USER MANUAL

Please read these instructions carefully before setting up and using the NEO Wheelbase

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CONTENTS

1 GENERAL

1.1 Introduction

- This user manual contains important information regarding the use and basic maintenance of the product.
- Please read this manual carefully before setting up and using the wheelbase.
- The wheelbase is designed specifically for use with special seating systems.
- The basic maintenance and safety instructions described in this manual must be followed to ensure correct and safe usage of this product.
- Active Design reserves the right to alter product specifications without notice. You can find the latest version of this manual on the Active Design website (www.activedesign.co.uk).

1.2 Symbols used in this document

- The ⚠ symbol is used to highlight key points of information regarding important safety usage instructions which need to be followed to avoid potential hazardous situations.

1.3 Warranty information

- This product has a warranty duration of 12 months.
- Warranty claims must be made through the supplier of the product.

1.4 Service life

- Expected lifetime: **7 years**.
- With correct use, cleaning and maintenance in accordance with this manual, the NEO main frame should have an expected lifetime as stated above. The effective service life can vary depending upon both frequency and intensity of use.
- When no longer required please return the wheelbase to your provider for recycling/correct environmental disposal.

1.5 Limitations of liability

- Active Design accepts no liability for damage arising from non-compliance with this user manual, incorrect or dangerous use of the product, incorrect set-up or assembly by a third party, and the use of any unauthorised modifications or unsuitable spare parts or accessories.

1.6 Compliance

- ISO 9001 2015.
- Compliant with crash test ISO 7176/19.

2 SAFETY

2.1 General safety information

- Avoid storing or using the wheelbase near open flames or combustible products.
- Do not smoke while using the wheelbase.
- Check all parts, wheels, knobs, screws and nuts are properly tightened and show no signs of degradation (see page 14 for frequency guidelines).

2.2 Product specific safety information

- The wheelbase and accessories will have been set up by a qualified person. Only adjust or remove items as described in this manual.
- The wheelbase must only be used by the user for whom it has been assigned, and must only be used with a seating system recommended by a qualified person.
- The wheelbase must always be parked on level ground with the wheel locks fully applied before getting in/out.
- There are a number of potential pinch/trap points on the wheelbase. This includes but is not limited to spokes of the wheel; hinged hangers; armrests; seat tilt and frame; wheel locks and wheels; adjustable back angle.
- Do not stand on the footrests when getting in or out of the seat as this could cause instability and the wheelbase to tip over.
- Attaching or hanging any items or objects to the wheelbase could seriously affect the overall stability of the unit.
- Ensure the occupant does not lean too far out of the seating system as this will cause instability of the wheelbase system and could cause it to tip over.
- When lifting the wheelbase ensure it is lifted by two people and that it is always held by the frame and not by loose or moving parts/accessories.
- The maximum load capacity including the seat and accessories is 120Kg. Exceeding this value may compromise the safety of the occupant and the rigidity of the wheelbase.

2.3 Use in motor vehicle guidelines

- The wheelbase must only be used in a motor vehicle fitted with a suitable wheelchair restraint system that has been approved to meet regulatory standards for passenger safety.
- The wheelbase and seating system must only be secured using the correct attachment points and in accordance with the restraint system manufacturer's instructions.

See Section 7 for use in motor vehicle guidelines

3 PRODUCT OVERVIEW

3.1 Product description

- The Neo Wheelbase is a tilt in space wheelbase system designed to be used with special seating options, and has a range of accessories.

3.2 Main parts of the wheelbase

1: Push handles

2: Attendant brakes

3: Push handle locking lever

4: Front tie down point

5: Rear tie down point

6: Tilt lever

7: Seat base

8: Wheel lock

4 SETTING THE WHEELBASE UP BEFORE USE

Before setting up please ensure you have a clear and tidy flat surface from which to work.

4.1 Push handles

4.1.1 Unfolding push handles

- Undo the handwheels or cap head screw completely on each side of the wheelbase and raise the backrest to the most appropriate position (see figures 1 & 2).
- Align the holes in the bracket (see figure 2) and rescrew the handwheels or cap head screw, ensuring both are tightened securely.

