

180 Mobile Hoist



User Manual

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1 Introduction



Please read and understand this manual in its entirety before using your mobile hoist. The information in this manual is important for the safety of anyone near the hoist and must be read and understood to help prevent injuries. It is also crucial to the proper operation and maintenance of the mobile hoist.

This user manual should be kept safe for future reference. Contents of this manual are subject to change without prior written notice.

Should any questions arise from reviewing this manual, contact your local authorised representative.

If, during the use of this device a serious incident has occurred, please report it to the manufacturer and to your national authority.

1.1 Intended Use

The mobile hoist is a raising and lowering aid used to transfer people safely and is designed to be used in combination with a sling, together these two items make up the mobile hoist system. The lift makes it possible to move mobility impaired individuals with minimal strain or risk to the caregiver, while providing complete safety, dignity and comfort for the person being moved. It can raise up an individual from one location, such as a bed, move the individual within the room to another location and finally lower the individual, such as into a chair or a bath. The lift is designed for internal use only. No other environments are suitable.

The mobile hoist is designed to be used by healthcare workers, care home staff, and at home carers such as family members. All users will need specific training in how to use the hoist. Typical home care users may include, but is not limited to, teachers, medics, paramedics, carers, family, and friends. Focusing on the dignity and wellbeing of the person being moved, the simple to use hoist maximises the amount of care provided to the person.

You may need to seek a specialist advice on how to assist some people with specific moving and handling needs. Sources of advice include, but is not limited to, professional bodies and organisations, occupational therapists, physiotherapists, manual handling advisers and ergonomists with experience in health and social care.

1.2 Manufacture

The product is manufactured at the address below:



Prism Medical UK

Unit 1, Tir Llwyd Industrial Estate, St Asaph Avenue, Kinmel Bay, Conwy, LL18 5JZ
Telephone number: 01924 840100.

1.3 European Authorised Representative

The address of the European Authorised Representative for this product:



European Healthcare & Device Solutions (Ireland) Ltd.
Stratton House, Bishopstown Road,
Cork, Ireland.
T12 Y9TC.
Telephone number: +353(86)2280846.

1.4 Symbols Used

The table below includes all symbols from BS EN ISO 15223-1:2021 that can be found in this manual and on the product and what they represent. Refer to this table when you are unsure of what a symbol represents.

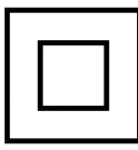
			
Place of Manufacture	Country of Manufacture	Serial number	Catalogue Number
			SWL
Caution – see instructions for use	Consult instructions for use	UK Conformity Assessed	Safe Working Load
			
For internal use only	Packaging indicator – Keep dry	Do not use if package is damaged	Packaging indicator – This way up
			
Fragile, handle with care	Please observe local laws on recycling	Non-sterile	Atmospheric pressure limitation
			IP_{N1}N₂
Temperature range	Humidity range	Class II Equipment	Degree of protection provided by enclosure. N1: Ingress of particles N2: Ingress of water
			
Type 'B' applied part	Type 'BF' applied part	European Authorised Representative	

Table 1.4-1

1.5 Contraindications / Limitations

There are no known "contraindications" associated with the usage of the mobile hoist, provided it is used as per the manufacturer's recommendations and guidelines. However, it is recommended that a client specific assessment is completed by a trained and knowledgeable health care professional to determine the method of transfer and use.

The manufacturer does not recommend a required number of operators for the use of our products. This information and recommendation can only be provided after a thorough personalised, case specific assessment, as there are many factors that can influence these decisions.

Limitations of the hoist include:

- The hoist should only be operated by competent and trained persons.
- The hoist should only be used with patients weighing under the safe working load of the hoist.
- Between the hoist, sling and carry bar, the lowest safe working load of the components should not be exceeded.
- The hoist is only compatible with the allocated slings found within this manual.
- Hoists are designed for human transfer only. There is no other application to this product.
- The operator of the hoist must always be pay attention to the well-being of the patient. Patients should not be left unsupervised during operation.
- The hoist is not designed for self-lifting. A carer must operate the hoist during use.

1.6 Safety Instructions and Warnings

Ensure to read and understand all the statements below, for the safety of the caregivers and users, along with warranty requirements. Failure to comply with warnings in this manual may result in; injury to the operator and/or client and/or damage to the lift or related components.

- The hoist is intended to be used on a flat and levelled surface during use.
- All mobile hoists are less stable on a sloping surface, never exceed a sloping surface of 5°, and always take great care during use on a sloping surface.
- The hoist becomes dangerous and unstable when transferring recklessly and at speed. Always keep two hands on the hoist during transfer and maintain a sensible moving speed.
- If you are unsure on the correct use of this product, please contact the manufacturer or a professional for further information or training.
- The mobile hoist and associated accessories are not toys. Do not use it for unsafe practices. Do not allow children to play with the product or any of its components. The hoist should not be used for any practice except its intended use.
- In facilities where more than one operator will be responsible for using the hoist, it is important that all such members be trained on the product prior to use. A training program should be established by the facility to acquaint new operators with this equipment.
- Your guarantee is void if persons unauthorised by the manufacturer perform work on the hoist.
- To maintain optimum function, the product should be inspected and maintained on a regular basis. See section 'Daily checks, Servicing and Cleaning' within this user manual.
- This user manual provides a list of standard accessories that have been approved.
- The product and the associated accessories are intended only for hoist and transferring of a person. The manufacturer will not be responsible for any damage caused by the misuse, neglect, or purposeful destruction of the equipment and/or its associated components.

