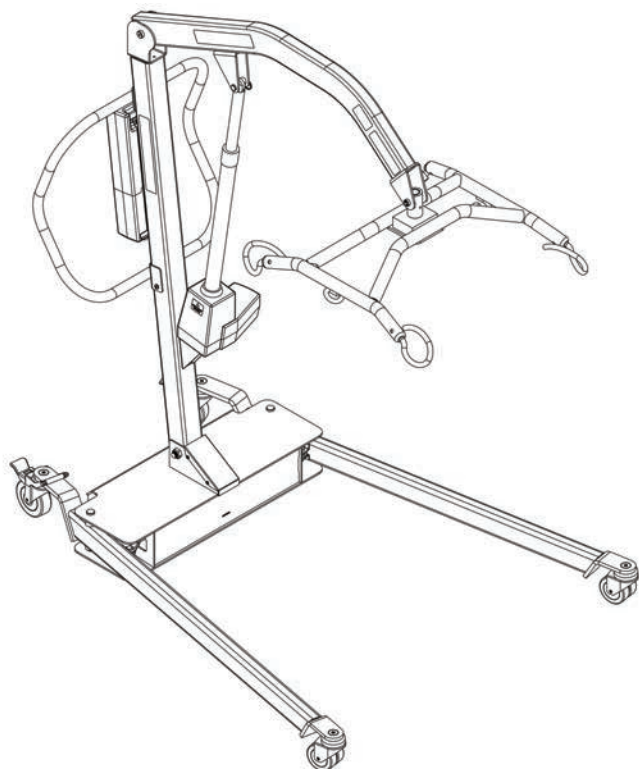


## User Instruction Manual

Hoyer® HPL700

To avoid injury, read user manual prior to use.



## Contents

1. Introduction.....	3
2. Safety Precautions .....	4
3. Assembly and Commissioning Instructions .....	6
4. Standard Control Box & Hand Control.....	10
5. Smart Monitor & Hand Control.....	11
6. Operating Instructions .....	15
7. 6-Point Bari Loop Spreader Bar System.....	17
8. Charging Instructions .....	19
9. Maintenance Schedule and Daily Check List .....	20
10. Lifter Maintenance Checklist.....	21
11. Specifications .....	22
12. Warranty.....	25

# 1. Introduction

Each HPL700 lift is fully assembled, load tested and certified before being packed/shipped.

The packing consists of a strong, purpose built carton that is used for both export and domestic markets to ensure the safe arrival of the lift. Documents are supplied and packed with each lift and should be kept safely for future reference.

- TEST CERTIFICATE
- USER MANUAL

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

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 for the safe lifting and transfer of an individual from one resting surface to another (such as a bed to a wheelchair). Joerns Healthcare recommends that the transfer of a patient is fully risk assessed and conducted safely over a short distance only.

The Hoyer HPL700 is suitable for patients in the SITTING, SITTING/RECUMBENT and RECUMBENT positions.

The Hoyer HPL700 is an electrically operated patient lift, designed to support and promote safe patient handling and transfer for both the patient and carer.

The Hoyer HPL700 lift incorporates a 6-point Bari loop 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 Bari Full Back
- Hoyer Bari Quickfit
- Hoyer Bari Hammock

With the optional 6-point standard spreader bar, examples of slings suitable for use with this device are listed as follows:

- Hoyer Full Back
- Hoyer Long Seat
- Hoyer Quickfit
- Hoyer Repositioning
- Hoyer Quickfit Deluxe
- Hoyer Twin Turner
- Hoyer Access
- Hoyer Limb

## Expected Service Life

The HPL700 lift is 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.

## 2. 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 THE HOYER HPL700 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**

- **DO NOT lift a patient unless you are trained and competent to do so.**
- **ALWAYS carry out the DAILY CHECK LIST located towards the end of the manual before using the lift.**
- **DO NOT exceed the safe working load of the lift.**
- **ALWAYS plan your lifting operations before commencing.**
- **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 operations 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.**
- **ALWAYS lock the wheels when lifting from the floor.**
- **DO NOT attempt to maneuver the lift by pushing on the mast, boom or patient.**
- **ALWAYS maneuver the lift with the handle provided. A foot push pad is also provided.**
- **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/pull a loaded lift over a floor obstruction.**

