



**DRAPER**<sup>®</sup>

230V 1/2"

# IMPACT WRENCH

82994



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: 230V 1/2" Impact Wrench**

**Stock No: 82994**

**Part No: IW1000D**

## 1.2 REVISIONS:

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**Date first published June 2019.**

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**Revised August 2020.**

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**Revised August 2021.**

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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://drapertools.com/manuals>

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

Draper Tools Limited  
Oude Graaf 8  
6002 NL  
WEERT  
Netherlands

**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 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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## 2. CONTENTS

---

<b>1. TITLE PAGE</b>	
1.1 INTRODUCTION .....	2
1.2 REVISION HISTORY .....	2
1.3 UNDERSTANDING THIS MANUAL .....	2
1.4 COPYRIGHT NOTICE .....	2
<b>2. CONTENTS</b>	
2.1 CONTENTS .....	3
<b>3. WARRANTY</b>	
3.1 WARRANTY .....	4
<b>4. INTRODUCTION</b>	
4.1 SCOPE .....	5
4.2 SPECIFICATION .....	5
4.3 HANDLING AND STORAGE .....	5
<b>5. HEALTH AND SAFETY INFORMATION</b>	
5.1 GENERAL POWER TOOL SAFETY WARNINGS .....	6-7
5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR IMPACT WRENCHES .....	7-8
5.3 RESIDUAL RISK .....	8
5.4 CONNECTION TO THE POWER SUPPLY .....	9
<b>6. TECHNICAL DESCRIPTION</b>	
6.1 IDENTIFICATION .....	10
<b>7. UNPACKING AND CHECKING</b>	
7.1 PACKAGING .....	11
7.2 WHAT'S IN THE BOX .....	11
<b>8. BASIC IMPACT WRENCH OPERATIONS</b>	
8.1 INSTALLING AND REMOVING SOCKETS .....	12
8.2 ROTATIONAL DRIVE SELECTION .....	12
8.3 OPERATION .....	13
<b>9. MAINTENANCE &amp; TROUBLESHOOTING</b>	
9.1 MAINTENANCE .....	14
9.2 TROUBLESHOOTING GUIDE .....	14
<b>10. OPTIONAL ACCESSORIES</b>	
10.1 OPTIONAL ACCESSORIES .....	15
<b>11. DISPOSAL</b>	
11.1 DISPOSAL .....	16
<b>12. EXPLANATION OF SYMBOLS</b>	
12.1 EXPLANATION OF SYMBOLS .....	17
<b>DECLARATION OF CONFORMITY</b> .....	ENCLOSED

## 3. WARRANTY

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### 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: (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.**

## 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.

Any application other than that it was intended for, is considered misuse.

### 4.2 SPECIFICATION

Stock No.....	82994
Part No. ....	IW1000D
Rated voltage .....	230V~50Hz
Rated input .....	1000W
Revolutions per minute (no load): .....	2,600r/min
Square drive .....	1/2"
Max. torque ( $\pm 10\%$ ).....	480Nm / 354lbs-ft
Break away torque ( $\pm 10\%$ ).....	up to 1100Nm / 811lbs-ft
Max. reverse torque ( $\pm 10\%$ ).....	480Nm / 354lbs-ft
Impact rate .....	0 – 3000bpm
Sound pressure level (LpA):.....	100dB(A)
Sound power level (LWA): .....	111dB(A)
Uncertainty (K): .....	3dB(A)
Vibration level: .....	18.9m/s <sup>2</sup> , K=1.5m/s <sup>2</sup>
Weight (wrench only):.....	3.67kg

### 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

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### 5.1 GENERAL POWER TOOL SAFETY WARNINGS

**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 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 electric 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 a 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 and clothing 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.*

**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.*

## 5. HEALTH AND 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 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.*

**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 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.*

**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 those intended could result in a hazardous situation.*

**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.*

### 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 ADDITIONAL SAFETY INSTRUCTIONS FOR IMPACT WRENCHES

**Important:** Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

- Power tools shall not be used in potentially explosive atmospheres unless specifically designed for that purpose.
- Unexpected tool movement due to reaction forces or breakage of inserted tool or reaction bar may cause injuries.
- Power tools shall be isolated from the energy source before changing or adjusting the inserted tool.

