



## ORIGINAL INSTRUCTIONS

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## INTRODUCTION

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Thank you for purchasing this Bench Grinder with sanding belt.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

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## GUARANTEE

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This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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## ENVIRONMENTAL PROTECTION

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Do not dispose of this product with general household waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of according to the laws governing Waste Electrical and Electronic Equipment.

Through the purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

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## GENERAL SAFETY RULES

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CAUTION: FAILURE TO FOLLOW THESE PRECAUTIONS COULD RESULT IN PERSONAL INJURY, AND/OR DAMAGE TO PROPERTY. PLEASE KEEP THESE INSTRUCTIONS IN A SAFE PLACE FOR FUTURE REFERENCE.

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### WORK ENVIRONMENT

1. Keep the work area clean, tidy and well lit. Cluttered and dark areas invite accidents
2. 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.
3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

### PERSONAL SAFETY

1. 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 personal injury.
2. Avoid accidental starting. Ensure the switch is in the off position before plugging in. Plugging in power tools that have the switch on invites accidents.
3. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
4. 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.
5. Gloves, manufactured to the current European safety standards should be worn when operating grinding equipment.
6. Eye protection manufactured to the current European safety standards should be worn when operating grinding equipment. Eye protectors must provide protection from flying particles from the front and the side.

### GENERAL USE AND CARE OF POWER TOOLS

1. ALWAYS check for any damage or condition that could affect the grinder's operation. Any damaged part should be properly repaired.
2. NEVER use the grinder if it is defective or operating abnormally.

3. NEVER abuse the mains cable. Never yank the cable to disconnect it from the socket. Keep the cable away from sharp edges/hot surfaces.
4. NEVER carry out any alterations or modifications to this product.
5. NEVER wipe the machine clean with solvents. Wipe plastic parts with a soft cloth, slightly dampened with soapy water.
6. Do not use the tool for any purpose than that described in this manual.
7. Always maintain the tool with care. Keep it clean for the best and safest performance.
8. 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 which it was designed.
9. 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.
10. Store idle 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.
11. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
12. Use the power tool and accessories in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

## **ELECTRICAL SAFETY**

1. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use adapter plugs with earthed (grounded) power tools. Correct plugs and matching outlets will reduce the risk of electric shock.
2. Do not abuse the cable. Never use it for carrying, pulling or unplugging the power tool. Keep the cable away from heat, oil, sharp edges or moving parts. Damaged or entangled cables increase the risk of electric shock.
3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock. If operating the power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.

4. When operating a power tool outdoors, use an extension cable suitable for outdoor use. Use of a cable suitable for outdoor use reduces the risk of electric shock.

## **BELT/DISC SANDER SAFETY**

1. ALWAYS wear a dust mask when using this machine. Be aware that harmful or toxic dusts could be produced when sanding some woods.
2. ALWAYS use the table to support the workpiece.
3. ALWAYS check to ensure the attachments are secure before starting.
4. ALWAYS maintain a suitable clearance between table and sanding belt.
5. ALWAYS hold the workpiece firmly so that it cannot be torn from your hands
6. ALWAYS ensure that nails or foreign objects have been removed from a workpiece beforehand. Nails etc. will destroy the belt.
7. NEVER sand pieces which cannot be held firmly by hand.

## **GRINDING STONE SAFETY**

1. Check the speed of the grindstone before fitting to your grinder. Never use a stone with a rpm speed less than the rpm speed of your grinder.
2. The outside diameter and thickness of your accessories must be within the capacity rating of the power tool. The correct size accessories can be correctly guarded and controlled.
3. Never use a stone that is chipped, cracked or damaged. Fragments from a broken or damaged grinding stone can cause serious injury. Make sure that defective stones are destroyed and not used.
4. Bonded abrasive products are breakable and shall therefore be handled with utmost care. The use of damaged or improperly mounted or used abrasive products is dangerous and can cause serious injuries.
5. Always refer to the label for specified usage and observe the safety information. Do not use for purposes other than specified.
6. Always use the correct stone for it's intended task. Using the incorrect stone can cause serious injury.
7. Allow the stone and tool to do the work. Never force the workpiece against the stone as this could cause kickback and/or shatter the stone causing serious injury.
8. Never use a damaged grinding stone. Inspect the stone before each use for chips, cracks or excess wear. If the tool or accessory is dropped, inspect for damage or install a new accessory. After fitting the accessory, position yourself away from the plane of the rotating accessory and run the tool at full speed. damaged stones may break apart during this test.