- **NEVER** force an operating/safety control. All controls are easy to use and do not require excessive force.
- **DO NOT** park a loaded lift on **ANY** sloping surface.
- **DO NOT** use electric lifts in a shower.
- **DO NOT** use or store a lift in a wet or corrosive environment such as shower, bath or pool locations.
- **DO NOT** charge batteries in a bathroom or shower room.
- **DO NOT** place or store batteries under direct sunlight or near a heat source.
- **YOUR** lift is for patient lifting. **DO NOT** use it, or allow it to be used, for any other purpose.
- **DO NOT** bump the lift down steps, loaded or unloaded.
- **DO NOT** attempt to negotiate a loaded lift on a slope, which exceeds 1:12 (approximately 5 degrees)
- **DO NOT** attempt to negotiate a slope without a second helper being present.
- **DO NOT** use a loaded lift on thick pile carpet.
- **NEVER** operate the lift with loose or missing parts or fasteners.
- **INSPECT** all precautionary labels on the lift. Order and replace all labels that cannot be easily read.

## 3. Assembly and Commissioning Instructions

### **⚠ WARNING**

The Hoyer® HPL700 is heavy and will need to be lifted with care. You may need assistance to lift the Hoyer HPL700 from the carton.

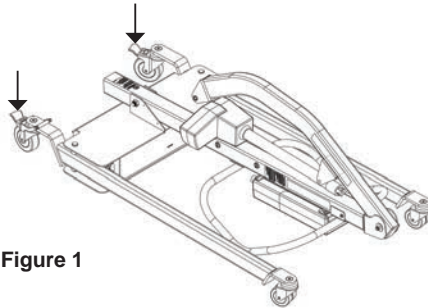
### Carton Contents

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

- Hoyer HPL700 Lift
- Hand control
- Charging cord
- Covers and hardware (2)
- Product documents
- Battery pack (2)
- Desk top charger/stand
- 6-point Bari loop spreader bar

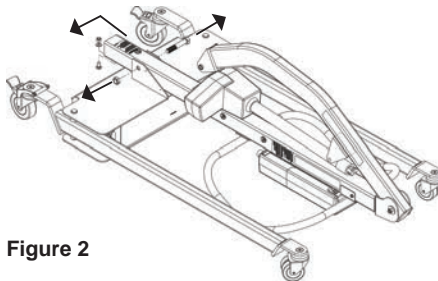
### Assembly Instructions

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



**Figure 1**

1. Place the chassis in a clear space and apply the rear brakes (Figure 1).



**Figure 2**

2. Remove the 5/8" bolt that connects the mast (in its shipping position) to the base. Remove the 3/8" carriage bolt as well (Figure 2). Do not discard these nuts and bolts as they are needed for assembly.

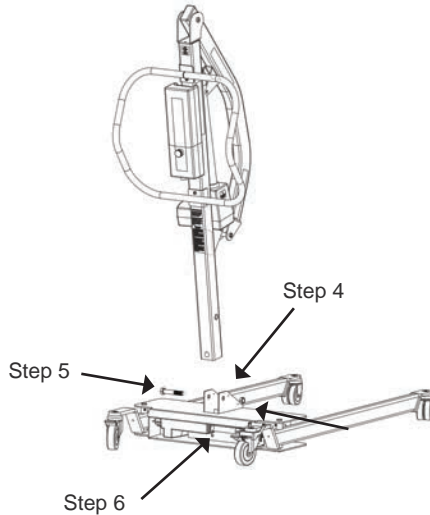


Figure 3

3. Lift the mast assembly from the base. The assembly needs to be rotated and positioned close to vertical so the handle is to the rear of the lift (Figure 3).

**⚠ WARNING**

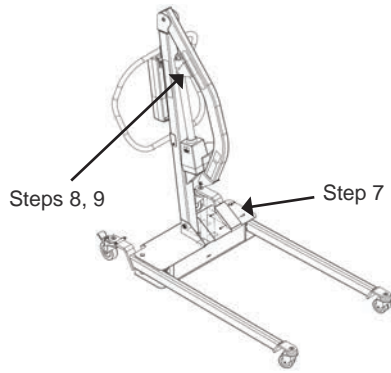
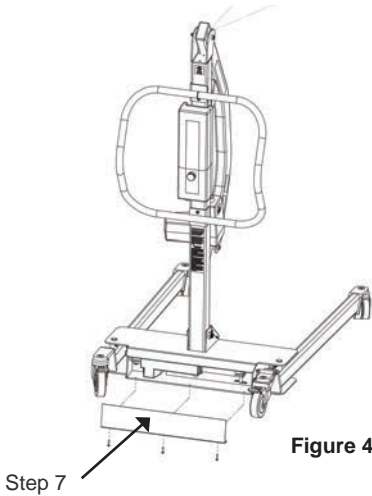
**Do not damage the cord that runs from the mast to the base. This can lead to the leg spreader actuator not functioning.**

4. Position the mast assembly into the base socket. Full engagement of the mast is indicated by alignment of the 5/8" bolt hole between the mast and the base (Figure 3).

