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From DIY to industrial. Plus air tools, spray guns and accessories.

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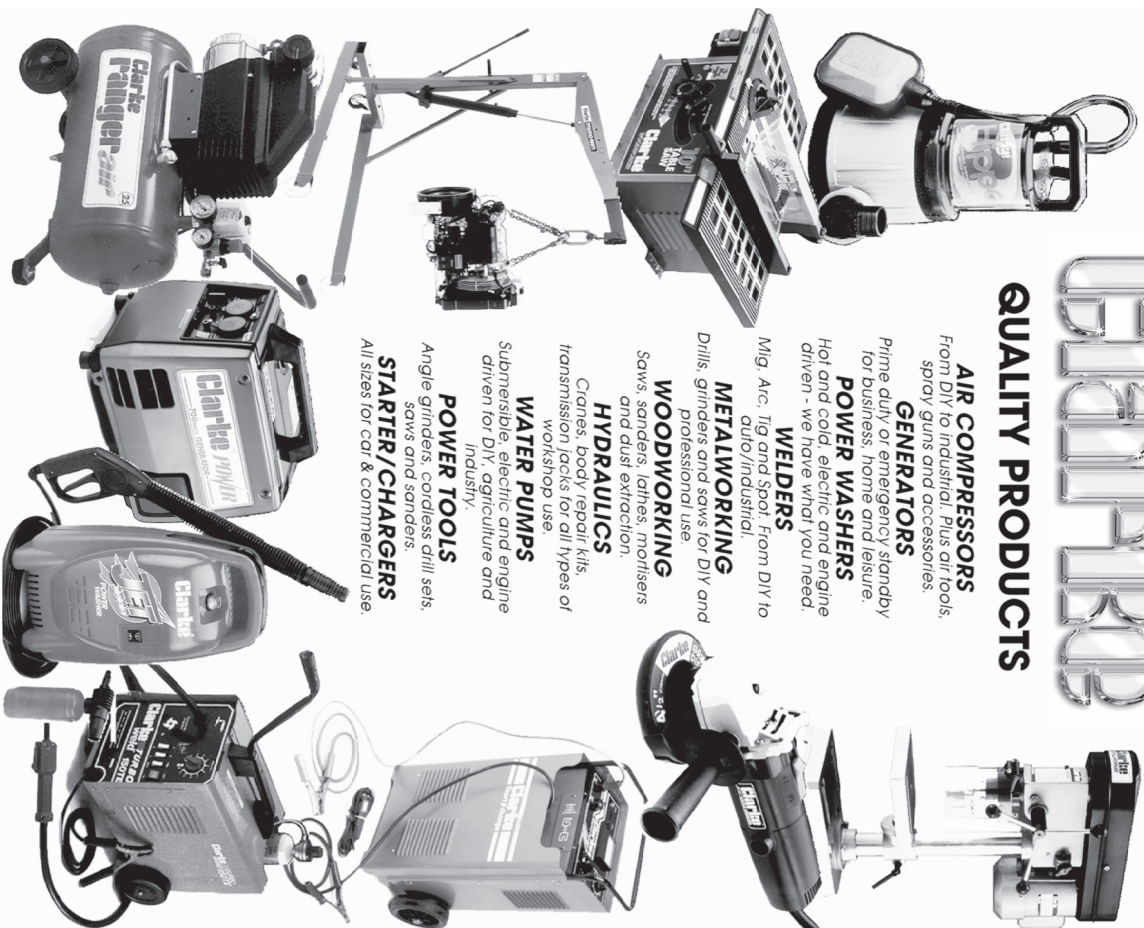
Submersible, electric and engine driven for DIY, agriculture and industry.

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Angle grinders, cordless drill sets, saws and sanders.

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All sizes for car & commercial use.



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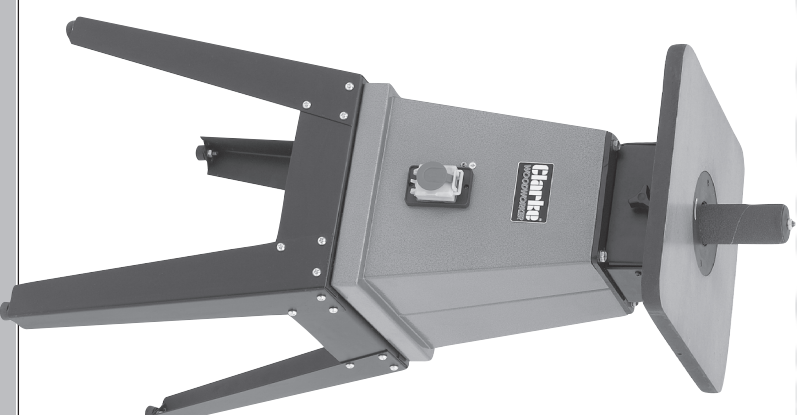
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e-mail: parts@clarkeinternational.com Service@clarkeinternational.com

