



DRAPER[®]

STORMFORCE

650W 230V

125mm DUAL ACTION POLISHER

01816



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: 650W 230V 125mm Dual Action Polisher

Stock No: 01816

Part No's: DA650SF

1.2 REVISIONS:

Date first published March 2018.

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

Product Helpline: +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:

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. CONTENTS

2.1 CONTENTS

1. TITLE PAGE

1.1 INTRODUCTION	2
1.2 REVISION HISTORY	2
1.3 UNDERSTANDING THIS MANUAL	2
1.4 COPYRIGHT NOTICE	2

2. CONTENTS

2.1 CONTENTS	3
--------------------	---

3. GUARANTEE

3.1 GUARANTEE	4
---------------------	---

4. INTRODUCTION

4.1 SCOPE	5
4.2 SPECIFICATION	5
4.3 HANDLING AND STORAGE	5

5. HEALTH AND SAFETY INFORMATION

5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE	6-7
5.2 SPECIFIC SAFETY INSTRUCTIONS FOR POLISHERS	8-9
5.3 CONNECTION TO THE POWER SUPPLY	10

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION	11
--------------------------	----

7. UNPACKING AND CHECKING

7.1 PACKAGING	12
---------------------	----

8. PREPARING THE POLISHER

8.1 ADJUSTING THE AUXILIARY HANDLE	13
8.2 FITTING THE BACKING PAD	13

9. OPERATING THE POLISHER

9.1 OPERATING THE POLISHER SWITCH	14
9.2 STEPPED SPEED SETTING	14

10. MAINTENANCE

10.1 MAINTENANCE	15
------------------------	----

11. TROUBLESHOOTING

11.1 TROUBLESHOOTING GUIDE	15
----------------------------------	----

12. DISPOSAL

12.1 DISPOSAL	16
---------------------	----

13. EXPLANATION OF SYMBOLS

13.1 EXPLANATION OF SYMBOLS	17
-----------------------------------	----

DECLARATION OF CONFORMITY	ENCLOSED
---------------------------------	----------

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 Helpline (023) 8049 4344.

A proof of purchase must be provided.

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 6 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 power tool uses polishing mops and foam polishing sponges for paint work correction. It is intended for domestic and light commercial use only. Any other application is considered misuse.

4.2 SPECIFICATION

Stock No.	01816
Part No.	DA650SF
Rated voltage	230V~50Hz
Rated input	650W
Disc diameter	125mm
Speed (no load)	2000-6400rpm
Rated capacity	125mm
Spindle thread	M14
Sound Pressure Level	89dB(A)
Sound Power Level	100dB(A)
Vibration Level.....	3.09m/s ²
Weight (nett).....	2kg

4.3 HANDLING & STORAGE

Although this machine is small in size, care must still be taken when handling and lifting. Dropping this machine will have an effect on the accuracy and may also result in personal injury. This machine is not a toy and must be respected.

The environment will have a negative result on its operation if you are not careful. If the air is damp, components will rust. If the machine 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

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.

5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

Warning: Read all safety warnings and all instructions. Failure to follow the warnings and instructions 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.

1) Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2) Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3) Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

5. HEALTH AND SAFETY INFORMATION

3) Personal safety continued...

- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4) Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.
Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Service

- a) 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. HEALTH AND SAFETY INFORMATION

5.2 SPECIFIC SAFETY INSTRUCTIONS FOR POLISHERS

Safety Warnings Common for Polishing Operations:

- A) **This power tool is intended to function as a polisher. 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.
- B) **Operations such as grinding, sanding, wire brushing, or cutting-off are not recommended to be performed with this power tool.** Operations for which the power tool was not designed may create a hazard and cause personal injury.
- C) **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.
- D) **The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.** Accessories running faster than their rated speed can break and fly apart.
- E) **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 guarded or controlled.
- F) **Do not use a damaged accessory. Before each use inspect the backing pad for cracks, tear or excessive wear. If power tool is dropped, inspect for damage or install an undamaged accessory. After inspecting or installation of accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for a minute, damaged accessories will usually break apart during this test time.**
- G) **Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments.** The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss. The gloves must fit well and not be loose, loose gloves could catch in rotating parts and lead to person injury.
- H) **Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.** Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.
- I) **Position the cord clear of the spinning accessory.** If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
- J) **Never lay the power tool down until the accessory has come to a complete stop.** The spinning accessory may grab the surface and pull the power tool out of your control.
- K) **Do not run the power tool while carrying it at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.
- L) **Regularly clean the power tool's air vents.** The motor's fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- M) **Do not operate the power tool near flammable materials.** Sparks could ignite these materials.
- N) **Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.

