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

020 - 8988 - 7400

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Hemnall Street, Epping, Essex CM16 4LG

Clarke® WOODWORKER



VARIABLE SPEED JIGSAW

MODEL No. CJS2

Part No. 6462030

OPERATING & MAINTENANCE INSTRUCTIONS



Thank you for purchasing this CLARKE Jig Saw, which is designed for DIY and light workshop use only.

Before attempting to use the machine, 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 the saw 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.

Specifications

Elec. Supply	230V 50Hz 1 ph
Power Rating	420W Motor
Fuse Rating	5amp
No Load Speed	0-2,700 strokes/minute
Maximum Cutting Depth	55mm
Net Weight	1.5kg
Vibration Emissions.....	Refer to notes on page 10
This Product Conforms To 98/37/EEC Regulations	

 When disposing of this product, ensure it is disposed of according to all local ordinances. It must not be disposed of with general household waste.

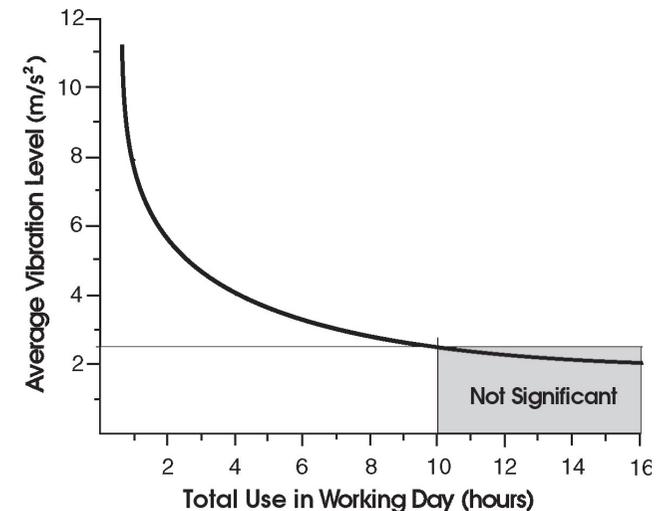


Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.

You will note that a third value is given in the specification - the highest measured reading in a single plane. This is the maximum level of vibration measured during testing in one of the axes, and this should also be taken into account when making a risk assessment.

'a' values in excess of 2.5 m/s² are considered hazardous when used for prolonged periods. A tool with a vibration value of 2.8 m/s² may be used for up to 8 hours (cumulative) per day, whereas a tool with a value of 11.2 m/s² may be used for ½ hour per day only.

The graph below shows the vibration value against the maximum time the respective tool may be used, per day.



The uncertainty factor should also be taken into account when assessing a risk. The two figures 'a' and 'K' may be added together and the resultant value used to assess the risk.

It should be noted that if a tool is used under abnormal, or unusual conditions, then the vibration level could possibly increase significantly. Users must always take this into account and make their own risk assessment, using the graph above as a reference.

Some tools with a high vibration value, such as impact wrenches, are generally used for a few seconds at a time, therefore the cumulative time may only be in the order of a few minutes per day. Nevertheless, the cumulative effect, particularly when added to that of other hand held power tools that may be used, must always be taken into account when the total daily dose rate is determined.

Vibration Emissions

HAND-ARM VIBRATION

Employers are advised to refer to the HSE publication "Guide for Employers".

All hand held power tools vibrate to some extent, and this vibration is transmitted to the operator via the handle, or hand used to steady the tool. Vibration from about 2 to 1500 herz is potentially damaging and is most hazardous in the range from about 5 to 20 herz.

Operators who are regularly exposed to vibration may suffer from Hand Arm Vibration Syndrome (HAVS), which includes 'dead hand', 'dead finger', and 'white finger'. These are painful conditions and are widespread in industries where vibrating tools are used.

The health risk depends upon the vibration level and the length of time of exposure to it.....in effect, a daily vibration dose.

