



# 20V BATTERY POWERED HOIST

MODEL NO: **PH2520V**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to  
instructions



Wear eye  
protection



Wear safety  
footwear



Wear head  
protection



Indoor use only

## 1. SAFETY

### 1.1. BATTERY SAFETY

- ✓ Refer to the battery safety instructions supplied with the battery to ensure proper and safe use.

### 1.2. GENERAL SAFETY

- ✓ Trained users only. The operator shall always work in compliance with the operating instructions.
- ✓ The user shall ensure that the operating personnel are given the necessary training.
- ✓ **CAUTION Read all safety regulations and instructions.** Any errors made in following the safety regulations and instructions may result in an electric shock, fire and/or serious injury.
- ✓ Keep manual in a safe place for future use.

### 1.3. SPECIFIC OPERATIONAL SAFETY

- ✓ The operator shall lift the load from the ground with the minimum speed available at the hoist.
- ✓ The rope shall be tightened and shall not be in the slack-condition when the load is being lifted from the ground.
- ✓ The hoist is not designed to lift loads above the rated capacity of the hoist.
- ✓ Be sure to hoist the loads with lowest speed from the ground. The cable should be tense but not unwound when start loading from the ground.
- \* **DO NOT** try to lift fixed or obstructed loads. It is prohibited, to lift a weight crookedly, or to pull it along the floor.
- \* **DO NOT** pull loads sideways or from one side. **DO NOT** allow the load to swing.
- ✓ **DO NOT** use the product for any purpose other than that for which it is designed.
- \* **DO NOT** exceed maximum capacity of product.
- \* **DO NOT** use the product out of doors.
- \* **DO NOT** get the product wet or use in damp or wet locations or areas where there is condensation.
- \* **DO NOT** clean the product with any solvents which may damage the paint surface or the protective coating.
- **WARNING!** Excessive inching (e.g. giving short pulses to the motor) shall be avoided.
- **WARNING!** The hoist is not designed for lifting of persons.
- \* **DO NOT** leave the load hanging in the air long-term, to prevent the deformation of the pieces. While the machine is in operation **DO NOT** carry out any repairs or inspections.
- \* **DO NOT** lift people or lift loads over people. Falling loads can injure or kill people.
- \* **DO NOT** attempt to lift loads that exceed the rated load (see the data plate).
- \* **DO NOT** use 2 or more machines to load same object.
- \* **DO NOT** remove or cover warning labels and/or tags. These carry important safety information. If unreadable or missing, contact Sealey Service Centre for a replacement.
- ✓ Always begin lifting at the minimum speed to slowly tension the wire rope and load. Never start lifting abruptly with a slack rope, as this can cause shock loading and potential damage.
- **WARNING!** The hoist is not designed for lifting of persons.
- **WARNING! DO NOT** stand under the raised load.
- **WARNING!** If the red indicator mark is visible when unwinding the cable, please stop the cable winch immediately and do not continue to unwind the cable.
- **WARNING!** It is prohibited, to transport hot molten masses.
- \* **DO NOT** use the Emergency Stop button as a routine stopping device. It should only be used to stop the machine in an emergency.
- 1.3.1. PPE:**
  - **WARNING!** Always wear safety equipment (such as thick leather gloves, non-slip footwear, hearing, eye and hair protection and etc.) when working.
  - **WARNING!** Never wear loose clothing or jewellery; this could be caught by movable parts of the machine.
  - ✓ Avoid frequent switching on and off of the brushless DC electric hoist, as this may damage the motor and controller.
  - **WARNING!** Keep hands away from the wire rope, lifting hook, and drum during installation, operation, retraction, or release to avoid injury.
  - **WARNING!** After use, the wire rope must be tightly wound onto the drum under tension. If the wire rope is wound without proper stress, it may become loosely coiled, leading to piling and scattering. When the hoist is used again, this improper winding can cause extrusion and deformation of the rope, ultimately resulting in damage. Proper tension during winding helps maintain the rope's integrity and ensures safe and efficient operation.

## 2. INTRODUCTION

The Sealey SV20 Series, designed and produced for the professional – the perfect solution for all your power needs! Heavy-duty, high performance, durable tools with lightweight composite designs for superior control and comfort let you tackle any task with ease. With a wide range of advanced technology lithium battery options available you can be sure that fast charging and longer run times can be achieved to meet the demands of any job at hand!

### 3. SPECIFICATION

Model No:	PH2520V
Capacity (Double Cable):	250kg
Capacity (Single Cable):	125kg
Insulating Grade:	B
IP Rating:	IP23
Lift Height (Double Cable):	6m
Lift Height (Single Cable):	12m
Lift Speed (Maximum):	4m/2min
Minimum Rope Tensile Strength:	1870N/mm <sup>2</sup>
Motor Power:	200W

Nett Weight:	7.5kg
Lowering Speed:	Single - 4.5m/min Double - 2.25m/min
Wire Rope Diameter:	3.18mm
Tensile Strength of Wire Rope:	1870 N/mm <sup>2</sup>
Rope Diameter:	3.18mm
Voltage:	20V
Sound pressure value:	71dB(A)

#### 3.1. THE NOISE PRESSURE VALUE

The sound pressure value of the Brushless DC Electric Hoist indicates the maximum noise it emits, but not necessarily the level experienced by the operator. Actual exposure depends on factors like distance, surrounding noise, and the work environment. For safety, even if hearing protection is not explicitly required, it is strongly recommended to always wear it while operating the hoist.