9. Abrasive products shall be handled and transported with care. Abrasive products shall be stored in such a manner that they are not subjected to mechanical damage and harmful environmental influences.
10. Do not use separate reducing bushes or adapters to adapt large hole abrasive wheels. Do not force a stone onto a machine or alter the size of the arbor hole.

## BENCH GRINDER SAFETY WARNINGS

1. Hold a hand tool or blade being sharpened firmly to prevent loss of control.
2. Never install a abrasive flap wheel or sanding disc on this grinder.
3. Always replace a cracked grinding wheel immediately.
4. Never use damaged or incorrect grindstones. The stone and retaining fixtures were specially designed for your grinder, for optimum performance and safety of operation. Inspect the condition of the grinding stone before use and do not use if any damage is found.
5. Always use the tool rests to steady the workpiece, the torque of the spinning grinding wheel may pull the workpiece from your hands.
6. ALWAYS check for damaged parts. Before further use any part that is damaged should be carefully checked to determine if it would operate properly and perform its intended function. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool's operation. A part that is damaged should be properly repaired or replaced at an authorised service center. Following this rule will reduce the risk of electric shock, fire or serious injury.





**NOTE:** Bench grinders used in industrial environments may be subject to the The Provision and Use of Work Equipment regulations 1992 and/or the training requirement of The Abrasive Wheels Regulations 1970), or other legislation. If in doubt seek advice

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## SAFETY SYMBOLS

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The meanings of the markings and symbols on the product are shown below

	<p>Read this manual before use and keep in a safe place for future reference</p>		<p>Wear eye protection when using this sharpener.</p>
	<p>Gloves should be worn when grinding.</p>		<p>Wear dust mask when using the sharpener or honing wheel.</p>

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## SPECIFICATIONS

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Feature	Value
Overall Dimensions	340 (H) x 340 (W) x 300 (D)
Weight	8.3KG
Grinding Stone Dimensions	150 dia x 20 mm thickness (12.7 mm bore)
Rated Voltage / Frequency	230 V / 50 Hz
Motor Wattage	400W
No Load Speed	2980 rpm
Duty Cycle Classification	2 minutes on/2 minutes off
No load belt speed	15.5 m/s
Belt Length	686 mm
Belt Width	50 mm

# OVERVIEW



No	Description
1	Grinding Wheel Cover
2	Eye Shield/Spark Arrester
3	Grinding Wheel
4	Tool Rest
5	Motor Housing
6	Base

No	Description
7	On/Off Switch
8	Bench Mounting Holes
9	Sander Work Rest
10	Sanding Belt Cover
11	Sanding Belt
12	Top Roller Securing Knob



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## ASSEMBLY

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### INSTALLATION OF THE TOOL REST

The tool rest attaches to the inward side of the guard and provides a surface that must be used to support the workpiece during operation. Certain types of grinding/sanding may require jigs or accessories that will be used with the tool rest to assure the proper angle of the workpiece against the wheel. Failure to install and use the tool rest can lead to serious personal injury.

To install the tool rest:

- Loosely attach the tool rests perpendicular to the belt or wheel surface with the knob bolts, 5 mm washers and hex nuts (included).
- To adjust the angle of the sanding belt tool rest, use a square or a protractor to set the angle of the tool rest in relation to the sanding belt. Adjust both tool rests approximately 1,5-3,0mm. from the grinding wheel and the sanding belt and tighten the knob bolts. (in Fig. 1) shows the correct adjustment for the tool rest at the grinding wheel.

