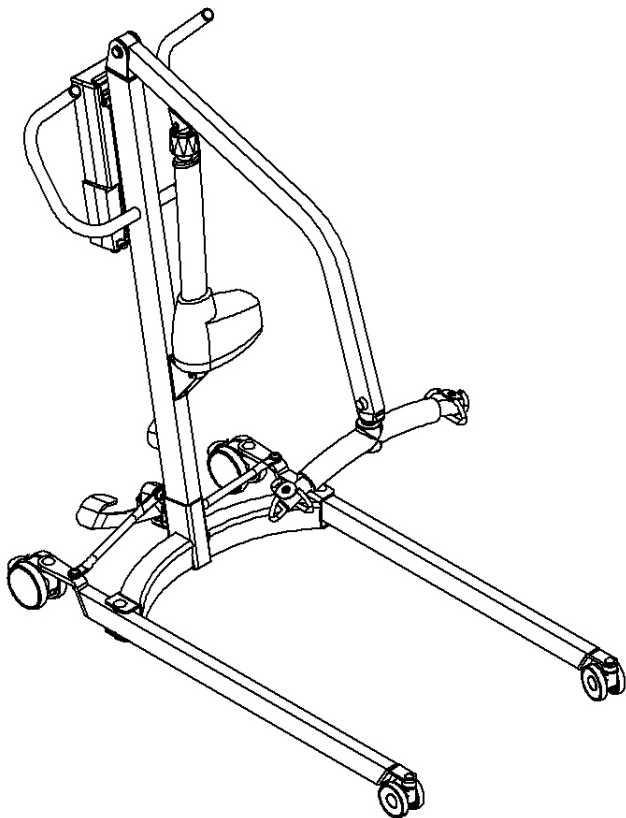


## User Instruction Manual

Hoyer® HPL450 / HML450

To avoid injury, read user manual prior to use.

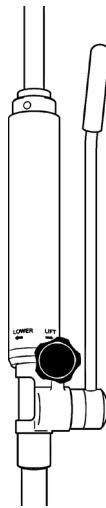
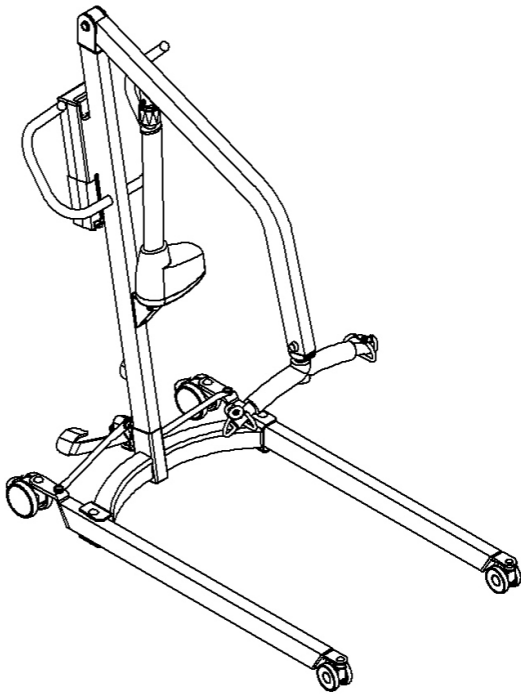


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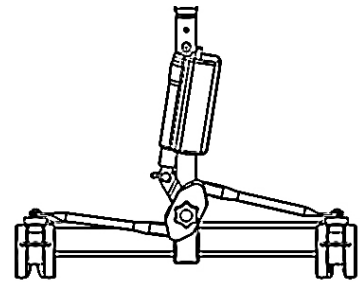
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# 1. Hoyer® Lift Model Range

## Configurations



Hydraulic ram (Replaces actuator on hydraulic models)



Leg actuator (Replaces foot pedal on electric leg models)

## 2. Introduction: About Your Lift

The Hoyer HPL450 / HML450 lift is available with hydraulic or electric powered options. This manual covers both options.

Each lift is fully assembled, load tested and certified before being partially dismantled for packing. The packing consists of a strong, purpose built carton and is used for both export and domestic markets to ensure the safe arrival of the lift.

### Accompanying Documents:

A number of documents are supplied in a bag packed with each lift and should be retained for future reference.

- User Manual
- Test Certificate

The TEST CERTIFICATE is an important document and should be kept for reference purposes.

### **WARNING**

**Prior to each daily use of your lift the checks detailed in the daily checklist within this manual should be carried out.**

To properly maintain your lift please refer to the maintenance schedule included in this document. If you are at all unsure what your country's servicing requirements are, please check with your dealer and/or a local government agency

### Statement of Intended Use:

The intended use of this lifting device is to transfer an individual from one resting surface to another (such as a bed to a wheelchair). Moving a person in a sling over extended distances is not recommended. Hoyer passive lifts are suitable for patients in the SITTING, SITTING/RECUMBENT and RECUMBENT positions.

The Hoyer HPL450 / HML450 is an electrically/manual operated patient lift, designed to support and promote safe patient handling and transfer for both the patient and caregiver.

The Hoyer HPL450 / HML450 lift incorporates a 6-point cradle, loop style spreader bar, as standard and is designed to be used in conjunction with the Hoyer range of slings. The examples of slings suitable for use with this device are listed as follows:

- Hoyer Quickfit
- Hoyer Full Back
- Hoyer Quickfit Deluxe
- Hoyer Access
- Hoyer Comfort
- Hoyer Long Seat

### **WARNING**

**Hoyer Patient Lifts should only be operated by fully trained/competent care givers.**

### Expected Service Life:

Hoyer HPL450 / HML450 are designed and tested for a minimum service life of seven (7) years, subject to the use and maintenance procedures stated in this manual. Use other than in accordance with these instructions may compromise service life.

