

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: 230W RANDOM ORBITAL PALM SANDER

Stock no. 83639. Part no. RS230KA.

1.2 REVISIONS:

Date first published April 2016

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

DRAPER TOOLS LIMITED	WEBSITE:	drapertools.com
HURSLEY ROAD	PRODUCT HELPLINE:	+44 (0) 23 8049 4344
CHANDLER'S FORD	GENERAL FAX:	+44 (0) 23 8026 0784
EASTLEIGH		
HAMPSHIRE		
SO53 1YF		
UK		

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 & 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

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.

2.1 CONTENTS

Page	content		Page
1	TITLE PAG	E	
	1.1	INTRODUCTION	
	1.2	REVISION HISTORY	
	1.3	UNDERSTANDING THIS MANUAL	
	1.4	COPYRIGHT NOTICE	2
2	CONTENTS		2
-	2.1	CONTENTS	3
3	GUARANT	EE GUARANTEE	
	3.1		4
4	INTRODUC 4 1	SCOPE	F
	4.1	SECIFICATION	-
	4.1	HANDLING & STORAGE	
5		SAFETY INFORMATION	5
	5.1	GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE	6
	5.2	ADDITIONAL SAFETY INSTRUCTIONS FOR SANDERS	
	5.3	CAUTION: RISK OF ELECTRIC SHOCK. DO NOT OPEN.	7
6		L DESCRIPTION	_
	6.1	IDENTIFICATION	8
7		IG & CHECKING	-
	7.1 7.2	PACKAGING WHAT'S IN THE BOX?	
0	<i>·</i> · -		9
8	8.1	G THE SANDER SWITCH	10
	8.2	ABRASIVE DISC INSTALLATION/REPLACEMENT	10
	8.3	DUST EXTRACTION FACILITY	
9	MAINTEN	ANCE & PARTS REPLACEMENT	12
10	TROUBLES	HOOTING	13
11	EXPLANA	TION OF SYMBOLS	
	11.1	EXPLANATION OF SYMBOLS	12
12	DISPOSAL		
	12.1	DISPOSAL	13
DECLA	RATION OF	CONFORMITYENCLOS	ED

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 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.

4.1 SCOPE

This machine is designed for use in a domestic environment for light surface preparation and other detail work on wood and similar materials.

4.2 SPECIFICATION

Stock no	83639
Part no	RS230KA
Motor:	
Rated voltage	230V~
Rated frequency	50Hz
Rated input	230W
Revolutions per minute (no load) 12	,000min-1
Backing Pad Size Ø Abrasive Disc Size Ø	125mm
Abrasive Disc Size Ø	125mm
Orbit Diameter	2.7mm
Sound pressure level	81.3dB(A)
Sound power level	92.3dB(A)
Vibration level	6.1m/s ²
Weight (machine only)	1.4kg

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: And if not cleaned and maintained correctly or regularly the machine will not perform at its best.

5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

WARNING:

Please read the following instructions carefully, failure to do so could lead to serious personal injury. When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before operating this product and save these instructions.

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.