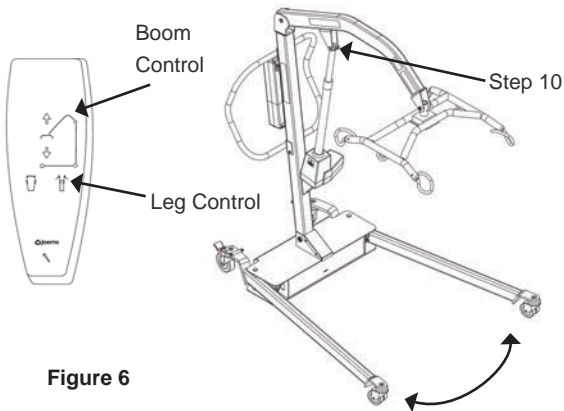
**⚠ WARNING**

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

5. Insert 5/8" bolt and nut removed in Step 2, and tighten until snug.
6. Insert the 3/8" carriage bolt and nut removed in Step 2, and tighten until snug.



7. Attach the front and rear covers (Figures 4 and 5), using the screws provided.
8. Remove the key ring fastener from the boom actuator mounting bracket. Remove the pin (Figure 5).
9. Carefully remove the orange tie from the lifter actuator that is attached to the mast (Figure 5).

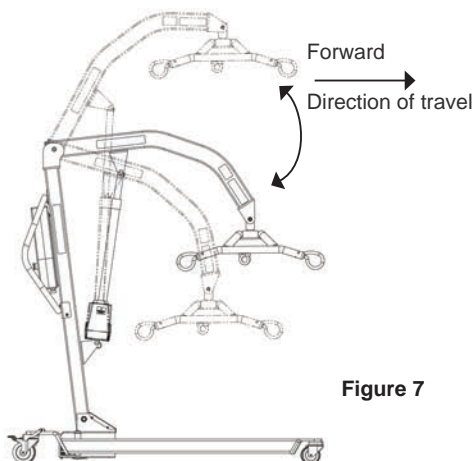


10. Align the upper end of the lifter actuator and boom actuator mounting bracket (Figure 6). Insert the pin. Install the key ring fastener.
11. To connect the spreader bar to the boom, see instructions on page 16.
12. Plug the hand control and actuator cables into the bottom of the controller. Refer to the figures on page 10 or 11 for correct positions.



