



DRAPER[®]

12V 3/8"

IMPACT WRENCH

70276



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

1.1 INTRODUCTION

USER MANUAL FOR: 12V 3/8" Impact Wrench

Stock No: 70276

Part No: CIW12VD

1.2 REVISION HISTORY

Date first published: January 2021.

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

Downloads are available from: <http://drapertools.com/manuals>

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1.3 UNDERSTANDING THIS MANUAL'S 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. WARRANTY

3.1 WARRANTY

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: +44 (0) 23 8049 4333 or Product Help Line +44 (0) 23 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 warranty period covering labour is 12 months from the date of purchase except where tools are hired out when the warranty period is 90 days from the date of purchase. The warranty is extended to 24 months for parts only. This warranty does not apply to any consumable parts, any type of battery or 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 warranty applies in lieu of any other warranty expressed or implied and variations of its terms are not authorised.

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

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

Draper Tools Limited.

4. INTRODUCTION

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.

This product is intended for domestic and infrequent light trade use only. Any application other than that it was intended for, is considered misuse.

4.2 SPECIFICATION

STOCK NO	70276
PART NO	CIW12VD
REVOLUTIONS PER MINUTE (NO LOAD)	0 – 2,500R/MIN
ANVIL	3/8"
CLUTCH	TWIN HAMMER
MAXIMUM TORQUE (±10%)	80Nm/59LBS-FT
IMPACT RATE	0 – 3,500BPM
SOUND PRESSURE LEVEL (LpA)	93.5dB(A)
SOUND POWER LEVEL (LWA)	104.5dB(A)
UNCERTAINTY (K)	3dB(A)
VIBRATION LEVEL	13.77M/S ² , K=1.5M/S ²
WEIGHT (MACHINE ONLY)	0.8KG

BATTERY PACK (SOLD SEPARATELY):

STOCK NO	70308
PART NO	CB12VDLI1.5
TYPE	LI-ION
RATED VOLTAGE	12V
RATING	1.5AH

CHARGER (SOLD SEPARATELY):

STOCK NO	70326
PART NO	C12VDLI
RATED VOLTAGE	230V~
RATED FREQUENCY	50HZ
RATED INPUT	35W
RATED D.C. OUTPUT VOLTAGE	12V
RATED D.C. OUTPUT CURRENT	2.0A
PROTECTIVE DEVICE RATED CURRENT	2A
CONSTRUCTION	CLASS II

4. INTRODUCTION

4.3 HANDLING AND STORAGE

- Care must be taken when handling this product.
 - Dropping this power tool could have an effect on its accuracy and could also result in personal injury. This product is not a toy and must be respected.
- Environmental conditions can have a detrimental effect on this product if neglected.
 - Exposure to damp air can gradually corrode components.
 - If the product is unprotected from dust and debris, components will become clogged.
 - If not cleaned and maintained correctly or regularly, the machine will not perform at its best.

5. HEALTH AND SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

Warning!

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. 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 tools” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **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.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical safety

- a) **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.
- b) **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.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **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.
- e) **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.
- f) **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.

3) Personal safety

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

5. HEALTH AND SAFETY INFORMATION

- d) **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.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **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.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

4) Power tool use and care

- a) **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.
- b) **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.
- c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, 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.
- d) **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.
- e) **Maintain power tools and accessories. 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.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **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.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

5) Service

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

5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR IMPACT WRENCH

Warning!

1) Safety instructions for all operations

- a) **Wear ear protectors.** Exposure to noise can cause hearing loss.
- b) **Brace the tool properly before use.** This tool produces a high output torque and without properly bracing the tool during operation, loss of control may occur resulting in personal injury.
- c) **Hold the power tool by insulated gripping surfaces, when performing an operation where the fasteners 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.

5.3 SAFETY INSTRUCTIONS FOR MAINS POWERED CHARGERS & BATTERY PACKS

Chargers

- The charger is for indoor use only.
- Prior to plugging the charger in to the supply, check that the plug, cable and charger casing are in good condition. If any are damaged, have the defective part(s) replaced immediately by a suitably qualified person.
- Only use a correctly rated mains outlet to provide power, do not plug into site generators, attach to engine generators or D.C. sources. Do not use a mains socket outlet that is not switched.
- Use the correct Draper charger in conjunction with its corresponding battery pack (consult the Draper website for more information or to find your local stockist).
- Do not charge any other batteries with Draper chargers. Any other application is considered misuse.
- Do not attempt to charge battery packs that are too hot (over 30°C) or too cold (under 5°C), if these conditions apply set the battery pack aside to “normalise” before proceeding with the charging operation.
- Set up the charger and cable in a safe place where it won't be knocked, tripped over, stepped on, etc. and where it is well ventilated. Make sure the ventilation slots in the charger case are not obstructed.
- Inspect the battery pack for damage, if it is undamaged, plug it into the charger, ensuring the correct orientation.
- Switch the charger on and check that the correct indicators illuminate, allow the battery pack to charge (see the specific instructions for your charger). Once charging is complete, switch the charger off, disconnect from power supply, remove the battery pack and store.

