

LECKEY[®]

Hi-low Chassis

User Instructions





The Hi-low Chassis has been designed to offer the options of indoor and outdoor bases for various seating systems. This manual shows how you can quickly, easily and safely make use of all the functions. The instructions on safety and maintenance will ensure that you will enjoy the use of this product for a long time.

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1. Intended Use

The Hi-low Chassis has been designed for indoor and outdoor use. It is not designed for use in transportation and is not crash tested. It should never be exposed to the elements as this may corrode the metal components. The Indoor chassis has 4 small castors and is for use indoors only. The Indoor / Outdoor Chassis has two small wheels at the front and two larger wheels at the back and can be used both indoors and outdoors.

2. Declaration of Conformity

James Leckey Design Ltd as manufacturer with sole responsibility declares that the Indoor / Outdoor Chassis conforms to the requirements of the 93/42/EEC Guidelines, Medical Device Regulations 2002 and EN12182 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 for use 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 setups, reissue inspections and annual inspections of this product.

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

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

Section 6

Safety Information

Section 8

Frequent Adjustments for Daily use

Section 9

Cleaning and Care

Section 10

Daily Product Inspection

Leckey recommend that a written record is maintained of all those who have been trained in the correct use of this product.

6 Safety Information



6.1 Always read instructions fully before use.



6.2 To improve safety we recommend that users should not be left unattended at any time whilst using Leckey equipment.



6.3 Only use Leckey approved components with your product. Never modify the product in any way. Failure to follow instructions may put the user or carer at risk and will invalidate the warranty on the product.



6.4 If in any doubt to the continued safe use of your Leckey product or if any parts should fail, please cease using the product and contact our customer services department or your local dealer as soon as possible.



6.5 Carry out all positional adjustments and ensure that they are securely fastened before you put the user into the product. Some adjustments may require the use of a tool which is provided with each product. Keep all tools out of reach of children.



6.6 When the product is stationary ensure that all castors are locked and facing away from the base, as this will improve product stability. This is especially important when the tilt in space or back recline facility is in use.



6.7 When the seat is in use on a Hi-low chassis please ensure that the height adjustment pedal and tilt in space lever are locked off and cannot be adjusted accidentally by other children.



6.8 When the Leckey seating systems are used on the Hi-low chassis we do not recommend that users are moved over uneven surfaces when in the equipment. All due care and attention should be taken if transporting the user in and out of the seat.



6.9 Never leave the product on a sloping surface, greater than 5 degrees. Always remember to lock all the castors.



6.10 Only use the push handle to steer and move the seat from one area to another. Never use the tray for this purpose.



6.11 The product contains components which could present a choking hazard to small children. Always check that locking knobs and bolts within the child's reach are tightened and secure at all times.



6.12 Leckey products comply with fire safety regulations in accordance with EN12182. However the product contains plastic components and therefore should be kept away from all direct sources of heat including naked flames, cigarettes, electric and gas heaters.



6.13 Clean the product regularly. Do not use abrasive cleaners. Carry out maintenance checks on a regular basis to ensure your product is in good working condition.



6.14 The Hi-low Chassis has been designed for indoor and outdoor use. The indoor chassis has 4 small castors and is for use indoors only. The Indoor / Outdoor Chassis has two small wheels at the front and two larger wheels at the back and can be used both indoors and outdoors. When not in use should be stored in a dry place that is not subjected to extremes of temperature. The safe operating temperature range of the product is +5 to +40 deg Celsius.



6.15 Always check the plastic hand knobs on the push handle are tightened securely before you move the seat unit.



6.16 Before using the seating system always check that the interface handle on the seat unit is fully engaged with the chassis. If the handle is not engaged properly the seat unit may come loose and could cause serious injury to the child or carer.



