

Clarke®



PROFESSIONAL CORDLESS IMPACT SCREWDRIVER

Model CIS100

Part No 4500625

OPERATING & MAINTENANCE INSTRUCTIONS



GC0309

INTRODUCTION

Thank you for purchasing this CLARKE Impact Screwdriver.

Before attempting to operate the machine, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the product giving you long and satisfactory service.

GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt 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.

ENVIRONMENTAL PROTECTION



Do not dispose of this product with general household waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of according to the laws governing Waste Electrical and Electronic Equipment.

BATTERIES - DISPOSAL

Dispose of old batteries in accordance with local regulations. Do not incinerate or crush, as this will increase the risk of explosion and contamination. If the battery contents come into contact with skin or the eyes, rinse with clean water for several minutes and seek medical advice immediately afterwards.

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COMPONENT INVENTORY

The CIS100 is a professional, rechargeable cordless impact screwdriver.

Upon receipt, unpack and lay out the components, checking against the following list. Any damage or deficiency should be reported to your CLARKE dealer immediately.

1. 12V Impact screwdriver with 1.7a/h battery pack
2. Battery-charging unit
3. Moulded Tool-case
4. 2 x Double-ended phillips no2 screwdriver bits, 1/4" (6.35mm)
5. Operators manual (this document)

SAFETY PRECAUTIONS

WORK ENVIRONMENT

1. Keep the work area clean and tidy.
2. Dress appropriately - do not wear loose clothing or jewellery. Tie long hair out of the way.
3. Keep children and visitors away - do not let children handle the screwdriver.
4. DO NOT use in damp or wet conditions. Keep the work area well lit. Do not use where a risk of fire or explosion is present.
5. Although the impact screwdriver may be used outdoors, DO NOT leave it exposed to the elements. Avoid direct sunlight, direct heat, rain/moisture etc.
6. Always keep body and clothing dry. Never work in damp area without adequate insulation against electric shock.
7. Do not fit the screwdriver to any stand or clamping device that may damage it.

GENERAL USE

1. This product vibrates during use. Vibration may be harmful to your hands or arms. Stop using the machine if discomfort, a tingling feeling or pain occurs and seek medical advice before resuming use.
2. ALWAYS use ear defenders.
3. ALWAYS stay alert and use common sense - do not use this product when you are tired or under the influence of alcohol or medication.
4. ALWAYS ensure the workpiece is firmly secured leaving both hands free to control the impact screwdriver.
5. ALWAYS wear eye protection when using this product - eye protection must provide protection from the front and the side.
6. ALWAYS ensure the machine has stopped before putting it down after use.
7. ALWAYS set the forward/reverse switch-bar to neutral when changing bits or when the machine is not required for immediate use.
8. ALWAYS ensure that any bits are correctly installed before switching on.
9. ALWAYS store this product in a dry, secure place out of reach of children.
10. ALWAYS keep all equipment dry especially the battery & battery charger.
11. ALWAYS check for any damage or any condition that could affect its operation. Any damaged part should be properly repaired.
12. NEVER carry out any alterations or modifications to this product.

13. NEVER force or misuse the machine It will do a better and safer job at the rate for which it was designed.
14. NEVER over-reach. Keep proper footing and balance at all times.
15. NEVER use this product for any other purpose than that described in this booklet.
16. NEVER use this product if it is defective / operating abnormally.
17. NEVER abuse the mains cable of the battery charger. Never yank the cable to disconnect it from the socket. Keep the cable away from sharp edges/hot surfaces.
18. NEVER attempt to wipe the machine clean with solvents. Wipe plastic parts with a soft cloth, slightly dampened with soapy water.
19. NEVER attempt any repairs yourself. If you have a problem with this product contact your local CLARKE dealer.

SAFETY SYMBOLS

The full technical specification of the battery charger is printed on a label on the charger. The meanings of the markings and symbols are shown below.



Class II appliance which does not need an earth connection



For indoor use only



Read the manual before operating this machine



Falls under the Waste Electrical & Electronic Equipment directive (WEEE)



European Certificate of Conformance

ELECTRICAL CONNECTIONS

This battery charger is provided with a 13 amp, 230 volt (50Hz), BS 1363 plug, for connection to a standard, domestic electrical supply. Should the plug need changing at any time, ensure that a plug of identical specification is used.