## Always Check the Following Before Operation

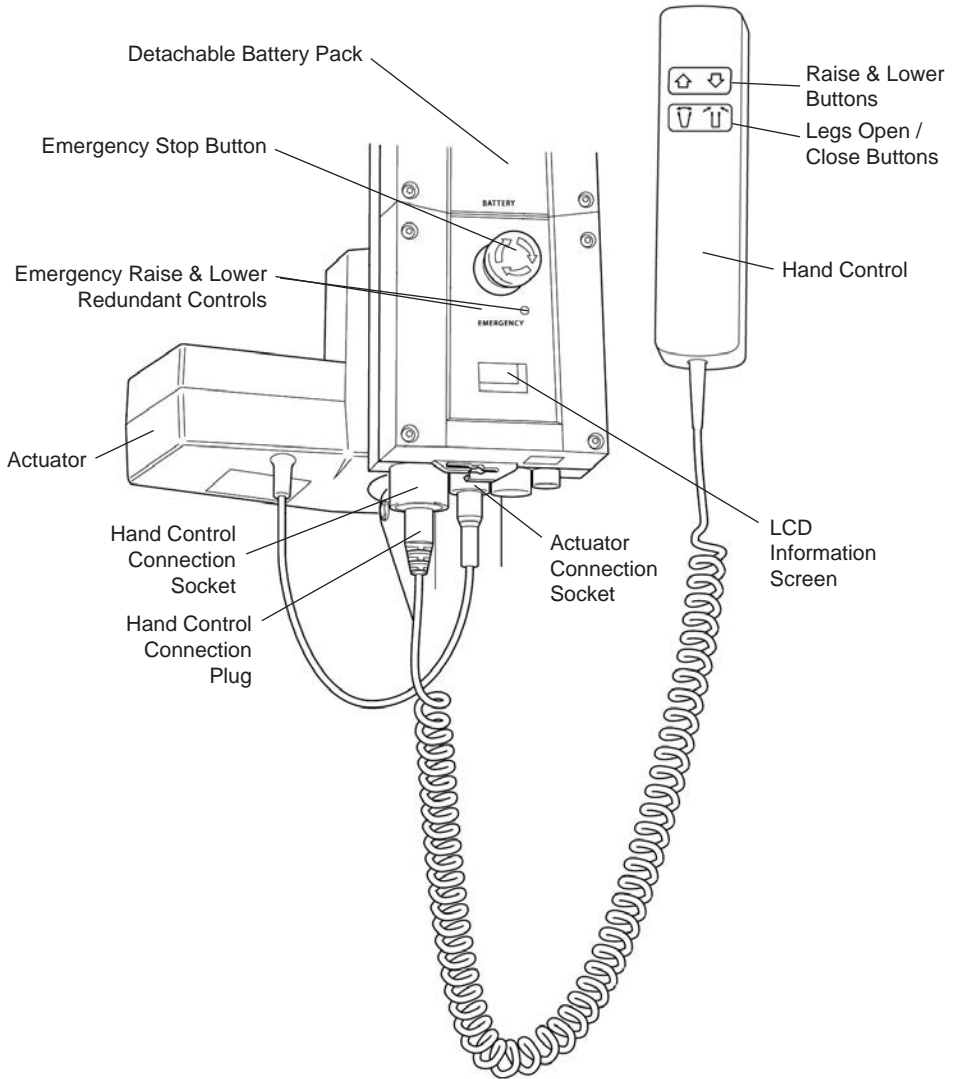
- The mast is securely bolted into place per Steps 5 and 6.
- The red emergency stop is located on the front of the control box. Twist clockwise for normal lift operation (on).
- The legs of the lift open and close satisfactorily (This is done via the hand control) (Figure 6).



