

User-Service Manual
Joerns® Lifting and Repositioning
Model HPL700, HPL700WSC

To avoid injury, read user's manual before using.



redefining patient handling

This manual contains important safety and maintenance instructions. Please read it carefully before using your patient lifter and refer to it as often as needed for safe and efficient use.

If you have any questions regarding the safe use and/or assembly, maintenance or specifications of your patient lifter, you should call Joerns Healthcare toll-free at 800.826.0270.

For service and repair, remember your authorized Hoyer dealer is able to provide the assistance you need. Save this manual for future reference. For non-homecare lifters, your maintenance department should keep this manual.

⚠Caution: For patient use, refer to the separate manual, “How to Use a Patient Lifter.” If you did not receive a copy or need additional copies, contact Joerns Healthcare at 800.826.0270.

⚠Warning: Using other manufacturers’ parts and accessories on Hoyer® products is unsafe and may result in serious injury to patient and/or attendant. Use only Hoyer parts. Hoyer lifter parts are NOT interchangeable with other manufacturers’ products. Replace any worn parts immediately.

Equipment Identification: The unit’s identification number (specification, model, serial number) appears on a silver nameplate attached to the side of the lift base.

Receipt of Equipment: Upon receipt of the equipment, verify it against the packing list to ensure it is complete and inspect the equipment for possible damage due to shipping. If there is any damage, DO NOT use the equipment and notify the carrier immediately to file a claim. Provide complete information concerning damage claims or shipping errors to your supplier. Include all equipment identification numbers and group part numbers (if any) as described above in “Equipment Identification” section along with a full description of damaged goods.

Important Precautions

⚠Warning: Do not attempt to use this equipment without understanding this manual.

To ensure safe operation, read carefully the entire manual before installing, operating or servicing this equipment.

If anything is not completely understood, please contact your supplier for more details. Failure to comply with warnings in this manual may result in injury.

Keep this manual with the lift and refer to it as required. Contents of this manual are subjected to change without prior notice to users.

Important information is highlighted by the following terms, which appear throughout the manual. Pay particular attention to the information provided under these headings.

⚠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.

Additional copies of this manual can be obtained from your supplier. Please quote the product model number.

⚠Warning: Your lift is for transferring patients only. Do not use the lift for any other purpose.

⚠Warning: Always carry out the daily check list before using the lift.

⚠Warning: Hoyer floor lifts are specifically designed for Hoyer slings and accessories. Slings and accessories designed by any other manufacturer is prohibited and will void Joerns Healthcare’s warranty. Use only Hoyer slings and accessories to maintain user safety and product utility.

⚠Warning: Hoyer floor lifts are intended to be used for persons within the specified weight limit indicated for the lift. Do not attempt to lift more than the weight limit indicated.

⚠Warning: Before attempting a transfer, the user must be assessed by a qualified professional.

⚠Warning: Hoyer® lifts must be used by qualified caregivers with proper training to work with the person to be transferred.

⚠Warning: Only trained and qualified caregivers should transfer a person. Do not attempt to use the lift if you have not been properly trained to do so.

⚠Warning: Always plan carefully before attempting to transfer a person.

⚠Warning: Do not use a sling that is not recommended for the lift.

⚠Warning: Never use a damaged, torn or frayed sling.

⚠Warning: Always place the sling around the user according to the sling user instructions.

⚠Warning: Follow lifting procedures outlined in the “How to Use a Patient Lifter” manual, available upon request.

⚠Warning: Use all controls and safety features only according to the rules specified in this manual. Never attempt to force a control or button on the lift.

⚠Warning: Do not store the lift in a shower, bath or other area with high humidity.

⚠Warning: IMPORTANT: Keep all components of the lift clean and dry, and have electrical and mechanical safety checkpoints done as instructed in the “Maintenance” section of this manual.

⚠Warning: Do not attempt to maneuver the lift by pushing on the mast, motor shaft, boom or user.

⚠Warning: Always maneuver the lift with the handle provided.

⚠Warning: Do not push a loaded lift at speeds which exceed a slow walking pace (2.6 ft/sec.).

⚠Warning: Inspect all precautionary labels on the equipment. Order and replace all labels that cannot be easily read.

⚠Warning: Avoid violent shock during transportation.

⚠Warning: Do not touch or use a lift with bare conductors or a damaged power cord. Electrically live equipment can cause injury or electrocution. If the lift or charger has any exposed or damaged wires, contact your local dealer immediately.