For spares and servicing, please contact your nearest dealer or Clarke International on 020-8988-7400

CLARKE

WOODWORKER



VERTICAL RECIPROCATING SANDER

MODEL No. VRS1

Part No. 6262035

OPERATING AND MAINTENANCE
INSTRUCTIONS





Please read these instructions carefully before operating the tool

Thank you for purchasing this CLARKE Vertical Reciprocating Sander. Your new sander is designed for DIY use only. Before using the machine, please read this manual thoroughly and carefully follow all instructions given. This is for your own safety and that of others around you, and is also to help you achieve a long and trouble free service from your new tool.

CLARKE GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt 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 affect your statutory rights.

PARTS & SERVICE TEL: 020 8988 7400
 Or e-mail as follows:
PARTS: Parts@clarkeinternational.com
SERVICE: Service@clarkeinternational.com

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. Always consult the machines data plate

PARTS LIST Cont

38	LGVR51038	Strip Nut M6	2
39	LGVR51039	Knob	1
40	LGVR51040	Hex. Nut M6	1
41	LGVR51041	Bracket II of Worktable	1
42	LGVR51042	Bracket III of Worktable	1
43	LGVR51043	Cross Head Screw M8 x 16	2
44	LGVR51044	Dust Collect Cover	1
45	LGVR51045	Hex. Nut M5	4
46	LGVR51046	Cap Screw M5 x 30	2
47	LGVR51047	Left Core Axle of Worm Wheel	1
48	LGVR51048	Worm Wheel	1
49	LGVR51049	Worm Stand	1
50	LGVR51050	Right Core Axle of Worm Wheel	1
51	LGVR51051	Hex. Bolt M6 x 16	4
52	LGVR51052	Fix Frame For Motor	1
53	LGVR51053	Hex. Nut M8	5
54	LGVR51054	Hex. Bolt M8 x 25	7
55	LGVR51055	Lock Washer 8mm	7
56	LGVR51056	Left Hand Hex. Nut M8	2
57	LGVR51057	2" Convex Washer	1
58	LGVR51058	2" Sand Drum	1
59	LGVR51059	2" Rubber Drum	1
60	LGVR51060	2" Rubber Drum Washer	1
61	LGVR51061	Connecting Rod	1
62	LGVR51062	Key 5 x 5 x50	1
67	LGVR51067	3/4" Washer	2
68	LGVR51068	3/4" Sand Drum	1
69	LGVR51069	3/4" Rubber Drum	1
70	LGVR51070	3/4" Connecting Rod	1
76	LGVR51076	Countersunk Screw ST3.5 x 12	10
77	LGVR51077	Washer Nut M8	4
78	LGVR51078	Rubber Foot	4
79	LGVR51079	Switch Seat	1
80	LGVR51080	Bottom Guard	2
81	LGVR51081	3-1/2" Core Table Insert	1
90	LGVR51090	3/4" Arbor	1
91	LGVR51091	# 1" Arbor #	1
92	LGVR51092	# 1-1/2" Arbor #	1
93	LGVR51093	# 1-3/4" Arbor #	1
94	LGVR51094	2" Arbor	1
95	LGVR51095	# 3" Arbor #	1

NOTE: parts marked # are optional and can be obtained from your nearest CLARKE dealer.

Accessories

A wide range of tools and accessories is available from your nearest CLARKE dealer, for further information, contact your nearest dealer, or telephone CLARKE International Sales department on 01992 565300.

