

User manual

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BodyHoist



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1. Introduction

In front of you lays the user manual for the BodyHoist in combination with a PLS Ceiling Hoist and PLS Rail system. The BodyHoist can also be attached to lifting systems provided by third parties, in consultation with your distributor. All the information you need to operate the BodyHoist safely and securely can be found here.

1.1. Used symbols



General warning: possible risk of physical injury.



Remark.

An explanatory overview of the symbols and the label used on the BodyHoist can be found in the appendix (*chapter 5.4*).

1.2. Safety



The BodyHoist is only suitable for moving deceased persons. Living persons, products and/or any other objects may not be moved with the BodyHoist!



It is not permitted to use the BodyHoist to lift a weight exceeding 250 kg!



It is not permitted to use the BodyHoist to lift a deceased person who exceeds the margins with regards to dimensions!



PLS BV and your distributor cannot be held responsible for any damage caused by accidental, inappropriate, improper, incorrect or injudicious use (described above) or by insufficiently qualified persons. In case of doubt, please contact your distributor.

1.3. Target audience

The BodyHoist is intended for use by those who are involved in the care and relocation of deceased persons in and out of a coffin, to and from an embalming table, primarily in mortuaries or funeral homes.

1.4. Lifespan

The expected (safe) lifespan of the BodyHoist under normal use and normal circumstances when maintained in accordance with the instructions is 20 years.

Improper use or neglect, such as failure to clean the BodyHoist, may reduce its lifespan.

1.5. Package contents

Remove the packaging and check the contents. The package contains the following:

- The BodyHoist.
- Documentation, consisting of:
 - User manual.
 - BodyHoist Basic Instructions Card.
A short description of the most important functions. Not an adequate replacement for the user manual!



Please contact your distributor if parts are missing.

1.6. Setting up

The BodyHoist is installed by your distributor and is ready for use.



Please contact your distributor if the installation has not been carried out according to your requirements.

2. BodyHoist

Here, a description is provided regarding the optimal, safe and respectful (to the deceased) use of the BodyHoist.

2.1. Technical specifications

General	Value/unit
Maximum permissible lifting weight:	250 kg/ 551,2 lbs
Weight (empty):	30,5 kg/ 67,2 lbs
Material:	RVS 304
Surface finishing:	Bead blasted

Dimensions (figure 1)	Value/unit
Length (E):	1165 mm
Width (C):	505 mm
Height (D):	720 mm
Maximum adjustable shoulder width (B):	600 mm
Minimum adjustable shoulder width (B):	400 mm
Maximum ankle width (A):	350 mm
Minimum ankle width (A):	150 mm

