

# Clarke®



## 12V DC IMPACT WRENCH

MODEL NO: CIR13C

PART NO: 4500610

### OPERATING & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC0518 ISS 2

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## INTRODUCTION

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Thank you for purchasing this CLARKE Impact Wrench. The CIR13C must only be used with 12V vehicle systems

This product includes the following items:

- Impact Wrench c/w Cigarette Lighter Adapter
- Battery Clamp set c/w Cigarette Lighter Socket
- Impact Socket 17/19 mm
- Impact Socket 23/21 mm
- Spare Fuse - 12V 15 Amp, 1¼" x ¼" Glass - Automotive type

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## IMPORTANT

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**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 IMPACT WRENCH. MAKE SURE THAT THESE CAUTIONS ARE READ AND UNDERSTOOD AT ALL TIMES.**

**Please keep these instructions in a safe place for future reference.**

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# GENERAL POWER TOOL SAFETY WARNINGS

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**WARNING: READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS.  
FAILURE TO FOLLOW THE WARNINGS AND INSTRUCTIONS MAY RESULT IN  
ELECTRIC SHOCK, FIRE AND/OR SERIOUS INJURY.**

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Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your impact wrench

## WORK AREA SAFETY

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

## ELECTRICAL SAFETY

1. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
2. **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
5. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

## PERSONAL SAFETY

1. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Use personal protective equipment. Always wear eye and ear protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
3. **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
4. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
5. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
6. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
7. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
8. **Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring or its own cord.** Fasteners contacting a "Live" wire may make exposed metal parts of the power tool "Live" and could give the operator an electric shock.

## POWER TOOL USE AND CARE

1. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
2. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.

4. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
5. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
6. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

## SERVICE

1. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

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## IMPACT WRENCH SAFETY WARNINGS

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1. Only use sockets designed for use with an impact wrench. Standard sockets could shatter and cause injury.
2. ALWAYS avoid excessive use of the wrench. When tightening a nut or bolt, always avoid over tightening.

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## SAFETY SYMBOLS

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The meaning of the symbol on the product is shown below.



Wear eye protection when using this product

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## CONNECTING TO THE VEHICLE POWER SUPPLY

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Only use this wrench with 12 Volt vehicle systems.

### CONNECTING TO THE CIGARETTE LIGHTER SOCKET

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CAUTION: IF THE VEHICLE'S CIGARETTE LIGHTER FUSE IS LESS THAN 15 AMPS, YOU MUST CONNECT THE IMPACT WRENCH DIRECTLY TO THE BATTERY.

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1. Make sure that the ignition switch is in the off position.
2. Insert the plug into the cigarette lighter socket.
3. Turn the ignition on.

### CONNECTING DIRECTLY TO THE BATTERY

1. Ensure the connections at the battery are firm and that the battery posts are clean and free from corrosion.
2. Connect the clamp with the RED hand grips to the unearthed battery terminal first, (on most vehicles this is the positive terminal and coloured RED), then connect the clamp with the black hand grips to the chassis or engine, away from moving engine parts.

**NOTE:** If the battery clamps are connected in reverse, the wrench will operate in the reverse direction.

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## OPERATION

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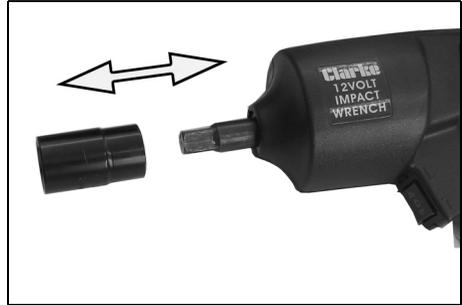


CAUTION: MAKE SURE THAT THE IMPACT WRENCH IS OFF AND DISCONNECTED FROM THE POWER SUPPLY BEFORE ATTACHING OR REMOVING A SOCKET. ALWAYS TAKE CARE TO USE THE CORRECT SIZE SOCKET FOR BOLTS AND NUTS. AN INCORRECT SOCKET WILL CAUSE DAMAGE TO THE BOLT OR NUT.

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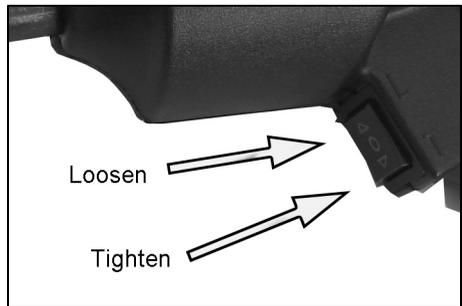
### FITTING A SOCKET

1. Align the chosen socket and simply push it onto the square drive.
  - Use only ½" square drive impact sockets supplied or as listed on page 8.
2. To remove a socket, pull it off of the square drive.



