all trunk supports. Fig. 90



Fig. 90



Fig. 91

The trunk support is attached to the chair with straps that wrap behind the seat back and connect with Velcro®. Fig.91

Support is achieved by pulling each triangular flap toward the appropriate side, then securing it by wrapping the strap around the frame and attaching with Velcro®. The two flaps can also be wrapped around the child's torso and joined in the middle.

#### Double Flap

One set of triangular flaps locates the midline positioning. The second set of flaps wrap around the trunk for stabilization. The scoliosis strap can be used to pull the torso to either side. Fig.92

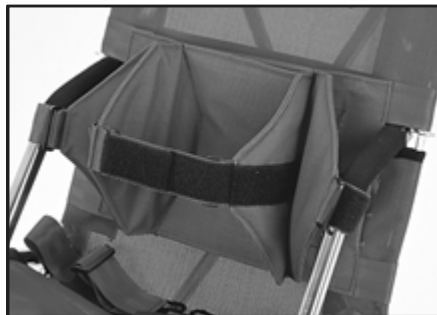


Fig. 92

## Attaching Lateral Trunk Support Single Flap

1. Attach the Lateral Trunk Support to the chair by wrapping the two rear straps around the back of the chair and securing with Velcro®.
2. Attach the single flap, by wrapping the strap on the left flap around the side tubing of the frame, and securing with Velcro® (repeat steps on opposite side) Fig.93
3. Thread the scoliosis strap through the plastic loop on the left flap, back through the plastic loop on the opposite end of the strap, and pull tight. Fig.94,95,96
4. Bring the scoliosis strap across the chest, thread it through the plastic loop on opposite flap, and fasten with Velcro®. Fig.97

**Note:** The Lateral Trunk Support - Single Flap can be used to support either the left or right side of the trunk.

5. To support the right side of the trunk, attach the support to the chair with the double-sided Velcro® strap on the left side. Detach the strap on the right flap from the tubing, and tighten scoliosis strap until desired trunk positioning is obtained. Fig.98,99
6. To support the left side of the trunk, attach the support to the chair with the double-sided Velcro® strap on the right side. Detach the strap on the left flap from the tubing, and tighten scoliosis strap until desired trunk positioning is obtained. Fig.100,101,102



Fig. 93



Fig. 94



Fig. 95



Fig. 96



Fig. 97



Fig. 98



Fig. 99



Fig. 100



Fig. 101



Fig. 102



## Attaching Lateral Trunk Support Double Flap

The Double Flap Lateral Trunk Support brings the trunk to midline position.

- The Inner flaps mobilize the trunk.
  - The Outer flaps centralize the trunk and keep the arms in the front of the chair.
  - The Scoliosis strap aligns the spine.
1. Attach the Lateral Trunk Support to the chair by wrapping the two rear straps around the back of the chair and securing with Velcro®. Fig.103
  2. To attach the double flap, wrap the strap on the left-hand outer flap around the side tubing of the frame and secure with Velcro®. Fig.104
  3. Thread the strap on the left-hand inner flap into the plastic loop on the outer flap working from front to back. Fig.105
  4. Adjust and secure strap. (Repeat steps 3 and 4 on right-hand flap.) Fig.106
  5. Bring the long scoliosis strap through the plastic loop on the inner flap on the right-hand side and across the chest. Fig.107
  6. Thread the strap through the plastic loop on the inner flap on the left-hand side. Fig.108
  7. Fasten the strap with Velcro®. Fig.109
  8. If additional tightness is desired, pull the scoliosis strap further and Velcro® it beyond the inner flap.

**Note:** The Lateral Trunk Support-Double Flap can be used to support either the left or side of the trunk right.

To support the right side of the trunk, attach the Support to the chair with the double-sided

Velcro® strap on the right. Fig.110

To support the left side of the trunk, attach the Support to the chair with the double-sided Velcro® strap on the left. Fig.111



Fig. 103



Fig. 104



Fig. 105



Fig. 106



Fig. 107



Fig. 108



Fig. 109



Fig. 110



Fig. 111

## **Full Torso Swing-Away Support Vest**

An adjustable support vest keeps the user in place comfortably and securely. It helps to maintain midline seating position and prevents forward slumping. The vest is attached to the chair with straps that wrap around the seat back and connect with Velcro®, and shoulder straps that screw into the seat back. Adjust the side straps for proper fit. Fig.112



Fig. 112

## **Lateral Thigh Support (Adductor)**

Pulls thighs together, improving hip alignment and stabilizing seating position. The degree of adduction can be varied and can favor one side. Fold the adductor flaps over the thighs, wrap the straps under and around the arm rest tube and attach with buckle. Fig.113 The adductor is attached with screws at the end of the seat tubes.



Fig. 113

## Medial Thigh Support (Abductor)

Separates the thighs to improve hip alignment and stabilize sitting posture. Degree of abduction can be varied and can favor one side. The abductor flaps wrap over the user's thighs from the inside to the outside. The straps buckle around the seat tube or the arm rest. They can also be wrapped around the arm rest tube twice for high tone children. Fig.114 The abductor is attached with screws at the end of the seat tubes.



Fig. 114

## Padded Headwings

Adjustable padded head-wings provide soft foam support for midline positioning. Fig.115 The padded head-wings can be attached at any height by wrapping the Velcro® straps around the frame and attaching at the back of the chair. Secure head-wings by tying laces through the grommet holes in the back of the seat fabric or headrest extension. Fig.116



Fig. 115



Fig. 116

## Headrest Extension

---

### To Install

Insert Headrest Extension Tubes into the Headrest Holding Brackets and push down.  
Fig.117-119

Cordura Upholstery. Fig.117-119

Textilene Upholstery. Fig. 120-121



Fig. 117



Fig. 118



Fig. 119



Fig. 120



Fig. 121

## Occi Headwing

---

Occi Head-wing supports and positions the head at the occipital area. This headrest provides added comfort, allows side to side head movement without obstruction, and does not block the individual's ears and line of vision.