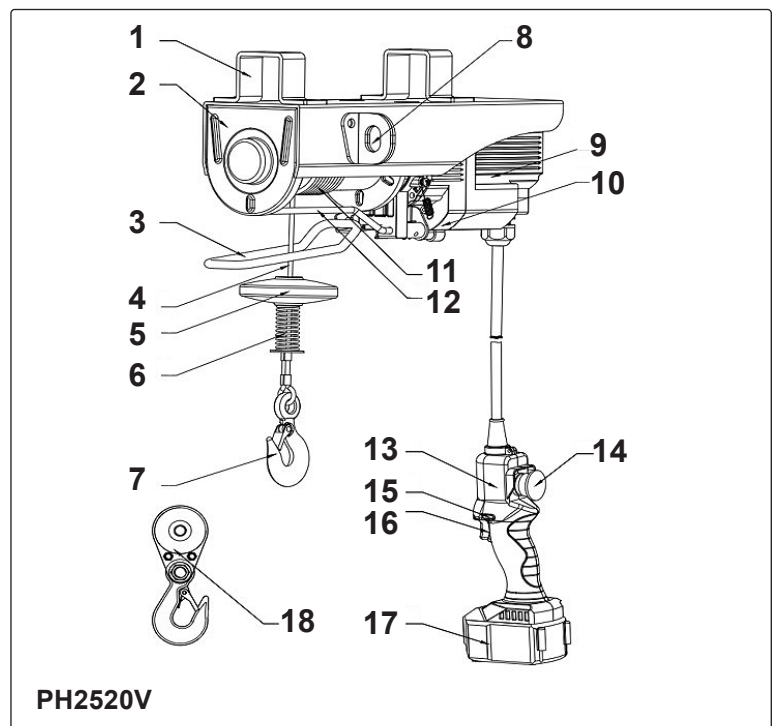
#### 3.2. INTERMITTENT RATING

This product operates with an ED 20% intermittent duty cycle, running for 2 minutes followed by an 8-minute rest. One complete operating cycle is 10 minutes, during which the hoist should only be used intermittently.

### 4. FEATURES

Below refers to the illustration to the right.

1	Support frame
2	Housing
3	Upper limit mechanism
4	Wire rope
5	Counterweight
6	Buffer spring
7	Lifting hook
8	Double-hook mechanism
9	Electrical appliance cover
10	Gear box
11	Drum assembly
12	Lower limit mechanism
13	Control handle assembly
14	E-stop switch
15	Direction paddle
16	Start switch
17	Battery pack
18	Double-hook pulley



PH2520V

### 5. INSTALLATION

- Ensure the installation site can support the full load.

#### CAPACITY

- Verify that the suspension point is structurally sound.

#### 5.1. UNPACKING

After opening the packaging, inspect the frame, the steel cable, the hook and the electric control mechanism for signs of possible transit damage.

#### 5.2. ASSEMBLY AND INSTALLATION (figs.1,2,)

##### Procedure for correct mounting

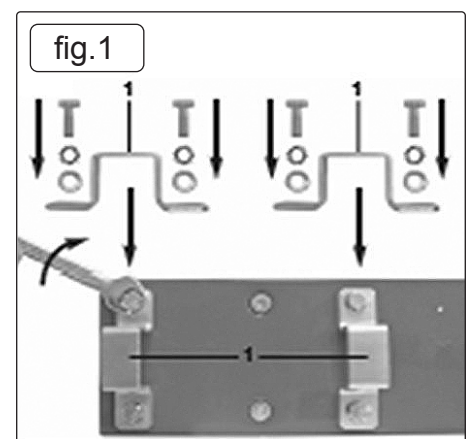
The cable hoist is fitted with two fastening clamps (fig.1) with which it has to be fastened to a rectangular tube. The dimensions of the arm must conform with the size of the fastening clamps and must be capable of supporting twice the rated load. We recommend that you seek advice from a qualified technician.

All screws must be tightened correctly. A qualified technician should check the anchoring of the arm before the machine is started.

**A)** Install the machine on a steel beam. (fig.2) Use only the enclosed installation brackets which can be attached to the top of the mounting casing using the screws, washers, and spring lock washers. The steel beam must be able to withstand at least double the rated lifting capacity of the cable hoist.

**B)** The installation and fixing tubes should preferably be square tubes. Their size must meet the installation requirements of the support frame for the brushless DC electric hoist is suitable for use with 40×40 mm square tubes with a wall thickness greater than 3 mm.

The installation and fixing tubes should be positioned according to the user's specific worksite needs.



However, they must be securely and stably installed and capable of bearing more than the rated lifting load for extended periods.

### 5.3. BLOCK AND TACKLE FUNCTION (FIG.3-5)

The cable hoist is fitted with a return roller (18) and an additional hook (7). If these parts are used correctly, the cable hoist can lift twice its rated load.