### LOOSENING A NUT

1. With the wrench connected to a power supply, place the socket over the nut or bolt head.
2. Use two hands to hold the wrench tightly and squeeze the direction switch in the LOOSEN (L) position.
  - The nut/bolt will be impacted again and again until it is loosened.
3. Release the switch when the nut starts to loosen.



### TIGHTENING A NUT

1. Start the nut or bolt by hand to make sure that it is not cross threaded, then with the applicable socket installed on the wrench, place it over the nut or bolt head.
2. Use two hands to hold the wrench tightly and squeeze the direction switch in the TIGHTEN (T) position.
3. ALWAYS finish tightening with a torque wrench or suitable spanner.

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# MAINTENANCE

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## STORAGE

1. Make sure that the impact wrench is stored in a clean, dry place, out of reach of children when not in use.

## CLEANING

1. Always examine the tool before use and make sure it is in good condition.
2. Make sure that all air vents are clear, (use compressed air to clean the impact wrench if possible).
3. Do not use solvents to clean plastic parts, most plastics are damaged by solvents.

## GENERAL MAINTENANCE

1. Make sure that all nuts, bolts and screws are tight.
2. Refer to your CLARKE dealer if internal maintenance is necessary.
3. Make sure that the power cable is free from cracks, bare wires etc.
4. If it is necessary to replace the power cable, this must be done by the manufacturer.
5. The bearings in this tool are lubricated for the tools lifetime in usual operating conditions, no more lubrication is necessary.

## 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.

Through the purchase of this product, 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 product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

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## ACCESSORIES

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A wide range of impact wrench accessories is available from your nearest Clarke dealer. For further information contact your nearest dealer.

Suitable impact wrench compatible socket sets include the following:

Part No	Model No	Description
3110437	CIS12/11	11 piece 1/2"square drive (metric)
1700582	PRO182	4 piece thin wall deep impact
1700584	PRO184	3 piece thin wall deep impact
1700616	PRO216	4 piece impact spline set
1800305	CIS9/32	32 piece 3/8" & 1/2"square drive (metric/AF)
1700727	CIS12/9S	9 piece impact spline socket bit set
1700726	CIS12/6SB	6 piece impact spline socket bit set
1800356	CIS12/6HB	6 piece 1/2"square drive hex key set (metric)
1800361	CIS12/7SB	7 piece 1/2"square drive TRX-Star
1800311	CIS12/17B	16 piece 1/2"square drive (metric/AF)
1700732	CIS12/3M	3 piece 1/2"square drive non-slip
3110875	CIS12/10	10 piece 1/2"square drive 6 point sockets
1700723	CISSB12/6S	6 piece impact spline socket bit set
1700722	CIS12/8S	8 piece impact spline socket bit set
3110437	CIS12/11	11 piece 1/2"square drive (metric)
1800340	CIS12/35	35 piece 1/2"square drive (metric/AF)

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## GUARANTEE

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The impact wrench 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 impact wrench 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

## SPECIFICATIONS

Weight	1.8 kg
Dimensions (L x W x H)	210 x 85 x 165 mm
Size of square drive spindle	1/2"
Max rated tightening torque	250 ft/lbs (350 Nm)
Impacts / minute	4000
IP Rating	IP20
Insulation class	III
Input voltage	12V DC
Charger fuse rating	15 Amp
Sound pressure level	73.2 dB LpA
Sound power level	84.2 dB LWA
Uncertainty factor (K)	3 dB
Vibration level	3.601 m/s <sup>2</sup>
Uncertainty factor (K)	1.5 m/s <sup>2</sup>

# DECLARATION OF CONFORMITY



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

Hemnall 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):

2014/30/EU      *Electromagnetic Compatibility Directive.*  
2006/42/EC      *Machinery Directive.*  
2011/65/EU      *Restriction of Hazardous substances.*

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

EN 60745-1:2009+A11:2010, EN 60745-2-2:2010, EN 55014-1:2006+A1+A2, EN 55014-2:2015,

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:**            12V Impact Wrench  
**Model number(s):**            CIR13C  
**Serial / batch Number:**        N/A  
**Date of issue:**                12/04/2018

Signed:

J.A. Clarke  
Director

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# Clarke®

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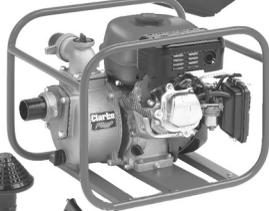
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