- Any accessories used with the product should be checked before each use to ensure that they are in good working order. Check for signs of wear and ensure that all labels are legible. Report any unusual wear to your local authorised dealer.
- Ensure that a clear space is maintained around the hoist. Before using the mobile hoist, always check for and move away any obstacles.
- Never leave a user unattended in the mobile hoist.
- If additional accessories have been supplied with the hoist, refer to the instructions included with those items.
- The hoist must be commissioned only by persons authorized by the manufacturer.
- Under no circumstances should the hoist, sling, or mobile hoist system be used by a person who has not received specific training in the use of the equipment. Failure to adhere to this warning may result in serious injury to the operator, and / or the individual being lifted / transferred.
- Unauthorised modifications on this product may affect its safety. The manufacturer will not be held responsible for any accident, incident or deficiencies of performance that occur because of any unauthorised modification to its products. Your guarantee is void if any modifications are made that are not authorised by the manufacturer. This includes, but is not limited to, shortening the length of the emergency red cord – for example, tying it up or cutting it.
- Never expose the hoist directly to water. Your guarantee does not cover any misuse or abuse of the hoist system.
- The hoist and associated accessories are intended only for lifting and transferring of a person. We will not be responsible for any damage caused by the misuse, neglect, or purposeful destruction of the hoist, and/or its associated components.
- The commission of the hoist and its associated parts are certified to a maximum load of 180kg, depending on the model. Do not exceed the maximum rated load of any of the components.
- There is a risk of explosion if the hoist is used in the presence of flammable anaesthetics.
- Your hoist is for human lifting. Do not use it, or allow it to be used, for any other purpose.
- In areas where children are prone to be present be vigilant when operating the hoist.
- Protecting the people present, visually monitor sling loop connection points during raising, lowering and transfer stages so the sling remains firmly attached to the carry bar.
- To reduce the risk of unintended use, when the hoist is not in use remove the sling(s) from the product to prevent entrapment or strangulation should the device be tampered with.
- The hoist batteries are not a user serviceable part. Contact your local authorised dealer to arrange for replacement.
- Before initial use, the hoist unit must be charged for approximately 8 hours. Refer to section 'Charging the Hoist.' The handset must also be connected to the hoist. To connect the handset, refer to the section 'Connecting the Handset to the Hoist.'
- Between the hoist, carry bar, sling and other accessories, the lowest maximum load shall always be used.

- A risk assessment must be performed before using any other manufactured sling to ensure 'safe' use can be established.
- Risk of strangulation: Please make sure handset cable are always clear of all persons.
- Risk of impact with carry bar: Please take care to ensure the carry bar is clear of the person in the sling when preparing to raise/lower and move them to avoid any contact with that person.
- Risk of collision: The person operating the hoist should make sure that when raising, lowering, or moving the hoist that no people or objects will obstruct, be injured or damaged by the movement.
- Ensure that the person being hoisted is always raised clear of the floor when using the hoist.
- Serious Injury: If, during the use of this device or because of its use a serious incident has occurred, please report it to the manufacturer and to your national authority.
- Electric Shock: Do not insert any objects into the control box or battery charging station because of potential risk of electric shock. To reduce the risk of electric shock, do not install or operate the battery charger with a damaged cable or if the unit has been dropped or damaged.
- Portable RF Communication Devices: Portable RF communications equipment (including peripherals, such as antenna cables and external antenna) should be used no closer than 30cm (12 inches) to any part of the mobile hoist, including cables specified by the manufacturer, otherwise degradation of the performance of this equipment could result.
- Vicinity to Other Equipment: Use of this equipment adjacent to or stacked with other equipment should be avoided, as it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- Specified Accessories: Use of accessories, transducers, and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.



You may need to seek specialist advice on how to assist some people with specific moving and handling needs. Sources of advice include, but is not limited to, professional bodies and organisations, occupational therapist, physiotherapists, manual handling advisers and ergonomist with experience in health and social care.

2 Configurations and Key Components

2.1 Product Configurations

The table below includes all the configurations available for this hoist.

Hoist Variants List	Product Number
Mackworth Essentials 180 – Standard Carry Bar	123400
Mackworth Essentials 180 – QRS Carry Bar	123401

Table 2-2-1

2.2 Key Components

Please see below to familiarise yourself with the components of the TX Advance Lift. The images below show the contents of the ceiling track lift. If you have not received all the components contact your local dealer immediately – contact details are provided on the last page of this manual.

Item	Description	Item	Description
1	Boom	6	Base Frame
2	Manual Emergency lower	7	Rear Braked Castor
3	Handle	8	Leg Actuator
4	Control Box & Battery	9	Front unbraked Castor
5	Mast	10	Lift Actuator
11	Handset	12	Carry Bar /Carry Bar cover
13	Information/Serial Number Label (located on Base Frame & side of Mast)	14	User Manual

