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# Clarke<sup>TM</sup>

**QUALITY PRODUCTS**

### **AIR COMPRESSORS**

*From DIY to industrial, plus air tools, spray guns and accessories*

### **GENERATORS**

*Prime duty or emergency standby for business, home and leisure*

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*MIG, Arc, TIG and Spot. From DIY to Auto/Industrial*

### **METALWORKING**

*Drills, Grinders, Saws, Lathe and Mills for DIY and professional use*

### **WOODWORKING**

*Saws, Sanders, Lathes, Morticers, Planers, Routers, Jointers and Dust extraction*

### **GARAGE EQUIPMENT**

*Cranes, Car Hoists, Jacks, Lifts, Body Repair kits, Transmission Jacks for all types of workshop use*

### **WATER PUMPS**

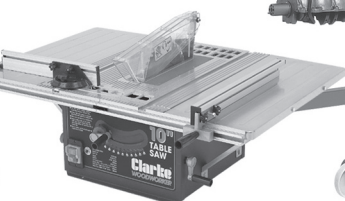
*Submersible and non-submersible, engine and electric driven for DIY, agricultural and industrial use*

### **POWER TOOLS**

*Angle Grinders, Cordless Drill sets, Drills and Sanders*

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*Huge range of Tool Chests, Cabinets, Racks & Benches from DIY to industrial use.*



# Clarke<sup>®</sup>

## METALWORKER

### BENCH GRINDER

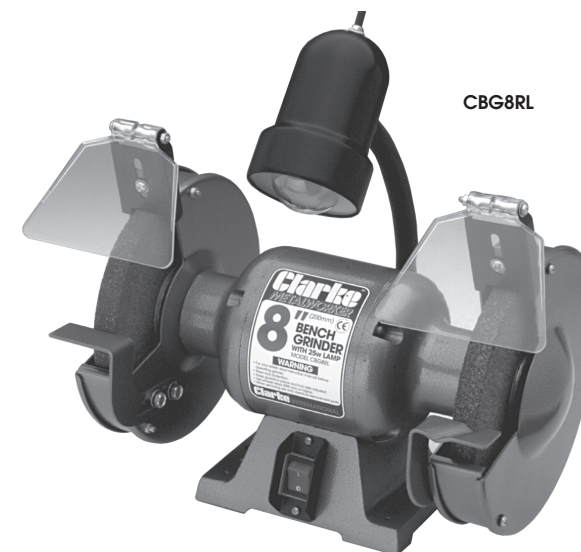
MODEL Nos.

**CBG6RL & CBG8RL**

**CBG6RSC & CBG8RSC**

**CBG6RWC & CBG8RWC**

**CBG6RR & CBG6RRW**



CBG8RL

## OPERATING & MAINTENANCE INSTRUCTIONS



### Clarke<sup>®</sup> INTERNATIONAL

For spare parts and servicing, please contact your nearest dealer, or CLARKE International on:

**020 8988 7400**

or e-mail: [parts@clarkeinternational.com](mailto:parts@clarkeinternational.com) or: [service@clarkeinternational.com](mailto:service@clarkeinternational.com)

HEMNALL STREET, EPPING, ESSEX CM16 4LG

## TECHNICAL DATA

	CBG6RL	CBG8RL
Grinding Wheel Size	2x150x20x12.7mm	2x200x20x32mm
Grade of Grinding Wheel	1 x Grit Size 36 1 x Grit Size 80	1 x Grit Size 36 1 x Grit Size 80
Power Supply	230V 50Hz 1ph	230V 50Hz 1ph
Motor size	250W	375W
Speed (RPM)	2,950	2,950
Weight-packed	12kg	16kg
Part No.	6500500	6500510

	CBG6RSC & CBG6RR	CBG8RSC
Grinding Wheel Size	2x150x20x12.7mm	2x200x20x32mm
Grade of Grinding Wheel	1 x Grit Size 36 1 x Grit Size 80	1 x Grit Size 36 1 x Grit Size 80
Power Supply	230V 50Hz 1ph	230V 50Hz 1ph
Motor size	250W	375W
Speed (RPM)	2,950	2,950
Weight-packed	12kg	16kg
Part No.	6500030	6500040

	CBG6RWC & CBG6RRW	CBG8RWC
Grinding Wheel Size	1x150x20x12.7mm	1x200x20x32mm
Grade of Grinding Wheel	1 x Grit Size 60	1 x Grit Size 60
Wire Wheel Size	1x150x20x32mm**	1x200x20x32mm
Power Supply	230V 50Hz 1ph	230V 50Hz 1ph
Motor size	250W	375W
Speed (RPM)	2,950	2,950
Weight-packed	12kg	16kg
Part No.	6500035	6500045

Duty Cycle 20/20 min

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.

