

# CLARKE® STRONG-ARM



## ELECTRIC HOIST

MODEL NO: CH2500B, CH4000B

PART NO: 7630386, 7630391

## OPERATION & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

LS0517 - Iss 5

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# INTRODUCTION

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Thank you for selecting this Clarke Electric Hoist.

The electric hoist is designed for lifting and lowering loads suspended on hooks over predetermined distances.

Read this manual before use. The warnings and cautions in this manual help you operate the Electric Hoist safely.

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# IMPORTANT

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**Read all instructions carefully before you use this electric hoist. Pay attention to all sections of this User Guide that display warning symbols and notices.**



**WARNING: THIS SYMBOL IS USED THROUGHOUT THE USER GUIDE WHEN THERE IS A RISK OF PERSONAL INJURY. MAKE SURE THAT THESE WARNINGS ARE READ AND UNDERSTOOD AT ALL TIMES.**



**CAUTION: THIS SYMBOL IS USED THROUGHOUT THE USER GUIDE WHEN THERE IS A RISK OF DAMAGING YOUR ELECTRIC HOIST. MAKE SURE THAT THESE CAUTIONS ARE READ AND UNDERSTOOD AT ALL TIMES.**

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# GUARANTEE

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The pump is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Your receipt is required as proof of purchase.

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

Faulty goods must be returned to their place of purchase, it must not be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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## ENVIRONMENTAL PROTECTION

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Through purchase of this hoist, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

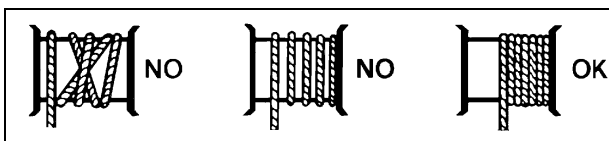
In effect, this means that this hoist must not be discarded with general waste. Refer to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

## GENERAL SAFETY RULES

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

1. This hoist must only be used by a competent person who understands these instructions.
2. This hoist is for indoor, non-industrial use.
3. Keep children, animals and bystanders away from the work area.
4. Do not use this hoist if you are ill, tired, or under the influence of alcohol or drugs.
5. Before use, always examine the machine and its mountings to make sure that they are in good condition. If you find any damaged or broken parts, remove the hoist from service and renew or repair the part before further use.

6. Before use, it is important to make sure that the steel cable is correctly wound around the drum



7. Wear protective clothing, gloves, footwear and hard hat.
8. Do not wear loose clothing, jewellery and tie back long hair.
9. Protect the machine from frost and high temperatures.
10. If the capacity of the hoist is exceeded, the cutout will operate, Let the hoist cool down before using it again.
11. Make sure that the load is balanced, stable and that personnel stay clear of the raised load.
12. Speak to the Clarke service department for any spare parts relating to the hoist.
13. Make sure that the switches are in good condition.
14. Use this hoist for vertical lifts only.
15. Attach the hoist to a horizontal beam/box section that can hold the weight of the load and the hoist.

# ELECTRICAL CONNECTIONS



**WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS FULLY BEFORE CONNECTING THE HOIST TO THE MAINS SUPPLY.**

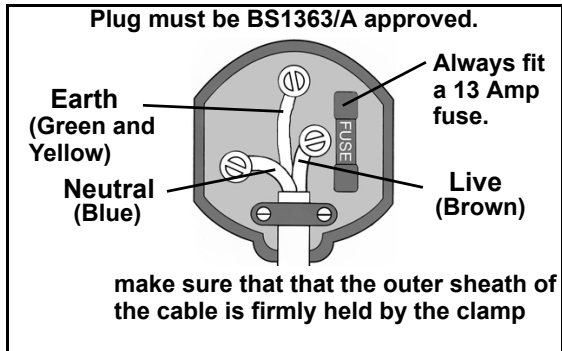
This hoist is provided with a standard 13 amp, 230 volt (50Hz), BS 1363 plug, for connection to a standard, domestic electrical supply. Should the plug need changing, make sure that a plug of identical specification is used.



