

LECKEY[®]

Leckey Tour Mobility Base
User Instructions
Assembly instructions
Service manual





This manual contains information regarding the use of the Leckey Tour Mobility Base including its use for transportation in motor vehicles. Please read the full manual to gain the full benefits offered by this product.

Contents

- 01 Intended Use
- 02 Declaration of Conformity
- 03 Terms of Warranty
- 04 Product History Record
- 05 Product Training Record
- 06 Safety Information
- 07 Delivery/Preparation
- 08 Adjusting the mobility base
- 09 Accessories
- 10 Maintenance, cleaning and care
- 11 Instructions for securing the Leckey Tour Mobility Base in a vehicle
- 12 Crash Test
- 13 User Restraint Systems
- 14 Technical Data

1. Intended Use

The Leckey Tour Mobility Base is designed for use with seating systems intended for a single user. The mobility base is designed to be suitable for use indoors and/or outdoors. It is designed to provide mobility for persons with disability. It must be adjusted by an orthopaedic or rehabilitation dealer to integrate with the seating system being used.

2. Declaration of Conformity

James Leckey Design Ltd as manufacturer with sole responsibility declares that the Leckey Seating and Mobility Systems conform to the requirements of the 93/42/EEC Guidelines, Medical Device Regulations 2002 and EN 12182 Technical aids for disabled persons and test methods.

3. Terms of Warranty

The warranty applies only when the product is used according to the specified conditions and for the intended purposes, following all manufacturers' recommendations (also see general terms of sales, delivery and payment). A two year warranty is provided on all Leckey manufactured products and components.

4. Product History Record

Your Leckey product is classified as a Class 1 Medical Device and as such should only be prescribed, set up or reissued by a technically competent person who has been trained in the use of this product. Leckey recommend that a written record is maintained to provide details of all set ups, reissue inspections and annual inspections of this product.

5. Product Training Record (Parents, Teachers & Carers)

Your Leckey product is classified as a Class 1 Medical Device and as such Leckey recommends that parents, teachers and carers using the equipment should be made aware of the following sections of the user manual by a technically competent person:

Section 6

Safety Information

Section 9

Instructions for Securing the Mobility Base in a Motor Vehicle

6 Safety Information



1. Please read the instructions for use before using this product. Familiarise yourself with the mobility base and your chosen seating system on level ground to avoid potentially dangerous situations.



2. Park the mobility base on level ground wherever possible. If parking on a slope is unavoidable ensure the anti-tipper is in a functional position.



3. When reaching for objects in front, to the side or behind the occupant make sure the occupant does not lean too far out of the seating system as this may cause the mobility base to tilt or tip over.



4. Treat your mobility base with care. Do not drive into or against obstacles without slowing down.



5. The anti-tipper is designed to prevent the mobility base with user from tipping over backwards. The anti-tipper should not be used to support the base with rear wheels removed.



6. Do not go up or down stairs without assistance from another person. If available make use of ramps and lifts. In the absence of a ramp or lift, then 2 people should carry the base with seating system over the obstacle. If only 1 helper is available, the anti-tipper (if fitted) should be adjusted or removed as to not contact the steps, therefore avoiding a potential fall. Replace anti-tipper afterwards.



7. When lifting the mobility base, ensure that it is held by firmly attached components and not by loose or moving parts.



8. Ensure height adjustable push handle clamping levers are firmly tightened.



9. Ensure brakes are applied when stationary on uneven ground and during transfer.



10. Ensure any tilt and brake cables do not interfere with any moving parts e.g. wheels.



11. Occupants should be secured with suitable safety straps, belts or harnesses at all times.



12. In some combinations of settings the foot supports may interfere with the castors. In this case adjust the settings so that this does not happen as the manoeuvrability of the base will be impaired.