⚠Warning: Do not splash or expose electric parts of the device to water or moisture.

⚠Warning: Check nameplate for voltage and cycle requirements. These requirements differ by country. Do not attempt to use the lift in an area that has different voltage and cycle requirements.

⚠Warning: Batteries may explode, leak and cause personal injury if not disposed of properly.

⚠Warning: Do not place or store the battery under direct sunlight or near a heat source.

⚠Warning: Do not dispose of in fire.

⚠Warning: Do not short the battery terminals.

⚠Warning: Do not incinerate.

⚠Warning: Flush with water if electrolyte from the battery comes in contact with skin or eyes.

⚠Warning: Batteries must be recycled or disposed of according to local law regulations. When returning batteries, insulate their terminals with adhesive tape, etc. Otherwise the residual electricity in used batteries may cause fire or explosion.



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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 Spreader Bar (measurement to top of location pins)

Cradle Maximum Height.....	69" 1753mm
Cradle Minimum Height.....	23.25" 591mm

Weight


Mast, Base, Boom Assembly, Cradle	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 Spreader Bar.....	20 lbs 9kg

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

Electrical Specifications

Batteries ..2x12 volt Rechargeable sealed lead acid type	
Battery Capacity	3.2 Ampere Hours
Charger Rated Input.....	110-240 VAC 50/60Hz
Charger Rated Output	29.5 VDC 19WMAX

I.D. Label Symbol Definition

-  Attention, Consult accompanying documents
-  Safe Working Load
-  Type B Applied Parts
-  Class II Equipment

Electric Shock Protection

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

Degree of Shock Protection

Charger.....	Type B
Lift	Type B
Intended Operating Environment.....	>+5° <+40°

Outside this environment functionality and safety may be compromised.

Introduction

The Hoyer HPL700 is an electrically operated patient lift. Each HPL700 lift is fully assembled load tested and certified before being packed/ shipped.

The package consists of a strong, purpose built carton that is used for both export and domestic markets to ensure the safe arrival of the lift.

A number of documents are supplied and packed with each lift and should be kept for future reference.

- Test Certificate
- Packing Check List
- User Manual
- Customer Satisfaction Card

The Test Certificate is an important document and will be required for our insurance records. It is valid for six months and after it has expired, the lift should be inspected and serviced per the maintenance schedule.

Servicing and periodic testing can be carried out by your authorized supplier. Please ensure your lift is included in their maintenance schedule. If you are unsure of what your local market servicing requirements are, please check with your dealer and/or a local government agency.

The Hoyer HPL700 is suitable for patients in the sitting, sitting/recumbent and recumbent positions. The slings suitable for this device are listed as follows:

- Hoyer Quick Fit Sling
- Hoyer Full Back Sling

Assembly and Preparation

⚠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
- Product Documents
- Hand Control
- Battery Pack (2)
- Charging Lead
- Desk Top Charger/Stand
- Covers and hardware (2)
- 6-Point Spreader Bar

Assembly Instructions

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

1. Place the chassis in a clear space and apply the rear brakes (Figure 1).
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.
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 torque to 90 ft-lb (122 N-M).

