



**DRAPER**<sup>®</sup>

12V

# ROTARY MULTI-TOOL KIT

70298



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 Rotary Multi-tool Kit**

**Stock No: 70298**

**Part No: CMG12VD**

## 1.2 REVISIONS:

**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>

Draper Tools Limited  
Hursley Road  
Chandler's Ford  
Eastleigh  
Hampshire  
SO53 1YF  
UK

**Website:** [drapertools.com](http://drapertools.com)

**Product Help Line:** +44 (0) 23 8049 4344

**General Fax:** +44 (0) 23 8026 0784

## 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:

Copyright © Draper Tools Limited.

Permission is granted to reproduce this publication for personal and educational use only. Commercial copying, redistribution, hiring or lending is prohibited.

No part of this publication may be stored in a retrieval system or transmitted in any other form or means without written permission from Draper Tools Limited.

In all cases this copyright notice must remain intact.

---

## 2. WARRANTY

### 2.1 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: (023) 8049 4333 or Product Help Line (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 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.**

## 3. INTRODUCTION

### 3.1 SCOPE

For drilling, milling, grinding, engraving, cutting, polishing, sharpening, buffing and removing rust, etc.

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

### 3.2 SPECIFICATION

Stock No .....	70298
Part No .....	CMG12VD
Speed (no load) .....	5,000 – 25,000r/min
Speed settings .....	6
Collet capacities: .....	1/32", 3/64", 1/16", 5/64", 3/32"
Collet nut .....	3/32"
Sound pressure level (LpA) .....	63.2dB(A)
Sound power level (LWA) .....	74.2dB(A)
Uncertainty (K) .....	3dB(A)
Vibration level .....	<2.5m/s <sup>2</sup> , K=1.5m/s <sup>2</sup>
Weight .....	0.43kg

#### Battery pack:

Stock No .....	70308
Part No .....	CB12VDLI1.5
Type .....	Li-ion
Rated Voltage .....	12V
Rating .....	1.5Ah

#### Charger:

Stock No .....	98002
Part No .....	C108LI/STD
Rated Voltage .....	230V~
Rated Frequency .....	50Hz
Rated Input .....	35W
Rated D.C. output voltage .....	13.5V
Rated D.C. output current .....	0.35A
Protective device rated current .....	2A
Construction .....	Class II

### 3.3 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 not cleaned and maintained correctly or regularly, the machine will not perform at its best.

## 4 HEALTH & SAFETY INFORMATION

### 4.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

When using any type of power tool there are steps that should be taken to make sure that you, as the user, remain safe.

Common sense and a respect for the tool will help reduce the risk of injury.

**Read the instruction manual fully.** Do not attempt any operation until you have read and understood this manual.

**Keep the work area tidy and clean.** Attempting to clear clutter from around the machine during use will reduce your concentration. Mess on the floor creates a trip hazard. Any liquid spilt on the floor could result in you slipping.

**Find a suitable location.** If the machine is bench mounted, the location should provide good natural light or artificial lighting as a replacement. Avoid damp and dust locations as it will have a negative effect on the machine's performance. If the machine is portable do not expose the tool to rain. In all cases do not operate power tools near any flammable materials.

**Keep bystanders away.** Children, onlookers and passers by must be restricted from entering the work area for their own protection. The barrier must extend a suitable distance from the tool user.

**Unplug and house all power tools that are not in use.** A power tool should never be left unattended while connected to the power supply. They must be housed in a suitable location, away locked up and from children. This includes battery chargers.

**Do not overload or misuse the tool.** All tools are designed for a purpose and are limited to what they are capable of doing.

Do not attempt to use a power tool (or adapt it in any way) for an application it is not designed for.

Select a tool appropriate for the size of the job. Overloading a tool will result in tool failure and user injury. This covers the use of accessories.

**Dress properly.** Loose clothing, long hair and jewellery are all dangerous because they can become entangled in moving machinery. This can also result in parts of body being pulled into the machine. Clothing should be close fitted, with any long hair tied back and jewellery and neck ties removed. Footwear must be fully enclosed and have a non-slip sole.

**Wear personal protective equipment (PPE).** Dust, noise, vibration and swarf can all be dangerous if not suitably protected against. If the work involving the power tool creates dust or fumes wear a dust mask. Vibration to the hand, caused by operating some tools for longer periods must be protected against. Wear vibration reducing gloves and allow long breaks between uses. Protect against dust and swarf by wearing approved safety goggles or a face shield. These are some of the more common hazards and preventions, however, always find out what hazards are associated with the machine/work process and wear the most suitable protective equipment available.

**Do not breathe contaminated air.** If the work creates dust or fumes connect the machine (if possible) to an extraction system either locally or remotely. Working outdoors can also help if possible.