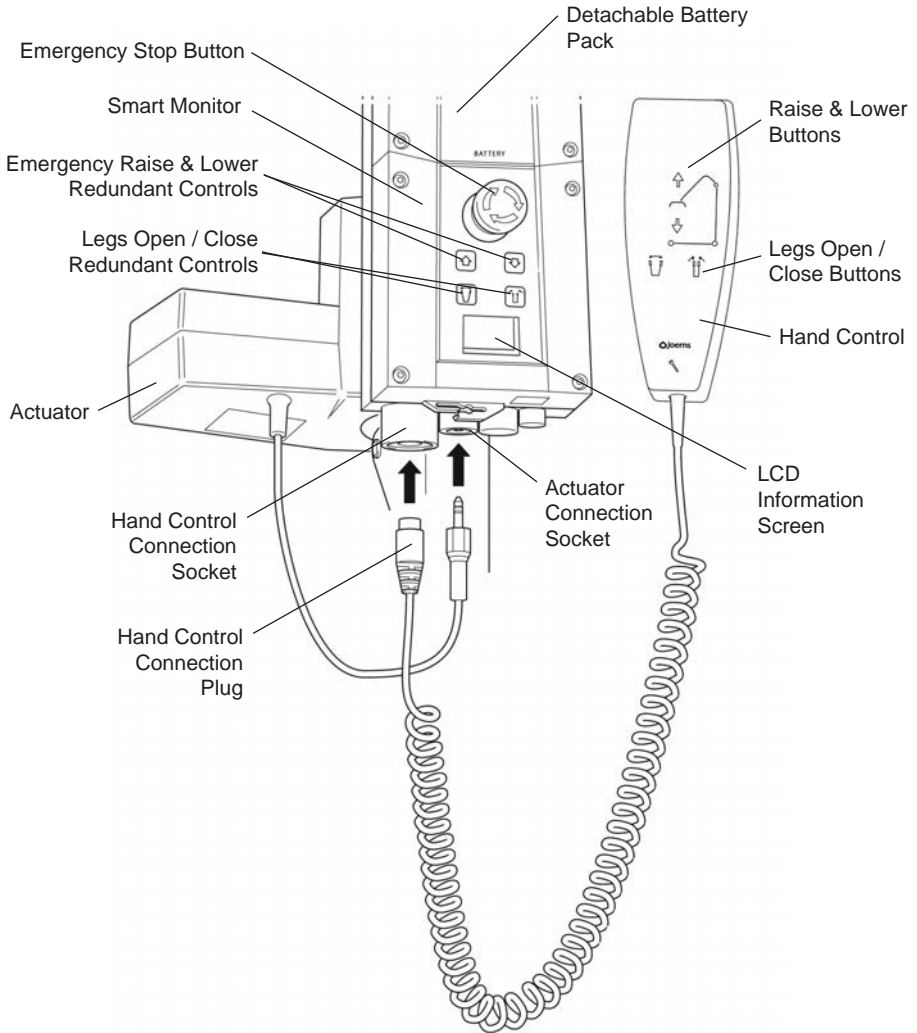
**Figure 7**

- Push the up and down buttons on the hand control and confirm the boom raises and lowers (Figure 7).

## 4. Standard Control Box & Hand Control



## 5. Smart Monitor & Hand Control



## **Intended Use**

The Hoyer Smart Monitor is a control system for Hoyer lifts. The Smart Monitor stores useful servicing information about the lift that can be recalled when required. This servicing information includes:

- Number of patient lift cycles
- Total work done by actuator
- Number of lift overloads (attempted lifts above the safe working load)
- Number of days since last service interval

The Hoyer Smart Monitor contains a microprocessor inside making it possible to read out service data via the on-board LCD screen.

## **Features**

- Data collection in the control box with data display via LCD screen
- Work counter
- Intelligent cycle counter
- Service indicator
- Service interval indicator
- Overload information
- 3 step battery indicator




## **Benefits**

- Improved safety for both patient and carer
- Accurate service data available at the touch of a button
- Optimised product life time
- Ease of maintenance for engineers and service technicians

## LCD Display Screen

The Hoyer Smart Monitor has the option to read out information via the LCD display screen. It is possible to read out total lifting cycles, total work done, overloads and number of days since last service, which can be used to quickly and easily evaluate the condition of the lift actuator.

This information is accessed by a ½ second press on the 'UP' button on the User Hand Control or redundant 'UP' button on the Smart Monitor.

	12034	— Total Lifting Cycles
A*S	1257000	— Total Work Done (Amps * Seconds)
	7	— Number of Overloads
	90/360	— Number of Days (since last service) / Number of Days (between services)

## Service & Usage Information



When it is time for a service, the service symbol will appear on the display. In addition, when the user hand control is activated, the Smart Monitor will give an audible signal giving notice to users that a PM check is recommended (see recommended maintenance schedule later in this manual).

The service symbol will be displayed each time the raise or lower keys are depressed on the user hand control.

To reset the service interval to one year, depress the raise and lower buttons simultaneously for five seconds.



If the lift stops because of an overload (an attempt to lift more than the safe working load) the overload symbol will appear on the LCD display and the lift will cease. Lower the boom and remove excess weight.

### **WARNING**

If the LCD display screen on your Smart Monitor has recorded an overload, Joerns Healthcare recommend that **ALL** routine daily checks are carried out on the lift prior to further use (for a list of daily checks, please refer to your lift user manual). Joerns Healthcare also recommend that you contact your authorised Hoyer service provider for additional guidance.

## On-Board Redundant Controls:

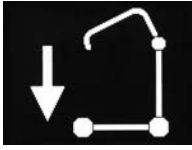


Fig. 10

On-board redundant controls enable the lift to be raised or lowered in the event of an emergency (Fig. 10).

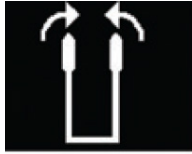


Fig. 11

If your lift incorporates powered leg positioning, there are redundant controls to both open and close the legs. (Fig 11).

## Battery Information:

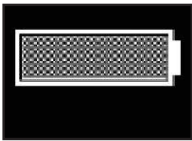


Fig. 12

The display showing full battery means that the battery is fully charged and the lift is ready for use (Fig. 12).

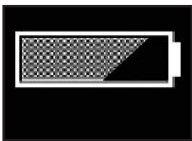


Fig. 13

The display indicates the battery is at 25-50% and charging is recommended (Fig. 13).

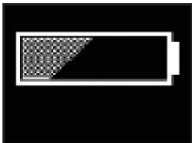


Fig. 14

The display indicates the battery is below 25% and requires charging. At this state, the control box will provide an audible alert when a button is pressed (Fig. 14).