6.17 These products have not been crash tested therefore cannot be used in transport.

How to assemble the Hi-low Chassis

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7.1 Attaching the seating system to the Hi-low chassis

Adjust the height of the chassis to its maximum to reduce risk of back strain while attaching the seat unit. Refer to Section 8 on how to adjust the height of the chassis you have purchased. (Please note that the photos and text relate to interfaces for Leckey seats. For all other seating systems please refer to the manufacturer's instructions.)

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.



Always check the handle and locking pin are fully engaged before you place the child in the seating system. If the handle is not engaged properly the seat unit can come loose and could cause serious injury to the child or carer.

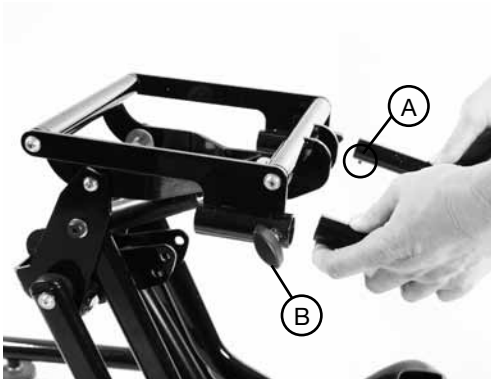


7.2 Attaching the push handle

The push handle is attached to the Hi-low chassis by inserting the two lower stems into the receiving tubes as shown. The push handle has safety poppers (A), which need to be pressed in when inserting the lower stems. Push the stems in until the poppers protrude from the other end of the receiving tubes. Secure the handle in place by tightening the locking knobs (B).

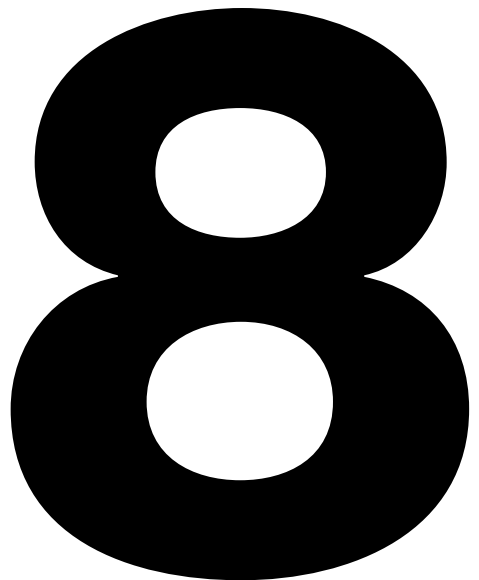


Check these regularly to make sure the knobs are tight, particularly if you are moving the product unit along corridors that may have uneven or sloping surfaces, or outdoors.



Frequent adjustment for daily use (therapists/ carers/parents)

Parents and carers should be shown how to make frequent adjustments and be made aware of the safety checks in Section 6 by a technically and clinically competent person who has been trained in the use of the product. Leckey recommend that a written record is maintained of all parent and carers who have been trained in the use of this product.



8.1 Chassis

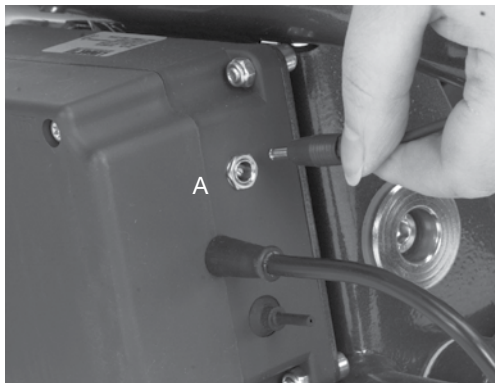
This user manual shows the correct and safe use of the Hi-low chassis.

To prepare the Hi-low chassis for a seating system we recommend that you raise the chassis to a comfortable working height by pressing the foot lever at the rear of the chassis or by pressing the up button on the handset of the powered option.