Fit the return roller (18) and additional hook (7) as shown in Figure 3 – 4. The permanent hook (7) must be attached to the fastening hole (Fig. 5). The load is now raised by two steel cables, which means that the cable hoist can lift twice its rated load.

### 5.4. INSTALLATION AND COMMISSIONING OF THE PRODUCT

Secure the hoist to an overhead beam or gantry using a certified trolley or suspension hook.

Ensure the control pendant is operational and positioned safely.

Conduct a test run without load to verify functionality.

### 5.5. PERMISSIBLE CONDITIONS OF USE

#### 5.5.1. LOAD CONDITIONS

The rated load capacity must not exceed 125kg under normal operation.

Dynamic and static loading should be within design limits. Shock loading (sudden lifting of a load) should be minimized to avoid excessive stress.

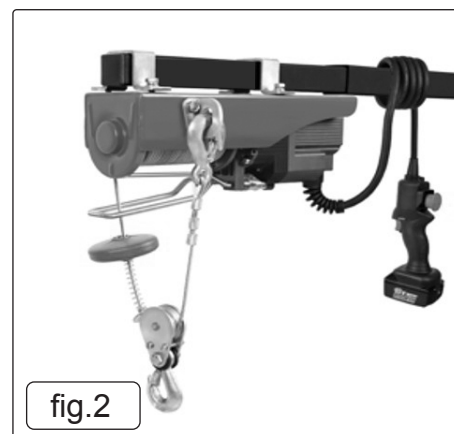


fig.2

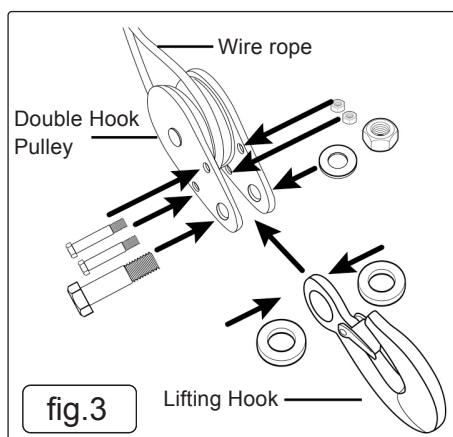


fig.3

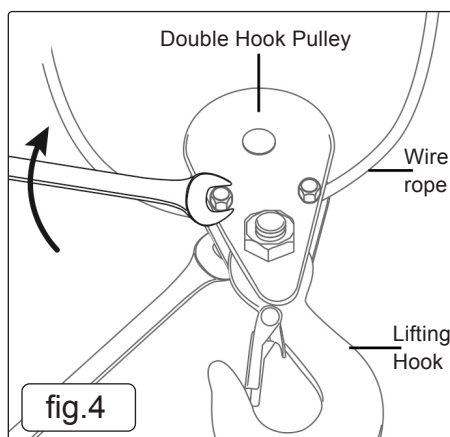


fig.4

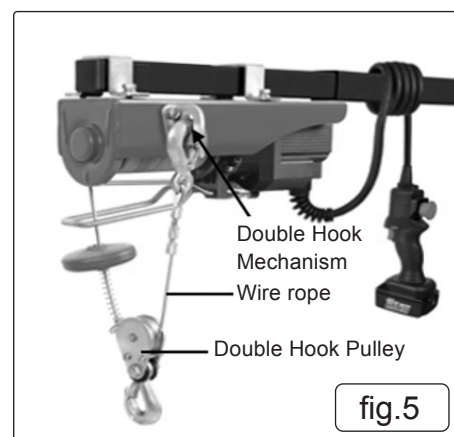


fig.5

#### 5.5.2. DUTY CYCLE & OPERATING TIME

Ensure your hoist's duty cycle matches your operational needs to avoid overheating and premature wear.

#### 5.5.3. ENVIRONMENTAL CONDITIONS

**Standard:** -5°C to +40°C

Extreme conditions require special hoists.

**Humidity:**

- Hoists should be protected in environments above 85% relative humidity to prevent electrical and mechanical failures.

The temperature for transport and storage may be between -25°C and 55°C. The maximum temperature must not exceed 70°C.

#### 5.5.4. Dust & Corrosive Environments:

- Hoists in dusty, humid, or corrosive areas must have IP-rated enclosures (e.g., IP54 or higher). Product has this rating.

**Outdoor Use:** This Hoist is NOT permitted for outdoor use.

#### 5.5.5. BATTERY CHARGER AND BATTERY

**NOTE:** Battery and charger are not included with this product. They can be ordered separately from Sealey.

The part numbers are as follows:

**Battery Charger:** [20V SV20 Series]

**Battery:** [CP20VBP8]

#### 5.6. USE OF CHARGER AND BATTERY PACK

**SAFETY NOTE:** Always use chargers and battery packs with the correct voltage and communication interface approved by the manufacturer.

- \* **DO NOT** use damaged chargers or mix components from different brands. Charge only in dry environments, within the recommended temperature range (0°C–45°C for charging, 0°C–55°C for discharging), and disconnect once fully charged. Store batteries between -15°C and 30°C, and recharge every six months if unused. Avoid complete discharge, tampering, or using conductive objects for testing.