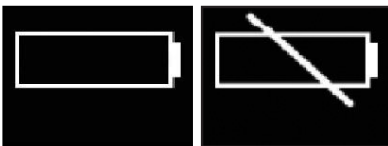


Fig. 15

The empty battery symbol showing on the display indicates the battery needs charging. At this stage, some of the functionality of the lift is lost and it is only possible to drive the lifting arm down. The symbol will switch between the two pictures for 10 seconds (Fig.15.). Permanent damage to the battery is likely to occur with continued battery depletion to this state.

## **⚠ WARNING**

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 (Fig. 14).

## 6. Operating Instructions

Read carefully the "Important Precautions" section before attempting to use the lift.

### WARNING

- The Hoyer<sup>®</sup> lift is not intended to be a transport device. Patients in the lift should be transferred for short distances only (example: bed to chair or toilet).
- Do not attempt to maneuver the lift by pulling on the mast, boom, actuator or patient.

### CAUTION

Have someone assist you when attempting to transfer a patient.

Always carry out the daily checklist before each lift use.

#### 1. Leg Adjustment

The legs on the Hoyer HPL700 are electrically adjustable for width. The legs can be opened to enable access around armchairs or wheelchairs. For transferring and negotiating narrow doorways and passages, the lift legs should be in the closed position. Electric leg adjustment is achieved by pressing the appropriate buttons on the hand control. The legs will be locked whenever the hand control switch is released.

#### 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 un-braked (the only exception is when lifting a patient from the floor). The lift will then be able to move to the center of gravity of the lift. If the brakes are applied it is the patient that will swing to the center of gravity and this may prove disconcerting and uncomfortable.

#### 3. Raising and Lowering the Boom

The movement of the boom is achieved by a powerful electric actuator which is controlled by a simple hand control box. The hand control has two buttons with directional arrows UP («) and DOWN (» ). 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.

#### 4. Emergency Stop

The red Emergency Stop Button is located on the front of the control box and is activated by pressing in. This will cut all power to the lift and can be reset by twisting the button counter-clockwise and releasing.

#### 5. Redundant controls

The HPL700 is fitted with redundant controls for raise/lower and base open/close on the control box. These are located under the emergency stop button and can be used should the hand control fail.

## 6. Mechanical Emergency Down

In the case of a complete electrical failure the electrical actuator is fitted with a mechanical lowering device (RED BOSS). Dependent on your lift, the device is either pulled upwards, or twisted by hand to activate. A slow decent will commence. Repeat this process until the patient has been safely lowered.

### CAUTION

Mechanical emergency down is to be used for emergency purposes only. Repeated use may cause permanent damage to the actuator.

## 7. 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).

## 8. Slings

The Hoyer HPL700 has a 6-point bari loop spreader bar. The 6-point system uses slings with webbing loops which allow positioning adjustment by selecting different colored straps.

**Loop Strap Slings:** Hoyer Bari Quickfit and Bari Full Back slings.

The 6-point system attaches to the spreader bar hooks via loop straps. Each sling is supplied with instructions. Please study the instruction guide before use.

**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 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 slings and lifts are not designed to be interchangeable with other manufacturer's products. Using other manufacturer's products on Hoyer products is potentially unsafe and could result in serious injury to patient and/or caregiver.**

### WARNING

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



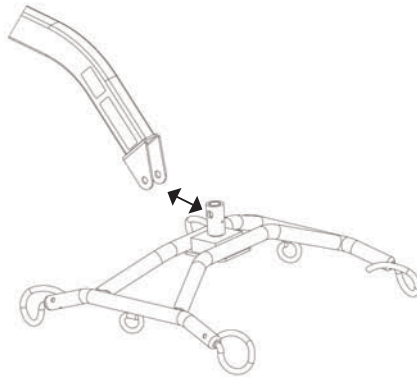
## 7. 6-Point Bari Loop Spreader Bar System

Follow these instructions exactly

Your Hoyer® HPL700 lift uses 6-point Bari loop spreader bar. The removal of this system is completed easily by the use of a quick-release pin. This is done quickly and easily, but you must read the following safety instructions to ensure the spreader bar is safely locked into position before use.