PARTS LIST

Item	Part Number	Description	Qty
1	LGVRS1001	Stand	1
1a	LGVRS1001a	Upper Bracket - Outer	2
1b	LGVRS1001b	Upper Bracket - Lower	2
1c	LGVRS1001c	Stand Leg	4
1d	LGVRS1001d	Hex. Nut M8	28
1e	LGVRS1001e	Flat Washer 8mm	52
1f	LGVRS1001f	Cross Head Screw M8 x 16	24
1g	LGVRS1001g	Foot	4
1h	LGVRS1001h	Hex. Bolt M8 x 25	4
1i	LGVRS1001i	Washer Nut M8	4
2	LGVRS1002	Flat Washer 4mm	12
3	LGVRS1003	Cross Head Screw M4 x 12	4
4	LGVRS1004	Switch	1
5	LGVRS1005	Hex. Nut M4	1
6	LGVRS1006	Lock Washer	1
7	LGVRS1007	Retaining Ring	1
8	LGVRS1008	Motor	1
9	LGVRS1009	Motor Shaft Key 5 x 5 x 50	1
10	LGVRS1010	Set Screw M6 x 5	2
11	LGVRS1011	Worm	1
12	LGVRS1012	Retaining Ring 55mm	1
13	LGVRS1013	Retaining Ring 32mm	1
14	LGVRS1014	Bearing 80106	1
15	LGVRS1015	Hex. Bolt M8 x 75	1
16	LGVRS1016	Flat Washer 5mm	4
17	LGVRS1017	Rock Arm Pin Bolt	2
18	LGVRS1018	Rock Arm	2
19	LGVRS1019	Guide Column	1
20	LGVRS1020	Shuttle Axle Sleeve	1
21	LGVRS1021	Shuttle Axle	1
22	LGVRS1022	Splint Dowel 4 x 30	1
23	LGVRS1023	Bearing 61804	1
24	LGVRS1024	2-3/8" Core Table Insert	1
25	LGVRS1025	2" Core Table Insert	1
26	LGVRS1026	1-1/4" Core Table Insert	1
27	LGVRS1027	Countersunk Screw M5 x 10	2
28	LGVRS1028	Splint Dowel 3 x 8	1
29	LGVRS1029	Work Table	1
30	LGVRS1030	Cross Head Screw M5 x 6	8
31	LGVRS1031	Dust Cover	1
32	LGVRS1032	Hex. Bolt M8 x 20	8
33	LGVRS1033	Flat Washer 8mm	21
34	LGVRS1034	Cross Head Screw M6 x 20	2
35	LGVRS1035	Flat Washer 6mm	7
36	LGVRS1036	Bracket 1 of Worktable	1
37	LGVRS1037	Hex. Bolt M8 x 16	4

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SPECIFICATIONS

Model:	VRS-1
Part No:	6262035
Power Rating:	370W
Fuse Rating:	5amp
Speed:	1400 rpm
Weight:	30Kg
Oscillations:	60/min
Oscillation Travel:	24mm
Table Size:	370 x 270mm
Dimensions (Machine):	370 x 370 x 600mm
Dimensions (With Stand):	470 x 470 x 1050mm