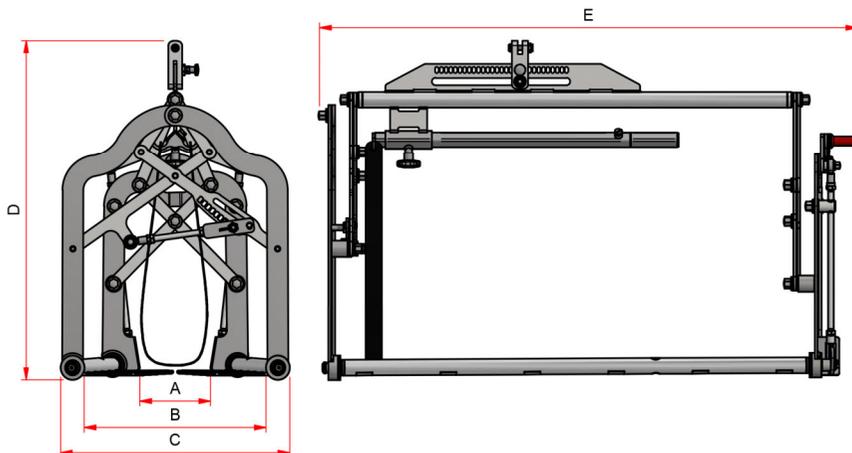


Figure 1, dimensions BodyHoist

2.2. General functional overview

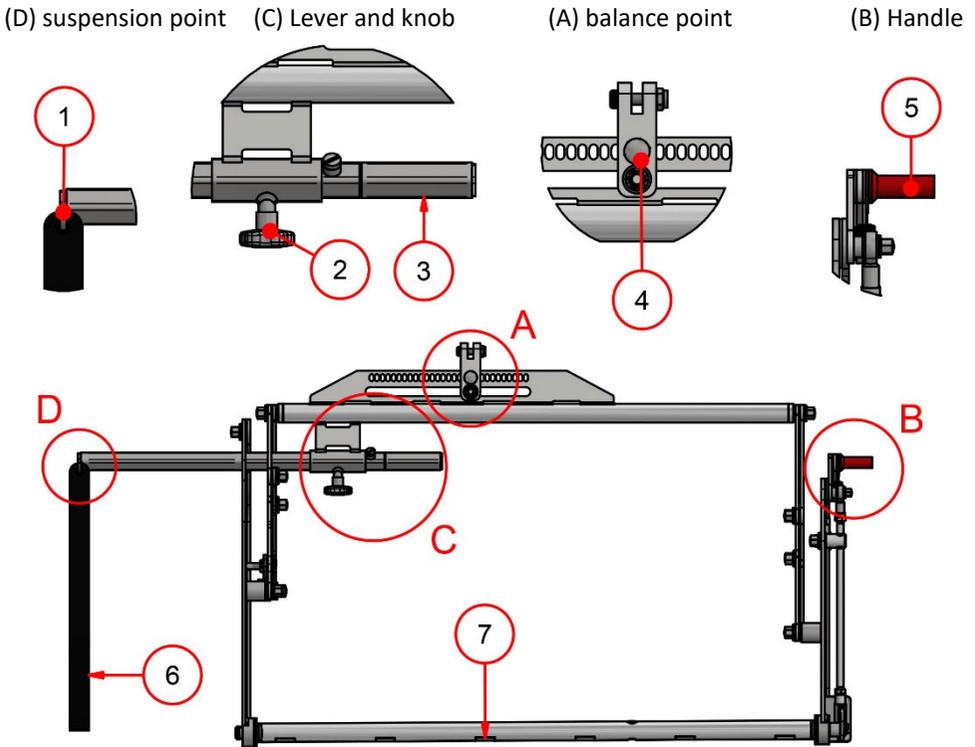
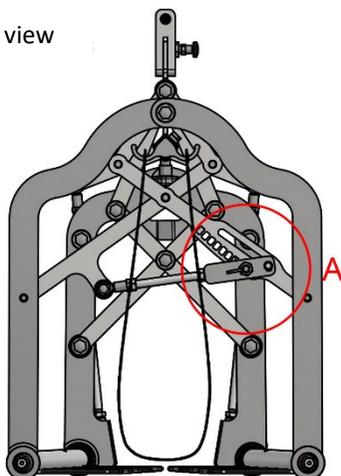


Figure 2, BodyHoist overview

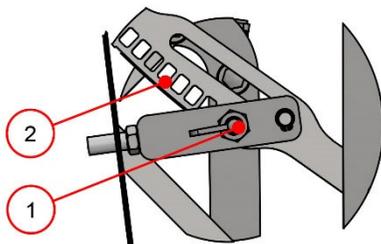
The balance point can be adjusted by pulling out the knob (4) and moving it left or right. The fingers (7) can be opened by pulling the red handle (5) upwards. Figure 2 shows these in the locked position. The head is suspended in the headband (6) that hangs from the suspension point (1). The headband has three adjustable height positions. The suspension point can be moved from left to right, and fixed in place by tightening the knob (2). See chapter 2.6 for an explanation of the lever (3).