When disposing of this product, do not dispose of with general waste. It must be disposed of according to the laws governing Waste Electrical and Electronic equipment, at a recognised disposal facility.

### DECLARATION of CONFORMITY

We declare that this product conforms to the following directives:

• 98/37EC  
signed   
L.E. Fergusson  
Engineering Manager

Parts List cont.		6RSC	6RWC	6RL		8RSC	8RWC	8RL
No.	Description	6RR Qty	6RRW Qty	Qty	Part No.	Qty	Qty	Qty
34	Spring Washer	HT6R034	12	12	12	HT8R034	12	12
35	Nut Hex	HT6R035	6	6	6	HT8R035	6	6
36	Tool Rest Left	HT6R036	1	1	1	HT8R036	1	1
37	Wheel Cover Inner Left	HT6R037	1	1	1	HT8R037	1	1
38	Screw	HT6R038	6	6	6	HT8R038	6	6
38a	Spring washer	HT6R038A	6	6	6	HT8R038A	6	6
39	Wheel Nut Left Hand	HT6R039	1	1	1	HT8R039	1	1
40	Wheel Cover Outer Left	HT6R040	1	1	1	HT8R040	1	1
41	Screw	HT6R041	2	2	2	HT8R041	2	2
42	Flat Washer	HT6R042	2	2	2	HT8R042	2	2
42a	Spring Washer	HT6R042A	2	2	2	HT8R042A	2	2
43	Screw	HT6R043	2	2	2	HT8R043	2	2
45	Flat Washer	HT6R045	4	4	4	HT8R045	4	4
46	Spring Washer	HT6R046	2	2	2	HT8R046	2	2
47	Nut	HT6R047	2	2	2	HT8R047	2	2
48	Eye Shield	HT6R048	2	2	2	HT8R048	2	2
49	Spark Arrester Bracket	HT6R049	2	2	2	HT8R049	2	2
50	Earth terminal	HT6R050	1	1	1	HT8R050	1	1
51	Earth terminal screw	HT6R050	2	2	2	HT8R051	1	1
52	Star washer	HT6R052	2	2	2	HT8R052	2	2
53	Lampholder	HT6R053	n/a	n/a	1	HT8R053	n/a	n/a
54	Sleeving	HT6R054	n/a	n/a	1	HT8R054	n/a	n/a
55	Support Holder	HT6R055	n/a	n/a	1	HT8R055	n/a	n/a
56	Screw	HT6R056	n/a	n/a	1	HT8R056	n/a	n/a
57	Shade	HT6R057	n/a	n/a	1	HT8R057	n/a	n/a
58	Nut	HT6R058	n/a	n/a	1	HT8R058	n/a	n/a
59	Hose Holder	HT6R059	n/a	n/a	1	HT8R059	n/a	n/a
60	Screw	HT6R060	n/a	n/a	1	HT8R060	n/a	n/a
61	Sleeve	HT6R061	n/a	n/a	1	HT8R061	n/a	n/a
62	Hose	HT6R062	n/a	n/a	1	HT8R062	n/a	n/a
63	Bushing (threaded)	HT6R063	n/a	n/a	1	HT8R063	n/a	n/a
64	Nut	HT6R064	n/a	n/a	1	HT8R064	n/a	n/a
65	Power cable	HT6R065	n/a	n/a	1	HT8R065	n/a	n/a

## PARTS & SERVICE CONTACTS

For Spare Parts and Service, please contact your nearest dealer,  
or CLARKE International, on one of the following numbers.