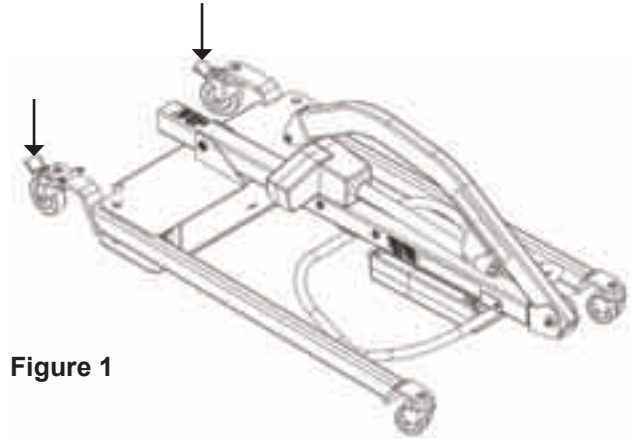


Figure 1

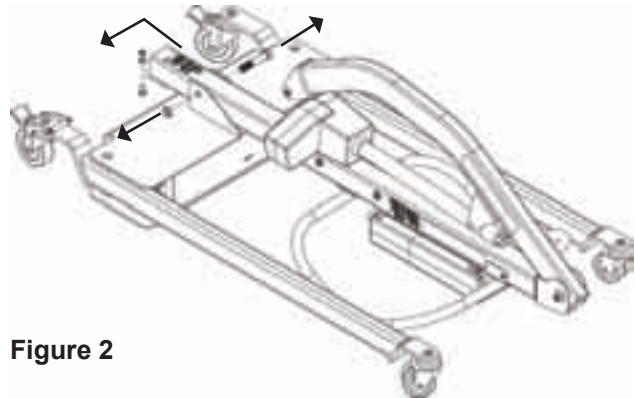


Figure 2

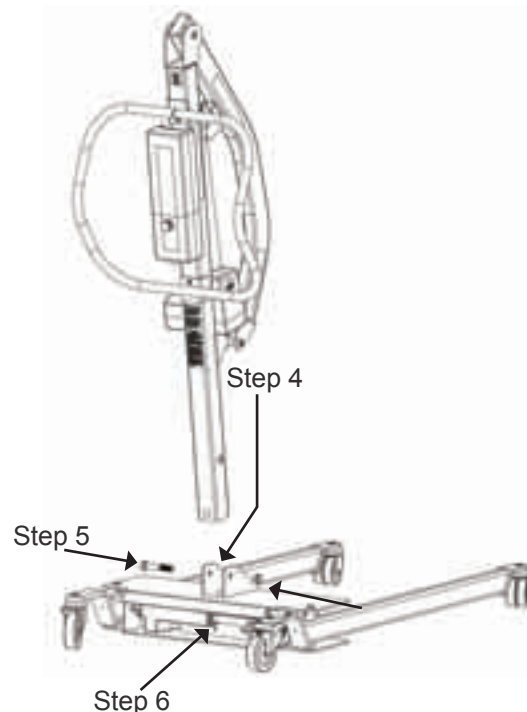
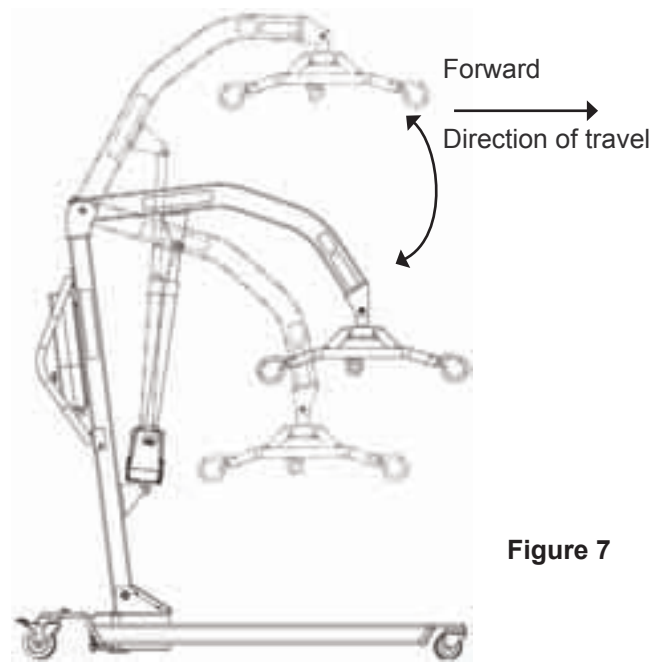
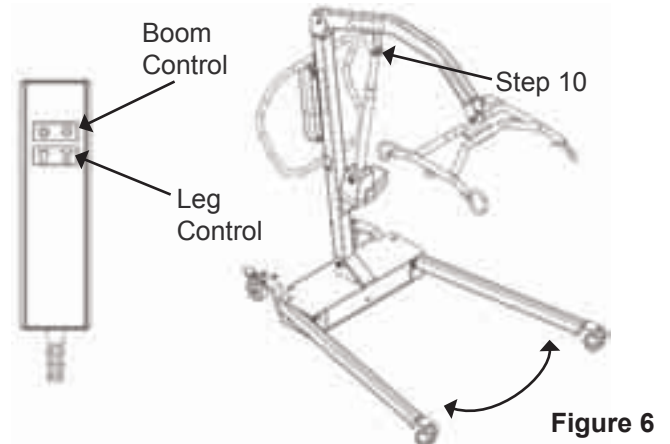
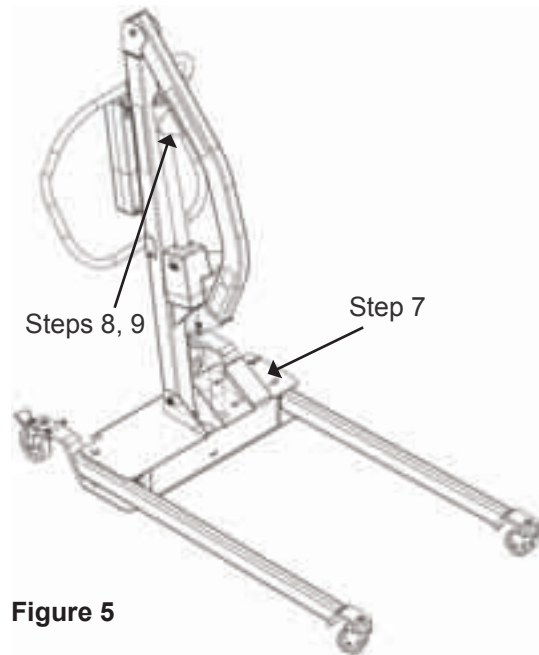
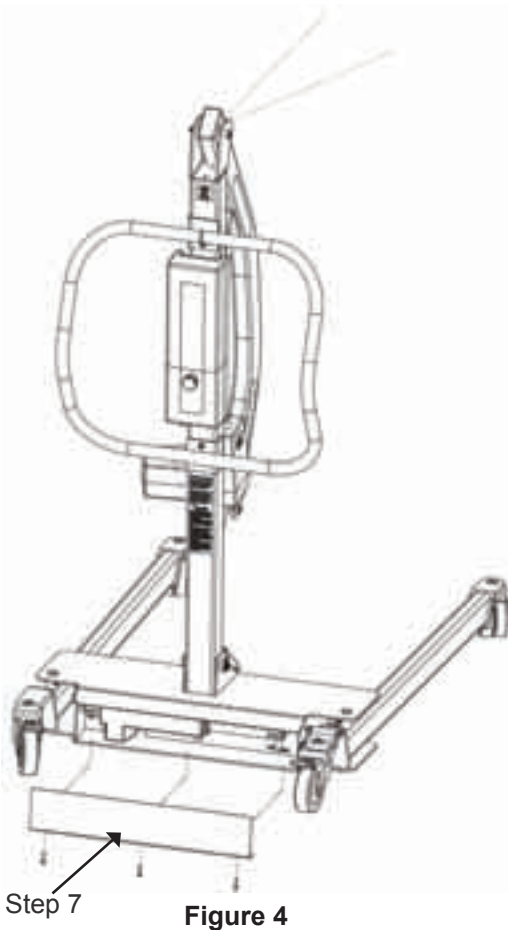