13. When using the mobility base in public areas and streets, ensure local traffic regulations are observed.



14. Be careful when adjusting the seat base to avoid finger injuries.



15. Maximum load capacity including seating system is 110Kg.



16. Ensure that screws are tightened after adjustment.

Delivery/ Preparation

Contained in the box will be –

Leckey Tour Mobility Base
Instructions for use
Tools required

Accessories as ordered

7

7.1 Seating Interface

The mobility base will arrive with the interface fitted in a position likely to be suitable for the seating system to be attached to it. There are five mounting positions to choose from. The foremost three positions are suitable for the Keat Seat and the rearmost are suitable for the Mygo Seat. In order to adjust the position of the interface, please refer to Fig 1a and 1b.

Remove the 4 screws (A) and nuts (B) retaining the interface and slide the interface forward or backwards as desired. Refit the 4 screws and nuts. Ensure all screws & nuts are re-tightened to ensure the seating system will be firmly attached to the base when fitted.

Fig 1a

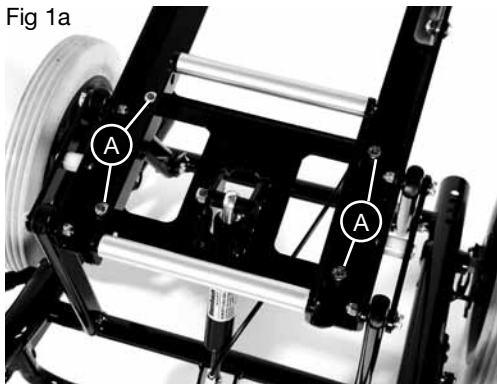
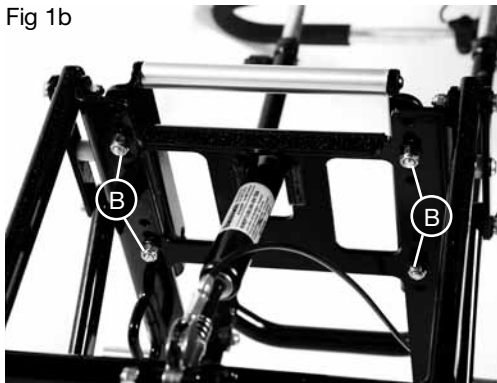


Fig 1b



7.2 Handle bar depth

The mobility base will arrive with the handle bar fitted in a position likely to be suitable for the seating system to be attached to it. In order to adjust the position of the handle bar, please refer to Fig 2.

Remove the 2 screws (A), 2 lap belt posts (B) and nuts (C) retaining the handle bar assembly and slide it forward or backwards as desired. Refit the attachment screws, posts and nuts. Ensure all nuts & screws are re-tightened to ensure the handle bars are firmly attached to the base.

The lap belt posts and screws can be fitted in either the forward or rearward position, ensuring the angle of the lap belt is correct (Fig 3) and it does not interfere with any parts of the base throughout its range of tilt.

Fig 2

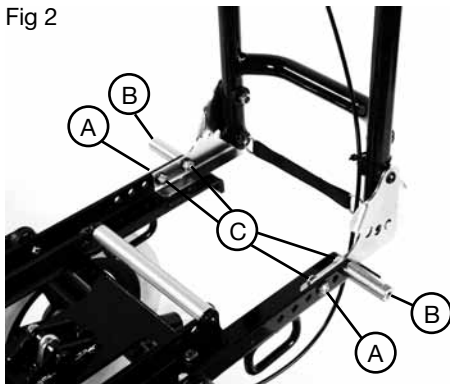
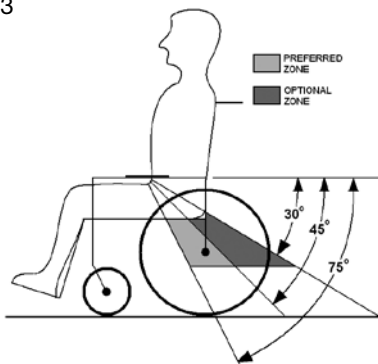