This appliance is of double insulated design

No earth conductor is provided. The two wires in the mains lead should be wired up in accordance with the following colour code:

Blue	—	Neutral
Brown	—	Live

Connect the BROWN coloured cord to the plug terminal marked a letter "L"
Connect the BLUE coloured cord to the plug terminal marked a letter "N"

If this appliance is fitted with a plug which is moulded on to 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. Should you wish to replace the fuse cover, ensure that the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local Clarke dealer or most electrical stockists.

FUSE RATING

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

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

CABLE EXTENSION

Do not use an extension longer than 10 metres and one where the conductors, are less than 1.5mm².

If used outdoors, ensure the extension cable is designed for outdoor use.

COMPONENT IDENTIFICATION

1. Bit Holder (chuck)
2. Battery Release Button
3. Forward/Reverse Switch-bar
4. Battery Pack
5. Trigger
6. Wrist Strap



BATTERY CHARGING

1. The new battery pack will require charging before use.
2. Squeeze the battery release buttons on either side of the battery pack and pull gently down to disengage the battery pack from the machine body as in Fig 1.
3. Insert the battery pack into the battery charger, as shown in Fig 2, noting that it will only fit one way.
4. Plug the charger into a 230v (mains) power supply and switch ON.
 - The green POWER ON light will illuminate with the RED charging light flashing and charging will begin.
 - If charging does not take place, ensure all connections are clean and free of grease etc.

FIG 1



- If the red charging light will not stay on for more than a few moments, the battery pack is likely to be defective and it must be replaced with a new one.
- When the RED charging light goes out after about 1/2 hour, and the GREEN light remains on, the battery pack can be considered charged and be removed. The charging time will be dependant upon the initial state of the batteries.
- When charging a new battery pack, it may not initially accept full charge. This is common & does not indicate a fault. It can be recharged fully after it has been discharged a couple of times.



FIG 2

4. After charging, switch off and unplug the charger from the power supply.
5. Remove the battery pack from the charger and slide it back into the machine until it clips into place. The battery pack should slide in easily.
6. For maximum battery life, we recommend that you maintain the battery in a fully charged state at all times.

If the battery pack is not to be fitted immediately, ensure that the metal contacts are protected so as to avoid the possibility of a short circuit which would cause damage.

Remember to avoid extremes of heat or cold when charging. Avoid temperatures outside the range of **Minimum 4°C /Maximum 40°C**. Avoid placing batteries in direct strong sunlight or any other heat source.

NOTE:

Ni-Cad batteries should be given a full charge when first supplied new. Maximum battery performance will be achieved after approximately 5 complete charge/discharge cycles.

The battery should be fully discharged before recharging in order to achieve its optimum performance. Constant topping up after only a small amount of charge has been used will, in effect, reduce its capacity.

Nickel cadmium batteries will slowly lose their power whilst in storage. If they become fully discharged, do not leave the batteries in this state for any length of time.

INSTALLING & REMOVING THE BIT

1. Pull the sleeve away from the machine body and insert the bit into the sleeve as far as it will go. Release the sleeve to secure the bit in place as shown in Fig 3.
 2. To remove the bit, pull the sleeve and draw the bit out.
- If the bit is not inserted deep enough into the sleeve, the sleeve will not spring back and the bit will not be secured.



FIG 3

OPERATION

1. Squeeze the trigger to start the machine.
 2. Increase the speed of the machine by increasing pressure on the trigger.
 3. Release the trigger to stop.
 4. To run the impact screwdriver in reverse, push the switch bar through the drive unit as shown in Fig 4. The direction of rotation is shown on the end face of the bar.
- The 3-position switch bar controls forward or reverse direction of rotation. Select the appropriate setting **ONLY** when the chuck is **STATIONARY**. Do not move the switch-bar when the chuck is moving. When the switch-bar is in the central position the trigger is locked.
5. Always check the direction of rotation before operation.
 6. Hold the machine firmly and place the point of the screwdriver bit in the screw head. Apply sufficient pressure that the bit will not slip off the screw and start the machine.