**PARTS & SERVICE TEL: 020 8988 7400**

**PARTS & SERVICE FAX: 020 8558 3622**

or e-mail as follows:

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

## PARTS LIST

No.	Description	Part No.	6RSC	6RWC	6RL	Part No.	8RSC	8RWC	8RL
			6RR Qty	6RRW Qty	Qty		Qty	Qty	Qty
1	Case Motor	HT6R001	1	1	1	HT8R001	1	1	1
2	Stator	HT6R002	1	1	1	HT8R002	1	1	1
3	Rotor Shaft	HT6R003	1	1	1	HT8R003	1	1	1
4	Circlip	HT6R004	2	2	2	HT8R004	n/a	n/a	n/a
5	Bearing	HT6R005	2	2	2	HT8R005	2	2	2
6	End Bell	HT6R006	2	2	2	HT8R006	2	2	2
7	Base Motor	HT6R007	1	1	n/a	HT8R007	1	1	n/a
7A	Base Motor	HT6R007A	n/a	n/a	1	HT8R007A	n/a	n/a	1
8	Switch Base Plate	HT6R008	1	1	1	HT8R008	1	1	1
-	Switch Base Screw	HT6R008A	2	2	2	HT8R008A	2	2	2
-	Switch Base Star Washer	HT6R008B	2	2	2	HT8R008B	2	2	2
9	Switch Assembly	HT6R009	1	1	1	HT8R009	1	1	1
10	Capacitor	HT6R010	1	1	1	HT8R010	1	1	1
11	Capacitor Clamp	HT6R011	1	1	1	HT8R011	1	1	1
12	Cable	HT6R012	1	1	1	HT8R012	1	1	1
13	Plate Securing	HT6R013	1	1	1	HT8R0013	1	1	1
-	Plate Securing Screw	HT6R013A	2	2	2	HT8R013A	2	2	2
14	Grommet	HT6R014	1	1	1	HT8R014	1	1	1
15	Grommet	HT6R015	1	1	1	HT8R015	1	1	1
16	Rubber Foot	HT6R016	4	4	4	HT8R016	4	4	4
17	Screw	HT6R017	4	4	4	HT8R017	4	4	4
18	Bolt Hex 6mm	HT6R018	2	2	2	HT8R018	2	2	2
18a	Spring washer 6mm	HT6R018A	2	2	2	HT8R018A	2	2	2
18b	Bolt Hex 5mm	HT6R018B	1	1	1	HT8R018B	1	1	1
18c	Spring washer 5mm	HT6R018C	1	1	1	HT8R018C	1	1	1
19	Pan Head Screw	HT6R019	8	8	8	HT8R019	8	8	8
20	Flat Washer	HT6R020	8	8	8	HT8R020	8	8	8
20a	Spring washer	HT6R020A	8	8	8	HT8R020A	8	8	8
21	Base Cover	HT6R021	1	1	1	HT8R021	1	1	1
22	Wheel Cover Outer Right	HT6R022	1	1	1	HT8R022	1	1	1
23	Wheel Nut Right Hand	HT6R023	1	1	1	HT8R023	1	1	1
24	Wheel Flange Outer	HT6R024	2	2	2	HT8R024	2	2	2
25	Wire Wheel	HT6R025	n/a	1	n/a	HT8R025	n/a	1	n/a
25a	G. Wheel - Coarse	6501088	1	n/a	1	6501110	1	n/a	1
25b	G. Wheel - Medium	6501089	n/a	1	n/a	6501024	n/a	1	n/a
25c	G. Wheel - Fine	6501135	1	n/a	1	6501130	1	n/a	1
26	Wheel Flange Inner	HT6R026	2	2	2	HT8R026	2	2	2
27	Wheel Cover	HT6R027	2	2	2	HT8R027	2	2	2
28	Wheel Cover Inner Right	HT6R028	1	2	2	HT8R028	1	1	1
29	Tool Rest Right Hand	HT6R029	1	1	1	HT8R029	1	1	1
30	Flat Washer	HT6R030	4	4	4	HT8R030	4	4	4
30a	Spring washer	HT6R030A	4	4	4	HT8R030A	4	4	4
31	Screw Hex	HT6R031	4	4	4	HT8E031	4	4	4
32	Bolt	HT6R032	6	6	6	HT8R032	6	6	6
33	Flat Washer	HT6R033	12	12	12	HTR033	12	12	12

Thank you for purchasing this CLARKE BENCH GRINDER, which is designed for DIY and general workshop use.