REPLACEMENT ARBORS and SANDING SLEEVES

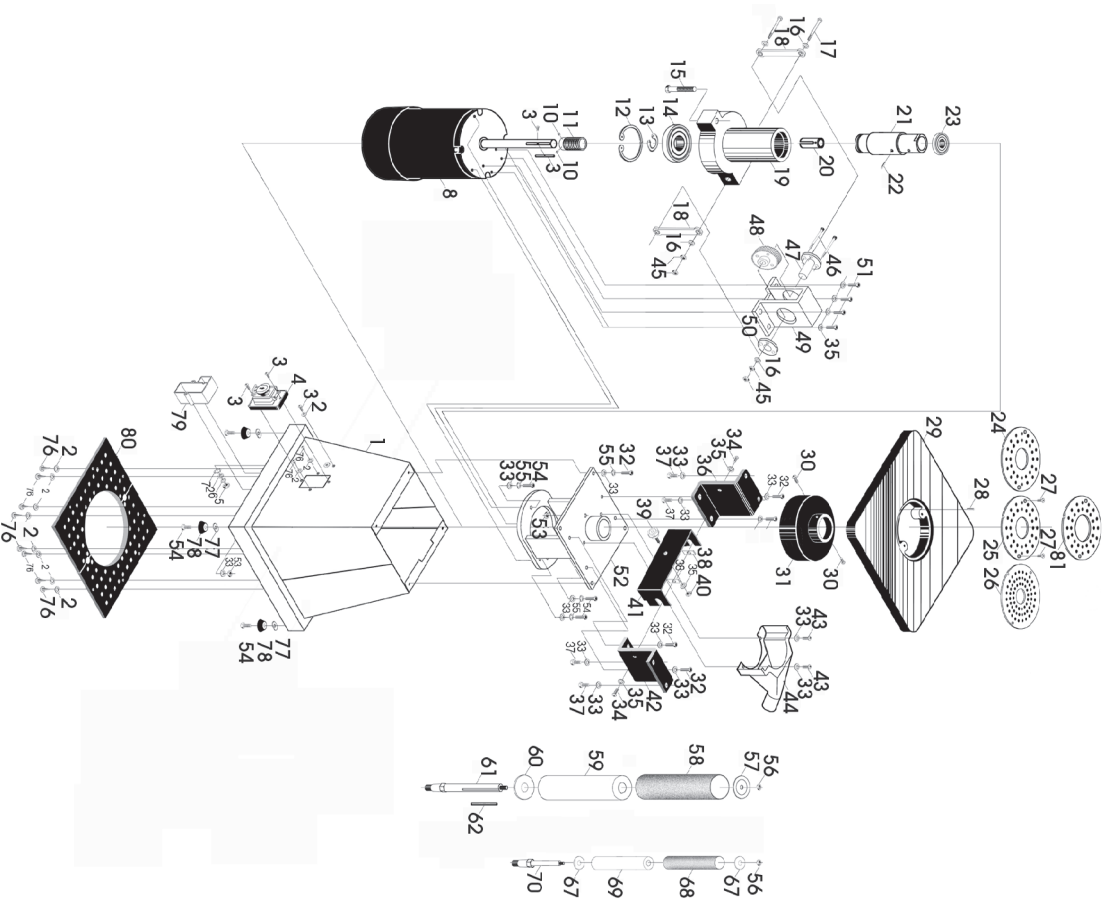
Arbor

Size	Part Number
3/4"	LGVRS1090
1"	LGVRS1091
1 1/2"	LGVRS1092
1 3/4"	LGVRS1093
2"	LGVRS1094
3"	LGVRS1095

Sanding Sleeve Packs of 5

Size	Length	60 grit	Part Number
3/4"	90mm		6262100
1"	90mm		6262115
1 1/2"	140mm		6262130
1 3/4"	140mm		6262145
2"	140mm		6262160
3"	140mm		6262175
Size	Length	80 grit	Part Number
3/4"	90mm		6262105
1"	90mm		6262120
1 1/2"	140mm		6262135
1 3/4"	140mm		6262150
2"	140mm		6262165
3"	140mm		6262180
Size	Length	120 grit	Part Number
3/4"	90mm		6262110
1"	90mm		6262125
1 1/2"	140mm		6262140
1 3/4"	140mm		6262155
2"	140mm		6262170
3"	140mm		6262185

PARTS DIAGRAM (Machine)



