

DRAPER[®]

GB

**STORM
FORCE**

230V
**BELT & DISC
SANDER**

98419



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: 230V Belt & Disc Sander

Stock No: 98419

Part No: BDS300SF

1.2 REVISIONS:

Date first published July 2020.

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>

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1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

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

Important – 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

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: +44 (0) 8049 4333 or Product Help Line +44 (0) 23 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

4.1 SCOPE

This belt and disc sander offers complete flexibility in the home workshop. Both the belt and disc functions offer a wide variety of sanding operations from chamfers to compound mitres.

Capabilities include sanding of various materials such as wood, plastic and aluminium. Any application other than that it was designed for is considered misuse.

4.2 SPECIFICATION

Stock No.....	98419
Part No.....	BDS300SF
Motor:	
Rated voltage	230V~
Rated frequency	50Hz
Rated input	300W
Belt size	25 x 762mm
Belt speed.....	13.5m/s
Belt work table size.....	130 x 130mm
Disc size	127mm
Disc speed.....	2950min ⁻¹
Disc work table size.....	178 x 95mm (0-45°)
Sound pressure level (LpA).....	70dB(A)
Sound power level (LWA)	83dB(A)
Weight	7.5kg

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

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.

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. This includes battery chargers.

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 non-slip 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.

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

5. HEALTH AND SAFETY INFORMATION

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 SANDERS

Safety is a combination of operator common sense and alertness at all times when the sander is being used.

Warning! For your own safety, do not attempt to operate the belt and disc sander until it is completely assembled and installed according to the instructions and until you have read and understand the following.

There may be a tendency for the machine to tip over or move during certain operations, due to this, the sander must be bolted down.

The machine should be positioned so the operator or a casual observer are not forced to stand in line with the sanding belt or disc. This machine is intended for indoor use only.

When sanding on the disc, always apply the workpiece left of centre of the disc. Applying the workpiece to the right side could cause it to fly up (kickback) which could be dangerous.

Always wear safety goggles (not glasses) that comply to a recognised standard. Wear a face mask if the operation is dusty. Wear ear plugs or muffs during extended periods of operation. Do not wear gloves, jewellery or watches. Roll long sleeves above the elbow. Tie back long hair.

Do not sand pieces of material too small to hold comfortably by hand.

Avoid awkward hand positions, where a sudden slip could cause a hand to move into the sanding disc or belt.

Never stand on the machine.

Never turn your sander "ON" before clearing the belt table and worktable of all objects.

Make sure the sanding belt runs in the right direction (directional arrow on inside of belt). Always have it adjusted correctly so that the belt does not run off the rollers.

Hold the work firmly when sanding on the belt and against the worktable when sanding on the disc.

Always adjust the worktable to within a maximum of 2mm off the sanding disc or belt.

When sanding a large piece of material, provide additional support at table height.

Never leave when the machine is on, wait until the machine has come to a complete stop.

5. HEALTH AND SAFETY INFORMATION

Do not perform assembly or adjustment work on the table while the sander is operating. Turn sander “OFF” and remove plug from power supply before removing any accessories.

If any part of this belt and disc sander breaks, bends, or fails in any way, or any electrical component fails to perform properly, or if any part is missing, turn off power switch, remove plug from the power supply and replace damaged, missing and/or failed parts before resuming operation.

Do not sand with the workpiece unsupported. Support it with the backstop or worktable. The only exception is curved work performed on the outer end of the belt (idler roller).

Safety is a combination of operator common sense and alertness at all times when the sander is in operation.

Caution: This Belt and Disc Sander is designed solely for wood and nonferrous metals only. Any other materials will cause damage to the product or risk of fire.

5.3 RESIDUAL RISK

Important: 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

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.