The Occi Head-wing can be attached at any height. Secure Head wing by tying laces through the grommet holes at the back of the seat fabric or headrest extension. Fig.121



Fig. 122

## 5-Point Harness

### ADJUSTING THE STRAPS

1. Release the Rear Lock Brace by lifting up on the center of brace. Fig.123
2. Press in the silver snap button on the Rear Lock Brace Fig.124 then pull the lock brace off of
3. the housing. Fig.125
4. Pull shoulder strap through the upholstery, reposition to the desired height, and reinsert it back through the seat upholstery Fig.126. Slide the shoulder harness loop on to the Rear Lock Brace Fig.127.
5. Reinsert the Lock Brace onto the housing by pushing it with the palm of your hand. Fig.128,129
6. Lock the Rear Lock Brace by pressing down on the Rear Lock Brace. Fig.130

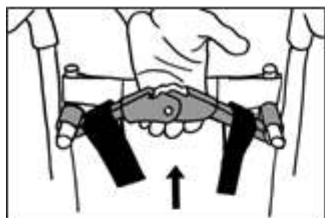


Fig. 123

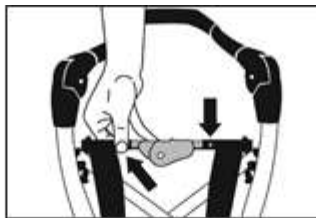


Fig. 124



Fig. 125



Fig. 126



Fig. 127



Fig. 128

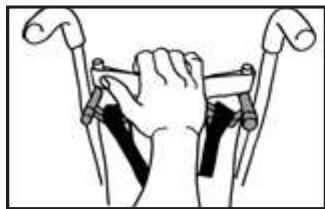


Fig. 129

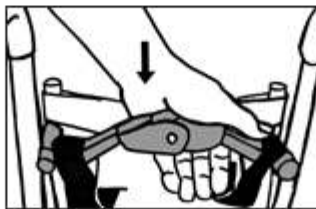


Fig. 130

## Adjusting the Pelvic Belt Strap

---

### To Tighten:

Tighten the pelvic belt straps by pulling on the loop located at the end of the strap. Fig.131

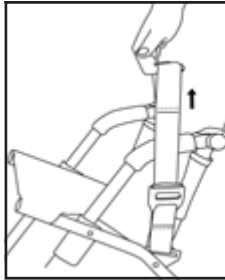


Fig. 131

### To Loosen:

Loosen the pelvic belt strap by pushing the gray button on the Strap Adjustment. Lock and pulling on the end of the strap closest to the buckle. Fig.132

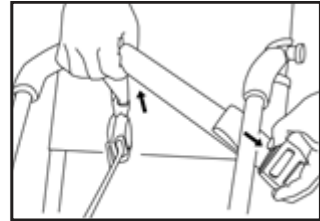


Fig. 132

## Adjusting the Crotch Strap

---

### To Tighten:

Tighten the Crotch Strap by pulling on the loop located at the end of the strap. Fig.133

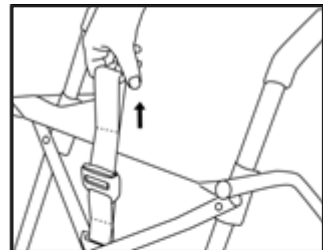


Fig. 133

### To Loosen:

Loosen the Crotch Strap by pushing the gray button on the Strap Adjustment Lock and pulling. Fig.134

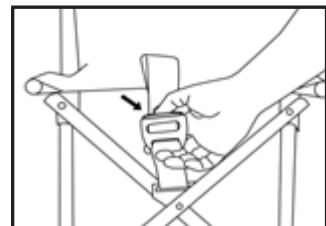


Fig. 134

## Seat Cushions

### Support:

#### General Use Cushion

Flat foam with wooden insert Fig.135

Promotes stability and posture control and provides comfort for the user.

Water-fall front eliminates pressure points at the back of the knees.



Fig. 135

### Position:

#### Medial Thigh Support and Anti-Thrust Cushion

Contoured foam with wooden insert Fig.136

Medial thigh support helps position the legs out of adduction and into better alignment, which can provide for improved weight-bearing balance and stability.

When used with a lap belt, the 1" (25mm) anti-thrust shelf in front of the ischials helps eliminate sliding or thrusting forward of the pelvis. This provides improved stability and reduces sacral sitting.



Fig. 136

### Align:

#### Lateral Pelvis and Lateral Thigh Support Cushion

Contoured foam with wooden insert Fig.137

Contoured edges provide lateral, pelvic and thigh positioning to reduce lateral movement of the pelvis and improve lower extremity stability.

Increased surface contact for better weight distribution.



Fig. 137

## Fitting

---

The fitting of the cushion should be done by a physician. When fitted correctly, the cushion will help provide stable support and promote good posture. Consult your physician for questions regarding individual needs.

Select the cushion size to match the seat width and depth of the chair. Measure the distance between the back of the buttocks and the back of the knees. Subtract 1-2" (25-51mm) to allow for adequate clearance between the seat and the back of the knees.

1. Apply wheel locks. Never leave occupied chair unattended.
2. To install the Seat Cushion (and Back) follow the detailed instructions found on page 50 in this User Guide.
3. Adjust the wheelchair footrest height so that the user's legs rest firmly but comfortably on the cushion. Proper footrest adjustment will enhance sitting comfort and help lower peak sitting pressures. If applicable, readjust arm rest height and lateral trunk supports.

## Caution

---

The height and weight of the occupant, in conjunction with a seat cushion, may affect the center of gravity and cause the wheelchair to become unstable, potentially resulting in injury. Prior to use, assess the stability of the wheelchair by sitting in it with the cushion attached.

Changes in the user's condition or growth, weight or changes in wheelchair equipment or accessories may require reassessment by a physician to ensure proper cushion fit and suitability. Skin should be constantly checked by the user's caregiver for any signs of reddened areas or skin sensitivity. These areas should be brought to the attention your physician. The physician should also assist you with assessing the cushion for any possible areas that have bottomed out.



# Accessories

## Upper Extremity Support Surface (Tray)

### ATTACHING THE TRAY

1. Raise front of the tray with the tray supports completely unfolded. Fig.137
2. Engage knobs on side of chair with tray hooks underneath. Fig.138
3. Lower tray until supports are positioned over the outside of the front legs. Fig.139

**NOTE:** For Scout option, raise arm rest before engaging knobs.



Fig. 137



Fig. 138



Fig. 139

## Saddle Bags

### To Install

1. Insert Front Button Strap into opening in Mesh Seat Bottom and over Seat Tube. Fig.140
2. Verify the strap is in front of the Seat Tube Retaining Bolt, then snap button shut. Fig.141
3. Wrap Rear Button Strap around Seat Tube and snap shut. Fig.142-143



Fig. 140



Fig. 141



Fig. 142



Fig. 143

## Under Seat Storage Basket

1. Connect Center Button Strap by looping it over Rear Cross Brace and snapping button to back of basket. Fig.144
2. Loop Side Button Strap over Chair Tubing (just above the Rear Axle Assembly), and snap button shut. Repeat for opposite side. Fig.145
3. Loop Front Button Strap over Chair Tubing (just above Front Cross Brace Mount), and snap button shut. Fig.146-148



Fig. 144



Fig. 145



Fig. 146



Fig. 147



Fig. 148

## Headrest Cover (Canopy)

### ATTACHING CANOPY

1. Remove Canopy from box. Fig.149
2. Align Canopy Retaining Clips with upper tubing on back of the chair. Fig.150 Push on clips with the palm of your hand until the canopy frame snaps into place. Fig.151
3. To open, grasp top of Canopy and push forward and rotate downward. Fig. 152-154
4. To close the Rear Flap of Canopy, attach the Velcro strap to Velcro receiving patch on the edge of the Canopy Hood. Fig.155
5. To fold, repeat above steps in reverse order. Fig.156



Fig. 149



Fig. 150



**WARNING:** Keep fingers away from moving parts.



**WARNING:** To prevent breakage of canopy clips, always carefully follow the instructions and avoid twisting when attaching or removing the canopy.