### **⚠ WARNING**

**Do not attempt to disassemble kingpin from the 6-point Bari loop spreader bar. This applies to spreader bar with or without scale.**

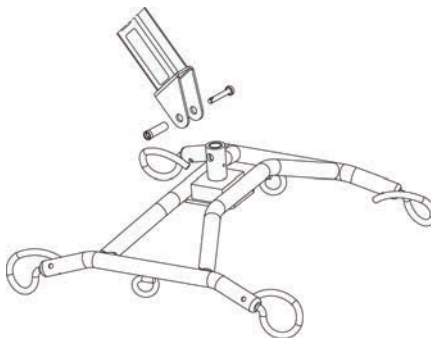


**Figure 8**

### **Connection**

To connect, place the spreader bar on a solid surface such as a table and lower the boom for ease of attachment (Figure 8).

**HPL700 (without scale):**



**Figure 9**

Insert the pin sleeve through end of the boom and the kingpin of the spreader bar (Figure 9).

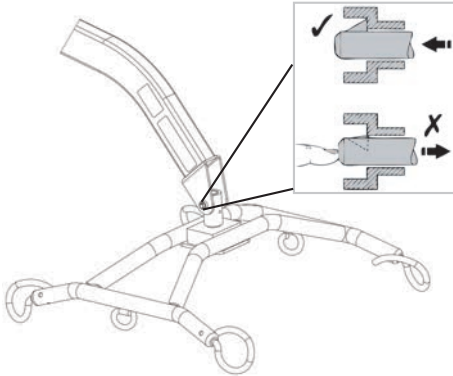


Figure 11

Once aligned in the boom slot reinsert the quick release pin fully into the sleeve until it locks into position (Figure 11). **YOU MUST CHECK THAT THE PIN IS SECURELY FITTED.**

To do this, press your finger into the barbed end. If the pin remains stationary, the lift is safe to use.

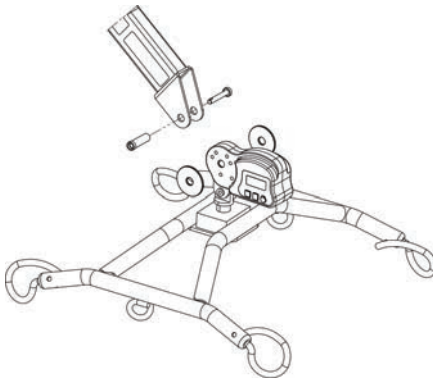


Figure 10

#### HPL700WSC (with scale):

Place a plastic washer on each side of scale housing, align holes, align these items within the end of the boom, and install the pin sleeve. Insert the quick release pin fully into the sleeve until it locks into position (Figure 10 and 11). You must check that the pin is securely fitted.

#### Removal

### ⚠ CAUTION

**Be sure to support the weight of the spreader bar before removing pin.**

To detach pin, depress the spring barb (using a flat screwdriver or similar) and pull the pin out.

Support the 6-point Bari loop spreader bar, and then pull the pin sleeve in the opposite direction, removing it completely from the boom. This will release the spreader bar completely.

## 8. Charging Instructions

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

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, unplug the charger 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.

### **WARNING**

- **The battery, charger, hand control and control box are NOT to be opened by unauthorised 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.**
- **NEVER leave the battery pack connected with the charger unit unplugged.**
- **DO NOT leave the charger plugged in with no battery connected.**
- **NEVER disconnect the charger plug by pulling on the cable.**
- **BE CAREFUL not to trip over the charge lead.**
- **DO NOT charge batteries in a bathroom or shower room.**

## 9. 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 yearly service, inspection and test will ensure a lift is kept in optimum safe working condition. A list of spare parts is available upon request.

DAILY CHECK LIST: Joerns Healthcare strongly recommends the following checks be carried out on a daily basis and before using lift.

- MAKE sure the lift moves freely on its castors.
- MAKE sure the spreader bar is free to rotate and swing. Check the spreader bar is firmly attached to the boom.
- ENSURE the mast is fully engaged into the mast slot and the mast locking device is securely tightened.
- EXAMINE the sling hooks on the spreader bar and side suspenders for excessive wear. If in doubt - do not use.
- MAKE sure the legs open and close correctly.
- OPERATE the hand control to confirm the boom raises and lowers satisfactorily.
- CONFIRM the lift is not giving a low battery indicator when the hand control is operated. If a low battery is indicated, DO NOT use and place on charge immediately.
- Check the operation of the emergency stop button.
- EXAMINE slings for fraying or other damage. DO NOT use any sling if damaged or if the sling shows signs of wear.

### **MAINTENANCE**

Joerns Healthcare recommends regular inspection and maintenance. Please refer to the chart on the next page.