Figure 3

6. Insert the 3/8" carriage bolt and nut removed in Step 2, and torque to 20 ft-lb (27 N-M).
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 9.

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



Operation

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

⚠Warning: The Hoyer® 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).

⚠Warning: 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.

Operating Controls

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 unit. 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. Electrical Emergency Down/Up

Emergency lower (down) and raise (up) buttons are provided at the front of the control box. This is operated by inserting the tip of a ballpoint pen, or similar object into the button highlighted ↖↗. This will bring the boom up or down should the hand control fail.

6. Mechanical Emergency Down

In the case of a complete electrical failure, the electric actuator is fitted with mechanical lowering device (RED TRIGGER). This will only operate when the lift is under load. The device must be pulled upwards to activate, and the boom will descend slowly.

⚠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 spreader bar. The 6 point system uses slings with webbing loops which allow positioning adjustment by selecting different colored straps.

Loop Strap Slings: Hoyer Quick Fit and Full Back Slings.

⚠Warning: Never exceed the rated weight capacity of the sling or the lift. Check the capacity of the sling and the lift prior to performing a transfer

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.

6-Point Spreader Bar System

Follow these instructions exactly

Your Hoyer® HPL700 lift uses 6-point 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 spreader bar. This applies to spreader bar with or without scale.

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:

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

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.

