HAFCO

260KG
500KG

MODEL LIFT CAPACITIES

30 METRE
LIFT HEIGHT

COMPLIES TO **AS 1418.2**

Edition : 1.0
Date: (06/26)

Instruction Manual

BRUSHLESS SERIES
COMPACT WIRE ROPE HOISTS
HBWH260, HBWH500, HBWH-WR

Order Code: (H2302, H2304, H2300)

INTRODUCTION

CONGRATULATIONS ON YOUR HAFCO WIRE ROPE HOIST PURCHASE

Thank you for choosing the HAFCO Wire Rope Hoist a robust and heavy-duty hoisting device engineered to maintain reliable performance under standard operating conditions. To ensure optimal performance and longevity, we recommend implementing a routine of correct usage, regular maintenance, and proper lubrication.

Before installing, operating, or servicing your HAFCO Wire Rope Hoist, please read this manual thoroughly. All tasks involving operation, installation, or maintenance should only be carried out by trained and competent personnel. Failure to follow the guidelines outlined in this manual may result in personal injury and/or property damage.

To comply with statutory requirements and to maximise the efficiency and safety of your equipment, we recommend conducting a comprehensive maintenance inspection every 12 months.

COMPLIANCE AND PRE-OPERATIONAL CHECKS

Your HAFCO Wire Rope Hoist has been tested and is compliant with Australian Standard AS 1418.2. nicks and gouges. If shipping damage has occurred, contact your local supplier.

1. Before placing the hoist into regular service following installation, the following pre-operational checks must be performed:
2. Ensure all joints and fasteners are correctly tightened and securely fixed.
3. Operate the hoist under both no-load and full-load conditions to verify smooth and consistent performance.
4. Test the hoist brake function under both light and full load to confirm reliable operation.

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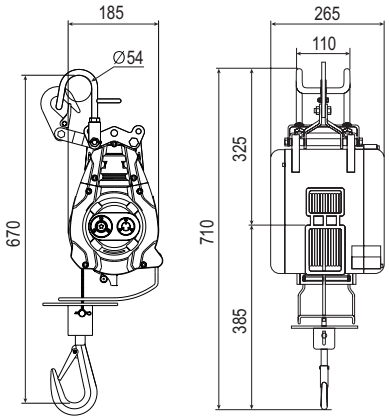
1.Technical Information

1.1 Specifications

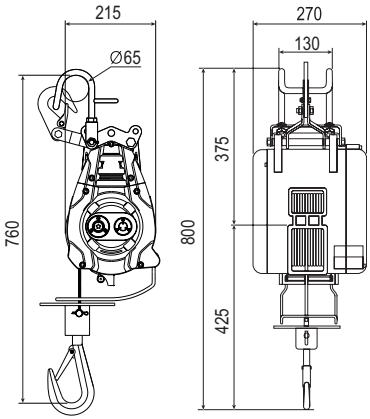
Stock Code	H2302	H2304
MODEL	**HBWH260**	**HBWH500**
Rated Capacity (Fully Roped)	260kg	500kg
Motor	2100W	2800W
Lifting Speed	7-19m/min	5-16m/min
Rope Size	5mm	6mm
Rope Construction	7 x 19	
Grade of Rope min.	G1960 Non-Rotating	
Lift Height	30M	
Power Supply	Single phase, 50Hz 220V	
Full Load Current (FLC)	10.5A	7.25A
Pendant Control Length	7M	
Power Cord Length	4.8M	
Net Weight	21kg	26kg

1.2 Dimensions

HBWH260



HBWH500



2. Pre-Operational Precautions

2.1 Safety Precautions

The winch is designed to provide safe and reliable service when operated in accordance with these instructions. Read and understand this manual before installing or operating the winch.

Follow these general safety precautions:

- Confirm that the winch is suitable for the intended operating conditions.
- Secure the winch firmly before operation and ensure the wire rope is properly aligned on the drum.
- Do not use unsuitable pulleys or accessories.
- Do not use wire rope that is of incorrect construction, insufficient strength, or shows signs of damage.
- Ensure proper grounding of the winch. Grounding provides a path of least resistance for electrical current and reduces the risk of electric shock.
- Check the winch for smooth operation without load before commencing lifting operations.
- Ensure the wire rope is wound evenly on the first layer of the drum. If cross-winding occurs, unwind and rewind the rope correctly.
- If the wire rope becomes unevenly wound or accumulates on one side of the drum, stop operation and realign it properly.

1. The winch must not be used to lift, support, or transport personnel.
2. A minimum of five (5) wraps of rope must remain on the drum at all times to support the rated load.
3. The owner and/or operator must understand these operating instructions and warnings before using the electric winch. Failure to follow these instructions may result in load loss, damage to the winch, property damage, serious injury, or death.
4. The owner shall retain this manual for future reference regarding important warnings, installation, operation, and maintenance instructions.