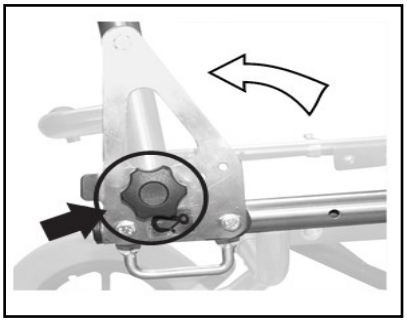
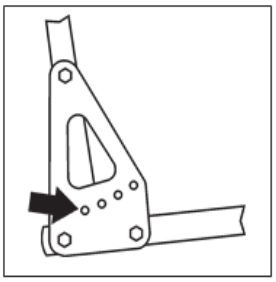


Figure 1



Note on some models the handwheel is replaced by a cap head screw

Figure 2

4.1.2 Positioning push handles

- Release and undo the push handle locking lever slightly on each side and then lift both handles to a comfortable position for handling the wheelbase and seating system (see figure 3).
- Tighten up and secure the lever on each side (see figure 3).
- Alternative positions for the push handles are shown (figure 4). This is useful if pushing the Neo when tilted.

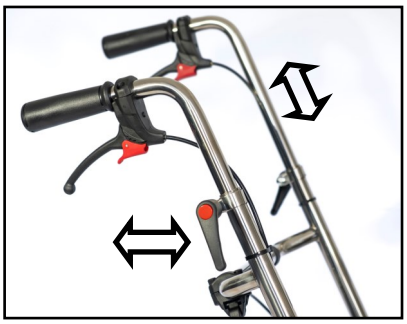


Figure 3

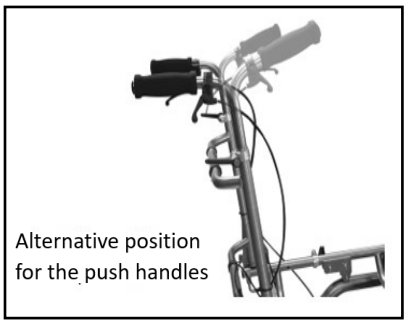


Figure 4

4.2 Tilting the seat

- To adjust the seat position apply both brakes then operate the tilt lever (figure 5), using the push handles to achieve the required seat angle (figure 6). Take care when adjusting as the tilt base will spring up quickly if there is no occupant in the seat.

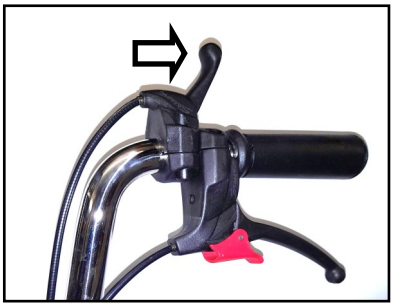


Figure 5

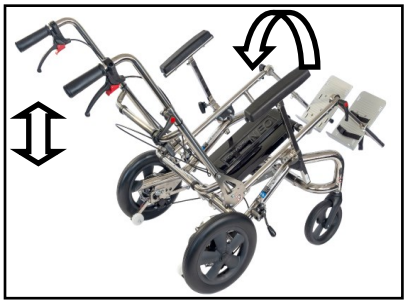


Figure 6

5 OPTIONS/ACCESSORIES

5.1 Arm rest options

Figure 7

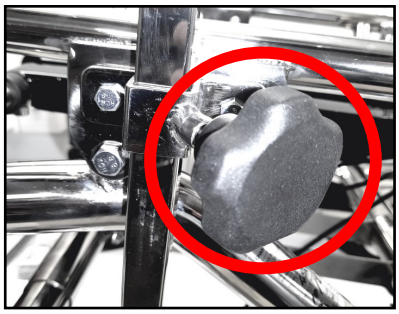
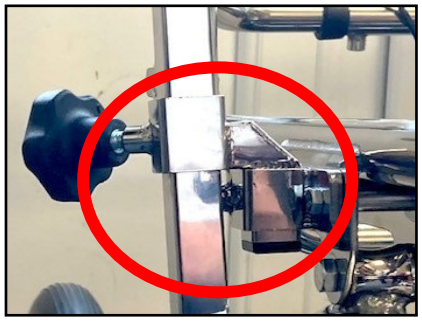


Figure 8

Armrest with sockets ARM10F

The armrest is removable and height adjustable by using the hand wheel (Figure 8).



Armrest outrigger ARM50F

Armrest stop collar ARM60F

These items should be fitted by qualified personnel only.

5.2 Hanger and footplate options

Footrest hanger FTH30F

These are secured in place by a spring pin.

Footrest hanger brace kit FHB10F

These items should be set up by qualified personnel only.

Swingaway footrest hanger FSA10F

These can be swung outwards and removed by lifting and twisting the hanger, but must be fully located in place prior to moving the wheel-base.

Angle adjustable footrest hanger NEL10F

These can be adjusted by first loosening the locking lever, adjusting the angle, and then re-tightening the handwheel.

