LUMBER JACK

SAFETY AND OPERATING MANUAL

6" BENCH GRINDER
BG150-2

ORIGINAL INSTRUCTIONS

INTRODUCTION

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.

GUARANTEE

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.

ENVIRONMENTAL PROTECTION

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.

GENERAL SAFETY RULES

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.

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.

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

SAFETY SYMBOLS

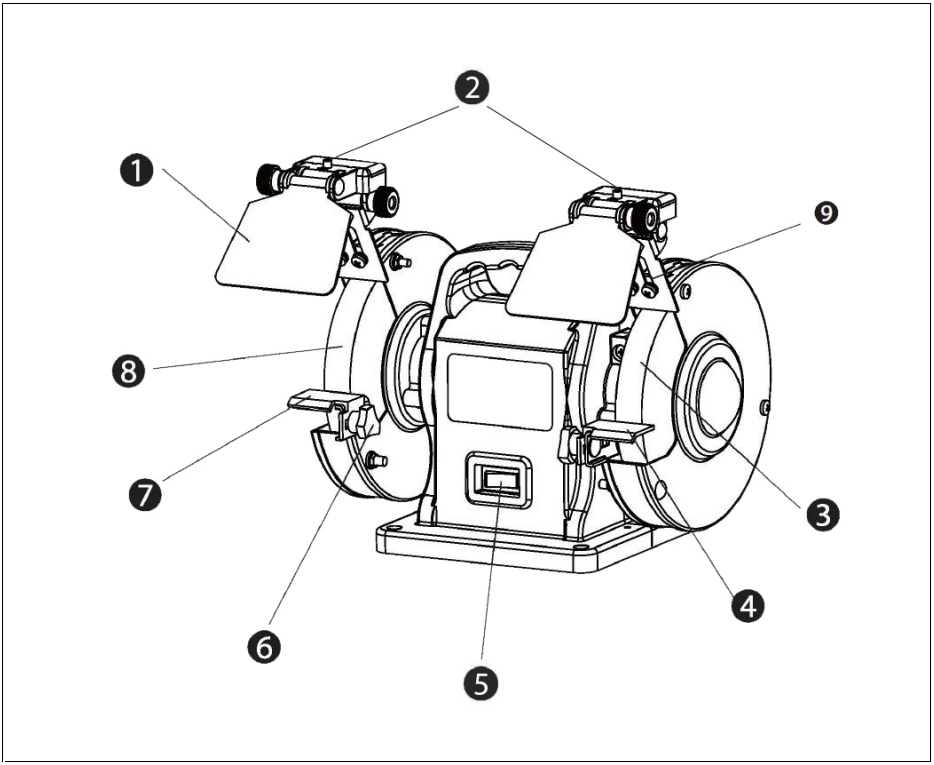
The meanings of the markings and symbols on the product are shown below

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

SPECIFICATIONS

Feature	Value
Overall Dimensions	365 (H) x 250(W) x 280 (D)
Weight	8.5KG
Grinding Stone Dimensions	150 dia x 20 mm thickness (12.7 mm bore)
Rated Voltage / Frequency	230 V / 50 Hz
Motor Wattage	250W
No Load Speed	2980 rpm
Duty Cycle Classification	2 minutes on/2 minutes off
Grit	36 / 60

OVERVIEW



No	Description
1	Eye Shield
2	LED Light
3	W A Grinding Wheel (60 Grit)
4	Right Tool Rest (V Grooved)
5	ON / OFF Switch
6	Tool Rest Lock Knob
7	Left Tool Rest
8	Coarse Wheel (36 Grit)
9	Spark Guard

ASSEMBLY

Assembly And Adjustments

Estimated Assembly Time: 10 - 20 Minutes.

● To avoid injury, do not connect this bench grinder to the power source until it is completely assembled and adjusted, and you have read and understood this Instruction Manual.

● To reduce the risk of injury, turn unit off and disconnect it from power source before installing and removing accessories, before adjusting or when making repairs. An accidental start-up can cause injury.

Installing Tool Rests (Fig. A)

1. Bag "B" - Attach the right tool rest support (1) to the grinder as the lower hole (2) to the nut (3)
2. Bag "C" - Place the lock knob (5) through the washer (6) and upper slot (7) into the hold (8) to lock the tool rest (4) in place.

NOTE: The V grooved tool rest must mounts on the right side of grinder.

3. Repeat the above steps for installing the left tool rest.

NOTE: When in use, the tool rests should be adjusted to within 1/8 in. (3.2 mm) of the grinding wheel or other accessory being used.

