

HOYER®

Hoyer®
Heavy Duty Patient Lift

Model HPL600

*Installation
and
Instruction
Manual*

SUNRISE LISTENS

Thank you for choosing a Hoyer Lift. We want to hear your questions or comments about this manual, the safety and reliability of your Lift and the service you receive from your Sunrise Medical Supplier. Please feel free to write or call us at the address and telephone number below:

SUNRISE MEDICAL

Customer Service Department
7477 East Dry Creek Parkway
Longmont, Colorado 80503
(303) 218-4600 or (800) 333-4000

FOR ANSWERS TO YOUR QUESTIONS

Your authorized supplier knows your Hoyer Lift best and can answer most of your questions about its safety, use and maintenance. For future reference, fill in the following:

Supplier: _____

Address: _____

Telephone: _____

Serial #: _____

Date Purchased: _____

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

If you have questions regarding the safe use and/or assembly, maintenance or specifications of your Hoyer lift, you should call Customer Service at 800-333-4000, 303-218-4600 or from Canada at 800-263-3390.

For service and repair, remember your authorized Hoyer supplier is able to provide the assistance you need.

Save this manual for future reference.

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 Customer Service at 800-333-4000, 303-218-4600 or from Canada at 800-263-3390.

 WARNING

Using other manufacturers' parts on Hoyer products is unsafe and may result in serious injury to user 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 back of 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 along with a full description of damaged parts.

IMPORTANT SAFEGUARDS

⚠️ 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.
- Always carry out the daily check list before using the lift.
- Hoyer floor lifts are specifically designed for Hoyer slings and accessories. Slings and accessories designed by any other manufacturer is prohibited and will void Sunrise Medical's warranty. Use only Hoyer slings and accessories to maintain user safety and product utility.
- 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.
- Before attempting to transfer, the user must be assessed by a qualified professional.
- Hoyer lifts must be used by a caregiver with proper training to work with the person to be transferred.
- 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.
- Always be prepared before attempting to transfer a person.
- Do not use a sling that is not recommended for the lift.
- Never use a damaged, torn or frayed sling.

- Always place the sling around the user according to the sling user instructions.
- Follow lifting procedures outlined in the "How to Use a Patient Lifter" manual.
- 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.
- Do not store the lift in a shower, bath or other area with high humidity.
- **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.
- Do not attempt to maneuver the lift by pushing on the mast, motor shaft, boom or user.
- Always maneuver the lift with the handle provided.
- Do not push a loaded lift at speeds which exceed a slow walking pace (2.6 ft/sec.).
- Inspect all precautionary labels on the equipment. Order and replace all labels that cannot be easily read.

SHOCK PREVENTION

⚠️ WARNING

- Avoid violent shock during transportation.
- Do not touch or use a lift with bare conductors or a damaged power cord. Electrically live equipment can electrocute a person. If the lift or charger has any exposed or damaged wires, contact your local dealer immediately.
- Do not cut or remove the round grounding prong from any plug. All Hoyer lifts are equipped with three-prong plugs to protect from shock hazard or electrocution. Any two pronged electrical outlet must be replaced with a properly grounded three-prong outlet according to the National Electrical Code and local codes. It is the responsibility of the customer to have the work done by a qualified electrician.
- Do not splash or expose electric parts of the device to water or moisture.
- Check nameplate for voltage and cycle requirements. These requirements differ by country. Do not attempt to use the lift in an area that has a different voltage and cycle requirements.

FIRE AND EXPLOSION PREVENTION

- Batteries may explode, leak and cause personal injury if not disposed of properly.
- Do not place or store the battery under direct sunlight or near a heat source.
- Do not dispose of in fire.
- Do not short the battery terminals.
- Do not incinerate.
- Flush with water if electrolyte (Acid) comes in contact with skin or eyes.
- 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.

DESCRIPTION OF EQUIPMENT

⚠ WARNING

The lift is heavy and must be removed from the crate with assistance and care.



