

# CLARKE® STRONG-ARM



## ELECTRIC HOIST

MODEL NO: CH2500B, CH4000B

PART NO: 7630386, 7630391

## OPERATION & MAINTENANCE INSTRUCTIONS



LS1010

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## INTRODUCTION

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Thank you for purchasing this CLARKE Electric Hoist.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

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## GUARANTEE

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This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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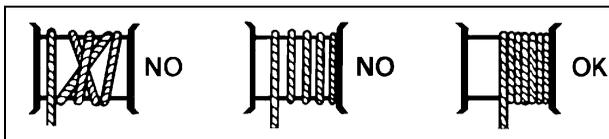
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## GENERAL SAFETY RULES

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

1. This hoist is designed to be used by an able bodied, competent adult who has read and understood these instructions.
2. This hoist is designed for indoor, non-industrial use.
3. Keep children, animals and bystanders away from the work area.
4. Never use this hoist if you are ill, feeling tired, or under the influence of alcohol or drugs.
5. Before use, always inspect the machine and its mountings to ensure they are in good condition. If any damaged or broken parts are found, the hoist should be removed from service and the parts renewed or repaired before further use.

6. Before operating it is important to ensure that the steel cable is correctly wound around the drum



7. Wear practical, protective clothing, gloves, footwear and a protective hard hat. Avoid loose garments and jewellery that could catch in moving parts, tie back long hair
8. Protect the machine from extreme weather conditions, i.e. frost and/or high temperatures.
9. The machine is equipped with a thermal cut-out. If the load exceeds the capacity of the machine this will cause the motor to overheat and the thermal cutout to activate, Let the hoist cool down before using it again.
10. Make sure the load is balanced, stable and that personnel stand clear of the raised load.
11. Contact your CLARKE dealer or the CLARKE Interational Service Department for any spare parts relating to this product.
12. Ensure that the switches are kept in good condition.
13. Use this hoist for vertical lifts only. The hoist must only be fixed to a horizontal beam/box section able to take the combined weight of the load and the hoist.

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# ELECTRICAL CONNECTIONS

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Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.



**WARNING: THIS APPLIANCE MUST BE EARTHED**

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**IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:**

Green & Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

As the colours of the flexible lead of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

- Connect GREEN & YELLOW cord to terminal marked with a letter "E" or Earth symbol "  " or coloured GREEN or GREEN & YELLOW.
- Connect BROWN cord to terminal marked with a letter "L" or coloured RED.
- Connect BLUE cord to terminal marked with a letter "N" or coloured BLACK.

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-rewireable) please note:

1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. When replacing a detachable fuse carrier, ensure the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.

## FUSE RATING

The fuse in the plug must be replaced with one of the same rating (13 amps) and this replacement must be ASTA approved to BS1362.

We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)

If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself.

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## UNPACKING AND ASSEMBLY

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Unpack your hoist and make sure that the following items are present. Should there be any damage caused during transit contact your Clarke dealer immediately.

- 1 x Hoist Assembly
- 1 x Hook / Pulley Assembly
- 2 x Mounting Brackets
- 1 x Fixings pack
- 1 x Instruction manual (this book)

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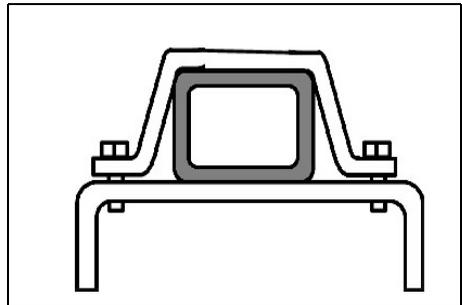
## INSTALLATION

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The hoist is provided with specially designed brackets allowing it to be attached to box sections or rectangular beams.

Beam dimensions must be carefully calculated and all mountings must be of adequate size and capable of sustaining the maximum load of the hoist, plus the weight of the hoist and mountings.

If there is any uncertainty. You should consult a qualified engineer.



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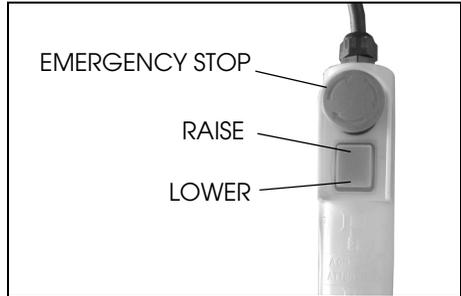
# OPERATION

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## HOIST CONTROL

### UP/DOWN BUTTONS

1. Press the Raise button to raise the hoist or the Lower button to lower the hoist as shown on the right.
2. To stop motion release the button.



**CAUTION: MAKE SURE THE HOIST STOPS COMPLETELY BEFORE REVERSING DIRECTION.**

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### EMERGENCY STOP BUTTON

Press the emergency stop button to stop the hoist in an emergency.

The emergency stop button can be reset by turning it clockwise until it 'pops' out.