### Serious Incident Reporting:

In the event of a serious incident taking place during use of this product, affecting the patient and/or care-giver, it must be reported to the product manufacturer or authorized distributor. Should the incident take place, it must also be reported to the local competent authority.

### 3. Assembly and Commissioning Instructions

Place the carton in a clear working area and open carefully. The carton contains:

- Main wheeled chassis
- Mast and boom assembly
- Battery pack (electric lifts only)
- Bag containing documents
- Battery charger (electric lifts only)
- Hand control (electric lifts only)

1. Remove all the parts from the carton and place on the floor, taking care to protect the finish from damage.

#### WARNING

**Some of the parts are heavy and will need to be lifted with care. You may need assistance with the heavier assemblies.**

2. Apply the rear caster brakes by pushing the brake levers (Fig. 1) downwards.
3. Fit the mast assembly to the chassis. The mast is located into the rectangular socket on the top centre of the chassis. (Fig. 1 - manual leg model shown).

#### WARNING

**Avoid trapping fingers. Keep fingers away from the end of the mast when inserting into the socket.**

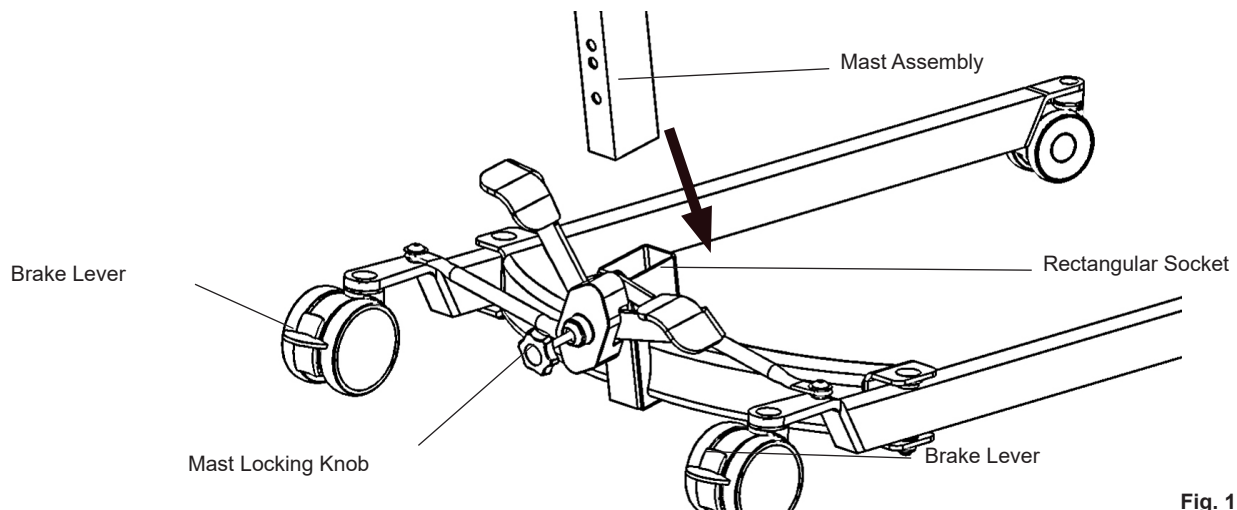


Fig. 1

4. When the mast is fully engaged within the socket, turn the mast locking knob (Fig. 5) clockwise, until fully tightened.

#### WARNING

**Full engagement of the mast is indicated by the label on the side of the mast.**

5. **Electric Leg Operation:** There is some minor assembly required in order to connect the leg actuator to the leg adjustment mechanism. Gently swing the actuator into place over the leg pivot bracket ensuring the corresponding holes are in alignment. Insert the clevis pin, ensuring the plastic wear washers remain in place. To finish, fit the spring clip through the hole in the clevis pin and confirm secure attachment.

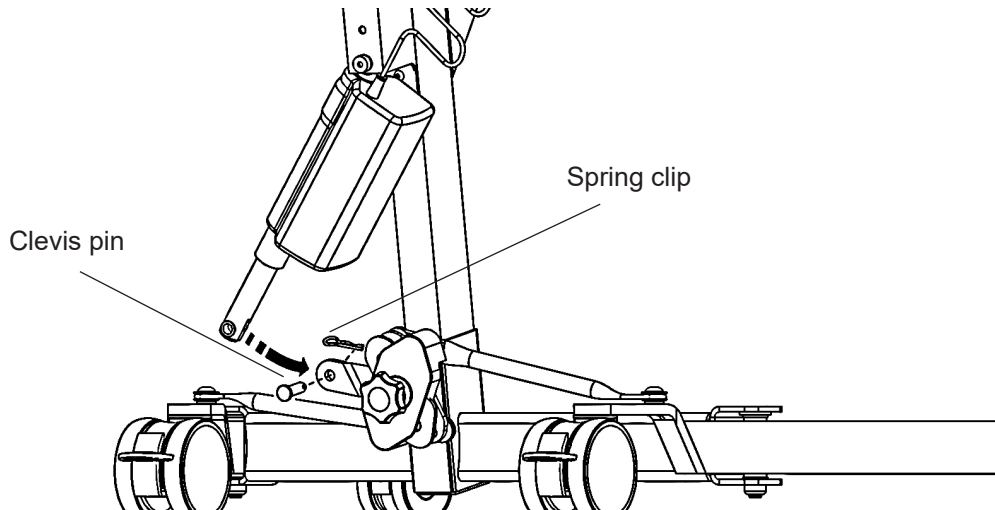


Fig. 2

- Foot Pedal Leg Operation:** If your lift is fitted with foot pedal operated legs, release the brakes and confirm they open and close satisfactorily by operating the push pedals (Fig. 3). Hold onto the push handle for stability.