Fig. 151



Fig. 152



Fig. 153



Fig. 154



Fig. 155



Fig. 156

## Heavy-Duty Reinforced Upholstery

---

Heavy-duty, reinforced, padded seat and seat back come with pockets which have removable plastic stiffeners. Use when extra firmness is required. Stiffeners easily lift out of pockets for custom-forming with a heat gun. Fig.157



Fig. 157

## Reducer Seat Insert

---

The Reducer Seat Insert provides proper positioning in an oversized wheelchair. This cushion easily slips into the seat of the chair to reduce the seat width 2" (51mm) and the seat depth 1" (25mm). The ribbed surface provides comfort and promotes airflow. Fig.158



Fig. 158

## Rear Anti-Tip Tubes

---

1. To install the anti-tip tube, align the tube with the end of the round frame tubing located next to the rear wheel. Fig.159
2. Push the spring button while positioning the anti-tip tube onto the round frame tubing Fig.160, and push until the "release button" pops through the hole located on the anti-tip tube. Fig.161
3. Repeat steps 1 & 2 for opposite side.
4. To remove the Anti-Tip Tubes, perform above steps in reverse order.


 **WARNING:** If the user's weight is less than 50 lbs (22.7 kg), the use of anti-tip tubes is recommended.



Fig. 159



Fig. 160



Fig. 161

## Utility Bag

The Utility Bag attaches to the back of the chair, but can be removed and converted to a tote bag. Fig.163,164

### To attach:

Hook clasps onto straps.

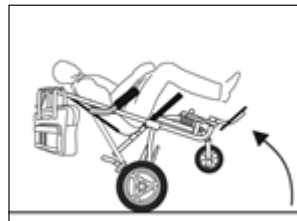


Fig. 162

**!** **WARNING:** Do not overload bag. Fig.162



Fig. 163



Fig. 164

## Transit Models

---

The optional wheelchair transport model has been crash tested and performed satisfactorily at 30 mph/20g deceleration. The optional models conform to RESNA WC-19 or ISO 7176-19 standards. Dummy weights are:

### All Cruiser Models

- Model CX10T.....66lbs / 30kg
- Model CX12T.....66lbs / 30kg
- Model CX14T.....100lbs / 45.5kg
- Model CX16T.....170lbs / 77kg
- Model CX18T.....170lbs / 77kg



Fig. 165

To reduce possibility of injury, the headrest extension must always be used with the chair. The following instructions should be followed to minimize impact in case of a crash:

1. During transit, the chair must be forward facing with tray and storage basket removed.
2. Use only a tested, proven and compatible 4-point wheelchair tie-down system (WTORS), and a 3-point occupant restraint system in accordance with SAE J2249.
3. The wheelchair tie-downs must be securely attached to the four red anchor points on the chair. See arrows in above photo for anchor points.
4. The occupant restraints must include a lap and a shoulder bet, secured directly to the Cruiser frame and side of roof of vehicle.
5. All floor tie-down straps must be drawn tight in the front and the back to eliminate any forward/ aft movement of the chair.
6. Wheelchair restraint manufacturers' instructions must be followed precisely to ensure intended performance.

**Note:** Tray, storage basket and other accessories must be removed during transport in bus or van, except when medically necessary.

**Note:** Do not over tighten. This may cause damage to the frame.


**Wheelchair Lateral Stability and Belt Restraint Accommodations Ratings**

Wheelchair Model	Mass (Weight) of Wheelchair (lbs./kg)	Test Rating	Lateral Stability** (in./mm)
CX-10T	27/12	Acceptable	0.25/6.4
CX-12T	27/12	Acceptable	0.35/8.9
CX-14T	28/13	Acceptable	1.18/30.0
CX-16T	32/14.5	Acceptable	1.97/50.0
CX-18T	30/13.6	Acceptable	1.57/39.9


\*\* "Lateral stability" is the displacement of point P (the center of gravity on the loaded wheelchair) when a platform with the loaded wheelchair is tilted 45° laterally from the horizontal. Higher numbers indicate less stability. This table refers to tests performed in accordance with WC-19 to establish lateral stability during normal travel and the ease of use and proper fit of vehicle-anchored belt restraints. The letter designation reflects the overall rating of the lap and shoulder belt positioning and installation.


**Transportation Mode Instructions**

The OPTIONAL Transit Version Cruiser can transport users in motor vehicles that are compatible with Occupant Restraint Systems (WTORS). The chair MUST be secured in a forward-facing position with a Wheelchair Tie-down and Occupant Restraint Systems (WTORS), which meets the requirements of WC-4 or ISO 7176:

 **WARNING:** The wheelchair should be used as indicated in the User's Guide instructions accompanying the wheelchair. Failure to do so increases the likelihood of serious injury in a vehicle crash.

 **WARNING:** Do not attach tie downs anywhere except designated tie down locations.

 **WARNING:** During transit, chair must be forward facing with the seating module in the forward facing position on the mobility base. All accessories should be removed.

 **WARNING:** Do not alter or substitute any part or component of the wheelchair, wheelchair frame or wheelchair seating system.



**WARNING:** Cruiser was dynamically crash tested in a forward-facing configuration using an appropriately sized crash-test dummy restrained by both upper-torso (shoulder) and lower-torso (lap) belts. To reduce the possibility of head and chest injuries resulting from contact with vehicle components, you must use both upper and lower torso belts.



**WARNING:** During transit, a five-point harness should be used for occupant weight less than 51lb (23kg).



**WARNING:** Both pelvic and torso restraint belts must be used while traveling aboard a motor vehicle.



**WARNING:** When riding aboard a motor vehicle, it is preferred that the wheelchair user transfer into the vehicle's manufacturer's seat and use a federally approved, crash-tested seat.



**WARNING:** Whenever possible, auxiliary wheelchair equipment should be removed from the wheelchair and secured in the vehicle during transit so that it does not break free and cause injury to vehicle occupants during a crash.



**WARNING:** Do not use the chair if it has been involved in a crash. In the event that your Cruiser is involved in a crash, please contact the Convaid Service Dealer or Convaid Customer Service Representative in order to arrange an evaluation of your Cruiser. For information on how to contact your representative please see page 66.



