

# **User Instruction Manual**

Hoyer<sup>°</sup> Calibre

To avoid injury, read user manual prior to use.

# Manuel de l'utilisateur

### Hoyer<sup>°</sup> Calibre

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

# Manual de Instrucciones

Hoyer<sup>®</sup> Calibre

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



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Hoyer<sup>®</sup> Calibre

# 1. The Hoyer Calibre Patient Lift



# 2. Introduction: About Your Lift

Each Calibre lift is fully 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. A number of documents are supplied in a wallet, 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 will be required for your insurance records. It is valid for six months and after it has expired the lift should be inspected and serviced per the maintenance schedule.

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 Hoyer Calibre lift is a passive patient handling device intended for the safe lifting and transferring of patients up to a safe working load of 385 kg (850 lbs).

The Hoyer Calibre lift is intended for INDOOR USE ONLY and must be operated by a MINIMUM of two people/carers.

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

The Hoyer Calibre is suitable for patients in the SITTING, SITTING/RECUMBENT and RECUMBENT positions. The slings suitable for use with this device are listed as follows:

· Hoyer Bariatric Hammock Sling (Safe working load - 385kg / 850lbs)

### **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 CALIBRE LIFT
- WALLET CONTAINING DOCUMENTS
- HAND CONTROL
- CHARGING LEAD
- BATTERY PACK
- DESK TOP CHARGER/STAND

### **Tools required**

The following tools will be required for assembly:

- 13MM SOCKET
   TORQUE WRENCH

Assembly and commissioning must be carried out by a competent engineer from an authorised Hoyer Service Agent/Dealer.

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A MINIMUM OF 2 PERSONS REQUIRED. The Hoyer Calibre is heavy and will need to be lifted with care. You will need assistance to lift the Hoyer Calibre from the carton.

#### Assembly Instructions

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

1. Place the mast/base assembly in a clear space and lay with rear castors and push handle on floor.







3. Tighten the M10 screws to secure each leg using a socket and torque wrench.

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Ensure the screws are secured firmly. It is recommended to tighten these to 10Nm

## A WARNING

Avoid trapping fingers. Keep fingers away from the end of the leg when inserting into the leg socket. Keep fingers away from the front castor bracket during assembly of the legs to the base.



- 4. Lift the Calibre onto its castors.
- NOTE: On a flat surface, all 6 castors must be in contact with the floor.



### A WARNING

#### The Calibre is extremely heavy, a minimum of 2 people will be required to lift the hoist.

Insert the two bushings into the outside of the mounting brackets on either side of the boom.
 Lift the boom and position the actuator so that the upper fixing hole align with the mounting bracket holes on the boom.





**6.** Insert quick-release pin sleeve into mounting bracket/actuator hole. make sure the sleeve is fully engaged in the hole on both mounting brackets.



7. Insert the quick-release pin through the quick-release pin sleeve until it is fully located.

# **A**WARNING

Check that the quick-release pin has been fully inserted by trying to push the pin back out.



**8.** Fit power pack to the lift and make sure the latch holding the pack in place is fully engaged. "Click" in place. Check that the battery is fully charged.



**9.** Plug the handset and actuator cables into the bottom of the controller. Refer to the figures on page 12 or 13 for correct positions.

### Disassembly

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# Disassembly must be carried out by a competent engineer from an authorised Hoyer Service Agent/Dealer.

The lift should not be disassembled unless for service, repair or transport if necessary. Therefore follow the assembly instructions in reverse sequence.

#### ALWAYS CHECK THE FOLLOWING BEFORE OPERATION

• The mast is fully locked into position by checking the grub screws at the front and rear of the base are tight.



• The red emergency stop button, located on the rear of the control box, is in the OFF (out) position.



• The legs of the lift open and close satisfactorily (This is done via the hand control).



• Push the up and down buttons on the hand control and confirm the boom rises and lowers.



# 4. Safety Precautions

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

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 CALIBRE 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.

### A 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 manoeuvre the lift by pushing on the mast, boom or patient.
- ALWAYS manoeuvre 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.

# 5. Standard Control Box & Handset



# 6. Smart Monitor & Handset



### 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  $\frac{1}{2}$  second press on the 'UP' button on the user handset or redundant 'UP' button on the Smart Monitor.



### Service & Usage Information



When it is time for a service, the service symbol will appear on the display. In addition, when the user handset 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 handset.

To reset the service interval to one year, depress the leg open and leg close keys 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.

### A 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**



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



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

#### **Battery Information**



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



The display showing a half empty battery indicates that it is time to charge the battery.



The empty battery symbol showing on the display indicates that the battery has no capacity left and should be placed on charge immediately.

### **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.

# 7. Operating Instructions

#### 1. Leg adjustment

The legs on the Hoyer Calibre 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 handcontrol. The legs will be locked whenever the handcontrol switch is released.

#### 2. Castors and Braking

The lift has two braked castors which can be applied for parking. When lifting, the castors should be left free and un-braked. The lift will then be able to move to the centre of gravity of the lift. If the brakes are applied it is the patient that will swing to the centre of gravity and this may prove disconcerting and uncomfortable.