8.2 Powered height adjustment

The powered chassis can be easily adjusted with the push button control handset. The seat can be height adjusted with the client in the chair. Before the product is used for the first time it is recommended that the battery should be fully charged for 12 hours. To do this plug the adaptor into the mains socket and attach the lead (A) to the battery and switch on the mains supply power. When charged switch off mains power, remove the adaptor plug and disconnect the lead from the battery. The battery charge should be topped up each day for approximately one hour. The chair can be adjusted in height while connected to the mains.



8.3 Height Adjustment - Hi-low chassis

You can carry out this adjustment with the child in the chair. To adjust the height of the Hi-low chassis press the foot lever at the rear of the chassis for the gas spring version and repeatedly for the hydraulic version and lift pedal up to lower the chassis, or press the up button on the handset of the powered option whilst holding the push handle. Once you remove your foot from the pedal or your thumb from the handset the seat will be fixed at the chosen height.

For safety the height adjustment pedal on the chassis can be locked by engaging the pull pin (C) on the right hand side of the pedal. The height adjustment pedal on the hydraulic chassis should be pushed in when the required height adjustment has been achieved. To unlock pull the pin out and rotate 90 degrees, the pedal can then be operated. The locking pin (C) should be kept in the locked position when you are not adjusting the chassis.



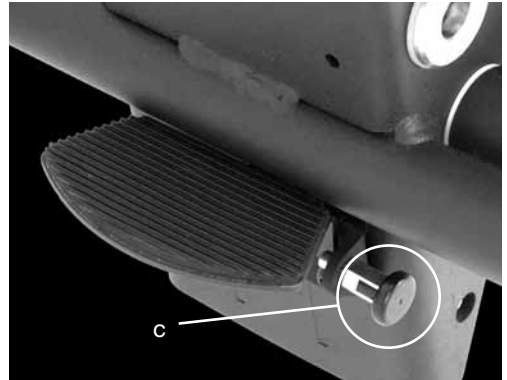
Always keep the locking pin engaged when you are not adjusting the chassis. This will prevent the foot pedal being operated accidentally.



For children over the weight of 27kg (60lbs), raising the manual chassis is a 2 person lift (UK lifting and handling regulations).



Always use caution as hands could become trapped when height adjusting the base.



8.4 Tilt in space

The tilt in space can be angled while the user is in the seat. Before you adjust the tilt in space angle of the seat always ensure the pelvic harness is secured preventing the user from sliding forward in the seat.

To adjust the tilt angle press the lever under the seat base. Once you have selected the angle you require, by simply removing your hand from the lever, the chair will be locked in position. The tilt in space should be locked off while the user is in the seat. To lock the lever twist the pull pin to the right hand side of the lever and the pin will pop into position. You may have to lift the lever slightly to allow it to lock. To unlock pull the pin out and rotate 90 degrees, the lever can then be operated.



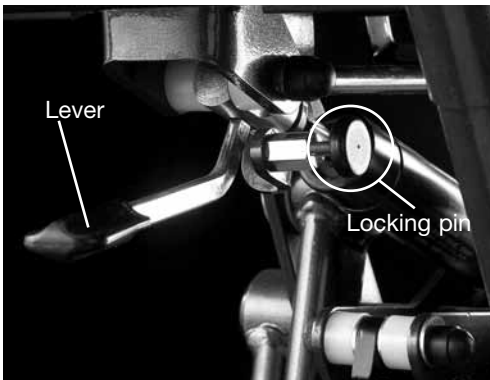
Always keep the tilt in space lever in the locked position to prevent accidental actuation of the lever which could cause the seat unit to jolt and possibly cause injury to the child.



Please use handle bars when operating tilt in space.



Always check with your therapist that the use of tilt in space will not cause any obstructions to the child's airways.



9 Cleaning & Care Information

How to Maintain

When cleaning we recommend that you use only warm water and a non-abrasive detergent. Never use organic solvents or dry cleaning fluids.

Metal and plastic components

1. Soap and water or antibacterial spray can be used for daily cleaning.
2. For deep cleaning a low pressure steam cleaner can be used.
3. Do not use solvents to clean plastic or metal components.
4. Make sure the product is dry before use.