Before attempting to operate this machine, please read this instruction manual thoroughly and follow all directions carefully. By doing so you will ensure the safety of both yourself and others around you, and at the same time, you should look forward to long and trouble free service from your Bench Grinder.

## GUARANTEE

This product is guaranteed against faults in manufacture for 12 months from purchase date. Keep your receipt as proof of purchase. This guarantee is invalid if the product has been found to have been abused in any way, or not used for the purpose for which it was intended, or to have been tampered with in any way. The reason for return must be clearly stated. This guarantee does not affect your statutory rights.

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## GENERAL SAFETY RULES

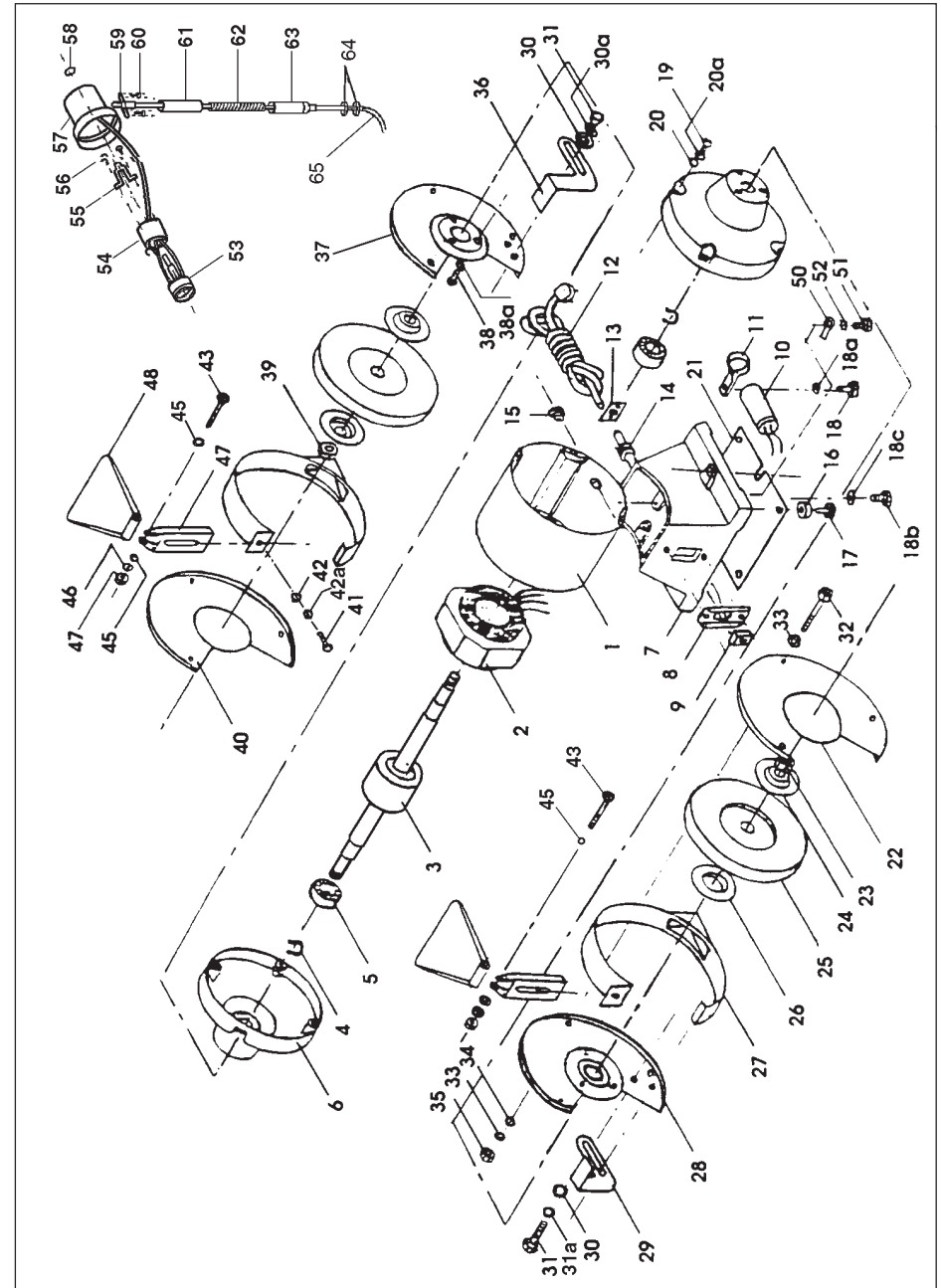
- KEEP GUARDS IN PLACE and check they are not damaged.
- REMOVE ADJUSTING KEYS AND WRENCHES. Make a habit of checking to see that all adjusting keys and wrenches are removed from machine before turning it on.
- KEEP WORK AREA CLEAN. Cluttered areas and work benches invite accidents
- DO NOT USE IN A DANGEROUS ENVIRONMENT. Do not use any power tools in damp or wet areas, or expose them to rain. Keep work area well lit.
- KEEP CHILDREN AWAY. All visitors, but in particular children, should be kept at a safe distance away from the work area.
- MAKE YOUR WORKSHOP CHILDPROOF with padlocks, master switches, or by removing starter keys.
- DO NOT FORCE YOUR BENCH GRINDER. It will do a better and safer job if used at the rate for which it was designed.