2.2 Environmental Precautions

The following environmental conditions may cause malfunction or operational issues:

- Temperatures below -10°C or above 40°C, or humidity exceeding 90%.
- Explosive or chemically hazardous environments.
- Heavy acid or salt exposure.
- Rain or snow conditions.
- Excessive dust or powder environments

2. Pre-Operational Precautions

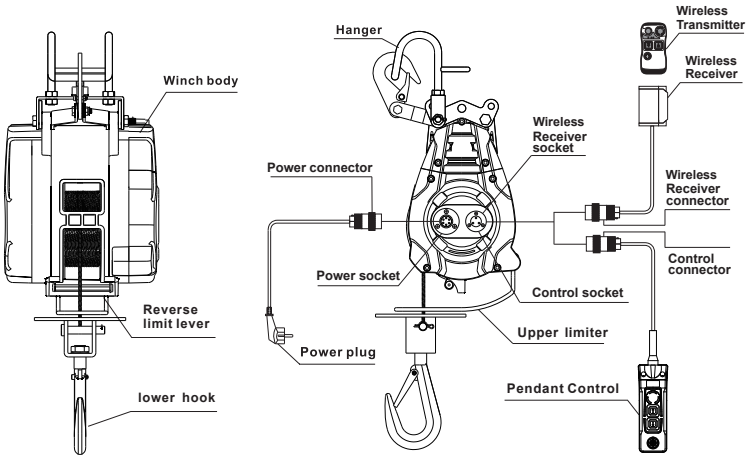
2.3 Handling Precautions

- To prevent the risk of electric shock, ensure the power plug is connected to a properly grounded outlet of the correct voltage.
- Never lift a load exceeding the rated capacity of the winch.
- Never ride on the hook, sling, or load being moved.
- This winch must not be used for lifting or lowering personnel.
- Do not work, walk, or stand beneath an operating winch.
- Always remain attentive and in control. Never leave the winch unattended while hoisting a load.
- Never stand under a suspended load or within the load's travel path.
- Always be aware of overhead hazards when operating or working near the winch.
- Never allow a load to drop freely.
- Always lift loads vertically. Slack rope may cause the wire rope to become entangled on the drum.
- Before operation, perform daily inspections and confirm proper function. If reverse rotation occurs, correct the wiring or rotation direction before use.
- Before lifting, ensure the brake is functioning correctly. If any brake malfunction is detected, stop operation immediately.
- Do not perform welding on or near a suspended load.
- Remove or replace the wire rope immediately if any of the following defects are observed: 1) Kinks, 2) Distortion, 3) Corrosion, 4) Broken wires exceeding 10% of the total strands, 5) Diameter reduction exceeding 7%.
- Stop operation immediately if unusual noise or vibration is detected in the gearbox.
- Do not use the wire rope as a grounding connection for welding equipment.
- During welding operations, keep the winch and wire rope clear of sparks and welding contact.
- Do not force or misuse the control switch
- Never perform instant reverse winding ("plugging") or excessive inching operations
- Do not exceed the short-time duty rating of the winch.
- To prevent rope loosening or irregular winding, maintain proper tension and ensure even layering on the drum.
- Securely mount the winch to ensure the rope winds evenly around the drum.
- Ensure the rope is properly centered in the hook and aligned with the load's centre of gravity.
- Avoid catching the hook or pulling against fixed obstructions.
- Return the pendant control to a safe position after use.
- Ensure the load is properly balanced and secured before lifting.
- Prevent water from splashing onto the pendant control.
- Never wrap the wire rope directly around a load. Always use appropriate lifting attachments.

