

User Instruction Manual

Hoyer® Advance

To avoid injury, read user manual prior to use.

Manuel de l'utilisateur

Hoyer® Advance

Afin d'éviter tout accident, veuillez lire attentivement la notice avant utilisation.

Manual de Instrucciones

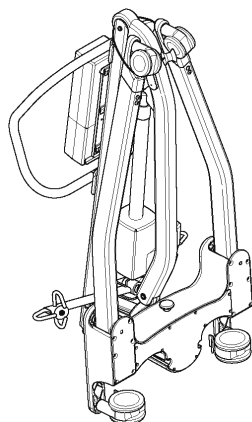
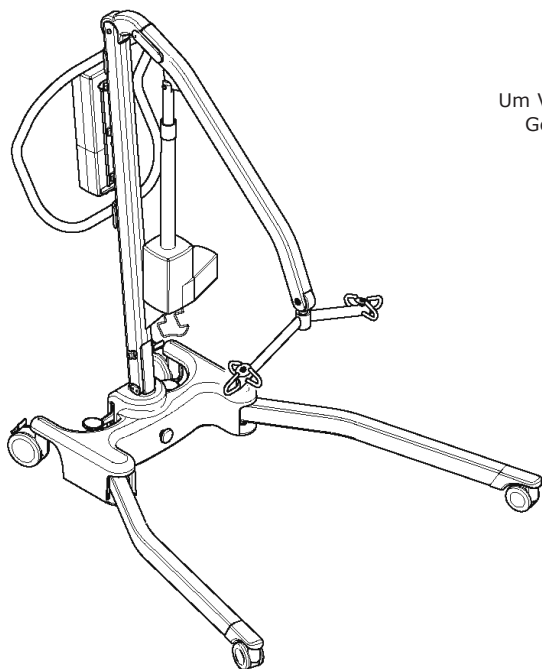
Hoyer® Advance

Para evitar posibles daños, lea previamente el manual de usuario.

Benutzerhandbuch

Hoyer® Advance

Um Verletzungen zu vermeiden, lesen Sie bitte die Gebrauchsanweisung vor der ersten Benutzung.