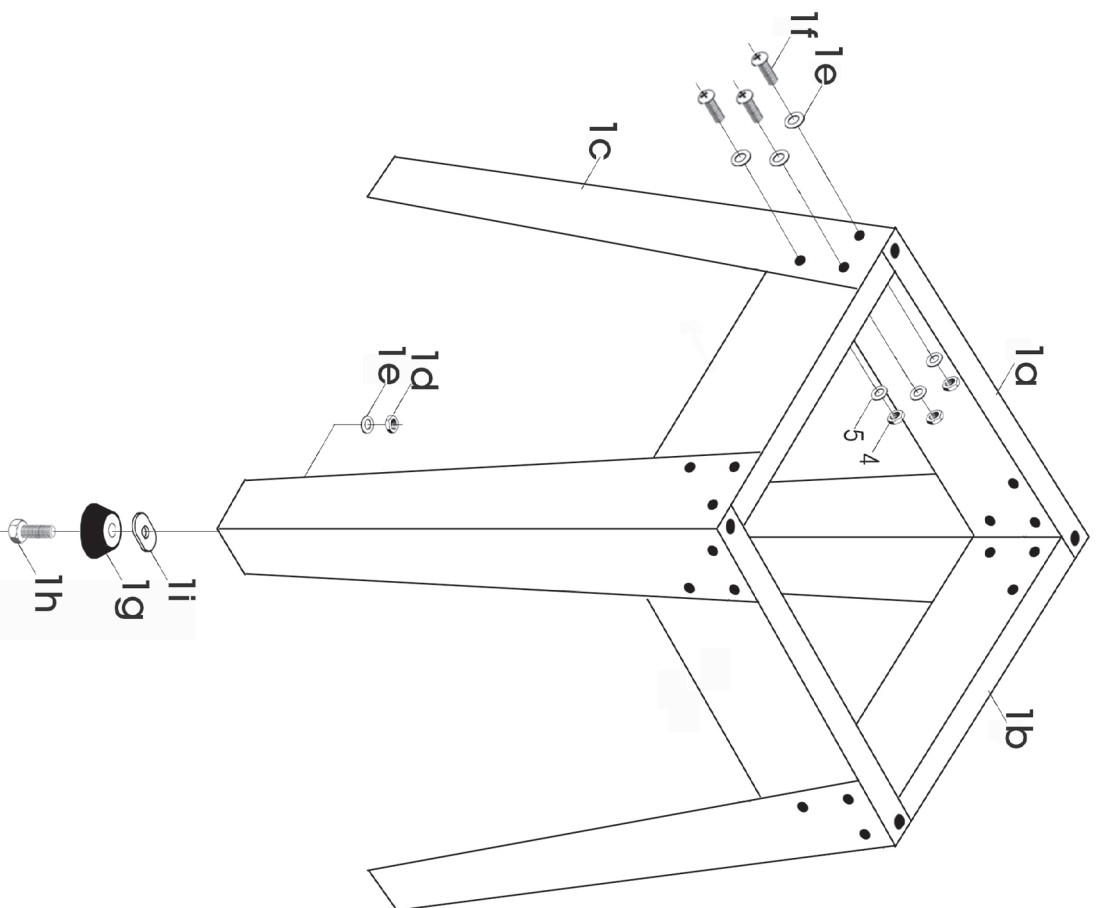
PARTS & SERVICE TEL: 020 8988 7400

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

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PARTS DIAGRAM (Stand)



IMPORTANT:

The use of parts other than CLARKE replacement parts may result in safety hazards, decreased tool performance and may invalidate your warranty.

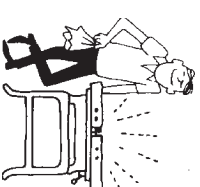
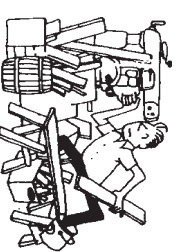
SAFETY PRECAUTIONS



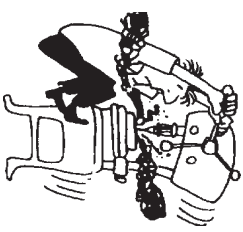
WARNING:

As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator or damage to property, may result.

1. **ALWAYS** Learn the machines' applications, limitations and the specific potential hazards peculiar to it. Read and become familiar with the entire operating manual.
2. **ALWAYS** use a face or dust mask if operation is particularly dusty.
3. **ALWAYS** check for damage. Before using the machine, any damaged part, should be checked to ensure that it will operate properly, and perform its intended function. Check for alignment of moving parts, breakage of parts, mountings, and any other condition that may affect the machines' operation. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use the machine. Consult your local dealer.
4. **ALWAYS** disconnect the tool/machine from the power supply before servicing and when changing accessories.
5. **ALWAYS** wear safety goggles, manufactured to the latest European Safety Standards. Everyday eyeglasses do not have impact resistant lenses, they are not safety glasses.
6. **ALWAYS** keep work area clean. Cluttered areas and benches invite accidents.
7. **ALWAYS** ensure that adequate lighting is available. A minimum intensity of 300 lux should be provided. Ensure that lighting is placed so that you will not be working in your own shadow.
8. **ALWAYS** keep children away. All visitors should be kept a safe distance from the work area, especially whilst operating the machine.
9. **ALWAYS** maintain machine in top condition. Keep tools/machines clean for the best and safest performance. Follow maintenance instructions.
10. **ALWAYS** handle with extreme care do not carry the tool/machine by its' electric cable, or yank the cable to disconnect it from the power supply.
11. **ALWAYS** ensure the switch is off before plugging in to mains. Avoid accidental starting.
12. **ALWAYS** concentrate on the job in hand, no matter how trivial it may seem. Be aware that accidents are caused by carelessness due to familiarity.
13. **ALWAYS** keep your proper footing and balance at all times don't overreach. For best footing, wear rubber soled footwear. Keep floor clear of oil, scrap wood, etc.



14. **ALWAYS** wear proper apparel. Loose clothing or jewelry may get caught in moving parts. Wear protective hair covering to contain long hair.
15. **ALWAYS** use recommended accessories, the use of improper accessories could be hazardous.
16. **ALWAYS** remove plug from electrical outlet when adjusting, changing parts or working on the machine.
17. **NEVER** operate machine while under the influence of drugs, alcohol or any medication.
18. **NEVER** leave machine running unattended, turn power off. Do not leave the machine until it comes to a complete stop.
19. **NEVER** force the machine, it will do a better and safer job at the rate for which it was designed.
20. **NEVER** use power tools in damp or wet locations or expose them to rain. Keep your work area well illuminated.
21. **DO NOT** use in explosive atmosphere (around paint, flammable liquids etc). Avoid dangerous environment.



