

# DRAPER®

## INSTRUCTIONS FOR Cordless Impact Wrenches

Stock Nos. 13507  
13510

Part No. CIW19NMH  
CIW18LI

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



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DRAPER®

### GENERAL INFORMATION

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

# 1. TITLE PAGE

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## **1.1 INTRODUCTION:**

USER MANUAL FOR:

## **CORDLESS IMPACT WRENCHES**

Stock nos. 13507, 13510

Part nos. CIW19NMH, CIW18LI

## **1.2 REVISIONS:**

Date first published December 2011

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As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: <http://www.drapertools.com/b2c/b2cmanuals.pgm>

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## **1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:**

**WARNING!** Information that draws attention to the risk of injury or death.

**CAUTION!** Information that draws attention to the risk of damage to the product or surroundings.

## **1.4 COPYRIGHT © NOTICE:**

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## 3. GUARANTEE

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### 3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

A proof of purchase must be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.

## 4. INTRODUCTION

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### 4.1 SCOPE

This hand held cordless impact wrench is intended to tighten and loosen mechanical fixings (nuts, bolts, etc).

There is no mechanism for adjusting or regulating the output torque. All fixings should be finished using a torque wrench.

### 4.2 SPECIFICATION

Stock no. ....	13507 .....	13510 .....
Part no. ....	CIW19NMH .....	CIW18LI .....
Battery:		
Type .....	Ni-Mh .....	Li Ion .....
Rated Voltage .....	19.2V $\overline{=}$ .....	18V $\overline{=}$ .....
Rating .....	2.0Ah .....	3.0Ah .....
Charger:		
Rated Voltage .....	230V~ .....	230V~ .....
Rated Frequency .....	50Hz .....	50Hz .....
Rated Input .....	0.45A .....	0.4A .....
Rated D.C. Output Voltage .....	22V .....	21V .....
Rated D.C. Output Current .....	2.0A .....	2.8A .....
Protective Device Rated Current .....	8A .....	8A .....
Construction .....	Class II .....	Class II .....
Revolutions Per Minute (no load) .....	1800min <sup>-1</sup> .....	1800min <sup>-1</sup> .....
Anvil .....	1/2" .....	1/2" .....
Clutch .....	Rocking dog .....	Rocking dog .....
Maximum Torque ( $\pm 10\%$ ) .....	519Nm .....	472Nm .....
	5292kgf-cm .....	4813kgf-cm .....
	382lbs-ft .....	348lbs-ft .....
Impact Rate .....	2400r/min .....	2400r/min .....
Sound Pressure Level .....	100.91dB(A) .....	100.91dB(A) .....
Sound Power Level .....	111.91dB(A) .....	111.91dB(A) .....
Vibration Level .....	5.52m/s <sup>2</sup> .....	5.52m/s <sup>2</sup> .....
Weight (machine & battery only) .....	2.7kg .....	2.5kg .....

### 4.3 HANDLING & STORAGE

Although this machine is Expert quality, care and attention must be observed during and after use to make sure the service life is maintained.

Do not drop this impact wrench or expose it to damp or hot environments.

Store it out of the reach of children.

## 5. HEALTH & SAFETY INFORMATION

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### 5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

**WARNING:** Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

#### Work area safety

**Keep work area clean and well lit.** Cluttered or dark areas invite accidents.

**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.

**Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

#### Electrical Safety

**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 electrical shock.

**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.

**Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

**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.

**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.

**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

**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.

**Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

**Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, 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.

**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.

**Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

**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.

**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.

## 5. HEALTH & SAFETY INFORMATION

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### Power Tool Use And Care

**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.

**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.

**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.

**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.

**Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.

**Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

**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 intended could result in a hazardous situation.

### Battery tool use and care

**Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

**Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.

**When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.

**Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

### Service

**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.

### **5.2 SPECIFIC SAFETY INSTRUCTIONS FOR IMPACT WRENCH USE**

**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.

### Screwdrivers and Impact Wrenches

Wear ear protectors with impact wrenches. Exposure to noise can cause hearing loss.

**WARNING:** Unexpected tool movement due to reaction forces or breakage of inserted tool may cause injuries.

**WARNING:** Wear safety goggles. Danger to persons from high speed splinters being emitted from impact wrenches in the case of nutrunner socket failure.

## 5. HEALTH & SAFETY INFORMATION

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### ***5.3 CONNECTION TO THE POWER SUPPLY***

Make sure the power supply information on the (battery charger) rating plate are compatible with the power supply you intend to connect it to.