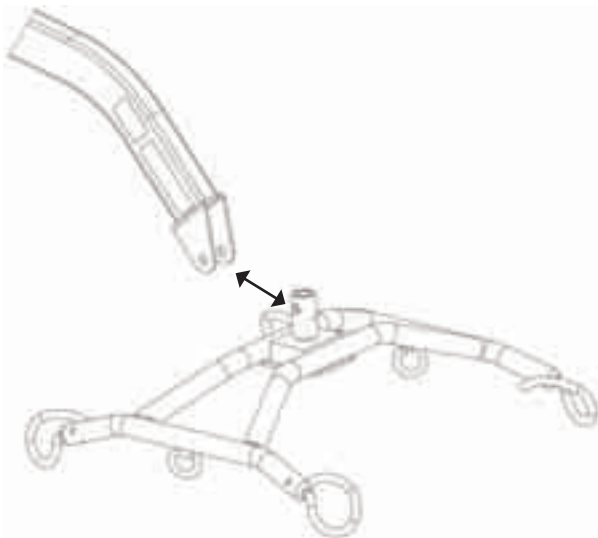


Figure 8

HPL700WSC:

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.

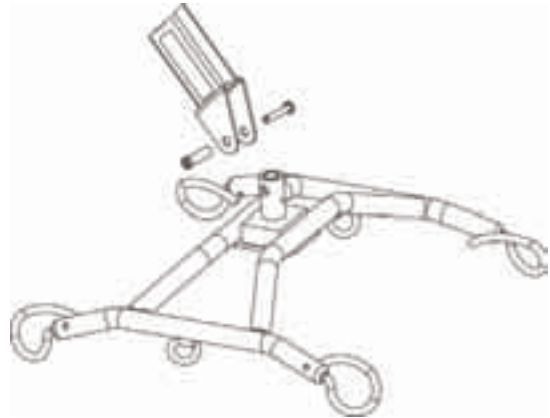


Figure 9

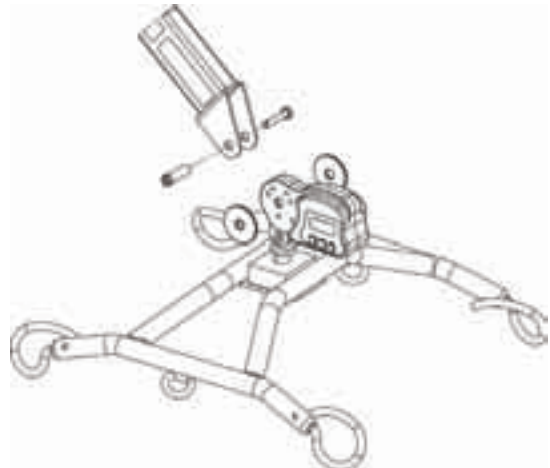


Figure 10

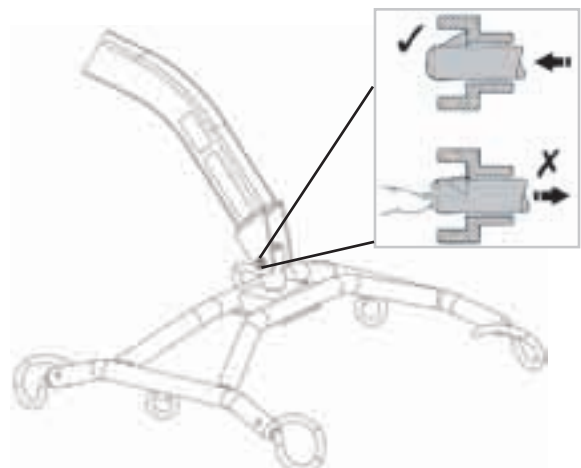


Figure 11

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 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.

Charging Instructions

The batteries are located in the power pack and are charged with a desktop charger.

Charging Instructions for the Hoyer® HPL700

When the power pack needs charging it is removed from the lift and attached to the charger.

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 charger. The location and latching of the power pack to the charger is the same system as used on the lift.
3. Plug the charger cord into a suitable outlet.
4. Charging is automatic and will fully charge the batteries over a period of eight to twelve hours. **Note:** Even if the charger is left plugged in for extended periods, it will not allow the batteries to overcharge.
5. To return the lift to service, 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.

⚠Caution: 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.

⚠Caution: Never run the batteries completely flat. As soon as the audible warning sounds, complete the lifting operation and place the power pack on charge.

⚠Caution: Never store the power pack for long periods without regular charging throughout the storage period.

⚠Warning: Always make sure the charger is unplugged before connecting or disconnecting the power pack.

⚠Warning: Never leave the power pack plugged in to the charger with the charger unplugged.

⚠Warning: Do not charge an electric lift in a bathroom or shower room.

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

The LOAD TEST and certification should only be carried out by qualified personnel or an authorized service agent / dealer.