5. HEALTH AND SAFETY INFORMATION

5.2 SPECIFIC SAFETY INSTRUCTIONS FOR POLISHERS

Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of the binding.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- A) **Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up.** The operator can control torque reactions or kickback forces, if proper precautions are taken.
- B) **Never place your hand near the rotating accessory.** Accessory may kickback over your hand.
- C) **Do not position your body in the area where power tool will move if kickback occurs.** Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.
- D) **Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.
- E) **Do not attach a saw chain woodcarving blade or toothed saw blade.** Such blades create frequent kickback and loss of control.
- F) **Do not allow any loose portion of the polishing bonnet or its attachment strings to spin freely. Tuck away or trim any loose attachment strings.** Loose and spinning attachment strings can entangle your fingers or snag on the workpiece.

5. HEALTH AND SAFETY INFORMATION


5.3 CONNECTION TO THE POWER SUPPLY

Make sure the power supply information on the machine's rating plate is 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 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.

†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 machine.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



- ① Main handle.
- ② On/off trigger switch.
- ③ Tool body.
- ④ Hook and loop backing pad.
- ⑤ Polishing pad.

- ⑥ Variable speed control.
- ⑦ Plug and cable (5.0M).
- ⑧ Wrench.
- ⑨ Hexagon key.

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 on page 8. If any part is damaged or missing; please contact the Draper Helpline (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.

In any of the packaging is to be thrown away, make sure it is disposed of correctly; according to local regulations.

8. PREPARING THE POLISHER

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

8.1 ADJUSTING THE AUXILIARY HANDLE - FIG. 1

Choose the best orientation to suit operator comfort and application in hand.

Loosen the two hex. head bolts through each side of the handle ①. Tighten with the hex. key ⑨ supplied.



8.2 FITTING THE BACKING PAD - FIGS. 2 - 4

Loosen the nut that attaches the backing pad ④ by using the supplied wrench ⑧.

Firmly holding the nut, use your other hand to turn the backing pad counter-clockwise to loosen it from the machine.

To attach the backing pad repeat these steps in reverse order.

A distance ring has been provided to keep some distance between the backing pad ④ and the plate screws, make sure this is in place before attaching the backing pad.



9. OPERATING THE POLISHER

9.1 OPERATING THE POLISHER SWITCH - FIGS. 5 - 6

To turn on the machine, push the ON/OFF switch and push it towards the head of the tool. The machine will be locked and keep turning. To release the machine move the switch back to the original position.



FIG.5



FIG.6

9.2 STEPPED SPEED SETTING- FIG. 7

Set the stepped speed in accordance to the cutting paste/compound or polish being used. Read the manufacturers instructions regarding this.

No responsibility or liability is accepted by Draper Tools regarding the setting of the correct speed for the job to be done. The speed settings are approximately as per table below.

SETTING	SPEED (OPM)	USAGE
1	2000	Waxing & buffering
2	3000	Waxing & buffering
3	3500	Polishing & cleaning
4	4500	Polishing & cleaning
5	5500	Removing paint defects & oxidation
6	6400	Removing paint defects & oxidation



FIG.7

NOTE: We strongly recommend that the polisher, speed setting, the polishing sponge/mop and medium being used are tested on a small, inobscure area before applying to a vehicle panel or similar.

IMPORTANT: Excessive pressure on the machine does not result in higher working speed. It increases wear on the internal mechanics and can damage the polisher.

10. MAINTENANCE

10.1 MAINTENANCE

Periodically blow out all air passages with dry compressed air. Wear safety glasses while using compressed air.

All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts, because these can cause damage to the item.

If anything unusual happens during use of the item then turn the item off. Remove the plug from the power source and check the item thoroughly. If necessary have the machine repaired by a qualified technician before using it again.

All repairs should be carried out by a qualified technician. Repair or maintenance undertaken by unqualified persons can cause risk of injury or damage.

Use only original parts for the repair of this tool.

11. TROUBLESHOOTING

11.1 TROUBLESHOOTING GUIDE

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

Problems	Possible cause	Required action
Motor does not start.	<ul style="list-style-type: none">- Blown fuse.- Other.	<ul style="list-style-type: none">- Replace 13amp fuse or check circuit breaker.- Return to Authorised service agent.
Machine vibrates.	<ul style="list-style-type: none">- Pad/bonnet damaged or out of balance.	<ul style="list-style-type: none">- Replace pad/bonnet.

12. DISPOSAL



12.1 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.*

13. EXPLANATION OF SYMBOLS

13.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Wear safety glasses and dust mask.



Wear ear defenders.



Wear protective gloves.



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



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.*

CONTACTS

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

Helpline: (023) 8049 4344

Sales Desk: (023) 8049 4333

Internet: drapertools.com

E-mail: sales@drapertools.com

General Enquiries: (023) 8026 6355

Service/Warranty Repair Agent:

For aftersales servicing or warranty repairs, please contact the Draper Tools Helpline for details of an agent in your local area.

YOUR DRAPER STOCKIST

TALJ0318

©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.