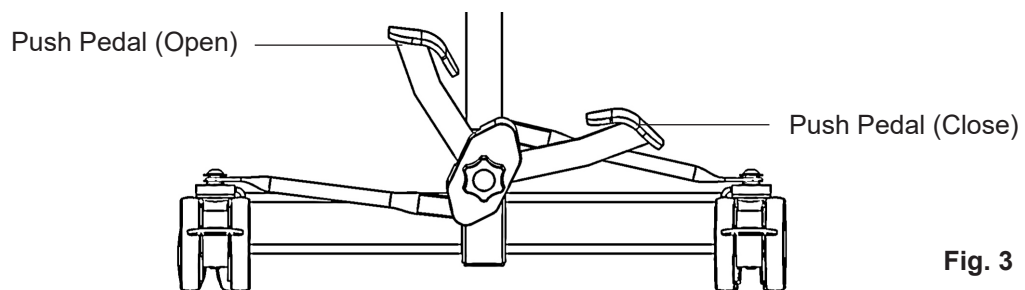
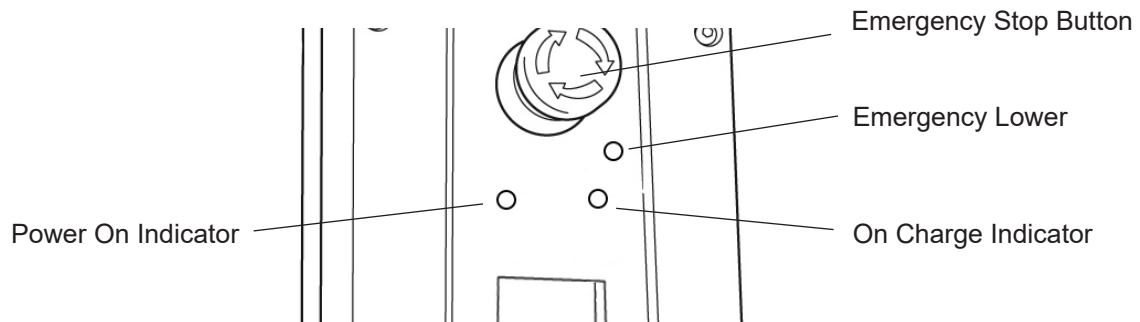


Fig. 3

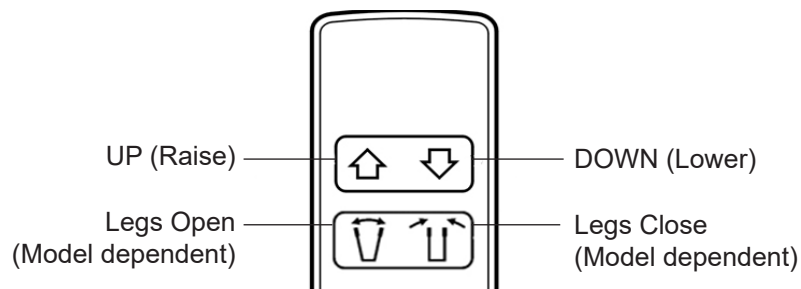
**Electric Models Only:**

6. Clip the battery onto the control box and ensure the red emergency stop button, located on the controller is in the out (ON) position by turning clockwise (Fig. 4).

**Fig. 4**

7. Push the UP and DOWN buttons on the hand control and confirm the boom will raise and lower accordingly (Fig. 5).

**NOTE:** If your lift incorporates electric leg operation, confirm the legs open and close by pushing the OPEN and CLOSE buttons on the hand control.

**Fig. 5**

8. The lift is now ready for use.

### Hydraulic Models Only:

6. Close the hydraulic unit release valve (Fig. 6) by turning the knurled black knob on the unit fully clockwise.

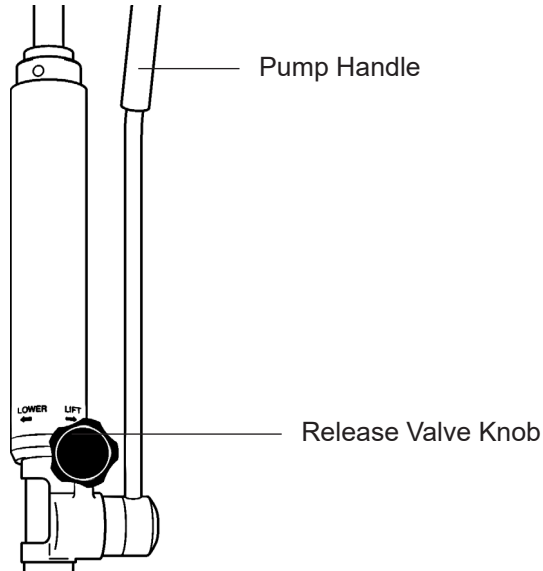


Fig. 6

**NOTE:** The release valve requires only minimal tightening to operate and should only be closed finger tight.

### WARNING

**DO NOT apply excessive force to the release valve knob as this will result in damage to the valve.**

7. Pump the handle (Fig. 10) of the hydraulic unit and confirm the ram raises the boom.
8. Open the release valve fully anti-clockwise and check the boom descends.

**NOTE:** An unloaded boom will not come down under its own weight, it will be necessary to apply some pressure to the boom before it will descend.