Before installing the battery pack into the hoist control handle for power-on use, ensure that both the battery and handle connectors are clean, undamaged, and properly aligned to prevent malfunction or damage.

- ❑ **WARNING!** Always ensure the battery is fully charged before operating the hoist to prevent malfunction or potential injury.

- ❑ **WARNING!** Always ensure the battery is securely clicked into the hoist handle before operation.

#### 5.6.1. Hoist Operation Instructions (No-Load Test Run):

1. Hold the control handle assembly and turn the emergency stop (E-stop) switch to the ON position.
2. Press the left direction paddle fully, then press and hold the start switch to lift (upward motion).

The control handle assembly is shown in the figure below

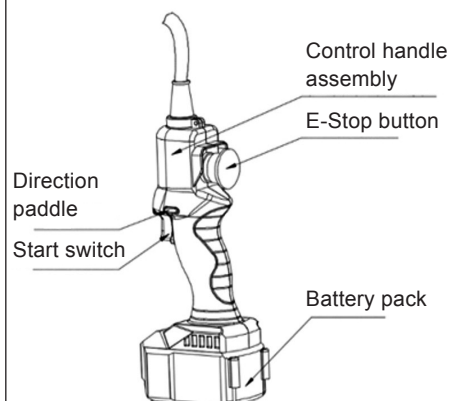


fig.6

3. Press the right direction paddle fully, then press and hold the start switch to lower (downward motion).

**A)** Pay attention to the upward and downward arrow indicators on the direction paddles.

**B)** When the direction paddle is in the middle (neutral) position, the arrows may not be clearly visible. In this state, the start switch cannot be activated, and the hoist will not operate.

**NOTE:** Perform a no-load lifting test run first. Only proceed to load testing after confirming that the lifting function operates reliably and the brake engages properly.

Before you start, ensure that the steel cable is correctly wound around the drum and that the spacing between the winds is smaller than the steel cable (Fig. 8).

**NOTE:** When replace the wire rope, be sure to pull rope into the square hole of rope drum, and then pull it out from the round hole. With that wind the rope two circles and then pull it to the baffle which is side of rope drum and fix it.

## 6. OPERATION

### 6.1. MANUAL CONTROLS

**6.1.1. EMERGENCY STOP BUTTON** - Use button in case of an emergency only. Fig.9. Check whether the Emergency Stop button is pressed. Turn the red stop button clockwise to release it.

When the maximum lifting height is reached, the cut-out weight presses lever (3) upward, triggering a limit switch.

This automatically stops the hoist, preventing further upward movement.

**6.1.2. Lever for maximum cable length:** When the load has reached its lowest possible position, a limit switch is tripped which makes it impossible to lower the load any further. This limit switch also prevents the cable hoist operating in the wrong direction. The cable hoist will stop if the Emergency Stop switch is pressed.

In an emergency, immediately press the Emergency Stop button to stop the cable hoist. The cable hoist cannot be operated if the Emergency Stop switch has been pressed.

**6.1.3. Direction Paddle:** Used to control the wire rope movement in or out by switching between forward and reverse rotation.

**6.1.4. Start Switch:** Supplies power to the hoist. Hold the switch to operate during lifting or lowering. Always raise the load at the slowest possible speed, ensuring the cable remains taut as the load is lifted.

**NOTE:** Ensure that the load is correctly secured to the hook or, if you are using the block and tackle, the additional hook, always maintain a safe distance from the load and the steel cable.

❑ **WARNING!** The electric cable hoist is not fitted with a rated power limiter. You should therefore not repeat attempts to lift a load if the overload trip is limiting the hoist's operation. In this case the load exceeds the rated capacity of the cable hoist.

✖ **DO NOT** leave any suspended loads unsupervised without first taking the appropriate safety precautions.

**NOTE:** Ensure that the load is correctly secured to the hook or, if you are using the block and tackle, the additional hook, always maintain a safe distance from the load and the steel cable.

### 6.2. SETTINGS AND ADJUSTMENTS

To ensure safe and efficient operation of your power hoist, the following settings and adjustments should be made according to industry standards.

#### 6.2.1. MODES AND MEANS FOR STOPPING

The power hoist incorporates two means of stopping: releasing the trigger or activating the emergency stop (E-stop). These actions initiate one of three stopping modes to ensure both safety and control. Category 0 is an emergency stop mode that immediately cuts power to the hoist, resulting in an uncontrolled stop for urgent situations. Category 1 enables a controlled stop by slowing the hoist before cutting power and applying the brake, thereby minimizing mechanical stress. Category 2 maintains power during braking, allowing the motor to bring the hoist to a smooth and precise stop. This mode is ideal for accurate positioning and for reducing sudden forces on the system.

#### 6.3. RESTARTING THE MACHINE AFTER AN INTERVENTION

After an intervention (repair, maintenance, or emergency stop), the hoist must be restarted safely to prevent hazards such as uncontrolled movement, electrical faults, or mechanical failure.

##### 1. Pre-Restart Safety Checks

###### A) Verify the Cause of Intervention

Confirm the original fault has been identified and fully resolved.