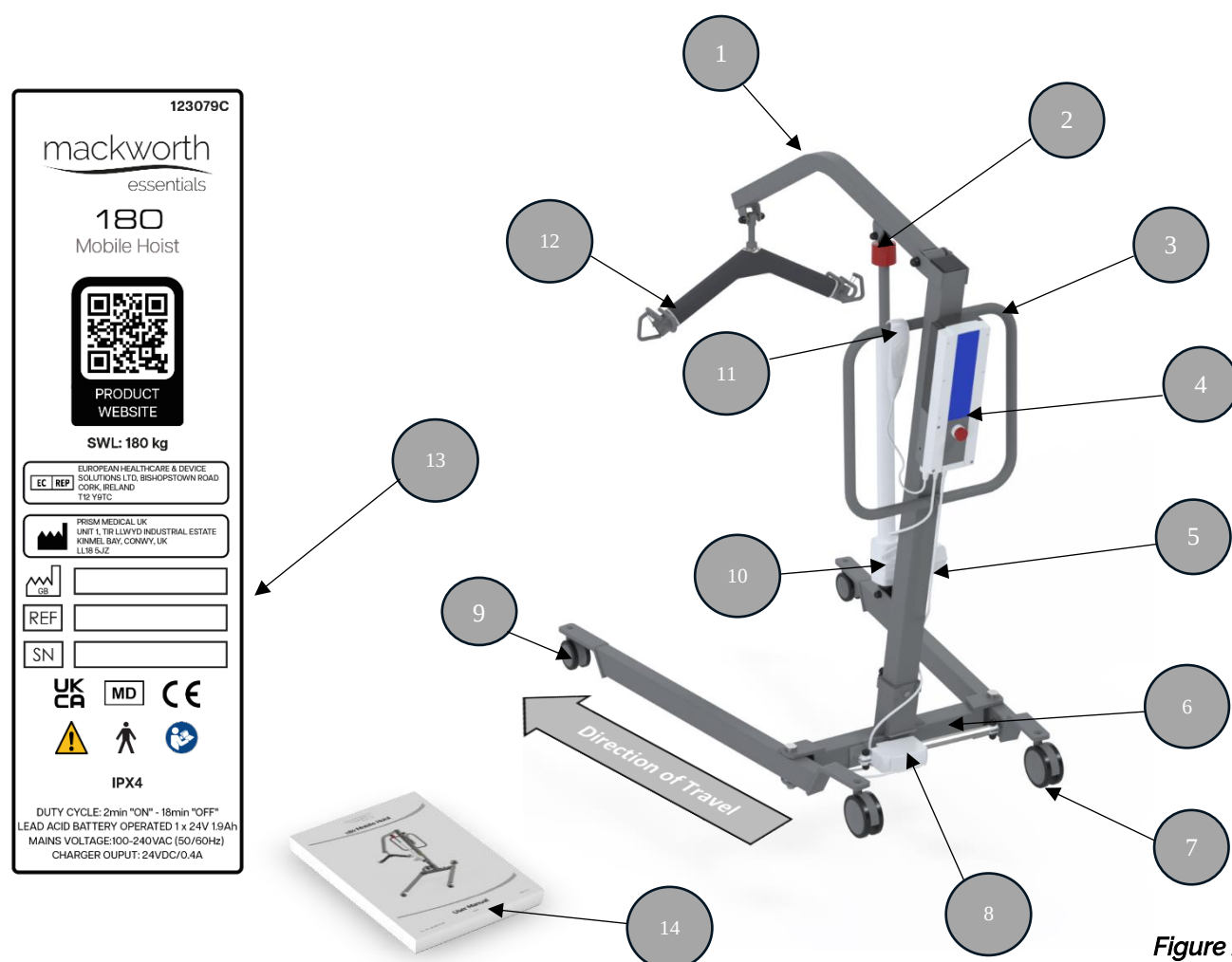


Figure 2-1

3 Assembly Instructions

The sections below will give detailed instructions on how to assemble and commission the hoist. These instructions must be adhered to for a successful and safe assembly. If you are unsure of any processes, always seek advice.



It is recommended that two people assembly the hoist.

3.1 Frame Assembly

To assemble the base and mast, follow the guidelines below:

1. Place the hoist base on the floor and proceed to disengage the star handle and bolt by unthreading, as shown below in Fig. 3.1-1
2. Carefully align the hoist mast with the base, ensuring that the mast is orientated forward and that the carry bar faces the front castors. Take care to avoid entangling any cabling during this process, as shown below in Fig 3.1-2
3. After successful positioning of the mast, reattach the star handle and bolt through the mast, and securely fasten. The hexagonal shape of the bolt corresponds to a similarly shaped aperture located on the rear side of the base, as shown below in Fig. 3.1-3 and 3.1-4.



Fig. 3.1-1

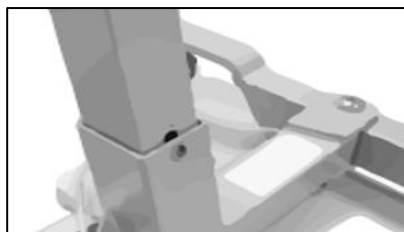


Fig. 3.1-2



Fig. 3.1-3

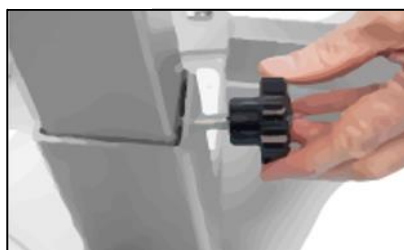
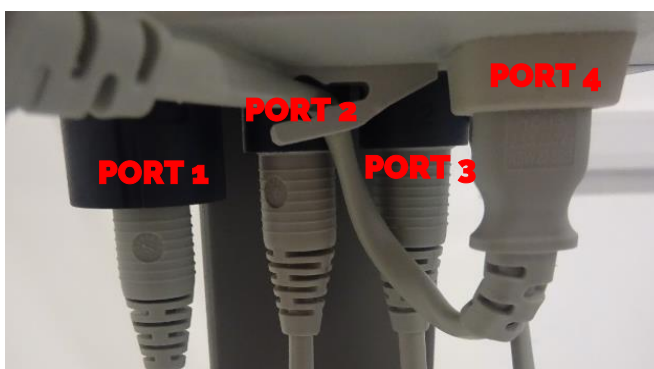


Fig. 3.1-4

3.2 Electrical Connections

On the control box, there are four cables that need to be fitted during assembly: the lift actuator, leg actuator, charger, and handset cables. The image below indicates each cable port and specifies the corresponding cable for each port.

Port	Cable Connection
1	Handset
2	Lift Actuator
3	Leg Actuator
4	Charger Snap Lead



NOTE: The handset cable has a small ridge which marries up with an ingress in the port. (Fig. 3.2-1)

NOTE: The charger cable fits into the snap lead as shown. (Fig. 3.2-2).



Fig. 3.2-1



Fig. 3.2-2

3.3 Body Floating (BF) Applied Parts

A Body floating applied part is a detachable component that has medium to long term contact with the user and carer. This includes the carry bar and sling.