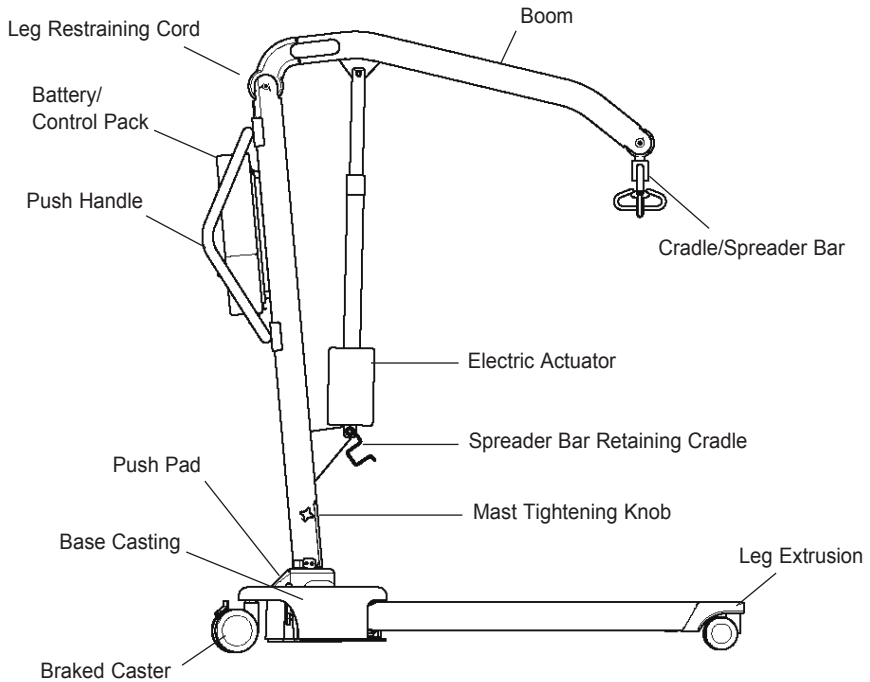


Contents

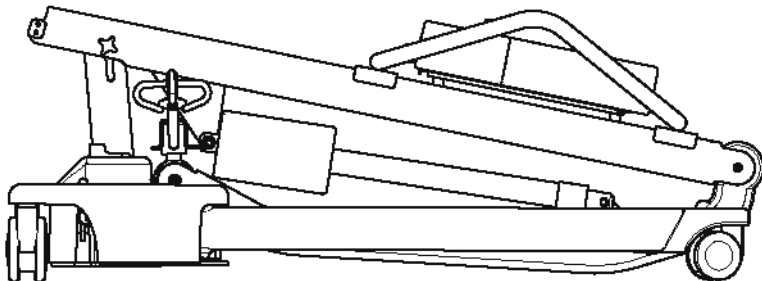
- 1. Hoyer Advance Patient Lift 3
- 2. Introduction: The Hoyer Advance Patient Lift 4
- 3. Assembly and Commissioning Instructions 5
- 4. Disassembly 7
- 5. Safety Precautions 10
- 6. Control Box & Handset 12
- 7. Operating Instructions 13
- 8. Maintenance Schedule..... 16
- 9. Technical Specifications..... 18
- 10. Warranty 21

1. The Hoyer Advance Patient Lift

Hoyer Advance lift (ready for use)



Hoyer Advance lift (storage position)



2. Introduction: The Hoyer Advance Patient Lift

The Hoyer Advance is available in two versions, hydraulically operated and electrically operated. This manual covers both Advance models. Each lift is fully assembled, load tested and certified before being packed/shipped.

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

- TEST CERTIFICATE
- USER MANUAL
- DEALER GUARANTEE CARD
- CUSTOMER SATISFACTION CARD

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.

The CE mark: The Hoyer Advance carries the CE mark and complies with the following EC directives:



- Medical Device Directive (93/42/EEC)
- EMC Directive (89/336/EEC)
- Low Voltage Directive (73/23/EEC)

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 Advance is suitable for patients in the SITTING, SITTING/RECUMBENT and RECUMBENT positions.

The Hoyer Advance is designed to support and promote safe patient handling and transfer for both the patient and carer. It can be folded without the use of tools enabling it to be easily stored in environments where space is limited. The Hoyer Advance can also be separated into two sections to facilitate onward transportation in a vehicle with a suitably sized boot.

The Hoyer Advance patient lift incorporates a 6-point spreader bar 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 Long Seat
- Hoyer Full Back
- Hoyer Access sling
- Hoyer Quickfit Deluxe
- Hoyer Silkfit

Expected Service Life

Hoyer Professional lifts are designed and tested for a minimum service life of ten (10) years, subject to the use and maintenance procedures stated in this manual. Use, other than in accordance with these instructions, may compromise service life.

3. Assembly and Commissioning Instructions

Carton Contents

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

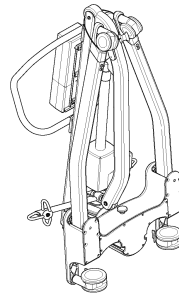
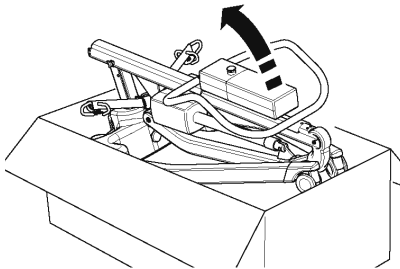
- HOYER ADVANCE
- WALLET CONTAINING DOCUMENTS
- HAND CONTROL (ELECTRIC ONLY)
- BATTERY PACK (ELECTRIC ONLY)
- BATTERY CHARGING LEAD (ELECTRIC ONLY)
- HYDRAULIC UNIT (HYDRAULIC ONLY)

SAFETY NOTE: The Hoyer Advance is heavy and will need to be lifted with care. You may need assistance to lift the Hoyer Advance from the carton.

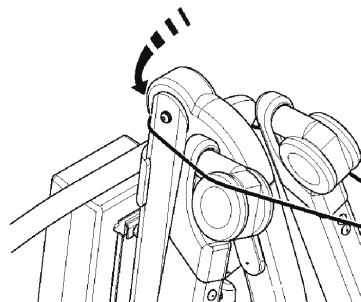
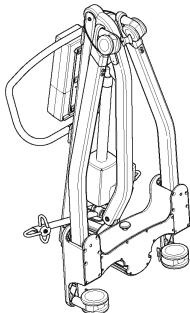
Assembly Instructions

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

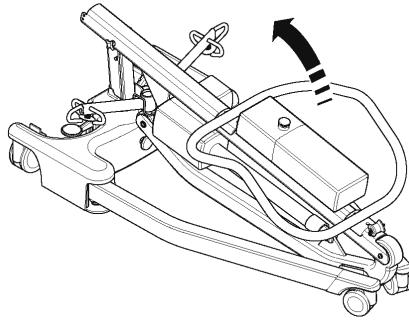
Lift the Advance carefully from the carton. Stand the lift in the upright position (in a triangular stance).