### WARNING

**The release valve is fully open and encounters a positive end stop in less than two full turns of the knob. DO NOT force the valve past the end stop as this will result in damage to the valve.**

9. Close the release valve by turning the knurled black knob clockwise.
10. The lift is now ready for use.



## 4. Safety Precautions

Please read and follow the safety precautions listed below. The operation and use of Hoyer patient lifts is simple and straightforward. Following these few basic safety precautions will make lifting operations easy and trouble free.

### **READ AND UNDERSTAND THE USER INSTRUCTION MANUAL BEFORE USING YOUR LIFT**

**WARNING:** Important safety information for hazards that might cause serious injury.

**CAUTION:** Information for preventing damage to the product.

**NOTE:** Information to which you should pay special attention.

### **WARNING**

- **Hoyer Patient Lifts should only be operated by fully trained/competent care givers.**
- **ALWAYS plan your lifting operations before commencing.**
- **ALWAYS carry out the DAILY CHECK LIST before using the lift.**
- **ALWAYS familiarize yourself with the operating control and safety features of a lift before lifting a patient.**
- **DO NOT use a sling unless it is recommended for use with the lift.**
- **ALWAYS check the sling is suitable for the particular patient and is of the correct size and capacity.**
- **NEVER use a sling which is frayed or damaged.**
- **ALWAYS fit the sling according to the instructions provided (user instructions).**
- **ALWAYS check the safe working load of the lift is suitable for the weight of the patient.**
- **ALWAYS carry out lifting according to the instructions in the user manual.**
- **NEVER disconnect or bypass a control or safety feature because it seems easier to operate the lift.**
- **NEVER force an operating or safety control. All controls are easy to use and do not require excessive force to operate. If a control is not working easily there will be a reason. Forcing will only strain or damage the lift and may compromise safety. If in doubt, contact your authorized Hoyer Service Provider or Joerns Healthcare.**
- **DO NOT lift a patient with the caster brakes on.**
- **DO NOT attempt to maneuver the lift by pushing on the mast, boom or patient.**
- **ALWAYS maneuver the lift using the handles provided. DO NOT attempt to apply additional side force to the boom or legs of the lift in order to maneuver the product.**

 **WARNING**

- **ALWAYS** lower the patient to the lowest comfortable position before transfers.
- **DO NOT** push a loaded lift at speeds which exceed a slow walking pace (2.6 ft/sec).
- **DO NOT** push the lift over uneven or rough ground, particularly if loaded.
- **DO NOT** attempt to push or pull a loaded lift over a floor obstruction which the casters are unable to ride over easily.
- **DO NOT** bump the lift down steps, loaded or unloaded.
- **DO NOT** make patient transfers on a sloping surface.
- **DO NOT** park a loaded lift on ANY sloping surface.
- **DO NOT** use electric lifts in a shower.
- **DO NOT** charge an electric lift in a bathroom or shower room.
- **DO NOT** lift a patient unless you are trained and competent to do so.
- Your lift is for patient lifting. **DO NOT** use it, or allow it to be used, for any other purpose.
- The Hoyer Classic Range is not intended for continuous use/storage in condensing humid conditions.
- The **MINIMUM** load required to manually lower the hoist using the mechanical emergency down function is 66 lb (where applicable).



## 6. Operating Instructions

### WARNING

Hoyer Patient Lifts should only be operated by fully trained/competent care givers

1. **Leg adjustment:** The legs on Hoyer Classic lifts can be opened to enable access around armchairs, wheelchairs and other furniture. For transferring and negotiating narrow doorways and passages, the lift legs should be in the closed position.

**Electric Leg Operation(model dependent):** Simply press the appropriate button on the hand control in order to open or close the legs. You may also use the redundant control soft keys located on the front of the control box above the LCD display screen.

**Foot Pedal Leg Operation:** Simply operate the push-pads, located at the lower/rear of the mast. To open the legs, simply depress the LEFT push-pad. To close the legs, depress the RIGHT push-pad.

In either case, the adjustment can be carried out with the patient in the lift.

2. **Casters and braking:** The lift has two braked casters which can be applied for parking. When lifting, the casters should be left free and unbraked. The lift will then be able to move to its centre of gravity. If the brakes are applied, it is the patient that will swing to the centre of gravity and this may prove disconcerting and uncomfortable.
3. **Direction of travel (Forward motion):** The Classic range of mobile lifts are designed to be pushed forwards using the integrated push-handle.

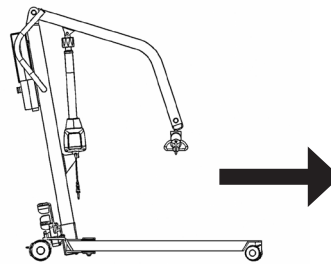


Fig. 8

4. **Straight line steering (where fitted):** One of the rear casters is fitted with a straight line steering device. To engage the device simply swing the 'U' shaped bar over the rear caster. The device will automatically engage as you move off.
5. **Raising and lowering the boom (electric models):** The movement of the boom is achieved by a powerful electric actuator which is controlled by a simple hand control unit. The hand control has two buttons with directional arrows RAISE and LOWER. The actuator stops automatically at the limit of travel in both directions. The hand control plugs into a socket at the base of the control box. There is a magnetic backing to the hand control which allows it to be "parked" on the mast or boom when not in use.
6. **Emergency stop (Electric only):** The red emergency stop button is located on the control box and is activated by pressing in. This will cut all power to the lift and can only be reset by twisting the button clockwise and releasing.
7. **Redundant controls:** All Hoyer Classic lifts are fitted with raise and lower buttons on the control box. These are located underneath the emergency stop button and can be used to lower/raise the patient should the hand control fail.

8. **Emergency lower:** In the case of a complete electrical failure the electrical actuator is fitted with a mechanical lowering device (RED BOSS). The device must be twisted clockwise by hand to operate. A slow decent will commence. Repeat this process until the patient has been safely lowered.

