



Version 2 – 10/24



**STORMFORCE**

230V

# AIRLESS SPRAY GUN

83657



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 Airless Spray Gun**

**Stock No: 83657**

**Part No: SG80SF**

## 1.2 REVISIONS:

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**Date first published September 2020.**

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**Version 2: October 2024**

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

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

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## 1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

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

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

## 1.4 COPYRIGHT © NOTICE:

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**DECLARATION OF CONFORMITY** ..... 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 product is intended primarily for outdoor use on sawn surfaces such as fences, sheds and decking. It is intended for domestic and light commercial use only. Any other application is considered misuse.

### 4.2 SPECIFICATION

Stock No .....	83657
Part No .....	SG80SF
Motor:	
Rated voltage .....	230V
Rated frequency .....	50Hz
Rated input .....	80W
Output .....	250mL/min
Cup capacity .....	0.7Ltr
Nozzle sizes .....	0.6mm/0.8mm
Max viscosity .....	40DIN-S
Sound pressure level (LpA) .....	95.2dB(A) K=3dB(A)
Sound power level (LWA) .....	106.2dB(A) K=3dB(A)
Uncertainty (K) .....	3dB(A)
Vibration level .....	10.175m/s <sup>2</sup> K=1.5m/s <sup>2</sup>
Weight .....	1.4kg

### 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 SPRAY GUNS

- Never point or spray the gun at humans or animals.
- Consult the manufacturer of the substance to be sprayed for safety guidelines specific to the material.
- In the event of the material being sprayed coming into contact with skin, eyes or taken internally, consult with a doctor immediately and inform them of the substance involved.
- Never spray flammable liquids, glazes, acidic, caustic, alkaline or substances containing abrasive or texture (ie grit).
- Do not spray near naked flames or heat sources.
- Always use in a well ventilated area.
- Keep out of the reach of children.
- After thoroughly cleaning the complete spray gun store in a safe, dry location.
- Do not operate the gun empty of fluid as this will cause excess wear internally.
- Oil the nozzle assembly with a light mineral oil on a regular basis.

## 5. HEALTH AND SAFETY INFORMATION

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### 5.3 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 BS 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.

†*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

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### 6.1 IDENTIFICATION



- ① 700ml container
- ② 0.8mm Nozzle (fitted)
- ③ Pressure adjustment

- ④ Handgrip
- ⑤ Plug & cable
- ⑥ Trigger

# 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.

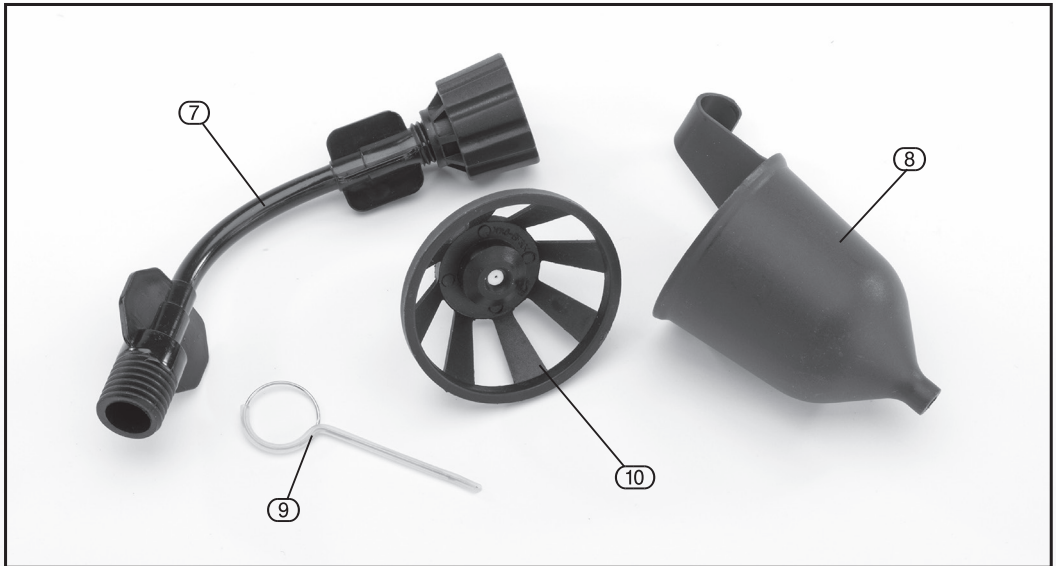
The packaging material should be retained at least during the warranty period, in case the machine needs to be returned for repair.

### 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 airless spray gun; there are several parts not fitted or attached to it.



