



DRAPER[®]

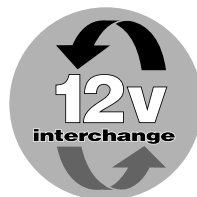
12V 3/8"

RATCHET

70301



UK
CA CE



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" Ratchet

Stock No: 70301

Part No: RW12VD

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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2. CONTENTS

2.1 CONTENTS

1. TITLE PAGE	
1.1 INTRODUCTION	2
1.2 REVISION HISTORY	2
1.3 UNDERSTANDING THIS MANUAL'S SAFETY CONTENT	2
1.4 COPYRIGHT © NOTICE	2
2. CONTENTS	
2.1 CONTENTS	3
3. WARRANTY	
3.1 WARRANTY	4
4. INTRODUCTION	
4.1 SCOPE	5
4.2 SPECIFICATION	5
4.3 HANDLING AND STORAGE	5
5. HEALTH AND SAFETY INFORMATION	
5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE.....	6
5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR RATCHET	8
5.3 SAFETY INSTRUCTIONS FOR MAINS POWERED CHARGERS & BATTERY PACKS ...	8
5.4 CONNECTION TO THE POWER SUPPLY (CHARGER).....	9
6. TECHNICAL DESCRIPTION	
6.1 IDENTIFICATION	10
7. UNPACKING AND CHECKING	
7.1 PACKAGING.....	11
7.2 DRAPER 12V MULTI-TOOL INTERCHANGEABLE BATTERY SYSTEM.....	11
8. BASIC RATCHET OPERATIONS	
8.1 FORWARD/REVERSE SELECTION.....	12
8.2 TRIGGER SWITCH	12
8.3 ANVIL.....	12
9. MAINTENANCE & TROUBLESHOOTING	
9.1 MAINTENANCE.....	13
9.2 TROUBLESHOOTING GUIDE	13
10. EXPLANATION OF SYMBOLS	
10.1 EXPLANATION OF SYMBOLS	14
11. DISPOSAL	
11.1 DISPOSAL.....	15
11.2 BATTERY PACK DISPOSAL INFORMATION.....	15

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 ratchet is designed for removal and installation of threaded fasteners. 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.....	70301
PART NO.....	RW12VD
ANVIL SIZE	3/8"
MAXIMUM TORQUE.....	45Nm
REVOLUTIONS PER MINUTE (NO LOAD).....	0 – 250R/MIN
SOUND PRESSURE LEVEL (LpA).....	79.04dB(A)
SOUND POWER LEVEL (LWA).....	90.04dB(A)
UNCERTAINTY (K).....	3dB(A)
VIBRATION LEVEL	9.72M/S ² , K=1.5M/S ²
WEIGHT (MACHINE ONLY).....	0.7KG

BATTERY PACK:

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

CHARGER:

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

4.3 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.

-
- 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. HEALTH AND SAFETY INFORMATION

5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR RATCHET

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 it's 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.

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 Battery charge indicator
- ② Forward/Reverse selector
- ③ 3/8" Square drive
- ④ LED worklight

- ⑤ Trigger lock switch
- ⑥ Trigger switch
- ⑦ 12V 1.5Ah battery pack (sold separately)

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 RATCHET OPERATIONS

8.1 FORWARD/REVERSE SELECTION – FIG. 1

Note: Ratchets are not torque wrenches and are not designed or capable of installing fasteners to a specified torque. For fasteners requiring a specific torque, use a hand torque wrench.

- Rotate the forward/reverse selector (2) anti-clockwise to select forward or clockwise for reverse operations.

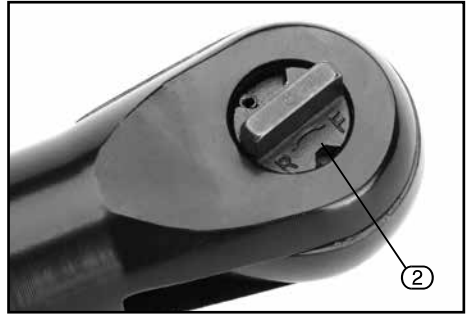


FIG. 1

8.2 TRIGGER SWITCH – FIG. 2

The ratchet is fitted with an “on/off” switch located near the trigger.

Slide the switch forward for the ratchet to function. Slide the switch to the back position when not in use.

- Confirm direction of rotation prior to starting. Pull trigger switch (6) to operate the ratchet.
- Release the trigger to stop the ratchet.

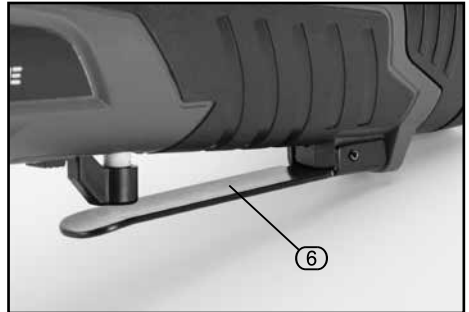


FIG. 2

8.3 ANVIL – FIG. 3

- Ensure the socket correctly locates on the 3/8" square drive (3) firmly engaging on the locating ball (3.1).

Warning!

Only use accessories specifically hardened and designed for use with impact tools.

Do not use standard chrome type hand tool sockets and accessories as they may shatter and splinter.

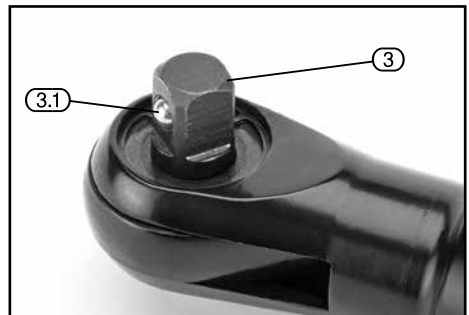


FIG. 3

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 turns. Spindle doesn't run or runs erratically.	Worn teeth on ratchet or pawl. Weak or broken pawl pressure spring. Weak drag springs fail to hold spindle while pawl advances for another bite.	Replace worn parts.
Motor seized – ratchet head rotates by hand.	Blocked motor.	Operate throttle in short bursts with socket engaged on the bolt. If motor remains jammed return to service centre.

10. EXPLANATION OF SYMBOLS

10.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Direction of rotation.



Wear safety glasses.



Class II construction
(Double insulated).



Wear ear defenders.



WEEE – Waste Electrical & Electronic Equipment.

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



Wear protective gloves.



Lithium-ion product.

Li-ion



Long and loose hair must be contained or securely tied back.



Do not incinerate or throw onto fire.



Do not abandon into the environment.



For indoor use only.
Do not expose to rain.



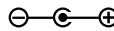
Keep out of the reach of children.



Fuse.



Warning!



Polarity indication.



Warning! Risk of crushing.



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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