2. Release the leg and mast assembly by unfastening the restraining strap from the wheels. This strap will retract neatly into the top of the mast section.

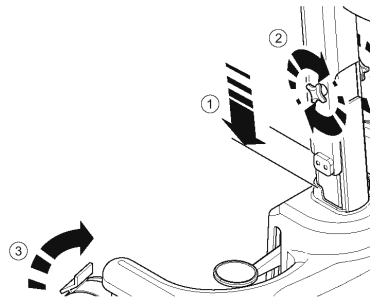
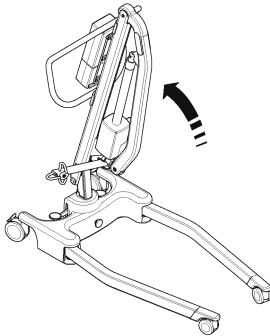


3. Lay the Advance flat on the floor (ensure rear casters are securely locked).

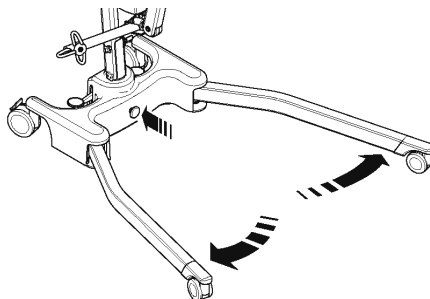


4. Lift the mast assembly upright (using the top of the push handle), and drop the mast into the slot, aligning the mast engagement decals (1), tighten mast lock knobs (2), release braked casters (3).

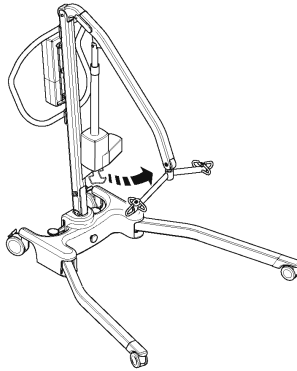
SAFETY NOTE: Avoid trapping fingers. Keep fingers away from the end of the mast when inserting into the mast slot. Ensure the mast is fully engaged before tightening the mast locking device.



5. Open legs fully. ENSURE leg-locking knob inserts flush against the base casting and the legs will no longer move freely. The legs will then only operate by the use of the foot pedal mechanism located at the rear of the base.