**WARNING:** CX-18 exceeded the maximum recommendation width. Use caution when entering/exiting small space.



**WARNING:** Adequate clear zones are required for occupants restrained by both upper-and lower-torso belt restraints. (See Figs.166,167)



## RECOMMENDED CLEAR ZONES IN VEHICLE

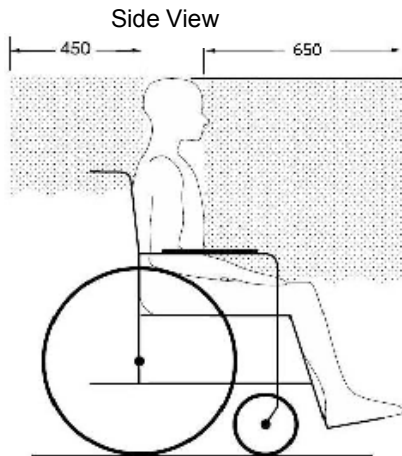


Fig. 166

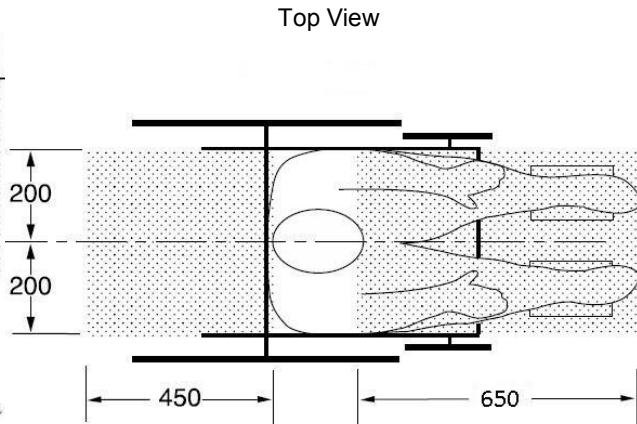


Fig. 167

The rear clear zone is measured from the rearmost point on an occupant's head. The front clear zone is measured from the frontmost point on an occupant's head.

Dimensions are shown in millimeters.






## Providing Clear Space & Padding

Position the wheelchair aboard the motor vehicle to ensure sufficient clear space in front of, and behind, the occupant. (See Figs. 166 & 167)



**WARNING:** If there are any hard or sharp objects or components near the wheelchair, such as components of lifts or fold-up seats, they must be covered with heavy-duty energy-absorbing padding to ensure the safety of the wheelchair occupant and other passengers.

## Cruiser Transit Anchor Installation

-  **WARNING:** Follow the instructions provided to securely install the transit anchors to your wheelchair.
-  **WARNING:** Only use high strength fasteners provided by Convaid to attach the transit anchors.
-  **WARNING:** The transit anchors are to be installed one time only using the hardware provided. Removal and reinstallation of the transit anchors will weaken the fitting of the hardware.
-  **WARNING:** Engage wheellock brakes before installing the transit anchors.
-  **WARNING:** For specific maximum transit weight capacity of your wheelchair, please see below:

- CX10 - 30 kg
- CX12 - 30 kg
- CX14 - 45.5 kg
- CX16 - 77 kg
- CX18 - 77 kg

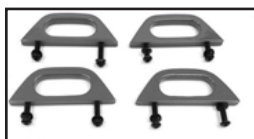


Fig. 174 Transit Anchors



Fig. 175

### Items Included in Kit:

1. 2 Front Transit Anchors
2. 2 Rear Transit Anchors
3. Attaching Hardware
4. 4 Transit Anchor Logo Stickers
5. 1 Transit Ready Serial Label Sticker

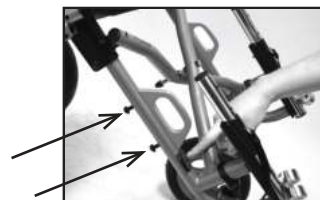


Fig. 176

### To Install Transit Anchors

1. Before attaching each transit anchor, apply Loctite adhesive to the end of each corresponding bolt.
2. Attach 2 transit anchors to the front left and right sides of the frame. Fig 175
3. Secure the hardware using a 5/32" Allen wrench and tighten the bolt to 47in-lb, 5.3 N•m. Fig. 176
4. Attach 2 transit anchors to the rear left and right side of frame. Fig. 177, Fig. 178



Fig. 177



Fig. 178

**⚠ WARNING:** Specialized hardware is designed for one time use only. Reinstalling will weaken the fittings of the hardware.

**Anchor Logo Sticker**

Place anchor hook sticker labels to the frame and the seating module. Fig. 179

**Serial Label Sticker**

Place the transit ready sticker over the non-transit hook symbol on the serial label sticker. Fig. 180



Fig. 179

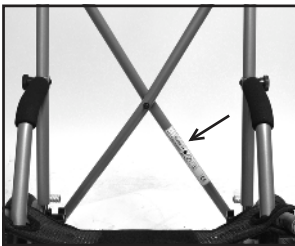


Fig. 180



Fig. 181



Fig. 182

**PROPER USE OF EQUIPMENT**

Securing the Wheelchair

Attach tiedown straps to securement points (red brackets) located on the wheelchair's legs in accordance with the WTORS manufacturer's instructions. Securement points are identified by the symbol in Fig. 170. and their location on the wheelchair illustrated in Fig. 168



Fig. 168

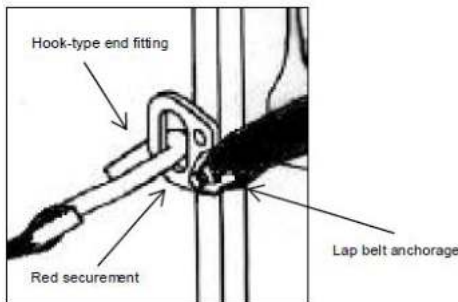


Fig. 169



Fig. 170

When securing the occupied wheelchair, it is important that the WTORS anchor points on the floor and wall of the motor vehicle are positioned properly according to the WTORS manufacturer's instructions. The wheelchair must be positioned facing forward inside the vehicle. Position the wheelchair between the front and rear tiedown anchor points, allowing for the correct angle of adjustment of the tiedown straps, as illustrated in Fig. 169.

Your Convaid transit wheelchair can be easily secured by four-point strap- type tiedowns by attaching the hook end fittings of the tiedown straps to the four red securement-point brackets located on the four tubular legs of the wheelchair or by threading tiedown straps through the openings in the securement points.