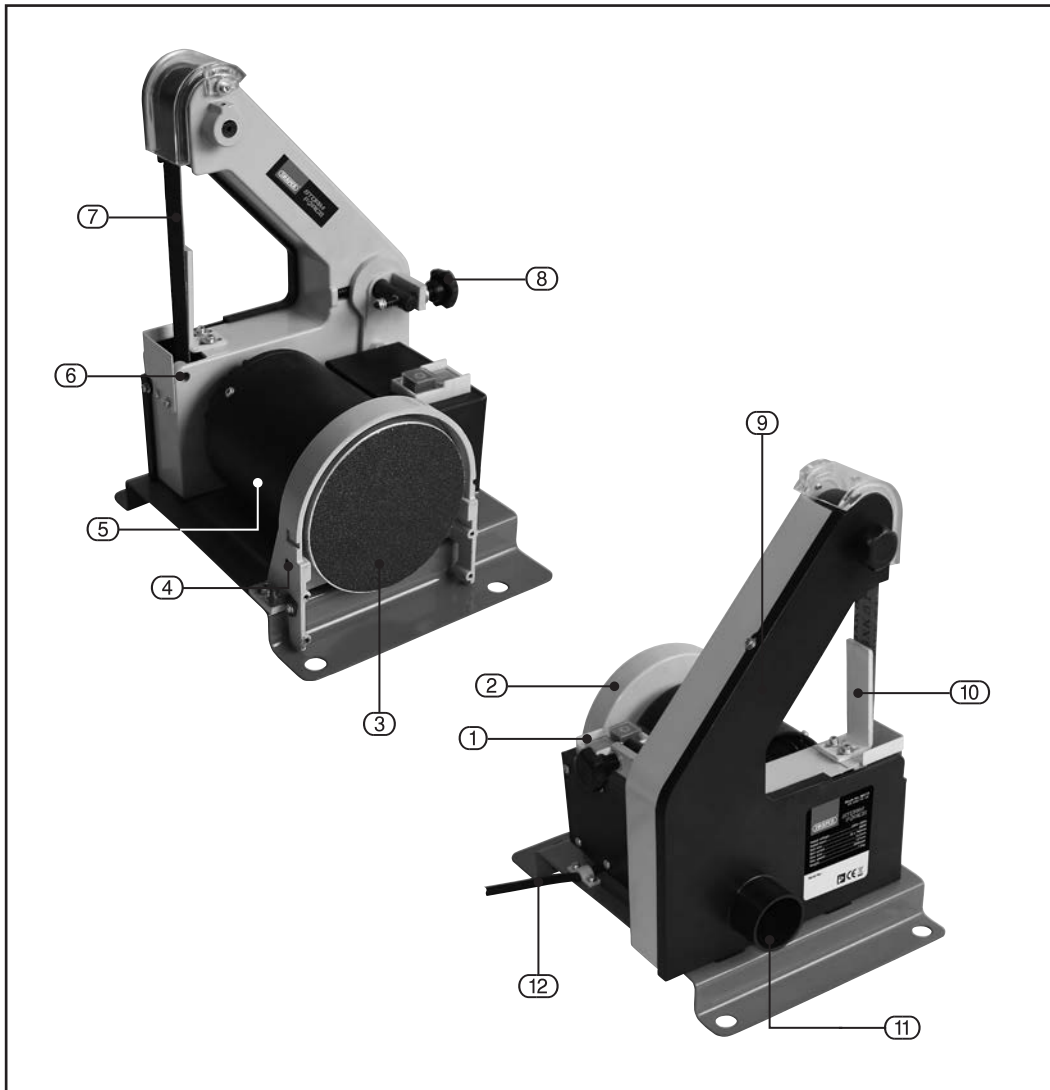
†Earthed : This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of failure of the basic insulation.

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 No-volt On/Off switch.

② Sanding disc guard.

③ Sanding disc.

④ Disc table support.

⑤ Motor.

⑥ Belt table support.

⑦ Sanding belt.

⑧ Tracking adjustment/belt release knob.

⑨ Belt drive cover.

⑩ Platen.

⑪ Belt dust extraction outlet.

⑫ Moulded plug and cable.

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.