Carry Bar



Slings

3.3.1 QRS Carry Bar

If you have chosen to have QRS carry bar option, please follow the following section to attach and detach the carry bar from hoist.

Attach

1. On the hook, move the locking mechanism into the hook by pressing down on the tab as shown below in Fig. 3.3.1-1 and 3.3.1-2.
2. With the carry bar positioned sideways along the length of the bar, move the pin at the top of the carry bar into the hook as shown below in Fig.3.3.1-3.
3. Once the pin is in the hook, release the carry bar and allow it to hang directly below the hook in its natural position as shown below in Fig.3.3.1-4.

Detach

1. Press down on the locking mechanism as described in step 1 (Attach).
2. Rotate the Carry Bar to a sideways position and remove from the hook.



Fig. 3.3.1-1



Fig. 3.3.1-2

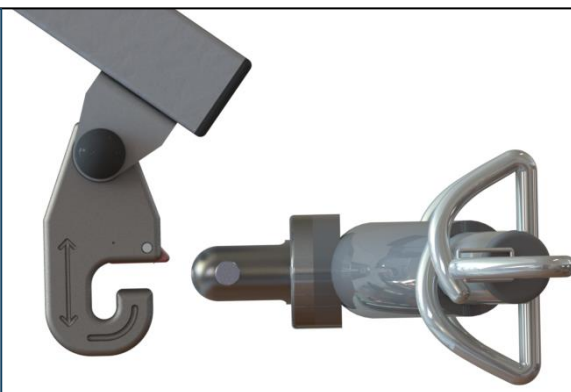


Fig. 3.3.1-3

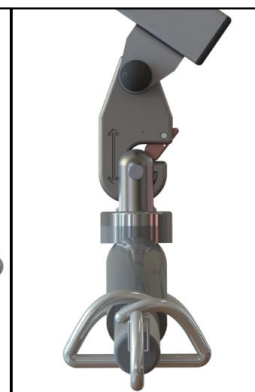


Fig. 3.3.1-4

3.3.2 Slings

The sling is a specially designed fabric accessory that attaches to the hoist through the carry bar. The sling is used to comfortably support the user during transfer. The sling is supplied separately from the hoist at the initial time of purchase. To choose an adequate sling, the user should be assessed prior to purchase for their specific requirements. See list below for compatible slings that are recommended for use with this hoist. For full list and further information on available slings, refer to the sling user manuals.

It is at the user's discretion to use alternative supplied product. In utilising another manufacturer's sling, checks must first be made to ensure the sling is safe to use and meets the requirements of BS EN ISO 10535 before its use and a full risk assessment to be carry out before use.

Always ensure that the sling SWL aligns with the hoist, for any component found across the system, the lowest SWL must never be exceeded.

Mackworth Sling Range	Care-Ability Sling Range
Mackworth Oak	Universal
Mackworth Yew	Universal Deluxe
Mackworth Hazel	Toilet Access
Mackworth Willow	Hammock
Mackworth Beech	Classic Hammock
Mackworth Pine	Deluxe Hammock
	Comfort In Chair Hammock
	Split Leg in Chair Hammock

The way the sling is attached to the carry bar needs to be assessed on individual basis and documented in the individual's care plan. Furthermore, the person attaching the sling should reference the slings user manual for the recommended colour coded loop attachment method, as well as the correct fitting requirements for the user. Only after the correct fitting requirements is fully understood should the sling loops be fitted onto the carry bar.

To attach the sling to the carry bar, follow the guidelines below:

- 1.** Pull the safety retaining clip back to access the carry bar hook. (See figure 3.3.2-1)
- 2.** Place the chosen sling loop onto the hook. (See figure 3.3.2-2)
- 3.** Release the safety retaining clip to secure the loop onto the carry bar. (See figure 3.3.2-3)



Make sure the required loop(s) are on the correct hooks and are correctly positioned.

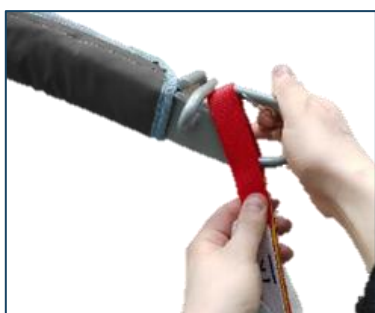


Fig. 3.3.2-1



Fig. 3.3.2-2



Fig. 3.3.2-3

To remove the sling, simply reverse the process – pull back on the spring locking mechanism, lift the loop out of the hook and release the locking mechanism.

3.4 Detachable Parts

This section covers the remaining components which are detachable by the end user, this includes the battery pack.

3.4.1 Battery Pack

To attach and detach the battery pack on the hoist, follow the guidelines below:

Attach

1. Place the Battery into the fixing location and push it forward into placement, the Battery will "click" into place as shown below.



Detach

2. Take hold of the Battery by placing your fingers into the latch, located on the top of the battery as shown below.



3. Pull the latch to release the Battery and lift the Battery from its fixing as shown below.



4 Operating Instructions



Appropriate training in lifting and handling procedures should be undergone by any person operating a mobile hoist, for their own and the client's safety and comfort.

4.1 Manoeuvring the Hoist

1. To move the hoist forward and backward, hold the handlebar with both hands and push/pull the hoist in the intended direction. (Do not step on the leg actuator positioned on the base of the frame to help with manoeuvring the hoist or in any other circumstance.)
2. To rotate the hoist, apply the brake on one of the rear castors to allow rotation when pushing. This movement should be performed with a smooth and slow action to avoid swinging the patient unnecessarily.
3. To stop the hoist, apply the brakes to both rear castors. When lifting and lowering the user in the hoist, both brakes should be engaged to avoid any unwanted lateral movement.

4.2 Applying the Brakes

The castors on the hoist are individually braked using your foot.



