

130

Mobile Hoist



Pre-Sales Manual

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1 Safety Instructions and Warnings

1.1 Intended Use

For internal use only.

The mobile hoist is a lifting aid used by trained personnel. The mobile hoist makes it possible to transfer/lift mobility impaired clients with minimal strain or risk to the caregiver, while providing complete safety, dignity, and comfort to the client.

The mobile hoist is one of two components that makes this possible. The other component, the sling, is a specially designed fabric accessory that attaches to the Hoist by means of a carry bar and straps and holds the client during the lift/transfer.

Please refer to the user guides supplied with the sling and reference them while reviewing this manual.

The functions of raising and lowering the boom and opening and closing of the legs on the Hoist, are accomplished by pressing buttons on the hand control. The hand control is attached to the Mobile Hoist.



The device is used under instruction, and the operation of the aid is undertaken by a trained carer. A risk assessment must be performed before using any other manufactured slings or Mobile Hoist, to ensure safe use can be established.

- The 130 Mobile Hoist is intended to be installed on a flat and levelled surface prior to use.
- The Hoist must be installed only by persons authorised by Smirthwaite or who have the rights to install and commission the Hoist safe for use.
- Under no circumstance should the Mobile Hoist or entire system be put in control of a person who has not been properly trained in the use and care of this equipment. Failure to adhere to this warning may result in serious injury to the operator and/or the individual being transferred.
- In facilities where more than one operator will be responsible for using the Mobile Hoist and sling(s) it is imperative that all such members be trained in the Mobile Hoist proper use. A training program should be established by the facility to acquaint new operators with this equipment.
- The Mobile Hoist, and associated slings are not toys. Do not use it for unsafe practices. Do not allow children to play with the Hoist or any of its components.
- Your guarantee is void if persons unauthorised by Smirthwaite perform work on the Mobile Hoist.
- To maintain optimum function, the Mobile Hoist should be inspected and maintained on a regular basis. See section 'General Inspection, Maintenance and Cleaning' within this user manual.
- Any accessories used with this Mobile Hoist including belt(s), should be checked to ensure that they are in good working order. Check for signs of wear to each component prior to use. Report any unusual wear, or damage immediately to your local authorised dealer.
- The 130 Mobile Hoist and Slings(s) are intended only for transferring of a person. The manufacturer or Smirthwaite will not be responsible for any damage caused by the misuse, neglect or purposeful destruction of the Unit and/or its associated components.
- The Mobile Hoist and its associated parts are certified to a maximum load of 130 kg. Do not exceed the maximum rated load of any of the components.
- Ensure that a clear space is maintained around the Mobile Hoist. Before performing a transfer, check for and move all obstacles out of the way.
- Your product is for aiding and transferring a patient. Do not use it, or allow it to be used, for any other purpose.

- Protecting the people present, visually monitor the sling(s) loops connection points during transfer stages, so the belt remains firmly attached to the clipped carry bar.
- In areas where children are prone to be present be vigilant when carrying out a transfer.
- 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.
- Between Hoist, Spreader Bar and Body-Support Unit, the lowest maximum load shall always be used.



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.

1.2 Warning Notes



Your Mobile Hoist has been manufactured and tested to exceed BS EN 10535:2021. This does not mean that it can be used without care. ALL OPERATORS should have read the operating instructions and appreciate this warning section.

1. ALL Mobile Hoists are less stable on sloping surfaces. A 5-degree slope is the maximum permitted and then only with great care.
2. ALL Mobile Hoists are dangerous to the person being transferred when used recklessly or pushed at speed.

1.3 Operating Environment

The Mobile Hoist is suitable for use within the professional health care facility environment as well as the home health care environment.

The Mobile Hoist is not suitable for any special environments.

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

Device Name	Order Code
Smirthwaite 130 (130 kg Safe Working Load)	3515

Table 1

2 Slings

The mobile hoist is designed to be used in combination with a Sling to perform its intended use. The sections below include the correct and safe manor of attaching/detaching the Slings as well as a list of approved slings for use.

2.1.1 Sling Attachment/Detachment

Sling loops should be attached as follows:

1. Put the required sling loop onto your finger and thumb and then using the same finger or thumb, pull back the spring locking mechanism on the correct hook on the correct side of the carry bar (Figure 1).
2. Slide the sling loop from your finger and thumb over the edge of the hook (Figure 2).
3. After positioning the loop below the locking mechanism (Figure 3) release the spring locking mechanism to secure the sling loop (Figure 4).