2.3. Adjusting shoulder width

BodyHoist front view



A1 (Closed locking pin)



A2 (Open locking pin)

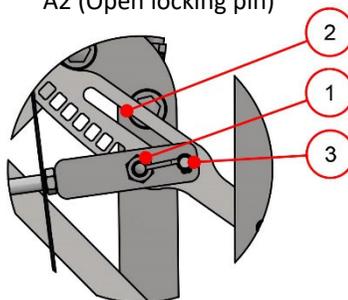


Figure 3, adjusting shoulder width

The shoulder width can be adjusted up to a maximum of 600 mm. There are two settings regarding adjustability:

1. A fixed width, whereby locking pin (1) is closed (A1) in one of the locking pin holes (2). Set this width slightly wider than the deceased persons shoulders.
2. Freely adjustable width, whereby the locking pin is open (A2) and the securing pin (3) can move freely in the channel (4). This allows the rods to easily fall around the body, and be clamped around the shoulders when the deceased person is lifted.

2.4. BodyHoist set up

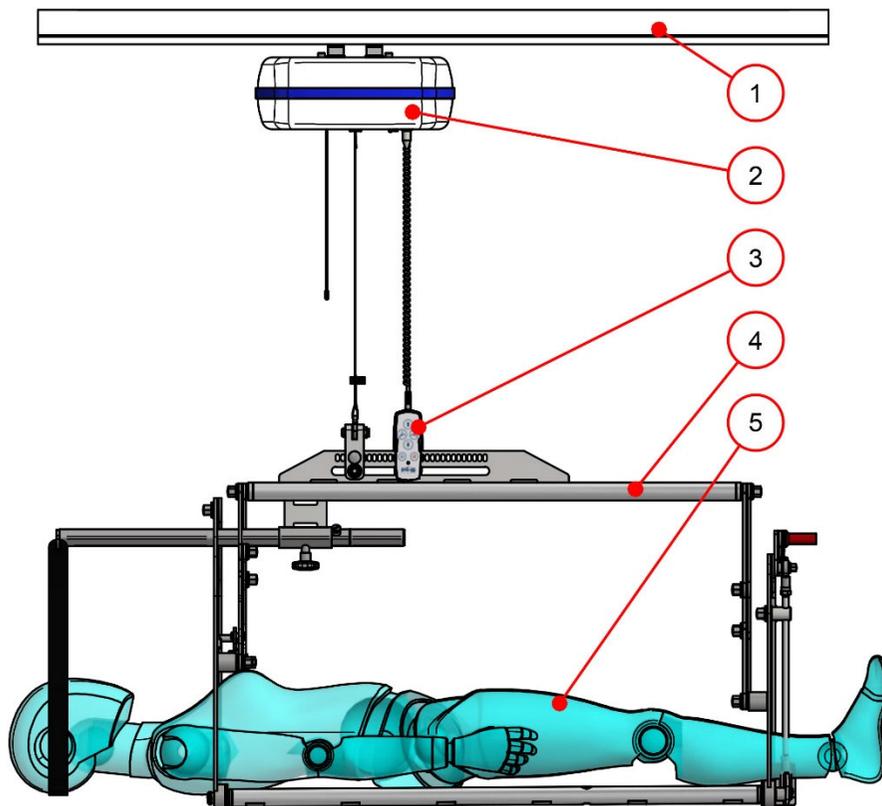


Figure 4, BodyHoist set up

The BodyHoist (4) gives you the freedom of movement for horizontal and vertical transfer depending on the range of the Rail System (1) and independent of where you operate the BodyHoist. The Ceiling Hoist (2) runs in the rails and also allows vertical transfer of the deceased person (5) which can be operated using the hand control (3).

The rod (4) and the hand control (3) are used to be gripped to move the deceased person once he or she has been lifted.