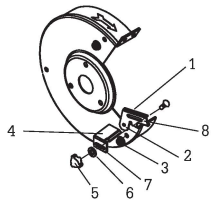


Fig. A

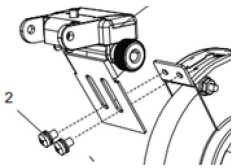


Fig. B

INSTALLING THE LED LIGHT AND EYE SHIELD ASSEMBLY

(FIG. B, C)

1. Bag "F" - Tighten the LED light assembly (1) to grinder with two composite screws (2) using a Philips screwdriver. (Fig. B)

2. Bag "D" - Attach one eye shield (3) to the support bracket (4) of the LED light assembly.

3. Bag "E" - Tighten the eye shield (3) by using a carriage bolt (5) and lock knob (6) as the way shown in Fig. C.

4. Repeat the above steps for installing the other LED light and eye shield assembly.

NOTE: Adjust eye shields to appropriate distance from tool rests avoiding interference when operation.

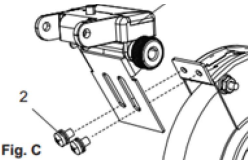


Fig. C

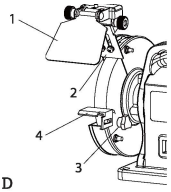


Fig. D

Changing Grinding Wheels (Fig. D, E, F, G, H)

Turn off and unplug the bench grinder. Use only grinding wheels that measure 6 in. (150 mm) in diameter. This tool has 1/2 in. (12.7 mm) arbors on both sides.

1. Raise the eye shield (1) out of the way and adjust the spark guard (2) in its highest setting.

2. Loosen the knob (3) and remove the tool rest assembly (4).

3. Remove three screws (5) and lock nuts (6) from the left side wheel cover and then remove the outer cover (7).

4. To prevent wheel rotating, place a wood wedge (8) (not supplied) between the wheel and the wheel cover as shown in Fig. E.

NOTE: Using a metal object, like a screwdriver, is not recom mended as it may damage the grinding wheel.

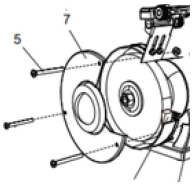


Fig. E

Loosen

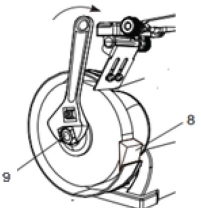


Fig.F

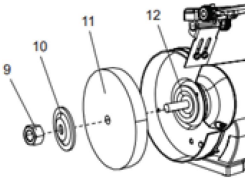


Fig.G

Tighten

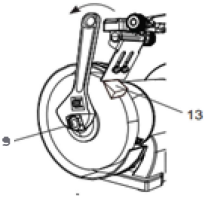


Fig.H

MOUNTING THE TOOL ON A WORKBENCH (FIG. I)

NOTE: FIRMLY BOLT THE GRINDER TO A WORK BENCH OR LEG STAND to gain maximum stability for your machine.

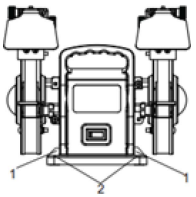


Fig. I

1. Using the base of the bench grinder as a template, mark the bench through two holes (1) in the casting.
2. Bolt the bench grinder on the bench with bolts, washers and nuts.

NOTE: The mentioned fasteners are not supplied

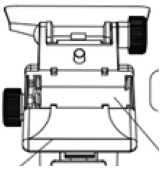


Fig. J

CHANGE BATTERIES (FIG. J)

WARNING : Unplug your grinder. Failure to unplug your saw could result in accidental starting and causing possible serious personal injury.

1. Bag "G"- Open the battery cover (1).
2. Insert two AAA batteries into the case (2),If replacing the batteries, take out the old batteries and replace with new AAA batteries. Dispose off old batteries properly.
3. Replace the battery cover (1).

NOTE: Replace with batteries that have a rating of 1.5 volts (Number 4 series and AAA size or equivalent). When replacing the batteries, the battery guide should be thoroughly cleaned. Use a soft paint brush or similar device, to remove all dust and debris.

Starting And Stopping The Grinder (Fig. K)

To avoid injury, always keep the plug disconnected from the power source and switch turned OFF until the grinder is completely assembled and adjusted properly. The ON/OFF switch (1) is located on the front of the grinder. To turn the grinder on, press the switch (1) to the "I" position. To turn the grinder off, press the switch (1) to the "O" position.

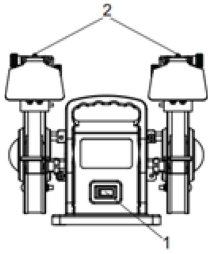


Fig. K

1. Press the LED light switch (2) down to turn the LED light "ON".
2. Press the LED switch (2) again to turn the LED light "OFF".

GENERAL OPERATION

Keep all bystanders a safe distance away from the tool and not in direct line, front or back of the grinder.