This charger comes supplied with a UK standard 3 pin plug fitted. It is designed for connection to a domestic power supply rated at 230V AC.

Because the charger is Class 2 (double insulated) it does not require an earth connection.

Apart from replacing the fuse in the plug, no other electrical work is recommended on this charger.



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# 6. TECHNICAL DESCRIPTION

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## 6.1 IDENTIFICATION



- |                                 |                       |
|---------------------------------|-----------------------|
| ① Variable speed trigger switch | ⑤ Wrist strap         |
| ② Forward/reverse selector      | ⑥ Battery pack (x2)   |
| ③ 1/2" drive (male) anvil       | ⑦ 1Hr battery charger |
| ④ Hand grip                     |                       |

NOTE: These are available as accessories/replacement:

18V charger (Stock No.22454 and lithium battery pack (Stock No.22453).

19.2V charger (Stock No.22455) and nickel-metal hydride battery pack (Stock No.22456).

## 7. UNPACKING & CHECKING

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### **7.1 PACKAGING**

Carefully remove the impact wrench from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the impact wrench.

The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

## 8. PREPARING THE IMPACT WRENCH

### 8.1 BATTERY CHARGING FIGS. 1 - 3

This product is supplied with an automatic battery charger designed for charging the batteries supplied with this machine.

#### DEFINITION:

#### Automatic Battery Charger:

Once connected to the mains supply recharging of the battery can be left generally unsupervised requiring minimal attention. Complex circuit construction monitors the battery condition adjusting the recharge current to suit. When the recharge cycle is complete and to maintain the full capacity a low output current will continue as required.

**WARNING:** Check the condition of the charger and battery prior to each charge. If there is any sign of damage then do not commence charging, seek advice from Draper Tools.

To charge the battery pack, it must first be removed from the tool. To release the battery pack, press the battery release buttons (6.1) and gently slide the battery pack off (Fig.1). Plug the battery charger unit into a 230V/AC 13amp, three pin socket. All 3 LEDs will briefly light as a test and then the red LED (7.1) will stay lit to show the charger has power. Slide the battery into place ensuring the battery terminals and the charger terminals make a good connection. After a few seconds delay the green LED (7.2) will begin to flash to show the battery is being charged.

**WARNING:** Ensure battery is connected correctly. (Fig 3). Sliding the battery on incorrectly may cause damage to the battery/charger.

When the battery is fully charged, the green LED (7.2) will stay lit.

**NOTE:** If the yellow LED (7.3) lights, the battery is too hot.

**NOTE:** If the red LED (7.1) flickers check the battery is properly mounted.

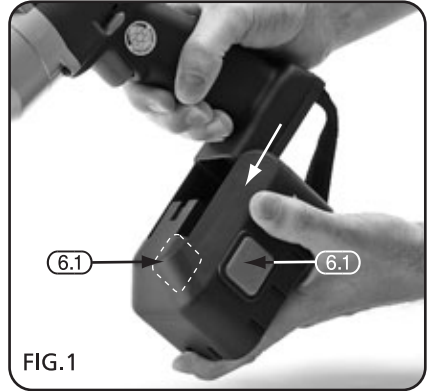


FIG.1



FIG.2



FIG.3

## 8. PREPARING THE IMPACT WRENCH

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**WARNING:** If any of the following occurs, unplug the charger from the power supply socket outlet and replace the battery pack

- None of the indicators lights on anyhow.

**Disconnect battery charger from the power supply.**

**CAUTION:** Do not pull the plug out of the power supply by pulling on the cord. Make sure to grasp the plug when removing from power supply to avoid damaging the cord.

**Remove the battery from the battery charger.**

Supporting the battery charger with hand, pull out the battery from the battery charger

**CAUTION:** When the battery charger has been continuously used, the battery charger will be hot. Once the charging has been completed, give 15 minutes rest until the next charge.

If the battery is charged when it is warm due to battery use or exposure to sunlight, the yellow LED (7.1) may light. The battery will not be recharged. In such a case, let the battery cool before charge.

If the red and green indicators flicker rapidly at 0.2 - second intervals, check for and take out any foreign objects in the charger's battery slot. If there are no foreign objects, it is probable that the battery or charger is malfunctioning. Take it to an authorized service agent.

**How to make the batteries perform longer.**

Recharge the batteries before they become completely exhausted.

When you feel that the power of the tool becomes weaker, stop using the tool and recharge the battery. If you continue to use the tool and exhaust the electric current, the battery may become damaged.

