

Original Instruction Manual

SABRE-450 18" Bandsaw

Version 3.2
July 2017





To register this product please visit **www.recordpower.info**

It is important to register your product as soon as possible in order to receive efficient after sales support and be entitled to the full **5 year guarantee**. Your statutory rights are not affected.

Please see back cover for contact details.





Always wear safety glasses when using woodworking equipment.



Important

For your safety read instructions carefully before assembling or using this product.

Save this manual for future reference.

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EU Declaration of Conformity

1. Explanation of Symbols

THE S MBOLS A D THEIR MEA I GS SHOW BELOW MA BE USED THROUGHOUT THIS MA UAL. PLEASE E SURE THAT OU TAKE THE APPROPRIATE ACTIO WHEREVER THE WAR I GS ARE USED.

Mandatory Instructions



Read and fully understand the instruction manual before attempting to use the machine.



Indicates an instruction that requires particular attention



Wear protective eyewear



Use respiratory protective equipment



Use hearing protection



Use suitable protective footwear



Use protective work gloves

Warning



Indicates a risk of severe personal injury or damage to the machine



Indicates a risk of severe personal injury from electrical shock



Risk of personal injury from lifting of heavy items



Indicates a risk of severe personal injury from airborne objects



Risk of fire

2. General Health and Safety Guidance

Ensure that you carefully read and fully understand the instructions in this manual before assembly, installation and use of this product. Keep these instructions in a safe place for future reference.

WAR I G for your own safety, do not attempt to operate this machine until it is completely assembled and installed according to these instructions.

WAR I G When using any machine, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.

Safe Operation

1. Use Personal Protective Equipment PPE

The operation of any machine can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Protective eyewear or other suitable eye protection or face shield should be used at all times. Everyday spectacles only have impact resistant lenses. They are not protective eyewear and do not give additional lateral protection.

Use respiratory protective equipment (dust mask etc.) if the machining operation creates dust. Exposure to high levels of dust created by machining hardwoods, softwoods and man made composite boards can result in serious health problems. Some imported hardwoods give off highly irritating dust, which can cause a burning sensation. The use of respiratory protective equipment should not be seen as an alternative to controlling the risk of exposure at source by using adequate dust extraction equipment.

The use of ear plugs or ear defenders is recommended when the machine is in use, particularly if the noise level exceeds 85 dB.

Wear suitable protective gloves when handling cutting tools or blades. Gloves should NOT be worn when using the machine as they can be caught in moving parts of the machine.

Non-slip safety footwear is recommended when using the machine and handling large work pieces.

2. Dress appropriately

Do not wear loose clothing, neckties or jewellery they can be caught in moving parts of the machine.

Roll up long sleeves above the elbow.

Wear protective hair covering to contain long hair.

3. Safety warnings

Find and read any warning labels on the machine

It is important that any labels bearing health and safety warnings are not removed, defaced or covered. Replacement labels can be obtained by contacting our Customer Service Department.

4. Familiarise yourself with the machine

If you are not thoroughly familiar with the operation of this machine, obtain advice from your supervisor, instructor, or other qualified person or contact your retailer for information on training courses. Do not use this machine until adequate training has been undertaken.

5. Take care when moving or positioning the machine

Some machines can be very heavy. Ensure the floor of the area in which the machine is to be used is capable of supporting the machine.

The machine and its various components can be heavy.

Always adopt a safe lifting technique and seek assistance when lifting heavy components. In some cases it may be necessary to use mechanical handling equipment to position the machine within the work area.

Some machines have optional wheel kits available to allow them to be manoeuvred around the workshop as required. Care should be taken to install these according to the instructions provided.

Due to the nature of the design of some machines the centre of gravity will be high making them unstable when moved. Extreme care should be taken when moving any machine.

If transportation of the machine is required then all precautions relating to the installation and handling of the machine apply. In addition, ensure that any vehicles or manual handling equipment used for transportation are of adequate specification.

6. The machine should be level and stable at all times

When using a leg stand or cabinet base that is designed to be fitted to the machine, always ensure that it is securely fastened to the machine using the fixings provided.

If the machine is suitable to be used on a workbench, ensure that the workbench is well constructed and capable of withstanding the weight of the machine. The machine should always be securely fastened to the workbench with appropriate fixings.

Where possible, floor standing machines should always be secured to the floor with fixings appropriate to the structure of the floor.

The floor surface should be sound and level. All of the feet of the machine should make contact with the floor surface. If they do not, either re-locate the machine to a more suitable position or use packing shims between the feet and the floor surface to ensure the machine is stable.

7. Remove adjusting keys and wrenches

Ensure that all adjusting wrenches and keys are removed before switching the machine 'ON'. There is a risk of severe personal injury or damage to the machine from airborne objects.

8. Before switching the machine O

Clear the machine table of all objects (tools, scrap pieces etc.)

Make sure there is no debris between the work piece and the table / work support.

Ensure that the work piece is not pressed against, or touching the saw blade or cutting tool.

Check all clamps, work holding devices and fences to ensure that they are secure and cannot move during machining operations.

Plan the way that you will hold and feed the work piece for the entire machining operation.

9. Whilst machining

Before starting work, watch the machine while it runs. If it makes an unfamiliar noise or vibrates excessively, switch the machine 'OFF' immediately and disconnect it from the power supply. Do not restart until finding and correcting the source of the problem.

10. Keep the work area clear

Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine and space for auxiliary stands and/or work tables. Also consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely operate your machines in any foreseeable operation.

Cluttered work areas and benches create the risk of accidents. Keep benches clear and tidy away tools that are not in use.

Ensure that the floor area is kept clean and clear of any dust and debris that may create trip or slip hazards.

11. Consider the work area environment

Do not expose the machine to rain or damp conditions.

Keep the work area well lit and ensure that there is artificial lighting available when there is insufficient natural light to effectively light the work area. Lighting should be bright enough to eliminate shadow and prevent eye strain.

Do not use the machine in explosive environments eg. in the presence of flammable liquids, gases or dust.

The presence of high levels of dust created by machining wood can present a risk of fire or explosion. Always use dust extraction equipment to minimise the risk.

12. Keep other persons away and pets

The machine is designed to be used by one person only.

Do not let persons, especially children, touch the machine or extension cable (if used) and keep visitors away from the work area.

Never leave the machine running unattended. Turn the power supply off and do not leave the machine unattended until it comes to a complete stop.

2. General Health and Safety Guidance

If the work area is to be left unattended, all machinery should be switched 'OFF' and isolated from the mains power supply.

13. Store machines safely when not in use

When not in use, machines should be stored in a dry place, out of reach of children. Do not allow persons unfamiliar with these instructions or with the machine to operate it.

14. Do not overreach

Choose a working position that allows your body to remain balanced and feed the work piece in to the machine without overreaching.

Keep proper footing and balance at all times.

15. Electrical supply

Electrical circuits should be dedicated to each machine or large enough to handle combined motor amp loads. Power outlets should be located near each machine so that power or extension cables are not obstructing high-traffic areas. Observe local electrical guidelines for proper installation of new lighting, power outlets, or circuits.

The machine must be connected to an earthed power supply.

The power supply must be equipped with a circuit breaker that provides short circuit, overload and earth leakage protection.

The voltage of the machine must correspond to the voltage of the mains power supply.

The mains plug fitted to the machine should always match the power outlet. Do not modify the plug in any way. If a replacement plug is required it should be fitted by a competent person and of the correct type and rating for the machine.

If you are unsure about any electrical connections always consult a qualified electrician.

16. Avoid unintentional starting of the machine

Most machines are fitted with a no-volt release (NVR) switch to prevent unintentional starting. If in doubt always ensure the machine switch is in the 'OFF' position before connecting it to the power supply. This means the machine will not automatically start up after a power cut or switching on of the power supply, unless you first reset the start switch.

17. Outdoor use

Your machine should not be used outdoors.

18. Extension cables

Whenever possible, the use of extension cables is not recommended. If the use of an extension cable is unavoidable, then it should have a minimum core cross section of 2.5 mm and limited to a maximum length of 3 metres.

Extension cables should be routed away from the direct working area to prevent a trip hazard.

19. Guard against electric shock

Avoid body contact with earthed or grounded surfaces such as pipes and radiators. There is an increased risk of electric shock if your body is earthed or grounded.

20. Always work within the machine s intended capacities

Operator safety and machine performance are seriously adversely affected if attempts to make the machine perform beyond its limits are made

21. Do not abuse the power cable

Never pull the power cable to disconnect it from the power socket. Always use the plug.

Keep the power cable away from heat, oil and sharp edges.

Do not use the power cable for carrying or moving the machine.

22. Secure the work piece

Ensure that the work piece is securely held before starting to machine it. When working within 300 mm of the machining area, always use a push stick to feed the work piece in to the blade or cutting tool. The push stick should have a minimum length of 400 mm. If the push stick becomes damaged, replace it immediately.

Use extra supports (roller support stands etc.) for any work pieces large enough to tip when not held down to the table top.

Do not use another person as a substitute for a table extension, or as

additional support for a work piece that is longer or wider than the basic table, or to help feed, support, or pull the work piece.

Do not attempt to machine more than one work piece at a time.

When feeding the work piece towards the blade or cutting tool never position your hands in direct line of the cutting path. Avoid awkward operations and hand positions where a sudden slip could cause your hand or fingers to move into the machining area.

23. Stay alert

Safety is a combination of operator common sense and alertness at all times when the machine is being used.

Use all machines with extreme care and do not use the machine when you are tired or under the influence of drugs, alcohol or medication.

24. Use the correct tool for the job

Do not use the machine for any purpose other than which it was designed.

When selecting replacement cutting tools and blades, always ensure that they are designed to cut the material that you intend to use them for. If in any doubt seek further advice from the manufacturer.

25. Connect dust extraction equipment

Always use dust extraction equipment. The dust extractor should be of suitable size and capacity for the machine that it is connected to and have a filtration level appropriate to the type of waste being collected. Refer to the relevant section of the manual for details of the specific dust extraction requirements for this machine.

The dust extractor should be switched 'ON' before starting the machine that it is connected to. The dust extractor should be left running for 30 seconds after the last machining operation is complete in order to clear any residual waste from the machine.

26. Ensure that the machine is correctly guarded

Never use the machine if any of the standard safety guards and equipment are removed or damaged.

Some machines incorporate safety interlocks to prevent the machine from being used without the guards in place. Never attempt to bypass or modify the interlocks to allow the machine to be used without the guards in place.

27. Maintain your machine with care

This manual gives clear instructions on installation, set up and operation of the machine and also details any routine and preventative maintenance that should be performed periodically by the user.

Remember always to switch off and unplug the machine from the power supply before carrying out any setting up or maintenance operations.

Follow any instructions for the maintenance of accessories and consumables.

Do not use compressed air to clean the machine. Always use a brush to dislodge dust in places that are awkward to reach and a dust extractor to collect the waste.

Inspect electric cables periodically and, if damaged, have them replaced by an authorised service facility or qualified electrician.

Inspect extension cables (if used) periodically and replace if damaged.

28. Keep cutting tools sharp and clean

Correctly maintained cutting tools are easier to control and less likely to bind.

Cutting tools and blades can become hot during use. Take extreme care when handling them and always allow them to cool before changing, adjusting or sharpening them.

29. Disconnect the machine from the power supply

When not in use, before servicing, changing blades etc. always disconnect the machine from the power supply.

30. Check for damaged parts

Before each use of the machine, it should be carefully checked to determine that it will operate properly and perform its intended function.

Check for alignment of moving parts, binding of moving parts, breakage of parts and any other conditions that may affect the operation of the machine.

2. General Health and Safety Guidance

A guard or other part that is damaged should be properly repaired or replaced by a qualified person unless otherwise indicated in this instruction manual.

Do not use the machine if the switch does not turn the machine 'ON' and 'OFF'.

Have defective switches replaced by a qualified person.

31. Warning

The use of any accessory or attachment, other than those recommended in this instruction manual, or recommended by our Company may present a risk of personal injury or damage to the machine and invalidation of the warranty.