**Move the machine as instructed.** If the machine is hand held, do not carry it by the power supply cable. If the product is heavy, employ a second or third person to help move it safely or use a mechanical device. Always refer to the instructions for the correct method.

**Do not overreach.** Extending your body too far can result in a loss of balance and you falling. This could be from a height or onto a machine and will result in injury.

**Maintain your tools correctly.** A well maintained tool will do the job safely. Replace any damaged or missing parts immediately with original parts from the manufacturer. As applicable, keep blades sharp, moving parts clean, oiled or greased, handles clean, and emergency devices working.

**Wait for the machine to stop.** Unless the machine is fitted with a safety brake, some parts may continue to move due to momentum. Wait for all parts to stop, then unplug it from the power supply before making any adjustments, carrying out maintenance operations or just finishing using the tool.

**Remove and check setting tools.** Some machinery requires the use of additional tools or keys to set, load or adjust the power tool. Before starting the power tool always check to make certain they have been removed and are safely away from the machine.

**Prevent unintentional starting.** Before plugging any machine in to the power supply, make sure the switch is in the OFF position. If the machine is portable, do not hold the machine near the switch and take care when putting the machine down, that nothing can operate the switch.

**Carefully select an extension lead.** Some machines are not suitable for use with extension leads.

**Concentrate and stay alert.** Distractions are likely to cause an accident. Never operate a power tool if you are under the influence of drugs (prescription or otherwise), including alcohol or if you are feeling tired. Being disorientated will result in an accident.

**Have this tool repaired by a qualified person.** This tool is designed to conform to the relevant international and local standards and as such should be maintained and repaired by someone qualified, using only original parts supplied by the manufacturer. This will ensure the tool remains safe to use.

## 4.2 ADDITIONAL SAFETY INSTRUCTIONS FOR MULTI-TOOL USE

Safety warnings common for grinding, sanding, wire brushing, polishing, carving and cutting off operations:

**This power tool is intended to function as a grinder, sander, wire brush, polisher, carving or cut-off tool.** 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.

**Do not use accessories which are not specifically designed and recommended by the tool manufacturer.** Just because the accessory can be attached to your power tool, it does not assure safe operation.

**The rated speed of the grinding accessories must be at least equal to the maximum speed marked on the power tool.** Grinding accessories running faster than their rated speed can break and fly apart.

**The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool.** Incorrectly sized accessories cannot be adequately controlled.

**The arbour size of wheels, sanding drums or any other accessory must properly fit the spindle or collet of the power tool.** Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.

**Mandrel mounted wheels, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck.** If the mandrel is insufficiently held and/or the overhang of the wheel is too long, the mounted wheel may become loose and be ejected at high velocity.

**Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, sanding drum for cracks, tear or excess wear, wire brush for loose or cracked wires.** If power tool or accessory is dropped, inspect for damage or install an undamaged accessory.

## 4.3 RESIDUAL RISK

**Important note:** Although the safety instructions and operating manuals for our tools contain extensive instructions of safe working with power tools, every power tool involves a certain residual risk which can not be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution!

## 4.4 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 and the cable are in good repair. If either are damaged, have the defective item replaced immediately by a suitably qualified person. If the casing of the battery charger is damaged, it is good policy to have the charger checked over 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 Draper 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, plug the charger into the socket outlet.
- Inspect the battery pack for damage, if it is undamaged, plug it into the charger, ensuring the correct orientation. (Most chargers and batteries have 'keys' etc, to make sure the battery pack is not inserted incorrectly, if you are having to 'force' the battery pack into the charger, the chances are you have it the wrong way round, check and try again.)
  - 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, remove the battery pack and store, repeat the procedure if you have more than one battery pack to charge.

**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.

- After charging is complete, unplug the charger from the socket outlet by pulling on the plug. Do not pull on the cable. Store the charger in a dry secure place.
- If, when the charger was switched on, the correct indications did not occur, leave for two or three minutes to allow the charger to stabilise, if the correct indications occur, allow the charging cycle to proceed as normal. If no indication appears at all, switch off, remove the battery pack, unplug the charger, check that the charger contacts and the battery contacts are clean and repeat the process. If there is still no indication, switch off, remove the battery pack, unplug the charger and check the fuse. If the fuse is blown, replace and repeat the process. If the fuse blows again, or if the fuse was intact, attempt no further action. Refer the charger to a suitably qualified person for repair.

## Battery packs

- Before charging, read the instructions.
- For indoor use. Do not expose to rain.
- Do not charge any other manufacturer's battery packs using Draper chargers. Any other application is considered misuse.
- The battery must be removed from the appliance before it is recycled.– The charger must be disconnected from the supply mains when removing the battery.
- The battery is to be disposed of in-line with local authority procedures.
- Do not use any other than the designated Draper batteries/chargers with this product.
- 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 specified charger designed for this 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 running water, pat dry and seek medical attention and advice 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 medical attention immediately, relaying the information above.