Ensure all repair or maintenance work is complete.

If intervention was due to an emergency stop, investigate the root cause before restarting.

###### B) Inspect Mechanical Components

Verify that brakes are functional and properly engaged.

Check for correct chain/rope alignment and tension.

Ensure no obstructions in the hoist's path.

Confirm gearbox is properly lubricated.

###### C) Confirm Limit Switch & Emergency Stop Functionality

Manually test the upper and lower limit switches.

Press the Emergency Stop (E-Stop) button, then reset it.

#### 6.4. SEQUENCE OF OPERATION

The operation sequence of a hoist follows a structured process to ensure safe lifting, movement, and lowering of loads. Below is a step-by-step breakdown of the hoist's typical operation cycle.

##### ✓ Inspect Load Handling Equipment

Ensure hook, chain/wire rope, and brake system are in good condition.

Check that limit switches are functioning correctly.

Ensure the path is clear of obstructions.

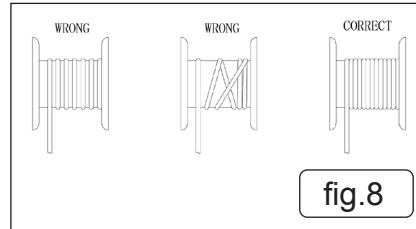
✓ Ensure the load does not exceed the hoist's maximum lifting capacity, always check the load markings before use. Verify load balance and secure attachment to prevent swinging.

#### 6.5. USE/MISUSE OF THE HOIST MECHANISM

The hoist mechanism is responsible for lifting, lowering, and positioning loads safely. Below is a detailed breakdown of its components, functions, and correct usage to ensure safe and efficient operation.

##### 6.5.1. MISUSE OF THE HOIST

Misusing a hoist can lead to serious accidents, equipment damage, and regulatory non-compliance.





### 6.5.2. HOW TO PREVENT HOIST MISUSE

Ensure Operators Are Trained & Certified.

Operators must understand weight limits, load positioning, and safety protocols.

Training should include hands-on hoist operation and emergency procedures.

#### ✓ Enforce Pre-Use Safety Inspections

Inspect chains, hooks, brakes, and controls before each use.

Report and tag faulty equipment immediately.

#### ✓ Display Clear Operational Guidelines

Post warning signs near the hoist.

Use load charts to show maximum capacity.

#### ✓ Use the Right Equipment for the Task

Use a trolley system for lateral movement.

Use a certified man-lift, not a hoist, for personnel lifting.

### 6.6. LIMITS OF THE HOIST

The PH2520V power hoist has defined operational, mechanical, and safety limits to ensure safe and efficient use. Exceeding these limits can lead to equipment failure, accidents, or regulatory violations.

## 7. MAINTENANCE

- 7.1. Always disconnect the hoist from power before maintenance. Inspect limit switches regularly to ensure proper stopping. Check the control cable, mechanical parts, and ensure no components are loose. Inspect the wire rope every 30 cycles and replace if damaged. Every 600 cycles, check the lifting hook, counterweight, and rope condition. Every 1000 cycles, check screw tightness on limit components and inspect the braking system, replace worn parts as needed. Always test the E-stop and control buttons before use. Contact Sealey Authorised Service Centre for major repairs.

### 7.2. STEEL CABLE

A check must be made every 30 cycles, as shown in Fig.11 or showing, to find whether the entire steel cable Fig.12 is in good condition. If it is damaged, it must be replaced by a steel cable of the type specified in the technical data.

#### 7.2.1. NATURE OF INSPECTIONS FOR SAFETY FUNCTIONS

**IMPORTANT.** Always ensure that the machine is not connected to the battery before you start any servicing work.

**In the following:** One cycle means one raising and lowering movement of a load.

Periodic inspection means an inspection after 100 cycles.

Test periodically that the limit switches on the cable hoist are in correct working order.

**Conduct this test as follows:** When the cable has reached the maximum height, the lever on the automatic stopping mechanism will be actuated. The motor must then stop. (Test without a load).

When the steel cable has been unwound as far as possible, the lever for the maximum cable length will be actuated. The motor must then stop.

Inspect the control cable periodically.

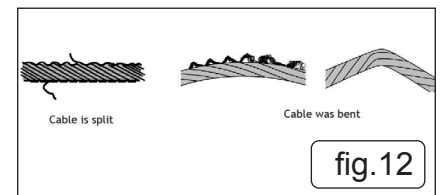
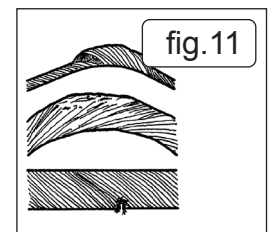
### 7.3. LIST OF NECESSARY SAFETY CHECKS

Before using the cable hoist, ensure the Emergency Stop and push buttons are functioning correctly. Every 200 cycles, grease the steel cable and return roller.

Every 1000 cycles, check that all fastening clamp and return roller screws are tightened, inspect the hooks and return roller for wear, and examine the braking system, if the motor makes unusual noises or fails to lift its rated load, an overhaul may be required. Replace any damaged or worn parts and store all service records safely. For any unscheduled maintenance, contact the Sealey Service Centre.

