

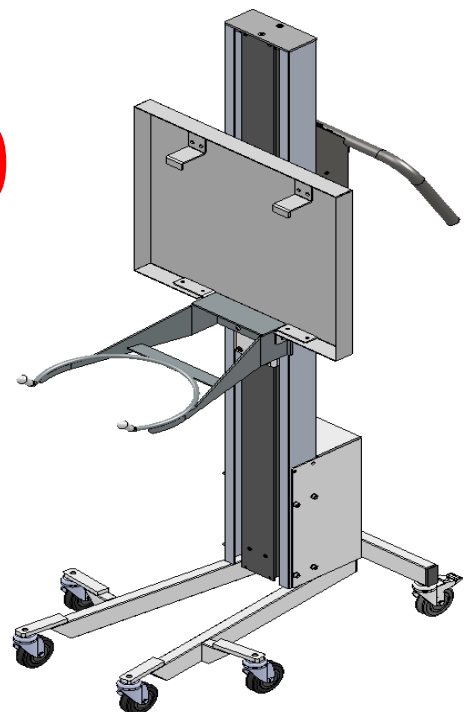
VLIFT

Operation Manual



VLIFT-ML60

SERIAL NUMBER: _____



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SAP nr. 20060-1710
Version 1.1 UK
Original language "English"

REV.-

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1 Typographic convention

The following cautionary symbols may be used in the manual and / or on the lift.



Warning!

This pictogram draws attention to the risk of personal injury.



Warning!

This pictogram draws attention to the risk of personal injury.

- There is a risk of getting your fingers crushed.



Warning!

This pictogram draws attention to the risk of personal injury.

- The lifter must not be used for lifting persons.



Warning!

This pictogram draws attention to the risk of personal injury.

- There should be no body parts below or near the lifting tool when operated up or down.



Warning!

This pictogram draws attention to the risk of personal injury.

- There should be no body parts on top of the front legs steel profile, when the lift is elevated or operated.



This pictogram is posted on the lifter, if the lifter is antistatic. (Option)