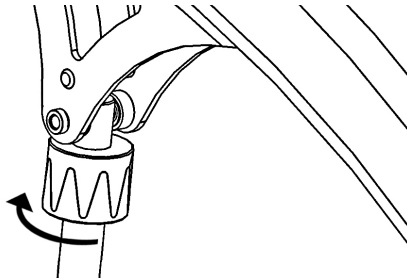


Fig. 9

**! WARNING**

The emergency lowering device should only be used in the event of electrical failure. It must not be used to lower the patient on a regular basis.

**! WARNING**

If this feature is used, the lift **MUST** be subsequently checked out by a competent engineer.

**! WARNING**

Continued use of the hoist after using the emergency descent feature may compromise the duty of care and safety of the patient.

9. **Batteries:** The batteries are protected from deep discharge by a LOW VOLTAGE ALARM. This will sound when the batteries need recharging and the hand control is being operated. It will not sound independently of the hand control being operated. **DO NOT IGNORE THIS WARNING ALARM.** Complete the lifting operation and place the battery on charge (see charging instructions).
10. **Raising and lowering the boom (hydraulic models only):** The raising and lowering of the boom is achieved by a powerful hydraulic ram which is operated by two simple controls. The release valve, which is identified by a black knurled knob, and the pump handle which is a long lever on the side of the hydraulic unit.

To raise the boom, ensure the release valve is closed. The valve is closed by gently turning the knurled knob fully clockwise. When closed, pump the long handle with smooth even strokes for maximum effect. The handle strokes from an upright position through an arc of 90 degrees. Leave the handle in the upright position when not in use.

**! WARNING**

**DO NOT** force the handle beyond the upper or lower stops. The hydraulic unit can be rotated to allow the handle to be used from either side of the lift.

To lower the boom, turn the release valve anti-clockwise. The release valve is progressive, the more it is opened the faster the descent. The valve is restricted so even when fully open the descent is controlled. This facility allows for a “hands free” descent.

If the release valve is opened a fraction (a quarter turn) a very slow speed of descent will allow the carer to work “hands free” while assisting or comforting the patient.

REMEMBER to close the release valve before commencing lifting operations. The release valve only requires gentle pressure to open or close.

### **WARNING**

**DO NOT apply excessive force to the release valve, either to close or to open. It is not necessary and will only damage the valve.**

- 11. Slings:** The selected sling is attached to the spreader bar hooks. Each sling is supplied with instructions which should be followed carefully.

The Hoyer Classic Lift range is suitable for patients in the SITTING, SITTING/RECUMBENT and RECUMBENT positions. The core slings suitable for these lifts are listed as follows:

- Hoyer Quickfit
- Hoyer Full Back
- Hoyer Quickfit Deluxe
- Hoyer Long Seat
- Hoyer Access
- Hoyer Full Body

When selecting a sling from the Hoyer range, be sure to assess the suitability of the type of sling for the patient to be lifted by conducting a thorough risk assessment prior to lifting.

**NOTE:** For detailed fitting instructions, please refer to the user guide supplied with each sling.

### **WARNING**

**Joerns Healthcare recommends that slings be checked regularly and particularly before each use for signs of fraying or damage. DO NOT use slings that are worn or damaged.**

### **WARNING**

**HOYER RECOMMENDS THE USE OF GENUINE HOYER PARTS.** Hoyer sling and lift products are designed to be compatible with one another. For country specific guidance on sling use and compatibility, please refer to the sling label or contact your local market distributor or Joerns Healthcare.

### **WARNING**

**Refer to maximum weight capacity of lift. Sling capacity is limited by the maximum capacity of the lift.**

**NOTE:** For further guidance on sling selection, please visit [www.joerns.com](http://www.joerns.com)

## 7. Charging Instructions (Electric Models Only)

When the power pack needs charging and the lift is in use, it is removed from the lift and fitted to an off board charging unit.

Joerns Healthcare provides an additional battery pack is purchased, so that one pack can be on charge at all times.

1. Remove the power pack from the lift. The pack is retained by a simple latch at the top of the power pack. Lift the latch and the power pack will be released.
2. Fit the power pack to the charging unit. The location and latching of the power pack to the charger is the same system as used on the lift.
3. Plug the charger mains plug into a suitable mains outlet and switch the mains supply ON.
4. Charging is automatic and will fully charge the batteries over a period of four (4) hours.

**Note:** Even if the charger is left plugged in for extended periods it will not allow the batteries to overcharge.

- a) Green Light - Indicates main power is on.
- b) Yellow Light - Indicates battery is charging.
- c) Battery will be fully charged when yellow light goes off.

**Note:** It is recommended that the battery be charged immediately upon receipt.

5. To return the lift to service, switch OFF the mains supply and remove the power pack from the charger. Fit the power pack to the lift and make sure the latch holding the pack in place is fully engaged. "Click" in place. The charging of Hoyer electric lifts is simple and straightforward, but it is important to follow the charging instructions closely. Please pay particular attention to the following points, they will help you avoid problems with discharged batteries.

When the power pack needs charging and the lift is not in use, it can be charged with the "On Board" charging feature.

1. Plug On board charge cable into on board charging socket on the control box
2. Plug on board charge cable into suitable mains power outlet and switch on the mains power.
3. See 4 above.