### 7.4. FREQUENCY OF INSPECTIONS FOR SAFETY FUNCTIONS

Component / Safety Function	Inspection Type	Frequency	Inspection Focus
Load Chain / Wire Rope.	Visual & Functional.	Daily (Before Use).	<ul style="list-style-type: none"><li>- Check for wear, corrosion, deformation, or broken strands.</li><li>- Ensure proper lubrication.</li><li>- Confirm smooth movement without snags.</li></ul>
Hooks & Load Attachment Points.	Visual.	Daily (Before Use).	<ul style="list-style-type: none"><li>- Look for cracks, deformation, excessive wear.</li><li>- Ensure the safety latch is functional.</li></ul>
Braking System.	Functional Test.	Weekly.	<ul style="list-style-type: none"><li>- Test if brake holds load properly.</li><li>- Listen for unusual noises (signs of wear).</li></ul>
Limit Switches (Upper & Lower).	Functional Test.	Weekly.	<ul style="list-style-type: none"><li>- Verify switches stop movement at limits.</li><li>- Ensure no bypassing or tampering.</li></ul>
Emergency Stop (E-Stop) Button.	Functional Test.	Weekly.	<ul style="list-style-type: none"><li>- Press E-Stop to ensure immediate halt of all hoist functions.</li><li>- Reset and verify normal operation resumes correctly.</li></ul>



## 7.5. BASIC MAINTENANCE OPERATIONS (NON-TECHNICAL):

Operators without technical training can safely perform essential daily checks and lubrication tasks to ensure proper hoist function and prevent premature wear. These include inspecting the wire rope or load chain for kinks, wear, or broken strands, and applying light chain oil if dry. Hooks and safety latches should be checked for damage and proper closure. The Emergency Stop must be tested to ensure immediate shutdown and reset functionality. The pendant or remote control should be inspected for cable damage and responsive buttons. Proper lubrication is key, especially for wire ropes, which should be cleaned and lubricated every three months (or monthly in harsh conditions) using penetrating or grease-based lubricants. Apply lubricant evenly, work it into the strands, and ensure full coverage. Signs the rope needs lubrication include rust, stiffness, or excessive friction during use. These preventive steps help maintain safety and extend the equipment's life without requiring disassembly or advanced repair skills.

## 7.6. TEST AND INSPECTION INTERVALS

### 1. Pre-Use Checks (Daily or Before Each Shift)

✓ **Who?** Trained operator.

✓ **What to check?**

Visual inspection for damage (wire ropes, chains, hooks, and slings).

Control functions (start/stop, emergency stop, limit switches).

Brakes & holding mechanisms (no unusual sounds or slipping).

Load test (light load) to confirm smooth operation.

## 7.7. FREQUENCY AND METHOD OF FUNCTIONAL TESTING

Functional testing ensures that the hoist operates safely and efficiently under normal working conditions. Below are the recommended testing intervals and methods.

Test Type	Frequency	Who Performs it?	Purpose
Pre-Use Check (Operational Test)	Daily or before each shift.	Trained operator.	Ensure safe operation before use.
Routine Functional Test	Weekly.	Competent maintenance staff.	Detect early signs of failure.
Thorough Examination	Every 6 or 12 months (LOLER, EU standards).	Qualified inspector.	Verify full functionality & compliance.
Load Testing	Annually or after major repairs.	Certified inspection engineer.	Ensure mechanical integrity under load.
Major Inspection	Every 10 years.	Specialist or manufacturer.	Full dismantling & life cycle assessment.

## 7.8. GUIDANCE ON THE ADJUSTMENT, MAINTENANCE AND REPAIR

Regular maintenance and proper repairs are essential to ensure the longevity and safe operation of your hoist. Contact Sealey Service Centre.

## 7.9. PROCEDURES FOR SECURING A HOIST MACHINE FOR SAFE MAINTENANCE

Securing a hoist machine for maintenance is essential to ensure the safety of personnel working on or around the equipment.

### 1. Preparation for Maintenance

#### A. Notify and Isolate the Hoist

Notify relevant personnel (operators, supervisors, etc.) that maintenance will take place to prevent accidental use.

Isolate the hoist from the battery power supply:

#### B. Ensure Clear Access to the Hoist

Remove any obstacles around the hoist to ensure a clear, safe working space.

Use appropriate warning signage (e.g., "Maintenance in Progress" signs) to alert others to the potential hazards.

## 7.10. PERFORMING MAINTENANCE ON THE MACHINE AND IT'S FITTINGS (SERVICE AND EMERGENCY REPAIR)

Proper servicing helps prevent breakdowns, reduce wear, and ensure safety.

## 7.11. ADJUSTMENTS AND MAINTENANCE OPERATIONS TO THE PRODUCT

Proper adjustments and maintenance are essential for safe operation, optimal performance, and longevity of the hoist. Below is a detailed guide covering routine maintenance, key adjustments, and troubleshooting procedures.