Make sure appropriate footwear is worn when using this product. Do not try to push the product when the castor brakes are activated.

To activate the brake, place your foot on the brake located on the rear castor and push down, as shown below in Fig 4.2-1 and Fig 4.2-2. The plastic will stay in the down position, indicating the brake is engaged. Repeat the process for both rear castors to ensure that the product is securely in position. To release the brakes, place your foot under the plastic brake and push up, as shown below in Fig. 4.2-3.



Fig. 4.2-1



Fig. 4.2-2



Fig. 4.2-3

4.3 Handset Operation

The Hand Controls has 4 functions: up and down, legs open and legs close.

Press down and hold on each symbol to operate the desired function. It is not possible to use the two functions at the same time. Once the mobile hoist has reached the extent of its travel in each direction, the actuator will automatically stop.

The handset is attached to the control box via a flexible, coiled cable that is secured in place with a friction-fit plug. The coiled cable is designed to give the greatest number of options for carer positioning without having a trailing cable around the patient. The handset also incorporates a hook which gives the carer flexibility whilst moving/positioning the patient. Clear and easy to understand labelling of the buttons enable ease of use for the caregiver.



4.4 Emergency Stop Button

The hoist is fitted with an emergency stop button which is only to be used during an emergency. Push the emergency stop button as shown in Fig. 4.4-1 to cut all power to the mobile hoist. To resume power, release the emergency stop button by turning in a clockwise direction. Indicated by arrows on the emergency Stop button as shown in Fig. 4.4-2



Fig. 4.4-1

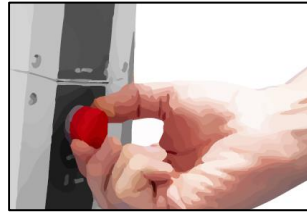


Fig. 4.4-2

4.5 Emergency Lowering

There are two options for emergency lowering, this includes the manual and electrical method. To lower the hoist using the electrical method, press the emergency button found on the control box directly below the emergency stop button. This button is designed to be pressed by a narrow object such as a pen nib or pencil. This button is a hold to run type, once release it will stop lowering.

The manual emergency lower function is best used during a power failure where the hoist does not respond to any electric related commands. This feature is found at the top end of the actuator and is a red wind-down which lowers the hoist by rotating in a clockwise direction.

If an emergency has occurred and the emergency features have been used, the hoist should not be used until an approved engineer has assessed the issue and serviced the hoist.



4.6 Charging the Hoist

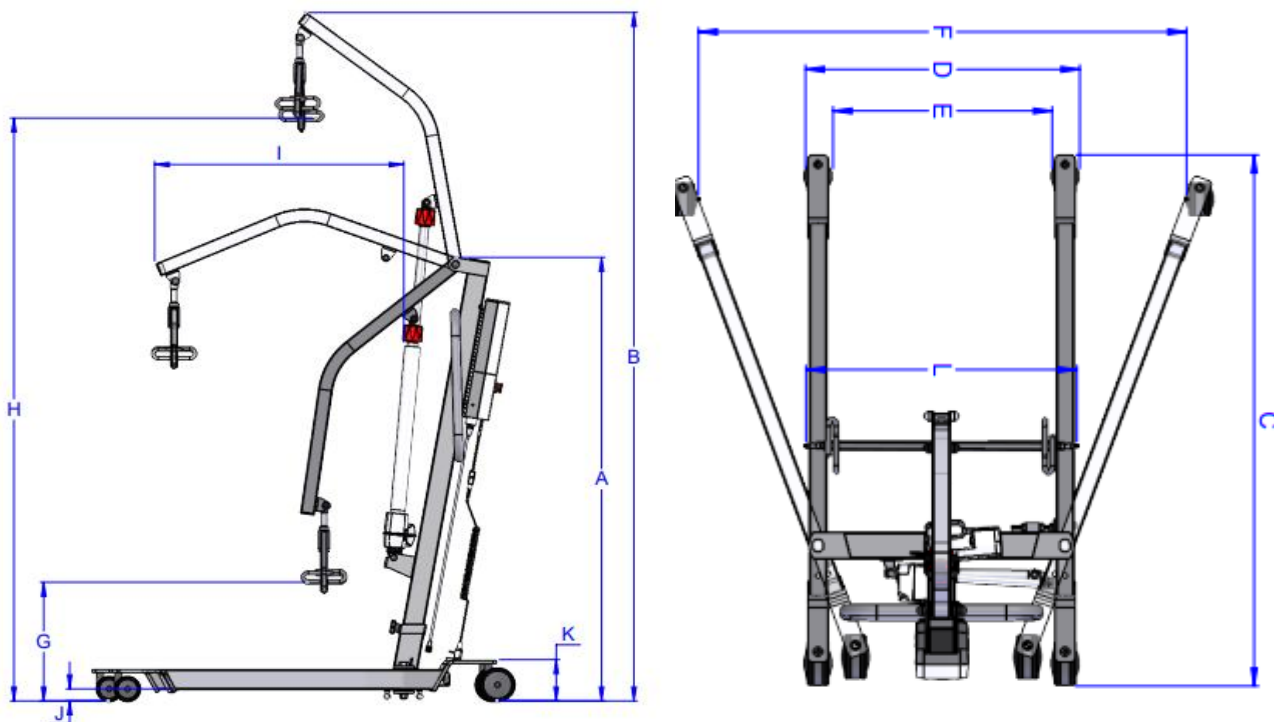
The battery pack is protected in an encased unit located on top of the control box. The control box will inform the user when the battery is flat and requires charging, by an illuminating an orange LED. When the LED illuminates, complete the lift, and place the battery on charge. As standard practice, the hoist should be placed on charged after each use. Keeping the batteries charged regularly and not allowing full discharge, will maintain the lifespan and performance of the batteries. From full discharge, the batteries take up to 8.5hrs before they are fully charged.