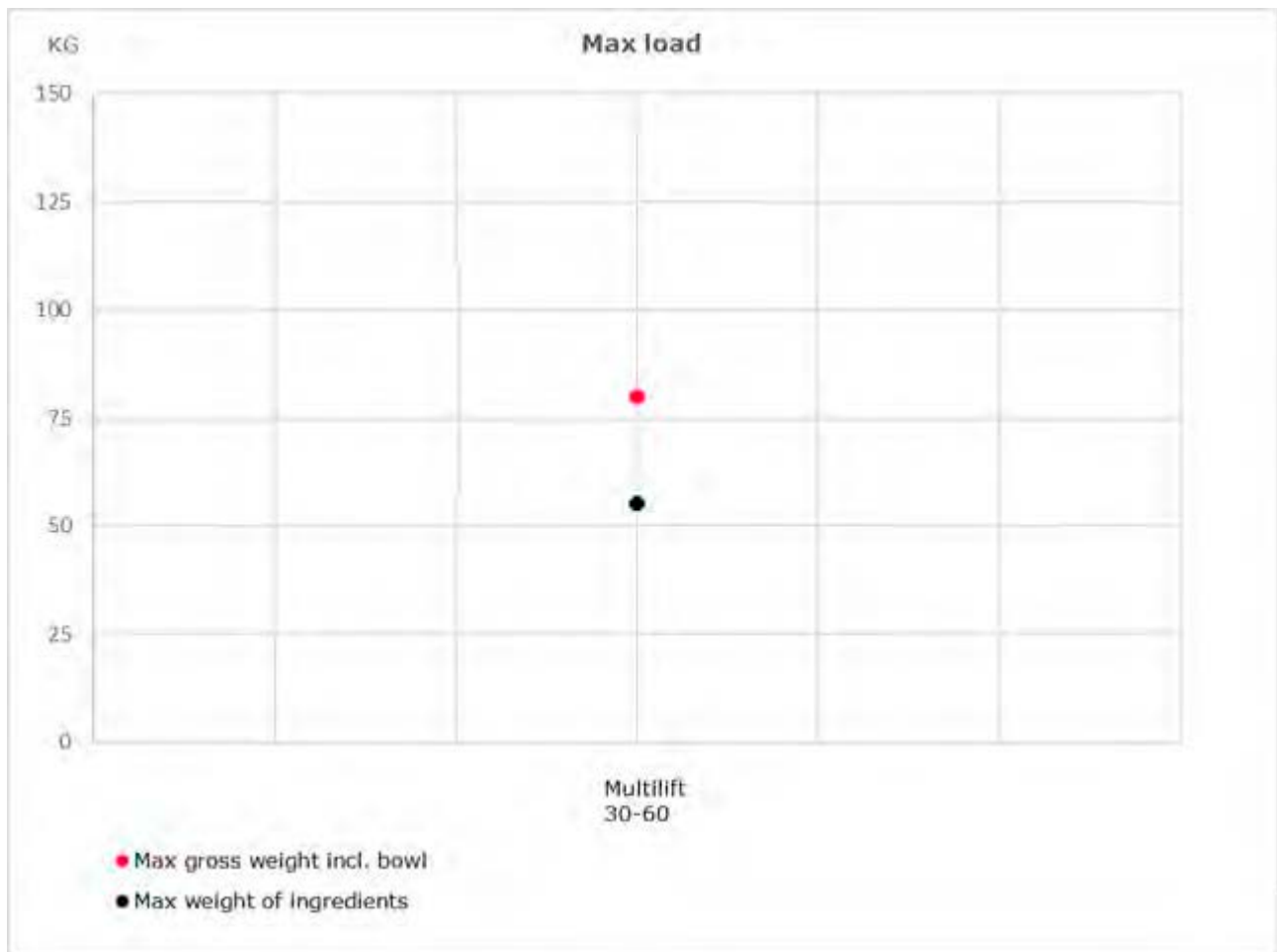
2 Specifications

	Multilift 30-60
Weight (kg)	32
Max. Load:	60 kg
Lifting speed	100 -125 mm/s
Protection class	IP41
Batteries	24V, 9Ah
Charger	100 - 240V 50/60Hz – 2 Amps
Charging time	4 hours (80%) 5 hours (100%)
Sound pressure level	≤ 70 Db(A)
Vibration strength	≤ 2,5 m/s ²

3 Load diagram

Please note:

Always respect the lowest value indicated, looking at the load diagram and the indication on the actual lifter.



4 General safety precautions during use

The following guidelines must be observed and followed when using a lift, to prevent personal injury:



- Under no circumstances should the lift elevate more than specified on the label.
- It is of most importance, due to personal safety, that the specified weight, load position, and height are respected and that the lift is not overloaded.



- The lift must not be used for lifting persons or live animals.



- No body parts near the sledge or tool at the mast or other lifting equipment when operated up/down.



- Secure that there is no person below the load, tool and lift when operated.



- There should be no body parts on top of the front legs steel profile, when the lift is elevated or operated.



- Only one person must operate the lift at a time.
- The user must read and understand these instructions or must have them explained to them before using the lifter.
- Only use the lift when operated on a hard-levelled surface during lifting or transporting loads.
- When transporting a cargo, the load should be lowered to the lowest possible position and secured in order to ensure that the cargo cannot slide.
- Always secure the cargo on the lift when moving.
- Not in use or storing, always ensure that the sledge is lowered to the lowest possible position and is free of any items or cargo.
- Operate and store in a clean, dry location with temperature from +5 °C to +40 °C.
- Make sure that the tool is firmly attached to the sledge and no slack occurs in the bolt connection.
- The lifter is to be controlled at least once a year or according to laws, regulations, directives, working conditions and experience. The control shall be performed by the manufacturer or a skilled technician. Please check your local requirements.
- Do not lift or handle open containers containing corrosive fluids, harmful to people if spilled.
- Industrial or commercial use only.
- Indoor use only.
- Do not use the lifter in explosive or flammable hazard environment.
- Do not use or store in a corrosive environment.