The floor anchor points and wheelchair should be located:

- So that the tie-down straps follow a straight, clear path from the wheelchair securement points to the floor anchor points and
- So that the front straps are angled outward from the sides of the wheelchair (see Fig.171) and
- So that the rear straps are anchored straight back from the wheelchair securement points

Once all four tie-down straps are attached to the wheelchair:

- Inspect all tie-down straps for signs of wear to the webbing and replace any straps that are worn and
- Tighten the straps to remove any excess slack and provide tension between the front and rear tie-down strap

PREFERRED LOCATIONS OF FLOOR ANCHOR POINTS

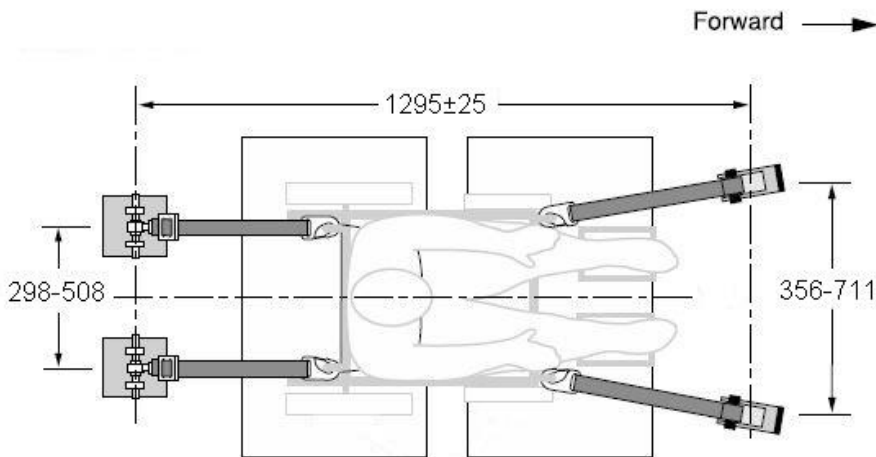


Fig.171 Dimensions are in millimeters

FIG. 172: FRONT TIEDOWN STRAPS ANGLED AWAY FROM SIDES OF WHEELCHAIR.

FIG. 173: CORRECT POSITIONS OF SHOULDER AND LAP BELT RESTRAINTS AND WHEELCHAIR TIEDOWNS.

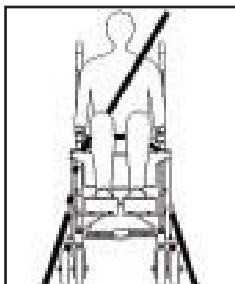


Fig. 172



Fig. 173

STANDARD METAL CLIP (FIG.183) AT LOWER END OF SHOULDER BELT AND AT END OF OPTIONAL WHEELCHAIR-ANCHORED LAP BELT USED TO CONNECT TO PIN/BUSHING (FIG.184) ON LAP BELT OR ON WHEELCHAIR SECUREMENT POINT BRACKETS.

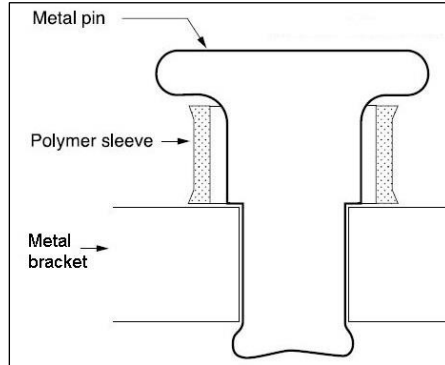
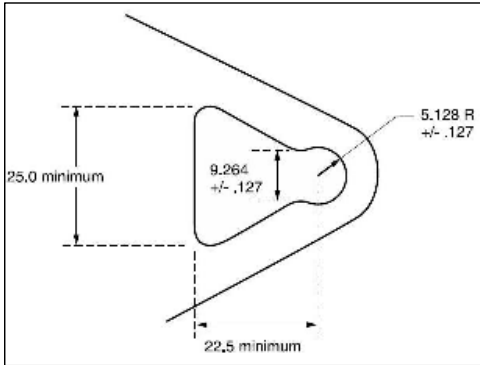


Fig.183 Dimensions are shown in millimeters Fig.184

## Restraining the Wheelchair Occupant

---

Your Convaid transit wheelchair was dynamically crash tested in a forward-facing configuration using an appropriately sized crash-test dummy restrained by both upper-torso (shoulder) and lower-torso (lap) belts. To reduce the possibility of head and chest injuries resulting from contact with vehicle components, you must use both upper and lower torso belts. (See Figs.172,173)

Your Convaid transit wheelchair provides for the use of an optional wheelchair-anchored lap belt. The optional belt, which has been dynamically tested in accordance with Annex A of WC19, may be ordered from Convaid at a nominal additional cost. To attach the lap belt to the wheelchair, secure the metal clips at the ends of the lap belt. to the pin/bushing connectors located on the wheelchair's rear securement-point brackets.

Before loading the wheelchair onto the vehicle lift, fasten the lap belt over the wheelchair user's pelvis. The wheelchair user should wear the optional lap belt as low over the pelvis and as snugly as possible without compromising comfort. The vehicle-anchored shoulder belt may then be clipped to the pin/bushing connector located on the lap belt near where it attaches to the chair. When not in use, the optional lap belt may be looped underneath the seat, buckled, and tightened.

If the wheelchair is purchased without the optional lap belt or if the wheelchair user elects not to use the belt, a vehicle-anchored lap and shoulder belt must be used. As with the wheelchair-anchored lap belt, it is very important to position the vehicle-anchored lap belt low over the pelvis so that the angle of the lap belt is within the preferred zone of 45° to 75° to the horizontal or the optional zone of 30° to 45° to the horizontal, as shown in Fig.185.

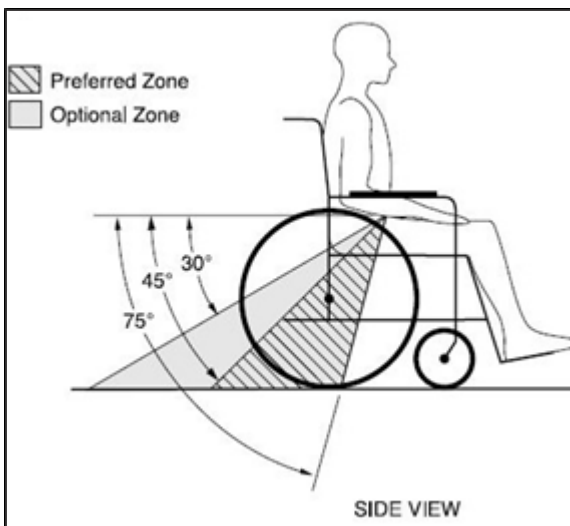


Fig. 185

**Note:** Steeper side view pelvic-belt angles are especially important if the pelvic belt is intended to be used for postural support in addition to occupant restraint in a frontal crash. Steeper angles will reduce the tendency for a vertical gap to develop between the user and the belt due to compliance of seat cushions and belt movement, thereby reducing the tendency for the user to slip under the belt for the belt to ride up on the soft abdomen during normal use.

**Note:** Steeper belt angles also reduce the tendency for upper-torso belts to pull the pelvic belt onto the abdomen during frontal impact loading.



Fig. 186

Be sure that the shoulder belt crosses the chest and the middle of one shoulder and that belt restraints are not held a way from the body by wheelchair components or parts, such as arm rests or wheelchair legs. (See Fig.186)

Thread the lap belt under the frame tubes located directly under the user's elbows and pull the belt snug against the pelvis.

Ensure that belt webbing is not twisted as this may compromise safety. It is best for Cruiser to be transported with the seat in a relatively upright orientation. However, if the seat must remain in a tilted position for medical reasons, the seat back should not be reclined more than 30 ° from the vertical. If it is necessary to recline the seat more than 30 °, move the shoulder belt anchor point rearward on the vehicle wall so that the shoulder belt remains in contact with the wheelchair user's shoulder and chest.