- ⑦ 1x Adjustable nozzle (0.8mm)
- ⑧ 1x Viscosity measurement cup
- ⑨ 1x Nozzle cleaning pin
- ⑩ 0.6mm Nozzle

## 8. PREPARING THE SPRAY GUN

**Note:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

### 8.1 VISCOSITY MEASUREMENT - Fig. 1

Thoroughly mix the material appropriate for the intended job. Immerse the measurement cup (8) fully. Raise the cup and measure the time taken for it to empty in seconds.

Refer to the table below as a guide on if the material requires diluting. If dilution is necessary, measure the viscosity once again to ensure the correct level has been achieved.

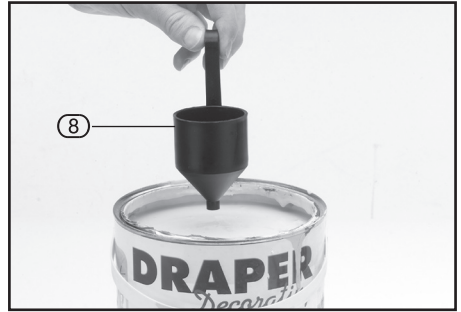


FIG.1

Material	Time
Water based paint	20 - 25 secs
Primers	24 - 28 secs
Varnishes	20 - 25 secs
Enamel	18 - 22 secs
Wood sealers	28 - 35 secs
Wood preservatives	No thinning required
Wood stains	No thinning required

**Warning:** This table is a general guide only.

The material being sprayed must be suitable for spraying and must conform to the viscosity requirements detailed here.

Always check with the paint/varnish manufacturer if in doubt.

**NB:** Do not use textured wall paints, these will block the nozzle.

**NB:** Not suitable for cellulose paints.

**Note:** If the intended material does not appear on this table, the guide for viscosity should be between 15-30 seconds.

Only mix in a small quantity of thinner at a time and re-measure to ensure excess dilution does not occur.

Remove any foreign bodies, lumps or contaminants from the material prior to filling the gun.

### 8.2 FILLING THE CONTAINER - Fig. 2

To remove the container (1) rotate it anti-clockwise one and a quarter turns. Place the container on to a piece of scrap material in case of spillage. Pour in the material (diluted as necessary) carefully into the container. Do not exceed the 700ml mark. Re-attach the container on to the gun with care.



FIG.2

## 8. PREPARING THE SPRAY GUN

### 8.3 SPRAY REGULATION - FIG. 3

Rotate the pressure adjustment knob (3) clockwise to reduce the output or anti-clockwise to increase the output.

Set up the required volume by testing the spray on a small area of the workpiece or a scrap piece of timber.

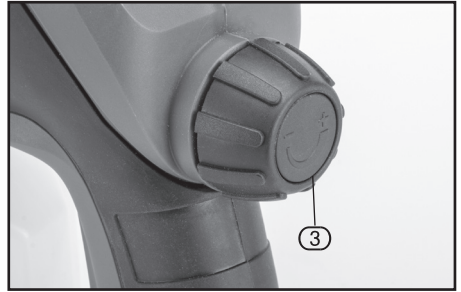


FIG.3

### 8.4 NOZZLE CHANGING - Fig. 4

THE COMPLETE ASSEMBLY:

Unscrew the nozzle (2) and replace with other nozzle supplied (10) not shown.

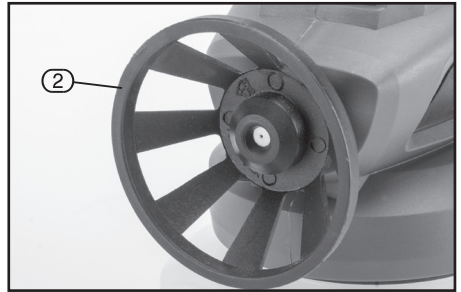


FIG.4

### 8.5 THE ADJUSTABLE NOZZLE - FIG. 5

With the nozzle removed, screw on the adjustable nozzle head (7).

Note: Ensure that the small valve does not fall out while the nozzle is removed.

The adjustable nozzle should be used to spray floors and ceilings. It can also be used in areas with limited access.

Always hold the machine level when using this nozzle.

Nozzle can be adjusted by using hand pressure only to bend into desired position.

