

RECORD POWER

ESTABLISHED 1909®

Original Instruction Manual

SS16V 16" Variable Speed Scrollsaw

54100 (UK version)
54101 (EP version)
54102 (AUS version)

Version 4.0
September 2015



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.



Always read the instructions provided before using woodworking equipment.

Important

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

Save this manual for future reference.

Contents

- 1** Explanation of Symbols
- 2** General Health & Safety Guidance
- 3** Record Power Guarantee
- 4** Specifications
- 5** Contents of the Package
- 6** Intended Use of the Scrollsaw
- 7** Assembly
- 8** Operation
- 9** Electrical Connection & Wiring Diagram
- 10** Dust Extraction
- 11** Scrollsaw Blade Choice
- 12** Parts List & Diagram
- EU Declaration of Conformity

1. Explanation of Symbols

**The symbols and their meanings shown below may be used throughout this manual.
Please ensure that you take the appropriate action wherever the warnings 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

Warnings



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 & 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.

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

WARNING: 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 'ON'

- 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 e.g. 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

2. General Health & Safety Guidance

complete stop.

- 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 2.5mm² 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 300mm 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 400mm. 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

2. General Health & Safety Guidance

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.
- 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.

3. 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 4XA 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.

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.

- 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 guarantee.
- 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.

4 Notice

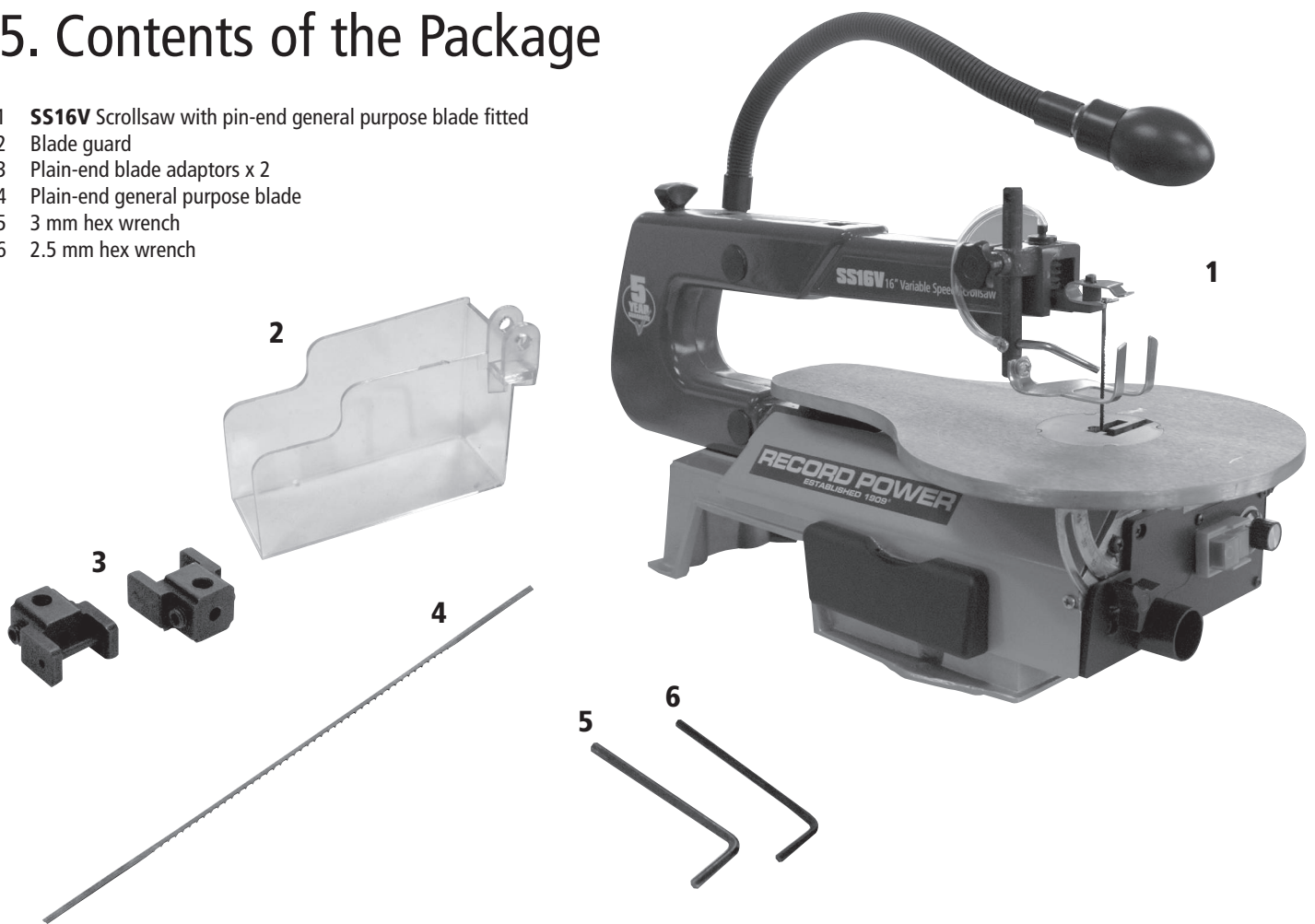
This Guarantee applies to all Products purchased from an Authorised Dealer of Record Power within the United Kingdom of Great Britain and Northern Ireland. Terms of Guarantee may vary in other countries – please check with the Authorised Distributor in your country (details of the Authorised Distributor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