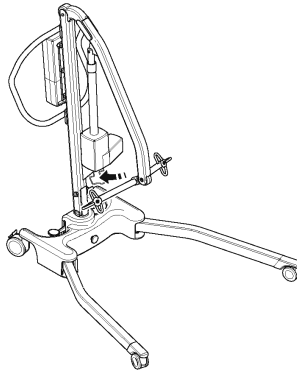


6. Release spreader bar from retaining cradle, and the lift is ready for operation.

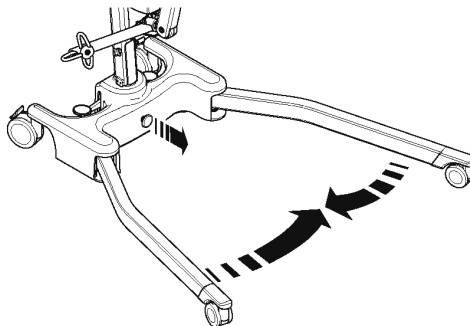


4. Disassembly

1. Lower the mast to the lowest possible position, then insert spreader bar into retaining cradle.

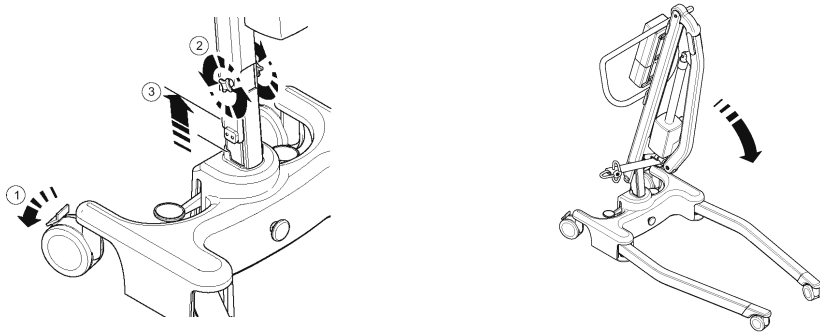


2. Release leg-locking device (pulling it away from the cast base), close legs tightly together.

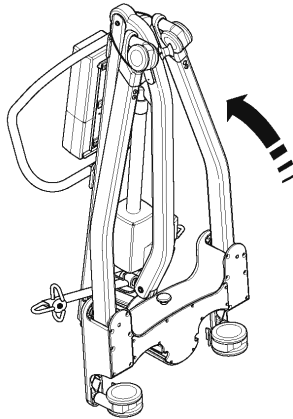


3. Loosen mast locking device (2 - not fully) lift the mast and boom assembly (3), and fold carefully toward the legs. Use the push handle to assist this motion.

NOTE: If you wish to separate the mast and boom completely from the base and legs, undo the mast locking device fully (remove) and lift the mast and boom completely free from the base. Be careful not to lose the mast lock device's knob and location spindle.

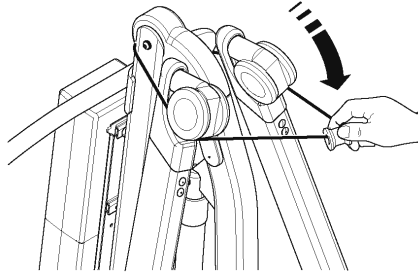


4. Lift the folded Advance upright (using the legs and push handle as a guide) being careful that the mast and boom stay together as you tilt upright.



5. Pull the restraining strap sharply upwards and extend over the wheels. (This will keep the legs, mast and boom neatly together during transit and storage).

NOTE: Care should be exercised when folding/unfolding an Advance as there is a possible danger of pinching the fingers etc. Please follow the instructions carefully and ask for assistance if you are unsure of the correct procedure.



ALWAYS CHECK THE FOLLOWING BEFORE OPERATION:

- The legs are fully engaged from the stowed position (see assembly instructions, step 5)
- The mast is fully locked into position with mast engagement decals correctly aligned (see assembly instructions, step 4).
- The legs of the lift open and close satisfactorily.
- The red emergency stop button, located on the rear of the control box, is in the OFF (out) position.
- Push the up and down buttons on the hand control and confirm the boom rises and lowers.
- Fit the power pack to the lift and make sure the latch holding the pack in place is fully engaged. "Click" in place.

HYDRAULIC MODELS ONLY:

- Close the hydraulic unit release valve by turning the knob clockwise on the unit.

NOTE: The release valve requires only minimal tightening to operate and should only be closed finger tight. DO NOT apply excessive force to the valve knob as this will result in damage to the valve.

- Pump the handle of the hydraulic unit and confirm the ram raises the boom.
- Open the release valve fully anti-clockwise and check the boom descends. An unloaded boom will not come down under its own weight. It may be necessary to apply some pressure to the boom before it will descend.

NOTE: The release valve is fully open and encounters a positive end stop in less than two full turns of the knob.

⚠ WARNING

When lowering a patient, open the valve very slowly. Rapidly opening the valve may cause the boom to lower quickly which may cause injury to the patient.

5. 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 “ADVANCE” LIFT

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

CAUTION: Information for preventing damage to the product.