### SPARK GUARD & EYE SHIELD

The spark guard must be installed and positioned 3mm from the grinding wheel to minimize sparks flying towards the operator. The eye shield must be positioned between the grinding wheel and the operator's face to protect the operator from flying debris. This is not a replacement for safety glasses!

To install the spark guard and eye shield:

- Using the included 5 mm screw and washer, install the spark guard as shown (in Fig. 2)
- Attach the eye shield to the support bracket with the included 6 mm carriage bolt and hex nut. Use the 8 mm hex bolt and washer to attach the support bracket to the grinder (Fig.2).

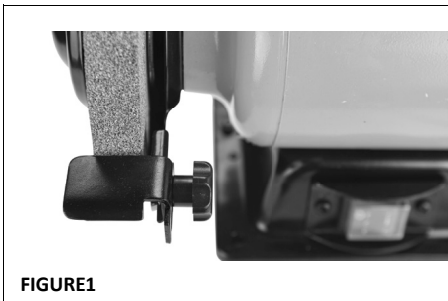


FIGURE1



FIGURE2

## BELT TRACKING

Tracking the sanding belt means to center the belt on its rollers, so that it runs balanced and does not make contact with the sides of the belt cover.

To track the sanding belt:

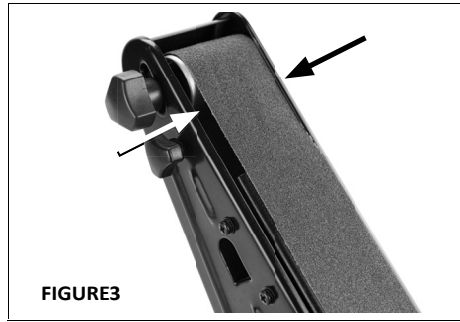
- Disconnect the machine from the power supply.
- Rotate the grinding wheel.
- As you rotate the grinding wheel, watch how the sanding belt rides on the upper roller. If the belt is tracking properly, the sanding belt should be centered between the sides of the belt cover as shown (in Fig. 3).
- While spinning the wheel, turn the tracking control knob anti-clockwise to make the belt move to the left, or turn the tracking control knob clockwise to make the belt move to the right.
- After the belt is centered, spin the grinding wheel approximately ten times to ensure that the belt continues to track properly.

## DUST/CHIP EXTRACTION

Dust from materials such as lead-containing coat-ings, some wood types, minerals and metal can be harmful to one's health. Touching or breathing-in the dust can cause allergic reactions and/or lead to respiratory infections of the user or bystanders. Certain dust, such as oak or beech dust, is con-sidered carcinogenic, especially in connection with wood-treatment additives (chromate, wood preservative). Materials containing asbestos may only be worked by specialists.

Provide for good ventilation of the working place.

- It is recommended to wear a P2 filter-class respirator.
- Observe the relevant regulations in your country for the materials to be worked.
- Avoid dust accumulation at the workplace.
- Dust can easily ignite.



## OPERATION

Pay attention to the mains voltage. The voltage of the power source must match the voltage specified on the rating plate of the power tool. Always check abrasive tools before using them. The abrasive tool must be fitted properly and be able to move freely. Carry out a test run for at least one minute with no load. Do not use abrasive tools that are damaged, run untrue or vibrate during use.

## SWITCHING ON/OFF

- To start the power tool, push the on/of switch (4) into position "I".
- To switch off the power tool, push the on/of switch (4) into position "0".