**WARNING: THE WIRES IN THE CABLE ARE COLOURED AS FOLLOWS:  
BLUE = NEUTRAL    BROWN = LIVE    YELLOW AND GREEN = EARTH**

If the colours of the wires in the power cable do not correspond with the markings on the terminals of your plug, proceed as follows.

- Connect the **blue** wire to the terminal which is marked **N**.
- Connect the **brown** wire to the terminal which is marked **L**.
- Connect the **yellow and green** wire to the terminal which is marked **E** or  $\perp$ .



**AN APPROVED RESIDUAL CURRENT DEVICE (RCD) WHICH HAS A TRIPPING CURRENT OF LESS THAN 30MA MUST BE USED.**

If you are not sure, consult a qualified electrician. DO NOT try to do any repairs.

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## UNPACKING

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Unpack the box and make sure that the items in the list below are included.

- 1 x Hoist
- 1 x Hook / Pulley
- 2 x Bracket
- 1 x bag of fixings
- 1 x Instruction manual

If a part is damaged, speak to your Clarke supplier immediately.

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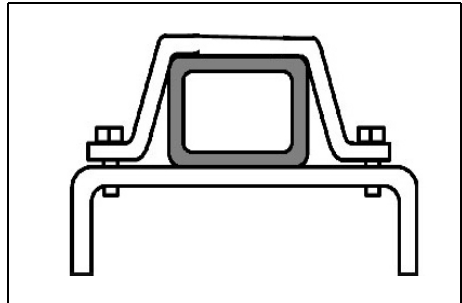
## INSTALLATION

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To attach the hoist to box section, use the brackets supplied.

The box section must be able to hold the maximum load plus the weight of the hoist and brackets.

If you are not sure, you must consult an approved engineer.



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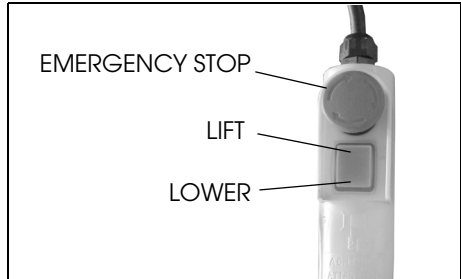
# OPERATION

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## HOIST CONTROL

### LIFT/LOWER BUTTON

1. Push the Lift button to lift the load.
2. Push the Lower button to lower the load.
3. To stop the hoist release the button.



**NOTE:** The load will not stop immediately when you release the lower button. It can continue for a 3-4 mm before the brake takes effect.



**CAUTION:** MAKE SURE THE HOIST HAS STOPPED BEFORE MOVING IN THE OPPOSITE DIRECTION.

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### EMERGENCY STOP

Push the emergency stop to stop the hoist in an emergency.

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

## TO USE YOUR HOIST



**WARNING: LIFTING OPERATIONS MUST BE PLANNED, SUPERVISED AND CARRIED OUT SAFELY BY COMPETENT PERSONNEL.**

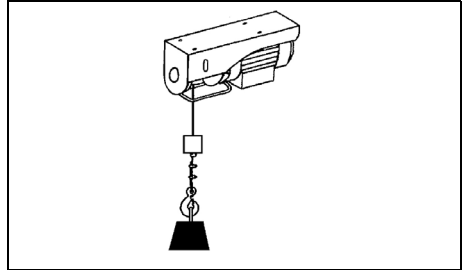
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Before use, make sure that the emergency stop and the lift/lower buttons are in good condition.

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

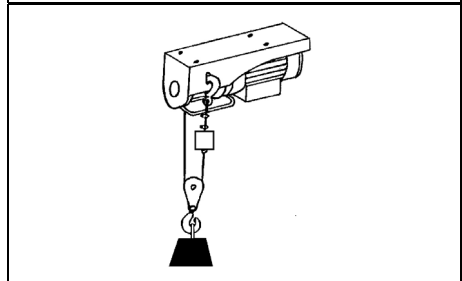
## HOIST CAPACITY

In the basic setup (shown on the right) the lifting capacity is 125 kg, (200 kg for the CH4000B)



It is possible to increase 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 as shown.