- Maximum lifting capacity 600 lbs. (270 kg.).
- Limit switches at each end of the actuator spindle that stops the actuator when fully extended and retracted.
- Anti-crush device on the actuator that stops the actuator from retracting when it is obstructed.
- Motorized adjustable base.
- Anti-sway device on the carry bar.
- Multi-purpose handle for easy use by users with different heights.
- Easy-to-access emergency stop.
- Minimum height is low enough to lift a person lying on the floor without lifting the shoulders.
- Directional wheel guide on one of the rear casters that allows the user to move the lifter in a straight line.
- The whole unit complies with CSA No. 601.1, UL No. 2601-1 and CE standards.

OPERATION

⚠ WARNING

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

Always carry out the daily checklist before each lift use.

1. Unplug the lift from the electrical outlet.
2. Install the sling (see sling installation).
3. Open the base as wide as possible using the  button on the handset or control box.
4. Raise / lower the boom (using the  buttons on the handset) so the carry bar is approximately chest height to the person being lifted.
5. Move the lift over to the person being lifted so the end of the boom is approximately 6 inches (15 cm) away from the person. For a person in a lying position, lower the lift so the carry bar is near the thorax, then install the straps.

CAUTION– HAVE SOMEONE ASSIST YOU WHEN ATTEMPTING TO TRANSFER A PERSON.

6. Attach the straps of the sling as described in the sling user instructions. Make sure that all straps are secure to the carry bar.
7. Carefully observe the user's safety as you lift the user slightly by pressing the control button.

BEFORE LIFTING:


1. Make sure that all straps are attached to the carry bar.
2. Make sure the person being lifted is comfortable.
3. Make sure the sling is not caught on an obstruction (wheelchair brake or arm of chair). If any problems occur, lower the person being lifted immediately and correct the problem.
4. Lift until the buttocks of the person being lifted clear the arm supports or the top of the bath or bed before moving the person. Guide the legs past any obstacle.

⚠ WARNING

Your Hoyer lift is not intended to be a transport device. Person in the lift should not be moved more than a few feet.

⚠ WARNING

Do not attempt to maneuver the lift by pulling on the mast, boom, actuator or user.

5. When the person is located above the desired point of transfer and ready to be lowered, press the  button.
6. Make sure wheels are locked on the bed or wheelchair.
7. For a transfer into a seated position, use the handles on the back of the sling to position the person when transferring into a chair. Hold the handles firmly as the sling lowers and the sling will tilt back to position the person. As the boom lowers, guide the lift away from the person (approx. 6 inches/15 cm).
8. Once the person is properly seated and the straps are loose, remove the sling from the lift.
9. Slide the lift away from the person.
10. Sling may be removed from around the person.

Emergency Stop Feature

1. The emergency stop feature stops the lift from functioning in case of an emergency. It does not affect the charging system, the lift will charge whether or not the emergency stop is engaged.
2. To activate the emergency stop, press in the red button on front of the control box on the lift.
3. To deactivate the emergency stop, turn the button clockwise.

Emergency Lowering Feature

The HPL600 has an emergency manual lowering feature in the event of an electrical or functional failure.

If the lift malfunctions when a person is being transferred, the emergency manual lowering device provides a safe way of lowering the person onto a chair or bed.

To operate the emergency lowering feature:

1. Find the red tab on the side of the motor on the lift.
2. Move the person over a bed or chair.
3. Slowly pull down on the ring and hold in place until the person being lifted is lowered onto chair or bed.
4. Once the person is lowered safely into a chair or bed, take the lift to a certified technician to be serviced.

Anti-crush Feature

To prevent damage or injury, the motor on the lift has a limit switch that recognizes when the boom is being lifted or pressed upward. This limit switch will stop the motor until the boom is no longer being lifted or pressed upward. This will ensure that the motor stops if the boom is unknowingly being lowered onto an object or person. To check this feature, press the button on the handset or control box then lift up the boom. The motor should stop.

Battery Information

CAUTION– Do not drop the battery. A dropped battery may have internal damage that is not visible. It may lose its ability to recharge.

Due to internal damage caused when the battery is dropped, the battery may indicate it is fully charged, when in fact it cannot hold a full charge.

Never attempt to use a battery that appears to be damaged or dented.

Do not store the battery near a heat source. Heat will damage it.

Always keep metal battery contacts clean.

MAINTENANCE

ALWAYS CARRY OUT THE DAILY CHECKLIST BEFORE EACH LIFT USE.

HPL600 accessories must be inspected ANNUALLY in addition to the daily and other periodic visual checks done by the user specified in this section.