To charge the batteries, connect the figure 8 charger lead into the snap lead under the control box and connect the 3-pin socket into the nearest power supply. The hoist cannot be operated during charging; therefore, it must be removed to continue use.



5 Technical Specification

5.1 Hoist Dimensions



Hoist Dimensions - Millimetres		
Dimensions (Ref to drawing)	Standard Hoist	QRS Hoist
A – Minimum Height	1340	1340
B – Maximum Height	2025	2025
C – Overall Length	1235	1235
D – External Width Legs Closed	620	620
E – Internal Width Legs Closed	500	500
F – Maximum Internal Width Legs Open	1100	1100
G– Floor to Carry Bar Height Lowest Position	380	380
H – Floor to Carry Bar Height Highest Position	1750	1750
I – Maximum Reach	640	640
J – Ground Clearance	15	15
K– Under Bed Clearance	115	115
L – Carry Bar Width	620	615
Lifting Range	1370	1370
Turning Circle	1010	1010
Castor Size	100	100
Hoist Weight	40kg	40kg
Approx. Package Weight including pallet	70KG	70kg

Table 5-1-1

5.2 Specifications

Hoist Specifications	
Safe Working Loads	
Mackworth Essentials 180	180kg
Mackworth Essentials 180 (QRS Carry Bar)	180kg
Lift Speeds	
Lifting Speed 0kg	8.02 mm/s
Lifting Speed 180kg	5.99 mm/s
Lowering Speed 0kg	8.11 mm/s
Lowering Speed 180kg	8.91 mm/s
Battery Specification	
Battery Type	2 x 12-volt Rechargeable sealed lead acid.
Battery Capacity	24 V DC, 1 x 2.9 Ah
Raising/Lowering Duty Cycle	15% use, 85% rest (90 seconds use, 510 seconds rest)
Component Weights	
Product weight	40kg
Base assembly	1.5lb
Mast and boom assembly	4lb
Operational Forces	
Handset	4.5N
Brakes	35N
E-Stop Button	12N
Spring clips on carry bar	8N
Manoeuvring hoist with SWL	83N
Manoeuvring hoist without SWL	16N
Charger Specification	
Charger Input	230VAC 50/60Hz
Charger Output	27.4/29.0 VDC @ 0.8A
Charger degree of shock protection	Class II - Type B *Lift - internal power source
Hoist Protection	
Handset IP Rating	IPX4
Control Box IP Rating	IPX4
Battery IP Rating	IPX5
Sound Level	
Lifting (0kg)	38.5dB
Lifting (180kg)	41.7dB
Lowering (0kg)	40.9dB
Lowering (180kg)	30.5dB

Table 5-2-1

5.3 Standards Applied

The standards that have been applied to the device are as follows:

- IEC 60601-1-1:2012: Medical electrical equipment - Part 1: General requirements for basic safety and essential performance
- IEC 60601-1-2:2014: Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests
- IEC 60601-1-11:2010: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment.
- IEC 62366-1:2015: Medical devices - Part 1: Application of usability engineering to medical devices
- BS EN ISO 14971:2019: Medical devices. Application of risk management to medical devices
- BS EN ISO 12182:2012: Assistive products for persons with disability.
- BS EN ISO 10535:2006: Hoists for the transfer of disabled persons. Requirements and test methods
- Medical Device Regulation 2017/745 - CE marking of Medical Devices
- UK Medical Device Regulation 2002: UKCA marking of medical devices.
- EN ISO 15223-1:2016 - Medical devices. Symbols to be used with medical device labels, labelling and information to be supplied. General requirements
- EN 1041:2008+A1:2013 - Information supplied by the manufacturer of medical devices.
- BS ISO 20417 – Medical Devices – Information to be supplied by the manufacture.
- Waste Electrical and Electronic Equipment Directive (WEEE) 2012/19/EU

6 Environmental Conditions

The sections below will give detailed information regarding the environmental conditions the product should maintain throughout its life cycle. Failure to adhere to these conditions may negatively impact the function of the product. If you are unsure of any environmental conditions, always seek advice.

6.1 Operating Environment

The mobile hoist is intended to be used in dry environments. The hoist is also intended for internal use only.

The hoist is intended to be used within a professional healthcare facility or home healthcare environment. The hoist is not suitable for any other environment.

The hoist is not intended to be used in environments where there are rapid changes in the environmental temperature and humidity.

6.1.1 Normal Operating Conditions

+5°C to +40°C (41°F to 104°F) at a relative humidity between 15% to 90% RH, non-condensing but not requiring a water vapour pressure greater than 50hPa and atmospheric pressure between 700hPa to 1060hPa.

6.2 Storage Conditions

The hoist is intended for internal storage within normal environmental conditions. The hoist is intended to be stored in a dry room.

It is not intended to be stored in environments where there are rapid changes in the environmental temperature.

When storing the hoist, ensure that the product has been cleaned and dried. For further information, refer to the 'cleaning' section instructions.

6.2.1 Shipping and Storage Conditions

-25°C to +5°C (-13°F to 41°F) with any humidity level.

+5°C to +35°C (41°F to 95°F) at a relative humidity up to 90%.

+35°C to 70°C non-condensing at a water vapour pressure up to 50hPa.

12 Hours are required for the hoist to cool from the maximum storage temperature until ready for its intended use when the ambient temperature is 20°C (68°F).

12 Hours are required for the hoist to warm from the minimum storage temperature until ready for its intended use when the ambient temperature is 20°C (68°F).

7 Daily Checks

Inspection is to be completed prior to each use by the user of the mobile hoist.



Should any of the components in the table below fail the inspection, DO NOT use the hoist.

Contact your local authorized dealer for service – contact details are on the last page of this manual.

Ensure all component inspections in the table below are completed prior to each use of the hoist.