## WORKING ADVICE

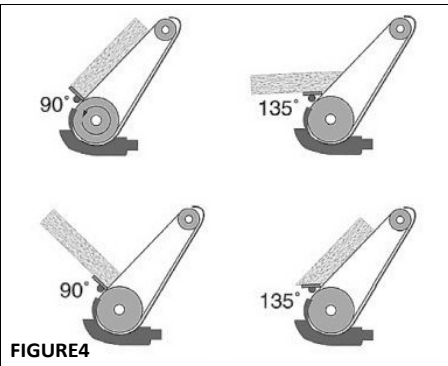
- Switch the power tool on before bringing the workpiece into contact with it and only switch the power tool off after you have removed the workpiece. The workpiece can move suddenly.
- Never reach into the power tool grinding wheel when it is running. This can lead to serious injuries.
- Wear a work apron. Ensure that no persons are at risk due to flying sparks. Remove combustible materials from the surrounding area. Flying sparks are created when sanding metals.

Use silicon carbide grinding discs C (accessory) when working carbide (TC) workpieces. Place the workpiece you intend to grind onto the tool rest (5) and press it lightly against the grinding wheel. To achieve optimal grinding results, move the workpiece gently back and forth. This also ensures that the grinding wheel is worn off evenly. Cool off the workpiece in water at intervals.

## SANDING

To sand a workpiece:

- Before starting the machine, adjust the angle of the tool rest so your workpiece is supported and the area you wish to sand is parallel with the sanding belt as illustrated (in Fig 4).
- With the machine plugged into power, the red switch to the ON position.



- Grasp the workpiece tightly and properly support it on the tool rest.
- Press the workpiece evenly against the sanding belt with light pressure (see Fig 7 and 8). DO NOT press hard. Let the rotation of the belt do the work.

- Remove your workpiece regularly to check the progress the sander has made. Remember you can always remove more material but you cannot add it.
- When you are finished sanding, move the red switch to the OFF position. DO NOT continue sanding and DO NOT manually stop the sanding belt with your workpiece.

## REPLACING WHEELS



**WARNING!** The hazards of using a damaged wheel include flying chunks of sharp abrasive material that could cause serious injury or death. Inspect every grinding wheel before it is mounted and DO NOT use a damaged grinding wheel!

To remove/mount a wheel:

- Disconnect the grinder from the power supply.
- Remove the head screws and nuts that go through the outer guard. Take off the outer guard and the rim guard.
- Use a wrench on the nut that holds the wheel on the arbor. Hold the wheel to prevent it from turning with your other hand. The grinding wheel arbor has a left handed thread. Loosen the nut by turning it clockwise.
- Remove the outer wheel flange and paper disc. Pull the wheel free from the arbor. There will also be a paper disc and a wheel flange on the back side of the wheel which should also be removed.

- Mount the new wheel in the reverse order. Always make certain there is a paper or fiber disc between the wheel flanges and the wheel itself. Tighten the nut snugly but DO NOT over tighten.
- Over tightening can crack the wheel.
- Re-install the guards and shields.
- Run a new wheel for at least one minute while stand-ing clear of the line of rotation.
- If a wheel does have defects it will generally fail as soon as it gets up to full speed.

### REPLACING SANDING BELT

To remove/replace a sanding belt:

1. Disconnect the machine from the power supply.
2. Remove the star knob from the right hand sanding belt cover as shown (in Fig 5) and remove the cover.
3. Loosen the sanding belt tension knob, as shown (in Fig 6).
4. Pull the sanding belt tension knob down with one hand and work the sanding belt off the rollers with the other hand.
5. Install the new sanding belt in the reverse order of removal and replace the belt cover.
6. Track the new sanding belt before turning the machine on (see Belt Tracking).

### TRANSPORT

Remove all accessories that cannot be securely

- fitted to the power tool.  
Wind up the network cable completely and tie it together.
- To lift or transport the power tool, hold it from below by the two protective guards.