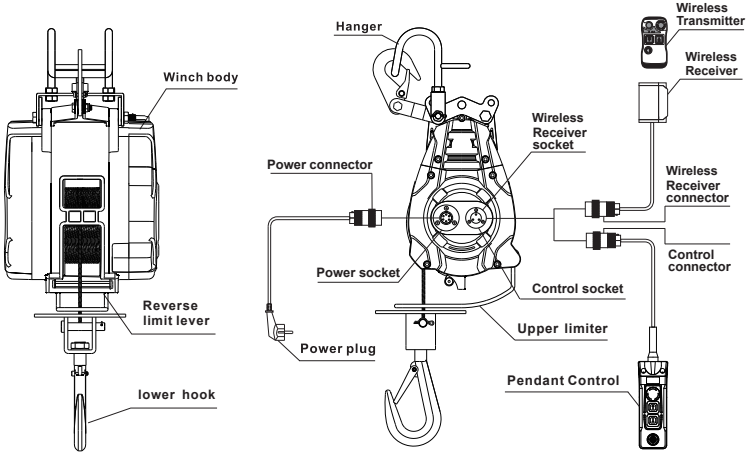
3. Installation

3.1 Winch Assembly

With Pendant Control and Remote Control HBWH260



With Pendant Control and Remote Control HBWH500



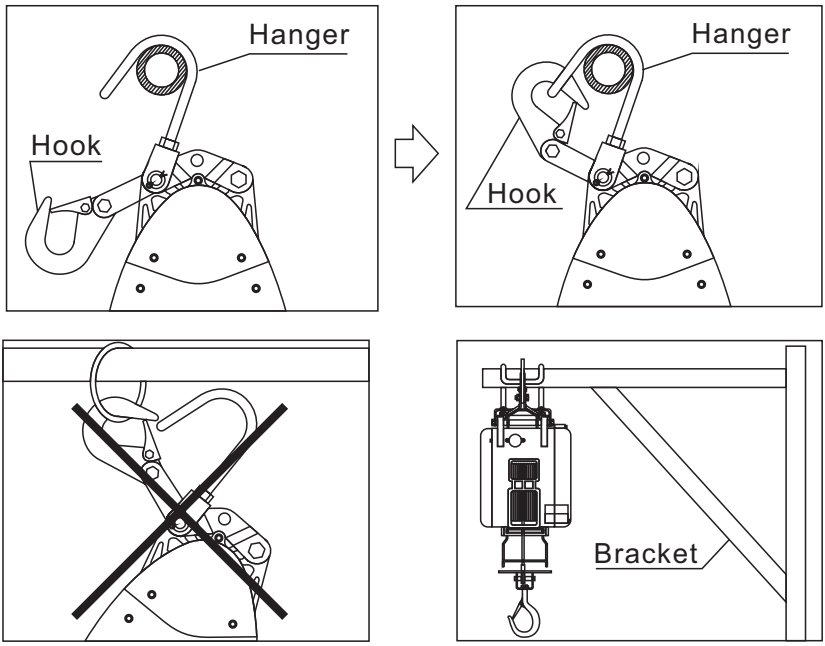
3. Installation

3.2 Mounting

The winch is designed to be suspended from or mounted onto a firm and stable support beam or suitable bracket.

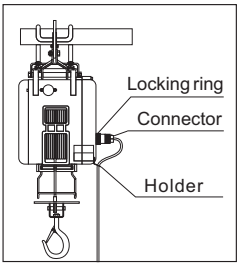
When installing the winch, ensure the unit and load have sufficient clearance and are not obstructed by surrounding structures, frames, or other fixed objects.

Ensure the mounting point is secure and capable of supporting the rated load of the winch. Always fully engage and secure the hanger or mounting hardware to prevent accidental disengagement.

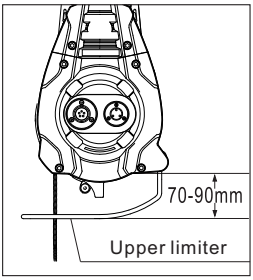


3.3 Connector insertion

- Insert the pendant control connector and the power connector into their respective sockets on the winch. Tighten the locking ring by turning it clockwise until fully secured.
- Ensure the cable is properly secured using the cable holder. Do not allow the cable to contact or become entangled with the wire rope, drum, or any moving parts. The standard power cord length is 20 metres. If a longer extension is required, use a power cable with a larger conductor cross-section (e.g. 2.0 mm^2 or 3.5 mm^2) to prevent excessive voltage drop. Alternatively, install a suitable magnetic switch or isolator to ensure safe operation.

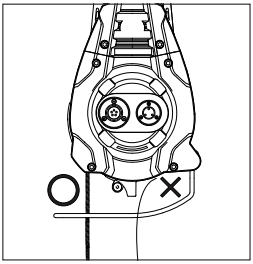


3.4 Upper Limit Prevention



- A built-in upper limit mechanism prevents over-lifting during operation.
- When the lower hook contacts the upper limit stop, the lifting operation will automatically stop.
- If the upper limit stop is positioned too close to the winch body, serious damage may occur to both the limit mechanism and the winch.
- The recommended clearance between the upper limit stop and the bottom of the winch is 70–90 mm.

3.5 Reverse Limit Prevention



- A built-in reverse limit protection mechanism prevents over-lowering of the wire rope.
- When lowering, and the wire rope becomes fully extended, it will shift from position O to position X
- When the wire rope contacts the reverse limit lever, the lowering operation will automatically stop.
- To reset the mechanism, pull the wire rope and press the UP (↑) button to return the rope from position X back to position O before resuming operation.

NOTE: This unit has been intentionally designed with an additional 2 metres of wire rope at the final end of the drum, identified by a red coloured section of wire rope. This coloured section serves as a visual warning indicator to advise the operator that the reverse travel limit is being approached and that reversing operation must not continue further.

The red wire rope indicator is intended to provide the user with clear visual identification that the operational reverse limit has been reached.