Fig 3

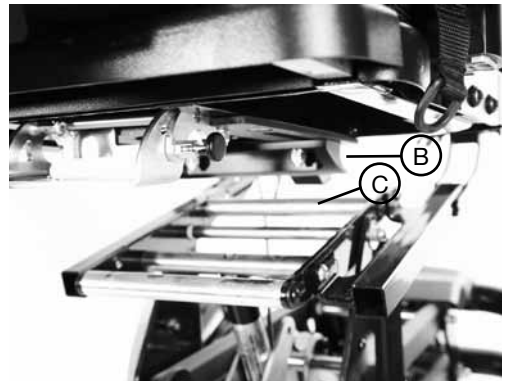
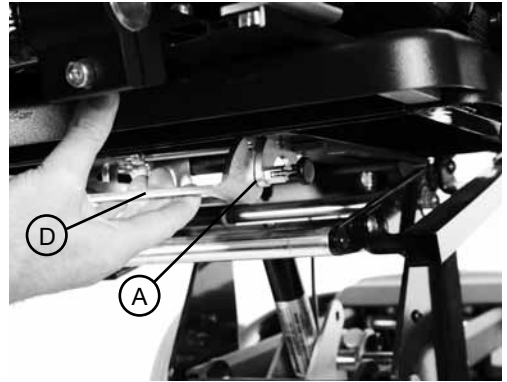


7.3 Fitting of accessories

Refer to Section 9

7.4 Mounting of the seating system

To mount the Kit Seating System on the mobility base release the safety locking pin at the front of the seat by pulling the pin (A) out and rotating it through 90 degrees. Carefully tilt the seat and place it onto the chassis, locating the channel (B) at the rear of the seat over the tube at the back of the chassis (C). Pull the handle (D) at the front of the seat unit up and then pivot the seat down. Once the seat is fully lowered, release the handle and push it forward to ensure it has fully engaged on the front tube. Rotate the safety locking pin (A) so that it engages in the front of the handle.



To mount the Mygo Seating System on the mobility base first release the safety locking pin at the front of the seat. To do this pull the pin out and rotate through 90 degrees. Carefully lift the seat and place it into the chassis. At the rear of the underside of the seat you will see a receiving channel. Place this securely over the tube towards the back of the chassis. Pull the handle at the front of the seat unit up and then pivot the seat forward and down. Once the front of the seat is lowered fully, release the handle and push it forward to ensure it has fully engaged on the front tube. Rotate the safety locking pin so it engages in front of the handle. If it hits the handle then the seat is not inserted properly. Remove and repeat process outlined above.



Once the seat is mounted, ensure that the static stability of the product is checked. If the stability is less than 10° the user and/or attendant need to be informed using a clear warning note, to allow them to take precautions in interest of the user's safety.



Adjusting the mobility base

8

8.1 Seat Tilt

The seating system mounting can be tilted to the rear by approximately 30° (Fig 4). This is achieved by pressing the tilt release lever (Fig 5). When the desired angle is reached, release the lever.

Fig 4



Fig 5



8.2 Handle bar height

The handle bar can be adjusted to a height that is suitable for the person pushing the seat. In order to adjust the height of the handle bar, please refer to Fig 6.

Loosen the clamping levers (A), Move the bars to the required height and re-tighten the clamping levers. The adjustment range is approximately 230mm. When the handle bar has reached its maximum height, a popper will engage in the handle bar outer tube (Fig 7, Item B). Press the popper in once the clamping levers are loose, while adjusting the height of the handle bar.



Note - It is recommended that the handle bar is not adjusted beyond the height at which the popper engages.

Fig 6



Fig 7



8.3 Handle bar angle

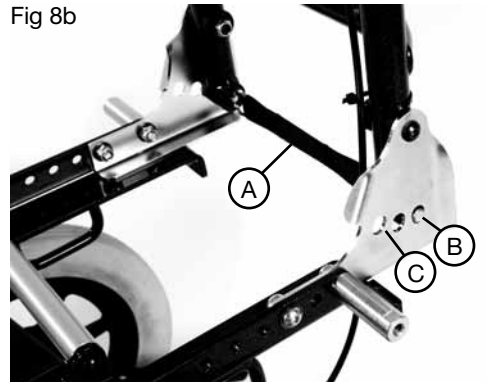
The handle bar can be adjusted to an angle from 90° to 120° dependant on the desired back angle of the seating system attached (fig 8a). In order to adjust the angle of the handle bar, please refer to Fig 8b.