Tools are tested using specialised equipment, to approximate the vibration level generated under normal, acceptable operating conditions for the tool in question. For example, a grinder used at 45° on mild steel plate, or a sander on softwood in a horizontal plane etc.

These tests produce a value 'a', expressed in metres per second per second, which represents the average vibration level of all tests taken, in three axes where necessary, and a second figure 'K', which represents the uncertainty factor, i.e. a value in excess of 'a', to which the tool could vibrate under normal conditions. These values appear in the specification panel below.

MODEL No:	CJS2
DESCRIPTION:	JIG SAW

Declared vibration emission value in accordance with EN12096

Measured vibration emission value - a : 6.3m/s²

Uncertainty value - K : 2.5m/s²

Highest measured reading in a single plane m/s²

Values determined according to EN28622-1

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.

- ALWAYS** Learn the machines' applications, limitations and the specific potential hazards peculiar to it. Read and become familiar with the entire operating manual.
- ALWAYS** use a face or dust mask if operation is particularly dusty.
- 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.
- ALWAYS** disconnect the tool/machine from the power supply before servicing and when changing accessories.
- ALWAYS** wear safety goggles, manufactured to the latest European Safety Standards. Everyday eyeglasses do not have impact resistant lenses, they are not safety glasses.
- ALWAYS** keep work area clean. Cluttered areas and benches invite accidents.
- 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.
- ALWAYS** keep children away. All visitors should be kept a safe distance from the work area, especially whilst operating the machine.
- ALWAYS** maintain machine in top condition. Keep tools/ machines clean for the best and safest performance. Follow maintenance instructions.
- 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 .
- ALWAYS** ensure the switch is off before plugging in to mains. Avoid accidental starting.
- 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.
- 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 jewellery 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. do not use in explosive atmosphere (around paint, flammable liquids etc.). Avoid dangerous environment.



Additional Precautions For Jig Saws

1. **ALWAYS** wear ear protectors/defenders as the noise level of this machine can exceed 85dB (A).

2. **ALWAYS** use the appropriate saw blade for the material being cut.

3. **ALWAYS** keep the mains cable well away from the machine and ensure an adequate electrical supply is close at hand so that the operation is not restricted by the length of the cable.

4. **ALWAYS** switch the machine OFF immediately the task is completed.

5. **ALWAYS** ensure the blade is fully tightened before use.

6. **ALWAYS** allow sufficient clearance beneath the work to ensure the blade does not come into contact with the floor, table etc.

7. **NEVER** allow the ventilation slots in the machine to become blocked.

8. **DO NOT** cut hollow pipe and do not cut material above the specified thickness.

9. **DO NOT** cut through walls or cavities before checking for hidden electrical wires or water pipes etc.

10. **DO NOT** remove tool from work until the blade has completely stopped.

11. **DO NOT** touch the blade immediately after use, allow time for it to cool.

12. **DO NOT** cut work less than at least twice the pitch of the saw blade. i.e. at least two teeth must be in contact with the work at all times.

13. **DO NOT** use the machine if the electric cable, plug or motor is in poor condition.