### WARNING

- The battery, charger, hand control and control box are **NOT** to be opened by unauthorized personnel. (Contact your distributor for warranty and repairs).
- **DO NOT touch battery/charger terminals.**
- **KEEP the batteries fully charged. Place the battery on charge whenever it is not in use. If it is more convenient to do so, place on charge every night. The charger will not allow the batteries to overcharge.**
- **NEVER run the batteries completely flat. As soon as the audible warning sounds, complete the lifting operation in hand and place on charge.**
- **To avoid possible permanent damage to the battery, the battery should be placed on charge as soon as the display indicates the half empty battery symbol.**
- **NEVER store the battery for long periods without regular charging throughout the storage period.**
- **ALWAYS make sure the mains power to the charger is switched off before connecting or disconnecting the battery pack.**
- **NEVER leave the battery pack connected with the charger mains power switched off.**
- **Do NOT leave the charger switched on with the battery disconnected.**

### WARNING

- **Do NOT use the lift while charging is taking place.**
- **Check the lift is not charging before moving as the electrical connection may be damaged.**
- **Never disconnect the charger plug by pulling on the cable.**
- **Be careful not to trip over the charge lead.**
- **Do not charge an electric lift in a bathroom or shower room.**

## 8. Maintenance Schedule and Daily Check List

All Hoyer products are designed for minimum maintenance, however some safety checks and procedures are required. A schedule of DAILY tasks are detailed below.

Daily checks and a bi-annual service, inspection and test will ensure your lift is kept in optimum safe working condition. A list of spare parts is available upon request.

**NOTE: The LOAD TEST and CERTIFICATION should only be carried out by qualified personnel or an authorized service dealer.**

### Daily Check List:

Joerns Healthcare strongly recommend the following checks are carried out on a daily basis and before using the lift.

- **ENSURE** the lift moves freely on its casters.
- **ENSURE** the spreader bar is free to rotate and swing. Check the spreader bar is firmly attached to the boom.
- **EXAMINE** the sling hooks on the spreader bar and side suspenders for excessive wear. If in doubt - **DO NOT** use.
- **ENSURE** the sling retaining disks on the spreader bar are fitted and function as intended.
- **ENSURE** the legs open and close correctly.
- Operate the hand control or the hydraulic unit to **CONFIRM** the boom raises and lowers satisfactorily.
- **CONFIRM** the lift is not sounding a low battery alarm when the hand control is operated (electric lifts only). If the alarm sounds, **DO NOT** use and place the battery on charge immediately.
- On electric powered lifts **CHECK** the operation of the emergency stop button.
- On hydraulically operated lifts **CHECK** for hydraulic fluid leakage. Any leakage should be reported to a service engineer immediately and the lift should not be used until it has been checked out.
- On lifts with detachable masts **MAKE SURE** the mast is fully engaged and the locking knob is fully tightened.
- **EXAMINE** slings for fraying or other damage. **DO NOT** use any sling if damaged or if the sling shows signs of wear.
- **EXAMINE** all hardware and fasteners and ensure they are secure prior to use.



## Maintenance, Inspection and Test:

Joerns Healthcare recommend a thorough inspection and test of the Hoyer Mobile Hoist lifting accessories, slings etc. is carried out at least every six months. The examination and test should be conducted according to the recommendations and procedures below. Joerns Healthcare recommend maintenance, inspection and certified testing is carried out by authorized service dealers only.

- **SPREADER BAR:** Check the spreader bar for freedom of rotation and swing. Check for wear on the central pivot. Check for presence and condition of the wear washer. Check for firm attachment to the boom. Inspect for excessive wear on the sling hooks and any side suspenders used in conjunction with the spreader bar. Check that the sling retaining disks are fitted and function as intended. Lubricate the main suspension point and central pivot with a light mineral based grease or silicon spray.
- **BOOM:** Check for secure attachment of the boom to the mast. Make sure there is only minimal side movement of the boom and the boom is free to rotate on the boom bearing. Check the boom is centered and does not exhibit signs of damage. Check that the actuator or hydraulic unit mounting on the boom is secure.
- **MAST:** Check the operation of the mast locking device. Make sure the mast fully engages into the socket. Check that the bottom actuator or hydraulic unit mounting is secure.
- **CONTROL BOX (Electric only):** Check the function of the emergency stop button. Inspect the hand control socket for correct fitting. Check functioning of the hand control. Check the redundant controls and confirm they operate as intended.
- **LEG ADJUSTMENT:** Check the leg linkages are secure. Operate the leg adjustment pedals or handset controls (electric leg models only) to confirm smooth opening and closing of the legs. If leg linkages are damaged, they should be replaced. Confirm the leg adjustment mechanism locks/ locates correctly in all open and closed positions.  
**MAINTENANCE:** Lubricate the leg adjustment mechanism with a light mineral based grease.  
**NOTE:** To ease application of the lubrication, the mast should be removed from the cross member and the grease applied from inside the mast socket (foot pedal operation only).
- **LEG PIVOTS:** Check the leg pivots are secure and the legs pivot freely. Any stiffness must be investigated. Strip out the leg pivots and lubricate with a light mineral based grease. Make sure there is no excessive play in the leg pivots.
- **CASTERS:** Check all casters for firm attachment to the legs. Check for free rotation of the caster and the wheels. Remove any build up of threads, hair or fluff. Lubricate if necessary with a light mineral based grease or silicon spray. Check correct operation of the brakes. Confirm all four casters sit firmly on the ground.
- **ACTUATORS (Electric models only):** The actuators should require no maintenance other than checking for correct operation and listening for unusual noise. Ensure all fixing points are secure. Confirm the anti-crush mechanism is operational (lifting actuator only). If in doubt, DO NOT use and have the unit checked by a qualified person or authorized Hoyer Service Provider.