Pull the lock strap (A), this will release the locking pins (B) either side of the handle bar. Adjust the handle bar angle then release the lock strap. Ensure both locking pins engage in the locking plate holes (C) after adjustments are made.

Fig 8a



Fig 8b



8.4 Brakes

To operate the friction brakes on a 12" wheel application, please refer to Fig 9. To operate the drum brakes on a 22" and 24" wheel application, please refer to Fig 10.

To apply the friction brake, push the brake lever (A) forward. To release the friction brake, push the brake lever rearward. To apply the drum brake, squeeze the brake lever (B). To lock the drum brake, squeeze the brake lever (B) and engage the retaining claw (C) with your index finger. To unlock the drum brake, squeeze the brake lever slightly and the retaining claw will disengage.

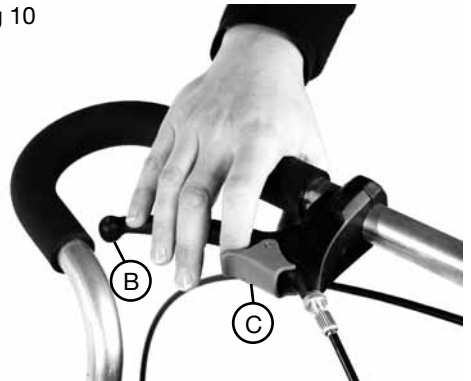


Check the brakes weekly to ensure they are operational and adjust if necessary (Refer to section 10, 'Maintenance, cleaning and care').

Fig 9



Fig 10



Accessories

9

9.1 Anti-tippers/Tip assist

The anti-tippers prevent the mobility base from tipping too far backwards. Please refer to Fig 11a and 11b.

To fit the anti-tipper for the first time, press down the popper (A) and slide into the chassis tube at the rear of the mobility base.

The effectiveness of the anti-tipper is achieved by adjusting its position. Press the popper (A) then slide the anti-tipper to the desired position, ensuring the popper has engaged in one of the locking holes (B). The further out the anti-tipper, the more effective it is.

In order to make tipping the mobility base easier to clear an obstacle e.g. curbs, tipping assistance can be achieved by simply stepping onto the anti-tipper tubes while pulling back on the handle bar.

Note - To avoid an accident risk, it may be necessary to adjust the anti-tipper inwards to clear an obstacle. In some circumstances it may be necessary to remove the anti-tipper completely. This is done by pressing in the popper (A) and sliding the anti-tipper out completely. Once the obstacle has been negotiated, re-insert the anti-tipper ensuring the popper has engaged in one of the locking holes.



In the event anti-tippers are fitted or removed, please inform the occupant if they do not require an attendant.

Fig 11a

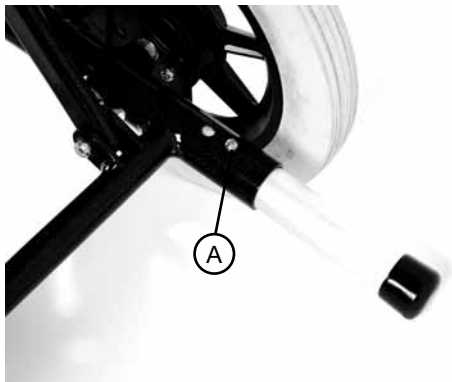
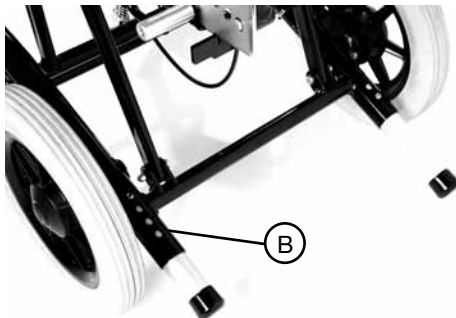


Fig 11b

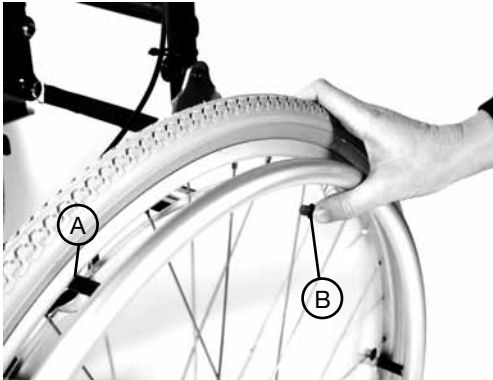


9.2 Spoke protectors

In order to reduce the risk of injuries to the occupant's fingers, the use of spoke protectors is encouraged. See fig 12.