Preventive maintenance specified in this manual can prevent accidents and reduce repair costs.

Note all services or repairs to the HPL600 or its accessories in the log book at the back of this manual.

Daily Checklist

THE FOLLOWING PROCEDURE MUST BE FOLLOWED BEFORE EACH USE.

- Has the battery been charged? Plug the lift in whenever is not in use.
- Inspect the lift for any damage. If there are any cracks or other damage on the lift, or any parts are missing– DO NOT USE IT. Contact your local representative to have the lift serviced.
- Inspect the carry bar for any signs of cracking or damage and that it rotates freely.
- Inspect the actuator on the lift to ensure it is securely attached to the lift and has no visible damage.
- Make sure casters roll freely and are securely attached.

⚠ WARNING

Inspect the sling for tears, frayed straps or loose stitching. If the sling has any of the above damage– DO NOT USE IT. Contact your local representative to have the sling replaced.

Inspection and Cleaning

Clean the lift with a soft dry cloth or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent that may damage the finish.

⚠ WARNING

DO NOT immerse the lift in water.

To ensure a better rolling surface for the wheels, clean them every 4 months. Remove any hair or debris from the wheel.

To touch-up scratches or chipped paint and retard rust, apply spray paint.

Handling and Storage

Avoid violent shock during transportation.

The lift should not remain stored for long periods of time without recharging the batteries.

Sunrise Medical recommends charging of batteries at least every two weeks even if the lift is not used. This will prevent premature aging of batteries.

Lubrication & Casters

The lift is designed for minimum maintenance; however, a six (6) months check and lubrication should ensure continued safety and reliability.

The casters MUST swivel and roll smoothly. A white grease (waterproof auto lubricant) may be applied to the ball bearing swivel of the casters once a year. Apply more frequently if the casters are exposed to extreme moist conditions.

Refer to Figure 1 for lubrication points. Lubricate all pivot points. Wipe all excess lubricant from lift surface.

Cleaning of Casters

1. Place the lift on its side.
2. Remove the bolt and locknut that secure the existing front caster assembly to the fork.
3. Remove all debris and clean any dust.

NOTE- For the front caster, examine and replace the existing washer if worn. The front caster assembly consists of two (2) washers and a caster in between. The caster will fall out between the two (2) washers (Figures 2 & 3).

4. Position the front caster in the assembly and tighten up the bolt and locknut.
5. Line up the mounting holes in the new front caster assembly and the fork
6. Install the bolt through the fork and caster assembly and tighten securely with the locknut.

Annual Inspection

The HPL600 and its accessories must be inspected annually.

⚠ WARNING

The HPL600 and its accessories must be serviced every 12 months as a minimum requirement.

As part of the annual inspection, an annual load test with the safe working load must be performed on the HPL600 as required for CE mark maintenance.