**NB:** If ambient temperature is cold, place nozzle in warm water for a few minutes, this will enable easier bending.

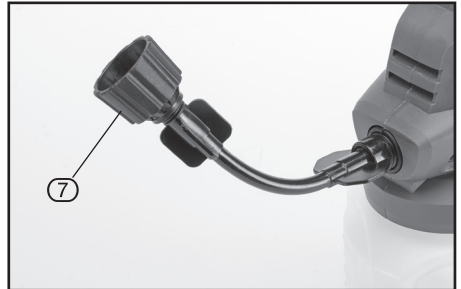


FIG.5



## 9. BASIC SPRAY GUN OPERATIONS

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### 9.1 SPRAYING TECHNIQUES

Due to the nature of this type of spray gun, overspray is reduced, however some masking may still be required.

Clean the area thoroughly. Remove any dust.

Keep the gun upright at all times as tilting will introduce air gaps into the material being sprayed. This will result in the paint splattering.

The spray gun should be kept parallel and an equal distance from the work area (25-35cm approximately). The correct distance will vary depending on the adjustment on the volume regulation. The lesser amount being sprayed, the closer the gun will require holding.

As the gun cannot be tilted, the adjustable nozzle will enable spraying areas up or down, eg. ceiling or floors.

Avoid holding the gun too close or moving it too slowly as this will result in runs occurring.

Spray the first coat and allow a short period in-between applying a second coat. Do not leave material in the gun for prolonged periods.

# 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. MAINTENANCE & TROUBLESHOOTING

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## 11.1 MAINTENANCE AND PARTS REPLACEMENT

**Note:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance. DO NOT clean the parts holding the machine under flowing water or by submerging the machine in water or thinners.

It is essential that the spray gun is cleaned thoroughly after every use. If not, this will decrease the life of this spray gun.

- Remove the container and pour the remaining liquid back into a paint can or suitable container.
- Clean the container thoroughly by using water or thinners.
- Pour a small amount of water or thinners into the container and spray until only water or thinners comes out of the nozzle. Ensure that spray is captured in a rag or tissue, in order to avoid spraying potentially flammable thinners.
- Remove the container from the machine and thoroughly clean the suction tube/filter using water or thinners.
- Unscrew nozzle and pull the nozzle and piston assembly out of the unit and ensure these parts are cleaned well.
- Apply a few drops of light lubricating oil to the piston, piston spring and cylinder.
- Use the cleaning pin provided to clean the hole in the nozzle.
- Re-assemble the machine and wipe over the spray gun with a damp cloth to remove any splatters of paint.

# 11. MAINTENANCE & TROUBLESHOOTING

## 11.2 TROUBLESHOOTING

**Warning:** For your own safety, turn the switch off and remove the plug from the power supply socket.

<b>Problem</b>	<b>Possible cause</b>	<b>Required action</b>
Motor hums but does not spray or irregular spraying	<ul style="list-style-type: none"><li>- Valve worn</li><li>- Piston stuck</li><li>- No valve in the pump</li><li>- Blocked suction tube/filter</li><li>- Blocked nozzle</li><li>- Loosened nozzle</li></ul>	<ul style="list-style-type: none"><li>- Replace valve</li><li>- Clean the piston with thinners/water</li><li>- Fit valve</li><li>- Clean the suction tube/filter using thinners</li><li>- Clean the nozzle with pin</li><li>- Tighten the nozzle</li></ul>
Atomization is not good	<ul style="list-style-type: none"><li>- Nozzle is not tightened</li><li>- Paint is too thick</li></ul>	<ul style="list-style-type: none"><li>- Tighten the nozzle</li><li>- Check the viscosity of the paint</li></ul>
Over painting	<ul style="list-style-type: none"><li>- Spray gun is too close to the object being sprayed</li><li>- Too much paint</li><li>- Viscosity is too low</li></ul>	<ul style="list-style-type: none"><li>- Keep the spray gun 25-35cm from the surface of object</li><li>- Adjust the pressure adjustment knob to reduce spray</li><li>- Check the viscosity</li></ul>
No spray, no sound	<ul style="list-style-type: none"><li>- No electricity</li></ul>	<ul style="list-style-type: none"><li>- Check power supply</li></ul>
Operating sound is not right	<ul style="list-style-type: none"><li>- Poor output adjustment</li><li>- Not enough paint in the container</li><li>- Incorrect paint dilution or paint not passing suction tube/filter completely</li></ul>	<ul style="list-style-type: none"><li>- Re-adjust</li><li>- Refill the container with paint</li><li>- Check suction tube/filter and viscosity level</li></ul>

# 12. EXPLANATION OF SYMBOLS

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## 12.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Wear safety glasses and dust mask.



Wear ear defenders.



Class II construction  
(*Double insulated*).



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



European conformity



UK Conformity Assessed



# NOTES

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## CONTACTS

Draper Tools Limited, Hursley Road,  
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6002 NL, Weert, Netherlands

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

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