FIG 4

Note: Take care to use the correct bit for the head of screw that you wish to use. Take care to point the machine straight at the screw.

7. Before starting work, always perform a test operation to determine the appropriate tightening effort for the screw in whatever material is being used.

8. Turn off the machine as soon as the impact sound is heard, taking care not to damage the screw. Extra care is needed with small screws.

Note: As the battery becomes discharged, the power available will drop. Operating the machine at low speed will cause a reduction in torque.

9. After use, recharge the battery cartridge as shown on pages 7-8. Avoid leaving your batteries in a discharged state.

MAINTENANCE

Keep the unit clean by wiping with a dry cloth. DO NOT use solvents as a cleaning agent.

Keep the battery pack well charged at all times.

Check the battery charger power cable to ensure it is sound & free from cracks etc.

All bearings in this tool are lubricated with sufficient amount of high quality lubricant for the tool's lifetime under normal operating conditions, therefore no further lubrication is required.

Refer to your Clarke dealer if internal maintenance is required.

Your Clarke Impact Screwdriver has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems, take the unit to your local Clarke dealer.

SPARE PARTS & SERVICE CONTACTS

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

SERVICE: Service@clarkeinternational.com

TECHNICAL SPECIFICATION

Feature	Specification
Weight (including battery cartridge)	2.08 kg
Dimensions (l x w x h) mm	200 x 62 x 238
No-load speed (RPM)	0-2200
Max tightening torque	108 Nm
Impacts per minute	0-2900
Input voltage	230V/50Hz
Output voltage	DC-14V/2.5A
Battery type	Nickel-Cadmium
Battery pack capacity	1.7 ah
Sound power level (Lp)	74 dB(A)
Sound power level measured (Lw)	85 dB(A)
Sound power level guaranteed	<85 dB(A)

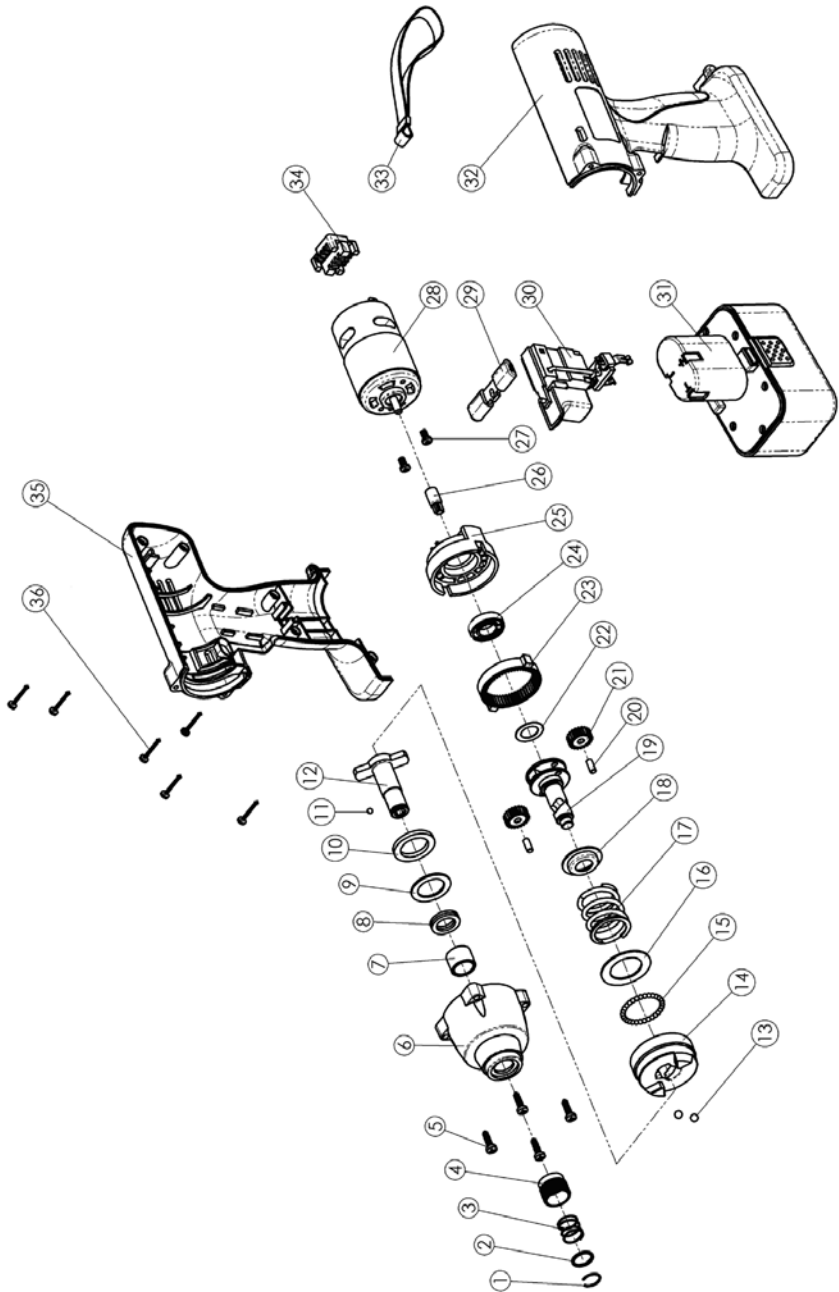
Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.