## USING YOUR HOIST



**WARNING: ENSURE THAT LIFTING OPERATIONS ARE PLANNED, SUPERVISED AND CARRIED OUT IN A SAFE MANNER BY PEOPLE WHO ARE COMPETENT.**

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Before use, check to ensure the emergency stop switch and the raise/lower buttons are in good condition.

1. Play out the cable.
  - Keep the cable under tension so that the coils on the drum remain neatly in place.
2. Attach the hook to the load, the hook should be placed -
  - Directly above the centre of gravity of the load, and in line with the winch.
  - Ensure that nothing prevents a clean lift.

- When lowering a load, the load will not stop immediately when the lower button is released. It may continue for a few more millimeters whilst the brake takes effect.

### HOIST CAPACITY

When the hoist is used in its basic configuration as shown on the right, the rated lifting capacity is 125 Kg (200 Kg for the CH4000B)

It is possible to double the capacity to 250 Kg (400 Kg for the CH4000B). To do this:

1. Loop the cable around the pulley supplied.
2. Attach the hook to the hoist casing as shown.



## MAINTENANCE

- Fully unwind the cable and check its general condition, for fraying, corrosion etc.
- Check the security and condition of the mountings and brackets.
- Check the tightness of all bolts and screws.

**NOTE:** When in constant use, the hoist should be inspected more frequently - at least monthly.

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
When operating the switch the motor does not run.	The cable or extension is not plugged in correctly	Plug in the power cable correctly
	The thermal cut out has activated	Allow the hoist to cool down
	Power failure	Check plug fuse
Motor hums but will not hoist	The motor has overheated	Allow it to cool down
	The load exceeds the hoist capacity	Reduce the load
	Brake has become stuck during storage.	Press hoist button quickly a few times to free brake
Brake does not operate, and load slips	Brake is worn out	Renew brake, Discontinue use and contact your CLARKE dealer for advice
Cable twisted frayed or kinked	Incorrectly wound on drum.	Replace cable.
	Cable stored unwound or in poor conditions.	Replace cable.

If this does not solve your problem, please contact the Clarke service department. See below

## PARTS AND SERVICING

For Parts & Servicing, please contact your nearest dealer, or CLARKE International, on one of the following numbers.

**PARTS & SERVICE TEL: 020 8988 7400**  
**PARTS & SERVICE FAX: 020 8558 3622**  
**or e-mail as follows:**  
**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**  
**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

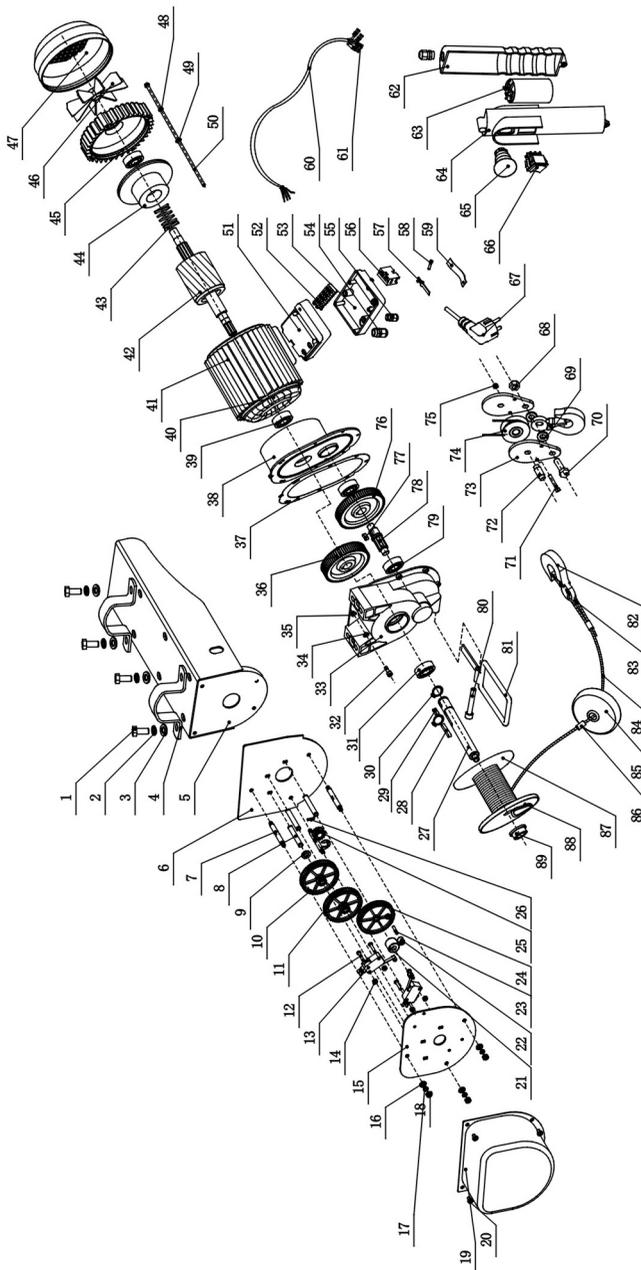
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## SPECIFICATIONS