2.5. Positioning deceased person in the BodyHoist

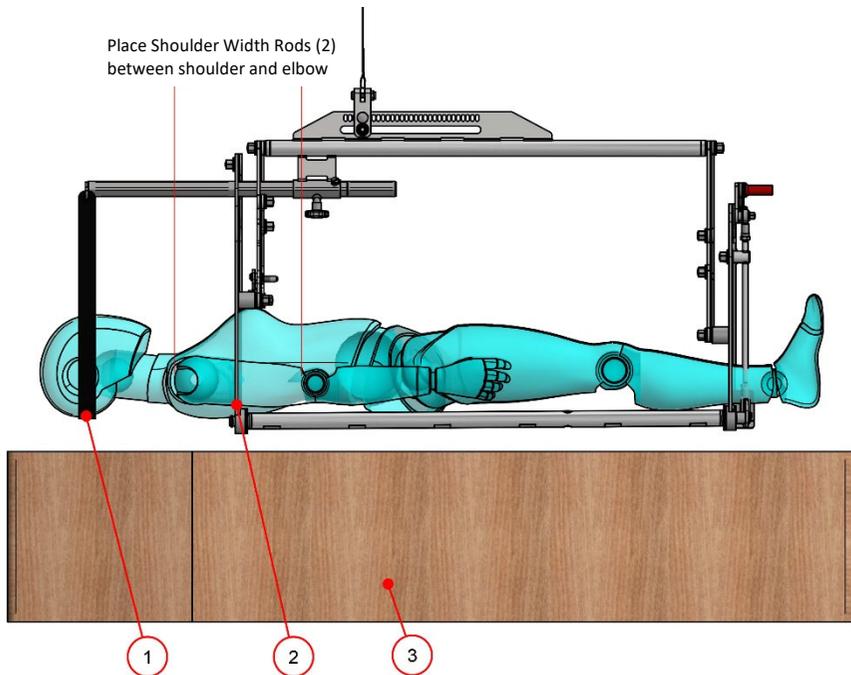


Figure 5, side view deceased person above coffin

Support the head by positioning the headband (1) as straight as possible under the head prior to lifting. When picking up a deceased person to put into or take out of a coffin, place the Shoulder Width Rods (2) between the shoulder and elbow. This is because the BodyHoist remains within the shoulders (widest measure) of the deceased person.

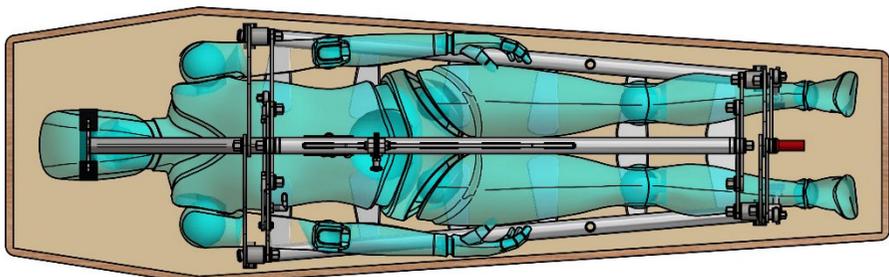


Figure 6, top view of deceased person in coffin

2.6. Using the lever in a coffin

The fingers close when the BodyHoist is resting fully on the embalming table or on the bottom of the coffin, but can also be closed manually using the lever (1).

1. Pull the lever from the tube (see chapter 2.2).
2. Insert it into the hole for the fingers (2).
3. Pull the lever towards you until you hear a click. This means that the fingers are closed.
4. Push the lever back into the tube.