## **Using Postural Belts & Supports**

---

Positioning accessories such as pelvic positioning belts, anterior trunk supports, and lateral trunk supports may be used while in transit, but are not designed to provide restraint during a crash. Postural supports and belts should therefore not be relied on for restraint in a vehicle crash and should be used only in conjunction with lap and shoulder belts that have been designed for restraint in a motor vehicle and crash tested in accordance with RESNA WC-4-19 and/or ISO 7176-19.

## **Trays & Other Wheelchair Components**

---

To reduce the risk of potential injury to the wheelchair user or other occupants in a motor-vehicle crash, wheelchair-mounted accessories, such as trays and respiratory equipment, must be removed and secured separately during transit. Use tether straps or other strong attachment hardware to prevent items from breaking loose and causing injury during a crash. If it is absolutely necessary to keep a tray on the wheelchair during transit, energy-absorbing padding must be placed between the edge of the tray and the wheelchair user or serious injury may result during a crash.



## **WTORS Manufacturers**

---

Convaid is a wheelchair manufacturer and does not offer wheelchair tie-down and occupant restraint systems (WTORS). However, products that comply with current WTORS standards can be obtained from the following companies that specialize in crash-tested WTORS:

**Q'Straint, Sure-Lok, Unwin** and **Ortho Safe** specialize in crash-tested tie-down systems and are in no way associated with Convaid.

Ortho Safe Systems  
 P.O. Box 8865  
 Trenton, NJ 08650 U.S.A  
 (609) 587-9444

Q'Straint  
 5553 Ravenswood Rd.  
 #110 Ft. Lauderdale, FL  
 33312 U.S.A (954) 986-9987

Sure-Lok  
 2501 Baglyos Circle  
 Bethlehem, PA 18020  
 U.S.A (866) 787-3565

Unwin Safety Systems  
 Unwin House  
 The Horseshoe Coat Road,  
 Martock, TA12, 6EY U.K.  
 (44) (01935) 827740

## Miscellaneous

---

### Fabric Removal

Partially fold the chair to relieve fabric tension (see fold instructions on page 9). The lower seat panel is attached to the back panel with Velcro®. Remove Velcro® from the top of the seat bottom. Press spring button at the end of the seat extension, and take off upholstery. Fig.187,188

To remove the top portion of the seat, remove the Velcro® straps that attach the seat upholstery to the frame, and take off upholstery. Lift fabric off seat tubes and away from upper handles. The seat-reinforcing strap should remain on frame. Fig.188,189



Fig. 187



Fig. 188



Fig. 189

### Adjustable Tension Back

1. To adjust the Tension Back, unfasten the Velcro Straps and pull to desired firmness. Fig.190  
After adjustments are made, refasten Velcro straps. Repeat steps 1 and 2 on each set of straps. Fig.191,192



Fig. 190



Fig. 191



Fig. 192

## Full Torso Swing-Away Support Vest

An adjustable support vest keeps the user in place comfortably and securely. It helps maintain midline-seating position and prevents forward slumping. The vest is attached to the chair with straps that wrap around the seat back and connect with Velcro®, and shoulder straps that screw into the solid seat back. Adjust side straps for proper fit.

Fig. 193,194,195



Fig. 193



Fig. 194



Fig. 195

### Contoured Firm Headrest (Head-wings)

Adjust the headrest height by slightly loosening the knobs on the seat back, and raising or lowering the headrest. It can also be pivoted by changing the horizontal alignment of the knobs. Fig. 196

Note: All other positioning options and accessories are utilized on the planar seating system the same way as on the standard Cruiser. See front of User Guide for detailed information.



Fig. 196

# Scout Options

## Wheel Lock Adjustment

---

Set wheel locks to locked position. Push chair with light pressure on the rear wheels. If wheel rotates, adjust tension by turning the adjustment nut until wheels no longer rotate while locked. Fig.197



Fig. 197



Fig. 198

## Hand Brakes

---

Use riding brakes to maintain control of the wheelchair when going down an incline. A moderate squeeze to the two hand levers will slow the chair; a firm squeeze will stop the chair. Fig.199

When stationary, moving the handles to a full rearward position will stop the chair from moving. Fig.200

Note: Regular inspection is necessary to maintain the brake system.

Follow the instructions in the back of this User's Guide on how to adjust brakes when needed.



Fig. 199



Fig. 200

## Lever Adjustment

To increase brake pressure, turn adjusting nut (A) counter clockwise, then turn locknut (B) clockwise to secure nut (A) in position. Fig. 201

**Note:** Adjust when lever pressure is too high.

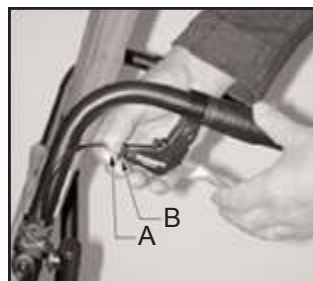


Fig. 201

## Inner Pad Adjustment

Turn nut clockwise to move pad closer to disk (wheel should spin and not grab). Fig.202



Fig. 202



Fig. 203

## Outer Pad Adjustment

Insert Allen wrench (2.5mm) into the screw, turn clockwise to move pad closer to disk (wheel should spin and not grab). Fig.203

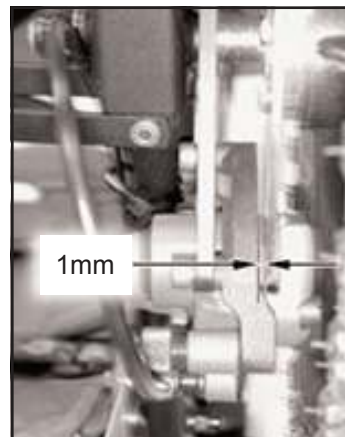


Fig. 204

## Brake Pad Wear

Brake pads should wear no thinner than 1mm before replacement. Fig.204

## Removal of Brake Pads

---

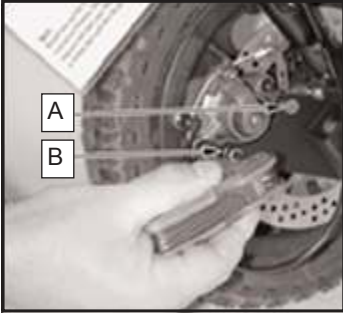


Fig. 205

Remove calipers from the axle brackets by unscrewing Hex bolts (A) & (B) with a 5mm wrench. Fig.205

Remove outer pad first by pulling tab downward. Fig.206

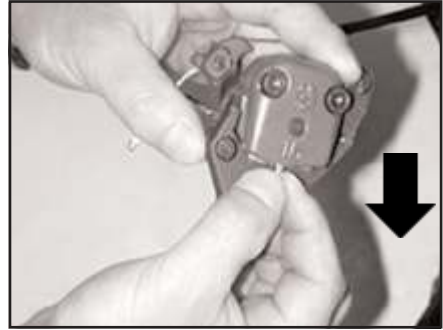


Fig. 206

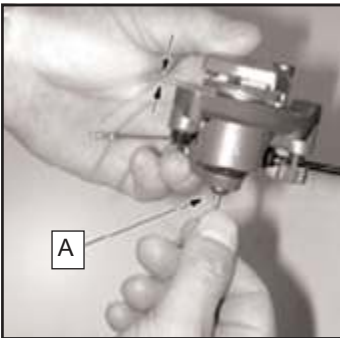


Fig. 207

To remove inner pad, insert a 2.5mm Allen wrench into screw (A) and turn clockwise until the back of the pad is clear of its housing. Fig.207

With a small screw driver, press the pad downward until it is clear of its housing. Fig.208  
 Remove the two springs from the old pad assembly Fig.209. Attach the two springs to the new pad assembly making certain that the hooks are properly seated over the two sheet metal steps. Fig.210

To install new pads, first insert inner pad as shown.