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	<b>CH2500</b>	<b>CH4000</b>
Load Capacity (Single Cable)	125 kg	200 kg
Lifting Speed (Single Cable)	10 m/min	10 m/min
Lifting Height (Single Cable)	12 m	12 m
Load Capacity (Double Cable)	250 kg	400 kg
Lifting Speed (Double Cable)	5 m/min	5 m/min
Lifting Height (Double Cable)	6 m	6 m
Cable Length	12 m	12 m
Cable Diameter	3 mm	3.8 mm
Duty Cycle	S3 20% - 10min	S3 20% - 10min
Electrical Supply	230V @ 50Hz	230V @ 50Hz
Power Rating	540 W	950 W
Part Number	7630386	7630391

# EXPLODED DIAGRAM & PARTS LIST



# EXPLODED DIAGRAM & PARTS LIST

No	Description
1	Hexagon Bolt
2	Spring Washer
3	Flat Washer
4	Fixing Ring
5	Support Frame
6	Support Panel
7	Locating Shaft
8	Gear Shaft
9	Flat Washer
10	Gear (A)
11	Gear (B)
12	X-Head Bolt
13	Switch
14	Paper Washer
15	Limit Switch Plate
16	Flat Washer
17	Spring Washer
18	Nut
19	Cover
20	X-Head Bolt
21	Washer (1)
22	Washer (2)
23	Limit Pin
24	Driven Gear
25	Primary Gear
26	Pound Pin
27	Drum Shaft
28	Flat Key
29	Flat Key
30	Elastic Collar
31	Bearing
32	Screw

No	Description
33	Gear Case
34	Spring Washer
35	Flat Washer
36	2nd Gear Wheel
37	Cushion Board
38	Front Cover
39	Bearing
40	Stator
41	Stator Shell
42	Rotor
43	Tripping Spring
44	Brake Disc
45	After Closure
46	Fan Blade
47	Fan Cover
48	Spring Washer
49	Flat Washer
50	Hexagon Bolt
51	Junction Box
52	Terminal
53	Cover
54	Holding Fixture
55	Holding Fixture
56	Safety Switch
57	Breaker Contactor
58	Locating Pin
59	Spring Tab
60	Cable
61	Socket
62	Holding Fixture
63	Handle Switch-Down
64	Condenser

No	Description
65	Handle Switch -Up
66	Rise & Fall Switch
67	3-Prong Plug
68	Hook Locknut
69	Hook Washer
70	Hexagon Bolt
71	Hexagon Bolt
72	Pulley
73	Splint
74	Pulley
75	Locknut
76	1st Gearwheel
77	Flat Key
78	Gear Shaft
79	Bearing
80	Screw
81	Limiter
82	Hook
83	Rope Thimble
84	Wire Rope
85	Block
86	Aluminium Tube
87	Rope Drum
88	Wedge
89	Bushing

When ordering any spare parts, please specify either RKCH2500 or RKCH4000 as required.

# DECLARATION OF CONFORMITY



**Clarke**<sup>®</sup>  
**INTERNATIONAL**

Hemndill Street, Epping, Essex CM16 4LG

## DECLARATION OF CONFORMITY

**This is an important document and should be retained.**

**We hereby declare that this product(s) complies with the following directive(s):**

2004/108/EC      *Electromagnetic Compatibility Directive.*  
2006/42/EC      *Machinery Directive.*  
2006/95/EC      *Low Voltage Equipment Directive.*  
2002/95/EC      *Restriction of Hazardous substances.*

**The following standards have been applied to the product(s):**

*EN 55014-1:2006, EN 55014-2:1997+A1+A2, EN 61000-3-2:2006, EN 61000-3-3:2008, EN 60204-32:1998, EN 14492-2:2006+A1.*

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2009

**Product Description:**            125/250 kg - 200/400 kg    Electric Hoists  
**Model number(s):**            CH2500B - CH4000B  
**Serial / batch Number:**        n/a  
**Date of Issue:**                24/09/2010

**Signed:**

**J.A. Clarke**  
**Director**

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## NOTES

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## NOTES

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# A SELECTION FROM THE VAST RANGE OF

# Clarke®

## QUALITY PRODUCTS

### AIR COMPRESSORS

From DIY to industrial, Plus air tools, spray guns and accessories.

### GENERATORS

Prime duty or emergency standby for business, home and leisure.

### POWER WASHERS

Hot and cold, electric and engine driven - we have what you need

### WELDERS

Mig, Arc, Tig and Spot. From DIY to auto/industrial.

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Drills, grinders and saws for DIY and professional use.

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Cranes, body repair kits, transmission jacks for all types of workshop use.

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Submersible, electric and engine driven for DIY, agriculture and industry.

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Angle grinders, cordless drill sets, saws and sanders.

### STARTERS/CHARGERS

All sizes for car and commercial use.



**PARTS & SERVICE: 0208 988 7400**

**E-mail: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com) or [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

**SALES: UK 01992 565333 or Export 00 44 (0)1992 565335**

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