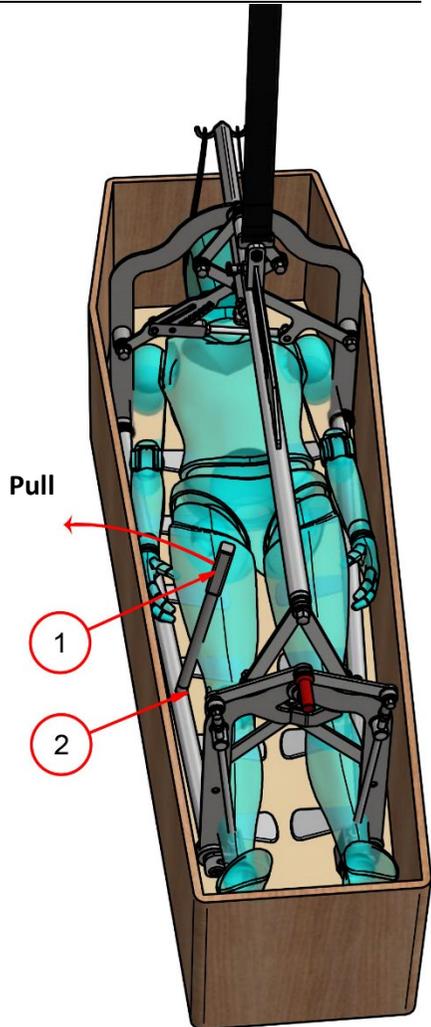


Figure 6, using the lever

2.7. Manual operation

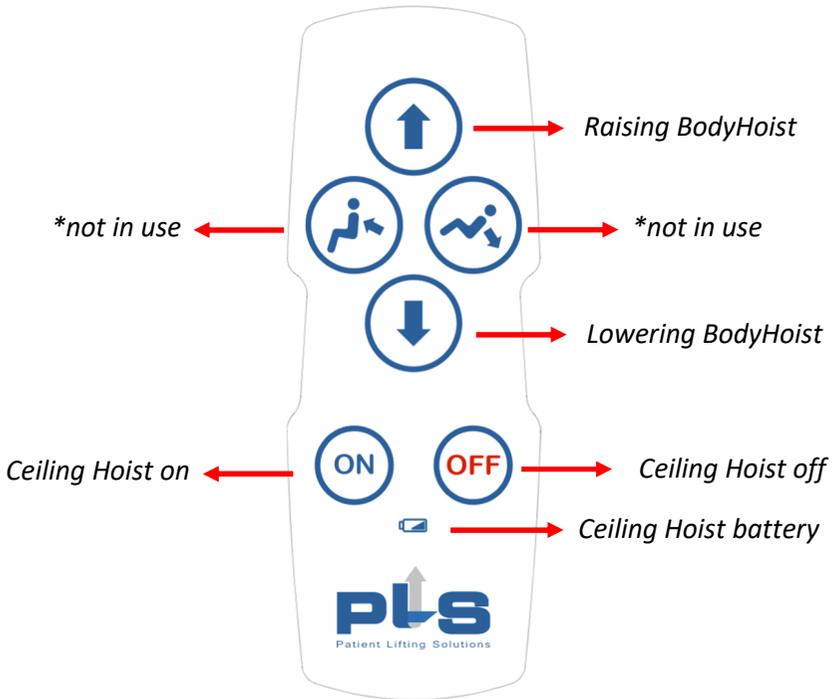


Figure 8, PLS manual control symbols



Functional overview only applies to PLS Hand Controls. When using a different brand/type of manual control device, functions may differ.



Other information, such as charging, can be found in the user manual for the ceiling hoist.

3. Use

3.1. When not in use

1. Stabilise the BodyHoist by adjusting the balance point.
2. Adjust the shoulder width according to requirements.
3. Open the fingers (when the BodyHoist is hanging in the air and not in use).
4. Place the hand control in the wall charger to allow the ceiling hoist to charge (*see PLS Ceiling Hoist AR-260 user manual*).



When not in use, place the BodyHoist in a location where it is visible in order to decrease the likelihood of physical injury due to collision as much as possible. For example, hanging in the air or resting on the embalming table.