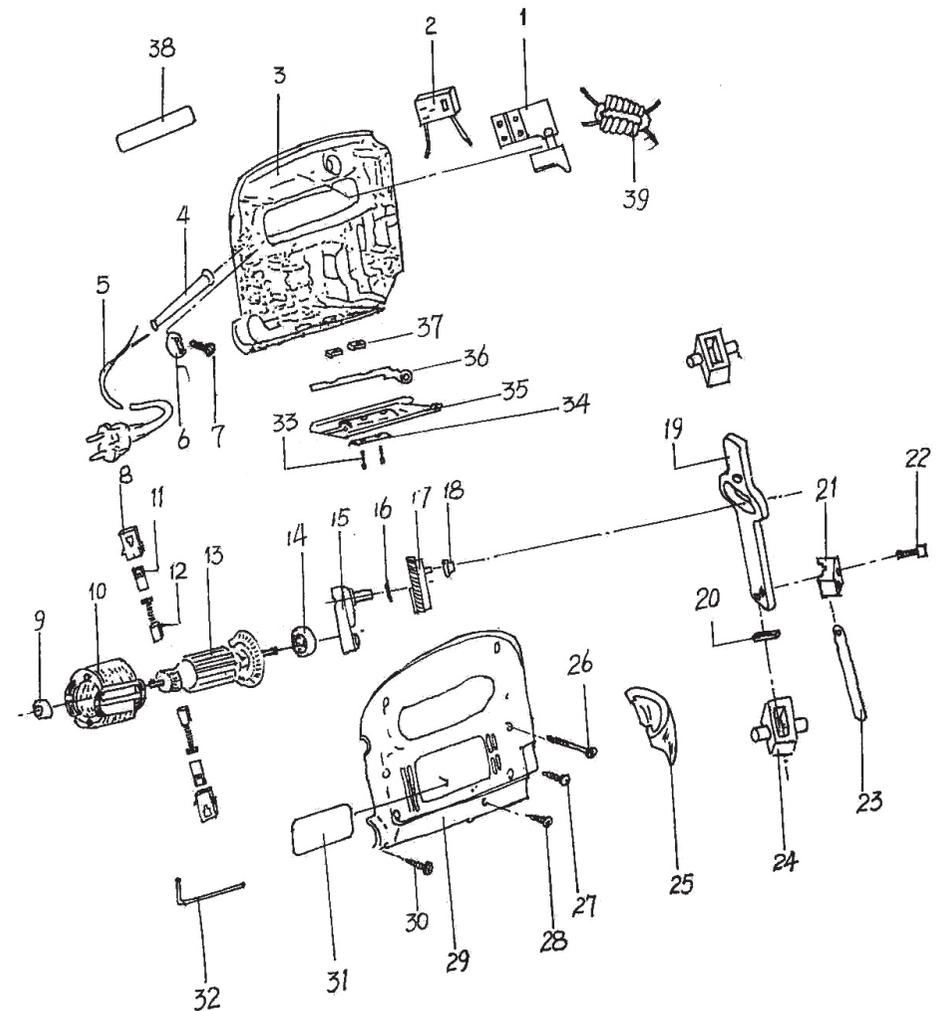
14. When cutting wood, ensure all nails have been removed beforehand. Nails will damage the wood saw blade.

15. When cutting metals, always use a cooling agent i.e. cutting/soluble oil.

16. Replacement blades for wood, plastic and steel are available from your CLARKE dealer. (see Parts List, for details)

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

Parts Diagram



Accessories

A wide range of 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 No	Description	Qty	Item	Part No	Description	Qty
1	GRCJS2001	Switch	1	21	GRCJS2021	Blade Holder	1
2	GRCJS2002	Capacitor	1	22	GRCJS2022	Screw	2
3	GRCJS2003	Housing	1	23	GRCJS2023	Saw Blade	1
4	GRCJS2004	cable Sleeve	1	24	GRCJS2024	Sliding Part	1
5	GRCJS2005	Power Cable	1	25	GRCJS2025	Guard	1
6	GRCJS2006	Cable Clamp	1	26	GRCJS2026	Screw	3
7	GRCJS2007	Screw	2	27	GRCJS2027	Screw	2
8	GRCJS2008	Box	2	28	GRCJS2028	Screw	1
9	GRCJS2009	Bearing	1	29	GRCJS2029	Housing	1
10	GRCJS2010	Stator	1	30	GRCJS2030	Screw	1
11	GRCJS2011	Brush Holder	2	31	GRCJS2031	Label	1
12	GRCJS2012	Carbon Brush	2	32	GRCJS2032	Key	1
13	GRCJS2013	Rotor	1	33	GRCJS2033	Screw	2
14	GRCJS2014	Bearing	1	34	GRCJS2034	Fixing Plate	1
15	GRCJS2015	Centering Plate	1	35	GRCJS2035	Base	1
16	GRCJS2016	Spring Washer	1	36	GRCJS2036	Wheel Support	1
17	GRCJS2017	Gear	1	37	GRCJS2037	Square Nut	1
18	GRCJS2018	Pinion	1	38	GRCJS2038	Label	1
19	GRCJS2019	Rod	1	39	GRCJS2039	Inductor	1
20	GRCJS2020	Wool Pad	1				