To fit the spoke protector, place it over the face of the wheel, lining up the hand rim support posts to the scallops (A) on the outside edge of the spoke protector. Place the supplied clips through the slots in the spoke protector and clip to the spoke directly behind the slot (B).

Fig 12



9.3 Rear wheels

The rear wheels are available in 3 sizes, 300mm[12"] (Fig 13), 560mm[22"] or 610mm[24"] (Fig 14). The larger 2 sizes are provided with a quick release axle (Fig 15) so the wheels can be removed quickly, if necessary. To fit the wheel, simply press and hold the centre button (A) and push the wheel and axle fully on the hub. Ensure the wheels are fully secure before using the mobility base. Removal is the reversal to fitting.

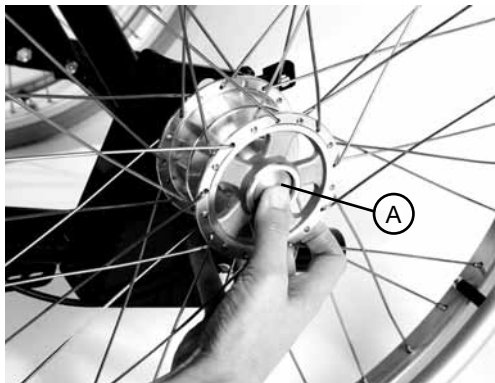
Fig 13



Fig 14



Fig 15



9.4 Front castors

The front castors are available in 3 sizes, 100mm[4"] (Fig 16), 150mm[6"] (Fig 17) and 200mm[8"] (Fig 18). These can be chosen dependant on the use of the mobility base and the clearance that is required for the foot plates of the seating system.

Fig 17



Fig 16



Fig 18



**Maintenance,
cleaning
and care**

10

10.1 Annual Product Inspection

The correct function of the mobility base and seating system should be checked before every use. The table of checks listed below are to be carried out by the user at the intervals shown. Failure to carry out these checks may lead to problems arising that could invalidate the warranty.

Should any defects become apparent, please contact an authorised dealer. It is also recommended that your mobility base is serviced every 12 months by an authorised dealer.

Check	Weekly	Monthly
Brake/Wheel lock function	✓	
Security of seating system	✓	
Firm attachment of wheels	✓	
Firm attachment of handle bar	✓	
Bearing contamination		✓
Screw connections		✓
Visual examination of wearing parts (e.g. Tires, bearings)		✓
Spoke tension if 22" or 24" wheels are used		✓

10.2 Adjustable Brake Force for 12" wheel

To adjust the friction brake, please refer to Fig 19a and 19b.

By reducing the distance between the wheel lock friction post (A) and the wheel, braking force is increased. In order to adjust the brake, loosen the nuts (B), allowing the wheel lock to slide. The wheel lock should be adjusted so that when the wheel lock is not activated, the distance between the wheel lock friction post (A) and the tyre is 10mm. After adjustment tighten the nuts (B). Ensure the wheels lock when the brake is activated after adjustment.



Ensure the locking/braking forces of both wheels are adjusted equally.

Fig 19a



Fig 19b



10.3 Adjustable Brake force for 22" and 24" wheel

To adjust the drum braking force, please refer to Fig 20.

The braking force can be adjusted using the adjustment screw (A). By unscrewing the adjustment screw, braking force will be increased and vice-versa. With the wheel rotating freely the adjustment screw should be unscrewed until you can hear the noise of the wheel being braked. Next screw in the adjustment screw until the friction noise disappears. The wheel should run freely. After adjustment tighten the locking nut (B) against the post (C). When tightening the locking nut (B), ensure that the adjustment screw (A) doesn't rotate. Ensure the wheels lock only when the retaining claw (Fig 10, item C) of the hand brake lever is in the 2nd or 3rd ratchet position.