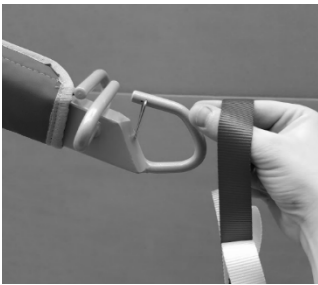


Figure 1



Figure 2

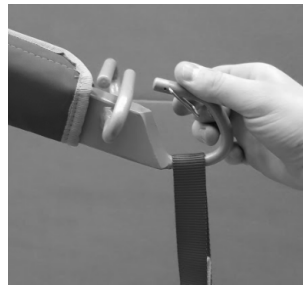


Figure 3

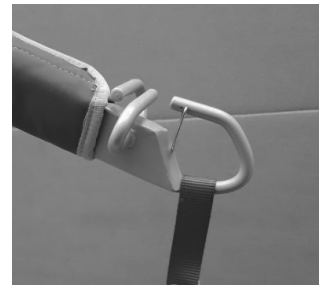


Figure 4

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.



Figure 5



Figure 6

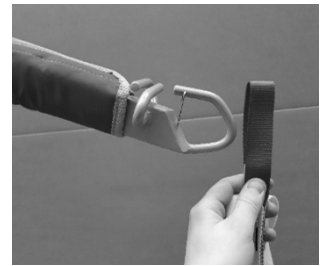


Figure 7

2.1.2 Compatible Slings

Below is a list of slings that are recommended and have been approved by the manufacturer for use in combination with the product.

The manufacturer recommends the use of the Smirthwaite sling range (type 'BF' applied part) to be utilised with the Smirthwaite 130 Mobile Hoist. 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.

The slings with a safe working load of 130 kg that can be used with the Mobile Hoist are shown below in the Table, complete with product codes. For all components, the lowest maximum safe working load must always be adhered to.

Size	Smirthwaite Sling Range - Product Material and Code			
	Polyester – Blue	Mesh – Black	Mesh – Pink	Mesh – Aqua Blue
Smirthwaite Universal Slings				
Junior	n/a	3501	3503	3505
Child	n/a	3502	3504	3506
Smirthwaite Comfort Recline Slings				
Junior	n/a	3507	3509	3511
Child	n/a	3508	3510	3512
Smirthwaite Dual Access Toileting Slings				
Junior	3513	n/a	n/a	n/a
Child	3514	n/a	n/a	n/a

Table 2

3 Detachable Parts

Detachable parts that are included with the product consist of the Battery. Below are the instructions for attaching and detaching the Battery.

3.1 Attaching/Detaching the Battery

The attachment and detachment of the Battery can be completed safely by following the following procedure:

Attach

1. Grab Hold of the Battery from the top position as shown in figure 8 and place your fingers onto the latch.
2. Press the latch to release the Battery and lift the Battery from its fixing. (Figure 9)

Detach

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

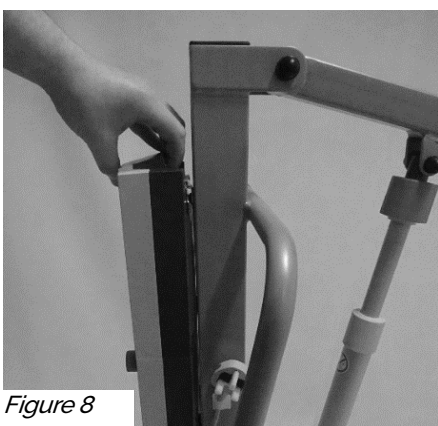


Figure 8

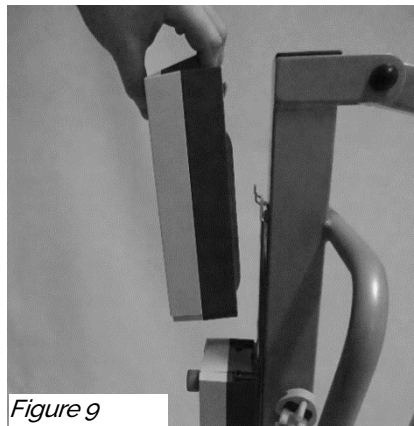


Figure 9

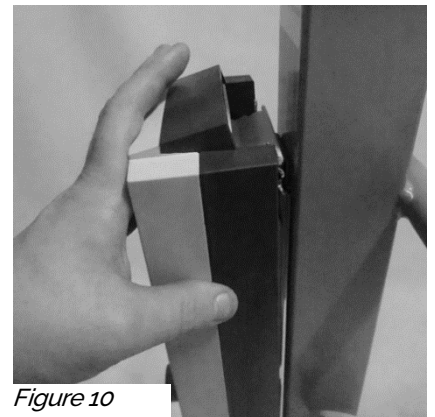


Figure 10

4 Technical Specification

4.1 Mobile Hoist Dimensions

All dimensions below are shown in millimetres.