### Warning!

- There is a risk of crushing by torque between a reaction bar and the workpiece.
- There is a risk of loose clothing, hair etc., being caught in the rotating spindle of the power supply tool.
- There is a risk of being injured if hands are not kept away from the reaction bar, specially observed when unscrewing in confined work spaces.
- There is a risk of being injured if hands are not kept away from the impact socket.
- There is a risk of danger to persons from high speed splinters being emitted from impact wrenches in the case of socket failure. Only use properly hardened impact sockets with this machine.

## 5. HEALTH AND SAFETY INFORMATION

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- Use only sockets and adaptors which are in good condition and are intended for use with impact wrenches.
- Adopt a suitable posture to counteract normal or unexpected movement of the power tool due to reaction forces from the power assembly tool.
- Impact wrenches are not torque wrenches and are not designed or capable of installing fasteners to a specified torque. For fasteners requiring a specific torque, install the fastener to well below the required value then complete the task with a hand torque wrench to avoid damaging the fastener or workpiece.
- Ensure the anvil ring is correctly maintained and if damaged or missing, is replaced immediately before work commences. Missing or damaged anvil rings may lead to sockets detaching from the wrench while rotating at high speed.
- Only use accessories specifically hardened for impact use. Do not use standard chrome type hand tool sockets as they will shatter and splinter causing injury.
- Do not modify this impact wrench in any way.
- When starting or finishing the removal and installation of fasteners there is a risk of crushing between the tool and the workpiece due to sudden movement or reaction forces.

### 5.3 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!



## 5. HEALTH AND SAFETY INFORMATION

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### 5.4 CONNECTION TO THE POWER SUPPLY

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

This appliance is supplied with an approved plug and cable 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<sup>†</sup> 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.**

## 6. TECHNICAL DESCRIPTION

### 6.1 IDENTIFICATION



- ① 1/2" Square drive (male) anvil.
- ② Variable speed, forward/reverse trigger switch.
- ③ Hand grip.
- ④ Gearbox.
- ⑤ Protective rubber bumper.
- ⑥ Plug & power supply cable (approx. 6M).

## 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.

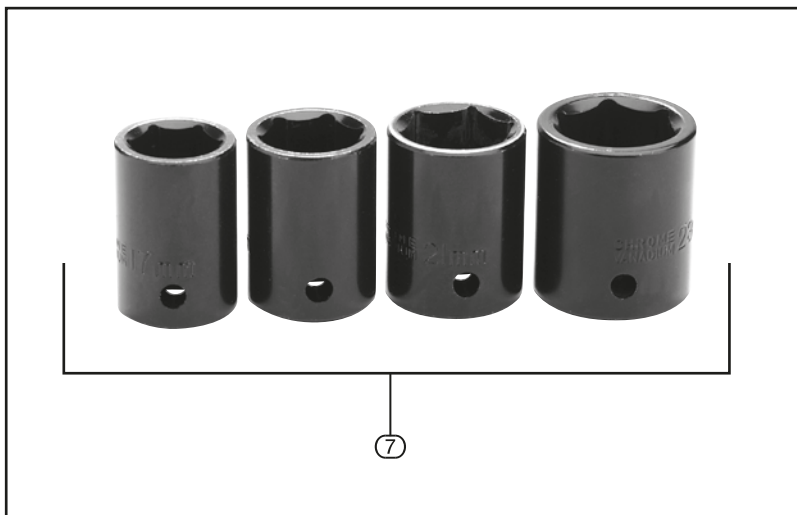
The packaging material should be retained at least during the warranty period, in case the machine needs to be returned for repair.

#### 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 WHAT'S IN THE BOX

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



- ⑦ 4 x Impact sockets, sizes; 17mm, 19mm, 21mm and 23mm.

## 8. BASIC IMPACT WRENCH OPERATIONS

### 8.1 INSTALLING AND REMOVING SOCKETS – FIG.1

This wrench is supplied with a 1/2" Square Drive ①.