Check List before Use:

Component	Service/Inspection required
Generic	Visual inspection of the external of the hoist. Significant damage that may affect the function of the hoist along with a clear safety hazard is unacceptable.
	Check the labelling on the hoist to ensure they are all still legible, this includes the serial number and other important markings. If labels are not legible, then contact your local authorised dealer immediately.
	Check all nuts and bolts that are accessible and visible to see if they are loose. If they are not tight or you have concerns, then contact your local authorised dealer immediately.
Emergency Stop Button	Check the emergency stop button functionality.
Manual Emergency Lower	Check the manual emergency lower functionality.
Carry Bar	Inspect the sling looped attachments for any damage, sharp edges, and excessive wear.
	Check the carry bar rotates and swings freely, and that there is no build-up of wear.
	Ensure the spring clips on the carry bar are functional and present.
Castors	Check the brake functionality on each rear castor. Check all castor fixing points. Check that each castor runs free and rotates easily. Remove any build-up of hair, fluff, dust etc.
QRS (Quick Release Hook)	Ensure that the locking device on the QRS is closed when the carry bar is attached.
	Inspect the QRS for damage such as cracking. And ensure that the locking device is functioning correctly.
Lift Actuator	When raising and lowering the hoist, with or without load, listen to the actuator for any unusual lifting noises. Lower the patient immediately if an unusual noise is present.
Leg Actuator	When opening and closing the leg actuator, with or without load, listen to the actuator for any unusual lifting noises. Lower the patient immediately if an unusual noise is present.
Leg Pivot Points	Check the smooth opening and closing of the legs.
Control Box	Inspect all male plugs and female sockets for correct fitting. Inspect the hand control functionality.
Handset	Ensure the handset is functional, ensure the connection to the hoist is correct and that all the buttons are working before operation with a patient.

8 Cleaning



To reduce the risk of cross-contamination it is recommended to clean the hoist and accessories before use by a different person.

Please follow the recommended cleaning guidelines below on cleaning and disinfecting the hoist.

8.1 General Cleaning

For cleaning, the frame can be cleaned using a damp cloth, soap/water, and antibacterial spray. Do not use a steam cleaner as this could damage the internals of the electronic components as well as label integrity. Do not use industrial bleaches, abrasive cleaners, or organic solvents.

All cleaning solutions must be thoroughly rinsed off the product at the end of the cleaning process and the product dried using a dry cloth/towel. Always ensure the product is dry before use.



Care should always be taken when cleaning around electrical components to reduce the risk of electric shock or damage to the hoist.

8.2 Disinfecting

Should the hoist require a more thorough cleaning, the use of the Actichlor™ disinfectant product (which is widely available in tablet form and used throughout the healthcare industry) is recommended.



Follow the manufacturer's safety instructions for the use of this cleaning product before use to ensure safe use for the operator and the user.
Ensure the cloth is damp before the cleaning process.

Application is through a clean damp cloth applied to wipe the product down. Use in the following dilutions to ensure an effective clean:

- Actichlor™ dissolvable chlorine tablets provide a concentration of 1000 ppm of available chlorine (0.1%) per 1 tablet.
- 1 tablet (1.7g formed tablet (x1)) will create a virucidal solution, diluted in 1 litre of water to provide effective means to clean a "dirty" product. This is also ideal for use after an outbreak of the Norovirus/winter vomiting and can be used as a precaution against C.Diff. It is effective against viruses, bacteria, spores, yeasts, and moulds.
- A minimum of 5 minutes contact time with the outer components is recommended to prevent virucidal infections, whilst maintaining the integrity of the product. The product can withstand a longer contact period, however a minimum of 5 minutes is required to provide an effective cleaning regime.
- Blood spills should be dealt with by an increased concentration of the solution – please refer to the instructions on the manufacturer's product labelling.

Dilution chart					
Product used as	Product condition	Concentration (ppm)	Dilution qty* (l)	Tablets per 1l (0.26gal)	Contact time (minutes)
Bactericidal	Clean	200	5 (1.32gal)	1	1
	Dirty	1000	1 (0.26gal)	1	5
Yeastical	Clean	200	5 (1.32gal)	1	1
	Dirty	1000	1 (0.26gal)	1	5
Fungicidal	Clean	2000	1 (0.26gal)	2	15
	Dirty	5000	1 (0.26gal)	5	15
Mycrobactericidal	Clean	1000	1 (0.26gal)	1	15
	Dirty	5000	1 (0.26gal)	5	15
Virucidal	Clean	500	2 (0.53gal)	1	5
	Dirty	1000	1 (0.26gal)	1	5
Sporcidal (C. Diff)	Clean	1000	1 (0.26gal)	1	10
	-	-	-	-	-
Sporcidal	Clean	5000	1 (0.26gal)	5	10
	-	-	-	-	-

- Dilution is made with water. DO NOT dilute within any other medium.
- When diluted in water, one tablet gives 1000ppm of available chlorine.
- The concentration of the solution depends upon whether the object being cleaned is noticeably dirty (indicated in the table by "Product condition.")

Table 8-3-1

Handling and storage safety precautions when using this cleaning agent:		
Advice on Safe Handling	Hygiene Measures	Conditions for Safe Storage
Avoid contact with skin and eyes. Do not breathe dust, fumes, gas, mist, vapours, spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.	Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands, and any exposed skin thoroughly after handling.	Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers. Storage temperature: 0-25°C (32-77°F).
Individual Protective Measures		Dissolve
Hand protection: Gloves		Dissolve in cold water – With no agitation, 1 tablet will take approximately 10 minutes to fully dissolve in the water used.
The information above has been extracted from the Actichlor™ MSDS (Manufacturers Safety Data Sheet). For a full review of the data please follow the link below: http://www.nhsggc.org.uk/media/236215/msds-actichlor-plus.pdf		

Table 8-3-2

9 Servicing

Regular servicing on the hoist will help prevent breakdowns and reduce repair costs. It will also improve the quality of the product for the end users.