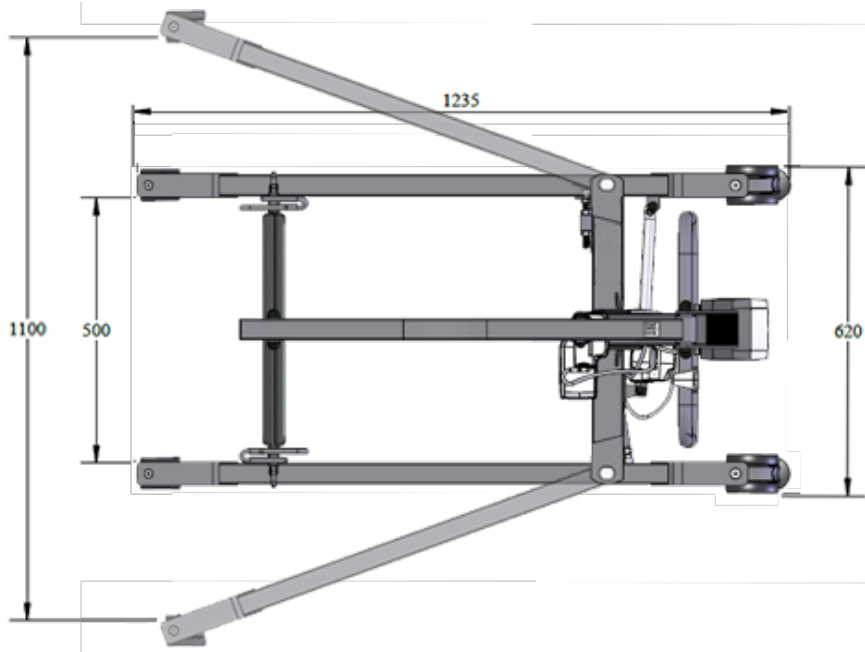


Figure 11

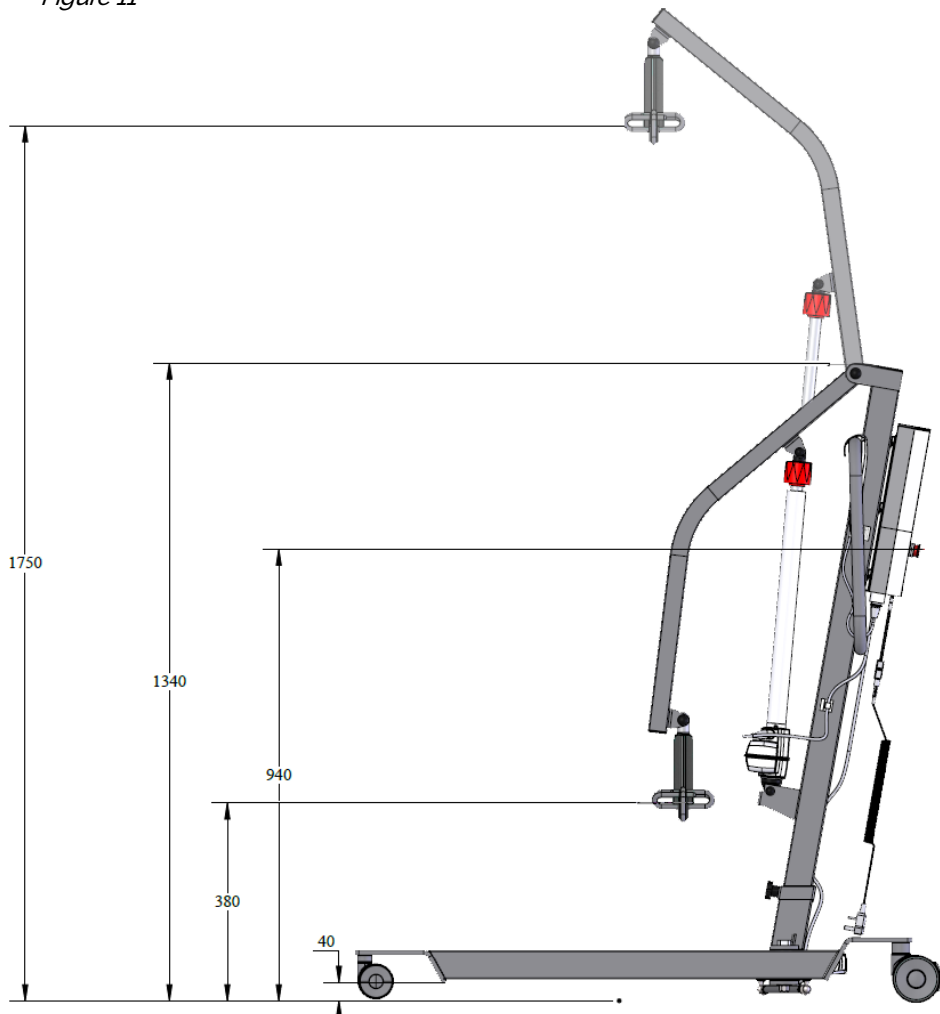


Figure 12

4.2 Specifications

Dimensions		
Turning Circle	1,010 mm	
Overall Height	2,010 mm	
Overall Width	625 mm	
Ground Clearance	15 mm	
Front and Rear Castors Size	75 mm and 100 mm	
Weights:		
Safe Working Load (SWL)	130 kg	
Full Product	40 kg	
Base Assembly	18.5 kg	
	21.5 kg	
Operational Forces:		
Moving Force (at SWL)	83 N	
Moving Force (with 0 kg)	16 N	
Operation of the Brake	35 N	
Handset	4.5 N	
E-Stop Button	12 N	
Carry Bar Rotation (at SWL)	18 N	
Carry Bar Rotation (0 kg)	< 0.5 N	
Sound Levels		
	Loaded dB(a)	Unloaded dB(a)
Lifting	41.7	38.5
Lowering	40.9	30.5

Table 3

4.3 Electrical Specifications

Battery type:	2 x 12-volt Rechargeable sealed lead acid.
Battery capacity:	24 V DC, 1 x 2.9 Ah
Charger rated input:	230VAC 50/60Hz
Charger rated output:	27.4/29.0 VDC @ 0.8A

Electric Shock Protection

Charger:	Class II *Lift - internal power source
Degree of shock protection:	Type B *Lift - internal power source
Duty cycle:	10% Use – 90% Rest (90 seconds use - 810 seconds rest)
IP rating, control box:	IPX4
IP rating, battery:	IPX5
IP rating, handset:	IPX4

4.4 Expected Product Lifetime

10 years. depending on usage and compliance to maintenance, servicing, and inspection.

4.5 Standards Applied

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

- EN 10535:2021
Hoists for the transfer of disabled persons. Requirement and test methods

5 Environmental - Storage and Operating Conditions

The Mobile Hoist is intended for internal use within normal environmental conditions.

It is not intended to be used in environments where there are rapid changes in the environmental temperature and humidity during use.

5.1 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 795hPa to 1060hPa.

5.2 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 (95°F to 158°F) non-condensing at a water vapour pressure up to 50hPa.

6 Maintenance



No service is to be carried out on the Mobile Hoist, while transferring a person to reduce the risk of injury.

Service must be completed by a Smirthwaite authorised Service Engineer.

Do not attempt to service the product yourself, or warranty is void.

To ensure the safety and continued good function of your Hoist, routine service must be performed on your Mobile Hoist.

Service should be completed by a Smirthwaite approved service engineer every 6 months to ensure the products required standard is maintained. The service history of the product should be documented each service in the Service Log at the back of this User Manual.



When the Mobile Hoist is serviced, the 6-month service checklist must be completed.

