CAARLA PA200

CAARLA PA200 Electric Hoist User Manual

Model: PA200

1. Introduction

1.1 Product Description

The CAARLA PA200 Electric Hoist is a compact lifting device designed for efficiently lifting and moving heavy objects. It is suitable for use in various environments such as workshops, garages, and construction sites where larger lifting equipment may not be practical. This hoist features a robust design and includes a wireless remote control for convenient operation.

This manual provides essential information for the safe installation, operation, and maintenance of your PA200 Electric Hoist. Please read it thoroughly before using the product.

1.2 Intended Use

The PA200 Electric Hoist is intended for lifting and lowering loads within its specified weight capacity. It is designed for intermittent use in non-hazardous environments. Any use beyond the specified parameters or for purposes other than lifting is considered misuse and may result in damage to the equipment or injury to the operator.

Image 1.1: General view of the CAARLA PA200 Electric Hoist. This image shows the main body of the hoist, including the motor housing, wire rope drum, and the lifting hook assembly.

2. Safety Information

WARNING: Failure to follow these safety instructions may result in serious injury or death.

- Read and understand all instructions in this manual before operating the hoist.
- Always wear appropriate personal protective equipment (PPE), including safety gloves and eye protection.
- Ensure the hoist is securely mounted to a structure capable of supporting the hoist's weight plus the maximum rated load.

- Inspect the hoist, wire rope, hook, and remote control for damage or wear before each use. Do not operate if any damage is found.
- Do not exceed the rated load capacity of the hoist. Refer to the specifications section for details.
- Keep the work area clear of personnel and obstructions during operation.
- Never lift people or objects over people.
- Avoid sudden starts or stops when lifting or lowering loads. Operate the controls smoothly.
- Do not leave a suspended load unattended.
- Ensure the power supply matches the hoist's voltage requirements.
- In case of emergency, immediately press the emergency stop button on the remote control.

3. Product Overview and Components

Familiarize yourself with the various parts of your CAARLA PA200 Electric Hoist to ensure correct assembly and operation.