Footboard medium FTB42F

Footboard large FTB45F (Pictured)

Multiaxis footplate medium FTR42F

Multiaxis footplate large FTR45F

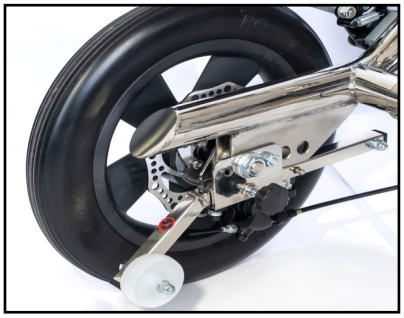
⚠ Footboards and footplates are not designed to be stood on.

These items should be setup by qualified personnel only.

Central footrest hanger FCH10F

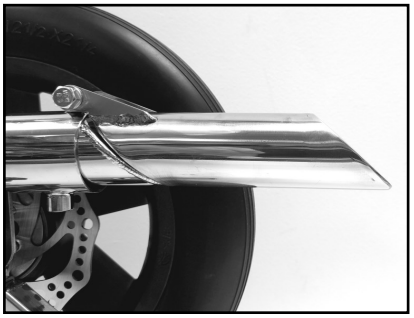
These items should be setup by qualified personnel only.

5.3 Accessories



Anti-tipper NAT10F

These are engaged/retracted by loosening the handwheel, pressing the spring button and extending fully rearward.



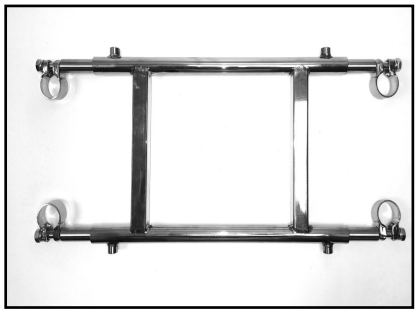
Tip assist extension NTA10F

Swing down to engage.

Tie down 'D' ring strap DR120

Velcro into place.

Please refer to Section 7 for use.



Cross tube interface adaptor INT50F

These can be provided with the specialist seating.

Only to be installed by qualified personnel.

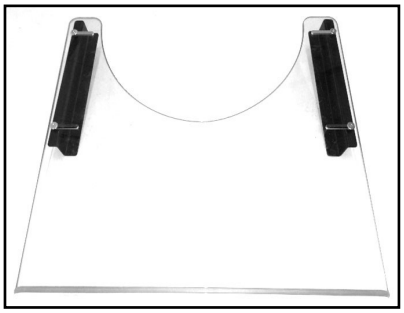
Pram handle width adjustable NPH10F

Can be adjusted up and down using the handle post locking levers.

Does not include brake levers/cables.

Basket NBK10F

To be installed by qualified personnel only.



Small tray (600mm x 500mm) TRA10F

Large tray (650mm x 500mm) TRA20F

Extra large tray (750mm x 550mm) TRA30F

Drop on seat board DOB10F

To be installed by qualified personnel only.

Slide over the arm pads to install.

Fine adaptions to fitting can be achieved by adjusting the button head screws.

6 USING THE WHEELBASE

6.1 General usage

⚠ Before use always familiarise yourself with the safety details covered in Section 2.

6.2 Brakes

⚠ Improper use of the brakes could result in an accident. Verify the functionality of the brakes prior to every use. If you have any concerns around your braking systems please contact your supplier

6.2.1 Wheel locks

- Your wheelbase has manual wheel locks (also referred to as parking brakes) which can be applied by pulling the lever upwards by hand to engage into the on position (see figure 9). Always engage both wheel locks to fully secure the wheelbase in position. In order to release the wheel lock, the handle should be pushed down.

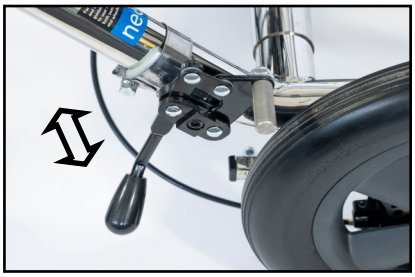


Figure 9

⚠ The manual wheel locks must be applied when parking the wheelbase, when leaving it unattended, or when secured during transit.

6.2.2 Attendant brakes

- Your NEO may be fitted with attendant brakes for the rear wheels operated by a lever on each push handle (see figure 10). When in motion, squeeze both brake handles upwards and the brakes will be applied. In order to lock the attendant brake into position, pull the lever and locate the red latch into position (see figure 11). This will keep the brake applied and locked into position. To release the attendant brake pull on the lever and allow the latch to click off. These brakes are designed to be used on flat ground only.