5. HEALTH AND SAFETY INFORMATION

Battery packs

- Before charging, read the instructions.
- Do not expose to rain.
- Only use Draper 12V battery packs with this product. Consult your Draper stockist for details.
- Do not charge any other batteries with Draper chargers. Any other application is considered misuse.
- The charger must be disconnected from the power supply before removing the battery.
- The battery must be removed from the appliance before it is recycled.
- The battery is to be disposed of in-line with local authority procedures.
- Do not crush, open or burn the battery. Exposure to potentially harmful materials may occur.
- In case of fire use CO₂ or dry chemical extinguisher.
- Do not expose to high temperatures >50°C. The battery may degrade at high temperatures.
- Charge battery in conditions between 5°C to 30°C with the designated charger for the battery.
- Do not use battery if it has been stored at 5°C or less. Allow it to “normalise” at room temperature before usage/charging.

Warning! – Leaking battery packs

- The electrolyte in battery packs is corrosive. Avoid contact with the skin.
- If contact is made, flush the area with clean water, pat dry and seek medical attention at the earliest opportunity.
- Inform medical personnel that the contaminant is a “high alkaline, corrosive liquid”.
- If electrolyte comes into contact with the eyes, flush with copious amounts of water only. Seek immediate medical attention, relaying the information above.

5.4 CONNECTION TO THE POWER SUPPLY (CHARGER)


Caution: Risk of electric shock. Do not open.

This appliance is supplied with an approved plug and cable for your safety. Never use a damaged or incomplete plug.

This appliance is Class II† and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted.

Carefully select an extension lead. Some machines are not suitable for use with extension leads. If the tool is designed for use outdoors, only use an extension lead suitable for that environment in conjunction with an RCD adaptor. When using an extension lead, select one capable of handling the current (amps) drawn by the machine in use. Ensure the cable is fully unwound regardless of the distance between the power supply and the tool. Excess current (amps) and a coiled extension lead will cause the cable to heat up and can result in fire.

Keep extension leads away from moving hazardous parts to avoid damages to the cable which can lead to contact with live parts. Position cable safely to avoid tripping over.

†Double insulated : This product requires no earth connection as supplementary insulation is applied to the basic insulation to protect against electric shock in the event of failure of the basic insulation.

Important! If using an extension lead, follow the instructions that came with your lead regarding maximum load while cable is wound. If in doubt, ensure that the entire cable is unwound. Using a coiled extension lead will generate heat which could melt the lead and cause a fire.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



① 3/8" square drive anvil

② LED worklight

③ Variable speed trigger switch

④ Hand grip

⑤ 12V 1.5Ah battery pack (sold separately)

⑥ Forward/Reverse selector

⑦ Battery charge indicator

7. UNPACKING AND CHECKING

7.1 PACKAGING

Carefully remove the product 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 below. If any part is damaged or missing, please contact the Draper Help Line (the telephone number appears on the Title page) and do not attempt to use the product.

The packaging material should be retained at least during the warranty 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.

7.2 DRAPER 12V MULTI-TOOL INTERCHANGEABLE BATTERY SYSTEM

This tool is supplied **without** a battery, and **without** a charger. These optional accessories are available.

The Draper 12V multi-tool interchangeable range features an array of machines all running from the same batteries and charger. To find out the latest range of accessories including batteries and charger please consult the Draper website for more information or to find your local Draper stockist.



8. BASIC IMPACT WRENCH OPERATIONS

8.1 INSTALLING AND REMOVING SOCKETS

This wrench is supplied with a 3/8" Square Drive.

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

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

To fit a socket:

- Push fit the socket over the anvil. The friction based ring holds the socket securely in place.

To remove a socket:

- Pull the socket away from the anvil to remove.

Note: Extra effort may be required when fitting and removing brand new sockets on their initial usage.



FIG. 1

8.2 ROTATIONAL DRIVE SELECTION – FIGS. 1 – 2

The forward/reverse drive selector switch (6) 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 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.

Note: Failure to use the neutral position may activate the trigger inadvertently. This inadvertent operation may cause the wrench to become damaged.

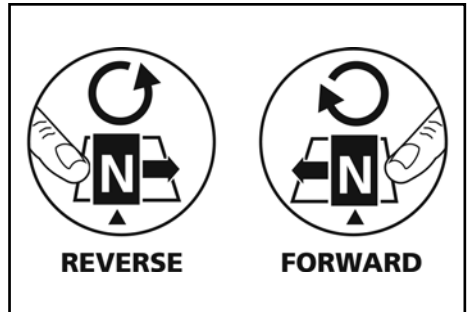


FIG. 2

8. BASIC IMPACT WRENCH OPERATIONS

8.3 VARIABLE SPEED TRIGGER – FIG. 3

When the variable speed trigger switch (3) is depressed, the drive will rotate (provided the forward/reverse selector (6) 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: If the fastening is heavily corroded, or extremely tight, it may be necessary to release the fixing by hand before continuing with the 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.