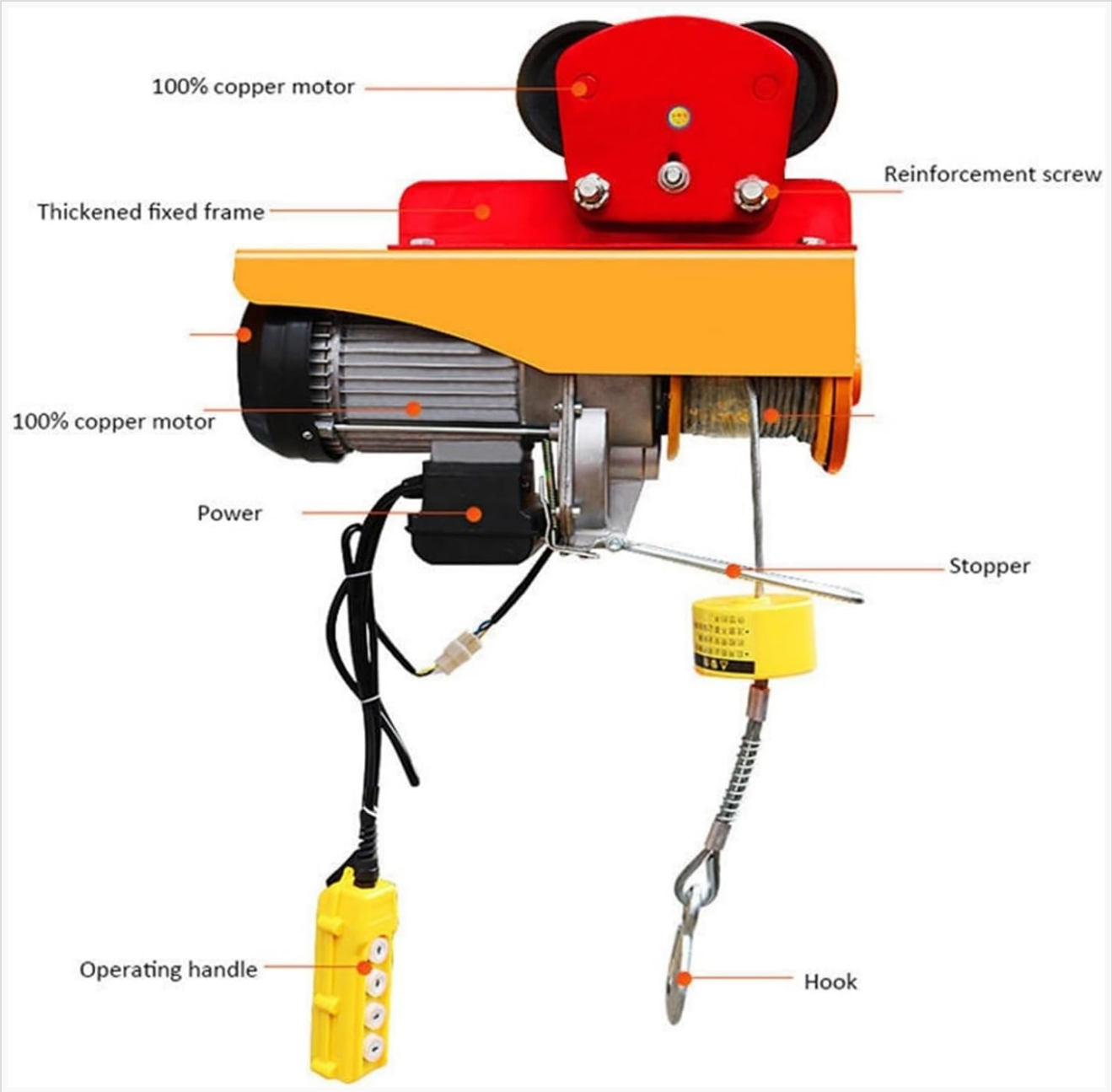

Image 3.1: This diagram illustrates the main components of the electric hoist, including the motor, thickened fixed frame, power connection, stopper mechanism, operating handle for control, and the lifting hook.

3.1 Key Components

- **100% Copper Motor:** Provides power for lifting operations.
- **Thickened Fixed Frame:** The main structural support for the hoist.
- **Reinforcement Screw:** Secures critical parts of the frame.
- **Power:** Electrical connection point for the hoist.
- **Stopper:** A safety mechanism to prevent over-winding of the wire rope.
- **Operating Handle:** Wired control unit for hoist movement.
- **Hook:** The attachment point for loads.
- **Wire Rope:** The cable used for lifting.

Image 3.2: The CAARLA PA200 Electric Hoist shown with its wired operating handle, which includes control buttons and an emergency stop.

4. Specifications

The following table details the technical specifications for the CAARLA PA200 Electric Hoist.

PA200 Hoist Performance Parameters

Parameter	Value (PA200)
Rated Voltage	220-50HZ
Work Factor	S3 20% 10 min
Rated Capacity (Single-hook)	100 kg
Rated Capacity (Double-hook)	200 kg
Input Power	510 W
Lifting Speed (Single-hook)	10 m/min
Lifting Speed (Double-hook)	5 m/min
Lifting Height (Single-hook)	12 m
Lifting Height (Double-hook)	6 m
Net Weight	12 kg

General Product Specifications

Specification	Value
Package Dimensions	1.18 x 0.79 x 0.39 inches
Item Weight	26.5 pounds (Note: This may refer to shipping weight, actual unit weight is 12kg/26.4lbs)
Manufacturer	CAARLA
Assembly Required	No
Number of Pieces	1

5. Setup and Installation

5.1 Unpacking

1. Carefully remove all components from the packaging.
2. Check for any visible damage during transit. If damage is found, do not proceed with installation and contact customer support.
3. Verify that all parts listed in the packing list are present.

5.2 Mounting the Hoist

The hoist must be securely mounted to a robust overhead structure capable of safely supporting the hoist's weight and the maximum anticipated load. Consult a qualified engineer if unsure about the structural integrity of the mounting point.

- Identify a suitable mounting location that is stable, level, and free from obstructions.
- Use appropriate fasteners (not included) that are rated for the combined weight of the hoist and its maximum load.
- Ensure the hoist is mounted in a way that allows the wire rope to descend vertically without rubbing against any surfaces.

5.3 Electrical Connection

Connect the hoist to a power supply that matches the rated voltage (220-50HZ) as specified in Section 4. Ensure the power outlet is properly grounded and protected by a circuit breaker.

- Plug the hoist's power cord into a suitable electrical outlet.
- Ensure all connections are secure and free from damage.