- 1. KNOW YOUR POWER TOOL: Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.
- 2. KEEP WORK AREA CLEAN: Cluttered areas and benches invite accidents. Floors must not be slippery due to oil or sawdust.
- 3. AVOID DANGEROUS ENVIRONMENTS: Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit. Provide adequate space surrounding the work area. Do not use in environments with a potentially explosive atmosphere.
- 4. KEEP CHILDREN AWAY: All visitors should be kept a safe distance from work area.
- 5. STORED TOOLS: When not being used, all tools should be stored in a dry, locked cupboard and out of the reach of children.
- 6. WEAR PROPER CLOTHING: Do not wear loose clothing, neckties or jewellery (rings, wristwatches) to catch in moving parts. NONSLIP footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.
- 7. USE SAFETY GOGGLES (Head Protection): Wear CE approved safety goggles at all times. Normal spectacles only have impact resistant lenses, they are NOT safety glasses. Also, use face or dust mask if application is dusty and ear protectors (plugs or muffs) during extended periods of operation.
- 8. NOISE LEVELS: Some types of machines may have high noise levels when working. In such cases ear protection must be worn.
- 9. VIBRATION LEVELS: Hand held power tools produce different vibration levels. You should always refer to the specifications and relevant Health and Safety guide.
- **10. DUST EXTRACTION:** If your tool is fitted with a dust extraction fitting, always ensure that it is connected and being used with a dust extractor. Vacuum cleaners can be used if suitable for the material being extracted.
- 11. PROTECT YOURSELF FROM ELECTRIC SHOCK: When working with power tools, avoid contact with any earthed items (e.g. pipes, radiators, hobs and refrigerators, etc.). If you are using a power tool in extreme conditions (e.g. high humidity or generating metal dust), always use an RCD (residual current device) at the power socket.
- **12. STAY ALERT:** Always watch what you are doing and use common sense. Do not operate a power tool when you are tired or under the influence of alcohol or drugs.
- 13. WHEN WORKING OUT OF DOORS: Only use extension leads designed for that purpose.
- 14. ACCESS TO MAINS SOCKET: If a stationary machine is fitted with a moulded plug and cable, the machine should not be positioned so that access to the mains socket is restricted.
- 15. DISCONNECT POWER TO THE TOOL: When not in use, before servicing and when changing accessories such as cutters, etc.
- **16.** AVOID ACCIDENTAL STARTING: Make sure the switch is in the OFF position before plugging the machine into the power supply.
- 17. NEVER LEAVE MACHINE RUNNING UNATTENDED: Turn power off. Do not leave machine until it comes to a complete stop.
- 18. DO NOT ABUSE THE CORD: Never carry the tool by the power cable or pull it from the socket. Keep the power cable away from heat, oil and sharp edges. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid hazard.
- 19. CHECK DAMAGED PARTS: Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be repaired properly or replaced by an authorized service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorized service facility. Do not use the tool if the switch does not turn it on and off.

5. HEALTH & SAFETY INFORMATION

20. KEEP GUARDS IN PLACE: And in working order.

- **21. MAINTAIN TOOLS WITH CARE:** Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. All extension cables must be checked at regular intervals and replaced if damaged. Always keep the hand grips on the tool clean, dry and free of oil and grease.
- 22. USE RECOMMENDED ACCESSORIES: Consult the owners manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.
- 23. SECURE WORK: Use clamps or a vice to hold work. This frees both hands to operate the tool.
- 24. DO NOT OVERREACH: Keep proper footing and balance at all times.
- 25. USE RIGHT TOOL: Do not force the tool or attachment to do a job for which it was not designed.
- 26. DO NOT FORCE TOOL: It will do the job better and safer at the rate for which it was designed.
- 27. HAVE YOUR TOOL REPAIRED BY A QUALIFIED PERSON: This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

IMPORTANT NOTE:

Residual Risk. Although the safety instructions and operating manuals for our tools contain extensive instructions on 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!

5.2 ADDITIONAL SAFETY INSTRUCTIONS FOR SANDERS

When using your Random Orbital Palm Sander, follow these basic safety precautions: WARNING:

Wear dust protection with sanders. Exposure to dust can be detrimental to health.

Connect dust extraction equipment. If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

5.5 CAUTION: RISK OF ELECTRIC SHOCK. DO NOT OPEN.

Caution: Risk of electric shock. Do not open.

This appliance is supplied with a moulded 3 pin mains plug for your safety. The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, ensure the substitute is of the correct rating, approved to BS1362 and ASTA or 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 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.

6. TECHNICAL DESCRIPTION

6.1 IDENTIFICATION



- ① On/Off Rocker Switch.
- 2 Hand Grip.
- ③ BS Moulded Plug & Cable.
- (4) Backing Pad.

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 Helpline (the telephone number appears on the Title page) and do not attempt to use the tool.

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 product; there are several parts not fitted or attached to it.



- 5 Dust Extraction (Collection Box).
- 6 Dust Extraction (Vacuum Adaptor).
- ⑦ Various Abrasive Discs.

8. PREPARING THE SANDER

WARNING: Contact with or inhalation of harmful toxic dusts arising from sanding lead paint surfaces, woods, etc., can endanger the health of operators and bystanders. An approved dust mask shall be worn.

Prior to connecting this machine to the power supply ensure the switch is in the "off" position.

8.1 SWITCH - FIG. 1

Ensure the sander is raised off the workpiece. To activate the sander, position the rocker switch ① to the "I" position. The sander will continue to run until switch ① is changed back to the "O" position.

This machine is intended for fine detail/light duty sanding of wood and similar materials only.

Apply equal pressure on the workpiece with the backing pad remaining flat. Attempting to sand areas using only the edge will lead to damage to the backing pad.

NOTE: Excess pressure when sanding reduces the effectiveness of tool and will cause the motor to overload.