Avoid recharging at high temperatures. A rechargeable battery will be hot immediately after use. If such a battery is recharged immediately after use, its internal chemical substance will deteriorate, and the battery life will be shortened. Leave the battery and recharge it after it has cooled for a while.

## 9. BASIC OPERATION

### 9.1 INSTALLING AND REMOVING SOCKETS - FIG.4

This wrench is supplied with a ½" Square Drive (3).

**NOTE:** This product is equipped with an electric brake. Never use any sockets or accessories that are not hardened for impact use.

Never use chrome vanadium steel sockets which can shatter and can cause personal injury.

### 9.2 SWITCH - FIG.5

The switch determines the direction of rotation of the drive, i.e. clockwise or anticlockwise.

To alter the direction of rotation, stop the machine and push switch (2) to the left or right. When the direction switch is pushed to the left, the drive will rotate clockwise. When the switch is pushed to the right, the drive will rotate anticlockwise. Before operation, check that the switch is set in the required position. Do not change the direction of rotation until the wrench comes to a complete stop.

When the wrench is not in use move the direction switch to the neutral position (the middle setting) to lock the trigger out.

When the trigger (1) is depressed, the drive will rotate (provided the direction switch is set in the forward or reverse position). This trigger switch is electronic which enables the user to vary the speed continuously. The speed varies according to how far the trigger switch is depressed. The further it is depressed, the faster the drive spindle will rotate. The lighter it is depressed, the slower it will rotate.

**NOTE:** It may be necessary to initially release fixings with a hand tool prior to using the impact wrench.

**NOTE:** Always tighten fixings to the correct torque as indicated by the manufacturer using a calibrated torque wrench. Failure to do so may result in the fixing becoming damaged or insufficiently tightened.

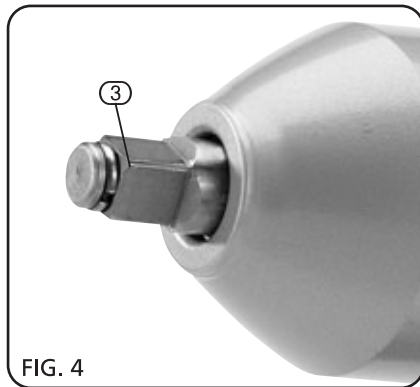


FIG. 4



FIG. 5

# 10. MAINTENANCE

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## **10.1 BATTERY USAGE NOTICE**

In order to increase charging capacity and the useful life of battery pack, please discharge the remaining power first and re-charge the battery pack for 24-hour whenever the user charges the battery pack in first time OR re-uses the battery pack after more than a months storage.

### **Charging Environment:**

Charging temperature: 10°C~40°C

Discharging temperature: -20°C~65°C

Storage temperature: -20°C~65°C

Place battery pack inside the house (temperature between 10°C ~40°C) for one-hour first before charging, if the battery pack is stored under 10°C

### **Storage Instructions of Battery Pack -**

If battery pack is in a low temperature (under-20°C) its chemical solutions will be in solid state and resistance in charging will become too big for battery to be charged.

If battery pack is in a high temperature(above 65°C), its chemical solution will be in a vapour state that can make battery ineffective in a short time.

Regular inspection and cleaning reduces the necessity for maintenance operations and will keep your tools in good working condition.

The motor must be correctly ventilated during the tools operation. For this reason avoid blocking the air inlets. After use remove the battery pack and vacuum the ventilation slots.

If the replacement of the charger's supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.



# 11. EXPLANATION OF SYMBOLS

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## 11.1 EXPLANATION OF SYMBOLS



WEEE

Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish



Class II construction  
(Double insulated).



For indoor use.  
Do not expose to rain.

# 12. DISPOSAL

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## 12.1 DISPOSAL

At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.

Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE\* as unsorted municipal waste.



## HEALTH AND SAFETY FOR BATTERIES

General: Do not put in fire or mutilate - cells may burst or release hazardous materials.

Do not short circuit cells, may cause burns.

The battery must be removed from the appliance before it is scrapped.

The battery is to be disposed of safely.

## DISPOSAL

Do not mutilate batteries, electrolyte will be released.

Do not incinerate - danger of explosion and release of toxic fumes.

Do not dispose of batteries or cells in a charged condition.

Expired batteries must be recycled/disposed of in accordance with the appropriate regulation or legislation. They should be returned to your local warranty agent/stockist.

\* Waste Electrical & Electronic Equipment.







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For aftersales servicing or warranty repairs, please  
contact the Draper Tools Helpline for details of an  
agent in your local area.

YOUR DRAPER STOCKIST