3.2. Lifting deceased person from the embalming table

Follow the steps below to safely lift a deceased person:

1. Take the hand control from the wall charger.
2. Manually move the BodyHoist into position above the deceased person.
3. Check that the BodyHoist is far enough open to be able to pick up the Deceased person (shoulder width).
4. Use the hand control (*Figure*) to lower the BodyHoist with open fingers.
5. Lower the device so far that the fingers reach the horizontal position under the deceased person. This can be achieved by letting the BodyHoist rest completely on the embalming table.
6. Place the headband under the deceased person's head.
7. Fasten the headband to the suspension point as required.
8. Adjust the balance point left or right, according to estimation.
9. Lift the deceased person a few centimetres from the embalming table.

10. Check whether the fingers are closed (*are in the locked state*). If not satisfactory;
 - a. Lower the BodyHoist back onto the embalming table so that the fingers close.
 - b. If the fingers will not close, use the lever to close them manually.
11. Check whether the balance point has been set so that the BodyHoist is oriented horizontally. If not satisfactory;
 - a. Lower the BodyHoist back onto the embalming table.
 - b. Adjust the balance point to the correct position.
12. When satisfactory; lift the deceased person far enough that he or she can be moved from the embalming table into the coffin.
13. Position the BodyHoist above the coffin by moving it manually, and walk alongside the BodyHoist while moving it, remaining close to the deceased person.
14. Lower the BodyHoist until it is a few centimetres above the edge of the coffin.
15. Check that the BodyHoist is set to the correct width so that it can fit inside the coffin. If not satisfactory;
 - a. Move the BodyHoist to the embalming table and lower it onto the table.
 - b. It is possible that the shoulder rods are not correctly positioned around the deceased person. Correct this as described in *chapter 2.3* (fixed or freely adjustable width) and repeat the procedure from point 9.
16. When satisfactory; lower the deceased person into the coffin until both the clamp and the deceased person are resting securely on the bottom. This will be evident from the loose hoisting belt.
17. Once the deceased person is in the desired position in the coffin, open the fingers by pulling the red lever upwards and hold onto it as the BodyHoist is lifted from the coffin using the manual controls. The fingers can only be opened when they are fully resting on the bottom.



When lowering the BodyHoist, ensure that the hoisting belt is taut at all times. The ceiling hoist will stop if the hoisting belt becomes slack.

3.3. Lifting a deceased person from a coffin

Follow the steps below to safely lift a deceased person:

1. Take the hand control from the wall charger.
2. Manually move the BodyHoist into position a few centimetres above the deceased person.
3. Check that the BodyHoist is far enough open to be able to pick up the deceased person and will also fit inside the coffin. If not satisfactory;
 - a. Move the BodyHoist to the embalming table and adjust the shoulder width so that the BodyHoist can fit inside the coffin.
4. When satisfactory; position the BodyHoist above the coffin again.
5. Lower the device so far that the fingers reach the horizontal position under the deceased person. This can be achieved by letting the BodyHoist rest completely on the bottom of the coffin.
6. Adjust the balance point left or right, according to estimation.
7. Place the headband under the deceased person's head as required.
8. Lift the deceased person a few centimetres.
9. Check whether the fingers are closed (*are in the horizontal state*). If not satisfactory;
 - a. Lower the BodyHoist back into the coffin so that the fingers close.
 - b. If the fingers will not close, use the extra lever to close them manually.
10. Check whether the balance point has been set so that the BodyHoist is oriented horizontally. If not satisfactory;
 - a. Lower the BodyHoist back into the coffin.
 - b. Adjust the balance point to the correct position.
11. When satisfactory; lift the deceased person far enough that he or she can be moved from the coffin to the embalming table.
12. Position the BodyHoist above the embalming table by moving it manually, and walk alongside the BodyHoist while moving it, remaining close to the deceased person.

13. Lower the deceased person onto the embalming table until both the clamp and the deceased person are resting securely on the table. This will be evident from the loose hoisting belt.
14. Once the deceased person is in the desired position on the embalming table, open the fingers by pulling the red lever upwards and hold onto it as the BodyHoist is lifted from the embalming table using the hand control.



Never use the hand control as a towing cord. The BodyHoist can be used as a handle for moving (*chapter 2.4*).