10 Daily Product Inspection

(Therapists, parents & carers)

We recommend that daily visual checks of the equipment are carried out by therapists, carers or parents to ensure the product is safe for use. The recommended daily checks are detailed below.

1. Check that there is no lateral movement or wobble in any of the moving parts. Ensure all adjustment knobs and bolts are in place and secure.
2. Check all castors are moving freely and lock securely.
3. Ensure the handle and locking pin on the seat interface plate is fully engaged and the seat unit is securely fixed onto the chassis.



If in any doubt to the continued safe use of your Leckey product or if any parts should fail, please cease using the product and contact our customer service department or your local dealer as soon as possible.

11 Annual Product Inspection

(Therapist, Technician, Leckey Product Advisor, Dealer)

Leckey recommend that each product should be subject to a detailed inspection at least once a year and every time the product is reissued for use. This inspection should be carried out by a technically competent person who has been trained in the use of the product and should include the following checks as a minimum requirement.

1. Check that there is no lateral movement or wobble in any of the moving parts. Ensure all adjustment knobs and bolts are in place and secure.

2. Check all ratchet handles, knobs, nuts, bolts and plastic buckles are in place, replacing any missing items. Paying particular attention to the following items;

- > Headsupport locking bolts.
- > Backrest height and angle adjustments bolts.
- > Seat depth adjustment bolts.
- > Pelvic harness / hip guide attachment bolts.
- > Footrest height and angle adjustment.

3. Check the chassis height adjustment mechanism is working properly. If the chassis is foot pedal operated ensure the seat height doesn't change when the pedal is released. Also, check that the locking pin engages securely to prevent accidental height adjustment of the chassis.

4. Adjust the seat to its maximum range of tilt in space and ensure that the locking lever locks the seat out securely at varying point in this range.

5. Check that where the seat and chassis join there is no visible wear and tear on the metal components.

6. Lift the base to check each castor individually. Make sure they are moving freely and remove any dirt from the rubber wheels. Check that the brakes lock the wheels securely.

7. Visually check the structure of the product paying attention to weld points on the frame ensuring there are no signs of fatigue or cracking around the welds.

8. Leckey recommend that a written record is maintained of all annual product inspections.



If in any doubt to the continued safe use of your Leckey product or if any parts should fail, please cease using the product and contact our customer service department or your local dealer as soon as possible.

12 Re-issuing Leckey Products

Most Leckey products are assessed and ordered to meet the needs of an individual user. Before reissuing a product we recommend that the therapist prescribing the product has carried out an equipment compatibility check for the new user and has ensured that the product being re-issued contains no modifications or special attachments.

A detailed technical inspection should be carried out on the product prior to re-issuing. This should be carried out by a technically competent person who has been trained in the use and inspection of the product. Please refer to section 11 for the required checks to be carried out.

Ensure the product has been cleaned thoroughly in accordance with section 9 of this manual.

Ensure a copy of the user manual is supplied with the product. A copy can be downloaded from our website www.leckey.com

Leckey recommend that a written record is maintained of all product inspections carried out during the reissue of the product.



If in any doubt to the continued safe use of your Leckey product or if any parts should fail, please cease using the product and contact our customer service department or your local dealer as soon as possible.

13 Product Servicing

Servicing of all Leckey products should only be carried out by technically competent persons who have been trained in the use of the product.

In the UK & ROI please contact the Leckey Service Centre on UK 0800 318265 or ROI 1800 626020 and our customer service department will be delighted to assist you with your servicing requirements.