Service Manual Document Number: 995151.

Spare Parts Manual Document Number 992151.

The Service must be completed every 6 months after installation of the Hoist.

Contact your local authorised Smirthwaite dealer if you:

- Need more information.
- Have any questions about the use or service of your Mobile Hoist.
- 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.

Contact details of your local Smirthwaite dealer are shown on the last page of this manual.

7 Cleaning

Please follow the cleaning guidelines below on cleaning and disinfecting the Hoist.

7.1.1 General Cleaning



It is recommended to clean the Mobile Hoist and accessories before the use by a different patient, reducing the risk of cross-contamination.

The exterior of the Mobile Hoist can be cleaned using a damp soapy cloth for general cleaning duties. Please ensure the cloth is damp and not wet. Ensure the exterior of the device is dry after cleaning. Dry using a clean dry cloth.

7.1.2 Disinfecting (if necessary)

Should the Mobile Hoist require a more thorough clean, the use of the Actichlor™ disinfectant product (which is widely available in tablet form and used throughout the health care industry) is recommended.



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

Application is through a clean damp cloth applied to wipe the device 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" device. This is also ideal for use after an outbreak of the Norovirus/winter vomiting and can be used as a precaution against Sporcidal. It is effective against viruses, bacteria, spores, yeasts and moulds.
- The contact time against the outer components of the device should be for 5 minutes to prevent any virucidal infections without a degradation to the functionality of the device. 5 minutes is a recommended contact time. The device can withstand a longer contact period but the 5 minute recommendation as a minimum must be followed 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 manufacturers product labelling.

User notes:

Dealer/service contact details:

Manufacturer contact details:



Prism Medical UK

Unit 1, Tir Llwyd Industrial Estate,
St Asaph Avenue, Kinmel Bay,
Conwy, United Kingdom, LL18 5JZ

Telephone Number: 01924 840100

Disclaimer

While every effort has been made to ensure the accuracy of information contained in this user manual, no liability can be accepted by Smirthwaite for any errors or omissions. Smirthwaite operates a policy of continuous improvement. Specifications and other data are subject to change without notice.

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