8. WEAR THE PROPER APPAREL. No loose clothing, gloves, neckties, rings, bracelets, or any other jewellery which might get caught in moving parts. Non-slip footwear is recommended. Long hair should be contained.
9. ALWAYS USE SAFETY GLASSES. Everyday glasses only have impact resistant lenses, they are not safety glasses. Also use a face mask if a lot of dust is generated.
10. DO NOT OVERREACH. Keep a firm footing and proper balance at all times.
11. DISCONNECT FROM THE MAINS before attempting any kind of service work or adjustment or when changing accessories such as grinding wheels.
12. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance.
13. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in the OFF position before plugging in.
14. CHECK FOR DAMAGED PARTS. Before using the machine, always check parts for signs of damage, and to ensure they are secure. If a component suffers slight damage, (eg. a distorted guard or bracket), make sure it will perform its intended function properly before switching on. If in doubt, do not use the machine. ALWAYS be prepared to SWITCH OFF IMMEDIATELY, if you experience unusual noises, or excessive vibration. Do not use the machine until the fault is fully rectified.

### ADDITIONAL SAFETY RULES FOR BENCH GRINDERS

1. Replace a cracked wheel immediately.
2. Always use guards and eye shield
3. Do not overtighten wheel nut.
4. Maintain the distance between wheel and tool rest to 1/16 (1.6mm) or less as the diameter of the wheel decreases with use.
5. Use a grinding wheel suitable for the speed of grinder. (See technical data).
6. Stand to one side of bench grinder during operation, not directly in front.
7. One minute of free rotation is necessary for a new grinding wheel. Should the new grinding wheel be faulty and break, it will happen within the first minute of operation.
8. Do not remove the wheel guard except when changing a worn wheel.
9. Do not use the grinding wheel for any kind of cutting.
10. Do not use the side of the wheel for any reason.
11. Do not over stress the grinding wheel.
12. NEVER leave a grinder running unattended. Turn power off. Do not leave tool until it comes to a complete stop.
13. Use ONLY approved replacement grinding wheels. Contact your local dealer for approved replacement grinding wheels. The use of inferior parts may risk of injury.

### PARTS DIAGRAM



brackets from time to time. Adjustments can be made by loosening the mounting screw, and positioning the bracket accordingly, remembering to re-tighten the screw once adjustment is complete.

The see-through Eye Shields allow the user to see the operation clearly, and to work precisely. The eye shields can be adjusted on their pivots to suit the operator.

**IMPORTANT:** Even though Eye Shields are fitted, you should nevertheless, **ALWAYS** wear safety goggles when operating a grinding machine.

## B. TOOL REST ADJUSTMENT

The appropriate adjustment of the tool rests provides the operator with a correct working angle and a firm and efficient base for working. A gap of approx. 1/16" between the wheel and tool rest should be maintained at all times. Due to wear on the grinding wheel, it is necessary to adjust the tool rests from time to time. Adjustments can be made by loosening the mounting screws, and positioning the tool rest accordingly, remembering to re-tighten the screws once adjustment is complete.