Fig. 208



Fig. 209



Fig. 210

**Note:** Spring should lightly clip onto the small post in the center of the piston and push inward.

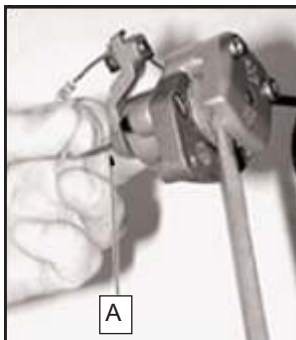


Fig. 212



Fig. 211

Using the 2.5mm Allen wrench inserted into (A), replace the pad into the housing. At the same time, turning counter-clockwise, insert a flat head screw-driver to push the pad. Fig.212

## CONVAID USER'S GUIDE

---

Install outer pad by dropping the spring side over the small post. Push upward until the spring clips lightly onto the post. Fig.213



Fig. 213

## Replacing Pads

---

Note: A brake system needs some time to break in. Initially, the rubbing of the pad on the disc may cause some noise.

Return calipers to the axle bracket using Hex bolts (A) & (B) and Allen wrench. Fig.214,215 Make sure Hex bolts are securely tightened. Test brakes for effectiveness. Brake levers should travel approximately 25mm.

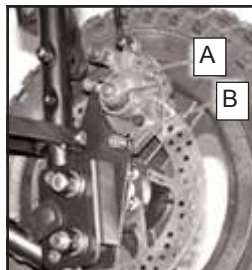


Fig. 214



Fig. 215

## Cleaning

---

To avoid damage to the brake seals, use only alcohol or water when cleaning the caliper part.



# Important Information

## Maintenance, Operating & Safety Instructions

- READ ALL INSTRUCTIONS BEFORE USING THE PRODUCT
- ALWAYS FOLLOW THESE SAFETY INSTRUCTIONS
- SAVE SAFETY INSTRUCTIONS FOR FUTURE REFERENCE

### WARNING:

- For safety reasons, the seat belt should be used at all times.
- Do not leave user unattended.
- Do not strap user too tight.
- Straps should not interfere with breathing or circulation
- Always apply wheel locks before letting go of the chair.
- If front edge of seat is at or forward of the point where tires touch the floor, avoid using front of seat tubes for support during entry or exit from chair to prevent tipping.
- Avoid using footplates for weight support during exit or entry of the chair.

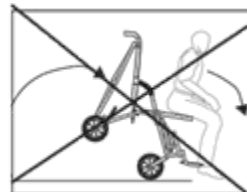


Fig. 216

### 1. Waste Disposal

The shipping carton should be kept for possible return to the manufacturer/service facility for repair or maintenance. Other paper packaging waste should be set aside for recycling. For disposition of replaced parts or the complete chair, the materials should be separated into: plastic, rubber, steel, aluminum, etc., and set aside for recycling.

### 2. Intended Use

This product is intended for use by a person with physical disabilities who is frequently or permanently non-ambulatory. The chair is always under the control and supervision of an attendant, and the occupant should never be left unattended.

### 3. Suitable Environment

The chair is intended for both indoor and outdoor use. If the chair is used in the rain, the excess water should be wiped off with a soft cloth. If the chair is splashed with mud or corrosive substances like salt water or road salt, the chair should be washed clean with water, wiped dry and a hypoallergenic and biodegradable lubricant reapplied to the moving parts. Contact with seawater should be avoided, as it will corrode areas that cannot be washed clean. When going from outside to inside, clean any excess dirt or mud from the wheels to prevent soiling of inside environment.

**IMPORTANT INFORMATION**

**4. Safety Instructions**

- Follow folding/unfolding instructions.
- Never leave occupied chair unattended.
- Do not attempt to take occupied chair up or down stairs, escalators, steep inclines, icy or slippery surfaces. Fig.217,218
- To avoid tipping, do not overload the chair, or hang heavy items on the handles that might cause tipping. Fig.219
- Be aware of newly created sharp edges.
- Frequently inspect the adjustments on the frame and the positioning accessories.
- Do not use chair after occupant has outgrown it.
- Do not ignore minor malfunctions and maintain the chair in good operating condition.
- Inspect the wheel locks (brakes) regularly and adjust as needed.
- If and whenever possible and feasible, the rider should transfer out of the chair and into an approved vehicle seat and passenger restraint system. However, if a transfer is not possible, use only designated chairs in a moving vehicle which contain the Wheelchair Tie-down and Occupant Restraint System (WTORS) following the requirements of SAE J2249. Follow tie-down harness manufacturer's instructions carefully and refer to Transit Section for specifics
- In case of an adverse event occurred in relation to the device incident should be reported to your local dealer and national competent authority in a timely manner. The local dealer will forward information to manufacturer.

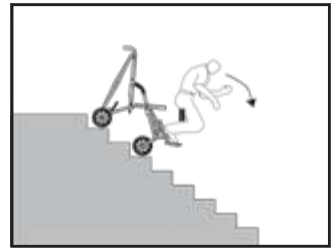


Fig. 217

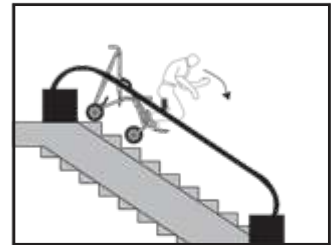


Fig. 218

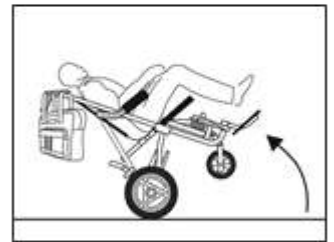


Fig. 219



Fig. 220

When going up a curb or step, face forward and tilt the chair back to lift the front wheels over the curb. Move forward and lift the rear wheels over the curb. Fig.220



Fig. 221

When transferring user to or from chair, apply foot wheel locks. Fig.222



Fig. 222

Maintain control of the chair at all times while going up/down ramp. Avoid steep slopes, particularly with a heavy occupant. If in doubt, do not proceed unless a third party is present to help maintain control of chair. Fig.223



Fig. 223

## 5. Chair Maintenance

The following maintenance procedures should be conducted on a regular basis: Examine your Convaid product visually from time to time for possible wear and tear. Teflon spray\* should be applied to frame and moving parts to maintain easy folding and adjustment.