32. Have your machine repaired by a qualified person

This machine complies with the relevant safety rules and standards appropriate to its type when used in accordance with these instructions and with all of the standard safety guards and equipment in place. Only

qualified persons using original spare parts should carry out repairs. Failure to do this may result in considerable danger to the user and invalidation of warranty.

33. Caution Motor may become hot during use

It is normal for motors on some machines to become hot to the touch during use. Avoid touching the motor directly when in use.

3. Additional Health and Safety Guidance for Bandsaws

Safe Operation

1. Familiarise yourself with the machine

Machining operations using bandsaws have a history of serious accidents. Most result from contact with the moving blade while presenting material to the blade or moving it from the table. Other minor accidents can occur whilst setting, cleaning, adjusting or maintaining the machine.

The machine is designed for cutting wood and composite board (plywood, MDF etc.). Certain plastics can also be cut using a suitable blade.

2. Before switching the machine O

Ensure that the blade is correctly tensioned and aligned on the bandwheels and the blade guides are correctly adjusted.

Ensure that the teeth of the blade are pointing downwards.

Check the condition of the blade to ensure that no teeth are missing, damaged or deformed and the blade is not cracked or split. If any of these conditions apply, replace the blade immediately.

Ensure that the saw blade type and width are suitable for the material to be cut.

Check that the blade width is within the minimum and maximum permitted on the machine and that the thickness of the blade is suitable for the diameter of the wheel.

Some machines have more than one cutting speed. For most wood cutting applications the faster of the speeds should be used.

Check the condition of the table insert. Replace it immediately if it is damaged or showing signs of wear.

Adjust the guard as close as possible to the work piece being cut.

Check that access doors are fully closed and that the latches are secure.

3. Whilst machining

Never apply sideways pressure to the blade as this may cause the blade to break.

Care must be taken when cutting wood with knots, nails or cracks in it and / or dirt on it, as these can cause the blade to get stuck. If this happens, switch the machine 'OFF' immediately and follow the procedure detailed in the manual to remove the blade from the work piece.

If cutting cylindrical timber use a suitable jig to prevent twisting of the work piece.

4. This machine falls under the scope of the 'Health and Safety at Work etc. Act 1974', and the 'Provision & Use of Work Equipment Regulations 1998'. In addition the elimination or control of risks from wood dust is included in the above regulations and the 'Control of Substances Hazardous to Health (COSHH) Regulations 2002'. We recommend that you study and follow these regulations.

Further guidance can be found in the 'Safety in the use of narrow bandsaws Woodworking sheet No.31' and the 'Safe use of woodworking machinery' code of practice booklet (L114) published by Health and Safety Executive and available from their website www.hse.gov.uk.

4. Record Power Guarantee

Products means the Products sold by Record Power subject to these terms and conditions

Record Power is Record Power Limited, whose company registration number is 4804158 and registered office address is Centenary House, 11 Midland Way, Barlborough Links, Chesterfield, Derbyshire, S43 4 A and sells through a network of Authorised Dealers

Authorised Distributor is the nominated importer for your region who will generally sell through a network of Authorised Dealers. Details of Authorised Distributors for specific countries can be found in the Product manual or at www.recordpower.info

Authorised Dealer is a retailer or business authorised to sell Record Power Products to end users.

1 Guarantee

- **1.1** Record Power guarantees that for a period of 5 years from the date of purchase the components of qualifying Products (see clauses 1.2.1 to 1.2.9) will be free from defects caused by faulty construction or manufacture.
- 1.2 During this period Record Power, its Authorised Distributor or Authorised Dealer will repair or replace free of charge any parts which are proved to be faulty in accordance with paragraphs 1.1 above provided that:
- 1.2.1 you follow the claims procedure set out in clause 2 below
- 1.2.2 Record Power, our Authorised Distributor or Authorised Dealer are given a reasonable opportunity after receiving notice of the claim to examine the Product
- 1.2.3 if asked to do so by Record Power, its Authorised Distributor or Authorised Dealer, you return the Product, at your own cost, to Record Power s premises or other approved premises such as those of the Authorised Distributor or supplying Authorised Dealer, for the examination to take place
- 1.2.4 the fault in question is not caused by industrial use, accidental damage, fair wear and tear, wilful damage, neglect, incorrect electrical connection, abnormal working conditions, failure to follow our instructions, misuse, or alteration or repair of the Product without our approval
- 1.2.5 the Product has been used in a domestic environment only
- 1.2.6 the fault does not relate to consumable Products such as blades, bearings, drive belts or other wearing parts which can reasonably be expected to wear at different rates depending on usage (for full details contact Record Power or your local Authorised Distributor)
- **1.2.7** the Product has not been used for hire purposes, by you or by a previous owner
- **1.2.8** the Product has been purchased by you as the guarantee is not transferable from a private sale.
- 1.2.9 where the Product has been purchased from a retailer, the 5 year guarantee is transferable and begins on the date of the first purchase of the Product and in the event of a claim under this guarantee proof of the original purchase date will be required to validate the warranty period.

2 Claims Procedure

- 2.1 In the first instance please contact the Authorised Dealer who supplied the Product to you. In our experience many initial problems with machines that are thought to be due to faulty parts are actually solved by correct setting up or adjustment of the machines. A good Authorised Dealer should be able to resolve the majority of these issues much more quickly than processing a claim under the quarantee.
- 2.2 Any damage to the Product resulting in a potential claim under the guarantee must be reported to the Authorised Dealer from which it was purchased within 48 hours of receipt.
- 2.3 If the Authorised Dealer who supplied the Product to you has been unable to satisfy your query, any claim made under this Guarantee should be made directly to Record Power or its Authorised Distributor (for details of the Authorised Distributor in your country please see your Product manual or check www.recordpower.info for details). The claim itself should be made in a letter setting out the date and place of purchase, and giving a brief explanation of the problem which has led to the claim. This letter should then be sent with proof of the purchase date (preferably a receipt) to Record Power or its Authorised Distributor. If you include a phone number or email address this will help to speed up your claim.
- 2.4 Please note that it is essential that the letter of claim reaches Record Power or its Authorised Distributor on the last day of this Guarantee at the latest. Late claims will not be considered.

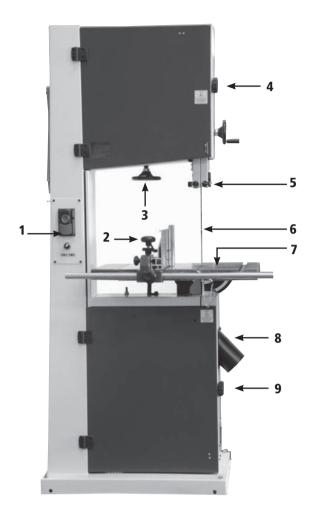
3 Limitation of Liability

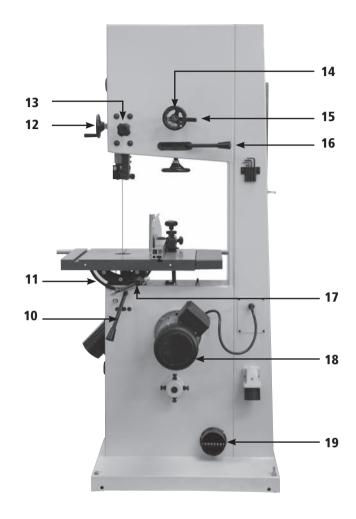
- **3.1** We only supply Products for domestic and private use. You agree not to use the Product for any commercial, business or re-sale purposes and we have no liability to you for any loss of profit, loss of business, business interruption or loss of business opportunity.
- **3.2** This Guarantee does not confer any rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This Guarantee is offered as an extra benefit and does not affect your statutory rights as a consumer.

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This Guarantee applies to all Products purchased from an Authorised Dealer of Record Power within the United Kingdom of Great Britain and Northern Ireland. Terms of Guarantee may vary in other countries please check with the Authorised Distributor in your country (details of the Authorised Distributor for your country can be found in the manual or at www.recordpower.info).

5. Getting to Know Your Bandsaw





- 1 On / off switch
- 2 Rip fence assembly
- **3** Blade tensioning knob
- 4 Upper door knob
- 5 Upper blade guides
- 6 Blade
- **7** Table

- 8 Dust extraction port
- **9** Lower door knob
- **10** Table locking lever
- 11 Trunnion
- 12 Blade guide position hand wheel
- 13 Blade guide lock
- **14** Blade tracking hand wheel

- 5 Blade tracking lock
- **16** Blade tension lever
- **17** Table tilt box wrench
- 18 Motor
- 19 Dust extraction port

6. Specifications

Maximum depth of cut 320 mm Throat depth 445 mm Table si e 546 x 400 mm Extension table 112 x 400 mm Table height from oor 900 mm Motor input P1 2.0 kW Motor output P2 1.5 kW

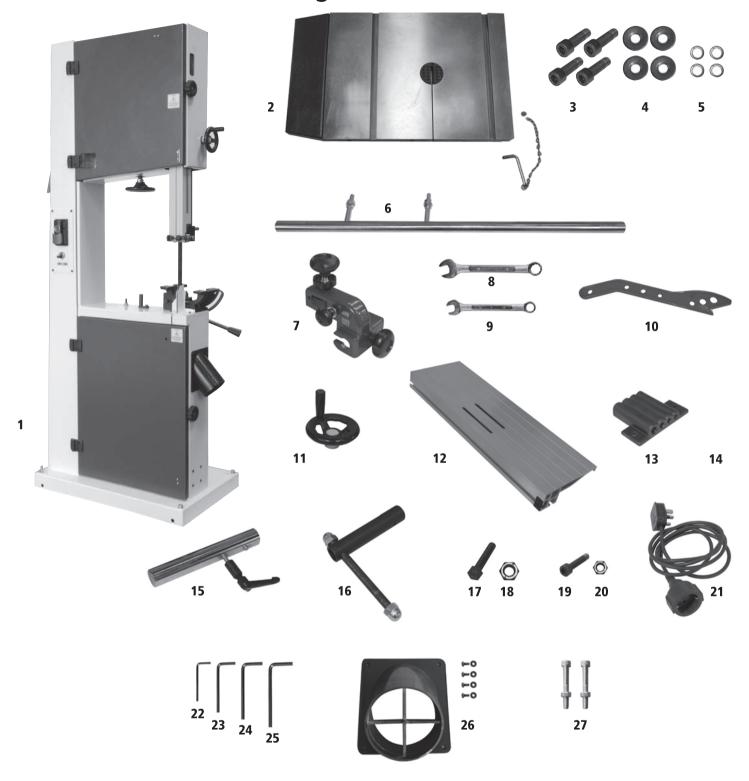
Sound power level 100 dBA Sound pressure level 90 dBA Main document number RC1801 Voltage 230 V
Frequency 50 Hz
Full load current 8.6 A
Short circuit rating 1 kA
Motor speed 1400 rpm
Blade length 153 (3886 mm)
Blade width capacity 1/4 (6.35 mm) - 1 3/8 (35 mm)

2 Associated uncertanty K 4 dB measurement made in accordance with EN ISO 3746:2010

Blade speed 1000 m / minute Upper extraction port diameters Internal 90 mm / external 96 mm Lower extraction port diameters Internal 93 mm / external 99 mm Weight 149 kg Si e H1880 x W976 x D740 mm

The figures quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that in uence the actual level of exposure of the workforce include the characteristics of the work room and the other sources of noise, etc., i.e. the number of machines and other adjacent processes. Also the permissible exposure level can vary from country to country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.

7. Contents of the Package



3 Hex head socket screws
4 Washers
5 Spring washers
6 Rip fence rail and fixings
7 Rip fence mount
8 13 mm wrench
9 10 mm wrench

Sabre - 450 Bandsaw

Table with levelling pin attached

1

2

- 10 Push stick 11 Hand wheel Rip fence 12 Tool holder 13 M5 x 10 mounting screws 14 15 Re-saw bar assembly Box wrench 16 **17** M8 x 50 hex head bolt 18 M8 nut
- 19 M6 x 30 hex socket head screw 1 20 Power cord (UK plug shown) 1 21 3 mm hex wrench 22 2 23 4 mm hex wrench 24 5 mm hex wrench 25 6 mm hex wrench 26 Dust port & mounting screws 1 1 Hanging bolts for optional jockey bar

The table trunnion has 4 holes as shown in **Fig 8.1** and the underside of the table has 4 corresponding threaded holes as shown in **Fig 8.2**. Place the table onto the trunnion, taking care to pass the blade through the table slot without damaging it.



Ensure the blade is centrally aligned with the blade slot.

Secure the table in place using 4 hex head socket screws, washers and spring washers as shown in **Fig 8.3**. Do not fully tighten until the table is aligned with the blade.

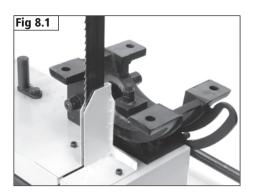
Aligning the Table to the Blade

For accurate cutting the table must be parallel to the bandsaw blade. Place a straight edge along the blade as shown in **Fig 8.4** then measure the distance between the straight edge and the mitre fence slot in the table as shown. When the distances are equal at the front and back of the mitre slot the screws can be tightened fully.

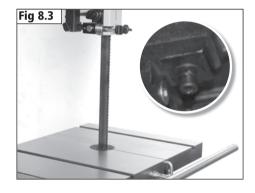
Once tightened, check the alignment and re-adjust if necessary.

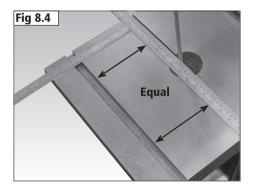
Positioning the Table at 90° to the Blade

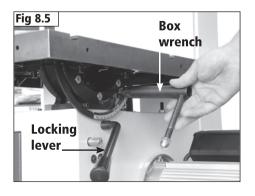
Loosen the table locking lever as shown in **Fig 8.5** and use the box wrench to tilt the table to gain access to the underside.











Place the M8 nut onto the M8 x 50 hex head bolt and attach to the underside of the table as shown in **Fig 8.6**. This bolt acts as a table stop to ensure the table returns to the correct position when it is required to be at 90 to the blade.

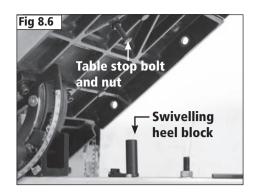
Set the stop bolt so that the table is 90 when in contact with the swivelling heel block. This is rotated out of the way of the stop bolt when you require the table to be set beyond 0 on the angle scale of the trunnion.

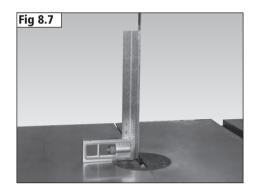
Set the table at 90 to the blade using a square as shown in **Fig 8.7**. Secure it in place then adjust the screw so that it touches the top of the lower band wheel box. Secure the screw in place by tightening the nut against the table surface.

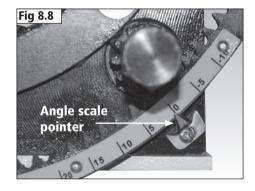
If necessary the angle scale pointer can now be adjusted to point to 0 as shown in **Fig 8.8** using a Phillips screwdriver.

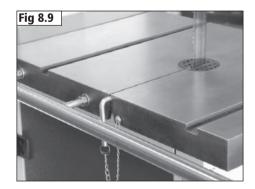
Installing the Rip Fence

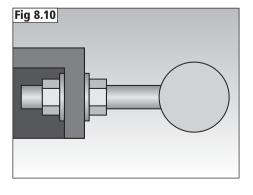
Fit the rip fence rail to the table as shown in **Fig 8.9** using the nuts and washers supplied with the rail in the order shown in **Fig 8.10**.











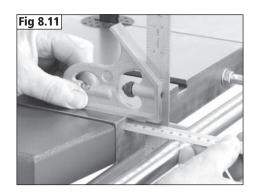
Ensure the rip fence rail is parallel to the table by measuring the distance between them at one end as shown in **Fig 8.11** and ensure the measurement is the same at the opposite end as shown in **Fig 8.12**.

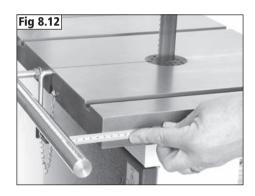


Important Ensure at this stage the table levelling pin is installed as shown in Fig 8.13.

To ensure the **height of the rail is parallel** to the table lay a steel rule on the table surface as shown in **Fig 8.14** and measure the distance between the rule and the rail.

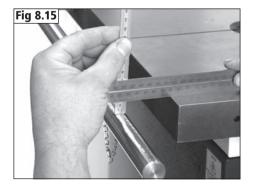
Repeat this process at the opposite end of the table as shown in ${\bf Fig~8.15}$, ensuring both measurements are equal.











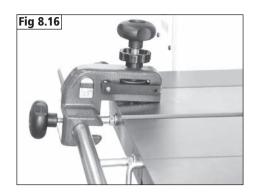
Fitting the Fence

Place the rip fence mount onto the rail as shown in **Fig 8.16.**

Slide the rip fence onto the mount as shown in **Fig 8.17**. Ensure the rip fence is placed fully onto the mount and locates over the protrusion as shown in **Fig 8.18**.

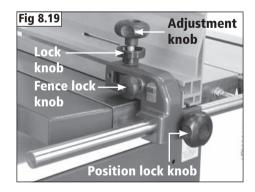
Secure the rip fence in place using the fence lock knob as shown in **Fig 8.19**. The fence and mount assembly is secured in place on the rail using the position lock knob as shown in **Fig 8.19**.

The fence can also be fitted as shown in **Fig 8.20**. This position allows the guides to move much further down to support the blade when cutting thinner materials.











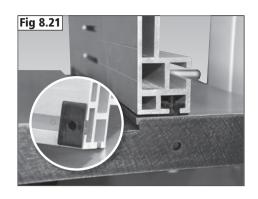
The fence features a pad at each end as shown in **Fig 8.21**. This raises the fence from the table to minimise contact and improve travel of the fence across the table and mitre slot.

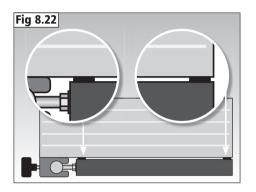
The height of the fence should be parallel with the table as shown in **Fig 8.22**. If adjustment is required, change the height of the rip fence rail as previously described until the fence is positioned as shown.

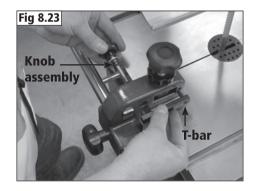
Mounting the Rip Fence to the Right Hand Side of the BladeTo support work when cutting with the table tilted, the rip fence can be placed to the right hand side of the blade.

Remove the rip fence from the mount. Fully unscrew the fence lock knob and remove the knob assembly and T bar as shown in **Fig 8.23**. Re-fit to the opposite side of the fence mount as shown in **Fig 8.24**.

Re-fit the rip fence to the mount as previously described and shown in **Fig** 8.25











Aligning the Fence with the Blade

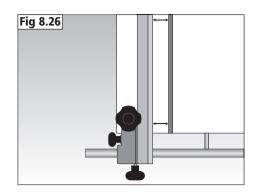
For accurate cutting the rip fence must be parallel to the blade as shown in **Fig 8.26**. The fence mount features a cam-mechanism adjustment for quick and easy alignment.

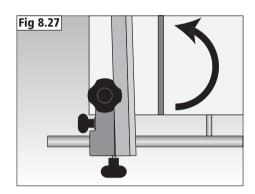
Loosen the lock knob as shown in **Fig 8.19** and use the adjustment knob to move the fence. The fence can be moved anti-clockwise as shown in **Fig 8.28**. When the fence is in the desired position re-tighten the lock knob.

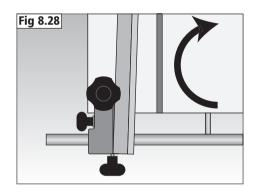
Fitting the Hand Wheel

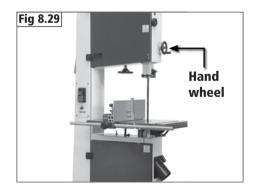
The hand wheel supplied must be fitted as shown in **Fig 8.29**. This hand wheel controls the guide post position.

The hand wheel shaft features a flattened area as shown in Fig 8.30.











Place the upper hand wheel onto the shaft as shown in **Fig 8.31**, ensuring the blind set screw is positioned over the flattened area. Tighten the blind set screw to secure the hand wheel in place using a 3 mm hex wrench.

Fitting the Hanging Bolts for the Optional ockey Bar

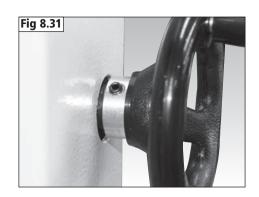
Place a nut on each hanging bolt leaving approximately 6 mm of thread visible. Screw into the holes until you reach the nuts and secure in place. **Figure 8.32.**

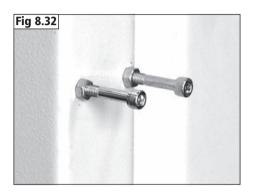
Fitting the Push Stick Holder

Screw the M6 x 30 hex socket head screw to the bandsaw frame as shown in **Fig 8.33** and secure in place with the M6 nut. Place the push stick holder onto the screw as shown in **Fig 8.34**.

Fitting the Tool Holder

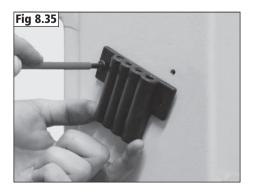
Secure the tool holder to the rear of the bandsaw spine as shown in **Fig 8.35** using the 2 M5 x 10 mounting screws supplied.









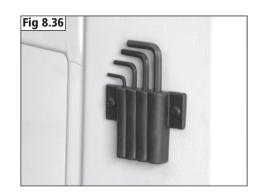


The tool holder is used for storing the hex wrenches supplied with the machine as shown in **Fig 8.36**.

Fitting the Re-Saw Bar

The re-saw bar can be used when cutting timber which is prone to variations in density and grain direction, particularly larger pieces. The bar is used to pivot the timber against so the feed direction can be adjusted by the operator to ensure the straightest possible cut.

Disassemble the re-saw bar assembly and place the bar through the slots in the fence as shown in **Fig 8.37**. Re-fit the fixings as shown and secure the bar in place.











Caution Before carrying out any adjustments or maintenance ensure that the machine is isolated and disconnected from the electricity supply.

Changing the Bandsaw Blade

Open the upper and lower band wheel box doors.

Remove the securing table levelling pin as shown in **Fig 9.1** to allow the blade to be passed through the front of the table as it is removed.

Move the cam tension lever to the left as shown in Fig 9.2.

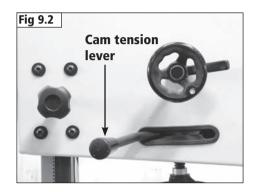
Slide out the extraction insert below the lower guides in the lower part of the machine.

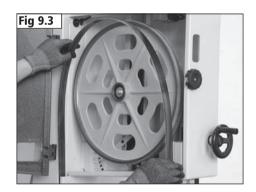
Wearing protective gloves, carefully remove the blade by pulling it forwards and out from the table slot as shown in **Fig 9.3**. Ensure the left hand side of the blade is brought through the gap in the spine blade cover as shown in **Fig 9.4**.

Fit the new blade to the bandsaw, ensuring the teeth of the blade point downwards and towards the front of the machine as shown in **Fig 9.5**.

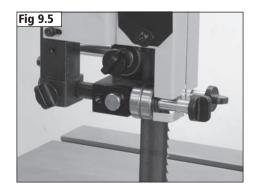
ote If the new blade is the same si e and type as the old blade, the blade tension and guide positions may not necessarily need adjusting.











Tensioning the Bandsaw Blade

Re-engage the cam tension lever and if necessary adjust the tension knob to apply the correct tension to the blade.

To check the tension of the blade, set the blade guides to their highest position and apply a reasonable amount of pressure using a push stick. A correctly tensioned blade will move approximately 4 mm as shown in **Fig 9.6**. Do not overtighten the blade as shown in **Fig 9.6** as this could damage it.

The machine features a blade tension indicator as shown in **Fig 9.7**. This gives an approximate guide to the tension required for a variety of blade sizes.

Bandsaw blade tension can be subject to personal preferences and opinions vary on the best ways to measure the tension and of what the correct tension should be. If the blade is cutting accurately then this is the best indication that the tension (and overall machine setup) is correct. If adjusting the blade tension does not correct a poorly performing blade, this could indicate that the blade needs replacing.

If the machine is not in use for long periods, slacken the tension to avoid placing unnecessary pressure on the blade and the bandsaw itself.

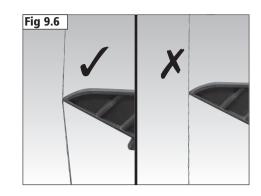
Tracking the Bandsaw Blade

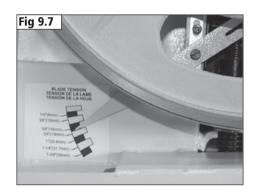
A correctly tracked blade will sit centrally on the band wheels as shown in **Fiq 9.8**.

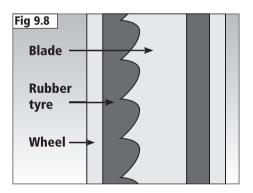
To aid tracking there is an inspection window on the side of the upper band wheel box as shown in **Fig 9.9** which allows the blade position to be seen.

The bandsaw is fitted with an electromagnetic brake to stop the machine within a set time when the stop button is depressed which in turn locks the motor and band wheels until turning the machine on again. To be able to rotate the band wheel to aid tracking the power supply to the machine must still be connected and the power switched on. Having the upper or lower doors open locks out the on switch so it cannot be turned on during the tracking adjustment process .

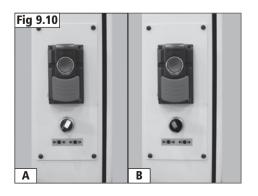
Turn the Brake Switch to the right shown in **Fig 9.10A** After approximately ten seconds a click will be heard from the motor and the switch will illuminate. This is the magnetic brake releasing and now the top wheel can be rotated to make the tracking adjustments.











To adjust the tracking, loosen the tracking lock knob and adjust the tracking knob as shown in **Fig 9.11**. Turn the knob clockwise to move the blade towards the back of the band wheel and anti-clockwise to move it towards the front. Rotate the bandwheels by hand to move the blade into position. Once the tracking is set correctly re-tighten the tracking lock knob.

After the tracking adjustments are made, close both the top and bottom doors. You can now either make the necessary guide adjustments with the brake switch still in the same position or you can turn the brake switch back to the left **Fig 9.10B** which will re activate the electromagnetic brake and the on/off switch.

If you choose to do the latter you must turn off the power at the mains supply.

Setting the Blade Guides

Once the blade is installed, tensioned and tracked the guides must be set correctly around it.

There are 2 sets of guides on the bandsaw, one above the table and one below. Both sets comprise of a pair of guides on either side of the blade and a rear guide. All guides are spring-loaded for easy adjustment.

The side guides should be positioned so they are just behind the blade gullet. This will ensure the teeth do not catch on the guides during operation. See **Fig 9.12**.

In addition, the side guides should also be positioned as close to the blade as possible but without touching the blade. The guides should not be touching the blade when the machine is running and not under load as constant contact will reduce the life span of the blade, See **Fig 9.13**.

The rear guide must also be placed as close as possible to the blade but not be touching it, see **Fig 9.14**.

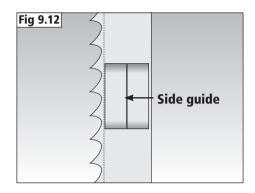


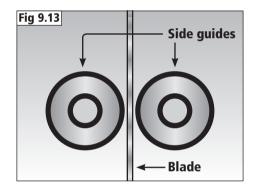
Important When positioning the side guides behind the blade gullet take into account the possible backwards movement of the blade during cutting to ensure that the side guides do not protrude past the gullet.

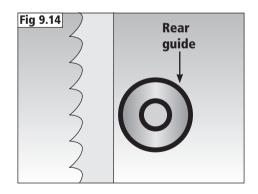
Adjusting the Upper Blade Guides

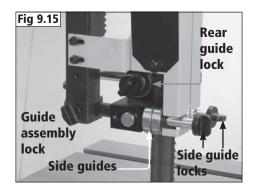
To move the side guides to the correct position behind the blade gullet, loosen the guide assembly lock shown in **Fig 9.15** and move the whole guide assembly until the guides are positioned correctly then re-tighten the quide assembly lock.











The side guides must now be positioned as close to either side of the blade as possible. Loosen the side guide locks shown in **Fig 9.15**, position the guides correctly by moving the guide shafts then re-tighten the locks as shown in **Fig 9.16**.

The rear guide must now be set in the correct position. Loosen the rear guide lock shown in **Fig 9.15** and position the guide by moving the guide shaft as shown in **Fig 9.17**.

Adjusting the Lower Blade Guides

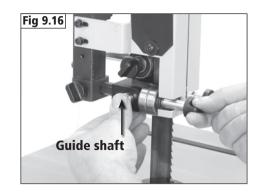
The lower guides are set in the same way as the upper guides. The guide assembly is mounted inside the lower cabinet **Fig 9.18**.

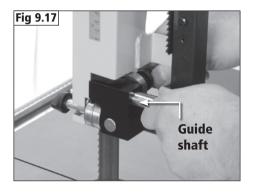
Setting the Height of the Upper Blade Guides

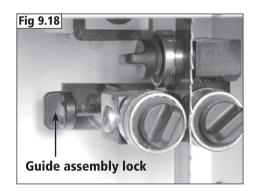
The upper guide assembly should be set as low as possible for the cut being made to give maximum support to the blade and aid in accurate cutting.

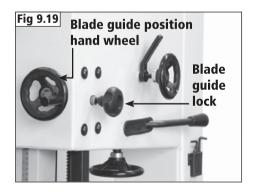
To move the guide assembly, loosen the blade guide lock as shown in **Fig 9.19** and use the blade guide position hand wheel to raise or lower the assembly to the required height. Re-tighten the blade guide lock to ensure the guide assembly remains in place.

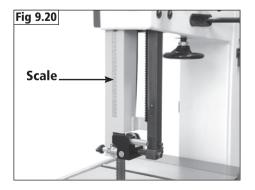
The blade guard features a scale as shown in **Fig 9.20**. This indicates the height of the bottom of the blade guides from the table to aid positioning.











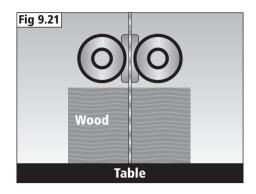
The assembly must allow the workpiece to pass beneath it as shown in Fig 9.21.

Turning the Bandsaw On and Off

The bandsaw is fitted with a no-volt release switch which ensures it will not unintentionally re-start after a power failure, **Fig 9.22**.

To turn the machine on press the blue button marked On .

To turn the machine off press the red button marked Off .





Basic Bandsawing Principles

The blade cuts on a continuous down stroke.

Slowly feed the workpiece towards the blade, using only light pressure whilst letting the blade do the cutting. Always use a push stick and take care.

Firmly hold the workpiece and feed it towards the blade slowly, using the push stick and keeping your hands well away from the blade.

For best results the blade must be sharp. Damaged or worn blades should always be replaced.

Select the correct blade for the job, depending on the thickness of the wood and the cut to be made (see blade selection).

For straight cutting use the rip fence supplied.

When cutting shapes, follow the design marked out by pushing and turning the workpiece evenly. Do not attempt to turn the workpiece without pushing it, as this may cause the workpiece to get stuck, or the blade to bend.



CAUTIO Particular care should be taken towards the end of the cut as there will be a sudden decrease in resistance and care must be taken to stop hands from being thrown towards the blade. Always use a push stick.

Always ensure that your machine is properly maintained and clean. Before commencing work on an important project, it is advisable to familiarise yourself with the operation of the equipment by practising on low value or scrap materials.



WAR I G In circumstances such as cutting deep or wet timber, the work piece may close up behind the blade causing it to stall. In the event that the blade stalls whilst cutting, ease the work piece backwards slightly, to release feed pressure from the blade. Allow the blade to reach full speed before continuing to feed the work piece in to the blade. If the blade fails to move when feed pressure is released, immediately switch off the machine and disconnect the power supply before attempting to free the blade from the work piece.



WAR I G If any component of the machine fails whilst in use or if the blade should break whilst the machine is running, immediately switch off the machine and disconnect from the power supply. Remove the faulty component and replace only with genuine Record Power replacement parts. Any electrical components should only be replaced by a suitably qualified person. To replace a broken blade, please refer to the section of this manual entitled Band saw Blade Set Up . Always remember to fully release the blade tension mechanism before attempting to fit a new blade. If you are in any doubt about using the machine following a failure or if you need to order replacement spare parts or blades, please contact customer services in your country.

Restarting

In the Event of a Blockage or if the Machine Stalls

If the bandsaw stalls due to the blade becoming trapped in the work piece, switch it off immediately by pressing the stop button and wait for the machine to come to a complete stop before proceeding further. If the blade is trapped within the work piece, it may be necessary to prize the work piece apart slightly using a suitable lever or wooden wedge in order to free the blade. If it is not possible to free the blade using this method, then it may be necessary to cut the blade using suitable side cutters or tin snips.

Replace the blade if necessary and ensure that it is correctly tracked and tensioned and that both doors of the bandsaw are fully closed and secured before attempting to re-start the machine.

To re-start the machine, press the green button marked 'I' on the switch.

In the Event of a Power Failure

The bandsaw is fitted with a no volt release (NVR) switch to protect the user against automatic starting of the machine when power is restored after a power failure.

In the event of a power failure, first locate and rectify the source of the failure. If the fault is within the power circuit of the workshop, there may be an underlying cause (circuit overload etc.) that should be investigated by a qualified electrician, before attempting to restore the power source. If a cutting operation was taking place when the power supply was interrupted, then it may be necessary to free the blade from the work piece before attempting to re-start the machine.

Once the power is restored, the machine can be re-started by pressing the green button marked 'I' on the switch.

Blade Selection TPI

The selection of the best blade configuration (see page 28) is necessary for optimum cutting performance.

Correct blade choice is primarily dependant on two factors: material thickness and material type.

Greater TPI should be selected as material thickness decreases.

However, if the TPI is too great, the tooth loading will be insufficient to enable penetration and cutting. The teeth will also rapidly lose their sharpness.

For thicker material a lower TPI should be used otherwise the gullet will not be sufficient to clear the waste and the blade will stall or burn the wood.

In general a minimum of 3 teeth should be in contact with the wood at all times during cutting.

The accompanying blade selection chart (see the table below) gives guidance on the TPI that should give the best results when cutting a variety of material types and thickness. The table below provides recommendations on selecting the correct blade for a variety of commonly used materials. If in doubt about any aspects of blade selection contact Customer Services in your country.

The table provides a guide to selection only. Exact tooth configurations are not always available, nor are all blade configurations covered, but the principles remain the same.

For special applications, custom blades can be supplied please call Customer Services in your country and we can advise you accordingly on your specific needs.

Material	Material Thickness							
	6 mm	6 mm 6-12 mm		25mm				
Perspex	16 TPI	14 TPI	-	-				
Chipboard	-	6 TPI	3-6 TPI	3-4 TPI				
Fibre board	16 TPI	14 TPI	-	-				
Hardboard	10 TPI	-	-	-				
Plywood	10 TPI	8 TPI	6 TPI	3-4 TPI				
Strawboard	14 TPI	10 TPI	-	-				
Cork	14 TPI	6 TPI	3 TPI	3-4 TPI				
Leather	14 TPI	-	-	-				
Rubber	10 TPI	8 TPI	-	-				
Wood -log	-	-	-	3-4 TPI				
Wood -soft	6 TPI	3-6 TPI	3-4 TPI	3-4 TPI				
Wood -hard	6 TPI	3-6 TPI	3-4 TPI	3-4 TPI				
Wood -wet	-	-	-	3-4 TPI				

Blade Selection TPI - Cont.

Having selected an appropriate blade for the particular thickness and type of material to be sawn, it is essential that the saw blade is allowed to cut freely by not applying too much pressure.

The need for excessive pressure is likely to be a result of the incorrect blade selection or a worn blade and will result in inaccurate cutting and possibly blade breakage.

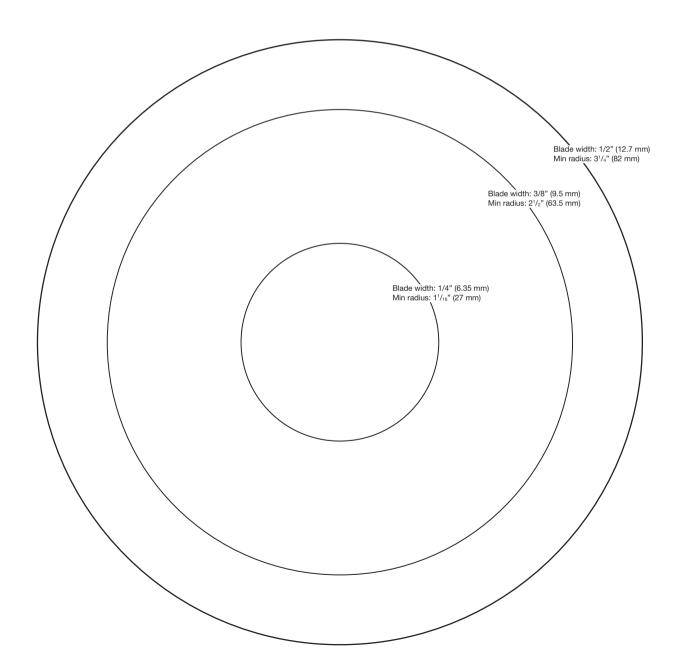
Blade Selection Width

When cutting shapes, the width of the blade limits the minimum radius that can be cut.

If the blade is too wide for the cutting radius the blade will twist and possibly jam or break.

The smaller the radius the narrower the blade has to be.

The diagram below provides guidance on the minimum radius to be cut with the most commonly used blade widths.



Blade Selection Summary

To see how TPI and width of the blade come together, use the table opposite for reference.

Regularly examine the blade for excessive damage or cracking as a result of fatigue. If such damage is present replace the blade.

It is important to use a sharp blade. Dull teeth result in increased feed pressure producing a poor quality finish and an inaccurate cut.



ote As well as the blades listed, we can also supply bandsaw blades to almost any specification please call Record Power Customer Services in your country.

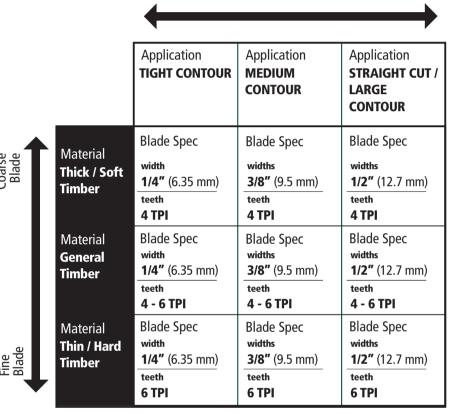
Record Power SABRE-450 Blade Range

Record Power's high performance bandsaw blades are manufactured to the highest quality tolerances using a specialist premium high carbon steel strip.

The extensive quality control program which involves digital tooth profile checks, set analysis, straightness testing, hardness testing and micro structural analysis results in a blade that cuts straighter and has harder, longer lasting teeth. A premium British blade that can last up to ten times longer than other blades on the market. To order any of these blades please contact Record Power Customer Services in your country who will advise you of your nearest retailer or alternatively a mail order supplier.

BB1531406 153" x 1/4" (6.35 mm) x 6 TPI Bandsaw Blade **BB1533806** 153" x 3/8" (9.5 mm) x 6 TPI Bandsaw Blade **BB1531206** 153" x 1/2" (12.7 mm) x 6 TPI Bandsaw Blade **BB1533403** 153" x 3/4" (19.05 mm) x 3 TPI Bandsaw Blade **BB153103** 153" x 1" (25.4 mm) x 3 TPI Bandsaw Blade

Wide Blade



Narrow Blade





Caution Before carrying out any adjustments or maintenance ensure that the machine is isolated and disconnected from the electrical supply

Replacing the Drive Belt

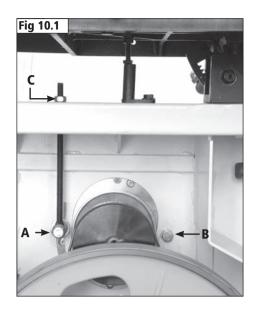
To replace the drive belt first remove the band saw blade **following section 9** on changing the bandsaw blade.

Slacken the two 16 mm hexagon bolts marked A & B in **Fig 10.1**. Using a 16 mm wrench turn the tensioning nut marked C **Fig 10.1** anti-clockwise to lower the motor which in turn slackens the belt.

If nuts A & B are slack but the motor doesn't move when loosening the adjusting nut C you may have to push on the drive belt between the two pulleys. This has the effect of shortening the belt and will pull the motor down towards the lower wheel.

Lift the belt off the motor pulley and drop it over the back onto the motor shaft. This will allow enough slack for you to remove the lower band wheel.

Remove the hex head socket screw with a 6 mm hex wrench and take off the washer from the lower band wheel hub, **Fig 10.2**. Carefully pull the wheel from the shaft as shown in **Fig 10.3** and remove the drive belt.



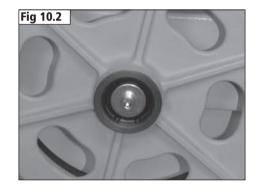


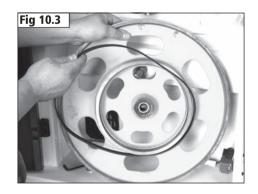
Before replacing the band wheel it is advisable to clean out any build up of saw dust as access is much easier.

Place the new drive belt over the motor shaft at the rear of the motor pulley. Replace the band wheel and secure using the washer and hexagon head socket screw. At this point you may find that the spacer between the two bearings has moved out of line so as you place the band wheel back on the shaft you can place your finger in the bearing centre and re align the spacer while re mounting. Through the cast holes in the lower band wheel you can now place the drive belt back onto the pulley and onto the motor pulley.

Tensioning the Drive Belt

Once the belt is mounted back on the pulleys you can re tension it by turning the tensioning nut marked C, **Fig 10.1** clockwise. Tension the belt until there is about 6 mm/1/4 of movement at the centre point between the two pulleys **Fig 10.4**. Then tighten the two hexagon bolts marked A & B **Fig 10.1** and re check the tension. Once this has been done you can now replace the blade.







Ensure that the V grooves of the belt mate with the V grooves of the pulleys as shown in **Fig 10.5**.

Replacing the Band Wheel Bearings

The bandsaw blade and wheels must be removed before replacing the bearings. To remove the lower band wheel follow the instructions in the section **Replacing the Drive Belt**.

To remove the upper band wheel, remove the hex head socket screw with a 6 mm hex wrench and take off the washer from the band wheel hub, **Fig 10.6**. The wheel can now be taken off the shaft.

The wheel hub contains 2 bearings and a spacer. This assembly is held in place on both sides with circlips as shown in **Fig 10.7**.

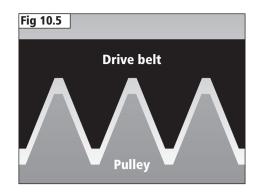
Remove the circlips from the rear and front of the wheel as shown in **Fig 10.8**.

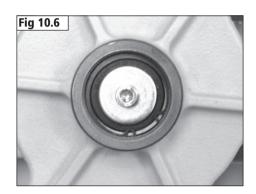
Place the band wheel on 2 blocks of wood as shown in **Fig 10.9** and using a brass drift carefully tap out the bearings and bearing spacer from the inside of the band wheel.

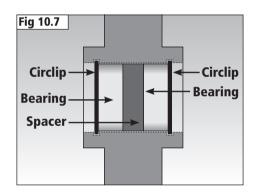
Fit the new bearings either side of the spacer and re fit the two circlips. Make sure you do not hit the centre race of the bearing then re-assemble the machine. When replacing use a piece of brass or similar material that is almost the same diameter as the outer race.



Knocking a bearing on the inner race that is a press fit on the outer race may cause instant damage to the bearing.











Replacing Band Wheel Tyres

The band wheels have rubber tyres fitted to protect the teeth of the blade when in use and also provide grip to stop the blade slipping. Regularly inspect the tyres for wear and damage and replace if necessary.

Remove the wheel from the bandsaw and ease the existing tyre from the rim, taking care not to damage the bandwheel.

Place the new tyre in hot water to soften and expand it. This will make it easier to fit onto the wheel.

Carefully fit the new tyre over the wheel and ensure it is placed centrally on the rim over the full circumference of the wheel as shown in **Fig 10.10**.

Replacing Side Blade Guide Bearings

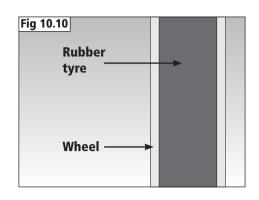
To remove the side guide assembly fully unscrew the lock and remove the assembly as shown in **Fig 10.11**.

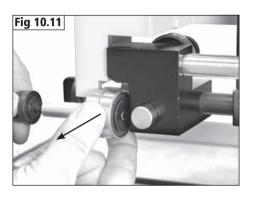
Remove the old bearings and replace with the new, ensuring the bearing bush, washer, bearings and sleeve are positioned as show in **Fig 10.12** and the assembly is screwed back into the guide shaft as shown.

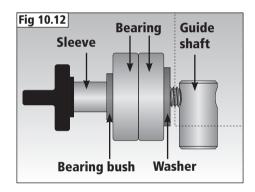
Replacing Rear Blade Guide Bearing

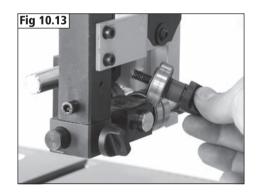
To remove the rear guide assembly fully unscrew the lock and remove the assembly as shown in **Fig 10.13**.

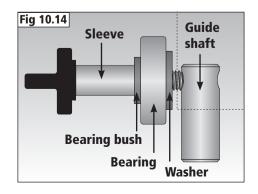
Remove the old bearing and replace with the new, ensuring the bearing bush, washer, bearing and sleeve are positioned as show in **Fig 10.14** and the assembly is screwed back into the guide shaft as shown.











Adjusting and Replacing the Band Wheel Brush

The brush is located in the lower band wheel box as shown in **Fig 10.15**.

The purpose of the band wheel brush is to remove sawdust that has been deposited during use.

To replace the brushes use a 10 mm wrench to remove the M6 nylon locking nut, washer and M6 x 25 bolt, replace the brush and re-assemble.

Changing the Table Insert

The table insert, **Fig 10.16**, is designed to give support to the workpiece and be soft enough to not cause damage to the blade if contact is made. The table insert will need to be replaced periodically as it wears.



Removing the blade before removing the table insert will eliminate the risk of injury from the blade.

Push the table insert up and out from the underside of the table and fit the new table insert by pressing firmly down into place.

Cleaning the Table

Regular cleaning of the table will ensure optimum performance of the machine. Remove all dust and resin using white spirit then coat the table with Record Power **CWA195** Silicone Spray. The silicone spray will repel dust and resin, helping the timber to move freely on the table.

Only apply silicone spray if you are sure it will not affect any surface finish that will be applied to your project afterwards.

Mechanical Motor Brake

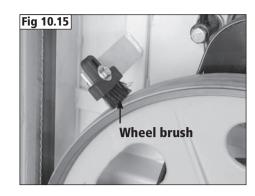
Check the function and effectiveness of the motor brake on a weekly basis.

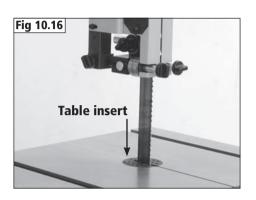
Test the brake with the blade mounted and correctly tensioned. Allow the machine to run up to full speed and then press the stop button on the switch. The blade should come to a complete stop within 10 seconds of the button being pressed.

If the brake does not bring the machine to a complete stop within 10 seconds, then the brake unit will require adjustment. The brake unit is located at the rear of the motor behind the motor fan. To gain access to the brake, first remove the three pozi pan head screws that secure the motor fan cover to the motor and remove the fan cover, **Fig 10.17.**

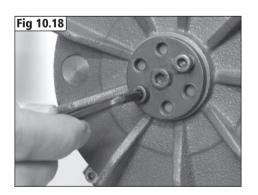
Locate the central locking plate in the centre of the motor fan. Loosen the 2 outer socket head cap screws and remove them completely from the locking plate, **Fig 10.18**.

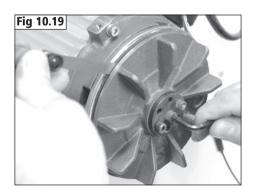
The brake can now be adjusted by turning the central screw in a clockwise direction **Fig 10.19** to increase the effectiveness of the brake. Check the air gap between the brake components using a set of feeler gauges. Set the air gap to 0.3 mm - 0.4 mm for optimum performance of the brake.











When the brake has been correctly adjusted, re-fit the two socket head screws to the central locking plate. Further slight adjustment of the locking plate may be required so that the holes in the locking plate line up correctly with the corresponding threaded holes in the motor fan, **Fig 10.20**.

Re-fit the fan cover to the motor and secure with the three pozi pan head screws.

Expected life of the brake components is 100,000 start/stop cycles. If the brake can no longer be adjusted to allow the machine to stop within the required time, the brake unit should be replaced. If replacement parts are needed, please contact Record Power Ltd or their representative in your country for further assistance.

The machine must not be used if the mechanical brake does not function correctly.

Safety Devices

The machine is fitted with various safety devices which should be checked weekly to ensure that they function correctly.

The doors of the machine are fitted with interlocking micro-switches designed to stop the machine if the doors are opened when the machine is in use, **Fig 10.21.**

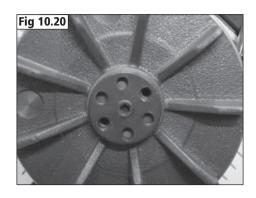
Testing of the micro-switches is best done without the blade fitted to the machine.

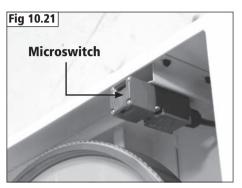
To perform the test, first close both doors and start the machine. With the machine running, open the upper door. The machine should stop as the door is opened. If the machine fails to stop, the micro-switch may require adjustment or cleaning in order for it to work correctly. If the micro-switch is found to be faulty, then it must be replaced immediately with a direct replacement part.

Repeat the same test with the lower door.

Finally, with the machine switched off, open both the upper and lower doors, and attempt to start the machine. The machine should not start. If the machine does start, the micro-switches may be faulty and should be replaced immediately.

If either of the micro-switches is found to be faulty or defective, the machine must not be used until suitable replacement parts have been fitted and proved to be working correctly.





11. Dust Extraction

The Importance of Dust Extraction

Suitable dust extraction is essential to avoid the possibility of serious health problems related to wood dust. It is also necessary in order to ensure the waste producing machine performs safely and effectively. Some woods are extremely toxic and in addition to suitable dust extraction machines it is recommended that PPE such as respirators are also used.

Record Power Dust Extraction Machines

Below is a summary of the Record Power range. Please visit your local stockist or go online for full details.

DX1000 Fine Filter 45 Litre Extractor

45 litre capacity, 1 kW motor, 0.5 micron filtration. Includes hose.

RSDE1 Fine Filter 45 Litre Extractor

45 litre capacity, 1 kW motor, 0.5 micron filtration. Includes hose.

RSDE/2 Fine Filter 50 Litre Extractor with Accessories

50 litre capacity, 1 kW motor, 0.5 micron filtration, includes wheel kit, hose cuff power tool adaptor hose and spare filter bags. Includes hose.

RSDE/2A Fine Filter Auto-Switching 50 Litre Extractor with Accessories

50 litre capacity, 1 kW motor, 0.5 micron filtration, includes wheel kit, hose cuff power tool adaptor hose and spare filter bags. Includes hose.

DX4000 Fine Filter Twin Motor 80 Litre Extractor

80 litre capacity, 2 x 1 kW motors, 0.5 micron filtration. Includes hose.

DX5000 Fine Filter Twin Motor 200 Litre Extractor

200 litre capacity, 2 x 1 kW motors, 0.5 micron filtration. Includes hose.

CGV286 CamVac Series Compact Extractor

36 litre capacity, 1 kW motor single or twin, 0.5 micron filtration.

CGV286-WALL CamVac Series Wall Mounted Extractor

150 litre capacity, 1 kW motor single or twin, 0.5 micron filtration.

CGV336 CamVac Series Medium Extractor

55 litre capacity, 1 kW motor single or twin, 0.5 micron filtration.

CGV386 CamVac Series Large Extractor

90 litre capacity, 1 kW motor twin or triple, 0.5 micron filtration.

CGV486 CamVac Series Heavy Duty Extractor

200 litre capacity, 1 kW triple motor, 0.5 micron filtration.

CX2000 Compact Chip Collector

54 litre capacity, 0.56 kW motor. Includes hose.

CX2500 80 Litre Chip Collector

80 litre capacity, 0.55 kW motor. Includes hose.

CX3000 Heavy Duty Chip Collector

128 litre capacity, 0.56 kW motor. Includes hose.

AC400 2 Stage Air filter with Remote, 3 speeds and Time Delay

Collects airborne dust, 1 micron filtration.





Recommended for light / intermittent use



Can be used

	Bandsaws	Table Saws	Planer Thicknessers		Sanding Machines	Dust Extraction Systems	Airborne Dust Collection
DX1000	-				-		
RSDE1	*		•				
RSDE/2		-			-		
RSDE/2A	-	-	•				
DX4000	~	~		~	~		
DX5000	~	~		*	*	*	
CGV286	*	-			-		
CGV286-WALL	*	*				*	
CGV336	-	-			-		
CGV386	~	~		*	*		
CGV486	~	~		~	*	*	
CX2000			*				
CX2500			~				
CX3000			~	~			
AC400							~

12. Troubleshooting

Problem	Cause	Solution
Will not cut in a straight line.	1. Blade is blunt.	1. Change blade.
Ç	2. Blade guides set too high.	2. Adjust blade guides.
	3. Blade tension incorrect.	3. Adjust blade tension.
	4. Fence aligned incorrectly.	4. Align fence as shown in section 8 .
	5. Table aligned incorrectly.	5. Align table as shown in section 8 .
Motor slows down during cutting.	1. Too much pressure being applied.	1. Adjust feed rate to suit material being cut.
	2. Drive belt slipping.	2. Adjust drive belt tension.
	3. Fence aligned incorrectly.	3. Align fence as shown in section 8 .
	4. Table aligned incorrectly.	4. Align table as shown in section 8 .
	5. Wrong type of blade being used.	5. Change blade to a suitable type.
Machine only operates when pressure is applied to the on switch.	1. Faulty switch.	1. Replace switch.
Machine buzzes but will not run.	1. Motor capacitor is faulty.	1. Replace motor capacitor.
Blade cannot be fitted.	1. Blade tension not released.	Release blade tension using the blade tension lever. Further tension reduction may be need to be performed using the blade tension knob.
	2. Blade is too small.	2. Ensure the correct length of blade is used.
Blade cannot be tensioned sufficiently.	1. Blade is too long.	1. Ensure the correct length of blade is used.
Blade will not cut.	1. Blade is upside down.	Ensure the teeth of the blade point downwards towards the bandsaw table.
	2. Blade is back to front.	2. Ensure the teeth of the blade point towards the front of the machine.
The bandsaw will not start.	1. No power supply.	Ensure the machine is connected to a suitable power source.
	2. Faulty switch.	2. Replace the switch.
	3. Doors not fully closed.	3. Ensure both doors are fully closed.
	4. Fuse blown.	4. Replace the fuse.
	5. Faulty motor.	5. Replace the motor with a genuine Record Power motor.
The bandsaw blade does not move when the motor is running.	1. The blade is under insufficient tension.	Ensure sufficient tension is applied to the blade.
	2. The blade has come off the wheels.	2. Re-fit the blade and ensure it is correctly tracked and tensioned.
	3. The blade has broken.	3. Replace the blade.
	4. The drive belt has broken.	4. Replace the drive belt.
The bandsaw will not cut at 45 or 90 to the table.	1. The table angle is incorrectly calibrated.	Set the table at 90 to the blade and re-set the angle pointer if necessary.
	2. The blade is blunt.	2. Replace the blade.
	3. Excessive pressure is being applied.	3. Reduce feed rate of the workpiece.

13. Electrical Connection and Wiring Diagram

Machines supplied for use in the UK are fitted with a 3 pin plug conforming to BS1363, fitted with a fuse conforming to BS1362 and appropriate to the current rating of the machine.

Machines supplied for use in other countries within the European Union are fitted with a 2 pin Schuko plug conforming to CEE 7/7.

Machines supplied for use in Australia & New Zealand are fitted with a 3 pin plug conforming to AS/NZS3112.

In all cases, if the original plug or connector has to be replaced for any reason, the wires within the mains power cable are colour coded as follows:

230 V (Single Phase)

Brown: Live (L)
Blue: Neutral (N)
Green and Yellow: Earth (E)

The wire coloured brown must always be connected to the terminal marked 'L' or coloured red.

The wire coloured blue must always be connected to the terminal marked 'N' or coloured black.

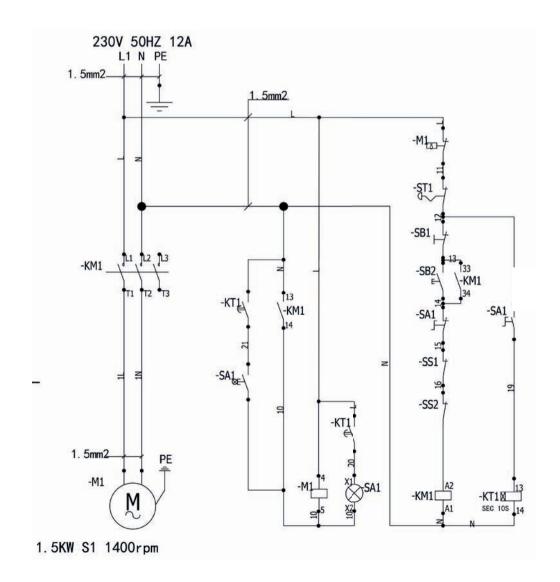
The wire coloured green and yellow must always be connected to the terminal marked 'E' or with the earth symbol:



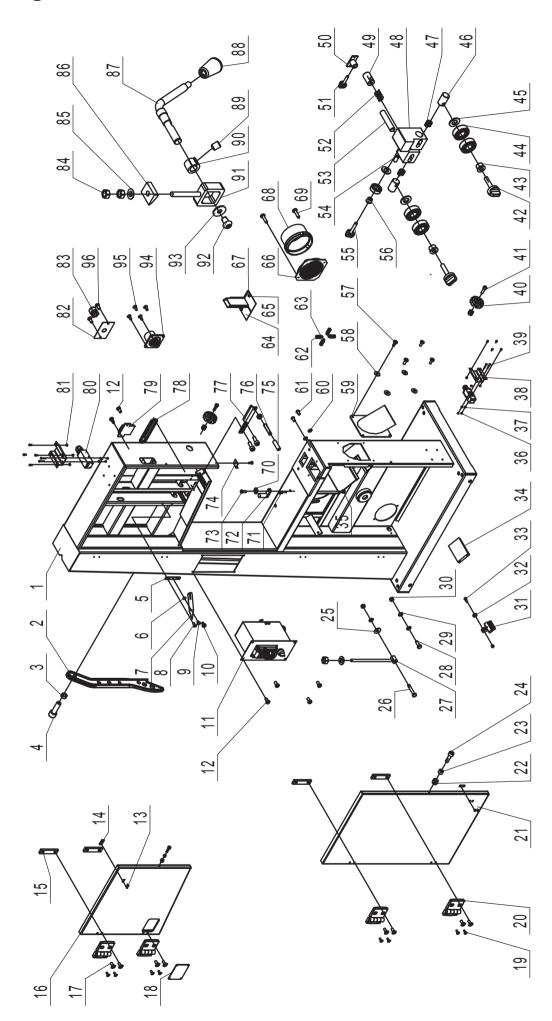
or coloured green / green and yellow.

In the case of the BS1363 plug for use in the UK, always ensure that it is fitted with a fuse conforming to BS1362 appropriate to the rating of the machine. If replacing the original fuse, always fit a fuse of equivalent rating to the original. Never fit a fuse of a higher rating than the original. Never modify the fuse or fuse holder to accept fuses of a different type or size.

If a plug conforming to BS1363 is used, the combination of plug and socket shall be protected from water and dust. to at least IP44.

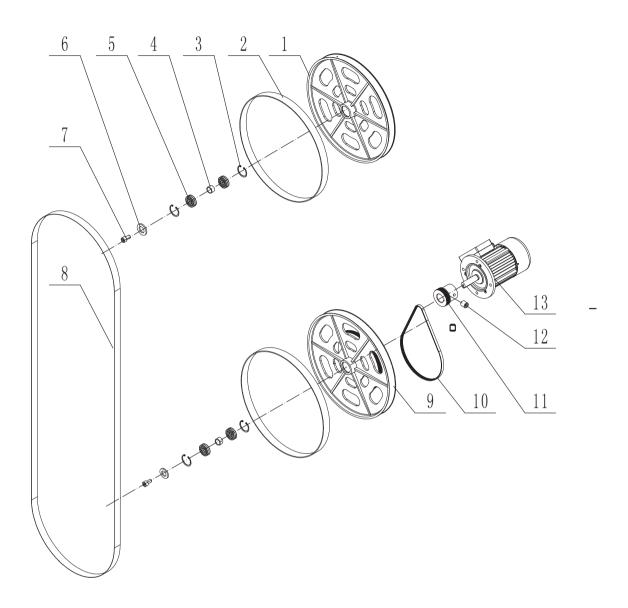


Frame Assembly



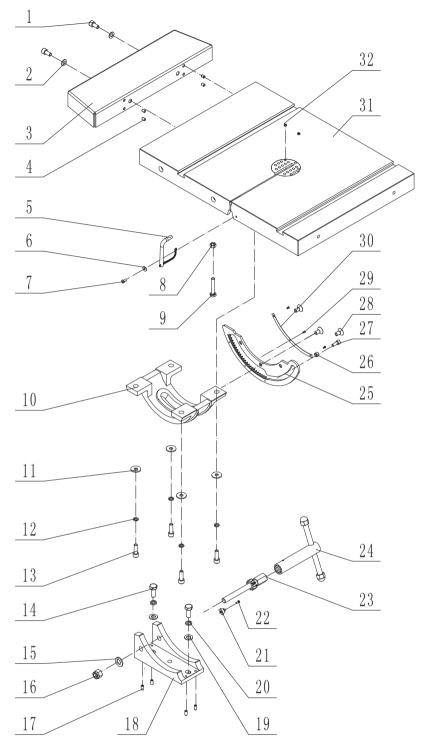
۰,	Part number	Description	ty		Description	, (
- ر	1-JIMBS1601011000C-051W	rame Duck ctick	- t	1-JIMBS1801016001	Lower guide snan	
۷ ۳	1-5E81100003-0183 1-M6GB6170B	Fusil stick Hex nit M6	1 5		Lowel gaine support block Locking handle	
4	1-M6 30GB70D1B	Hex bolt	1 52	_	Spring	- ←
2	1-JL27010005	Batter board	1 53	_	Guide supporting rod	_
9	1-WSH5GB97D1Z	Flat washer	1 54	_	Hex screw M8 x 10	_
7	1-JL26010004-002A	Tension indicator arrow	1 55	_	Locking handle	—
∞ (1-M5 10GB70D2Z	Screw M5 x 10	1 56	Ψ,	Bearing sleeve	← ·
6 [;]	1-JLZ6010010	Screw	1 57		Pan head screw M4 x 10	4
9 ;	1-JL27010019	Screw	1 58	Ψ,	Large washer	4,
Ξ	2-JMBS1801091000	Switch assembly	1 59	_	Dust port	_
12	1-M5 10GB818B	Pan head screw M5 x 10		_	Large washer	7
13	1-M4 10GB818B	Pan head screw M4 x 10	13 61	_	Screw M6 x 12	7
14	1-JL27010017	Thread plate	2 62	_	Hex bolt M12 x 40	4
15	1-JMBS1401010005A	Thread plate	4 63	- -	Hex nut M12	4 +
<u> </u>	1-JMBS1801012000C-033W	Upper abor	- 0		Lower guide guard	
<u> </u>	- V 0	rex socket screw	00 6	1-WSH3GB9/DIB	Flat Washer	7 -
0 5	1 M4 13CB20D2B	Graw Md < 13	00 0		Dust port graning	- ^
<u> </u>	1-IVI4 12/0B/0D3B	Sciew M4 X 12 Plactic bings	0 0	CINI-1	Diet socket liedu Doll	7 -
27	1-8101-10231 1-IMBS1801013001C-053W	l asser door	t -		Cross hand calf-tanning crow	- ~
73	1-JIMES 1881 01 300 1 C-0.33W	Lower door	- 1		Waya washor	7 -
73	1-INIOGE863D1Z 1-II 2601,0007	Closes	, c		Nove Washell	- ~
62	1-JE2001000/ 1 M6 20C B20D12		ء د 1		Head Schew	0 -
24 7c	1-M6 20dB/0D12	nex socket nead screw	2/ 2/ CC		חפפו טוסכג	
57	1-WSH1UGB90/12	Large Wasner	. /3		Stud snart	
97	1-M10 /0GB5/832	Hex Bolt M10 x /0		_ ,	Pointer	– ,
77	1-JMBS1801014001	Pull rod	7 /5	_ ,	Plastic tubing	— •
78	1-M10 30GB5/832	Hex Bolt M10 x 30	1 %	- ,	Set screw	. .
29	1-WSH10GB9/D1Z	Flat washer	3 //	- ,	Connecting plate	. .
30	1-M10GB6170Z	Hex nut M10	2 /8 2 /	- ,	Dust board	. - ,
31	1-JLZ1060003	Brush	1 /9	근,	lool holder	— (
32	1-WSH6GB96D1Z	Large washer	SS 7	_ '	Micro switch	7
33	1-M6 25GB5783Z	Hex Bolt M6 x 25		Ψ.	Hex nut M4	∞ ⋅
34	1-J BS1804010002	Dust collection plate	1 82	Ξ,	Threading board	. .
35	1-M8GB889D1Z	Hex lock nut M8		、	Cable gland	<u> </u>
30	1-IM4GB61/UZ	Hex nut IVI4	4 2		Hex hut IVI IO	7 -
3/	I-WSH4GB9/DI2	Flat Washer	4 85	_ '	Wasner	_ ,
200	1-JL26010012-051W	Wicro switch seat	7 80	_ ,	Heel Dlock	
33	- N 4 3UGB8 82	Pan nead screw IVI4 x 30	4 6 7 8	_ 、	Camsnart rod	- ,
40	1-JL26010006-0015	Handle	7 88	_ ,	Handle Knob	<u> </u>
41	1-M6 25GB/0D1Z	Hex socket head screw	2 89		Hex nut M8 x 8	<u> </u>
42	1-JMBS1801052002-001S	Locking handle		Ε,	Cam	. .
43	1-JMBS1801052003	Bearing sleeve		_	Tension	_
4	1-BRG6202-2RSGB276	Bearing		_	Hex socket head screw	-
45	1-WSH8GB96D1B	Large washer	3 93		Large washer	. .
46	1-JMBS1403014003	Guide shaft		- •	Plug	<u> </u>
4/	1-JMBS1403014005	Spring	26 7	_ `	Cross head screw M4 x 10	4 (
48	1-JMBS1801052001	Upper guide	1 96	1-M5 10GB818B	Pan head screw M5 x 10	2

Driving System Assembly



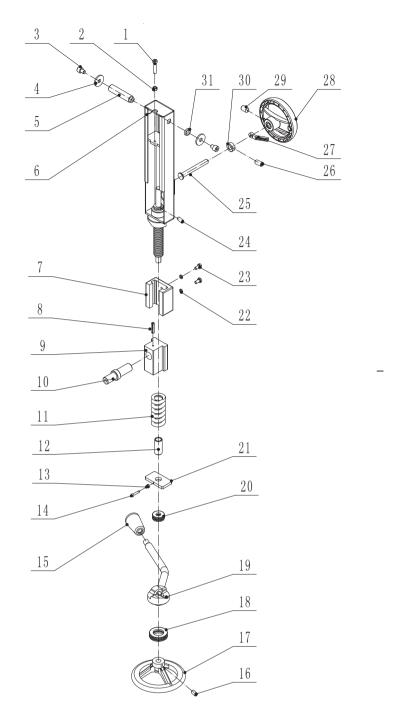
0	Part number	Description	ty
1	1-JMBS1801021001-053Z	Upper wheel	1
2	1-J BS1804021002	Tyre	2
3	1-CLP47GB893D1B	Circlip ring	4
4	1-JL26030008	Spacer bushing	2
5	1-BRG6204-2RSGB276	Bearing	4
6	1-J PS1202070005	Washer	2
7	1-M8 16GB70D1Z	Hex socket head screw	2
8	1-JMBS1801020002	Blade	1
9	1-JMBS1801022001-053Z	Lower wheel	1
10	1-JL46020005	Multi-vee belt	1
11	1-JMBS1801020004B	Motor pulley	1
12	1-M8 8GB80B12D9	Hex nut M8 x 8	2
13	2-YYH900154B	Motor	1

Table Assembly



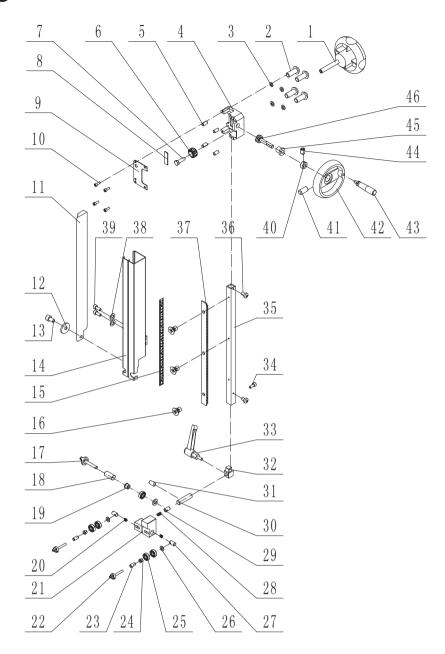
0	Part number	Description	ty	0	Part number	Description	ty
1	1-M8 16GB70D1Z	Hex socket head screw	2	17	1-M6 12GB77B12D9	Set screw M6 x 12	4
2	1-WSH8GB97D1Z	Flat washer	2	18	1-JMBS1403030005	Support bracket	1
3	1-JMBS1801030002-053W	Extension table	1	19	1-WSH10GB97D1B	Flat washer	2
4	1-M6 8GB77B12D9	Hex set screw M6 x 8	4	20	1-WSH10GB93B	Spring washer	2
5	1-JMBS1404030002	Table support pin assembly	1	21	1-J BS2401031008A	Table angle pointer	1
6	1-WSH4GB96D1Z	Large washer	1	22	1-M3 5GB818Z	Pan head screw M3 x 5	1
7	1-M4 10GB818Z	Pan head screw M4 x 10	1	23	1-JMBS1401032001	Gear shaft	1
8	1-M8GB6170B	Nut M8	1	24	1-JL29050002	Socket spanner	1
9	1-M8 40GB5781B	Hex bolt M8 x 40	1	25	1-JMBS1403030003	Rack	1
10	1-JMBS1403030002	Lower table trunnion	1	26	1-JMBS1403030008	Eccentric bushing	1
11	1-WSH8GB96D1B	Large washer	4	27	1-M6 16GB70D1B	Screw M6 x 16	1
12	1-WSH8GB93B	Spring washer	4	28	1-M8 16GB70D3Z	Hex socket screw M8 x 16	3
13	1-M8 25GB70D1B	Hex socket head screw	4	29	1-RVT2D5 5GB827C	Rivet	3
14	1-M10 25GB5783B	Hex bolt M10 x 25	2	30	1-JMBS1403030006	Angle scale label	1
15	1-WSH12GB97D1B	Flat washer	1	31	1-JMBS1801030100A-001L	Table	1
16	1-M12GB889D1B	Hex locking nut M12	1	32	1-M6 4GB77B12D9	Set screw M6 x 4	2
		-					2

Blade Tension Assembly



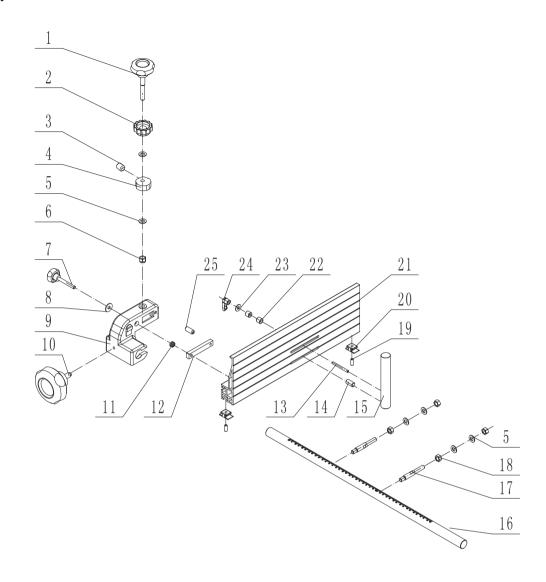
0	Part number	Description	ty	0	Part number	Description	ty
1	1-M6 30GB70D1Z	Hex socket head screw	1	17	1-SGSL-D125-d12A	Handwheel	1
2	1-M6GB6170Z	Hex nut M6	1	18	1-BRG51105GB301	Bearing	1
3	1-M8 10GB70D1Z	Hex socket head screw	2	19	1-JL26030018	Tension lever with riser block	1
4	1-WSH8GB5287Z	Large washer	2	20	1-BRG51201GB301	Bearing	1
5	1-JL26030001A	Support shaft	1	21	1-JMBS1403040007	Plate	1
6	1-JL26031000B	Blade tension bracket	1	22	1-WSH6GB93Z	Washer	2
7	1-JL26030013	Sliding Rail	1	23	1-M6 12GB5783Z	Hex bolt M6 x 12	2
8	1-PIN5 35GB879D1B	Roll pin	1	24	1-M5 12GB73B12D9	Set screw M5 x 12	1
9	1-JL26030009A	Upper wheel shaft hinge	1	25	1-JL26030020	Stud shaft	1
10	1-JMBS1801040001	Upper wheel shaft	1	26	1-M5 10GB77B12D9	Set screw M5 x 10	1
11	1-JL26030011	Spring	1	27	1-JL26030016-001S	Locking handle	1
12	1-JL26030002	Spring bushing	1	28	1-SGSL-D100-d10A	Hand wheel	1
13	1-M3GB6170B	Hex nut M3	1	29	1-M6 10GB80B12D9	Set screw M6 x 10	1
14	1-M3 16GB70D2B	Screw	1	30	1-JL26030021	Retainer ring	1
15	1-1904011	Handle Knob	1	31	1-JL26030017A	Support sleeve	1
16	1-M6 12GB80B12D9	Set screw M6 x 12	1				

Upper Guide Assembly



0	Part number	Description	ty	0	Part number	Description	ty
1	1-JMBS1801050006-001S	Locking handle M10	1	24	1-JMBS1801052003	Bearing sleeve	2
2	1-M8 20GB70D2B	Hex bolt M8 x 20	4	25	1-BRG6202-2RSGB276	Bearing	5
3	1-WSH8GB96D1B	Large washer	4	26	1-WSH8GB96D1B	Large washer	3
4	1-JL26040008	Guide bracket	1	27	1-JMBS1403014003	Guide shaft	2
5	1-M6 12GB77B12D9	Set screw M6 x 12	4	28	1-JMBS1403014008	Spring	1
6	1-1501006	Gear	1	29	1-JMBS1801052004	Upper guide shaft	1
7	1-JL26040006	Screw	1	30	1-JL26041004	Guide supporting rod	1
8	1-JL26040007	Fixed plate	1	31	1-M8 10GB77B12D9	Locking screw M8 x 12	1
9	1-BS5001050001	Guide bracket cover	1	32	1-BS5001052001	Upper guide support block	1
10	1-M8 16GB70D1B	Screw	4	33	1-KTSB-1-B-M8 63 25	Lock handle	1
11	1-JMBS1801050003	Spring piece	1	34	1-M6 30GB70D1B	Hex socket head screw	1
12	1-WSH6GB96D1Z	Large washer	1	35	1-JMBS1801050004	Slider bar	1
13	1-M6 10GB70D1Z	Hex socket head screw	1	36	1-M5 10GB818B	Pan head screw	2
14	1-JMBS1801051000C-114	Saw blade guard	1	37	1-BS6001050001	Rack	1
15	1-JMBS1404050002	Scale	1	38	1-WSH5GB97D1B	Flat washer	2
16	1-M4 10GB819D1B	Cross head screw M4 x 10	3	39	1-M5 12GB70D1B	Hex socket head screw	2
17	1-JMBS1401051003-001S	Lock handle	1	40	1-CLP12GB884B	Set screw collar	1
18	1-JMBS1401051004	Sleeve	1	41	1-M6 12GB77B12D9	Set screw M6 x 12	1
19	1-JMBS1403014002	Bearing sleeve	1	42	1-SGSL-D100-d12A	Hand wheel	1
20	1-JMBS1403014005	Spring	2	43	1-JL26020014B-001S	Small handle	1
21	1-JMBS1801052001	Upper guide	1	44	1-M5 8GB78B12D9	Set screw M5 x 8	1
22	1-JMBS1801052005-001S	Lock handle	2	45	1-JL26040003	Bushing	1
23	1-JMBS1801052007	Sleeve	2	46	1-JL26040004	Worm cylinder	1

Rip Fence Assembly



0	Part number	Description	ty
1	1-JMBS1403060009-001S	Adjust handle	1
2	1-JMBS1403060010-001S	Drift locking handle	1
3	1-M8 10GB80B	Hex screw M8 x 10	1
4	1-JMBS1403060004	Cam	1
5	1-WSH10GB97D1Z	Flat washer	6
6	1-M10GB889D1Z	Hex locking nut M10	1
7	1-JMBS1403060003-001S	Fence locking handle	1
8	1-WSH8GB96D1Z	Large washer	1
9	1-JMBS1403060001-053W	Fence carrier	1
10	1-JMBS1401063100	Locking handle	1
11	1-JMBS1403060007	Spring	1
12	1-JMBS1403060005	Sliding block	1
13	1-JMBS1403061002	Bolt	1
14	1-JL26061003	Bolt	1
15	1-JMBS1403061001	Bar	1
16	1-JMBS1403060006	Guide rail	1
17	1-J BS2001060003	Connecting rod	2
18	1-M10GB6170Z	Hex nut M10	4
19	1-M6 16GB77B12D9	Set screw M6 x 16	2
20	1-JMBS1401060001	Nylon plate	2
21	1-JMBS1404060001	Fence	1
22	1-JL93010018	Spacer	2
23	1-WSH6B97D1B	Flat washer	1
24	1-KTSB-1-A-M6 50	Lock knob	1
25	1-PIN6 26GB879D1B	Roll pin	1

EU Declaration of Conformity

Cert o EU / SABRE-450 / 1

Record Power Ltd,

Centenary House, 11 Midland Way, Barlborough Links, Chesterfield, Derbyshire, S43 4 A, UK declares that the machinery described:-

1. Type: Bandsaw

2. Model number: SABRE-450

3. Serial No

Conforms with the following directives:-

MACHINERY DIRECTIVE 2006/42/EC

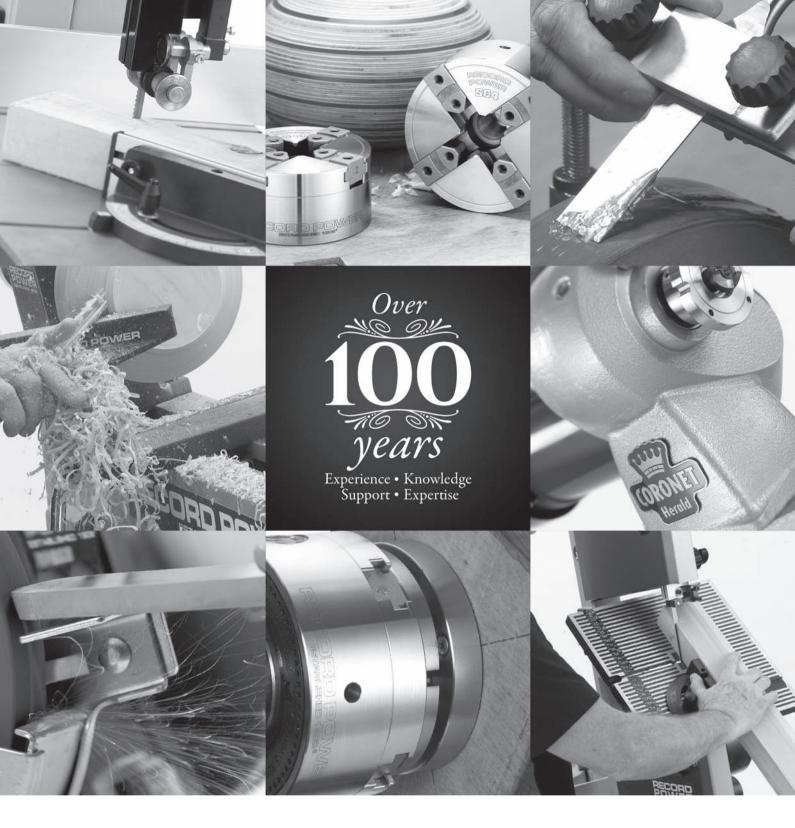
ELECTROMAGNETIC 2014/30/EU COMPATIBILITY DIRECTIVE EN 1807-1:2013

EN60204-1:2006 A1:2009 AC:2010

and conforms to the machinery example for which the EC Type-Examination Certificate No. BM 50374938 0001 has been issued by **TUV Rheinland LGA Products GmbH** at: Tillystrasse 2, D90431 N rnberg

and complies with the relevant essential health and safety requirements.

Andrew Greensted
Managing Director





Woodworking Machinery and Accessories

Record Power Ltd, Centenary House, 11 Midland Way, Barlborough Links, Chesterfield, Derbyshire S43 4 A

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