Lifting actions should only be performed by qualified individuals.



Lifting and horizontal movement should only be carried out simultaneously when the BodyHoist is not in contact with underlying parts such as the coffin or the embalming table.



Only lift the deceased person when the hoisting belt is perpendicular to the Ceiling Hoist (*Figure 7*).

This is important:

- To prevent falling or collisions, for the sake of your own safety and for the respectful handling of the deceased.
- To avoid wear to the hoisting belt that may occur if it rubs on the casing of the ceiling hoist.
- To prevent the height limit switch (or limit stop) of the ceiling hoist from being activated which means that the ceiling hoist can only be lowered (*see also Ceiling Hoist user manual*).

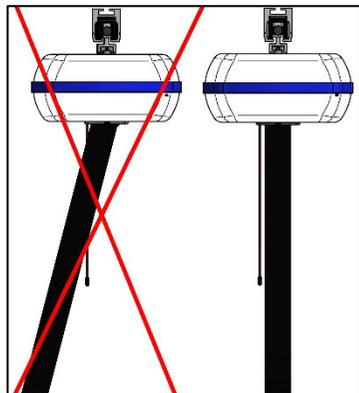


Figure 7, correct and incorrect position of the hoisting belt.

3.4. Cautions and warnings

- When lifting, you should always check that there is sufficient space above the deceased person.
- When picking up the deceased person, check that the fingers are open.
- Before picking up, check that the BodyHoist is set wide enough to easily descend past and under the body.
- Do not raise the deceased person higher than is necessary for the transfer.
- Only use the BodyHoist if it has a legible CE label.
- Handle the BodyHoist with care and ensure that the work area is clean and tidy.
- The BodyHoist may only be operated by demonstrably qualified individuals.
- The BodyHoist must undergo a periodic inspection at least once every year.
- The BodyHoist may only be serviced and maintained by demonstrably suitably qualified technicians.
- Use only original parts provided by PLS BV for repairs and replacements.
- A PLS Ceiling Hoist, PLS Rail System or other structural parts of the BodyHoist may only be replaced by suitably qualified technicians.
- The hoist must not be used if it has been deformed due to incorrect use or during transport. Return the BodyHoist to the distributor.
- Try to avoid collisions.
- Never move the BodyHoist faster than walking pace along the rails.
- Move the BodyHoist smoothly to avoid swinging the deceased person unnecessarily.
- Never leave a deceased person unattended while suspended from the BodyHoist.
- Do not use the hand control or the hoisting belt on the ceiling hoist as a pull cord to move the deceased person. This can damage the wiring.



If physical injury results from the use of the BodyHoist, PLS Ceiling Hoist or the PLS Rail System despite the components being carefully designed, assembled and mounted;

- Stop work activities immediately!
- Contact the distributor immediately. This presents the opportunity to investigate the problem's origin and to eliminate this problem in the future by changing the design.

4. Maintenance

4.1. Schedule

The BodyHoist has been designed to require minimum maintenance. The following maintenance schedule is recommended:

- Daily and weekly cleaning maintenance can be done by BodyHoist users.
- The annual inspection and any repairs to the BodyHoist must be performed by the distributor or by specially trained technicians.



Contact the distributor for details about maintenance contracts.



If you have any doubts about the condition of the BodyHoist, always contact your Technical Department or the distributor.

4.2. Daily maintenance

Daily maintenance consists of the following actions:

- After using the BodyHoist, clean it according to the relevant cleaning protocol for the embalming room.
- Check whether the adjustment features, both the shoulder width and the balance point, are working as intended.
- Check that all parts of the BodyHoist are present.
- Place the hand control on the charger when not in use.
- Before each use, check the BodyHoist for loose parts that should not be loose.



As much as possible, carry out daily maintenance while the BodyHoist is resting on the embalming table (slack hoisting belt) in order to reduce the risk of injury.