- a) Tire Air Pressure: The air pressure in your tires should be checked WEEKLY, since low air pressure may affect brake ability.
- b) Axles and Moving Parts: Axles and moving parts should be wiped off WEEKLY with a slightly moist cloth, to remove dust, dirt and mud. Sparingly apply a high quality Teflon spray\* after each cleaning. DO NOT USE WD-40, silicone sprays or other lubricant sprays as they will attract dust and dirt.
- c) Repair or replace loose, worn, bent, missing or damaged parts before using the chair!
- d) Flat tire: In the event of flat tire, please contact customer service or local dealer for specific repairing instructions

**IMPORTANT INFORMATION**

<b>Check for functionality and/or damage of the following:</b>	Weekly	Every 3 months	Every 6 months	As necessary
Rims and tires	•			
Wheel lock and hand brakes	•			
Accessories	•			
Front and rear wheel axles	•			
Cleaning & lubricating all moving parts*	•			
Belts, zippers and Velcro® closures		•		
Seat/back upholstery**/tautness		•		
Armrests & foam (cushioned parts)			•	
Frame			•	
Contacting a Convoid Dealer for service or repair***				•

\* Use a non-toxic, hypoallergenic lubricant for all moving parts of the frame. Do NOT use WD-40 or other silicone based spray as a lubricant.

\*\* Follow cleaning instructions for appropriate user hygiene.

\*\*\***NOTE:** Repair or replacement of non-removable, worn or broken parts must be performed by a qualified service facility.

**6. Cleaning and disinfection**

To prevent the spread of germs, clean all skin contacting areas with disinfectant wipes regularly. Keep frame dry and apply a non-toxic, hypoallergenic and biodegradable lubricant to all moving parts. After longer storage periods, and before further use, the entire chair needs to be serviced, cleaned, and disinfected.

**Cleaning of frame**

Frame is to be kept dry and free of dirt and should be wiped off with a non-toxic, hypoallergenic and biodegradable wipe. Lubricant should be applied to moving parts as needed to maintain easy folding and adjustment.

Corrosive substance such as salt water should be avoided at all times. If exposed the frame should be wiped off with a moist towel as soon as possible. Water and a soft cloth are sufficient for basic cleaning.

**Cleaning of wheels and brakes**

Wheels and brakes should be kept free of dirt or mud after each use. Foreign objects could cause interference with moving parts. Wipe wheels and brakes with a moist cloth as needed and readjust brakes if needed.

### **Cleaning of fabric cover**

Seat and back upholstery can be easily removed, washed, air dried and reattached to the chair. Use standard detergent to wash fabric.

Cushioned parts can also be removed from chair, washed or wiped off with a moist cloth. Before reattaching them to the chair, make sure they are completely dry. Use mild detergent to wash fabric. Use gentle cycle and cold water. Hang Dry.

Parts that are permanently attached may be wiped thoroughly with a moist cloth. Allow sufficient time to dry before placing user in chair.



### **7. Storage**

Store your chair in a clean, dry area and avoid extended exposure to heat or moisture. After extended storage periods, and before reuse, the entire chair needs to be serviced, cleaned and disinfected.

### **8. Re-use**

Your Convaid chair should undergo wipe-down disinfection before re-use. Please use a non-toxic, biodegradable disinfectant solution suitable for surface disinfection. Please check the following components for intactness before operation(see MAINTENANCE CHART)

Repair or replace if necessary:

Wheels (tread pattern), air pressure if applicable

- Frame
- Seat and back upholstery
- Wheel lock operation
- Bearings and axles: check wear and tear/ lubrication
- Straight-running stability of wheels attachments

### **9. Repairs**

**User:** The user can replace easily removable parts or accessories, e.g. foot supports, heel loops, all fabric items, hand grips, etc.

**Manufacturer/Service Facility:** Repair or replacement of permanently attached, worn or broken parts must be performed by a qualified service facility. Any individual part of the chair can be replaced. Contact the manufacturer/service facility for needed repairs. The chair should be packaged in the original or suitable shipping carton for return to the manufacturer/service facility. Ship via UPS.

.....  
**IMPORTANT INFORMATION**  
.....

---

**10. Tools Required**

3/8", 7/16", 3/8" or 2 adjustable wrenches with 3/4" capacity, Phillips head screwdriver 5/32" Allen wrench (included)

**11. Spare Parts**

If you need any spare parts for your chair, please visit or call your Convaid Service Dealer you purchased this chair from. If the part is not under warranty, you will receive an estimate of the cost and, if necessary, shipping instructions for the return of the chair for repairs.

**12. Functional Tests**

All four wheels should make contact with the floor. With the chair empty, push it forward on a smooth level surface with enough momentum to travel six feet (2 m). The chair should not veer to the left or right more than six inches (150 mm). Wheels should be free running. Following the fold/unfold instructions; the chair should fold/unfold smoothly without undue effort. All fasteners should be secure. Fasteners on moving joints should not be over tight. Seat fabric should not be wide-stretched or sagging. Positioning accessories should be correctly adjusted and secure.

**13. Authorized Service Dealer**

**14. CE Mark Authorized Representative**

**R82 A/S**

Parallelvej 3,  
8751 Gedved, Denmark

.....

# Warranty

---

Convaid warrants to the original retail purchaser of the Convaid product, that if any part thereof proves functionally defective in material or workmanship within the specified warranty period, such defective part will be repaired or replaced (at Convaid's discretion) free of charge. Warranty service may be performed by an authorized service center or (at Convaid's discretion) the factory.

## **Warranty Period**

Frame & X-Braces .....5 years  
Other components.....One year  
Fabric & webbing .....One year  
Sensiform cushion .....Two years

This warranty does not cover normal wear and tear or damage caused by accident or misuse.

To exercise this limited warranty, the user should first obtain a Return Authorization Number from Convaid's customer service. The product must be delivered charges pre-paid (UPS recommended) to the factory or to an authorized service center, together with a copy of the original invoice, the Return Authorization Number and a written description of the problem.

THIS LIMITED WARRANTY EXCLUDES ANY CLAIM FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. ANY IMPLIED WARRANTY APPLICABLE IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. SOME COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS. SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE THEREOF.

Contact your local dealer for warranty information.

The CE Mark Authorized Representative:  
R82 A/S, Parallelvej 3, 8751 Gedved, Denmark



2830 California Street, Torrance, CA 90503, USA  
Toll free in the US: 1-844-US-Mobility (844-876-6245) • Phone: (310) 618-0111 • Fax: (310) 618-8811  
Email: sales@convaid.com • International Email: international@convaid.com  
www.convaid.com