5 Exception of liability

- Hovmand cannot be held responsible for any modifications on the lift or attached equipment, not authorized by Hovmand.
- Do only use original spare parts, otherwise Hovmand cannot be held liable for the function and safety of the lift.
- The lifter must only be serviced by a qualified technician, otherwise Hovmand cannot be held liable for the function and safety of the lift.

6 Residual risks

There are residual risks for extraordinary wear, material or product failure due to great impact from collision, misuse, obstacle interference, blockade of driveways, etc.; e.g. a faulty wheel bearing, as a result of a heavy collision.

7 Operating the lifter

7.1 Power ON / OFF switch

Remember to turn OFF the lifter when not in use!



7.2 Rocker switch - Simple tool

To operate the lifter, use the rocker switch located on the lifter's control panel on the mast:

This is used to operate the lifting and lowering function.

↑ The lifter will lift while the button is pressed (normal speed)

↓ The lifter will lower while the button is pressed (normal speed)



7.3 Shipping



When shipping the lifter:

- The sledge must be lowered to the lowest possible position and be free of any items or cargo.
- Fasten the lifter securely during transport.

8 Construction and materials

All materials are suitable for use in production, retail, service and distribution.

Part	Material
Mast	Aluminium (AlMg3).
Handle	Powder-coated steel (1.0037 / S235)
Sledge	Electro-galvanized steel (1.0037 / S235)
Cover for control box	Powder-coated steel (1.0037 / S235)
Wheel frame	Powder-coated steel (1.0037 / S235)
Front wheels	Polyurethane
Back wheels	Polyamide and Polyurethane

9 Batteries and chargers



Before using the batteries

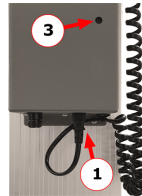
New batteries should always be fully charged prior to using.

Charge the battery pack daily

The battery pack must be charged daily as total discharge can damage the batteries or shorten their lifespan.

To charge the batteries:

- 1: Connect the lifter to the wall-plug .
- 2: The lifter must be turned **ON** when charging.
- 3: Charger indicator:
 - ● The charger is connected and charging.
 - ● The batteries are workable.



The indicator changes to green after 1 to 5 hours, which corresponds to 80% charge. The battery pack is fit for use as soon as the green light is on. However, it is recommended to do a full charge, which takes approximately 8 hours.

The charger automatically charges the batteries and switches to maintenance charging when the batteries are fully charged.

It is better to charge the batteries and turn the lifter ON, than to disconnect the charger and to turn the lifter OFF.



Safety when charging

Use only original charger. Check that the wires are in good condition, connect properly and correct before applying power. Make sure there are no dirt or water in the plug.

The battery status indicator

The lifter is equipped with a battery status indicator, which indicates the battery status when the lift button is activated.



- | | |
|---|--|
| ● Red indicator: | Batteries must be recharged immediately. |
| ● Green indicator: | The batteries are fully charged. |



Safety when discharged

Using discharged batteries means an extreme stress for the battery and should be avoided.

10 Lifting equipment

10.1 Fork

The Fork is used for lifting bowls. The Fork is placed below the bowl and lifted. The fork enables placement of the bowl on tables. The operator should make sure that the bowl is in upright position when lifted and during transport.

Type: Multilift 30-60
Bowl size: 30-60 l



Safety when using the fork

Make sure that the bowl is in upright position when lifting and during transport.

10.2 Platform

The Multilift 30-60 is as standard delivered with a platform in Stainless Steel. The platform is integrated with the fork, tip it down on to the fork when needed.

Type: Multilift 30-60
Platform size: 500 x 450 mm



Safety when using the Platform

Boxes handled with the platform must not be substantially larger than the platform, as there is risk of dropping the item.

11 Maintenance and Inspection

All Hovmand products are designed for minimum maintenance, however some safety checks and procedures are required.