4.3. Weekly maintenance

Weekly maintenance consists of the following actions:

- Check whether all moving parts can move freely without any annoying noises.
- Check whether the user manual and the basic instructions card are available.
- Check whether the label and the safety stickers are present and whether the information on them is legible.



If you have any doubts about the condition or correct operation of the hoist, always contact the technical department or the distributor.

4.4. Annual inspection and maintenance

Once a year, the hoist must be inspected according to the Occupational Health & Safety Decree (*Article 7.5 maintenance, repair and cleaning of work equipment*). These inspections should be carried out by the distributor.

The distributor offers you the option of having your BodyHoist thoroughly inspected once a year under a maintenance contract. Contact the distributor for more details about this.

4.5. Disabling

Any parts that are removed can be returned to the distributor or given to the technician. PLS BV will then investigate the cause of any damage that has occurred and use this information to improve the design of the BodyHoist. If this is not applicable, you can simply dispose of the parts via normal waste disposal services.



4.6. If the BodyHoist is not working

- Check whether objects are blocking the mechanisms of the BodyHoist.
- Check for loose parts that should not be loose.
- Check the components to determine whether they are functioning correctly.



If the problems are being caused by the PLS ceiling hoist, see the user manual for the PLS Ceiling Hoist AR-260 (Jane).



If you continue to experience problems, contact the distributor or manufacturer.

5. Appendix

5.1. Guarantee Provisions

PLS BV provides a 2-year warranty for the BodyHoist. PLS BV does not offer any guarantee on components that are prone to wear and tear, such as headbands and locking pins.

The guarantee does not cover damage or defects that may be caused to the BodyHoist due to incorrect or imprudent use or repairs by people who are not suitably qualified. PLS BV or the distributor will evaluate this.

PLS BV retains the right to make adjustments to the product which deviate from the descriptions in this user manual. It will not be responsible for this.

Should changes be made that affect the function, operation or form, resulting in the inability of the user to operate the BodyHoist without instruction, PLS BV will provide updated documentation.

5.2. About Patient Lifting Solutions

Patient Lifting Solutions (PLS) designs, develops and manufactures Ceiling Hoist solutions for the healthcare sector. We can conceive a reliable lifting system for any ceiling and in any situation.

PLS aims to provide a ceiling lift system that is user-friendly and possesses advanced technology.

The products are designed and made by PLS in The Netherlands and distributed by local distributors.

5.3. Contact details Patient Lifting Solutions

Patient Lifting Solutions BV
Barneveldsestraat 26a
3927 CC Renswoude
The Netherlands
Email: info@plsbv.com
Web: www.plsbv.com



5.4. Explanatory label overview

	Attention! Danger of pinching or jamming exposed limbs. This sticker is found on parts of the BodyHoist where there is a risk of pinching or jamming.
	The product manufacturer
	The date of the product's manufacture.
	Read the handbook before operating the BodyHoist.
	The product's serial number.

Information on the label:

- Name of the relevant product
- Maximum permitted lifting weight.
- CE marking
- Serial number
(example 2004-10001) consisting of;
 - 20; year of manufacture
 - 04; month of manufacture
 - 1; version of the product.
 - 0001; number of the product; in this case the first BodyHoist ever made.
- Patent number.
- Manufacturer's name and address data.
- Manufacturer's logo.
- Website name.



5.5. EC Declaration of conformity



We,
Patient Lifting Solutions BV
Barneveldsestraat 26a
3927 CC Renswoude
The Netherlands,

declare under our sole responsibility that the BodyHoist is covered by this declaration conform with European law, namely Machinery directive;

- Directive 2006/42/EC,

and in conformity with the following standards or other normative documents:

- NEN-EN-ISO 7010:2012
- ISO 12100:2010.

The PLS Ceiling Hoist and PLS Rail system are products conform the Medical Devices directive;

- Directive 93/42/EC,

and in conformity with the standards or other normative documents. Contact PLS BV for the full list of devices and normative documents.

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M. van den Brandt
Managing Director