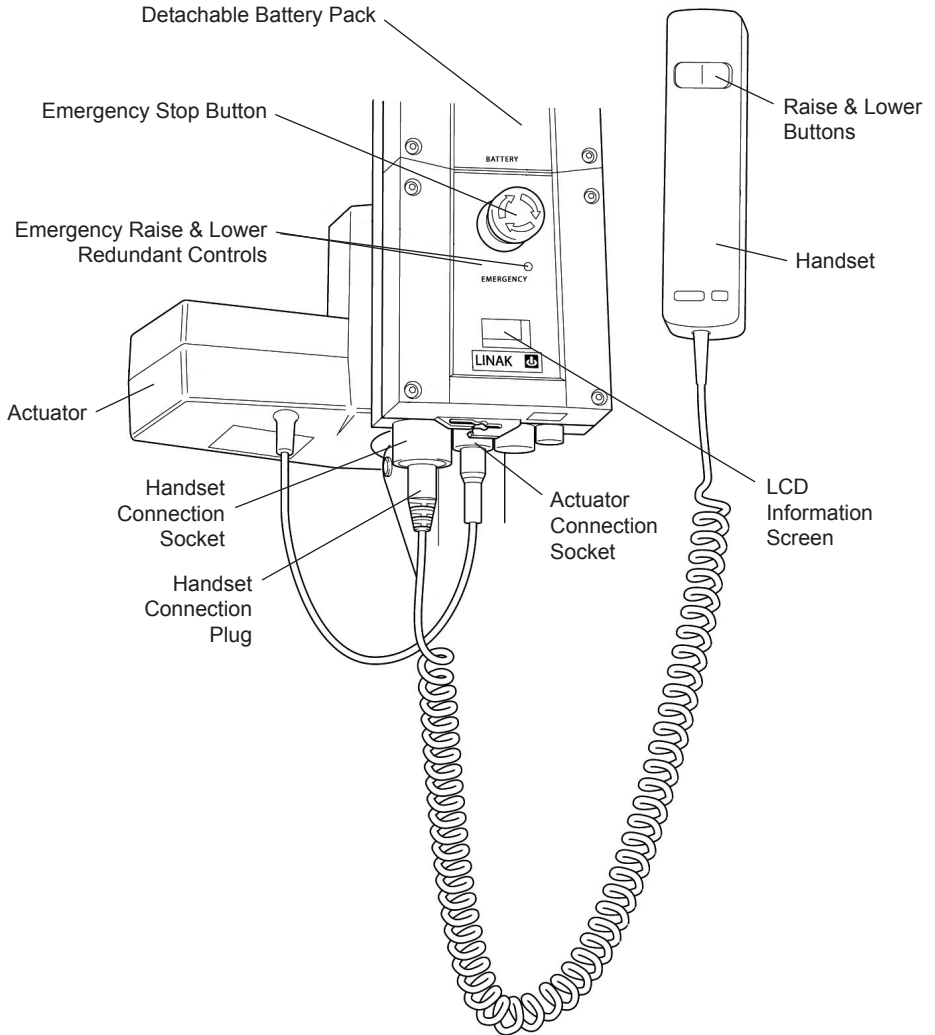
NOTE: Information to which you should pay special attention.

WARNING

- **ALWAYS** plan your lifting operations before commencing.
- **ALWAYS** carry out the **DAILY CHECK LIST** (page 16) before using the lift.
- **ALWAYS** familiarise 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.
- **DO NOT** lift a patient with the caster brakes on. Always let the lift find the correct centre of gravity.
- **DO NOT** attempt to maneuver the lift by pushing on the mast, boom or patient.
- **ALWAYS** maneuver the lift with the handle provided.
- **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 (3 Kilometers/hour 0.8 meters/second).
- **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, which the casters are unable to ride over.
- **NEVER** force an operating/safety control. All controls are easy to use and do not require excessive force.
- The **MINIMUM** load required to manually lower the hoist using the mechanical emergency down function is 30 kg.
- **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.
- **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.
- **ALWAYS** check the hoist is not charging before moving as the electrical connection may be damaged.

6. Control Box & Handset



7. Operating Instructions

1. Leg adjustment

The legs on the Hoyer Advance are 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.

To achieve the adjustment, the leg adjuster pedal, located at the rear of the base, is compressed right (DOWN) to open the legs outwards and left (UP) to close the legs. The adjustment can be carried out with the patient in the lift, but whether loaded or unloaded the adjustment should be made when the lift is moving.

WARNING

Never lift with the legs in the closed/transport position. The closed position is for storage and transport only.

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, so that the lift will then be able to move to the centre of gravity of the lift. DO NOT apply the brakes because if the brakes are applied the patient might swing to the centre 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. There is a hook on the rear of the hand control, which allows it to be "parked" on the mast or boom when not in use.

4. Emergency stop

The red Emergency Stop Button is located on the rear of the control box and is activated by pressing in. This will cut all power to the lift and only be reset by twisting the button counterclockwise and releasing.

5. Redundant controls

The standard control box is fitted with emergency lower/raise buttons located underneath the emergency stop button. They can be operated by inserting the tip of a ball point pen into the buttons highlighted "lower/raise". This will raise or lower the boom 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 BOSS). This will only operate when the lift is under load. The device must be pulled upwards to activate and a slow decent will commence.