Component	Daily	Weekly	Monthly	Annually
Load Chain / Wire Rope	Inspect for wear, lubrication.		Deep clean.	Replace if needed.
Hook & Safety Latch	Check for damage.			Replace if worn.
Brakes	Function test.			Replace pads if worn.
Limit Switches	Test stopping points.		Adjust settings.	Replace if faulty.
Electrical Wiring & Controls	Visual inspection.			Full electrical test.
Gearbox & Bearings	Check for leaks, noise.		Top-up lubrication.	Full service.
Bolts & Fasteners	Tighten if needed.			Replace if loose/worn.

## 7.12. REPAIR OF THE MACHINE

Proper repair procedures are essential to restore the safe and reliable operation of the hoist.

Contact Sealey Service Centre.

## 7.13. IDENTIFICATION OF END OF SERVICE

Knowing when to retire a lifting hoist is essential to prevent accidents and ensure safe and efficient operation. Below are the key indicators that a hoist has reached the end of its service life and should be replaced.

### 1. Criteria for Determining End of Service

Severe Structural Wear or Deformation.

Excessive chain or wire rope elongation beyond manufacturer limits.

Permanent deformation of the hook, drum, or load-bearing components.  
Cracks, corrosion, or deep gouges in load-bearing parts.  
Excessive wear on gear teeth leading to slipping or grinding noises.  
A hoist with any of these structural issues should be retired immediately.

#### **7.14. PROCEDURE OF END OF SERVICE**

When a lifting hoist reaches the end of its service life, it must be safely decommissioned and disposed of to prevent accidents, ensure compliance with safety regulations, and avoid unauthorized use.

##### **1. Decision to Retire the Hoist**

**A hoist should be taken out of service if it:**

- ✓ Fails safety inspections or load tests.
- ✓ Has excessive wear, cracks, or deformation in key load-bearing components.
- ✓ Has repeated failures despite regular repairs and maintenance.
- ✓ Exceeds its manufacturer-defined service life.
- ✓ Has obsolete or unavailable replacement parts.

Once a hoist is deemed unfit for use, it must not be operated again.

#### **7.15. INFORMATION FOR EMERGENCY SITUATIONS**

##### **Operation method in the event of an accident or breakdown**

If a hoist experiences an accident or breakdown, immediate and proper action is necessary to ensure safety, prevent further damage, and comply with regulatory requirements.

##### **1. Immediate Actions in Case of an Accident or Breakdown**

**A. If a Load is Suspended in the Air**

- ✗ **DO NOT** Attempt to Lower the Load Manually.
- ✓ Activate the Emergency Stop Button (E-Stop) on the hoist.
- ✓ Secure the surrounding area to prevent personnel from standing beneath the suspended load.
- ✓ Assess the cause of failure (electrical issue, mechanical failure, brake problem, etc.).
- ✓ Notify a qualified hoist technician immediately.
- ✓ Never attempt to free a jammed hoist without professional assistance.

#### **7.16. LOAD LIFTING ATTACHMENTS AND SLINGS**

The used load lifting attachments shall have a rated capacity of at least 2 times (fixing point) the total load (load, load lifting attachment) actually suspended.

The used slings shall have a rated capacity of at least 2 times the total load (load) actually suspended.

Loads shall be attached only with positive-locking means.

#### **7.17. TRANSPORT, HANDLING, AND STORAGE OF THE MACHINE**

##### **7.17.1. Position centre of gravity**

The Centre of Gravity (CoG) is the point where a load's weight is evenly balanced, and in hoisting, it's typically near the centre of the hoist body, slightly offset toward the motor due to its weight. Correctly positioning the CoG during lifting is essential to prevent tilting or swinging, ensure stability, reduce stress on hoist components, and minimize the risk of accidents or dropped loads.

#### **7.18. STORAGE CONDITIONS OF THE MACHINE**

Proper storage of a lifting hoist is crucial to prevent corrosion and damage. Always store the hoist in a clean, dry, and well-ventilated area, away from high humidity, direct sunlight, and corrosive substances. Maintain a storage temperature between -10°C and 40°C to protect electrical and mechanical components. For long-term storage, cover the hoist with a dust cover to shield it from contaminants and environmental wear.

#### **7.19. CORRECT HANDLING AND TRANSPORTATION**

Proper handling and transportation of a lifting hoist are essential to prevent damage, ensure safety, and maintain operational efficiency.

#### **7.20. HANDLING THE HOIST SAFELY**

Before moving the hoist, always inspect it for loose or protruding parts and ensure all chains, ropes, or slings are properly secured to avoid tangling. Check for any leaks and clean the hoist if needed. Disconnect the power supply and safely secure all control cables to prevent damage during transport.

#### **7.21. LIFTING THE HOIST PROPERLY**

When lifting the hoist, always use the designated lifting points specified in the manual and ensure the load is balanced to prevent tilting or swinging. Use appropriate equipment such as a forklift, crane, or another hoist for heavier units, and never lift the hoist by its chains, wire ropes, or electrical cables. Avoid dragging the hoist across the floor to prevent damage to its housing or electrical components.

Always pay attention to the stability of the load and stay away from others, keeping a safe distance from the wire rope and suspended load, and ensuring that others remain clear of the lifting area.

Be sure to check the wire rope and the lifting hook before operation. If there is any wear, twisted or damaged wire rope, it must be replaced immediately.