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## MAINTENANCE

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- Unwind and examine the condition of the cable, for fraying, corrosion etc.
- Check the condition of all brackets, bolts and screws.

**NOTE:** When in constant operation, the hoist must be inspected more frequently.



## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
When you press the buttons the motor does not operate.	The power cable is not plugged in correctly	Insert the power cable correctly
	The cut out has operated	Let the hoist cool down
	Power failure	Check plug fuse
Motor hums but does not lift	The motor is too hot	Let it cool down
	The load is more than the capacity of the hoist	Decrease the load
	Brake has become stuck during storage.	Do not use the hoist and speak to your Clarke dealer for advice
Brake does not operate, and load slips	Brake is worn out	Do not use the hoist and speak to your Clarke dealer for advice
The cable is twisted frayed or kinked	Incorrectly wound on drum.	Replace the cable.
	The cable has been stored unwound or in bad conditions.	Replace the cable.

If this does not solve your problem, please speak to 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)**

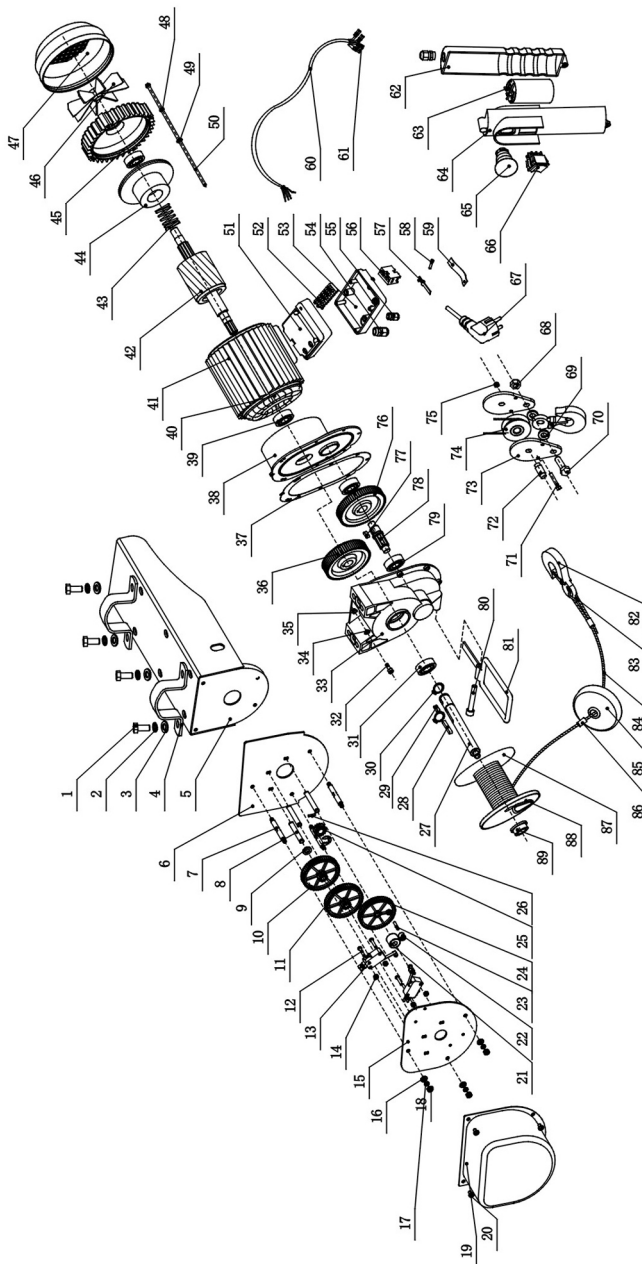
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## SPECIFICATIONS

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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.

### METALWORKING

Drills, grinders and saws for DIY and professional use.

### WOODWORKING

Saws, sanders, lathes, mortisers and dust extraction.

### HYDRAULICS

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

### WATER PUMPS

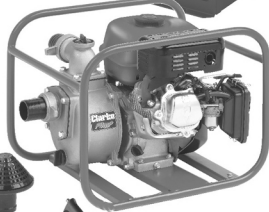
Submersible, electric and engine driven for DIY, agriculture and industry.

### POWERTOOLS

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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