If the operator continues reversing beyond the visual indicator, the reverse limit protection mechanism will activate and automatically stop further reverse operation as a final safety protection measure.

3.6 Wireless Receiver Installation - (Model HBWH-WR)

The HAFCO Wireless Receiver is a plug-and-play control system designed for quick installation and operation with the HBWH260 and HBWH500 Wire Rope Hoists.

It allows the operator to control lifting operations from a safe, clear position with improved visibility of the load and surrounding work area. With no pendant cable to restrict movement or create obstructions, it enhances both safety and operational efficiency on site.

Supplied Components

- 1 × Wireless Receiver
- 1 × Wireless Transmitter with Antenna
- 1 × Receiver Bracket
- 1 × Retaining Screw
- 1 × Fuse

Order Code: H2300

Installation Procedure

1. Disconnect the hoist from the power supply before commencing installation.
2. Locate the wireless receiver socket on the hoist as illustrated in Section 3.1 – Winch Assembly.
3. Align the receiver connector with the receiver socket and fully insert the connector into position.
4. Tighten the locking ring clockwise until the connector is securely fastened.
5. Install the receiver onto the supplied mounting bracket using the retaining screw provided.
6. Ensure the receiver and wiring are positioned clear of moving parts, the wire rope, drum, hook, and any pinch points.
7. Install the fuse supplied with the receiver if not already fitted.

Operating

- Ensure the transmitter antenna is securely fitted before operation.
- The wireless transmitter and pendant control must only be operated by authorised and competent personnel.
- Test all lifting and lowering functions without load prior to first use.
- If the wireless control does not respond correctly, stop operation immediately and inspect the receiver connection, fuse, and transmitter battery condition.
- Do not modify, disassemble, or bypass the wireless receiver system.

Safety Warning

- Always isolate power before installing, removing, or servicing the wireless receiver.
- Do not operate the hoist if the receiver housing, wiring, or connectors are damaged.
- Keep the receiver protected from excessive moisture, direct water spray, impact, and high heat sources.
- Never stand beneath a suspended load during operation.

4. Maintenance and Replacement

4.1 Ratchet Brake Replacement & Adjustment

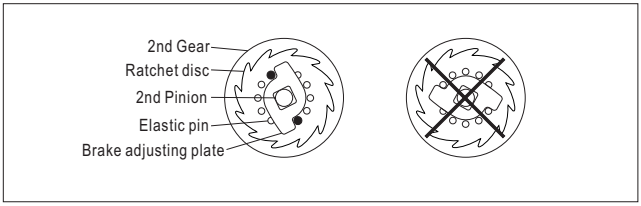
- All brake adjustments and replacements should be carried out by a qualified technician at an authorised service centre.
- Ratchet Brake Replacement and Adjustment Procedure.

Step 1. Remove retaining ring and elastic pin.

Step 2. Rotate the second gear / second pinion counter-clockwise until it engages and holds the ratchet brake mechanism.

Step 3. Identify the correct locating hole between the elastic pins and the brake adjusting plate (select one of the four available positions). Fit the brake adjusting plate onto the square shaft of the second pinion.

Step 4. Reinsert the elastic pins and secure the retaining ring to complete the assembly

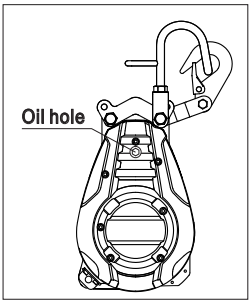


4.2 Oil Lubrication

Roper gear lubrication is essential to ensure long service life of the winch. The type and quality of lubricant used will significantly affect performance and durability.

The winch is pre-lubricated at the factory and does not require initial lubrication before first use.

Re-lubrication intervals will depend on operating conditions and frequency of use. Consult your local lubricant supplier to select a lubricant suitable for your climate and application.



Lubricant Type:

Caltex Multifak EP (grease), Cosmogear SP460 (gear oil)

Quantity: 250 cc

Service Condition
Normal duty (intermittent use, clean environment).
Heavy duty (frequent use, high load).
Harsh environment (dust, moisture, corrosive conditions).

Inspection Interval
Every 6 months, Every 3 months

Re-Lubrication Interval
Every 12 months, Every 6–9 months

Important Notes
Inspect lubrication condition during scheduled maintenance checks.

Replace lubricant immediately if contamination, moisture, or metal particles are detected.

Always isolate the power supply before performing maintenance.

All servicing should be carried out by a qualified technician.