Do not overload this machine.

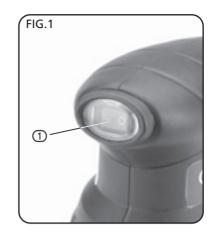
Replace abrasive discs when clogged with material or when surface/edge has rips, cracks or worn areas.

Inhalation of dust particles can be detrimental to health. The dust outlet must be connected with a dust extraction machine.

NOTE: Due to the outlet diameter, a size adaptation may be necessary.

All wood dust (including dust from composites like chipboards and fibre boards etc) is hazardous to health: it can affect the nose, the respiratory system and the skin. For example MDF (medium density fibreboard) which contains formaldehyde is a known carcinogen. In addition to the above measures a correctly fitted dust mask, suitable for the activity and in accordance to the relevant standard, must be worn.

For work activities involving exposure to fine wood dust a mask rated to at least FFP2 should be used.



8.2 ABRASIVE DISC INSTALLATION/REPLACEMENT – FIG.2

The backing pad and the abrasive disc are considered consumable items. The abrasive discs ⑦ simply push on to the backing pad ④ and are held in place with a hook and loop fastening. To ensure optimum removal of dust ensure the holes in the abrasive disc are aligned with those in the backing pad.

To remove the worn abrasive disc, simply pull away from the hook and loop and re-apply a new disc.

GENERAL SANDING INFORMATION:

Select the correct grit to obtain the desired finish. The higher the grit number the finer the finish. For removing larger amounts of material a 60/80 grit is ideal. When removing paint from a wood surface the grit will have a tendency to clog.

Replace abrasive disc when clogged with material or when surface/edge has rips, cracks or worn areas.

NOTE: Abrasive disc and the sander backing pad are consumable items.

8.3 DUST EXTRACTION FACILITY: - FIGS. 3 & 4

COLLECTION BOX:

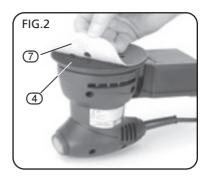
To attach the collection box (5) to the machine slide it down over the appature (5.1). Ensure it locates corrrectly in the guide slots and is pushed down fully, covering the outlet.

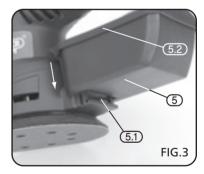
To empty the box, slide it off the machine over a waste recepticle, remove the lid (5.2) which is clipped over the box's rim.

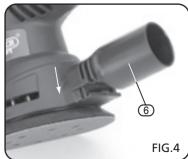
VACUUM ADAPTER:

The vacuum adaptor attaches to the sander in the same manner as the collection box.

With the collection box removed, attach the adapter (6) to the sander. Insert a vacuum cleaner nozzle to achieve efficient dust removal.







9. MAINTENANCE & PARTS REPLACEMENT

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. For this reason avoid blocking the air inlets. After use disconnect the tool from the power supply and vacuum the ventilation slots.

If the replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.

WARNING: FOR YOUR OWN SAFETY ALWAYS TURN THE MAIN SWITCH ON THE MACHINE "OFF" AND REMOVE THE PLUG FROM THE POWER SUPPLY BEFORE CARRYING OUT ANY MAINTENANCE OR TROUBLE SHOOTING.

PROBLEMS	POSSIBLE CAUSES	REMEDY
Motor does not start	1. Fuse	1. Replace 5 Amp time delay fuse or reset circuit breaker
	2. Brushes worn	2. Have brushes replaced by an authorised service centre
	3. Other	3. Contact an authorised service centre
Reduced sanding efficiency	1. Abrasive disc worn, clogged or cracked	1. Replace abrasive disc †

⁺ A range of accessory abrasive discs are available from your local Draper stockist. Abrasive discs and the backing pad are both considered consumable items.

11. EXPLANATION OF SYMBOLS

11.1 EXPLANATION OF SYMBOLS



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



For indoor use. Do not expose to rain.



Class II construction (Double insulated)



Warning! Wear dust mask.



Warning! Wear goggles.



Warning! Read instruction manuals before



operating and servicing this equipment.

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



* Waste Electrical & Electronic Equipment.



CONTACTS

- DRAPER TOOLS LIMITED, Hursley Road, Chandler's Ford, Eastleigh, Hampshire. SO53 1YF. U.K.
- Helpline: (023) 8049 4344
- Sales Desk: (023) 8049 4333
- 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		

RDMC0416