## 4.5 CONNECTION TO THE POWER SUPPLY (CHARGER)

**Caution:** Risk of electric shock. Do not open.

This appliance is supplied with a moulded 3 pin mains plug for your safety. The value of the fuse fitted is marked on the pin face of the plug.


Should the fuse need replacing, ensure the substitute is of the correct rating, approved to BS1362 and ASTA or BSI Kite marked.

ASTA   
BSI 

The fuse cover is removable with a small plain slot screwdriver. Ensure the fuse cover is replaced before attempting to connect the plug to an electrical outlet. If the cover is missing, a replacement must be obtained or the plug replaced with a suitable type. If a replacement plug is to be fitted this must be carried out by a qualified electrician.

The damaged or incomplete plug, when cut from the cable should be disabled to prevent connection to a live electrical outlet.

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. If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow all the instructions supplied with the extension lead.

<sup>†</sup>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.**

## 5. TECHNICAL DESCRIPTION

### 5.1 IDENTIFICATION



- ① Spindle locking button
- ② Variable speed trigger switch
- ③ Battery charge indicator
- ④ 12V 1.5Ah battery pack
- ⑤ On/Off button
- ⑥ Collet nut

## 6. UNPACKING AND CHECKING

### 6.1 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!

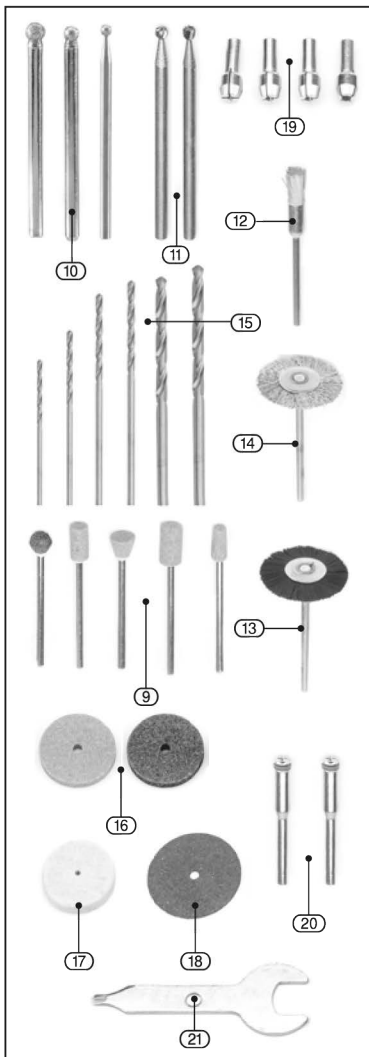
- Some of the packaging materials used may be harmful to children. Do not leave any of these materials in the reach of children.
- If any of the packaging is to be thrown away, make sure they are disposed of correctly, according to local regulations.

### 6.2 WHAT'S IN THE BOX

As well as the main product, there are also several other parts not fitted or attached to it:

- ④ 12V 1.5Ah battery pack
- ⑦ Charger adaptor
- ⑧ Battery charger dock





- (9) 5 x Grinding points
- (10) 3 x Engraving bits
- (11) 2 x Milling bits
- (12) 1 x Bristle brush
- (13) 1 x Bristle wheel
- (14) 1 x Brass wheel
- (15) 6 x HSS drill bits
- (16) 4 x Grinding discs
- (17) 3 x Polishing discs
- (18) 16 x Cutting discs
- (19) 5 x Collets: 1/32", 3/64", 1/16", 5/64", 3/32"
- (20) 2 x Mandrels
- (21) Combination spanner/screwdriver

## 7. PREPARING THE ROTARY MULTI-TOOL

### 7.1 BATTERY PACK CHARGING

**Important:** Only Draper designated battery packs and chargers can be used in conjunction with this product. Use of any other third party battery packs/chargers with this product is considered misuse and will invalidate the product's warranty.

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, 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.

The battery pack is supplied un-charged and must be charged before initial use.

To charge the battery pack (4), it must first be removed from the tool.

Check the mains voltage. Make sure the voltage of the power source is the same as the voltage specified on the rating plate of the charger unit.



## 7.1 BATTERY PACK CHARGING – FIGS. 1 – 2



FIG. 1

- Insert the jack plug (7.1) of the charger adaptor (7) into the battery charger dock (8). (Fig.2)
- Plug the charger adaptor mains plug into the power source.
- Insert the 12V 1.5Ah battery pack (4) into the battery charger dock (8).
- A full battery charge cycle will take approx. 3 – 5 hours.
- Remove the battery pack from the charger and unplug.