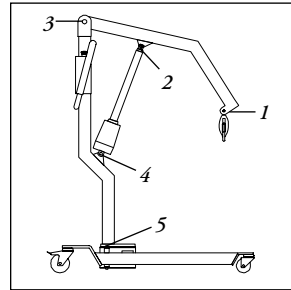


Figure 1

1. Carry Bar
2. Boom Mounting Bracket
3. Boom / Mast Mount
4. Mast Mounting Bracket
5. Leg Pivots

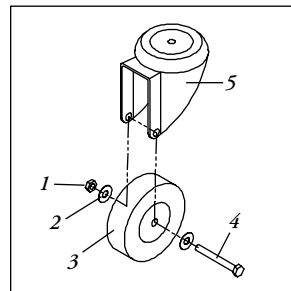


Figure 2 Front Caster

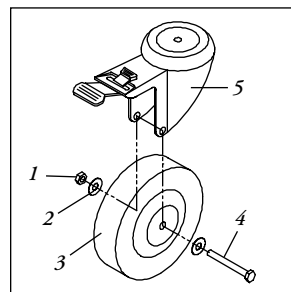


Figure 3 Rear Caster

1. Locknut
2. Washer
3. Caster wheel
4. Bolt
5. Fork

Maintenance Inspection Checklist

	Initially	Before each use	Every 2 months	Every 4 months	Every year
TO BE INSPECTED BY USER:					
Lift Device					
Inspect for missing hardware or broken pieces	✓	✓			✓
Battery recharge		✓	✓		
Slings and Hardware					
Check all sling attachments for sign of wear		✓			
Inspect sling material for wear or deterioration		✓			
Inspect sling straps for wear		✓			
Inspect for any defect or loose threads in stitched areas		✓			
Clean sling as indicated on the tag		When necessary			
The Caster Base					
Inspect for missing hardware	✓		✓		
Base opens/closes with ease	✓		✓		
Inspect casters and axle bolts for tightness	✓		✓		
Inspect caster for smooth swivel and roll	✓		✓		
Clean casters			✓		
The Mast					
Mast MUST be securely assembled to boom	✓	✓			
Inspect for cracks or deflections	✓	✓			
The Boom					
Check all hardware and swivel bar supports	✓		✓		
Inspect for cracks or deflections	✓		✓		
Inspect bolted joints of boom for wear	✓		✓		
Inspect to ensure that the boom is centered between the base legs.	✓		✓		
Check the bolt/hooks for wear or damage	✓		✓		
Check sling hooks for wear or deflections	✓		✓		
The Manual/Hydraulic/Electric Actuator Assembly					
Inspect hardware on mast and boom	✓		✓		
Check for wear or deterioration	✓		✓		
Cycle to ensure smooth quiet operation	✓		✓		
Cleaning					
Cleaning of the lifter	✓		✓		

Regular cleaning will reveal loose or worn parts, enhance smooth operation and extend the life expectancy of the lift.

	Initially	Before each use	Every 2 months	Every 4 months	Every year
Minor Service					
General inspection of lifter			✓		
Check that casters are tightly attached to wheels			✓		
Check casters for free running wheels (remove any fluff and/or debris)			✓		
Check that caster brakes operate efficiently			✓		
Overhaul casters and repack with all-purpose grease			✓		
Inspect surfaces for scratches/chips			✓		
Clean surfaces with mild soap and water. Remove any adhesive tape marks with WD40 or other degreasing agent.			✓		
Examine all moving parts and fasteners for wear fatigue and lubricate and/or adjust as required			✓		
Arrange repair/replacement of any faulty parts				✓	
Check for signs of fatigue or cracks in the frame of the lift (especially joints and stress points)			✓		
Retard rusting by applying spray paint				✓	
Check boom/carry bar (hanger)				✓	
Check all electrical components, including battery charges, for correct operation				✓	
Major Service (to be checked by a technician, plus inspection of all of the above)					
Inspect the welding aspect on the frame to detect cracks					✓
Inspect connecting joints for proper attachment					✓
Verify emergency devices for good functioning					✓
Load test with the SWL (maximum working capacity)					✓
Service motor					✓

⚠ WARNING

A major service undertaken by an authorized service agent every 12 months is a minimum requirement.

⚠ WARNING

Maintenance inspection points are suggested by the manufacturer and are a minimum requirement. By continuing to use the lift without replacing the listed parts in this maintenance inspection checklist, caregiver and user safety is greatly compromised.

⚠ WARNING

Contact your authorized supplier or Sunrise Medical Technical Service before opening the HPL600. Alterations made to the HPL600 by someone other than a technician may cause serious injury.

PROBLEM:	TO CHECK:
The unit does not work when you press the up or down buttons on the handset.	<ul style="list-style-type: none"> - Make sure the handset is plugged correctly into the unit. - Is the emergency stop button pressed down? Turn the button clockwise to allow it to "pop" out. - Is the battery charged? - Plug the lift in and check the light on the control box. If the light remains red, leave the lift plugged in the control box for approximately 2 hours. - If all of the previous points have been checked without success, you probably have a motor or electric problem, contact your Sunrise Medical representative.
The unit starts and stops repetitively.	<ul style="list-style-type: none"> - If the load is more than safe working load, the unit will not work due to an overload protection on the motor. - Has the lift been making a "beeping" sound? The battery is low and needs to be charged.
The lift emits a "beep" during utilization. The unit may stop lifting but you can still lower it.	<ul style="list-style-type: none"> - Batteries are low, recharge them.
Charge indicator on the control box (green-red) does not light up when the battery is being charged.	<ul style="list-style-type: none"> - Is the charger plugged into a standard outlet?
Battery is always dead after a few transfers (3 to 5).	<ul style="list-style-type: none"> - Replace battery with a new one, the life of the current one is probably nearly over.
The light on the control box shows green when the lift is plugged in yet the lift will only do one or two transfers.	<ul style="list-style-type: none"> - Replace the battery.
The light on the control box always lights up red. It does not turn to green after an overnight charge.	<ul style="list-style-type: none"> - Call your dealer or representative.
Lift feels loose (Mast/Base joint loose).	<ul style="list-style-type: none"> - Using a 5 mm allen key, tighten the 2 bolts at base.
Casters/Brakes noisy or stiff (fluff or debris in bearings).	<ul style="list-style-type: none"> - Refer to casters in the "Maintenance" section in this manual.
Noisy or dry sound from pivots (needs lubrication).	<ul style="list-style-type: none"> - Refer to lubrication in the "Maintenance" section in this manual.