FIGURES

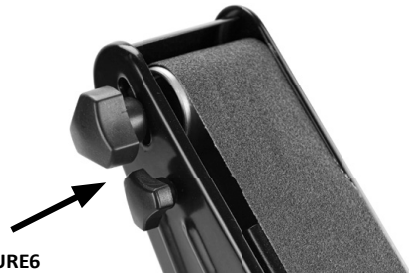


FIGURE6



FIGURE7



FIGURE8

## TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Grinder will not operate.	No power supply.	Check supply & rectify.
	ON/OFF switch is faulty.	Consult your dealer.
	Fuse blown.	Check & replace if necessary. Consult your dealer if condition persists.
	Motor faulty.	Consult your dealer.
Motor runs but wheel not spinning.	Retaining nut not tight.	Ensure wheel is correctly seated. Tighten retaining nut.
	wheel not engaged with drive pin.	Loosen wheel & engage wheel on drive pin.
Motor gets too hot.	Wrong supply voltage.	Ensure supply voltage is correct.
	Work load too heavy.	Reduce pressure applied to work-piece.
Unusual vibration while working.	Grindstone mounted incorrectly or damaged.	Check & rectify. Replace grinding wheel immediately.
	Bearings badly worn.	Consult your dealer.

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# MAINTENANCE

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## GENERAL MAINTENANCE

Make sure that all components are tight and secure. Always have any damaged or worn parts repaired or replaced by qualified service personnel. Do not attempt to repair the bench grinder unless you are qualified to do so.

The grinding stone will wear down with use and may well go out of true. Use a dressing wheel or stone grader to correct the trueness and to remove worn, glazed grains from the stone.

The stone will have a finite life expectancy, dependant upon the nature of the work being done. Periodically, make a note of the wheel diameter and replace your (150mm) dia wheel if it reduces to an little as (130mm) in diameter.

# DECLARATION OF CONFORMITY



We Importer:

**TOOLS&E LTD**

Unit C, Manders Ind. Est.,  
Old Heath Road, Wolverhampton,  
WV1 2RP.

Declare that the product:

**Designation: 6" GRINDER / BELT SANDER**  
**Model: BGS150**

Standards & technical specifications referred to:

**We hereby declare that this product(s) complies with the following directive(s):**

- 2014/30/EU *Electromagnetic Compatibility Directive.*
- 2006/42/EC *Machinery Directive.*
- 2011/65/EU *Restriction of Hazardous Substances, (amended by 2015/863).*