**Note:** Never use any sockets or accessories that are not hardened for impact use.

- 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.

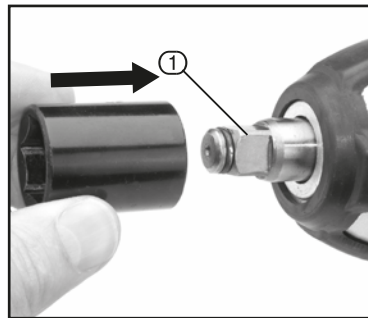




FIG.1

### 8.2 ROTATIONAL DRIVE SELECTION – FIG.2

The ergonomically designed soft grip handle incorporates the operational trigger switch ② which determines the directional rotation of the drive, i.e. clockwise or anti-clockwise.

**Note:** The switch operates at full power in forward or reverse. This is a very powerful tool – be prepared!

With the impact wrench in hand-held operating position, the trigger switch can be operated with the fore and second fingers.

-  Using the fore finger to depress the upper section of the trigger switch ②, the drive will rotate in reverse (anti-clockwise).
-  By using the second finger to depress the lower section of the trigger switch ②, the drive will rotate forwards (clockwise).

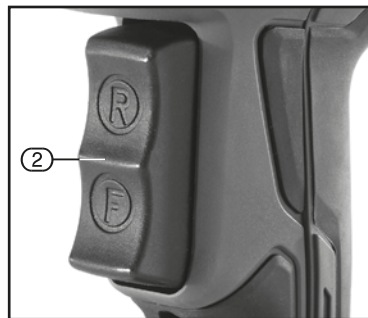


FIG.2

**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.

**Warning!** This powerful impact wrench could shear off bolt heads. Take care to avoid such circumstances.

**Note:** This product is equipped with an electric brake.

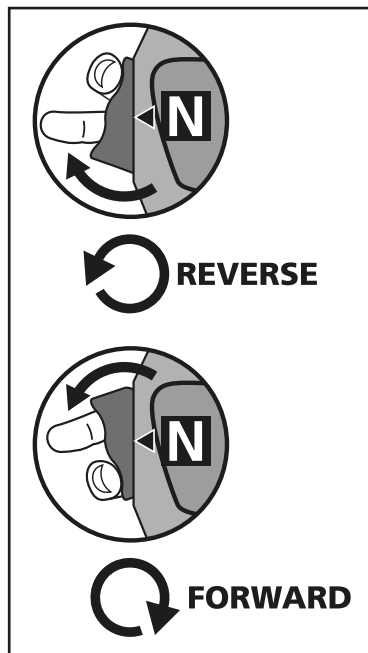


FIG.3

## 8. BASIC IMPACT WRENCH OPERATIONS

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### 8.3 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, sheared 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.

# 9. MAINTENANCE & TROUBLESHOOTING

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## 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.

Problems	Possible cause	Required action
Motor does not start.	<ul style="list-style-type: none"><li>- Fuse.</li><li>- Brushes worn.</li></ul>	<ul style="list-style-type: none"><li>- Replace/reset 13 amp time delay fuse or circuit breaker.</li><li>- Have carbon brushes in motor replaced – Stock No.01074.</li></ul>
Socket falls off anvil.	<ul style="list-style-type: none"><li>- Socket worn.</li><li>- Friction ring worn.</li></ul>	<ul style="list-style-type: none"><li>- Replace socket for new.</li><li>- Replace friction ring – Stock No.01075.</li></ul>

# 10. OPTIONAL ACCESSORIES

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## 10.1 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)

# 11. DISPOSAL

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## 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.



\* *Waste Electrical & Electronic Equipment.*



# 12. EXPLANATION OF SYMBOLS

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## 12.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Wear face mask and safety glasses.



Wear ear defenders.



Wear protective gloves.



Do not abandon into the environment.



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.*

# NOTES

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# NOTES

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## CONTACTS

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

EU: Oude Graaf 8  
6002 NL Weert (NL)

Helpline: (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 Helpline for details of an agent in your local area.

### YOUR DRAPER STOCKIST

TAFW0821

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