ADDITIONAL PRECAUTIONS FOR VERTICAL SANDER

1. **ALWAYS** use genuine replacement sanding sleeves.
2. **DO NOT** use the machine if the electric cable, plug or motor is in poor condition.
3. **DO NOT** let the ventilation slots in the machine become blocked.
4. Replacement sanding sleeves are available from your CLARKE dealer.
5. Ensure the sanding sleeve is fully secured before use.
6. Switch the machine OFF immediately the task is completed.
7. Never stand on the machine: serious injury could occur if the machine is tipped over.
8. Sanding of Lead based paint is not recommended, contaminated dust could result in lead poisoning.

Additionally, please keep these instructions in a safe place for future reference.

OPERATION

Before starting the machine, ALWAYS inspect for damaged or worn parts etc. Any defects should be rectified before continuing. Also ensure the machine table is completely clear, i.e. there are no tools etc left on the machine that could come into contact with the sanding sleeve when the machine is switched ON, this could cause the tool to fly off, and possibly lead to personal injury.

The sander is designed for use with wood and plastic materials ONLY. Sanding metal and abrasive materials could be hazardous.

Before starting work, select the correct size arbor and sanding sleeve for the work to be carried out, and fit as explained on page 9.

Sanding

1. To switch ON, press the switch cover (see fig. 9) in and slide in direction of arrow, this will expose the ON/OFF buttons. Push the ON button, (green button 'I'). DO NOT close the cover as this will switch the machine OFF again.

NOTE: in case of emergency, close the switch cover quickly, cover will latch down and motor will be switched OFF. To switch OFF normally, press OFF button, (red button 'O'), always close cover to prevent accidental starting.

2. Allow the motor to reach full speed before offering work to the sanding sleeve.
3. Once the machine has reached full speed, slowly offer the workpiece to the sanding sleeve.

NOTE: the sanding sleeve rotates in a clockwise direction, therefore the workpiece should be worked from right to left, otherwise if fed from the other direction, the rotation force, tends to throw the material away from the sanding sleeve.

DUST EXTRACTION

The sander is provided with a dust extraction facility, where a vacuum extractor may be connected to the 50mm outlet at the rear of the machine, note however that this does not preclude the user from wearing a face mask to prevent the inhalation of dust particles.

It is an EEC requirement that a dust extraction facility be provided on power tools, however, due to the nature of the tool, some of the dust produced will be forced into the surrounding atmosphere, and will not be collected.

MAINTENANCE

Clean the machine regularly using soft brush and clean cloth only.

Always inspect the tool before use, and ensure it is in top condition.

Ensure all air vents are clear.

Check the power cable to ensure it is sound and free from cracks, bare wires etc.

Avoid using solvents when cleaning plastic parts, most plastics are susceptible to damage from the various types of commercial solvents.

All bearings etc, in this tool are lubricated with a sufficient amount of high grade lubricant for the tools lifetime under normal operating conditions, therefore no further lubrication is required.

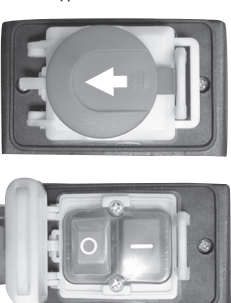


Fig. 9

CHANGING SANDING SLEEVES

Ensure the machine is switched off and isolated from the power supply by removing the plug from the 13amp socket, then proceed as follows.

To Remove Old Sleeve

1. Grasp and hold the sanding sleeve, loosen the nut on top of the arbor using 14mm spanner in a clockwise direction (see Fig. 5).
 2. Slide old sanding sleeve off arbor in direction of arrow 'A' (see Fig. 6).
- Clean sawdust accumulation from arbor and surrounding areas.

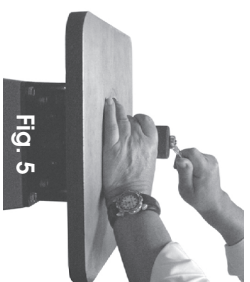


Fig. 5

To Fit New Sleeve

1. Slide new sleeve onto arbor, in direction 'B' until it is flush with the top of the rubber cylinder.
2. Grasp and hold the sanding sleeve as above, tighten the nut in anticlockwise direction. Do Not Overtighten, tighten sufficiently to hold the sleeve without slipping.

NOTE: If sanding sleeves become difficult to remove or install, apply french chalk/talcum powder on the inside of the sleeve before installing onto the arbor.