PARTS & SERVICE TEL: 020 8988 7400

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

SERVICE: Service@clarkeinternational.com

Electrical Connections

This product is provided 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.



This appliance is Double Insulated, and the two wires in the mains lead should be wired up in accordance with the following colour code:

BLUE - NEUTRAL

BROWN - LIVE

- Connect the BLUE coloured cord to the plug terminal marked a letter "N"
- Connect the BROWN coloured cord to the plug terminal marked a letter "L"

If this appliance is fitted with a plug which is moulded on to the electric cable (i.e. non-rewireable) 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 Clarke 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 ASTA 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.

Changing Blades

Note :

Item numbers in brackets, refer to parts list on page 8.

With the power cable disconnected from the mains supply, slacken off the two hex socket screws, (item 33), securing the Base Plate, using the hex. wrench stored at the rear of the base of the tool, and ease the roller, (item 36), backwards away from the blade.

Loosen the two blade holder screws, (item 22), (accessed through the clear plastic blade guard) and remove existing blade. Select the saw blade appropriate for the job in hand, and insert it in to the Blade Holder as far as it will go, with the teeth facing forwards.

Tighten the two blade holder Hex socket screws progressively, until the blade is held firmly.

Push the roller forwards so that it just touches the back of the blade, and with the base plate at the desired angle (this will normally be at 90°), tighten the two base plate securing screws.

Operation

The ON/OFF trigger switch is located under the grip.

IMPORTANT: DO NOT plug in to the mains, unless you have ensured the tool is switched OFF. To do this, pull the switch fully upwards, and then release it.

Push the clear plastic blade guard down fully.

To start the tool pull the trigger switch. Blade speed is dependant upon the pressure applied to the trigger. The greater the pressure (ie the more it is pulled in) the greater the speed. If you desire a constant speed, pull the switch all the way in and lock in position with the knob on the side of the grip, then adjust the blade speed by turning the knob (within the trigger switch) until you achieve the desired result. Wait until the blade is running at its desired speed before attempting to cut the workpiece. To stop the tool if the switch lock is activated, pull the trigger switch fully in, then release it, (motor will stop).

to make a cut, depress trigger, place the end of the base plate on the workpiece and move it slowly forward along the cutting line. Take extra care when cutting curves - move the blade slowly to avoid stress and therefore blade breakages.

The base plate is adjustable so that bevels of 15°, 30°,45° may be cut, however, if absolute accuracy is required you should always check the angle with a protractor whilst carefully tightening the two base plate securing screws. This includes setting the base plate for cutting at 90°, (check roller is still only just touching blade).

Maintenance

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

Ensure all air vents are clear, (use compressed air to clean the machine where possible).

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.

Trouble Shooting

Jig Saw is overheating

This indicates the machine is dirty. Clean the ventilation holes, and blow out with compressed air or clean with a dry cloth.

Overloading the machine will also cause overheating. Do not use for heavy duty work, and do not apply excessive pressure.

Excessive sparking occurs

This indicates worn brushes. This problem is quickly remedied but you should consult your CLARKE dealer for parts and advice.

Jig Saw does not operate when switched ON

Check to ensure the fuse is sound and replace if necessary. If the fuse is sound or blows repeatedly, consult your CLARKE dealer.

DUST EXTRACTION

The Jig saw is provided with a dust extraction facility, where a dust bag or vacuum extractor may be connected to the rear of the machine. Please 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.



Parts & Service

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

SERVICE: Service@clarkeinternational.com