⚠ When the Neo is left unattended or on any slope, the wheel locks must always be applied (see section 6.2.1).

Figure 10

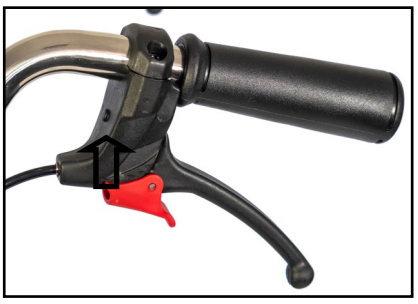


Figure 11

6.3 Driving and steering

- Push the wheelbase using both hands on the handles provided to prevent instability and erratic steering.
- Always apply the wheel lock brakes before releasing your hold on the wheelbase.
- Never push the wheelbase above walking pace.
- Never turn suddenly as this can make the wheelbase unstable.

6.4 Negotiating obstacles

⚠ Danger of falling or tipping over backwards due to approaching obstacles incorrectly.

- Push slowly when crossing obstacles (e.g. steps, curbs) and negotiating uphill or downhill slopes and inclines.
- Never cross obstacles at an angle. Always approach obstacles/slopes head on (at an angle of 90°).
- Raise the front wheels before crossing obstacles.
- Avoid collisions with obstacles and dropping off curbs/ledges.

⚠ When using the wheelbase on a slope it could run away from you down the slope, out of your control.

- If fitted use the attendant brake levers to control your momentum down a slope.
- Only negotiate slopes where you are able to control the speed of the wheelbase.
- Avoid getting into or out of the wheelbase on inclines and slopes.

6.5 Handling steps/stairs

- Use available equipment (e.g. ramps or lifts).
- If such equipment is not available, seek assistance when carrying over steps/stairs .

⚠ Never use escalators with the wheelbase.

6.6 Stability and balance

⚠ Hanging anything on the back of the wheelbase can cause instability and the possibility of tipping over.

- When using the luggage carrier accessory ensure you do not overload the basket, and that you pack the items securely, and not over hanging the edges.
- When reaching for objects the user must not lean so far out of the seat as to cause instability.
- Before negotiating slopes or crossing obstacles, the seat tilt should be adjusted to maintain optimum stability. When travelling downhill the wheelbase should be tilted backwards, and when travelling uphill it should have no tilt applied.
- Always provide support to the rear when negotiating slopes and obstacles on slopes or ramps.

7 USE IN A MOTOR VEHICLE

7.1 Suitable restraint system

⚠ The NEO wheelbase must only be used in a motor vehicle fitted with a suitable wheelchair restraint system approved to meet regulatory standards for passenger safety.

- The NEO Wheelbase was crash tested using the Unwins Safety Systems four point webbing system as shown in **7.3**

⚠ The NEO Wheelbase and seating system must ONLY be secured at the 4 points labelled with the symbol (see figures 11-13) on both sides of the NEO and in accordance with the restraint system manufacturer's instructions.

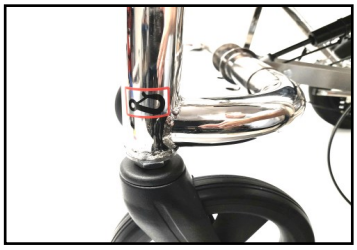


Figure 11

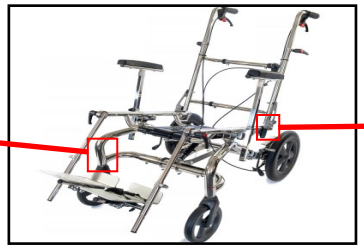


Figure 12

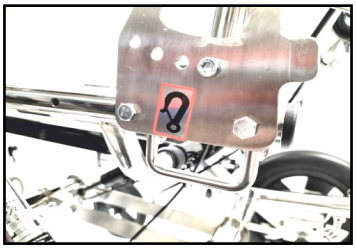


Figure 13

7.2 Safety points to follow

- Only use an approved restraint system that has been fitted in accordance with the manufacturer's instructions.
- All unsecured wheelbase accessories and loose items should be removed and stowed securely to avoid risk of injury.
- The seat should be as upright as possible to ensure the occupant restraint system works effectively.
- It is important that the driver of the vehicle and/or the attendant be familiar with the restraint system and ensure the wheelbase/seat and occupant are secured safely and in accordance with the restraint system manufacturer's instructions.