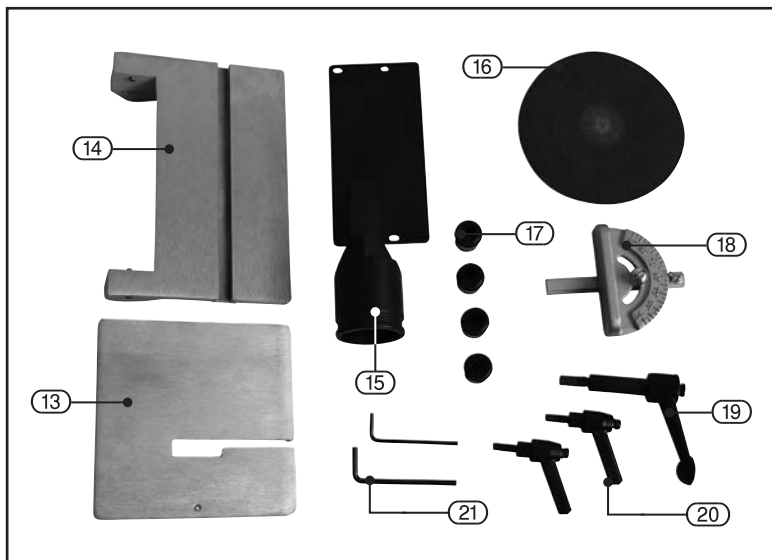
The packaging material should be retained at least during the warranty period, in case the machine needs to be returned for repair.

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.



(13) Belt sanding work table.

(14) Disc sanding work table.

(15) Disc dust extraction outlet.

(16) Sanding disc.

(17) Feet x4.

(18) Mitre gauge.

(19) Belt table locking handle.

(20) Disc table locking handles x2.

(21) Hex keys x2.

Note: For details of our full range of accessories and consumables, please visit drapertools.com

8. PREPARING THE SANDER

8.1 WORK SUPPORT TABLE ATTACHED TO SANDING BELT - FIGS. 1-2

Slide the belt and platen through the belt table.

Insert hex bolt (19.1) through the hole in the sander and the slot in the underside of the table.

Fasten the flat washer and table locking handle (19) onto the bolt. The table locking handle is spring loaded. By pulling the handle away from the hex bolt, the handle can be rotated without loosening or tightening the locking handle.

A positive stop to set the belt table at 90° to the belt is located underneath and at the back of the belt table. Place a combination square against the table and the belt, once a perfect 90° angle is obtained, unscrew hex bolt until it comes in contact with the sander frame.

Note: When tilting the table, it should be reajusted so that the gap between the belt and the table is no larger than 1/16". A gap larger than this could cause the workpiece to slip down between the belt and the table.



FIG.1

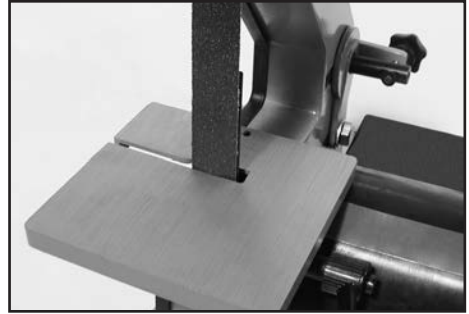


FIG.2

8.2 PLATEN ADJUSTMENT - FIG. 3

The platen (10) can be adjusted by loosening the two cap screws (10.1) that fasten it to the sander frame. The platen should be adjusted so that it almost touches the back of the sanding belt.

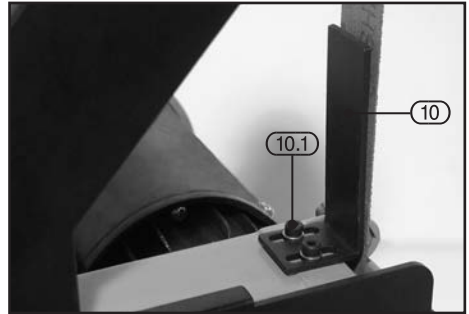


FIG.3

8.3 ATTACH FEET - FIG.4

Insert the feet (17) into the holes on each corner of the base of the machine. They will protect your worktop.

Note: Extra clamping maybe needed to keep the machine stable when in use.



FIG.4

8. PREPARING THE SANDER

8.4 WORK SUPPORT TABLE ATTACHED TO SANDING DISC - FIG. 5

Align the work support table (14) to the sander. Insert the 2x disc table locking handles (20) into the hole holes either side and tighten when table is in position. Ensure the maximum distance between disc and table is 1.6mm.