To reduce the risk of injury, no service is to be carried out on the hoist while in use.
Service must be completed by an authorised service engineer only.
Do not attempt to service the product yourself; this will void your warranty.

To ensure the safety and continued good function of your hoist, it is recommended to have an approved service engineer perform a routine service every 6 months, this will ensure that the product meets the required standards along with the LOLER requirements. It is important to document the service history of the product in the service log located at the back of this user manual after each service.

When the product is serviced, the service checklist must be completed.
Service Manual Document Number: 995051.

For information regarding spare parts, refer to the spare parts manual.
Spare Parts Manual Document Number: 992051.

Contact your local authorised dealer if you:

- Need more information.
- Have any questions about the use or service of your product.
- Notice any change in the performance.
- Want to report an unexpected occurrence.
- Want to arrange a service.
- Need to ascertain necessary information for replacement parts and components.

The expected product lifetime is **10 years**. This is dependent on usage and compliance with maintenance, servicing and LOLER inspections. Regular service on the product will increase the expected lifetime.

10 Troubleshooting

Should a problem arise with the use of the hoist, review the table below. Find the fault and complete the recommended solution. If the fault is not listed below or the solution does not correct the problem, contact your local authorised dealer immediately – contact details are provided on the last page of this manual.

Fault	Action
The handset has become disengaged from the hoist, or the handset buttons are not responding.	Refer to the section '3.2 electrical connections' to re-connect the handset or actuator leads to the hoist. If this does not correct the fault, then contact your local authorised dealer immediately so the hoist can be checked to ensure proper continued operation.
The handset button command is continuously activated.	Turn off the hoist by pressing the emergency stop button. Contact your local authorised dealer immediately so that the hoist can be checked to ensure proper continued operation.
No Power Part 1	If the emergency stop button has been accidentally pressed, then power will be ceased from the hoist, reset the e-stop button by twisting in clockwise direction.
No Power Part 2	Operate the hand control to determine if the hoist wakes up. This can be determined from the LED on the control box. If not present, the hoist may be out of charge. Place the hoist on charge for a minimum of one hour to determine if this resolves the issue. If not, contact your local authorised dealer.
Intermittent Display Screen – Self Recovering	If the display screen goes blank but self recovers, there is an electromagnetic disturbance in the vicinity, if the hoist remains operational, continue to use, and investigate the source of the disturbance.
Display Screen goes blank but LED functions	This may be caused by an electromagnetic disturbance, if the hoist remains operational, continue to use, and investigate the source of the disturbance.
Intermittent actuator performance	This may be caused by an electromagnetic disturbance, if the hoist remains operational, continue to use, and investigate the source of the disturbance. When the actuator performance is compromised, contact your local service provider.

Table 10-1-1

11 Disposal

With efforts to improve the environment and reduce waste, where possible our products have been manufactured with recyclable materials. Below are our guidelines on recyclable materials and being environmentally friendly.

The hoist should be disposed by an approved service engineer at the end of its life cycle. For guidelines on correct decommissioning procedures, refer to the commissioning guide: 996674.

Please observe the local laws on recycling and respect the current laws for disposal within the community the product is being used within. If there is any uncertainty of the below guidelines, contact your local authorities to determine the proper method of disposal of potentially biohazardous parts and accessories.

Fully recyclables:	Consideration when Recycling:
Steel Frame	Batteries
Castors	Electronic Components
Initial packaging of the device (cardboard)	Carry Bar Cover
Metallic fixing – Screws etc.	
Carry Bar	

Table 11-1



The product may be contaminated and must be disinfected before recycling or disposal. See section on 'Cleaning' for further details.

12 Warranty

It is impossible for all the risks to be eliminated from use of this product, but to reduce risk and improve safe and proper use, the user should always read and understand the user manual before use. Product failure may occur due to lack of maintenance and care, misuse, unauthorised and improper servicing or alterations, improper storage, and environmental use, or through normal use wear and tear. These factors are all beyond the control from the manufacturer. These risks are taken on by the users.

The hoist comes with a minimum 12-month warranty covering all manufacture defects. Refer to your terms and conditions for more detailed information. The warranty is valid if the product has maintained its intended use, and the user manual instructions have been followed. The warranty will not extend to the use of the product when used contrary to the user manual. This guarantee does not affect or in any way limit your statutory rights.

1. The liability of the manufacturer under the terms of this guarantee shall be limited to the replacement of the defective part(s) to the sales distributor, dealer, agent, person, or entity which purchased the equipment from the manufacturer. In no event shall the manufacturer incur liability for any consequential or unforeseeable losses.
2. This equipment guarantee shall be void if the equipment is not serviced by an authorised service engineer, in accordance with the manufacturer's recommendations, or if any unauthorised persons carry out work on the equipment.
3. This guarantee does not apply to failure attributable to normal wear and tear, damage by natural forces, user neglect or misuse or deliberate destruction.
4. Do not attempt to service the product yourself, or the warranty is void.

13 Service Record History

Complete this section after each service, repair inspection and/or maintenance.

Date:	Time:
Service Type: Service Inspection ☐ Repair ☐ Other ☐	
Completed By: (Printed name) (Signature)	
Company:	
Remarks & Actions Taken:	
Product Left in A Safe & Usable Condition: Yes ☐ No ☐ (if no explain in actions above)	
Date:	Time:
Service Type: Service Inspection ☐ Repair ☐ Other ☐	
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Product Left in A Safe & Usable Condition: Yes ☐ No ☐ (if no explain in actions above)	

Dealer/service contact details:

Contact details:

Prism Medical UK
Unit 1, Tir Llwyd Industrial Estate
St Asaph Avenue, Kinmel Bay, Conwy
LL18 5JZ
01924 840 100
www.prismmedical.co.uk

Disclaimer

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