4. Maintenance and Replacement

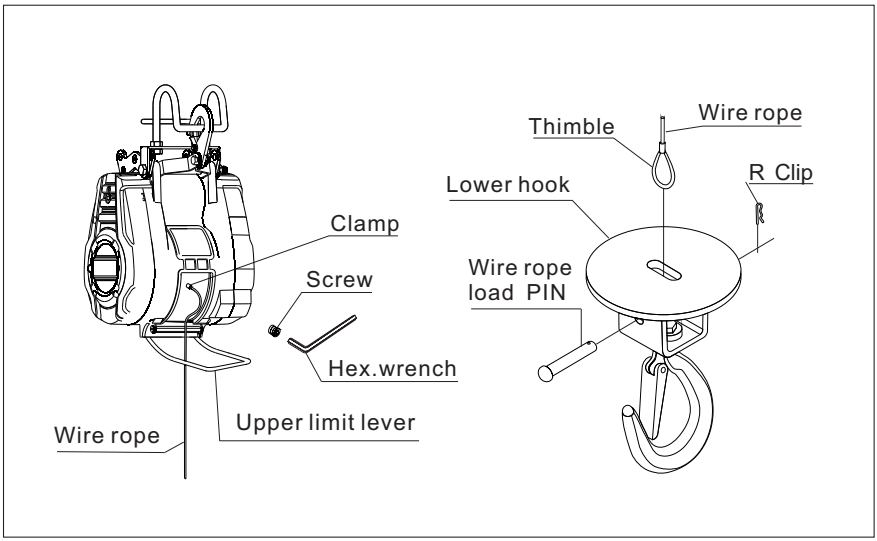
4.3 Wire Rope Replacement

Lower Hook

- Pass the new wire rope through the hole in the round plate of the lower hook assembly..
- Insert the wire rope load pin through the thimble eye of the wire rope.
- Secure the assembly by inserting the R-clip (retaining pin) through the load pin, then bend the clip legs with pliers to prevent it from loosening.

Drum

- Feed the new wire rope, fitted with the rope clamp, through the limit lever and insert it into the designated hole in the drum.
- Secure the rope by installing the retaining screw into the drum and tightening it with a hex wrench.
- Press the UP (↑) button to rotate the drum in the lifting direction and begin winding the rope onto the drum.
- Ensure the wire rope is wound evenly and under light tension. Uneven winding may cause load swing, rope damage, and reduced service life.



5. Checking Reference

- The winch shall be inspected by a competent and authorised person.
- Inspections are to be divided into daily inspections and periodic inspections.
- The inspection items and methods for both daily and periodic checks must be carried out in accordance with this schedule. The frequency of periodic inspections shall be determined based on the intensity of use and operating conditions.

Classification of Inspections

- Daily Inspection
- Periodic Inspection – Every 3 Months or 20 Operating Hours
- Major Inspection – Every 12 Months or 250 Operating Hours (whichever occurs first)

Inspection Checklist

Item	Inspection Area	Inspection Criteria	Inspection Method	Frequency	Periodic
1	Brake	Brake performance; Ratchet brake wear	Visual inspection; Component wear inspection	Daily	Every 12 Months or 250 Operating Hours
2	Motor	Insulation condition; Overheating; Physical damage	Insulation resistance test (Min. 50 MΩ); Visual inspection	Daily	Every 3 Months or 20 Operating Hours
3	Pendant / Remote Control	Operation; Cable damage; Earth continuity	Functional test; Visual inspection	Daily	Every 3 Months or 20 Operating Hours
4	Safety Devices	Upper limit function; Reverse limit function; Limit lever distortion; Rope direction	Functional test; Visual inspection	Daily	
5	Wire Rope	Kinks; Broken wires (>10%); Diameter reduction (>7%); Corrosion; Deformation	Visual inspection	Daily	
6	Lower Hook & Load Pin	Distortion; Cracks; Damage; Loosening	Visual inspection	Daily	
7	Drum	Flange cracking; Excessive wear	Visual inspection	Daily	Every 3 Months or 20 Operating Hours
8	Gear Train	Gear damage or wear; Lubrication condition	Visual inspection; Lubrication check	Daily	Every 12 Months or 250 Operating Hours
9	Fasteners	Loose bolts, nuts, retaining hardware	Manual torque check	Daily	Every 12 Months or 250 Operating Hours
10	Markings	Legibility of labels and warning tags	Visual inspection	Daily	

Important Notes

- Stop operation immediately if any defect is identified.
- Replace damaged components before returning the winch to service.
- Record all inspections in the maintenance log.
- Always isolate power before performing maintenance.

1. Wire rope inspection If the wire rope shows signs of excessive wear, broken strands, corrosion and damage to the ferrule or thimble, then the rope needs to be replaced.
2. Daily inspection Visually inspect the hoist including the wire rope, pendant electrical connections, mounting bolts and hook. Any worn or damage components must be replaced (using genuine parts only).
3. Monthly inspection Unwind the entire length of the wire rope and thoroughly inspect it.

- Check that the screw retaining the wire rope to the drum is secure.
- Inspect the hoist drum for wear and corrosion.
- Inspect the hook for any wear, damage and that the swivel is performing correctly.