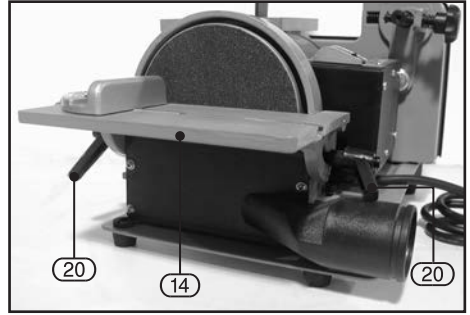


FIG.5

8.5 WORK SUPPORT TABLE ADJUSTMENTS - FIG. 6

Both the disc and belt tables are adjustable from 0-45°. To adjust the belt table, loosen the locking handle (19) on the right side of the table, adjust the table to the desired angle and retighten.

To adjust the disc table, loosen the two locking handles (20) on either side of the table, adjust the table to the desired angle and retighten both handles.

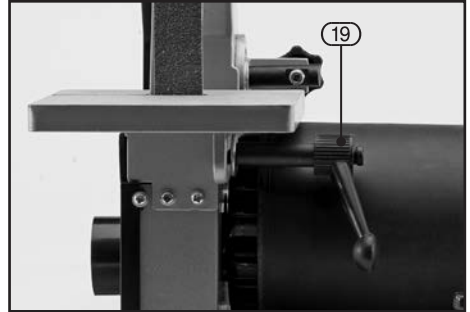


FIG.6

8.6 DUST EXTRACTION - FIGS. 7-8

Inhalation of dust particles can be detrimental to health.

The dust outlet must be connected with a dust extraction machine. There are two dust extraction outlets on this machine - (11) and (15).

All wood dust (including dust from composites like chipboards and fibreboards, 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 the fine wood dust, a mask rated to at least FFP2 should be used.



FIG.7

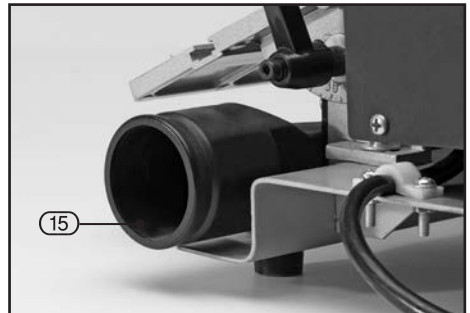


FIG.8

9. OPERATION AND USE

Important: Make sure that the mains voltage matches the voltage stated on the machines rating plate.

9.1 NO-VOLT ON/OFF SWITCH - FIG. 9

The sander is fitted with a no-volt on/off switch.

In the event of a power failure the machine will have to be manually restarted.

To switch the machine on, push the button marked I.

To switch the machine off, both normally and in an emergency, push the button marked O.

Caution: This machine is designed solely for wood and nonferrous metals only. Any other materials will cause damage to the product or risk of fire.

9.2 BELT AND DISC SANDING - FIG. 10

When sanding rest the workpiece against the work table and slide in gently to come into contact with the belt or disc.

Disc sanding should be done on the outer edge of the disc which revolves downward. Applying the work piece to the "UPSIDE" of the disc may cause it to fly up, which could be dangerous to the operator.

The mitre gauge (18) is very useful as a guide when chamfering and finishing angle sanding. To adjust the angle of bevel, the worktable can be tilted 0° to 45°. To do this release the two locking handles (20).

Note: When the worktable is tilted the gap between the disc and the table may increase, but ensure the gap is no larger than 1.6mm.

9.4 REPLACING THE SANDING DISC - FIG. 11

Remove the two locking handles (20) which hold the disc table to the frame and remove the table.

Remove the sanding disc by peeling it off the disc plate. Clean any adhesive residue off the disc plate.

Press the new sanding disc onto the disc plate.

Replace the disc support table.