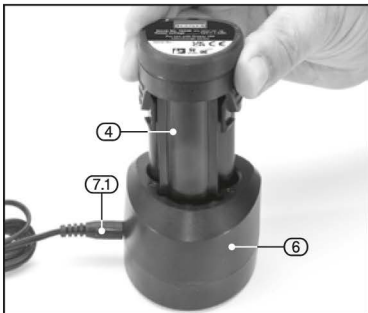


FIG. 2

## 8. BASIC MULTI-TOOL OPERATIONS

### 8.1 SWITCHING ON AND OFF – FIG. 3

- Slide on/off button (5) into the 'I' position. This will start the machine. Press switch to the 'O' position – this will stop the machine.



FIG. 3

### 8.2 VARIABLE SPEED CONTROL – FIG. 4

Using the variable speed trigger switch (2) will enable you to alter the speed of the machine:

- Select the correct speed for the work and type of bit you are using.



FIG. 4

### 8.3 FITTING ACCESSORIES

**Note:** Remove the battery from the tool before carrying out adjustment, servicing or maintenance.

When you purchase additional accessories check the safe working speed is compatible with the tool.

- Choose the appropriate size for the bit shank from the five collets provided.
- If the size is not known, insert the bit into the collet.
- The collet (19) which offers a machine fit to the bit is the correct one to use. Do not force the bit into a collet.
- Press spindle locking button (1) to stop the spindle from rotating.
- Using the spanner (21), loosen the collet nut (6).
- Place the collett into the spindle and loosely replace the collet nut.

**Note:** Do not over tighten the collet nut.

### 8.4 FITTING ACCESSORIES USING A MANDREL – FIG. 5

- With the mandrel (20) in the chuck, remove the screw (20.1) using the plain slot screwdriver (21) (incorporated in the spanner handle tip).
- Leave one fibre washer on the screw, place the cutting/grinding/polishing disc on the screw and fit the second fibre washer, refit to the disc holder spindle. (Do not over tighten).

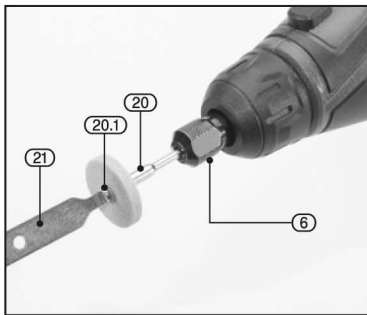


FIG. 5

### 8.5 HOLDING THE TOOL

For jobs such as milling or engraving where precision is required, hold the multi-tool like a pen. Care should be taken not to fully cover exhaust vents. Covering the vents will cause the machine to overheat and fail.

For heavier work like cutting or grinding hold the multi-tool in the palm of your hand.

### 8.6 BATTERY PACK CHARGE STATUS – FIG.6

The amount of charge remaining in the battery pack is indicated by the display (6) located on the upper handle section.

- The display is made up of three lights; green, orange and red, that illuminate every time the ON/OFF switch is operated.
- The level of charge remaining determines how many of the lights will illuminate; Red being minimal low power, red/orange being half power. All three lights illuminated, indicate full charge.



FIG.6

### 8.7 ATTACHMENTS AND MACHINE SPEEDS

Grinding points and discs (9), (16)	
MATERIAL	SPEED
Stone	1
Steel	5
Aluminium	2
Brass	2
Plastic	1
Polishing discs (17)	
MATERIAL	SPEED
Steel	5
Aluminium	3
Brass	5

Diamond engraving and milling bits (10), (11)	
MATERIAL	SPEED
Stone	6
Steel	3
Aluminium	6
Brass	6
Plastic	1
Brass, steel and bristle brushes (12), (13), (14)	
Material	Speed
Stone	2
Aluminium	2
Brass	2
Cutting disc (18)	
MATERIAL	SPEED
Stone	6
Steel	3
Aluminium	6
Brass	6
Plastic	1

## 9. OPTIONAL ACCESSORIES

A full range of accessories are available from Draper Tools.

Please visit our website for details:  
[www.drapertools.com](http://www.drapertools.com)

## 10. DISPOSAL

### 10.1 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.

## 10.2 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.

## 11. EXPLANATION OF SYMBOLS



Read the instruction manual.



Do not abandon into the environment.



Keep out of the reach of children.



Wear face mask and safety glasses.



Warning!



Class II construction  
(Double insulated).



**Li-ion**  
Lithium-ion product.



WEEE –

Waste Electrical & Electronic Equipment.

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



Do not incinerate or throw onto fire.



Short-circuit-proof safety isolating transformer



For indoor use only.  
Do not expose to rain.



Polarity indication.



Fuse protective device.



Rated voltage.

## 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](http://drapertools.com)

E-mail: [sales@drapertools.com](mailto: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

©Published by Draper Tools Limited.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise without prior permission in writing from Draper Tools Ltd.