Note: This product is equipped with an electric brake.

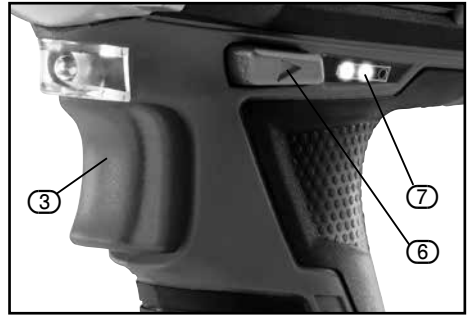


FIG. 3

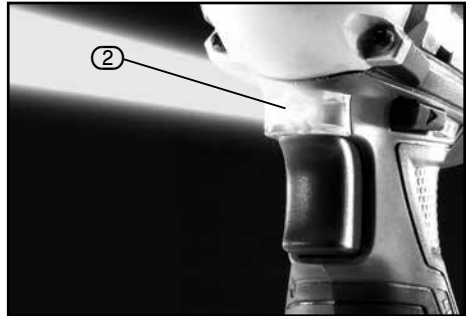


FIG. 4

8.4 BATTERY PACK CHARGE STATUS – FIG. 3

The amount of charge remaining in the battery pack is indicated by the battery charge indicator (7) located just above the handle section.

- The display is made up of three lights that illuminate every time the ON/OFF trigger is depressed.
- The level of charge remaining determines how many of the lights will illuminate – 1, being minimal low power, to all 3 indicating full charge.

8.5 LED WORKLIGHT – FIG. 4

To aid use in confined, and inadequately lit spaces; the LED worklight (2) automatically illuminates when the trigger is activated.

8.6 OPERATION

Proper fastening torque is determined by the kind of fastening, the size of the fastening or the material or workpiece.

- It is advisable to perform a test operation to determine the proper fastening time for the fastening you are using.
- Hold the wrench in straight alignment to the fastening.
- Depress the wrench and use for the required amount of time.
- After fastening, always check the torque with an appropriate torque wrench.

Note: Do not use this tool to install wheel nuts on wheels without a torque limiting device. Doing so could result in galled or broken nuts.

Note: Using a universal joint or extension bar may reduce the fastening force of the impact wrench and require longer fastening time.

Note: Using an impact wrench creates heat. The metal housing at the front of the wrench will become hot. In certain circumstances, the force required to tighten or remove fixings may cause the fixings themselves to become very hot! Wear suitable gloves to prevent burns.

9. MAINTENANCE & TROUBLESHOOTING

9.1 MAINTENANCE

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

The motor must be correctly ventilated during tool operation. Avoid blocking the air inlets and vacuum the ventilation slots regularly.

9.2 TROUBLESHOOTING GUIDE

Note: Remove the battery pack before carrying out adjustment, servicing or maintenance.

Problem	Possible Cause	Remedy
Motor does not start.	Battery pack no charge. Battery faulty or damaged.	Re-charge battery. Replace battery.
Motor runs, but slowly/ losing power.	Battery pack no charge. Battery pack faulty or damaged.	Re-charge battery. Replace battery.
Battery pack doesn't charge/ non-illumination of charger.	Fuse blown in charger plug. Charger faulty.	Replace fuse. Replace charger.

10. EXPLANATION OF SYMBOLS

10.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Wear safety glasses.



Wear ear defenders.



Wear protective gloves.



Keep out of the reach of children.



Warning!



Class II construction
(Double insulated).



WEEE – Waste Electrical & Electronic Equipment.

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



Lithium-ion product.



Do not incinerate or throw onto fire.



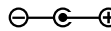
For indoor use only.
Do not expose to rain.



Short-circuit-proof safety isolating transformer.



Fuse protective device.



Polarity indication.



Rated voltage.

11. DISPOSAL

11.1 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 dispose of WEEE* as unsorted municipal waste.



Li-ion

* Waste Electrical & Electronic Equipment.

11.2 BATTERY PACK DISPOSAL INFORMATION

Warning!

- Do not put battery pack in fire or mutilate – cells may burst or release toxic materials.
- Do not short circuit cells, may cause burns.
- The battery pack must be removed from the appliance before it is scrapped.
- The battery pack is to be disposed of safely.
- Do not mutilate batteries, corrosive electrolyte will be released.
- 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.

CONTACTS

Draper Tools Limited, Hursley Road,
Chandler's Ford, Eastleigh, Hampshire. SO53 1YF. U.K.

Help line: (023) 8049 4344

Sales desk: (023) 8049 4333

Internet: drapertools.com

E-mail: sales@drapertools.com

General enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

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

YOUR DRAPER STOCKIST

TATL0121

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