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 casters.
- Make sure the spreader bar is free to rotate and swing.
- Ensure the spreader bar is firmly attached to the boom.
- Examine the sling hooks/clips on the spreader bar for excessive wear.
- Make sure the legs open and close correctly.
- Operate the hand control to confirm the boom raises and lowers satisfactorily.
- Check the operation of the emergency stop button.
- Examine slings for fraying or other damage. DO NOT use any sling if damaged.
- Confirm the lift is not giving a low battery alarm when the hand control is operated. If the alarm sounds, DO NOT use, and place on charge immediately.

Maintenance, Inspection and Testing

Joerns Healthcare recommends a thorough inspection and test of the Hoyer HPL700 lift and lifting accessories, slings, scales, etc. is carried out on a regular basis. Inspection frequency varies with location so you must check with your dealer or local government agency on how often an inspection is required. The examination and test should be conducted according to the recommendations and procedures. Joerns Healthcare recommends maintenance, inspection and certified testing is carried out by authorized service agent / dealers only.

Joerns Healthcare has an established network of reputable distributors and dealers who will be pleased to handle all of your purchasing, warranty, repair and maintenance requirements.

Our products are guaranteed for a period of 24 months from the date of manufacture or 24 months from the date of purchase if commissioned by an authorized dealer. This guarantee covers the lift's major structure, actuator and control box.

We recommend that all of our products are prepared by your dealer and are supported by them for future servicing. The dealer or distributor operates the warranty program, so it is important to keep a record of their name, address, and telephone number so they can be contacted should any problem arise.

If you are in doubt where your lift was purchased, Joerns Healthcare can trace the supplier if you provide the serial number of the lift.

Remember: Contact your distributor for purchases, warranty, repairs, servicing and certified maintenance.

Lifter Maintenance Checklist

To be Inspected by User	Initially	Before each use	6 months
Spreader Bar			
Check the spreader bar for freedom of rotation and swing. Check for wear on the central pivot. Check for firm attachment to the boom.	✓	✓	
Boom			
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.	✓	✓	
Mast			
Check the operation of the mast-locking device. Make sure the mast fully engages into the socket. Check the bottom actuator.	✓	✓	
Actuator			
The actuator should require no maintenance other than checking for correct operation and listening for unusual noise.			✓
Power Pack			
Check the function of the emergency stop button and emergency down/up.	✓	✓	
Batteries			
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.			✓
Leg Adjustment			
Check that the legs operate in both full extensions (inward/outward).	✓	✓	
Casters			
Check all casters for firm attachment to the legs. Check for free rotation of the caster and the wheels.	✓	✓	
Cleaning			
Clean with ordinary soap and water and/or any hard surface disinfectant. Harsh chemicals cleaners or abrasives should be avoided as these may damage the surface finish of the lift. Avoid wetting any of the electrical parts.			✓
Load Test			
The load test should be carried out in accordance with the manufacturer's test procedures. It is strongly recommended the testing is carried out by an authorized dealer.			✓
Base and Wheels			
Ensure base is even and level (all four wheels are on the floor).	✓	✓	
Slings			
Check for wear and fraying.		✓	
Lubrication			
Lubricate pivot joints, including mast and boom connections, spreader bar joint (only if required), and leg pivot points.			✓
Hand Set			
Ensure plugged fully into controller.	✓	✓	
Quick Release Pin			
Ensure the pin is fitted before lifting, by pressing the barbed end (Figure 11, page 9).	✓	✓	



To be Inspected by User	Initially	Before each use	6 months
Fasteners			
Check that all fasteners are properly retained (Bolts have nuts, pins have clips, etc.)	✓	✓	
Base Components			
Inspect components internal to the base (remove the rear cover and tip the lift on its side).			
All bolts are tight			✓
Pins are retained			✓
Leg actuator mechanism moves freely (not binding or obstructed)			✓
There is no excessive wear on any component			✓

Joerns Healthcare Warranty Program for Hoyer® HPL700 Lifts

This Warranty covers HPL700 Lifts only. Lifts not covered under this warranty include, but are not limited to: Advance-H, HML400, HPL600WB, HPL600WBSC, HPL402, C-HLA, all HoyerPro (and variations).

HPL700 Lifts are guaranteed for a period of two (2) 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 (excluding DC Batteries and casters).

Steel structural components and mechanical components on lifts are covered under warranty for a period of two (2) 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

An HPL700 Lift contains 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 can be 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.