NOTE: The MINIMUM load required to manually lower the hoist using the mechanical emergency down function is 30 kg.

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. CAUTION: DO NOT IGNORE THIS WARNING ALARM. Complete the lifting operation and place the lift on charge (see charging instructions).

8. Raising and lowering the boom (hydraulic models)

WARNING

Never loosen or unscrew the retaining bolt of the hydraulic jack unless you are an authorized competent engineer. Never load whilst user needs to rotate hydraulic jack. If the user intends to rotate the jack strongly, it may impact the patient or cause unforeseen danger to patient and/or caregiver.

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 silver star shaped knob, and the pump handle which is a long lever on the side of the hydraulic unit to raise the boom. The valve is closed by gently turning the 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.

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 caregiver 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. 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.

WARNING

When lowering a patient, open the valve very slowly. Rapidly opening the valve may cause the boom to lower quickly which may cause injury to the patient.

9. Slings

The selected sling is attached to the spreader bar hooks, each sling is supplied with instructions. Please study the instruction guide for the lifter and sling before using. Once the correct sling has been selected for the patient, attach it to the spreader bar hooks.

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

WARNING

Joerns Healthcare recommends slings are checked regularly and before use for fraying or damage. DO NOT use slings that are worn or damaged.

WARNING

HOYER RECOMMENDS THE USE OF GENUINE HOYER PARTS. Hoyer slings and lifters 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.

Charging Instructions

The batteries are located in the power pack and are charged through a socket at the base of the control box.

1. Insert the power supply plug into the charge point at the base of the control box. The plug is inserted with a straight push. DO NOT twist the plug in the socket.
2. Plug the charger mains lead/cord into a suitable mains/power outlet.
3. Charging is fully automatic. The LCD indicator indicates the status of the charging.

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: Charging will take up to 4 hours.

It is recommended that the battery be charged immediately up on receipt.

4. To return the lift to service, pull the charger socket out and disengage from the mains supply.

WARNING

- The battery, charger, hand control & 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.
- 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

All Hoyer products are designed for minimum maintenance, however some safety checks and procedures are required. A schedule of DAILY tasks is detailed below. A list of replacement 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 casters.
- 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.
- EXAMINE slings for fraying or other damage. DO NOT use any sling if damaged or if the sling shows signs of wear.
- MAKE sure 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 giving a low battery alarm when the hand control is operated. If the alarm sounds DO NOT use and place 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 repaired.

MAINTENANCE, INSPECTION AND TEST

Joerns Healthcare recommends a thorough inspection and test of the Hoyer Advance lift and lifting accessories; slings, etc. are carried out on a regular basis. Inspection frequency varies depending on locality, so you must check with your dealer or local government agency as appropriate regarding how often an inspection is required. The examination and test should be conducted according to the recommendations and procedures provided in this manual. Whenever possible Joerns Healthcare recommends maintenance, inspection and certified testing is carried out by authorized service agent / dealers only.

NOTE: These recommendations are in compliance with the requirements of 1998 No2307 Health and Safety: The Lifting Operations and Lifting Equipment Regulations 1998. This is a UK regulation. Outside the UK please check your local country requirements.

***THESE CHECKS SHOULD INCLUDE:**

✓ = Required X = Recommended

* 6 months in North America

	Initially	Before Use	Service Intervals *
1. 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.	✓	✓	✓
2. 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.	✓	✓	✓
3. MAST: Check the operation of the mast-locking device. Make sure the mast fully engages into the socket. Check the bottom actuator or hydraulic unit mounting.	✓	✓	✓
4. ACTUATOR: (electric only): The actuator should require no maintenance other than checking for correct operation and listening for unusual noise.		X	✓
5. 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. Note: The MINIMUM load required to manually lower the hoist using the emergency lower function is 30 kg.	✓	✓	✓
6. BATTERIES: (electric only): 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.			✓
7. HYDRAULIC UNIT: The hydraulic unit should require no maintenance other than checking for correct operation and leakage of hydraulic fluid.		✓	✓
8. LEG ADJUSTMENT: Check the legs operate in both full extensions (inward/outward).	✓	✓	✓
9. CASTERS: Check all casters for firm attachment to the legs. Check for free rotation of the caster and the wheels.	✓	✓	✓
10. 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.		X	✓
11. LOAD TEST: The load test should be carried out in accordance with the manufacturer's test procedures.			X
12. BASE AND WHEELS: Ensure base is even and level (all four wheels are on the floor).	✓	✓	✓
13. SLINGS: Check for wear and fraying.	✓	✓	✓
14. LUBRICATION: Oil pivot joints, including mast and boom connections, pedal assembly, spreader bar joint (only if required).			✓
15. FIXINGS: Check all nuts, bolts, screws and fasteners for excessive wear and for tightness. Replace as required.			✓