#### **7.22. TRANSPORTATION GUIDELINES**

When transporting a hoist, use proper manual handling techniques for smaller units, including correct posture and two-person lifting if needed. For vehicle transport, secure the hoist on a pallet or in a crate, strapping it tightly to prevent movement, and protect sensitive components from impact. Always store upright if specified and avoid placing heavy items on top. Upon unloading, inspect for damage, leaks, or loose parts before installation, and never operate a hoist showing signs of transport damage.

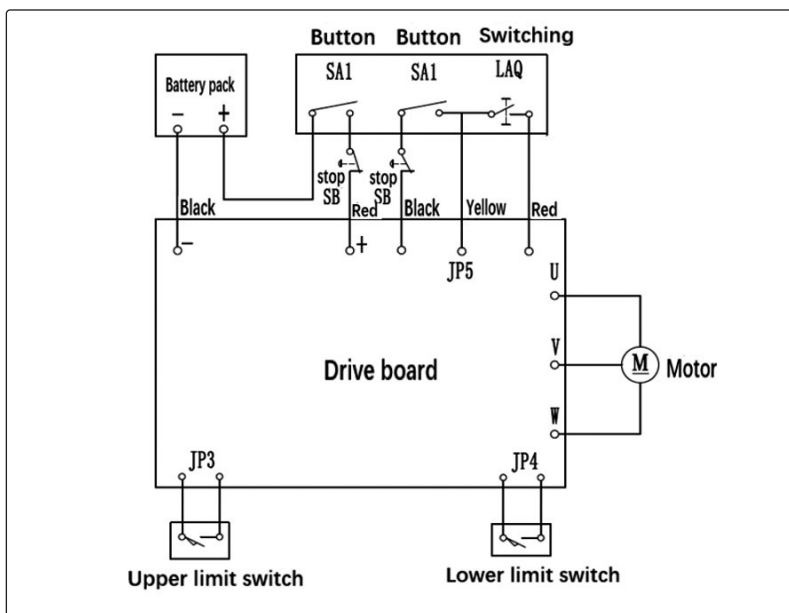
#### **7.23. CLEANING**

To maintain your hoist, keep all safety devices, air vents, and the motor housing clean and free of dust. After each use, wipe it down with a clean, moist cloth and mild soap, or use low-pressure compressed air. Avoid solvents or harsh cleaners, as they may damage plastic components. Ensure no water enters the device during cleaning.

## 8. TROUBLESHOOTING

Fault	Main Cause	Elimination
The motor does not rotate when the start switch is pressed manually.	<ol style="list-style-type: none"> <li>1. The power is not connected.</li> <li>2. The wiring is broken or loose.</li> <li>3. The switch is faulty.</li> <li>4. The direction paddle is in the neutral (middle) position.</li> <li>5. The limiter has not reset, or the travel switch is faulty.</li> <li>6. The hoist is in thermal protection mode.</li> </ol>	<ol style="list-style-type: none"> <li>1. Power on the unit (insert the battery pack and release the E-stop switch).</li> <li>2. Check the wiring and repair if necessary.</li> <li>3. Repair or replace the faulty switch.</li> <li>4. Adjust the direction paddle from the neutral position.</li> <li>5. Check the limiter and replace the travel switch if necessary. Contact the Sealey Service Centre for assistance..</li> <li>6. Restart the unit after it has cooled down. If the issue persists, contact the Sealey Service Centre.</li> </ol>
The motor makes a loud noise when the start switch is pressed manually, and the load cannot be lifted.	<ol style="list-style-type: none"> <li>1. The battery pack voltage is too low.</li> <li>2. The drive board is damaged.</li> <li>3. Components are damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check whether the battery pack is fully charged, and replace it if necessary.</li> <li>2. Contact Sealey Service Centre.</li> <li>3. Contact Sealey Service Centre.</li> </ol>
Braking is not possible, or there is excessive sliding after a power outage.	<ol style="list-style-type: none"> <li>1. The drive board is damaged.</li> <li>2. The gear is worn.</li> <li>3. Components are damaged.</li> <li>4. The motor is damaged.</li> </ol>	Contact Sealey Service Centre.
The noise has increased abnormally.	<ol style="list-style-type: none"> <li>1. The lubrication is insufficient.</li> <li>2. The gear bearing is damaged due to prolonged use.</li> <li>3. The assembly is incorrect or there are defects causing bumps.</li> </ol>	<ol style="list-style-type: none"> <li>1. Add more grease.</li> <li>2. Check and replace the gear or the bearing.</li> <li>3. Recheck the assembly and repair the damaged parts</li> </ol>
The limiter is malfunctioning.	<ol style="list-style-type: none"> <li>1. The travel switch for the limiter is malfunctioning.</li> <li>2. The limiter is blocked.</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair or replace the travel switch. Contact Sealey Service Centre for assistance.</li> <li>2. Check and repair the limiter. Contact Sealey Service Centre for assistance.</li> </ol>

## 9. ELECTRICAL SCHEMATIC DIAGRAM



### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



**NOTE:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

**IMPORTANT:** No Liability is accepted for incorrect use of this product.

**WARRANTY:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

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