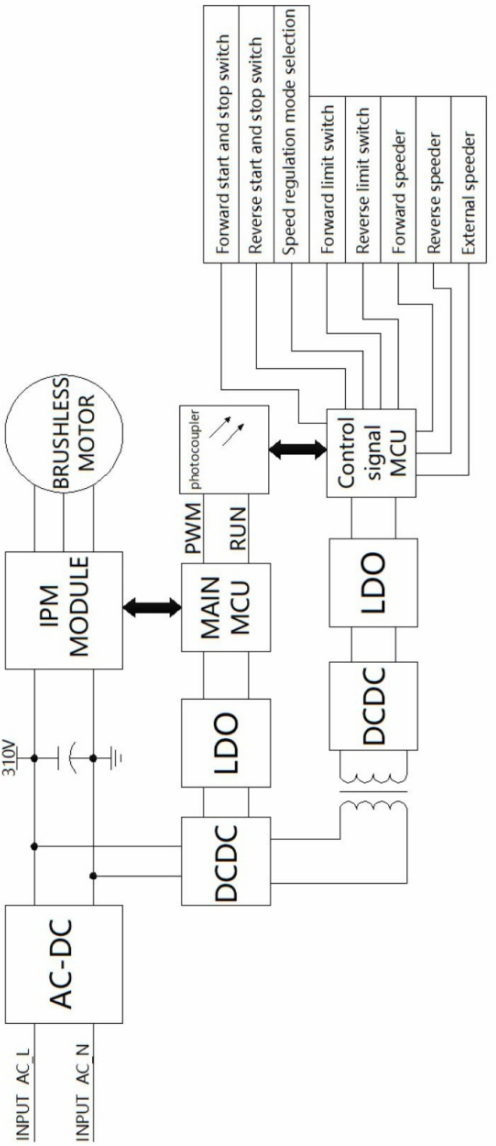
NOTE: Only qualified personnel to perform chain block maintenance.

6. Trouble Shootings

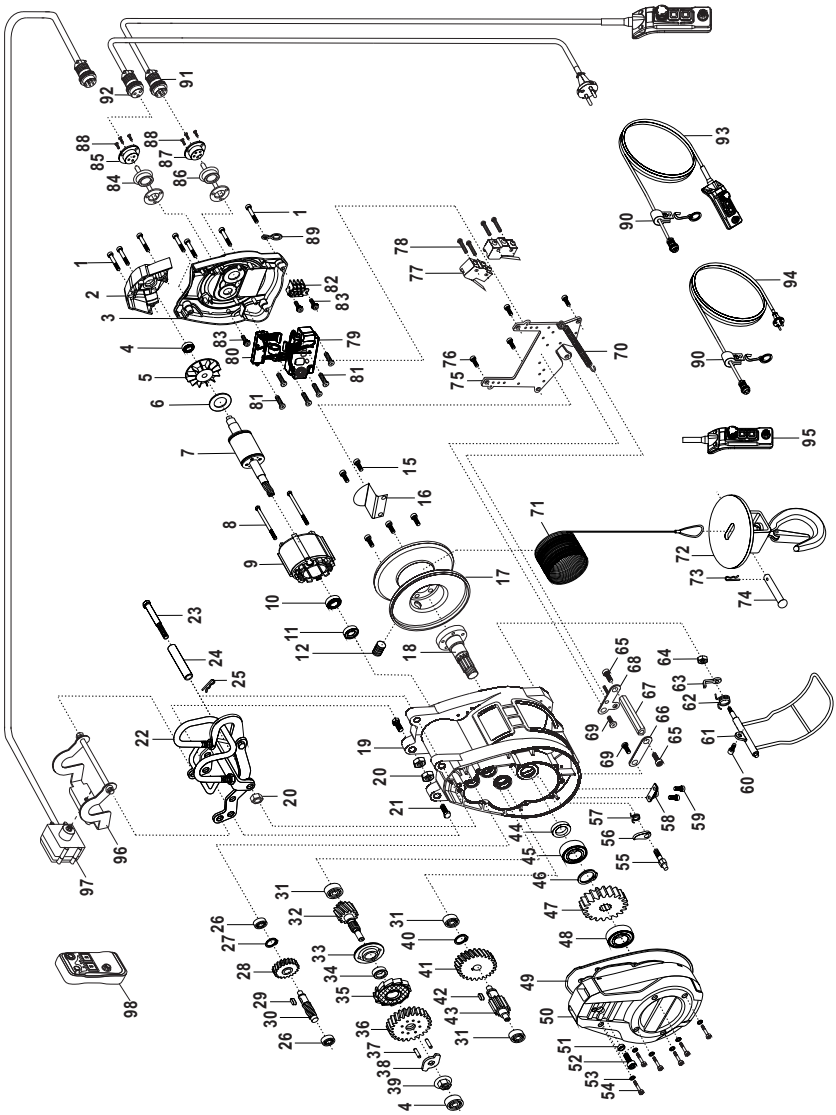
Before performing any trouble shooting on the electric chain hoist, de-energize the supply of electricity as hazardous voltages are present in the electric chain hoist and in connections between components.