Ensure the locking/braking forces of both wheels are adjusted equally.

10.4 Cleaning and care

To clean your mobility base, use a mild detergent. It is important to pay particular attention to certain components of your mobility base to ensure a smooth operation.

Hair or dirt particles may accumulate between the castor wheel and the fork, making it difficult for the castor wheels to rotate. Remove hair and dirt particles.

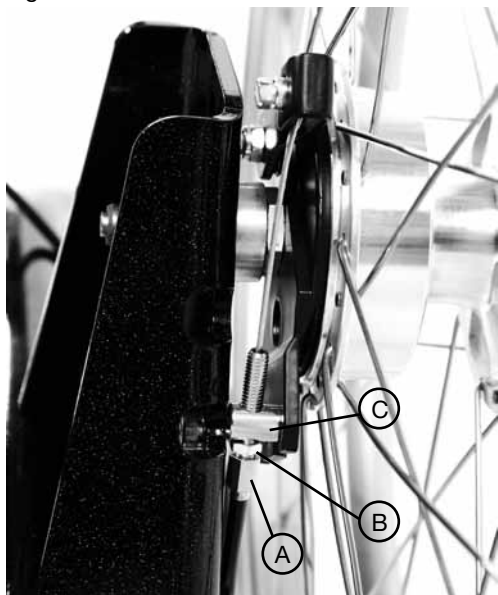
When mounting or removing the wheels, please ensure no oil gets on the brake linings or brake drum.

If the mobility base gets wet, towel dry it as soon as possible.

Do not use the mobility base in salt water. Keep sand or other particles from damaging wheel bearings.

Check the tightness of all screw connections regularly. If a screw connection frequently comes loose, consult your dealer.

Fig 20



11 Instructions for securing the Leckey Tour Mobility Base in a vehicle

These instructions apply to the Leckey Tour Mobility Base only. For all other mobility bases please refer to the manufacturer's instructions.

The wheelchair user must be seated in an upright seating position in the seating system.

Place the Leckey Tour Mobility Base in a forward facing direction, centrally between the tie-down rails on the floor of the vehicle, then apply the brakes.

Loose parts must be secured separately in the motor vehicle.

Check that the vehicle anchored restraint system and the wheelchair restraint system comply with the appropriate Standard.

Fig 21



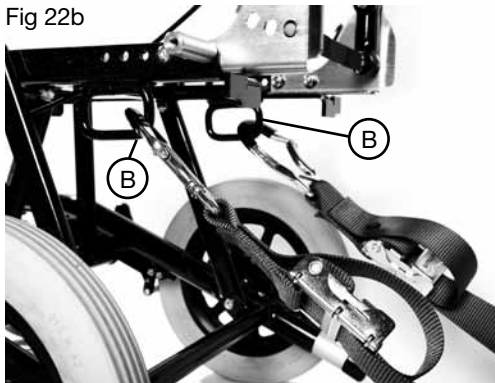
Rotate the front wheels of the Leckey Tour Mobility Base so that they are in a forward facing direction in order to improve stability of the unit (Fig 21).

The mobility base must be anchored to the vehicle using tie-down straps. Ensure that one end of the tie-down straps are securely attached to the floor tracks. Attach the other ends of the straps to the anchor points on the Leckey Tour Mobility Base on the left/right sides of the front frame (A) and at the left / right sides of the rear frame (B). Refer to figures 22a and 22b.

Fig 22a



Fig 22b



The tie down straps must be tightened firmly in accordance with the manufacturer's specifications.

Note: The maximum angle of the front tie-down straps (1) must be 60° and the maximum angle of the rear tie-down straps (2) must be 45° (Fig 23).

The vehicle restraint system's pelvic belt and shoulder harness must be attached in accordance with the manufacturer's specifications and tightened as firmly as possible.