## C. CHANGING THE GRINDING / WIRE WHEEL

1. Remove outside wheel cover, by unscrewing the cover retaining bolts, and slacken the Tool Rest and Spark Arrester mounting screws.
2. Holding the wheel firmly, remove the nut and flange using the correct size spanner, noting that the left wheel nut carries a left hand thread.

**IMPORTANT:** Always wear a heavy duty glove to hold a wire wheel.

3. Take off the used wheel and replace with a new one, ensuring the blotter is in place between the wheel and flange. Do not overtighten the nut - holding the wheel with your hand will enable you to apply sufficient force to tighten the nut effectively.
4. Re-assemble, steps A & B as detailed above, ensuring that there is a good balanced rotation of the wheel.
5. Switch on the machine and allow the wheel to rotate freely, for at least 1 minute.

## D. DRESSING THE WHEEL

It will be necessary from time to time to dress the wheel, to obtain a true working surface. This should be done **ONLY** with an approved dressing tool, which can be obtained from your CLARKE dealer, quoting Model Number GWD-1. Part No. 6501120.

## E. OPERATING THE LAMP (CBG6RL and CBG8RL only)

The lamp is provided with a rotary type switch located at the rear of the lamp

## ELECTRICAL CONNECTIONS

Connect the mains lead to a standard, 230 volt (50Hz) electrical supply through a fused good quality 13 amp BS 1363 plug, or a suitable fused isolator switch.

### **WARNING: THIS APPLIANCE MUST BE EARTHED**

**IMPORTANT:** The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow	---	Earth
Blue	---	Neutral
Brown	---	Live

As the colours of the flexible cord of this appliance may not correspond with the coloured markings identifying terminals in your plug, proceed as follows:

Connect **GREEN & YELLOW** cord to terminal marked with a letter "E" or Earth symbol '⏏' or coloured **GREEN** or **GREEN & YELLOW**.

Connect **BROWN** cord to terminal marked letter "L" or coloured **RED**.

Connect **BLUE** cord to terminal marked letter "N" or coloured **BLACK**.

We recommend that this unit is fitted with a Residual Current Device (RCD).

## FUSE RATING

The fuse in the plug for this appliance must be rated at **5 amps**

## IMPORTANT NOTICE

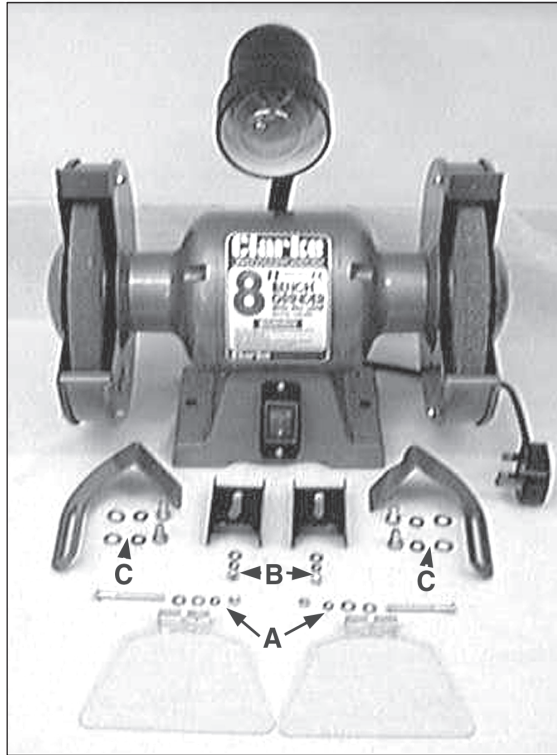
If this appliance is fitted with a plug which is moulded on to the electric cable (i.e. non rewirable) please note:

1. This plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted in a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. Should you wish to replace a detachable fuse carrier, ensure that the correct re-placement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer, or an electrical stockist.
5. The fuse in the plug must be 5 Amps, and any replacement must be ASTA approved to BS1362.