## 10. Lifter Maintenance Checklist

### \*THESE CHECKS SHOULD INCLUDE:

✓ = Recommended

	Initially	Before Use	Annual Service
<b>1. SPREADER BAR:</b> Check the spreader bar for freedom of rotation and swing. Check for wear on the central pivot. Check for firm attachment to the boom.	✓	✓	✓
<b>2. BOOM:</b> Check the 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.	✓	✓	✓
<b>3. MAST:</b> Check the operation of the mast-locking device. Make sure the mast fully engages into the socket. Check the bottom actuator.	✓	✓	✓
<b>4. ACTUATOR:</b> The actuator should require no maintenance other than checking for correct operation and listening for unusual noise.	✓		✓
<b>5. CONTROL BOX/SMART MONITOR:</b> 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.	✓	✓	✓
<b>6. BATTERIES:</b> The batteries are housed in the power pack and should not require maintenance other than the regular charging as detailed in the charging instructions. Check that the connections remain clean.			✓
<b>7. LEG ADJUSTMENT:</b> Check the legs operate in both full extensions (inward/outward).	✓		✓
<b>8. CASTORS:</b> Check all castors for firm attachment to the legs. Check for free rotation of the castor and the wheels.	✓	✓	✓
<b>9. CLEANING:</b> 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.		✓	✓
<b>10. BASE AND WHEELS:</b> Ensure base is even and level (all four wheels are on the floor).	✓	✓	✓
<b>11. SLINGS:</b> Check for wear and fraying.	✓	✓	✓
<b>12. LUBRICATION:</b> Lubricate pivot joints with any light food grade spray lubricant, including mast and boom connections, pedal assembly, spreader bar joint (only if required),			✓
<b>13. HAND CONTROL:</b> Ensure plugged fully into controller.	✓	✓	
<b>14. QUICK RELEASE PIN:</b> Ensure the pin is securely fitted before lifting.	✓	✓	
<b>15. HARDWARE:</b> Check all nuts, bolts, screws and fasteners for excessive wear and for tightness. Replace as required.		✓	✓

# 11. Specifications

Safe Working Load .....	700 lbs .....	227kg
Maximum Overall Length.....	56" .....	1423mm
Minimum Overall Length.....	55" .....	1397mm
Maximum Overall Height .....	81" .....	2058mm
Minimum Overall Height .....	57.75" .....	1467mm
Height at Maximum Reach .....	46.5" .....	1181mm
Reach at Maximum Height .....	28.5" .....	724mm
Reach at Minimum Height .....	27" .....	686mm
Maximum Reach* .....	37.75" .....	959mm
Turning Radius .....	62" .....	1575mm
Legs Open - External Width .....	46.25" .....	1175mm
Legs Open - Internal Width.....	42.25" .....	1073mm
Legs Closed - External Width .....	27.5" .....	699mm
Legs Closed - Internal Width .....	23.5" .....	597mm
Overall Height of Legs.....	4.5" .....	114mm
Ground Clearance .....	0.625" .....	16mm
Front Twin Casters .....	3" .....	76mm
Rear Braked Casters.....	4" .....	102mm
Maximum Sound Level.....		64 dB (A)
Operating forces of the controls meet the requirements of ISO 10535		

\*Reach = Center of spreader bar to the front of the mast

## 6-Point Bari Loop Spreader Bar (measurement to top of location pins)

Spreader Bar Maximum Height .....	69" .....	1753mm
Spreader Bar Minimum Height .....	23.25" .....	591mm

## Weight

Mast, Base, Boom Assembly, Spreader Bar .....	143.4 lbs .....	65kg
Power Pack .....	6.6 lbs .....	3kg
Total .....	150 lbs .....	68kg
Base Assembly .....	83 lbs .....	38kg
Mast and Boom (not including battery).....	40.4 lbs .....	18kg
6-Point Bari Loop Spreader Bar .....	20 lbs .....	9kg

All measurements are within a +5/-5% tolerance.

**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 (Double insulated)  
 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 ..... 800 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 ..... 800 to 1060 hPa

**IP Ratings:**

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

**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 box and battery:



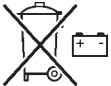
Type B equipment, as per EN 60601-1



Class 2 equipment



The disposal of the charging and control box should not be mixed with general household waste.



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



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



For indoor use



ATTENTION, consult accompanying documents.



## 12. Warranty

The HPL700 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.

Structural 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:

HoyerPro 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.