7.3 Securing the wheelbase

- The wheelbase should be positioned facing forwards in the vehicle and centred equally over the tracking rails in the floor (as shown below).
- Attach the restraining straps to the NEO Wheelbase frame (see figures 11 & 13 above) as pictured below (see figures 14 & 15). The straps should typically form an angle of 45 degrees with the floor (see figure 16).

Figure 14

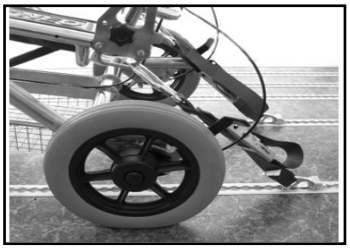


Figure 15

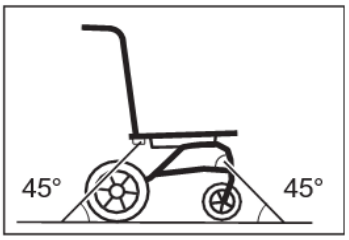


Figure 16

For further information and guidance please refer to Posture and Mobility Group best practice guidelines www.pmguk.co.uk

8 CLEANING AND MAINTENANCE

8.1 Cleaning

- The frame and wheels should be cleaned with warm water and mild detergent as required.
- Do not use a jet wash to clean the wheelbase.
- After cleaning check the product functions as normal before use.

8.2 Maintenance

- You should always do a visual check before use.
- Check all adjustment points are tightly fastened and that handgrips are firmly attached.

⚠ Your wheelbase should be checked by a qualified technician once a year.

⚠ Attendant brakes will bed in over the first 6-8 weeks of use. **DO NOT** attempt to adjust the brake by altering the tension adjuster on the cables. Brake adjustment should only be carried out by a suitably qualified wheelchair technician or wheelchair repair service.

- Regularly check your wheelbase as per the schedules shown below.

Frequency	Component	Checks to do
Before every use	Seating	Seating system firmly locked in place
	Handles	Push handles are securely fitted and free from damage
	All wheels	Securely fitted and rotate freely
	Brakes	Operating correctly
	Accessories	Securely fitted
Weekly	General	Pushes in a straight line
	Seating	Seat tilt locks securely
	Accessories	Check for damage
	All wheels	Rotate freely, no damage
Monthly	General	All nuts/bolts tightly secured
	General	Back frame unfolds/folds easily
	Frame	Free from damage

8.3 Fault finding checklist

- The chart below shows possible causes and remedies of the most common issues that can occur over time.

Symptoms							Checks/causes
Pulls or veers to the side	Slow turning	Castor wobble	Squeaks and rattles	Brakes squeaking	Hand brakes not functioning properly	Tilt operation not functioning properly	
✓	✓	✓					Check castors for wear
		✓					If castors not worn then refer to technical manual
			✓			✓	Make sure nuts/bolts are tight and accessories are securely fitted
✓	✓			✓	✓		Check brakes are releasing properly
✓				✓	✓	✓	Check cables are unobstructed

8.4 Damage or breakage

- As soon as you detect any damage or breakage to your equipment report it immediately to your wheelchair service provider.
- Under **NO** circumstances are any alterations/repairs to be attempted by anyone other than those authorised to do so by your wheelchair service provider.

9 REPAIRS AND SERVICE

Within the warranty period

All NEO wheelbases are provided with a 12 month warranty by Active Design. In the unlikely event of your product becoming defective please contact your wheelchair service provider.

Outside the warranty period

Please contact your wheelchair service provider for an estimate on the remedial work required.

10 TECHNICAL SPECIFICATIONS

NEO wheelbase specification

Maximum load	120kgs
Frame weight (excluding accessories)	20kgs
Material (Frame)	304 stainless steel
Seat depth	390mm - 460 mm
	530mm with set back brackets
Seat rail diameter	25.4 mm (1 inch)
Tilt angle	0-35 ^{o}
Backrest recline angle	0-25 ^{o}
Tilt mechanism	Single cable operated gas strut
Width adjustment	370mm-510mm between outside of seat rails
Overall width	520mm - 660mm (12.5" transit wheel)
	560mm - 700mm (20" big wheel)
Height	960mm
Push handle extension	220mm
Overall length	715mm - 775mm
Castor diameter	8" (203mm)
Rear wheel diameter	12.5" (300mm) or 20" (510mm)
Folded height	600mm
Seat rail height	480mm
Crash test standard	ISO7176 / 19

NOTES

NOTES

For up to date information on all our products please visit: **www.activedesign.co.uk**

ISO 9001 2015

Please contact your local supplier for repair centre contact details

Compliant with crash test ISO 7176/19

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