

DRAPER[®]
STORMFORCE[®]

INSTRUCTIONS FOR
**1000W 230V
Impact Wrench**
Stock No.82994 Part No.IW1000SF

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



DRAPER[®]

GENERAL INFORMATION

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:

1000W 230V IMPACT WRENCH

Stock no. 82994

Part no. IW1000SF

1.2 REVISIONS:

Date first published September 2017

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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3. GUARANTEE

3.1 GUARANTEE

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 guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to 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 guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

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

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

Draper Tools Limited.

4. INTRODUCTION

4.1 SCOPE

This hand held, mains powered 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, or started with a manual spanner/ratchet.

Warning! This wrench is very powerful and is capable of shearing off bolt heads. Take due care in this respect.

4.2 SPECIFICATION

| | |
|---|--|
| Stock no. | 82994 |
| Part no. | IW1000SF |
| Rated voltage | 230V~50Hz |
| Rated input | 1000W |
| Revolutions per min. (no load)..... | 2600r/min |
| Square drive | 1/2" |
| Max. torque ($\pm 10\%$)..... | 480Nm 354lbs-ft |
| Break away torque ($\pm 10\%$)..... | 1440Nm 1062lbs-ft |
| Max. reverse torque ($\pm 10\%$)..... | 480Nm 354lbs-ft |
| Impact rate | 3000ipm |
| Sound pressure level | 100dB(A), K=3 db(A) |
| Sound power level | 111dB(A), K=3 db(A) |
| Vibration level:..... | 18.9m/s ² , K=1.5m/s ² |
| Weight (wrench only) | 3.67kg |

4.3 HANDLING & STORAGE

Care and attention must be observed during and after use to make sure the service life is maintained.

Do not drop this impact wrench or expose it to damp or hot environments.

Store it out of the reach of children.

5. HEALTH & SAFETY INFORMATION

5.1 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.

Most important you must know how to safely start and stop this machine, especially in an emergency.

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.

Beware of electric shock. Avoid contact with earthed surfaces; because they can conduct electricity if there is an electrical fault with the power tool. Always protect the power cable and route it away from danger.

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.

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 nonslip 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.

5. HEALTH & SAFETY INFORMATION

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. If the tool is designed for use outdoors; use an extension lead also suitable for that environment. When using an extended lead, select one capable of handling the current (amps) drawn by the machine in use. Fully extend the lead regardless of the distance between the power supply and the tool. Excess current (amps) and a coiled extension lead will both cause the cable to heat up and can result in fire.

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.

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 nutrunner sockets.

5. HEALTH & SAFETY INFORMATION

- There is a risk of danger to persons from high speed splinters being emitted from impact wrenches in the case of nutrunner socket failure.
- Unexpected direction of inserted tool movement can cause a hazardous situation.
- 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!


5.4 CONNECTION TO THE POWER SUPPLY

Make sure the power supply information on the machine's rating plate are compatible with the power supply you intend to connect it to.

This product comes supplied with a UK standard 3 pin plug fitted. It is designed for connection to a domestic power supply rated at 230V AC.

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 instruction 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.

Apart from replacing the fuse in the plug, no other electrical work is recommended on this impact wrench.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



- ① ½" 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.

7. UNPACKING & 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 guarantee 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 impact wrench; there are several parts not fitted or attached to it.



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

8. BASIC OPERATION

8.1 INSTALLING AND REMOVING SOCKETS – FIG. 1

This wrench is supplied with a ½" Square Drive ①.

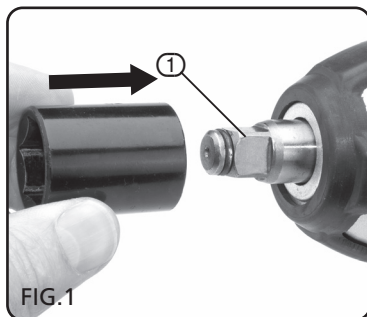
Note: Never use any sockets or accessories that are not hardened for impact use.

- 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.





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.

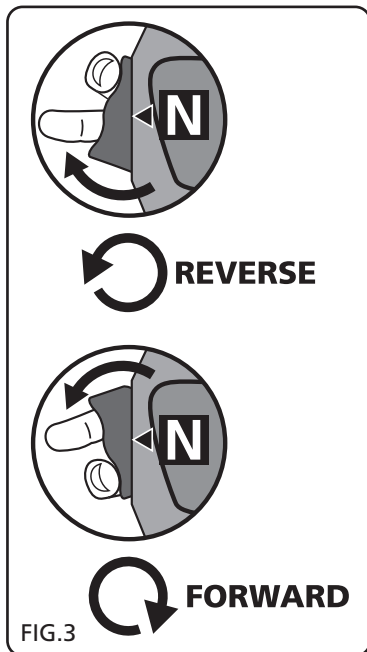
-  Using the fore finger to depress the upper section of the trigger switch ②, the drive will rotate in reverse (anti-clockwise).
-  By using the second finger to depress the lower section of the trigger switch ②, the drive will rotate forwards (clockwise).

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 will shear bolt off bolt heads. Take care to avoid such circumstances.

Note: This product is equipped with an electric brake.



8. BASIC OPERATION

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 AND 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

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

| Problem | Possible Cause | Remedy |
|-------------------------|------------------------|---|
| Motor does not start. | 1. Fuse. | 1. Replace/reset 13 amp time delay fuse or circuit breaker. |
| | 2. Brushes worn. | 2. Have carbon brushes in motor replaced – Stock No.01074. |
| Socket falls off anvil. | 1. Socket worn. | 1. Replace socket for new. |
| | 2. Friction ring worn. | 2. Replace friction ring – Stock No.01075. |

9.3 REPLACEMENT ACCESSORIES

| Item | Stock No. | Part No. |
|-----------------|-----------|-----------|
| Carbon brushes. | 01074. | YIW100SF1 |
| Friction ring. | 01075. | YIW100SF2 |

10. EXPLANATION OF SYMBOLS

10.1 EXPLANATION OF SYMBOLS



Warning!

Read the instruction manual.



Warning!

Wear eye protection.



Warning!

Wear ear defenders.



Class II construction

(Double insulated).



WEEE

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

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 abandon in the environment.
- Do not dispose of WEEE* as unsorted municipal waste.



* Waste Electrical & Electronic Equipment.

- **DRAPER TOOLS LIMITED,**
Hursley Road, Chandler's Ford,
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- **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

RDCH0917