Hovmand strongly recommends the following checks be carried out on a daily basis and before using the lift. Ensure that the lift is functioning as intended. If in doubt, do not use.

- The lifter must be free of dirt or debris which could affect safe operation
- Ensure all labels are present, without damage and are readable.
- Ensure no sign of wear, miss sounds or visual defects.
- Ensure bolts, nuts and rivets should not be loose.
- Ensure correct operation of the brakes.
- Ensure the lifter moves freely on its wheel and the castors.
- Ensure control unit are in working order.

The yearly maintenance must be performed by a qualified technician.

The critical components listed below, must be replaced with the intervals stated, to make sure that the lifter is in safe, operational condition.

Critical components:

Please contact Hovmand for instruction on how to replace critical components.

Cam belt

- Replace when / if any of the below points occur:
 - Any sign of wear, visual cracks, or miscolour.
 - Under normal use (Use < 20 lifts per day, in average over a year), replace after 8 years.
 - Under intensive use (Use > 20 lifts per day, in average over a year), replace after 4 years.

One way bearing

- Replace when / if any of the below points occur:
 - Any sign of wear, miss sounds or visual defects.
 - Under normal use (Use < 20 lifts per day in average over a year), replace after 8 years.
 - Under intensive use (Use > 20 lifts per day, in average over a year), replace after 4 years.

12 Disposal

When disposing the lifter, make sure to sort the different materials by category, metal, electronic waste, batteries etc.. Make sure to follow the local environmental legislations, and hand over the materials to the local recycling station.

- Note: The batteries contain lead and must be disposed accordingly!



13 Cleaning instructions



- **Swap batteries**

The external battery swap unit must be removed from the lifter, prior to cleaning.

Ingress protection marking (IP)			
Model-approved IP code:	IP 41	IP code description	
Solid particle protection	IP 4X	>1 mm	Most wires, slender screws, large ants etc.
Liquid ingress protection (with batteries)	IP X1	Dripping water	Dripping water (vertically falling drops) shall have no harmful effect on the specimen when mounted in an upright position onto a turntable and rotated at 1 RPM.
Special instructions/Precautions			
• Always wear the correct safety equipment • Lower the lifting tool, so that you don't risk a head injury when cleaning near the floor. • The battery charger must be disconnected from the main during cleaning. • In case of remote control the plug must be fitted during cleaning.			
Detergent application			
	• Use a standard PH neutral cleaning detergent.		• Do not use Acid, Alkaline or harsh chemical products, these might weaken the drive belt and other sensitive components or leave marks on the surfaces.
Work process			
	• The outer surfaces can be cleaned using a wet brush or a damp cloth.		• Do not use liquids to clean the lifter as this may have adverse effect on the electrical components.
Key inspection points			
	• Test that all functions are working properly before the lifter is taken back into service.		

14 Resolving faults

Fault type	Check the following	Solve
The timing belt jumps on the belt wheel (the belt is making crackling noises)	Is the belt slack?	Tighten the belt using the screws at the top of the mast.
	Is the belt worn?	Replace the belt.
The belt is skewed (the belt squeaks)	Is the belt running skewed in the track on the top cam wheel?	Adjust the screw at the top of the mast, on the side to which the belt is skewed.
	Is the belt worn?	Replace the belt.
The sledge jerks	Is there dirt in the mast on which the sledge runs?	Remove the dirt and wipe with alcohol.
	Is there dirt on the sledge wheels?	Remove the dirt or replace the wheels.
The lifter does not respond	Check whether the item being lifted is heavier than the lift's capacity	Remove the item.
	Check the main fuse or the on/off button	Replace the main fuse or press the button.
	Check that the batteries are charged	Connect the charger.
The lift works very slowly	Check the voltage of the batteries	Connect the charger.
	Check the charging frequency. Does the light quickly change to green when connected?	If the charger quickly changes to green, it could indicate that the batteries should be replaced or the fuse on the charger is broken or the main switch is off.

16 Annual inspection

Date of inspection:

Controller:

Comments:
