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Thank you for selecting this CLARKE Bandsaw .

Before attempting to operate the 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 the Bandsaw giving you long and trouble free service.

GUARANTEE

This CLARKE 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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SAFETY PRECAUTIONS

GENERAL SAFETY RULES FOR OPERATING MACHINERY

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 may result.

- 1. READ and BECOME FAMILIAR with the entire operating manual. Learn the machines' applications and limitations as well as the specific potential hazards peculiar to it.
- 2. 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.
- 3. CHECK for DAMAGE. Before using the machine, any damaged part, such as a guard etc., 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 effect the machines' operation. Any damage should be properly repaired or the part replaced. If in doubt, DO NO USE the machine. Consult your local dealer.
- 4. DISCONNECT the MACHINE from the power supply before servicing and when changing accessories or blades etc.
- 5. KEEP GUARDS in place and in working order.
- 6. ALWAYS WEAR SUITABLE SAFETY GOGGLES manufactured to the latest European Safety Standards. Also use a face or dust mask if cutting or sanding operation is dusty. Everyday eyeglasses do not have impact resistant lenses, they are NOT safety glasses.
- 7. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 8. ALWAYS wear Ear Protectors/Defenders
- 9. DON'T FORCE the Machine. It will do a better and safer job at the rate for which it was designed.
- 10.REMOVE ADJUSTING KEYS AND SPANNERS. Form the habit of checking to see that keys and adjusting wrenches are removed from the machine before switching on.

- 11. DRUGS, ALCOHOL, MEDICATION. Do not operate machine while under the influence of drugs, alcohol or any medication.
- 12. USE RECOMMENDED ACCESSORIES. The use of improper accessories could be hazardous.
- 13. NEVER LEAVE MACHINE RUNNING UNATTENDED. Turn power OFF. Do not leave the machine until it comes to a complete stop.
- 14. EARTH ALL MACHINES. If the machine is equipped with three-pin plug, it should be plugged into a three-pin electrical socket. Never remove the earth pin.
- 15. AVOID DANGEROUS ENVIRONMENT. Don't use power machines 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).
- 16. KEEP CHILDREN AWAY. All visitors should be kept a safe distance from the work area, especially whilst operating the unit.
- 17. MAINTAIN MACHINE IN TOP CONDITION. Keep tools sharp and clean for the best and safest performance. Follow maintenance instructions.
- 18. DON'T OVERREACH. Keep your proper footing and balance at all times. For best footing wear rubber soled footwear. Keep floor clear of oil, scrap wood, etc.
- 19. WEAR PROPER APPAREL. Loose clothing or jewellery may get caught in moving parts. Wear protective hair covering to contain long hair.
- 20. MAKE WORKSHOP CHILDPROOF. Lock all machines when not in use by removing the safety keys if fited, and store in a safe location.
- 21. NEVER STAND ON THE MACHINE. Serious injury could occur if the machine is tipped or if a cutting tool is accidentally contacted. Do not store materials above or near a machine, such that it is necessary to stand on the machine to reach them.
- 22. HANDLE WITH EXTREME CARE Whenever transporting or installing the machine, and always use a lifting appliance wherever possible. Plan your installation carefully, taking into accoount any lifting appliances which may be required.
- 23. ALWAYS use in a well ventilated area. Remove sawdust frequently, and clean sawdust out from the interior of the machine to avoid producing a potential fire hazard.
- 24. AVOID ACCIDENTAL STARTING. Ensure the switch is OFF before plugging in to the mains.
- 25. BE AWARE that many accidents are caused by carelessness due to familiarity. ALWAYS concentrate on the job in hand, no matter how trivial it may seem.

ADDITIONAL SAFETY RULES FOR BANDSAWS

- Use a Push Stick or scrap of wood to do the pushing and guiding, when sawing small pieces which require the fingers to be close to the blade.
- Set the blade guide block assembly as close as possible to the workpiece.
- Switch off the saw, and make sure the blade has come to a complete stop before clearing sawdust or off-cuts from the table.
- Keep the saw properly adjusted, paying particular attention to the blade tension and tracking, and position of the blade guides.
- Disconnect the saw from the mains supply before removing the front cover.
- Make sure there are no nails or foreign objects in the part of the workpiece to be sawn.
- Be extra cautious with very large or small, or irregularly shaped workpieces.
- Set up the machine and make all adjustments with the power OFF.
 - i.e. Tilting the table, Adjusting the saw blade guard Adjusting the saw blade guides Adjusting the Blade tension Adjusting the Blade tracking, etc.
- **DO NOT** operate the machine with the covers off. They must all be in place and securely fastened when performing any operation.
- When cutting large or oversize stock, always ensure the material is supported at table height.
- Any adjustable component must be securely locked in position to ensure it cannot vibrate free during operation.
- When sawing curves, make relief cuts to allow removal of scrap material. This will prevent undue twisting or binding of the saw blade. Make the relief cuts before starting the curved cut.
- When sawing, hold material firmly, and feed into blade at a moderate speed.
- Be sure to use the correct blade size and type.
- DO NOT saw any material that does not have a flat surface on which

to bear, unless a suitable support is used. Round or tubular work has a tendency to roll, and causes the blade to 'bite'.



Do not cut unless it is securely clamped or blocked.

• Ensure the bandsaw is permanently and securely fixed in position before operating.

ELECTRICAL INSTALLATION

Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably 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 lead of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

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

Connect BROWN coloured cord to plug terminal marked with a letter "L" or coloured RED.

Connect BLUE coloured cord to plug terminal marked with a letter "N" or coloured BLACK.

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.
- 5. The fuse in the plug must be replaced with one of the same rating (**13 amps**) and this replacement must be ASTA approved to BS1362.
 - **Important:** If a cable extension is needed, it is essential to comply with the following data.

Voltage	Itage Extension length Cable Sectio	
230v	Up to 20m	2.5mm ²
230v	From 20 to 50m	4mm ²

UNPACKING

Unpack the shipping carton and lay out all the items so that they may be clearly identified as follows:

- 1. Main Frame Assembly
- 2. Motor Assembly
- 3. Switch Box Assembly
- 4. (CBS12WC) Table Assembly c/w Trunnions
- 4 (CBS14WC) Table Assembly comprising:
 - 1 Table
 - 2 Trunnions
 - 1 Trunnion base
- 5. Mitre Gauge Assembly
- 6. (CBS12WC) Rip Fence
- 6. (CBS14WC) Rip Fence Assembly
 - comprising:1 Rip Fence
 - 1 Rip Fence Guide
 - 1 Guide Mounting Plate
- 7. 1 Bag containing
 - Allen Key
 - Adjusting Knobs
 - Bolts, Screws, Nuts & Washers

Check to ensure that no damage was suffered in transit, and that all parts are accounted for. You should contact your CLARKE dealer immediately, should there be any damage or deficiency

PRINCIPAL PARTS

(Ref. Fig. 1)

- A Blade Tension Adjuster Knob
- B Blade Guard and Upper Guide Block Securing Knob.

NOTE: This item is mounted on the back panel, on model CBS12WC, as indicated by the dotted line.

- C Front Cover Securing Knobs
- D Blade Guard
- E Upper Blade Guide Block
- F Switch Box
- G Safety Switch
- H Table Trunnion (fig. shows 12WC type)
- I Table Tilt Adjuster Knob (fig. shows 12WC type)
- J Motor
- K Rip Fence (fig. shows 12WC type)
- L Mitre Gauge
- M Dust Extraction Outlet



ASSEMBLY

Plan your installation. Ensure adequate floor space is available, with good lighting and ventilation, and an adequate electrical supply is close at hand.

Any protective coating on the Band Saw should be removed using a cloth moistened with paraffin. DO NOT use acetone, petrol or paint thinners.

If you have not purchased the optional floor stand, ensure the bandsaw is securely mounted on a strong stable worktop, and of sufficient height so that you do not have to bend your back to perform normal operations. Tighten the mounting bolts snugly, but take care NOT TO overtighten.

If you have purchased the stand, it should be assembled first. The main body of the machine is then located and bolted down to it before assembly of other components.

A. THE STAND ASSEMBLY

- Attach the braces to the legs as shown in fig. 2, using the inside set of holes on each brace, (i.e.the length will be at its shortest). Ensure a flat washer is located next to each nut. Do not tighten the nuts at this stage.
- 2. Attach the stand platform to the legs but do not tighten the nuts. Similarly, a flat washer should be located next to each nut.
- 3. Ensure the stand assembly is resting on even, level ground, and rock it to ensure that no part is under stress, before tightening all nuts. Check to ensure that the overall shape of the stand is symmetrical, and is completely stable when all nuts are tight and the platform is level.



B. THE MOTOR

- Locate the motor pulley and slide it on to the motor shaft with the boss facing inwards.
- 2. Using a straight edge, align the face of the pulley with the end of the motor shaft, as shown in the diagram, and lock it in this position by tightening the hex. socket screw.



- 3. Remove the nuts and washers from the motor mounting studs.
- 4. Place the motor on to the studs, with the pulley through the hole in the casing. DO NOT replace the nuts or washers at this point.
- 5. Open the front cover by unscrewing the upper and lower securing knobs.

IMPORTANT:

Take great care from this point to avoid any contact with the saw blade. Remember that carelessness can cause severe personal injury.

- 6. Behind the lower wheel, hangs a drive belt. Carefully, so as to avoid the saw blade and also not to trap your fingers, arrange it so that it is OFF the pulley, and around the shaft ie. BEHIND the large pulley.
- 7. Fit the belt over the motor pulley (lifting the motor with pulley slightly,gives adequate clearance).
- Carefully fit the belt to the larger lower wheel pulley. Sufficient slack is provided by moving the motor on its' elongated mounting holes.
- Replace the washers and nuts on to the motor mounting studs, and move the motor on its mountings

Casing Casing Lower Wheel

so that tension is applied to the belt. Belt tension is correct when the belt can be moved 1/2" either side of the centre line, in the middle of its run, using moderate thumb pressure.

Tighten the motor mounting nuts firmly.

C. THE TABLE

1. CBS12WC

The table is shipped with the trunnions, tapered pin and table insert attached. Before installing, remove the taper pin, loosen the hex. head screws securing the trunnions to the under side of the table, and tap out the table insert.

- 1. Raise the Upper Guide Block and Blade Guard assembly, and secure it at the top of its' travel with knob B, fig.1.
- 2. Carefully guide the saw blade through the table slot from the front, as shown in fig.4.



3. With the blade located in the centre hole, line up the slotted holes of the larger rear trunnion, with the long and short table tubes, and at the same time position the slotted hole in the front trunnion into the other end of the long tube, as shown in fig 5.

Ensure the ends of the tubes sit neatly in the grooves on the inside of the slotted holes in each trunnion.



4. Thread the Trunnion Tension Bolt in through the front trunnion, with a flat washer up against the trunnion, and a spring washer between the flat washer and the bolt head.

With the bolt fully home and protruding through the rear trunnion, attach a flat washer followed by a spring washer, and finally the table tilt adjuster knob. i.e. the flat washer must be up against the trunnion.

Do not tighten the adjuster knob at this stage.

5. Move the trunnions on their mountings away from each other, to ensure there is a working clearance between the trunnions and the table tubes, and then tighten the trunnion mounting bolts.

IMPORTANT: The table should be capable of tilting freely with the adjuster knob is loosened.

If it is tight and difficult to move, slacken off the trunnion mounting bolts slightly and prise the trunnions apart on their mountings, in the direction of the arrows in fig. 5. Finally, re-tighten the mounting bolts.

NOTE: It helps, to ensure free movement of the table, to apply grease to the trunnion slots during assembly.

- 6. A scale is provided on the larger (rear) trunnion, with a pointer mounted on the casing to indicate the degree of table tilt. Set the table so the pointer is opposite the zero degres mark, (i.e. the table is horizontal) and tighten the table tilt adjuster knob. The table should be firm and stable, if there is any movement when the adjuster knob is tightened, the trunnion mounting bolts are loose.
- 7. Replace the Table Insert and the Taper Pin.

2. CBS14WC

The table assembly comprises three main components, the table itself, a pair of trunnions, and the trunnion base.

- Bolt the trunnions to the underside of the table, ensuring the two table securing bolts are in place as shown in fig 6, and the trunnion with the scale attached is bolted to the front table mounting, so that the scale faces towards the front of the table. Leave the bolts finger tight.
- 2. Secure the trunnion base to the main body with the nuts and bolts provided, and tighten firmly.



- 3. Attach the Rip Fence Guide Bar Mounting Plate to the underside of the table with the screws provided, and then attach the Rip Fence Guide Bar to the Mounting Plate, (see fig.7).
- Mount the table on the trunnion base, with the table securing bolts protruding through the holes in the trunnion mountings.
 Screw on the table tilt adjusting knobs, and rock

Screw on the table tilt adjusting knobs, and rock the table, to bed the trunnions snugly on to their mountings. When they move smoothly and evenly, tighten the table tilt adjuster knobs, and finally tighten the trunnion to table mounting bolts. Slacken off the table tilt adjuster knobs once again, and check to ensure the table moves smoothly on its mountings.



The Rip Fence is slotted on to the guide bar, and may be secured into place with the knob provided, and the Mitre gauge when required, sits in the groove in the table.

IMPORTANT: Before use, the table must be correctly adjusted, and set to the horizontal position. Please refer to 'Table Adjustments' on page 8.

D. ELECTRICAL CONNECTIONS

1. Switch Box

On the left hand side of the frame, between the upper and lower wheel covers, are two loosely fitted screws. These are the mountings for the switch box.

Remove the screws and attach the switch box, with the safety bar on the wheel cover sitting snugly against the safety switch.

The safety switch operates when the wheel cover is opened. The safety bar, mounted on the wheel cover, pushes the switch into the OFF position, thereby preventing the machine from operating.

You will notice that the Safety Bar and Switch Box have elongated mounting holes. These allow the assembly to be adjusted so that the switch operates immediately the door is opened.

2. The Motor

Two cables extend from the switch box. One cable carries a 13 amp BS 1360 plug, the other, shorter cable is now connected to the motor, as follows:

- 2.1 Remove the motor connector box cover plate.
- 2.2 Remove the gland securing nut from the end of the cable, (leaving the gland ON the cable), and thread the cable through the hole in the motor connector box. Replace the gland securing nut on the cable, once the cable is through the hole, and secure it, loosely for the time being, so that the cable is not held.
- 2.3 Connect the YELLOW/GREEN wire to the EARTH terminal, which is attached to the casing.
- 2.4 The other two wires are connected to the other two terminals on the terminal block.
- 2.5 Ensuring all wires are firmly secured, pull any excessive cable that may be inside the box, back out through the cable inlet. Ensure there is a little slack in the cable and the wires are NOT taught, before tightening the gland securing nut and replacing the connector box cover.
- 2.6 Attach the cable, (between the switch box and motor), to the main frame, with the cable clips provided.

Your Band Saw is now fully assembled, but before use, it is MOST IMPORTANT that the following adjustments are made. It is equally important that these adjustments are

constantly checked and maintained.

ADJUSTMENTS

A. BLADE ALIGNMENT AND TENSION

Blade tension is effected by raising or lowering the upper wheel, by means of the Blade Tension Adjuster Knob (A, fig. 1) The upper wheel is mounted on a spring loaded trunnion, and tension is therefore a matter of 'feel'.

Additionally, the upper wheel can be adjusted so that it is correctly aligned with the lower wheel, and to ensure the blade will run centrally about both wheels. This adjustment is effected by turning the Alignment Knob, shown in fig. 8.

Screwing the knob 'in' (clockwise), will cause the upper wheel to tilt inwards at the top slightly, which in turn causes the blade to run on the outside of the wheel. Screwing the Knob anticlockwise, has the opposite effect.

The Upper wheel carries a rubber tyre which has a convex outer surface. It is important therefore to ensure the blade runs exactly in the centre of the tyre.



The sequence of adjustment is as follows:

- 1. Apply tension to the blade by screwing the tension adjuster knob clockwise until the blade feels firm on its' run between the two wheels.
- 2. Turn the upper wheel clockwise, by hand, and observe the reaction of the blade, and its position on the tyre of the upper wheel
- 3. If the blade begins to move towards the front edge of the tyre, (i.e. towards you as you look at it), slowly turn the alignment screw anticlockwise, causing the upper wheel to tilt outwards at the top, thereby causing the blade to move further towards the back edge of the tyre. Conversly, if the blade tends to run towards the back edge of the tyre, turn the alignment knob clockwise, moving the upper wheel inwards at the top, thereby causing the blade tomove towards the front edge of the tyre.

Adjust carefully so that the blade runs smoothly along the middle of the tyre, and lock the alignment knob in place with the locknut on its threaded shaft. (see fig.



4. Before closing the door on the CBS14WC, ensure the wire brush which is adjacent to the lower wheel, is adjusted so that it lightly brushes the edge of the wheel. This brush removes any saw dust from the edge of the wheel, thereby preventing the blade from being forced off course.

B. BLADE GUIDE ADJUSTMENT.

NOTES:

In order to obtain satisfactory results, it is important that the Blade Guide Adjustments are properly maintained at all times. Before carrying out these adjustments, the blade must be correctly tensioned, and tracking properly, as described above.

When assembling the machine initially, it is advantageous to carry out the blade guide adjustments, prior to assembling the table, as the blade guides are far more accessible at this stage. The procedure is as follows:

1. Upper Blade Guide (Ref Fig. 10)

NOTE: The Guide Block Bracket (G), carries the Blade Guide Bearings (A). These bearings provide side support for the blade, and should run neatly on the sides of the blade (as shown in fig 10), but not so far forward as to come into contact with the blades' teeth.

This adjustment must be the first to be checked. The sequence of adjustment is as follows:

- 1.1 Lower the Upper Guide Block and Blade Guard Assembly to its lowest position and check the position of the Blade Guide Bearings as described above. Slacken off the screw (F) if necesary, allowing the guide block to move in or out as required. Re-tighten the securing screw.
- 1.2 Slacken off the two screws (C), securing the Guide Blocks (B), to the Guide Block Bracket (G), and adjust each Blade Guide Bearing in turn so that they lightly touch the sides of the blade. Secure firmly in this position by re-tightening the screws (C).
- 1.3 The Blade Guide Bearing (D), prevents the blade from being pushed backwards, and protects it from tooth damage.

This bearing should be set 1/64" (0.04mm) behind the blade, and is adjusted by slackening the grub screw (E), positioning the bearing accordingly, and re-tightening the grub screw using the Allen key provided.



2. Lower Blade Guides (Ref Fig 11)

2.1 Slacken off the grub screw (K), which secures the Lower Guide Block (M), and move the Lower Guide Block so that the bearings run neatly alongside the blade, but not so far forward as to come in contact with the blades teeth, as shown in fig. 11.



2.2 The Lower Guide bearings (A) should lightly touch the sides of blade. Slacken off the securing screws (L), and move each bearing in turn so that it just touches the side of the blade. Re-tighten securing screws (L) 2.3 Slacken the grub screw (H), which secures the shaft carrying The Blade Guide Bearing (D), and adjust the position of the bearing so that it is1/64" behind the blade (as shown in fig. 10). Re-tighten the grub screw, using the Allen key provided

C. TABLE ADJUSTMENTS

For all normal sawing operations, it is important to ensure that the table is set at 90° to the blade. This is checked by sliding an engineers square on the table, up to the blade (with the blade correctly tensioned), and carrying out a visual inspection.

If necessary slacken off the table tilt adjuster knobs, and move the table until you are satisfied it is square with blade, then re-tighten the table tilt adjuster knobs.

In the case of the CBS14WC, it may be necessary to slacken off the lock nut, and screw 'in' the table stop screw (see fig.6 & 7, page 7), in order for the table to come square.

With the table tilt adjuster knobs tight, check to ensure the pointer beneath the table, is correctly set to zero on the scale on the side of the trunnion. If necessary, slacken the pointer securing screw, and re-set the pointer to zero.

The CBS14WC also requires the table stop to be screwed 'out' until it comes into contact with the table. It is then locked in place with the lock nut. This facility allows the table to be moved quickly and accurately to horizontal when the machine has been used for cutting mitres etc. If a reverse mitre is required, (up to 15°), it will be necessary to slacken the table stop screw lock nut, and screw the stop screw 'in' by the required amount to achieve your reverse mitre.

D. MICRO SWITCH ADJUSTMENTS

It is essential to ensure the operating lever of the micro switch is correctly adjusted to ensure it trips the switch immediately the door is opened. It must not be possible, under any circumstances, for the machine to operate when the door is open.

The operating lever mounting holes are elongated, as are the mounting holes of the switch box. This allows the lever and switch box to be adjusted independantly and/or together, to obtain the best possible action, so that the switch is operated immediately the door is opened. It may take one or two attempts to obtain satisfactory alignment.

E. UPPER AND LOWER WHEEL BEARINGS

If it becomes necessary at some stage to disassemble the machine completely, the upper and lower wheel bearing blocks must be adjusted to ensure the wheels are in perfect alignment. This operation should only be carried out by a qualified technician, and you should contact your CLARKE dealer for advice.

BLADE RENEWAL

- 1. Disconnect the mains cable from the supply.
- 2. Slacken off blade tension using the adjuster knob on top of the machine.
- 3. Raise the upper blade guard and guide block to the top of its travel, and secure in position.
- 4. Remove the Table Insert and Taper pin.
- 5. Open the Wheel Cover, and ease the blade off the upper and lower wheels, taking care that the blade does not 'spring' as this could cause serious injury. It is advisable to wear proper clothing, i.e. long sleeves and goggles.
- 6. Replace the new blade over the lower wheel first, then easing it over the upper wheel, ensuring the teeth point down towards the table.
- 7. Carry out all adjustments. i.e. Upper Wheel alignment and Blade Guide Bearings, as described on pages 8 and 9.
- 8. When changing a blade on the 14WC, check to ensure the wire brush inside the lower wheel housing, which keeps the lower wheel rim free from sawdust etc., ensuring the saw blade maintains a true path on the wheel, is brushing lightly against the rim of the wheel. Adjust as necessary.

DUST EXTRACTION

A dust extraction outlet is provided which may be connected to a vacuum cleaner or a dust extraction machine such as the CLARKE CDE35, as and when the need arises.

Please see your CLARKE dealer for details.

MAINTENANCE

After use

- 1. Accumulated dust and chips should be removed from inside the bandsaw. Open the front cover and use a brush or vacuum cleaner at the end of every work session.
- 2. ALWAYS Lower the Blade Guide Block and Guard Assembly to its lowest position.
- 3. ALWAYS slacken off blade tension.

Periodically

- 1. Apply a coat of wax paste to the table surface which will allow the wood stock to glide across it smoothly and effortlessly.
- 2. Inspect electric cables to ensure they are not cracked or damaged in any way. Damaged cables should be renewed immediately.
- 3. Inspect the blade for damaged teeth. If any are broken, the blade should be renewed.

BLADE GUIDES

Blade guides should be inspected regularly for wear or chipping. When replacing guides replace all guides at the same time, both upper and lower.

BEARINGS

All bearings used in the construction of your bandsaw and its motor are sealed and lubricated for life.

TIPS ON USING YOUR BANDSAW

For all cutting operations, the upper guide block and blade guard assembly should be adjusted to be just clear of the work being cut. Not only does this provide the best safety for the operator, but it also brings the blade guides closer to the work giving more accurate results and easier control.

Use both hands to feed the workpiece in to the blade. The work must be held flat on the table at all times to prevent binding of the blade. Use a steady even pressure just sufficient to keep the blade cutting.

Always use a rip fence or mitre guide where possible to eliminate any sideways slip of the work. This is most important when the table is tilted to an angle.

Always plan your work ahead. The tradesmans' rule is "measure twice, cut once". It is best to finish a cut in one continuous operation, but frequent backtracking may be necessary.

Turn off the motor and allow the blade to come to a complete stop before backing the blade out of the cut.

Remember that the blade removes material during the cut. This gap created by the blade is called the 'kerf', and must be allowed for when cutting to exact sizes. Plan your cut so that the kerf is the scrap side of the lines you wish to cut. If necessary, allow a little more for finish sanding.

RIP SAWING

This term refers to the cutting of the timber with the grain, rather than at a right angles to the grain. You can rip wood freehand to a previously drawn line, but best results are obtained by using the rip fence. If the table is set at a level angle, set the rip fence to the left hand side of the blade, allowing you to use your right hand to hold the work firmly against the fence.

CROSS CUTTING

This term refers to cutting timber at right angles to the grain. This type of cut can also be made freehand, but the mitre guide is used to ensure accurate results. The mitre guide can be adjusted to a 45° angle to produce mitre cuts, or with the table tilted as well - compound mitre cuts. Make sure the work is held firmly against the table and against the face of the mitre guide. Be careful to keep your fingers away from the blade, particularly at the end of the cut.

FREEHAND SAWING

The ease with which many different and varied shapes can be cut is one of the most important features of the bandsaw. Select a blade suitable for cutting the smallest radius in the work you have planned. See your CLARKE dealer for replacement or alternative blades.

When freehand cutting, always feed the work slowly so that the blade can follow the line you wish to saw. Make sure not to drag the work off line, forcing the blade sideways, or twisting it.

In many cases, it is helpful to rough cut about 6mm away from the line. For difficult curves which may be too tight for the blade, make relief cuts onto the face of the curve so that these scraps will fall as the final radius is sawn.

CONSUMABLES

A range of bandsaw blades, is available for your Bandsaw to help you get maximum use from your machine.

Consumables are obtainable from your CLARKE Dealer. If you have any difficulty in obtaining them, please contact the CLARKE Customer Service Department.

TROUBLE SHOOTING

BREAKING BLADES

The breaking of blades is a common problem with band saws, and the following are some of the causes associated with this problem.

- 1. Faulty alignment
- 2. Blade guides incorrectly adjusted.
- 3. Feeding the work too fast.
- 4. Forcing or twisting the blade around a tight radius.
- 5. Blade too tight.
- 6. Dull teeth.
- 7. Blade is badly welded or brazed.
- 8. Blade left running when not in use.

REMEMBER

ALWAYS disconnect your bandsaw from the power supply when troubleshooting, or carrying out adjustments or maintenance.

PARTS LIST & DIAGRAM

FLOOR STAND (Optional)

Part No. 6460075

3 4 5 6 7 8 9 10	Brace Front and Rear Bolt Cap Hd. Sq. Shoulder Hex. Nut 5/16"	FMEBS14S01 FMEBS14S02 FMEBS14S03 FMEBS14S04 FMEBS14S05 FMEBS14S06 FMEBS14S07 FMEBS14S08 FMEBS14S08 FMEBS14S10 FMEBS14S11 FMEBS14S12					3
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FLOOR STAND SPECIFICATIONS

Dimensions Weight 710 x 540 x 550mm 13 kg

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CBS14WC

SPECIFICATIONS

CBS12WC

Motor	. 230V 509Hz 1Ph	230V 509Hz 1Ph
Power Rating	. 1/2 HP	1HP
Speed	. 1420 RPM	1420 PRM
Capacitor	. 16 uF 350V	100uF 250V
Current Rating	. 3.5 Amps	5.5 Amps
Blade Speed	. 660 M/min	700 M/min
Blade Length	. 2300 mm	2500 mm
Cutting Capacity	. 305 x 155 mm	340 x 190 mm
Table Size	. 305 x305 mm	380 x 380 mm
Table Tilt	. 45 ⁰ right - 15 ⁰ left	45° right - 15° left
Dimensions	. 610 x 480 x 1080 mm	690 x 520 x 1210 mm
Weight net/gross	. 51 kg	81.5 kg



For Spare Parts and Servicing, please contact your nearest dealer, or CLARKE International, on one of the following numbers. PARTS - 0181 558 6696 SERVICE - 0181 556 4443 PARTS & SERVICE FAX - 0181 558 3622

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PARTS LIST

CBS12WC

<u>PARI</u>	PARISLISI CBS12WC					
No.	Description	Part No.	No.	Description	Part No.	
1	Frame	FMEBS12S001	61	Screw	FMEBS12S061	
2	Base	FMEBS12S002	62	Screw	FMEBS12S062	
3	Upper Wheel Box	FMEBS12S003	63	Pointer	FMEBS12S063	
4	Lower Wheel Box	FMEBS12S004	64	Dust Outlet	FMEBS12S064	
5	Strengthener	FMEBS12S005	65	Screw	FMEBS12S065	
6	Frame	FMEBS12S006	66	Motor	FMEBS12S066	
7	Lower Steel Pin	FMEBS12S007	67	Pulley	FMEBS12S067	
8	Table Support Tube	FMEBS12S008	68	Screw	FMEBS12S068	
9	Pin	FMEBS12S009	69	Washer	FMEBS12S069	
10	Wheel Cover	FMEBS12S010	70	Bearing Bracket	FMEBS12S070	
12	Upper Steel Pin	FMEBS12S012	71	Washer	FMEBS12S071	
13	Bottom Switch Plate	FMEBS12S012	72	Screw	FMEBS12S072	
14	Guide Bar	FMEBS12S013	73	Hex. Screw	FMEBS12S073	
14	Pin	FMEBS12S014	74	Hex. Screw	FMEBS12S074	
16	Guide Bar Holder		74	Washer	FMEBS12S074 FMEBS12S075	
		FMEBS12S016	-	Retaining Ring		
17	Blade Guard	FMEBS12S017	76	v v	FMEBS12S076	
18	Steel Ball	FMEBS12S018	77	Bearing	FMEBS12S077	
19	Spring	FMEBS12S019	79	Lower Wheel Shaft	FMEBS12S079	
20	Screw	FMEBS12S020	80	Key	FMEBS12S080	
21	Clamping Plate	FMEBS12S021	81	Lower Wheel	FMEBS12S081	
22	Washer	FMEBS12S022	82	Wheel Protector	FMEBS12S082	
23	Screw	FMEBS12S023	83	Driven Pulley	FMEBS12S083	
24	Bearing Guide Rod	FMEBS12S024	84	Strengthener	FMEBS12S084	
25	Bearing	FMEBS12S025	85	Saw Blade	FMEBS12S085	
26	Retaining Ring	FMEBS12S026	87	Knob	FMEBS12S087	
27	Blade Guide Holder	FMEBS12S027	88	Table	FMEBS12S088	
28	Screw 3/16x1/2	FMEBS12S028	89	Rear Trunnion	FMEBS12S089	
29	Pin	FMEBS12S029	90	Front Trunnion	FMEBS12S090	
30	Guide Block	FMEBS12S030	91	Washer	FMEBS12S091	
31	Hex. Nut	FMEBS12S031	92	Screw	FMEBS12S092	
32	Upper Wheel Shaft	FMEBS12S032	93	Washer	FMEBS12S092	
33	Bearing	FMEBS12S033	94	Screw	FMEBS12S094	
34	Retaining Ring	FMEBS12S034	95	Washer	FMEBS12S095	
35	Tyre	FMEBS12S035	96	Ring	FMEBS12S096	
36	Upper Wheel	FMEBS12S036	97	Safety Bar	FMEBS12S097	
37	Upper Wheel Hinge	FMEBS12S037	98	Power Cable	FMEBS12S098	
38	Support Bracket	FMEBS12S038	99	Washer	FMEBS12S099	
39	Spring	FMEBS12S039	100	Cable Clip	FMEBS12S100	
40	Adjusting Nut	FMEBS12S040	101	Taper Pin	FMEBS12S101	
41	Spring pin	FMEBS12S041	102	Screw	FMEBS12S102	
42	Guide Post Bracket	FMEBS12S042	103	Screw	FMEBS12S103	
43	Tension Screw	FMEBS12S043	104	Washer	FMEBS12S104	
44	Washer	FMEBS12S044	105	Trunnion Tension Bolt	FMEBS12S105	
45	Nut	FMEBS12S045	106	Stud	FMEBS12S106	
46	Tilt Screw	FMEBS12S046	107	Screw	FMEBS12S107	
47	Washer	FMEBS12S047	108	Grommet	FMEBS12S108	
48	Nut	FMEBS12S048	109	Motor Cable	FMEBS12S109	
49	Screw	FMEBS12S049	110	Key 5x5x23mm	FMEBS12S110	
50	Screw	FMEBS12S050	111	Screw 6x10mm	FMEBS12S111	
51	Washer	FMEBS12S051	112	Screw 5/16x1"	FMEBS12S112	
52	Set Screw	FMEBS12S052	113	Blade Protector	FMEBS12S113	
53	Switch	FMEBS12S052	114	Screw 5/16x3/8"	FMEBS12S114	
54	Washer	FMEBS12S0554	115	Switch Protector	FMEBS12S115	
55	Screw	FMEBS12S054	115	Table Insert	FMEBS12S115	
56	Washer	FMEBS12S055 FMEBS12S056	117	Screw 4x10mm	FMEBS12S110 FMEBS12S117	
57	Set Screw	FMEBS12S056 FMEBS12S057	117	Stud 5/16x2"	FMEBS12S117 FMEBS12S118	
	Set Screw		118	Stud 5/16x2 Screw 5/16"	FMEBS12S118 FMEBS12S119	
58 50	Washer	FMEBS12S058	-	Mitre Gauge Assy.	FMEBS12S119 FMEBS12S120	
59 60		FMEBS12S059				
60	Pin	FMEBS12S060	-	Rip Fence Assy	FMEBS12S121	



PARTS LIST

CBS14WC

	3 213 1					
No.	Description	Part No.	No	. Description	Part No.	
1	Left Bracket Upper Housing.	FMEBS14P01	61	Spring 8mmx18	FMEBS14P61	
2	Right Bracket	FMEBS14P02	62	Set Screw 3/8x3/8"	FMEBS14P62	
3	Bracket Upper Mount	FMEBS14P03	63	Rod Lower Bearing Guide	FMEBS14P63	
4	Bracket Upper Wheel	FMEBS14P04	64	Trunnion Clamp Shoe	FMEBS14P64	
5	Pivot Pin	FMEBS14P05	65	Screw	FMEBS14P65	
6		FMEBS14P06	66	Screw	FMEBS14P66	
	Spring		67	Ring	FMEBS14P67	
7	Square Nut	FMEBS14P07	68	Rod Lower Bearing Guide	FMEBS14P68	
8	Angle Bracket	FMEBS14P08	69	Pin		
9	Upper Wheel Shaft	FMEBS14P09			FMEBS14P69	
10	Upper Wheel	FMEBS14P10	70	Screw Hex 5/16x3"	FMEBS14P70	
11	Bearing	FMEBS14P11	71	Nut Hex 5/16"	FMEBS14P71	
12	Retaining Ring	FMEBS14P12	72	Pointer	FMEBS14P72	
13	Hex. Nut	FMEBS14P13	73	Screw 3/16x1/4"	FMEBS14P73	
14	Tyre	FMEBS14P14	74	Rip Fence	FMEBS14P74	
15	Lower Mtg Bracket	FMEBS14P15	75	Rip Fence Guide Plate	FMEBS14P75	
16	Retaining Ring	FMEBS14P16	76	Rip Fence Guide	FMEBS14P76	
17	Lower Wheel Shaft	FMEBS14P17	77	Rip Fence Knob	FMEBS14P77	
18	Кеу	FMEBS14P18	78	Screw	FMEBS14P78	
19	Driven Pulley	FMEBS14P19	79	Mitre Gauge complete	FMEBS14P79	
20	Lower Wheel	FMEBS14P20	80	Knob	FMEBS14P80	
21	Washer 5/16"	FMEBS14P21	81	Switch Button Protector	FMEBS14P81	
22	Screw Hex. Head 5/16x3/4"	FMEBS14P22	82	Hex. Nut 1/4"x1/2"	FMEBS14P82	
23	Screw Hex Head 1/4x3/4"	FMEBS14P23	83	Switch Push Button	FMEBS14P83	
24	Trunnion	FMEBS14P24	84	Screw Lock Knob 5/16x1"	FMEBS14P84	
24	Screw Hex Head 5/16x1-1/4"	FMEBS14P25	85	Screw Tension 3/8"	FMEBS14P85	
			86	Washer 1/4"	FMEBS14P86	
26	Lower Guide Bracket	FMEBS14P26	87	Screw Hex. 1/4x3/4"	FMEBS14P87	
27	Bearing Guide Rod	FMEBS14P27	88	Screw Tilt 5/16x1-7/8"	FMEBS14P88	
28	Ball Bearing	FMEBS14P28	89	Hex. Screw 5/16x1-1/4"		
29	Retaining Ring	FMEBS14P29			FMEBS14P89	
30	Bearing Guide Rod	FMEBS14P30	90	Adjusting Screw 5/16x1/2"	FMEBS14P90	
31	Hex. Nut 1/4"	FMEBS14P31	91	Lower Bearing Housing	FMEBS14P91	
32	Lower Blade Guide Holder	FMEBS14P32	92	Screw Round Head 1/4x1/2"	FMEBS14P92	
33	Hex. Head Screw 1/4"	FMEBS14P33	93	Dust Outlet	FMEBS14P93	
34	Scale	FMEBS14P34	94	Motor 1 HP	FMEBS14P94	
35	Trunnion Base	FMEBS14P35	95		FMEBS14P95	
36	Table Tilt Adjuster Knob	FMEBS14P36	96	Pulley 2-1/2"	FMEBS14P96	
37	TableLocking Screw	FMEBS14P37	97	Key 5x5x40mm	FMEBS14P97	
38	Hex. Head Screw 1/4x3/4"	FMEBS14P38	98	Door Upper Wheel	FMEBS14P98	
39	Table	FMEBS14P39	99	Lock Knob Screw 1/4"	FMEBS14P99	
40	Washer 1/4"	FMEBS14P40	100	Set Screw M6x1x6	FMEBS14P100	
41	Blade Guard	FMEBS14P41	101	V-Belt	FMEBS14P101	
42	Guide Bar Holder	FMEBS14P42		Nut Hex 5/16"	FMEBS14P102	
43	Guide Bar	FMEBS14P43		Washer 5/16	FMEBS14P103	
43 44	Spring Pin	FMEBS14P44		Nut Hex 1/4"	FMEBS14P104	
		FMEBS14P44 FMEBS14P45		Power Cable	FMEBS14P105	
45 46	Clamping Plate			Copper Brush	FMEBS14P106	
46	Set Screw 1/4x1/2"	FMEBS14P46		Support Plate	FMEBS14P100	
47	Washer 1/4"	FMEBS14P47		Support Plate Screw	FMEBS14P107 FMEBS14P108	
48	Hex Head Screw 1/4x1/2"	FMEBS14P48				
49	Upper Blade Guide Holder	FMEBS14P49		Gland	FMEBS14P119	
50	Upper Bearing Mount Block	FMEBS14P50		Screw hex 1/4x5/8"	FMEBS14P110	
51	Retaining Washer 3/8"	FMEBS14P51		Screw Rd. Head 3/16x3/8"	FMEBS14P111	
52	Hex. Head Screw 5/16"	FMEBS14P52		Bearing Guard	FMEBS14P112	
53	Pin 3x10mm	FMEBS14P53		Screw	FMEBS14P113	
54	Bearing	FMEBS14P54		Switch Plate	FMEBS14P114	
55	Saw Blade 102x1/2"	FMEBS14P55		Screw	FMEBS14P115	
56	Spring Pin 3x30mm	FMEBS14P56	116	Screw	FMEBS14P116	
57	Tapered Pin	FMEBS14P57	117	Switch Lever	FMEBS14P117	
58	Table Insert	FMEBS14P58	118	Pin	FMEBS14P118	
59	Ball Bearing	FMEBS14P59	119	Screw 5/16x3"	FMEBS14P119	
60	Steel Ball 5/16" dia	FMEBS14P60		Base and Frame	FMEBS14P120	
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