1. Your bench grinder has a medium wheel (60 grit) for medium material removal and general purpose grinding, and a coarse wheel (36 grit) for fast material removal.
2. To operate the bench grinder, always wear safety glasses and turn the tool on while standing at the side and not in front of the grinder. Allow it to reach full speed before grinding.
3. Hold the workpiece firmly against the tool rest. Hold very small pieces with pliers or other suitable clamps.
4. Feed the workpiece smoothly and evenly on the grinding wheel.
5. Move the workpiece slowly and avoid jamming the workpiece against the wheel. If the wheel tends to slow down from excessive force, you should occasionally release the pressure to let the wheel return to full speed.
6. The grinding wheels supplied with this unit are designed for different types of steel, wrought iron, and bronze.
7. Never sharpen or grind anything made of aluminum, brass, copper, wood, plastic or any other non-metallic materials. Grind only on the face of the grinding wheel and never the side of it. Prolonged grinding will cause most materials to become hot. Use care when handling such materials.

SCISSORS

If possible, take the scissors apart to make the sharpening operation easier and safer. Remove material only from the outside surface and work from the heavy end of the blade toward the tip.

KNIVES

Remove metal from both faces of most knives, working from the heavy end of the blade toward the tip.

SCREWDRIVERS

The end of a properly sharpened screwdriver will be a perfect rectangle, absolutely flat and perpendicular to the center line of the shank. The two sides and two faces will taper outward from the edge of the shoulder or shank. They should be flat with intersecting faces perpendicular. Hold each face of the screwdriver against the wheel to true it up, then ease the end straight into the stone to grind it true.

TWIST DRILL BITS (FIG. L)

Drill bits are best sharpened on a sharpening jig, available at most hardware stores, but can be "dressed up" on your grinder. Begin on one side of the point at the existing angle,then twist the bit while maintaining a constant angle with grinding surface. Sharpen only the tip.

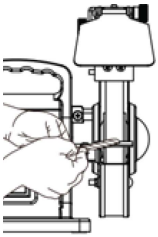


Fig.L

This technique requires considerable practice, so take your time and make a few "dry runs" first with the grinder off. Be sure to maintain the original cutting edge angle as this is important to the efficiency of your bits.One tool rest has a V-groove that is correctly angled for most drill bits.

LAWN MOWER BLADES

Lawn mower blades are usually sharpened on only one side and dressed up slightly on the other. After sharpening, be sure to balance the blade by removing additional material from the heavy end. There are a number of inexpensive cone balancers on the market for this purpose. Unbalanced blades can cause serious crank shaft damage to your lawn mower. Always remove spark plug wires from the mower before servicing the blades to prevent accidental starting.

DRESSING A GRINDING WHEEL (FIG. M)

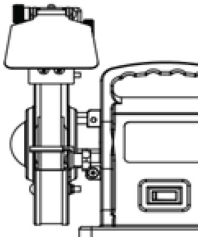


Fig. M

Bring the dressing tool forward on the tool rest until it touches the high point on the face of the wheel. Dress the wheel by moving the dressing tool back and forth. Repeat this operation until the face of the grinding wheel is clean and the corner of the wheel is square.

NOTE: A wheel dressing tool is NOT provided with the grinder.

NOTE: DO NOT use the wheel dressing tool on wire wheels.

INSTALLING WIRE WHEEL (Not included)

When replacing the grinding wheel with a wire wheel, it is necessary to place a space (not included) on the spindle shaft BEFORE installing the inner flange, wheel, outer flange and wheel nut.

For your own safety, turn switch "OFF" and remove plug from power source outlet before adjusting and maintaining your bench grinder. If power cord is worn, cut or damaged in any way, have it replaced immediately.

MAINTENANCE

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:

TOOLSAVE LTD

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

Declare that the product:

Designation: 6" BENCH GRINDER

Model: BG150-2

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).*

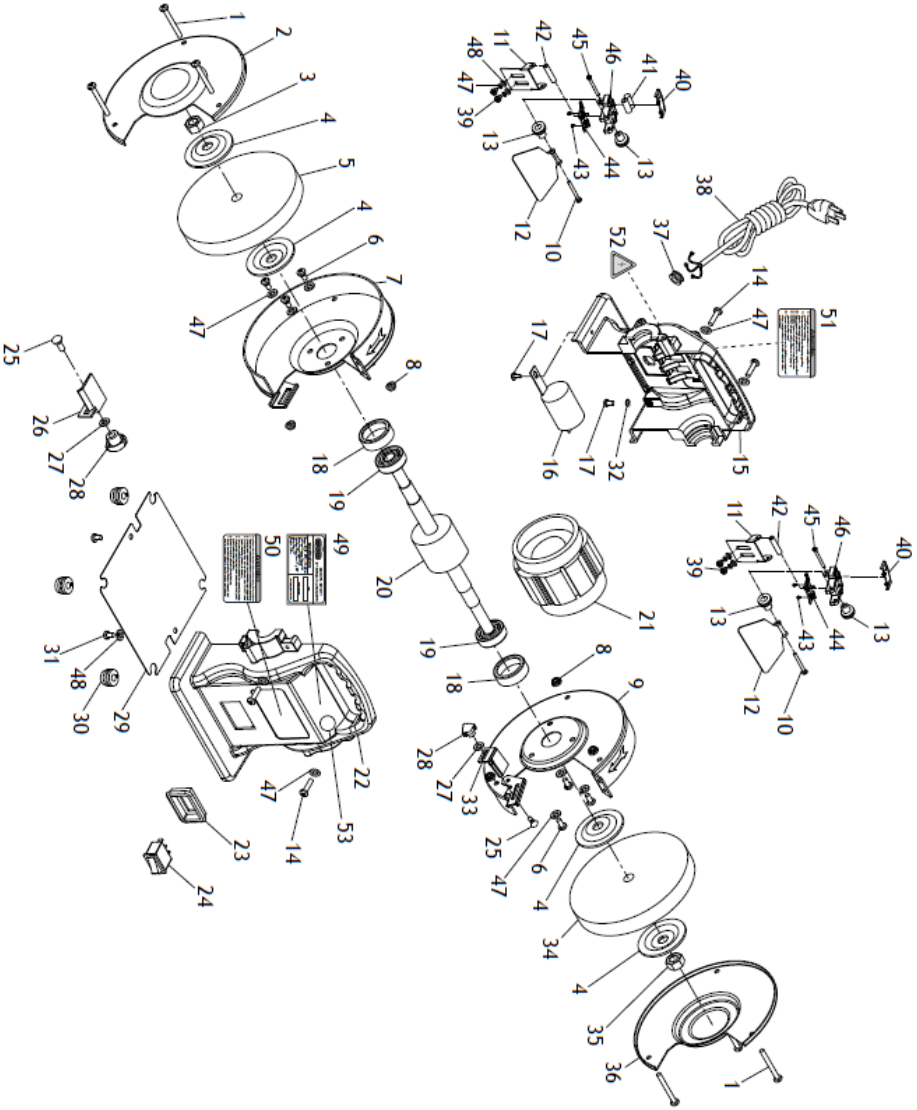
The following standards have been applied to the product(s):

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

COMPONENT PARTS DIAGRAM



COMPONENT PARTS LIST

1	PHLP HD SCR M5-.8 X 50
2	WHEEL GUARD (OUTER, LEFT)
3	HEX NUT M12-1.75 LH
4	GRINDING WHEEL FLANGE 1/2
5	GRINDING WHEEL 6" X 3/4" X 1/2" 36G
6	PHLP HD SCR M5-.8 X 10
7	WHEEL GUARD (INNER, LEFT)
8	FLANGE NUT M5-.8
9	WHEEL GUARD (INNER, RIGHT)
10	CARRIAGE BOLT M5-.8 X 55
11	SPARK DEFLECTOR
12	SAFETY SHIELD
13	KNOB M5-.8, D20, ROUND
14	PHLP HD SCR M5-.8 X 20
15	GRINDER CASING (REAR)
16	R CAPACITOR 10M 300V 1-3/8 X 2
17	PHLP HD SCR M4-.7 X 8
18	BEARING SLEEVE
19	BALL BEARING 6202ZZ
20	ROTOR
21	STATOR
22	GRINDER CASING (FRONT)
23	SWITCH PLATE
24	ON/OFF SWITCH K5 250V
25	CARRIAGE BOLT M6-1 X 14
26	TOOL REST (LEFT)

COMPONENT PARTS LIST

27	FLAT WASHER 6MM
28	KNOB M6-1, D26, 6-LOBE
29	GRINDER BASE PLATE
30	FOOT (RUBBER)
31	PHLP HD SCR M5-.8 X 8
32	EXT TOOTH WASHER 4MM
33	TOOL REST (RIGHT)
34	GRINDING WHEEL 6" X 3/8" X 1/2" 60G
35	HEX NUT M12-1.75
36	WHEEL GUARD (OUTER, RIGHT)
37	STRAIN RELIEF TYPE-1 1/2
38	POWER CORD 18G 3W 78" 5-15P
39	PHLP HD SCR M5-.8 X 10
40	BATTERY COVER
42	HOLLOW SHAFT 5 X 8 X 42MM
43	TAP SCREW M3 X 8
44	LED LIGHT COVER
45	CARRIAGE BOLT M5-.8 X 60
46	LED LIGHT HOUSING
47	LOCK WASHER 5MM
48	FLAT WASHER 5MM
49	MACHINE SPECIFICATIONS LABEL
50	MACHINE WARNING LABEL (FRONT)
51	MACHINE WARNING LABEL (REAR)
52	ELECTRICITY LABEL
53	TOUCH-UP PAINT, SHOP FOX WHITE