If your seating system does not include them and there is more than 30cm of space in front of the occupant's feet, then it is recommended that leg restraints be used to keep the user's legs from extending.

Always ensure that restraint belts are close to the body and are not distanced from user's body by components such as armrests or wheels.

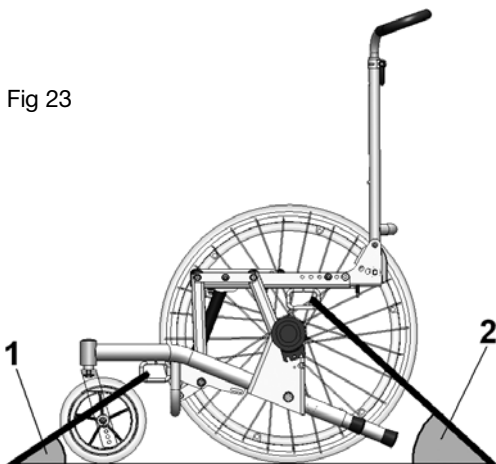


Fig 23

12 Crash test

The Leckey Tour Mobility Base has been crash tested facing forwards, with an Unwin Restraint System, pelvic harnesses and chest harnesses. Please see individual product User Instructions for further details.

Leckey does not recommend the use of a mobility base with a seating system for transportation in a motor vehicle. Our seating and mobility systems are designed to be easily manoeuvrable, lightweight and functional, which can conflict with the requirements which a seat must fulfil for transport in a motor vehicle. Furthermore the incorrect use of additional wheelchair tie-down systems and occupant restraint systems may result in an increased safety risk, which is not the case when using the vehicle with anchored restraint systems (seatbelts, headrest, airbags etc.). Leckey highly recommend, whenever possible, that the mobility system users transfer to the seats installed in the motor vehicle and use the corresponding vehicle restraint systems. In the event of a motor vehicle collision, Leckey cannot be held responsible for any injury caused to the users of Leckey products, if the occupant's restraint and tie-down system has not been correctly applied.



An independent pelvic and shoulder harness should be applied as the user's restraint system. The harness must conform to the standards described in section 13. If independent harnesses are not used, an independent vehicle-anchored 3 point occupant belt restraint system must be used instead.



The 4 point tie-down straps used to secure the mobility base to the vehicle must conform to the standards listed in section 13 and be compatible with the attached brackets on the mobility base.



Wheelchair mounted accessories, such as trays, respiratory equipment or communication devices should be removed and secured elsewhere during transport. It should be noted that Leckey's products have been crash tested without the accessories being mounted and Leckey therefore can accept no accountability for any injuries, should the vehicle be involved in an accident.



If the Leckey product is involved in a crash it must no longer be used for the transport of the occupant(s). We recommend that the product be returned to Leckey for assessment or replaced immediately. The reason for the immediate replacement is due to the fact that sudden stops or impacts during the accident could structurally damage the mobility base and seating system.



The mobility base should only be used in motor vehicles in a forward-facing seating position.



The mobility base should only be used with seating systems which have passed crash testing, if being used for transportation in a vehicle.



The mobility base should only be used for transportation in a motor vehicle fitted with anchor brackets, which comply with National and International standards.



The person responsible for the transportation of the individual in the mobility base is also responsible for their safety.



Alterations must not be made to the frame or structural parts of the Leckey product.

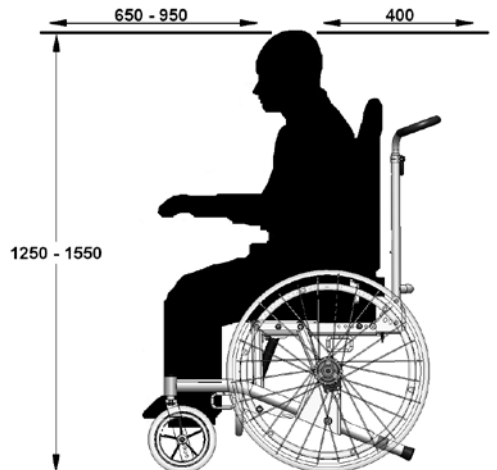


If the mobility base is enabled with back angle adjustment or tilt in space, the user must be sitting fully upright during transportation. If this is not possible due to the user's condition a full-risk assessment should be undertaken to address the issue of the user's safety.