⚠ WARNING

If problems are not resolved by the suggested means, please contact your dealer or Sunrise Medical Technical Service department.

Owner Checklist:

- Ensure the lift is serviced regularly as the maintenance inspection checklist.
- Contact an authorized Sunrise Medical provider immediately if there are any problems with the operation of the device.
- Ensure the log book is completed and signed.
- Record any repairs required.
- Withdraw the lifter from service if inspection reveals that user safety is jeopardized in any way from use of the lifter.

TO BE COMPLETED AFTER EACH SERVICE OR INSPECTION

Service Type:	Pre-delivery	Periodic inspection	Minor	Major
Condition report:	_____			

Action taken:	_____			

Date:	_____	Inspected by:	_____	

Service Type:	Pre-delivery	Periodic inspection	Minor	Major
Condition report:	_____			

Action taken:	_____			

Date:	_____	Inspected by:	_____	

Service Type:	Pre-delivery	Periodic inspection	Minor	Major
Condition report:	_____			

Action taken:	_____			

Date:	_____	Inspected by:	_____	

WARRANTY

This warranty is extended only to the original purchaser/user of Sunrise Medical products.

Sunrise Medical warrants its products to be free from defects in material under normal use and service, within the periods stated below from the date of purchase. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced at Sunrise Medical's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. Sunrise Medical's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

Patient Lifter	1 year
Accessories on Lifter	1 year
Batteries	1 year

For warranty service, please contact the provider from whom you purchased the Sunrise Medical product. In the event that you do not receive satisfactory warranty service, please contact Sunrise Medical Customer Service at 1-800-333-4000.

Do not return products to our factory without prior authorization. Sunrise Medical will issue a Return Merchandise Authorization (RMA) Number. C.O.D. shipments will be refused; all shipments to Sunrise Medical must be prepaid. For this warranty to be valid, the purchaser must present its original proof of purchase at the moment of the claim. The defective unit, assembly or part must be returned to Sunrise Medical for inspection. The part or components repaired or replaced are guaranteed for the remaining period of the initial warranty.

Limitations and Exclusions:

The warranty above does not apply to serial numbered products if the serial number has been removed or defaced.

No warranty claim shall apply where the product or any other part thereof has been altered, varied, modified, or damaged; either accidentally or through improper or negligent use and storage. Warranty does not apply to products modified without Sunrise Medical's express written consent, (including but not limited to products modified with unauthorized parts or attachments); products damaged by reason of repairs made to any component without the specific consent of Sunrise Medical, or to products damaged by circumstances beyond Sunrise Medical's control. Evaluation of warranty claim will be solely determined by Sunrise Medical. The warranty does not apply to problems arising from normal wear or failure to adhere to the instructions in this manual. Sunrise Medical Inc. slings are void of warranty if not laundered as per instructions on the Sling Label.

Sunrise Medical shall not be liable for damages losses or inconveniences caused by a carrier.

This warranty replaces any other warranty expressed or implied and constitutes Sunrise Medical's only obligation towards the purchaser. Sunrise Medical shall not be liable for any consequential or incidental damages whatsoever.



Manufactured for:
Sunrise Medical

7477 East Dry Creek Parkway • Longmont, Colorado • 80503 USA

(800) 333-4000

In Canada (800) 263-3390

Made in Canada