- **EMERGENCY RAISE/LOWER AND EMERGENCY DESCENT:** Check both the redundant raise/lower controls and the mechanical emergency descent function (if fitted) using the maximum safe working load applied to the end of the boom. Please note that the practice of using a spring balance will not correctly check the function of the emergency descent.
- **HYDRAULIC UNIT:** The hydraulic unit should require no maintenance other than checking for correct operation in both directions and leakage of hydraulic fluid. Additionally, check the ram for trapped air/sponginess.
- **BATTERIES (Electric models only):** The batteries are located in the Power Pack and should not require maintenance other than the regular charging as detailed in the charging instructions.
- **CLEANING:** Clean with ordinary soap and water and/or any hard surface disinfectant. Harsh chemical cleaners or abrasives should be avoided as these may damage the surface finish of the lift. Avoid wetting any of the electrical parts. After cleaning, the unit should be thoroughly dried.
- **SLINGS:** Check for wear and fraying. DO NOT use any sling that is damaged, or if the sling shows signs of wear.

### **END OF LIFE DISPOSAL:**

**Battery:** All batteries in the product and any accompanying accessories must be recycled separately. Batteries should be disposed of in accordance with local or national regulations.

**Slings:** Slings and associated material accessories should be sorted as combustible waste in accordance with local or national regulations

## 9. Technical Specifications

The drawings below highlight key dimensions for the Hoyer Classic range of lifts. Physical measurements for each lift are referenced overleaf.