During transportation, you must ensure that there are clear zones around the mobility base and wheelchair user, as shown in Figure 24: 650 mm at the front, when the 3-point shoulder and pelvic belt occupant restraint is used, and 400mm at the rear. The required overall height from the floor is between 1250 mm and 1550mm, depending on the height of the user.

Fig 24



13 User restraint systems

User restraints must conform to the following standards for transportation in a motor vehicle/ guidelines:

	International
WTRS: Wheelchair tie-down and occupant restraint system	ISO 7176-19 ISO 10542

14 Technical Data

Configured for:	Mygo or KIT		
Front Castor Diameter	100mm / 4"	150mm / 6"	200mm / 8"
Wheelbase	420mm / 16.5"	425mm / 16.7"	430mm / 16.9"

Configured for:	Mygo		KIT	
Rear Wheel Diameter	30.5cm / 12"	56cm / 22" 61cm / 24"	30.5cm / 12"	56cm / 22" 61cm / 24"
Overall Width	645mm 25.4"	645mm 25.4"	645mm 25.4"	690mm 27.2"
Overall Length Without Seat	790mm 31.1"	790mm 31.1"	850mm 33.5"	850mm 33.5"
Turning Radius	1665mm 65.6"	1665mm 65.6"	1712mm 67.4"	1785mm 70.3"
Space Between Wheels	500mm 19.7"	515mm 20.3"	500mm 19.7"	570mm 22.4"
Chassis Weight	23kg 50.7lbs	27kg 59.5lbs	23kg 50.7lbs	27kg 59.5lbs
Max Combined Weight of User and Seat	110kg 242.5lbs			
Seat Base Height	450mm 17.7"			
Push Handle Height	1050-1280mm 41.3-50.4"			
Push Handle Angle	90°-120°			
Minimum Height When Folded	570mm 22.4"			
Seat Tilt	0-30°			

14 Technical Data continued

	Mygo Size 1	Mygo Size 2	KIT Size 1	KIT Size 2
User age range (years)	3 - 10	8 - 14	12 - 18	16 - adult
Max. user weight	50kg 110lbs	60kg 132lbs	75kg 165lbs	75kg 165lbs
Seat Width (a)	200-325mm 7.8-12.8"	220-345mm 8.7-13.6"	215-370mm 8.5-14.6"	215-370mm 8.5-14.6"
Seat Depth (b)	270-420mm 10.6-16.5"	350-470mm 13.8-18.5"	360-480mm 14.2-18.9"	410-560mm 16.1-22"
Backrest Height (c)	360-470mm 14.2-18.5"	460-570mm 18.1-22.4"	500-620mm 19.7-24.4"	560-675mm 22-26.6"
Seat to Footplate (d)	215-350mm 8.5-13.8"	315-470mm 12.4-18.5"	330-510mm 13-20.1"	330-510mm 13-20.1"
Seat unit weight	10kg 22lbs	14.5kg 32lbs	20.5kg 45.1lbs	21kg 46.2lbs

Turning Radius

To calculate the turning radius around a braked wheel, use the following formula -

$$W = B + \sqrt{A^2 + B^2}$$

A = overall length

B = overall width

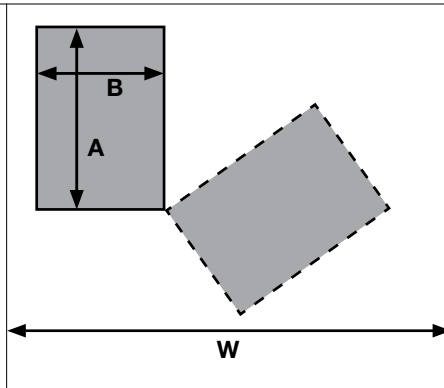
W = turning radius

Example:

133-770 with 22" wheel

A = 850mm, B = 690mm

Turning radius = 1785mm



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