9. Technical Specifications

Specification	Electric		Hydraulic	
Safe Working Load.....	341 lbs.....	155Kgs	341 lbs	155Kgs
Maximum Overall Length	51 inches.....	1300mm	49.2 inches	1250mm
Minimum Overall Length	49 inches.....	1250mm	47.2 inches	1200mm
Maximum Overall Height.....	73 inches.....	1860mm	72.6 inches	1845mm
Minimum Overall Height.....	53.5 inches.....	1360mm	53.1 inches	1350mm

Folded Dimensions

Height	17.1 inches.....	450mm	16.9 inches	470mm
Depth.....	46.4 inches.....	1180mm	46.5 inches	1230mm
Width	21.6 inches.....	550mm	23.0 inches	550mm

Spreader Bar Max. Height.....	66.5 inches.....	1690mm	64.6 inches	1640mm
Spreader Bar Min. Height (usable).....	15.3 inches.....	390mm	15.4 inches	390mm
Height at Maximum Reach.....	46 inches.....	1170mm	33.5 inches	850mm
Reach at Maximum Height.....	25.6 inches.....	650mm	28.0 inches	710mm
Reach at Minimum Height.....	13.7 inches.....	350mm	15.4 inches	390mm
Maximum Reach*.....	32.8 inches.....	835mm	33.5 inches	850mm
Turning Radius	55.9 inches.....	1420mm	41.0 inches	1040mm
Legs Open - External Width.....	42.5 inches.....	1080mm	43.7 inches	1110mm
Legs Open - Internal Width	39.3 inches.....	1000mm	45.7 inches	1160mm
Legs Closed - External Width.....	26.3 inches.....	670mm	25.2 inches	640mm
Legs Closed - Internal Width.....	22.4 inches.....	570mm	21.7 inches	550mm
Overall Height of Legs.....	4.5 inches.....	115mm	4.7 inches	120mm
Ground Clearance	1.1 inches.....	30mm	1.2 inches	30mm
Front Twin Casters	3.0 inches.....	75mm	3 inches	75mm
Rear Braked Casters.....	3.9 inches.....	100mm	4 inches	100mm

*Reach = center of spreader bar to the front of the mast

Weights

Mast, Base & Boom Assembly.....	63.1 lbs.....	28.9kgs	63.7 lbs	26.8kgs
Power Pack	6.2 lbs.....	2.8kgs	N/A	N/A
Total.....	69.9 lbs.....	31.7kgs	59 lbs	26.8kgs
Base Assembly (not incl. battery).....	32.8 lbs.....	14.9kgs	32.9 lbs	14.9kgs
Mast & Boom (not incl. battery).....	30.9 lbs.....	14.0kgs	26.3 lbs	11.9kgs

All measurements are within a +5/-5 degree of tolerance.

ELECTRICAL SPECIFICATIONS:

BATTERIES.....	24 volt Rechargeable sealed lead acid type
BATTERY CAPACITY	3.2 Ampere hours
CHARGER RATED INPUT	100 - 240 V AC/ 50/60 Hz
CHARGER RATED OUTPUT	29.5 VDC, Max. 19 W

ELECTRIC SHOCK PROTECTION

CHARGER.....	CLASS II (EN 60601-1)
LIFT	INTERNAL POWER SOURCE

DEGREE OF SHOCK PROTECTION

CHARGER.....	TYPE B (EN 60601-1)
LIFT	TYPE B (EN 60601-1)

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

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.)
CHARGER.....	Approx. 4 hrs.

ACOUSTICS

A-Weighted sound power level	60 dB (A)
------------------------------------	-----------

KEY SYMBOLS:

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



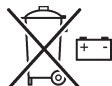
Type B equipment, as per EN 60601-1



Class 2 equipment



The disposal of the charging and control unit 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.

WEEE Producers registration number WEE/GG0464RZ

10. Warranty

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

HoyerPro 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:

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.