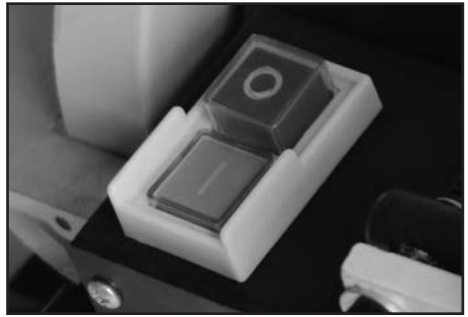


FIG.9

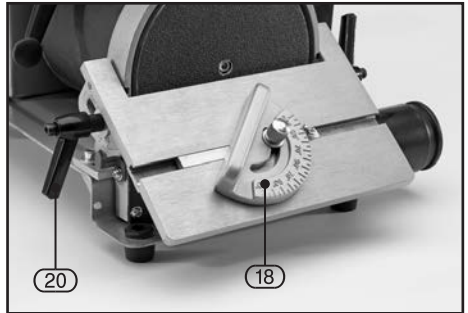


FIG.10

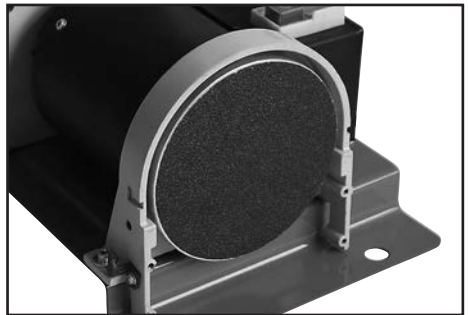


FIG.11

9. OPERATION AND USE

9.5 REPLACING THE SANDING BELT AND TRACKING - FIG. 12

Warning! To avoid injury from accidental starting, turn the power switch “OFF” and remove the plug from the power supply before removing or installing sanding belts.

On the inside of the sanding belt you will find direction arrows. These arrows must match up with the direction of rotation.

- Remove the lock knob from the top of the side cover and the screw below the belt table, then remove the entire cover.
- Pull the tracking knob (8) towards the front of the sander to release the belt tension. While holding the tracking knob, remove the sanding belt from the three wheels.
- Reinstall the new sanding belt and replace the cover.

To track the sanding belt, turn the tracking knob (8). Turning the tracking knob clockwise will move the belt right, and vice-versa. This adjustment is usually very slight.

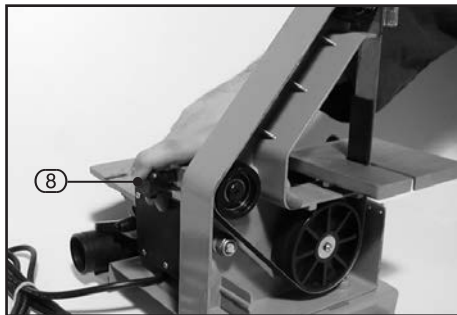


FIG.12

10. MAINTENANCE AND TROUBLESHOOTING

10.1 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.

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.

A coat of wax polish applied to the worktable will make it easier to feed the work while finishing.

Do not apply wax to the abrasive belt table because the belt could pick up the wax and deposit it on the pulleys, causing the belt to slip.

10.2 TROUBLESHOOTING GUIDE

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 troubleshooting.

Problem	Possible Cause	Remedy
Motor does not start.	1. Defective ON/OFF switch.	1. Replace defective parts before using again.
	2. Burned out motor.	2. Any attempt to repair this motor may create a HAZARD unless repair is done by a qualified service technician.
Machine slows down when sanding.	1. Drive belt too tight.	1. Decrease belt tension.
	2. Applying too much pressure to workpiece.	2. Ease up on pressure.
Sanding belt runs off pulleys.	1. Not tracking properly.	1. Adjust tracking.
Wood burns while sanding.	1. Sanding disc or belt is glazed with sap.	1. Replace disc or belt.

Important: Please note all repairs/service should be carried out by a qualified person.

11. EXPLANATION OF SYMBOLS

11.1 EXPLANATION OF SYMBOLS



Read the instruction manual.



Wear face mask and safety glasses.



Disable the machine before attempting to maintain it.



WEEE –
Waste Electrical & Electronic Equipment.

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

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.*

NOTES

NOTES

CONTACTS

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

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

YOUR DRAPER STOCKIST

TACM0720

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