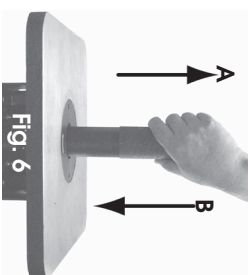
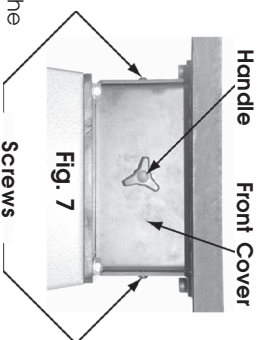


Fig. 6

CHANGING ARBORS

Ensure the machine is switched off and isolated from the power supply by removing the plug from the 13amp socket, then proceed as follows.

1. Loosen and remove two screws (see Fig. 7).
2. Remove front cover to expose Arbor base and spindle (see Fig. 8).
3. Using two 17mm open ended spanners, one on the spindle and the other on the arbor base. Holding the spindle, unscrew the arbor in clockwise direction and remove, store safely.
4. It may be necessary to change the table insert for the chosen arbor, this is done by simply removing two retaining screws, lift out insert, fit new insert, ensure it is lined up on locating pin, refit retaining screws.



NOTE: it is important to fit an insert as close as possible to the size of the arbor with sanding sleeve fitted.

4. Select required arbor and fit in reverse order.
5. Refit front cover and retain in place with screws removed earlier.

WARNING

NEVER operate the sander with any covers removed.

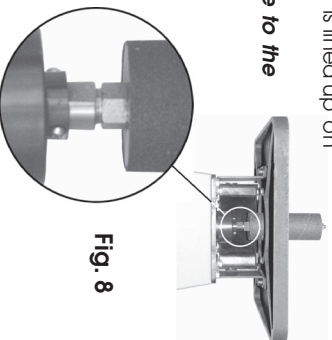


Fig. 8

ELECTRICAL CONNECTIONS

This product is fitted with a standard 13 amp, 230 volt (50Hz), BS 1363 plug, for connection to a standard, domestic electrical supply. Should the plug need changing at any time, ensure that a plug of identical specification is used.

WARNING! THIS APPLIANCE MUST BE EARTHED

This machine must be wired up in accordance with the following colour code:

- Connect the BLUE coloured cord to the plug terminal marked "N"
- Connect the BROWN coloured cord to the plug terminal marked "L"
- Connect the GREEN/YELLOW coloured cord to the plug terminal marked "E"

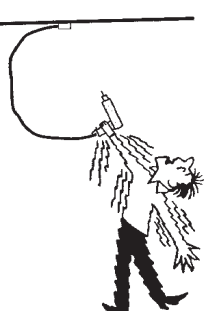


BLUE - NEUTRAL
BROWN - LIVE
GREEN/YELLOW - EARTH



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

1. The 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 into 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 replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.



Fuse Rating

The fuse in the plug must be replaced with one of the same rating (**5 amps**) and this replacement must be approved to BS1362.

If in doubt, consult a qualified electrician. Do not attempt any electrical repairs yourself.

Cable Extension

Always use an approved cable extension suitable for the power rating of this tool (see specifications), the conductor size should also be at least the same size as that on the machine, or larger. When using a cable reel, always unwind the cable completely.

IMPORTANT:

If a cable extension is needed, it is essential to comply with the following data.

Voltage	Extension length	Cable section
230V	Up to 20m	2.5mm ²
230V	From 20 to 50m	4mm ²

ASSEMBLY

Before starting check contents of carton and inform Clarke International of any shortages immediately.

Check List

1. Sander.
 2. Stand (see Fig. 1).
 3. Operating Instructions.
- a. Legs 4off
 - b. Cross members 4off
 - c. Feet 4off
 - d. $\frac{3}{4}$ " arbor complete with sanding sleeve 1off
 - e. Table Inserts 4off
 - f. 2" arbor complete with sanding sleeve fitted (Fitted in sander) 1off
 - g. Bag containing fixing nuts, screws and washers 1off

NOTE: the cross members are not all identical, there are two variations and two of each, they can be recognised by the single holes at each end on the top of each cross member, these holes are different distances from the ends. (see Fig. 2 & 3 on page 8).