#### 3. 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  $\uparrow \psi$ . 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 only be reset by twisting the button anticlockwise and releasing.

#### 5. Redundant controls

All Hoyer lifts are fitted with raise and lower buttons on the control box. These are located underneath the emergency stop button and can be used to lower/raise the patient should the hand control fail.

#### 6. Mechanical Emergency Down

In the case of a complete electrical failure the electrical actuator is fitted with a spring loaded mechanical lowering device (RED BOSS). This will only operate when the lift is under load. The device must twisted by hand and released to activate. A slow decent will commence. Repeat this process until the patient has been safely lowered.



# **A**WARNING

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

#### 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 Calibre has a 6-point cradle.

The 6-point system uses slings with webbing loops, which allow positioning adjustment by selecting different coloured loops.

#### Loop strap slings: Bariatric Hammock

The sling attaches to the 6-point cradle hooks via loop straps (shown below). Each sling is supplied with comprehensive user instructions. Please ensure you have read and fully understand the user instructions prior to use.



6-point cradle. Example of the 6-point cradle sling with loop attachments.

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

# **A**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 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.

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

# 8. Removal of 6-point Cradle System

#### FOLLOW THESE INSTRUCTIONS EXACTLY

Your Calibre lift uses the 6-point cradle. The removal of this systems is completed 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 6-point cradle is safely locked into position before use.

### Connection

# **A**WARNING

Two persons are required to fit the 6-point cradle OR a support table can be used.

To connect, raise the 6-point cradle up toward the boom slot.

Insert the pin sleeve through the plastic end cap to support the 6-point cradle.

Once aligned in the boom slot, reinsert the quick-release pin fully into the sleeve until it locks into position. 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.



### Removal

CAUTION: Be sure to support the weight of the 6-point cradle before removing pin.

To detach pin, depress the spring barb (using a flat blade electrical screw driver or similar) and pull the pin out.

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





# 9. 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.

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- 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.

# 10. Maintenance Schedule & 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 monthly 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 authorised 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 castors.
- · MAKE SURE the 6-point cradle is free to rotate and swing
- · EXAMINE & CHECK that the 6-point cradle is firmly attached to the boom.
- · EXAMINE the sling hooks/clips on the 6-point cradle 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.
- 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.
- · MAKE SURE the actuator connection points are secure.
- EXAMINE slings for fraying or other damage. DO NOT use any sling if damaged or if the sling shows signs of wear.

### Maintenance, Inspection and Test

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

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### \*THESE CHECKS SHOULD INCLUDE:

✓ = Recommended

Initially	Before Use	Annual Service
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# **11. Technical Specifications**

Safe Working Load	850 lbs	385 kgs
Maximum Overall Length	71 inches	1805 mm
Minimum Overall Length	68.5 inches	1740 mm
Maximum Overall Height	87 inches	2210 mm
Minimum Overall Height	62 inches	1575 mm
6-point Cradle Maximum Height	73 inches	1855 mm
6-point Cradle Minimum Height	25.5 inches	650 mm
Height at Maximum Reach	68 inches	1730 mm
Reach at Maximum Height	22.5 inches	570 mm
Reach at Minimum Height	28.5 inches	725 mm
Maximum Reach*	32.5 inches	825 mm
Turning Radius	77 inches	1960 mm
Legs Open - External Width	56 inches	1420 mm
Legs Open - Internal Width	49 inches	1245 mm
Legs Closed - External Width	35 inches	885 mm
Legs Closed - Internal Width	27.5 inches	700 mm
Overall Height of Legs	5 inches	130 mm
Ground Clearance	0.75 inches	20 mm
Front Twin Castors	4 inches	100 mm
Rear Braked Castors	4 inches	100 mm
* Reach = centre of 6-point cradle to the front of the mast		
Weights		
Mast, Base & Boom Assembly (includes 6-point cradle)	240 lbs	109 kgs
Power Pack	6.6 lbs	3 kgs
Total	246.6 lbs	112 kgs
6-point Cradle	20 lbs	9 kgs

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	230Vac 50/60Hz	
CHARGER RATED OUTPUT	27.4/29.0 VDC@0.8A	
Electric Shock Protection		
CHARGER	CLASS II	

### Degree of Shock Protection

CHARGER	TYPE B
LIFT	TYPE B

### **Environmental Conditions**

Outside this environment functionality and safety may be compromised.

LIFT ...... INTERNAL POWER SOURCE

### Operating

TEMPERATURE	>+5°C <+40°C
RELATIVE HUMIDITY	

#### Storage

TEMPERATURE	>-10°C <+50°C
RELATIVE HUMIDITY	20% - 90% @ 30°C (not condensing)
ATMOSPHERIC PRESSURE	700 - 1060 hpa

#### **IP Ratings**

CONTROL BOX	IPX4
ACTUATOR	IPX6
OFF-BOARD CHARGER	IPX5
BATTERY	IPX5
HANDSET	IPX5

#### **Duty Cycles**

ACTUATOR	10% (2 mins / 18 mins)
CHARGER	4 hours (approx.)

#### Acoustics

A-WEIGHTED SOUND POWER LEVEL .......64dB

#### **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

# 12. 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