Symptom	Possible Cause	Remedy
No Power / No Operation	Motor damaged due to overload	Replace the motor
	Open circuit in power lead or pendant control cable	Inspect the power lead or control cord
	Faulty motor or control unit	Inspect the motor or control unit (CPU)
	Motor damaged due to overload	Replace the motor
	Power plug or control cable disconnected	Inspect and repair as required
Lifts but does not lower	Disconnection of the down-limit switch spring plate	Adjust or re-stall the limit switch
	Burnt limit switch	Replace the limit switch
	Switch contact malfunction	Replace the contact switch
Lifts but does not lower	Malfunction of the down switch contact	Replace switch
	Malfunction of the up switch contact	Replace switch
	Burnt Up switch	Replace switch
Short circuit	Melted pendant control contact	Replace the pendant control switch
	Burnt motor	Replace motor
Fails to lift rated load	Overload	Reduce load
	Burnt rotor winding components	Replace the rotor or motor assembly
	Short circuit in the rotor commutator or burnt rotor windings	Replace the rotor commutator
Fail to hold load after stopping	Excessive clearance between the ratchet brake and brake hub	Replace the ratchet brake assembly
	Oil is contaminated or contains debris	Replace oil
Abnormal sound in gear box	Insufficient oil level	Replace the oil seal and refill with the correct type and quantity of oil
	Gearbox distortion	Repair or replace gear box

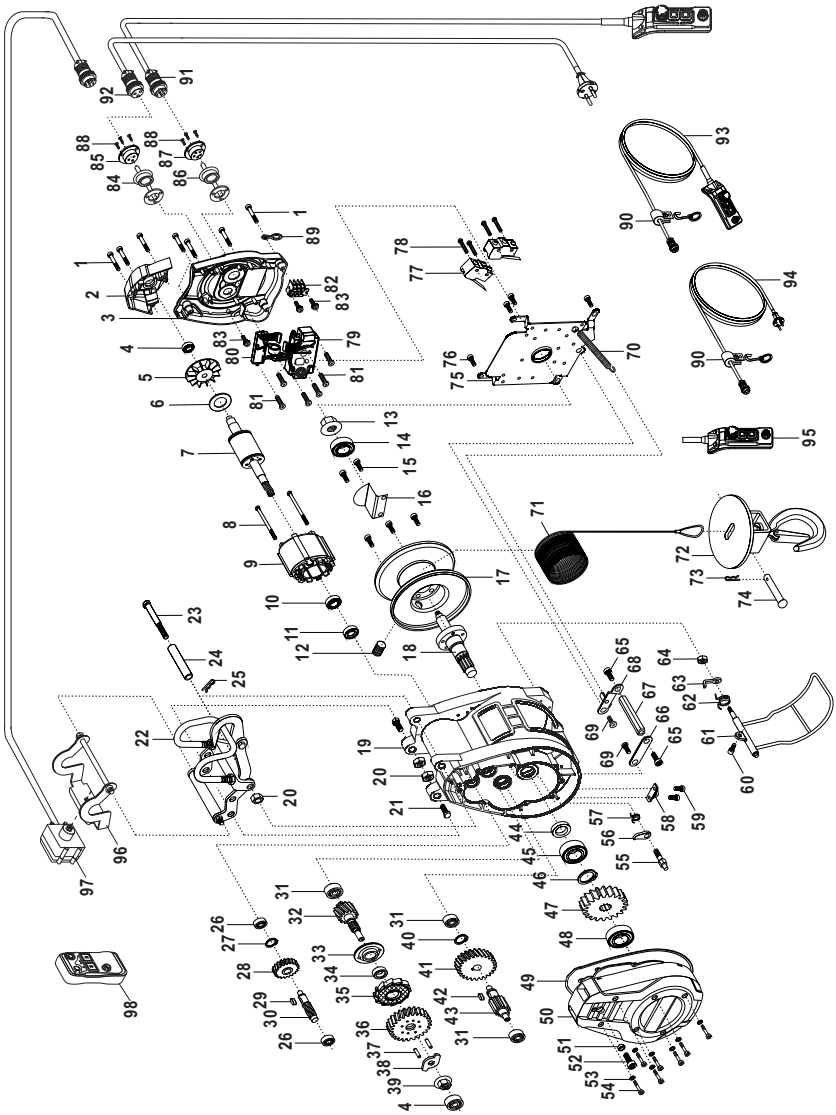
7. Wiring Diagram



8. Parts Drawing - HBWH260



9. Parts Drawing - HBWH500



10. Parts List - HBWH260, HBWH500

***NOTE:** * Parts listed in **BOLD** are common to both the HBWH260 and HBWH500 models. All other parts may use the same part number reference but differ between models. When ordering spare parts, always specify the hoist model (HBWH260 or HBWH500) to ensure the correct replacement part is supplied.*