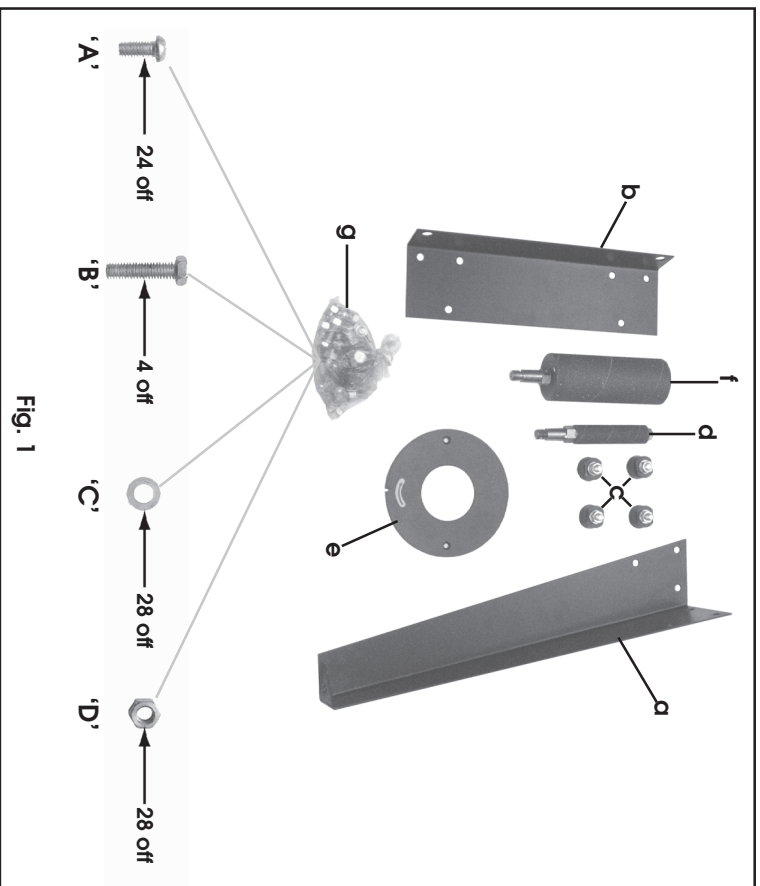


Fig. 1

ASSEMBLY Cont

Assemble stand as follows.

1. Fit two legs to each of the cross members with single holes 12mm from ends (see Fig. 2), using 6 off screws ('A'), 6 off washers ('C') and 6 off nuts ('D'), per assy, finger tight at this stage only.

NOTE: legs must be fitted on the outside of the cross member (see Fig. 2).

2. Fit other cross members with single holes 29mm from ends to leg assemblies (see Fig. 3) using, 6 off screws ('A'), 6 off washers ('C') and 6 off nuts ('D') per cross member, finger tight only.

Again the legs must be outside of the cross members, and second cross member must sit on top of the first cross member fitted, otherwise the holes will not line up correctly. Once all screws are fitted finger tight, stand the assy on a flat surface, proceed to tighten all screws, checking as you do the assy remains square stable.

Once all screws are fully tightened, turn the assy upside down and fit the rubber feet as follows.

1. check and adjust if necessary all four foot assy's are set as shown in Fig. 4.

Ensure the nut washer is wound right down, finger tight is adequate.

2. Remove nut and washer.
3. fit one foot assy to each leg, Do Not Overtighten.

Fit stand assy to sanding machine.

1. Remove the installed arbor ref instructions on page 9.
2. Carefully turn the sander upside down on a clean flat surface.
3. Position the stand assy upside down onto the machine base.
4. Using 4 bolts ('B'), 4 washers ('C') and 4 nuts ('D'), fasten stand to the machine, one bolt on each corner, Do Not fully tighten until all four bolts are fitted finger tight.
5. Carefully with assistance turn the completed assy onto it's feet.

Before using the machine, it is necessary to remove all the protective grease from the table etc using a suitable cleaning/degreasing agent, ALWAYS follow manufacturers instructions.

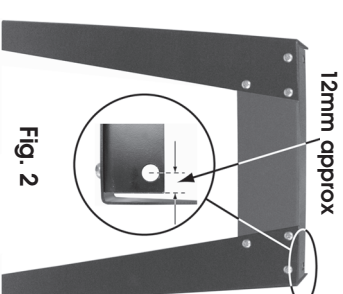


Fig. 2

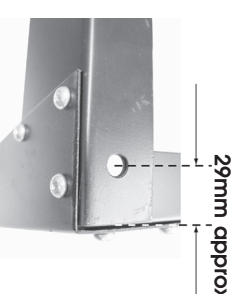


Fig. 3

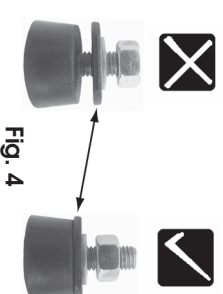


Fig. 4