All international service enquiries should be directed to the appropriate Leckey distributor who will be delighted to assist you. For further information on Leckey distributors please visit our website www.leckey.com

14 Technical Information

Chassis with Interface and Push Handle

- 102-2753 Indoor Hi-low chassis with gas powered manual lift
- 102-2766 Indoor Hi-low chassis with hydraulic manual lift
- 102-2754 Indoor Hi-low chassis with powered lift
- 102-2767 Indoor-outdoor Hi-low chassis with gas powered manual lift
- 102-2768 Indoor-outdoor Hi-low chassis with hydraulic manual lift
- 102-2769 Indoor-outdoor Hi-low chassis with powered lift

Chassis with no Interface and no Push Handle

- 102-2760 Indoor Hi-low chassis with gas powered manual lift (no interface or push handle)
- 102-2761 Indoor Hi-low chassis with hydraulic manual lift (no interface or push handle)
- 102-2762 Indoor Hi-low chassis with powered lift (no interface or push handle)
- 102-2763 Indoor-outdoor Hi-low chassis with gas powered manual lift (no interface or push handle)
- 102-2764 Indoor-outdoor Hi-low chassis with hydraulic manual lift (no interface or push handle)
- 102-2765 Indoor-outdoor Hi-low chassis with powered lift (no interface or push handle)

Chassis with Interface and no Push Handle

- 102-2755 Indoor Hi-low chassis with gas powered manual lift (no push handle)
- 102-2756 Hi-low powered lift
- 102-2770 Indoor-outdoor Hi-low chassis with hydraulic manual lift (no push handle)

Interfaces

- 120-817 Squiggles type chassis interface
- 117-733 Mygo type chassis interface
- 117-912 Intermediate plate for trapezoid interface

Leckey Hi-low base options

Indoor chassis (gas powered manual lift)	Min 340cm / 13.4 inches	Max 655cm / 25.8 inches
Indoor chassis (hydraulic manual lift)	Min 325cm / 12.8 inches	Max 615cm / 24.2 inches
Indoor chassis (powered lift)	Min 370cm / 14.6 inches	Max 675cm / 26.6 inches
Indoor-outdoor chassis (gas powered manual lift)	Min 390mm / 15.4 inches	Max 690mm / 27.2 inches
Indoor-outdoor chassis (hydraulic manual lift)	Min 380mm / 15.0 inches	Max 670mm / 26.4 inches
Indoor-outdoor chassis (powered lift)	Min 420mm / 16.5 inches	Max 710mm / 28.0 inches
Tilt in Space	Prone 10°	Supine 25°
Base Weight	12kg / 26.5lbs	
Max combined weight of user and seat	80kg / 176lbs	

6.3 LINAK Actuator specification

- 281209-01

Rated IP51

Duty Cycle Max 10% or 2 min continuous use followed by 18 min not in use.

Ambient temp +5deg to +40deg C

Ambient Operating temp 22deg

Storage temp -40deg C to 70degC

Push Max 3500N

Pull Max 2000N

Self Lock at 3500N Push – 2000N Pull

Typical speed with full load 4.7mm/sec

Max amps at load of 3500N is 3.9 amps

Noise level dB(A) 48

Power input voltage 24v +- 10%

6.4 LINAK Battery Box - BA18021-00

Rated IP51

Ambient temp +5deg to 40deg C

Storage temp -20deg C to 60deg C

Rated Capacity 1.2 Ah 24v

Charging current is max 0.3A

Lead acid gel filled battery

6.5 LINAK Handset - HB41000-00004

Rated IP51

Control current 100mA per channel (Max)

Ambient temp +5deg to +40deg C

LINAK Battery Charger - CH01

Mains 100-240 VAC/50-60 Hz switch mode power supply

Charging voltage 27.6 VDC +- 2%

Charging current Max 500mA

Green LED for power on

Yellow LED for charging function

Yellow LED turns into green when batteries are fully charged.

LINAK products may be stored in non-heated storage facilities with humidity between 0 and 100%, none condensing. None condensing means that one should not take a product from an ice cold warehouse into a room with a temperature of 20deg C; if this is done then moistness will appear on the products.

LECKEY^o

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24 hour postural
care for babies,
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