***NOTE:** Parts 31–39 (Gear Set) are supplied as a complete assembly and are available as one part only when ordering. Individual components within the gear set are not supplied separately.*

No.	Part Name
1	Socket Head Cap Screw
2	Motor Cover
3	Controller Cover
***4**	***Ball Bearing**
5	Fan
6	Wind Guide Ring
7	Rotor
8	Socket Head Cap Screw
9	Stator
***10**	***Ball Bearing**
11	Oil Seal
12	Threaded Stud
13	Lock Nut
***14**	***Ball Bearing**
15	Socket Head Cap Screw
16	Drum Side Cover
17	Drum
18	Output Shaft
19	Housing
20	Hex Nut
21	Hex Screw
22	Upper Hook Set
23	Hex Bolt
24	Bushing
25	R Pin
***26**	***Ball Bearing**
27	Retaining ring
28	1st Gear
29	Key
30	1st Pinion
31	Ball Bearing
32	2nd Pinion
33	Brake Hub

No.	Part Name
34	Brass Bushing
35	Ratchet Brake Assembly
36	2nd Gear
37	Elastic Pin
38	Brake Adjusting Plate
39	Lock Nut
40	Retaining ring
41	3rd Gear
42	Key
43	3rd Pinion
44	Oil Seal
45	Ball Bearing
46	Retaining ring
47	Load Gear
48	Ball Bearing
49	Gasket
50	Gear Cover
51	O-Ring
52	Socket Head Cap Screw
53	Elastic Washer
54	Socket Head Cap Screw
55	Pawl Pin
56	Pawl
57	Pawl Spring
58	Upper Limit Holder
59	Socket Head Cap Screw
60	Socket Head Cap Screw
61	Upper Limit Lever
62	Spring
63	Lock Washer
64	Hex Nut
65	Socket Head Cap Screw
66	Limit Lever Supporter A

No.	Part Name
67	Reverse Limit Lever
68	Limit Lever Supporter B
69	Screw
70	Spring
71	Wire Rope
***72**	***Lower Hook set**
73	R Pin
***74**	***Wire Rope Load Pin**
75	Panel Plate
76	Socket Head Cap Screw
77	Limit Switch
78	Screw
79	Motor Controller
***80**	***Operating Controller**
81	Screw
82	Terminal Block
83	Screw
84	Power Socket Cap
85	Power Socket
86	Control Socket Cap
87	Pendant Control Socket
88	Screw
89	Cable Support
90	Cable Hanger
***91**	***Pendant Control Connector**
***92**	***Power Connector**
***93**	***Pendant Control set**
***94**	***Power Cable set**
***95**	***Pendant Control**
96	Wireless Receiver Bracket
97	Wireless Receiver
98	Wireless Transmitter

Product Warranty

IMPORTANT INFORMATION

1 Year Limited Warranty

HAFCO offers a one year limited warranty on this product.

HAFCO warrants to the original retail consumer and purchaser that this product will be free from defects in materials and workmanship for one year from the date the product was purchased ('the warranty period').

HAFCO will rectify any defect in materials or workmanship appearing within the warranty period by repairing or replacing the product. HAFCO will offer a refund of the purchase price if the product cannot be readily and quickly repaired or replaced. HAFCO reserves the right to determine whether the product contains any defects in materials or workmanship covered by this warranty.

The benefits offered by this warranty are in addition to your rights and remedies that may apply in law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonable foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

How to make a warranty claim

To make a claim under this warranty, the product or part must be returned for examination to an authorised service centre nominated by Hare and Forbes Machineryhouse together with proof of purchase such as the dated sales receipt and an explanation of the problem to be rectified.

Any costs incurred in making a claim under this warranty or returning the product to an authorised service centre is to be borne by the person making the claim unless other wise agreed by Hare and Forbes Machineryhouse. If Hare and Forbes Machineryhouse determines the product contains a defect in materials or workmanship that is covered by this warranty then Hare and Forbes Machineryhouse will bear the cost of returning the repaired product or replacement product to the person making the claim. If We determines the product does not contain a defect in materials or workmanship covered by this warranty then the cost of returning the product will be at the expense of the person making the claim.

Exclusions

This warranty does not apply to any defect caused by, or associated with misuse, abuse, lack of maintenance, negligence or accidents, repairs or alterations.

Date introduced into service: ..... Serial Number: .....

DATE	COMMENT	SIGNATURE

DATE	COMMENT	SIGNATURE

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.

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