**The following standards have been applied to the product(s):**

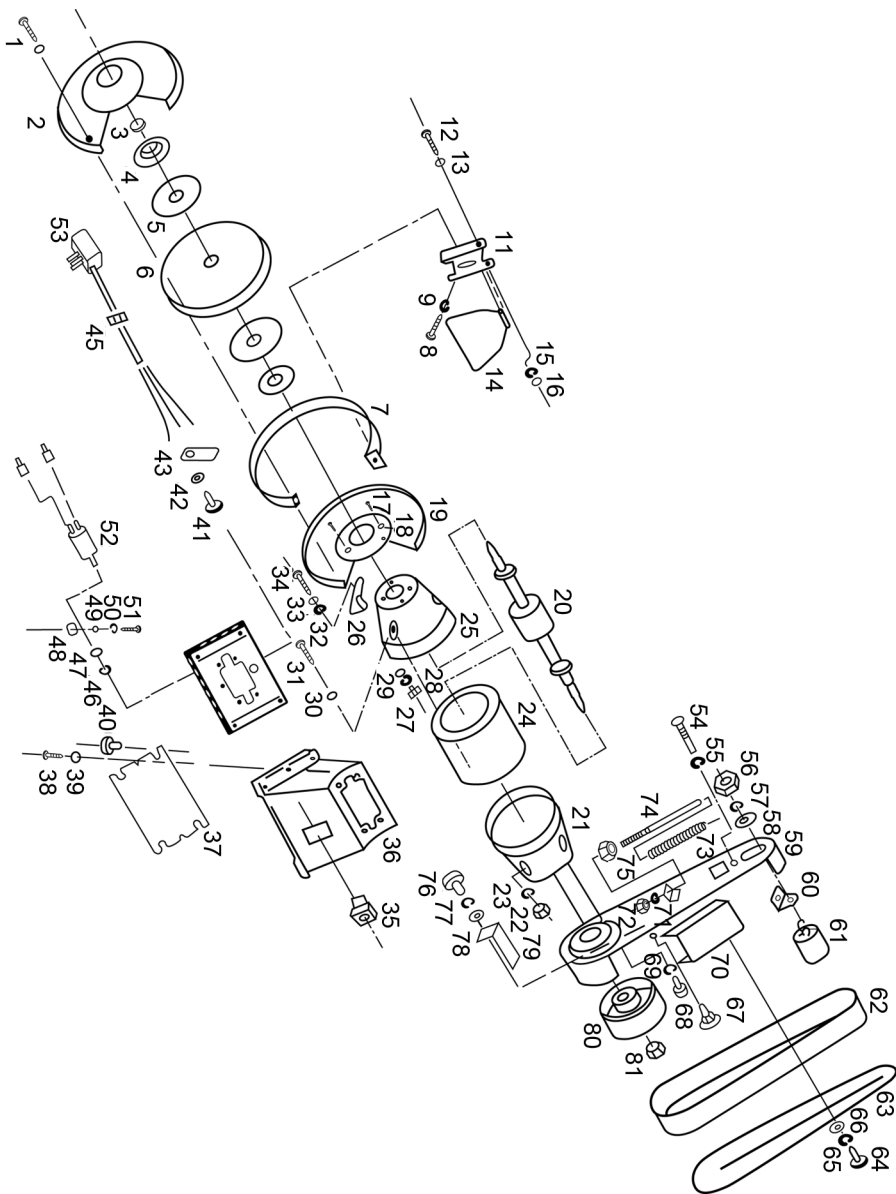
- EN 62841-3-4:2016+A11:2017, EN 62841-1:2015, EN 55014-1:2017, EN 55014-2:2015,*
- EN 61000-3-2:2019, EN 61000-3-3:2013.*

**Authorized Technical File Holder: Bill Evans**

**14/08/2023**  
**The Director**

A handwritten signature in black ink, appearing to read "Bill Evans".

# COMPONENT PARTS DIAGRAM





## COMPONENT PARTS LIST

No	Description	No	Description	No	Description
1	Bolt	31	Bolt	61	Top Roller
2	Outer Guard	32	Washer	62	Belt (5-pack)
3	Nut	33	Spring Washer	63	Outer cover
4	Flange	34	Screw	64	Screw
5	Paper Blotter	35	Switch	65	Spring Washer
6	Wheel	36	Base	66	Washer
7	Ring Guard	37	Base Plate	67	Square Neck Screw
8	Screw	38	Screw	68	Screw
9	Spring Washer	39	Tooth Washer	69	Spring Washer
10	Washer	40	Rubber feet	70	Belt Support Bracket
11	Spark Arrester	41	Screw	71	Spring Washer
12	Bolt	42	Spring Washer	72	Nut
13	Washer	43	Cable Clamp	73	Spring
14	Eyeshield	44	N/A	74	Spring Pin
15	Spring Washer	45	Cable Sleeve	75	NUt
16	Nut	46	Nut	76	Knob
17	Screw	47	Tooth Washer	77	Spring Washer
18	Spring Washer	48	Capacitor Bracket	78	Washer
19	Inner Guard	49	Washer	79	Tool Rest
20	Rotor	50	Spring Washer	80	Drive Roller
21	Motor Cover	51	Screw	81	Nut
22	Nut	52	Capacitor		
23	Spring Washer	53	Plug Cable		
24	Stator	54	Screw		
25	Motor Cover	55	Nut		
26	Tool Rest	56	Knob		
27	Bolt	57	Spring Washer		
28	Spring Washer	58	Washer		
29	Washer	59	Belt Cover		
30	Spring Washer	60	Bracket		