## PRE-ASSEMBLY CHECK

Before assembling your Bench Grinder, please check to ensure that all the parts listed below have been included. If any parts are missing or damaged, you should immediately contact your local dealer or CLARKE International on 0181-558 6696 for replacement.

1. Main Body (switch and power cable with plug are included. Additionally, the CBG6RL and 8RL models include a lamp assembly complete with bulb).
2. Two Eyeshields, each complete with 1 x nut, 1 x bolt, 1 x spring washer and 2 x flat washers (A).
3. Two spark arrester brackets, each complete with 1 x screw, 1 x spring washer and 1 x flat washer (B).
4. Two Tool rests, each complete with 2 x screws, 2 x spring washers and 2 x flat washers (C).



## ASSEMBLY

1. Attach the tool rests with the bolts and washers provided, in the manner shown in fig 1 - page 6.

The tool rests are adjustable and should be positioned 1/16" (1.6mm) from the grinding wheels, ensuring they are firmly fixed and horizontal.

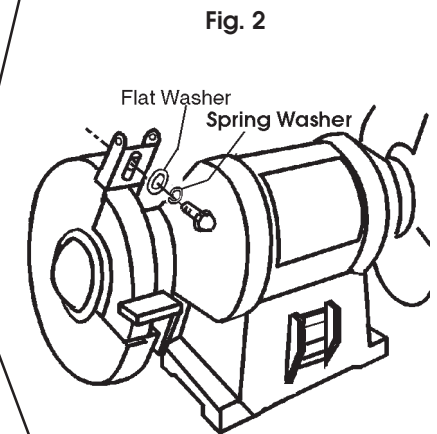
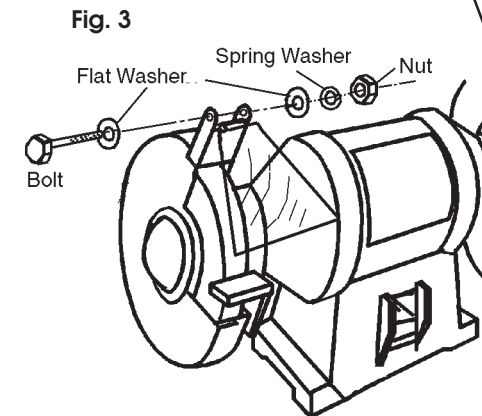
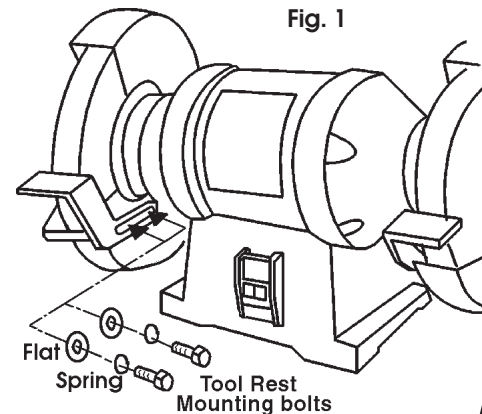
**NOTE:** Tool rests are not used with the Wire Wheels fitted to the CBG6RWC and 8RWC models, but are available as an accessory. (See your CLARKE dealer).

2. Assemble the Spark Arrester Brackets on to the Wheel Guards, using the single screw and washers provided, in the manner shown in fig. 2 - page 6.

**NOTE:** Before fully tightening the screw, each bracket should be adjusted by sliding it as close as possible to the grinding wheel without impairing the wheels

rotation. As the wheel wears down with use, it will be necessary to re-adjust the brackets accordingly.

3. Assemble the Eye Shields on to the Spark Arrester Brackets using the nuts, bolts and washers supplied, in the manner shown in fig. 3. The angle of the Eye Shields are adjustable to suit the operator.
4. Your Clarke Bench Grinder should be securely bolted to a workbench before operation, using the pre-drilled holes in the base. 2 x 5/16" (8mm) bolts are recommended. (Not supplied)



## MAINTENANCE

Before carrying out any service or adjustments, ensure the grinder is switched OFF, and disconnected from the electrical supply.

### A. SPARK ARRESTER & EYE SHIELD ADJUSTMENT

Due to wear on the grinding wheel, it is necessary to adjust the Spark Arrester