PARTS LIST

No	Description	Part No	Qty
1	Tie Ring	CZCIS10001	1
2	Seal	CZCIS10002	1
3	Spring	CZCIS10003	1
4	Locking Sleeve	CZCIS10004	1
5	Screw	CZCIS10005	4
6	Nose Housing	CZCIS10006	1
7	Forward Bush	CZCIS10007	1
8	Fibre Ring	CZCIS10008	1
9	Rubber Gasket	CZCIS10009	1
10	Gasket	CZCIS10010	1
11	Steel Ball	CZCIS10011	1
12	Anvil	CZCIS10012	1
13	Steel Ball	CZCIS10013	2
14	Gasket	CZCIS10014	1
15	Spring	CZCIS10015	1
16	Gasket	CZCIS10016	1
17	Spring	CZCIS10017	1
18	Gasket	CZCIS10018	1

No	Description	Part No	Qty
19	Spindle	CZCIS10019	1
20	Spiggot	CZCIS10020	2
21	Planetary Gear	CZCIS10021	2
22	Gasket	CZCIS10022	1
23	Planetary Bracket	CZCIS10023	1
24	Bearing	CZCIS10024	1
25	Gear Housing	CZCIS10025	1
26	Motor Gear	CZCIS10026	1
27	Screw	CZCIS10027	1
28	Motor	CZCIS10028	1
29	Switchbar	CZCIS10029	1
30	Switch	CZCIS10030	1
31	Battery Pack	CZCIS10031	1
32	Housing (LH)	CZCIS10032	1
33	Wristband	CZCIS10033	1
34	Vent	CZCIS10034	1
35	Housing (RH)	CZCIS10035	1
36	Screw	CZCIS10036	6
37	Battery Charger	CZCIS10037	1

PARTS DIAGRAM



DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hemncoll 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*
98/37/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):

BS EN 55014-1:2000+A1:2000+A2: 2002 , BS EN 55014-2:1997+A1:2001
BS EN 61000-3-3:1995+A1:2000, BS EN 61000-3-2:2000, BS EN 60745-2-2:2003
BS EN 60745-1:2003+A1:2003, BS EN 60335-2-29:2004, BS EN 50366:2003
+A1:2006, BS EN 60335-1:2002+ A11:2004+ A1:2005+A12:2006+A2:2007

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: 2005

Product Description: Impact Screw Driver (Cordless)
Model number(s): CIS100
Serial / Batch Number: N/A
Date of Issue: 11-03-09

Signed:


.....
J.A. Clarke
Managing Director

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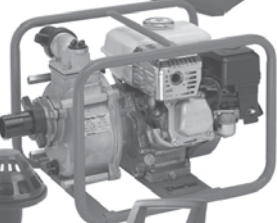
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