5.4 Wire Rope Configuration (Single vs. Double Sling)

The hoist can be configured for single-hook or double-hook operation, affecting its lifting capacity and speed. The double-hook configuration uses a pulley block to effectively double the lifting capacity while halving the lifting speed and height.

Image 5.1: The hoist configured for both single-line (left) and double-line (right) lifting, demonstrating the use of a pulley block for increased capacity.

- **Single-hook:** Attach the load directly to the main hook. Max capacity 100 kg, lifting height 12m, speed 10m/min.
- **Double-hook:** Loop the wire rope through the provided pulley block and attach the block's hook to the load, then secure the end of the wire rope back to the hoist frame. Max capacity 200 kg, lifting height 6m, speed 5m/min.

6. Operating Instructions

6.1 Pre-Operation Checks

Before each use, perform the following checks:

- Ensure the hoist is securely mounted.
- Inspect the wire rope for fraying, kinks, or damage.
- Check the hook for deformation, cracks, or wear, and ensure the safety latch operates correctly.
- Verify that the power cord and remote control cable are undamaged.
- Confirm the load does not exceed the hoist's rated capacity for the chosen configuration (single or double sling).

6.2 Lifting Operations

1. Attach the load securely to the hoist hook. Ensure the load is balanced and will not shift during lifting.
2. Stand clear of the load and use the wired operating handle to control the hoist.
3. Press the 'UP' button to slowly raise the load. Observe the load's stability.
4. Press the 'DOWN' button to slowly lower the load.
5. Avoid swinging the load. If the load begins to swing, stop the operation and stabilize it before proceeding.
6. Do not allow the wire rope to fully retract or extend to its absolute limits. The stopper mechanism will activate near the upper limit.

6.3 Emergency Stop Function

In case of any malfunction or hazardous situation, immediately press the large red emergency stop button on the operating handle. This will cut power to the hoist motor. To resume operation, twist the emergency stop button to release it, then restart the hoist if necessary.

7. Maintenance

Regular maintenance is crucial for the safe and efficient operation and longevity of your electric hoist.

7.1 Regular Inspection

- **Daily/Before Use:** Inspect the wire rope, hook, and control cables for any signs of wear, damage, or deformation.
- **Monthly:** Check all fasteners for tightness. Inspect the motor housing for cracks or damage. Test the emergency stop function.
- **Annually:** A thorough inspection by a qualified technician is recommended to check internal components, motor brushes, and lubrication levels.

7.2 Lubrication

Keep the wire rope lightly lubricated to prevent corrosion and reduce wear. Apply a suitable wire rope lubricant periodically, especially in humid or corrosive environments.

7.3 Cleaning and Storage

- Keep the hoist clean and free from dust, dirt, and debris. Use a dry cloth or soft brush for cleaning. Do not use water or harsh chemicals.
- When not in use for extended periods, store the hoist in a dry, clean, and secure location, protected from extreme temperatures and moisture.

8. Troubleshooting

This section provides solutions to common issues you might encounter with your electric hoist.

Common Troubleshooting Guide

Problem	Possible Cause	Solution
Hoist does not power on.	No power supply; Emergency stop engaged; Faulty power cord/plug.	Check power outlet and circuit breaker. Release emergency stop button. Inspect power cord for damage.
Motor runs but hoist does not lift/lower.	Wire rope jammed; Mechanical fault.	Inspect wire rope for obstructions. Do not attempt to repair internal mechanical faults; contact service.
Hoist operates slowly or struggles with light loads.	Overload; Low voltage; Motor issue.	Ensure load is within capacity. Check power supply voltage. If problem persists, contact service.
Unusual noises during operation.	Lack of lubrication; Worn components; Loose fasteners.	Lubricate wire rope. Inspect for loose parts and tighten. If noise persists, discontinue use and contact service.
Emergency stop button does not release.	Button jammed or damaged.	Ensure button is twisted correctly to release. If still jammed, do not use hoist and contact service.

For issues not listed here or if solutions do not resolve the problem, please contact CAARLA customer support.

9. Warranty and Support

Specific warranty details for the CAARLA PA200 Electric Hoist are not provided within this manual. For information regarding warranty coverage, terms, and conditions, please refer to the documentation included with your purchase or contact the manufacturer directly.

9.1 Customer Support

For technical assistance, spare parts, or service inquiries, please contact CAARLA customer support through the vendor from whom you purchased the product or refer to the manufacturer's official website for contact information.