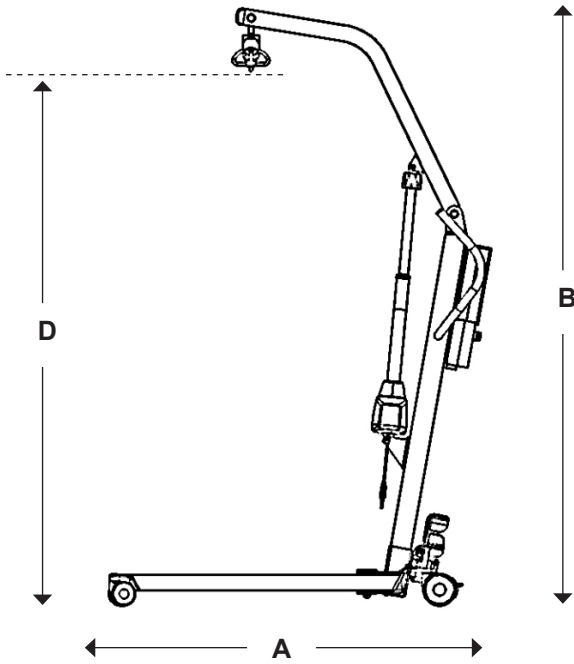


Fig. 10

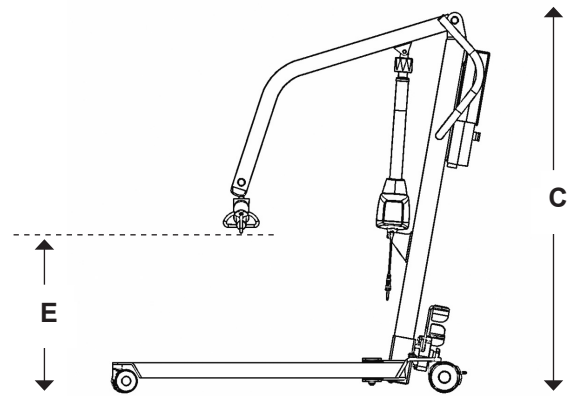


Fig. 11

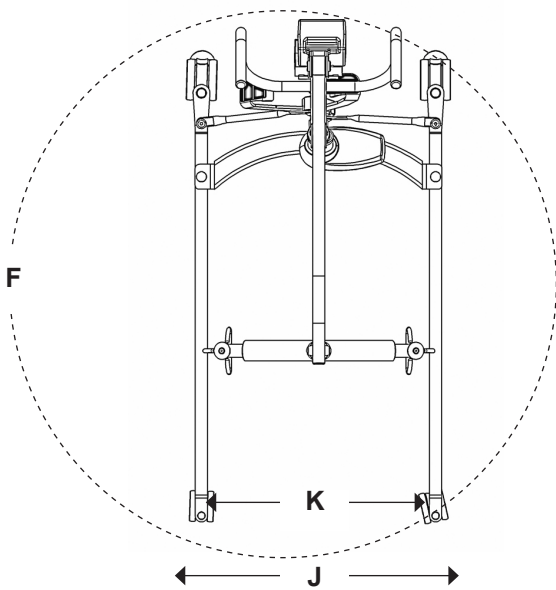


Fig. 12

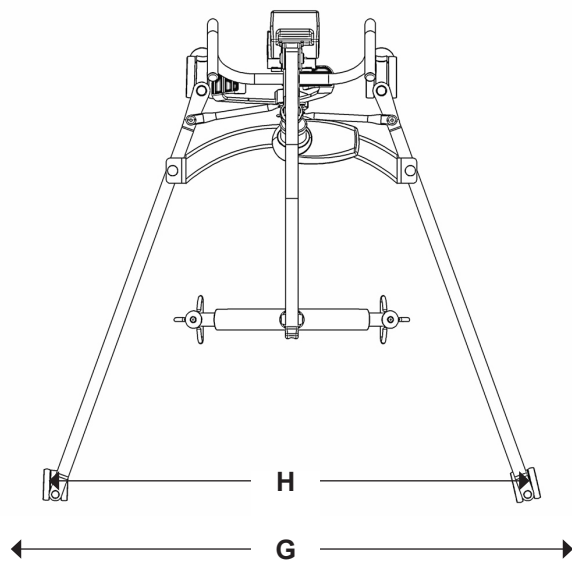


Fig. 13

	Electric	Hydraulic
Safe Working Load	440 lb   200 kg	440 lb   200 kgs
Length <b>(A)</b>	51.2 in   1300 mm	51.2 in   1300 mm
Maximum Overall Height <b>(B)</b>	76.0 in   1930 mm	76.0 in   1930 mm
Minimum Overall Height <b>(C)</b>	54.3 in   1380 mm	54.3 in   1380 mm
Spreader Bar Max. Height <b>(D)</b>	67.5 in   1715 mm	67.1 in   1705 mm
Spreader Bar Min. Height <b>(E)</b>	22.3 in   565 mm	20.7 in   525 mm
Spreader Bar Height at Maximum Reach	47.3 in   1200 mm	47.3 in   1200 mm
Reach at Maximum Height *	24.0 in   610 mm	24.4 in   620 mm
Reach at Minimum Height *	20.3 in   515 mm	20.0 in   510 mm
Maximum Reach	28.3 in   720 mm	28.3 in   720 mm
Turning Radius <b>(F)</b>	51.6 in   1310 mm	51.6 in   1310 mm
Legs Open (External Width) <b>(G)</b>	48.4 in   1230 mm	48.4 in   1230 mm
(Internal Width) <b>(H)</b>	44.9 in   1140 mm	44.9 in   1140 mm
Legs Closed (External Width) <b>(J)</b>	26.0 in   660 mm	26.0 in   660 mm
(Internal Width) <b>(K)</b>	22.8 in   580 mm	22.8 in   580 mm
Overall Height of Legs	4.0 in   100 mm	4.0 in   100 mm
Ground Clearance	0.6 in   15 mm	0.6 in   15 mm
Front Twin Casters	3.0 in   75 mm	3.0 in   75 mm
Rear Braked Casters	4.0 in   100 mm	4.0 in   100 mm

<b>Weights:</b>		
Mast & Boom Inc. all fixings	50.7 lb   23 kg	50.7 lb   23 kg
Base Assembly	44.9 lb   19 kg	44.9 lb   19 kg
Assembled Unit	92.6 lb   42 kg	92.6 lb   42 kg
Battery	6.4 lb   2.9 kg	-

\* Reach = Centre of spreader bar to front of mast

**Electrical Specifications:**

Batteries .....	2 x 12 Volt rechargeable sealed lead acid type
Battery Capacity .....	2.9 Ampere hours
Charger Rated Input .....	100-240V AC/24 VDC 50/60 Hz. Max 400MA
Charger Rated Output .....	29.5 VDC. Max 19W

**Electric Shock Protection:**

Charger.....	Class II
Lift.....	Internal Power Source

**Degree of Shock Protection:**

Charger.....	Type B
Lift.....	Type B

**Environmental Conditions:**

Outside this environment functionality and safety may be compromised.

**Operating:**

Temperature .....	5°C to 40°C
Relative humidity .....	20% to 90% @ 30°C - not condensing
Atmospheric pressure.....	700 to 1060 hPa
Noise level.....	55 dB

**Storage:**

Temperature .....	-10°C to +50°C
Relative humidity .....	20% to 90% @ 30°C - not condensing
Atmospheric pressure.....	700 to 1060 hPa

**IP Ratings:**

Control Box .....	IPX4
Actuator .....	IPX4
Off Board Charger .....	IPX5
Battery .....	IPX5
Handset .....	IPX5

**Duty Cycles:**

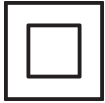
Actuator .....	10% (2 min/18 min)
Battery .....	10% (2 min/18 min)

### Key Symbols:

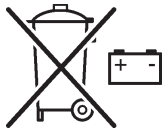
The following symbols are used on the charger, control unit and battery:



Type B equipment, as per EN 60601-1.



Class 2 equipment.



The disposal of batteries should not be mixed with general household waste. Batteries should be disposed of in accordance with local or national regulations.



The disposal of electronics should not be mixed with general household waste.



For indoor use.



ATTENTION, consult accompanying documents.



Refer to the user instructions before use.

**WEEE Producers registration number WEE/GG0464RZ**

## 10. Warranty

This warranty covers Hoyer lifts only. Lifts not covered under this warranty include, but are not limited to HML400, HPL600WB, HPL600WBSC, HPL402, C-HLA (and variations).

Hoyer lifts are guaranteed for a period of two years from the date of delivery against defects in materials and workmanship under normal use and service. This warranty includes all mechanical and electrical components.

Aluminium structural components and mechanical components on lifts are covered under warranty for a period of five (5) years from the date of delivery.

Damage caused by use in unsuitable environmental conditions or failure to maintain the product in accordance with user and service instructions is not covered. Any alteration, modification or repair unless performed by or authorized in writing by Joerns Healthcare will void this warranty.

### Parts:

Hoyer lifts contain various parts that wear from normal use. These parts, such as DC batteries and casters are not covered under the two-year warranty but are covered for 90 days after date of delivery.

Joerns Healthcare's obligation under this warranty is limited to supplying replacement parts, servicing or replacing, at its option, any product which is found by Joerns Healthcare to be defective.

Warranty replacement parts are covered by the terms of this warranty until the product's original warranty period expires.

When requested by Joerns Healthcare, parts must be returned for inspection at the customer's expense. Credit will be issued only after inspection.

### Service:

Most service requests handled by the facility Maintenance Department with assistance from the Joerns Healthcare Product Service Department.

Most parts requested can be shipped next day air at the customer's expense.

Should a technician be required, one will be provided by Joerns Healthcare, at our discretion. Only the Joerns Healthcare Product Service Department can dispatch authorized technicians.

This warranty is extended to the original purchaser of the equipment.