4. Specifications

Throat depth:	406 mm (16")
Max depth of cut:	50 mm
Speeds:	550-1600 rpm
Table tilt:	0-45°
Voltage:	230 V
Frequency:	50 Hz
Motor input P1:	0.09 kW
Motor output P2:	0.042 kW
Motor speed:	1000 rpm
Full load current:	1.1 A
Size:	D630 x W280 x H315 mm
Weight:	12 kg
Noise emission:	Sound power level < 85 dB (A) Sound pressure level < 85 dB (A)

5. Contents of the Package

- 1 **SS16V** Scrollsaw with pin-end general purpose blade fitted
- 2 Blade guard
- 3 Plain-end blade adaptors x 2
- 4 Plain-end general purpose blade
- 5 3 mm hex wrench
- 6 2.5 mm hex wrench



6. Intended Use of the Scrollsaw

The SS16V scrollsaw is primarily designed for cutting wood up to a maximum thickness of 50 mm. It may also be used to cut many other materials, including plastic, non-ferrous metals, composite boards and bone. Care must be taken when using the SS16V to select the correct blade for the material type and thickness being cut, as well as the type of cut being made. Please see the blade manufacturer's instructions to ensure the correct blade is selected and the chapter of this manual entitled **Scrollsaw Blade Choice**.

7. Assembly

The SS16V is supplied almost fully assembled, only the dust blower pipe and blade guard must be fitted before use.

One end of the dust blower pipe is supplied unconnected as shown in **Fig 7.1**. This loose end must be connected to the bellows cap by pushing it over the cap as shown in **Fig 7.2**.

The clear plastic blade guard must be fitted to complete assembly. Take the nut, bolt and washers supplied and attach the guard to the top of the drop foot fixing pole as shown in **Fig 7.3**. Ensure one washer is either side of the guard as shown.

Location of the Scrollsaw



Please note: For best results the scrollsaw should be placed on a flat, level surface, ideally a suitable workbench with a minimum worktop thickness of 25 mm and fixed to the bench worktop using the 4 holes in the base of the machine as shown in Fig 7.4.

Fig 7.1

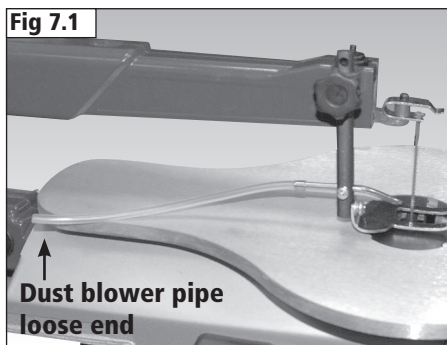


Fig 7.2

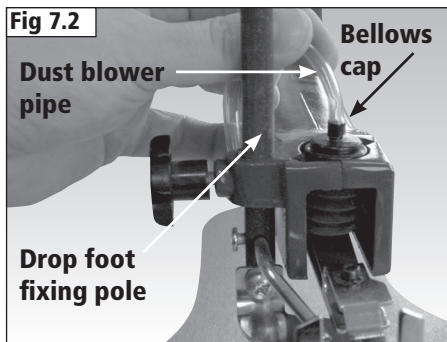


Fig 7.3

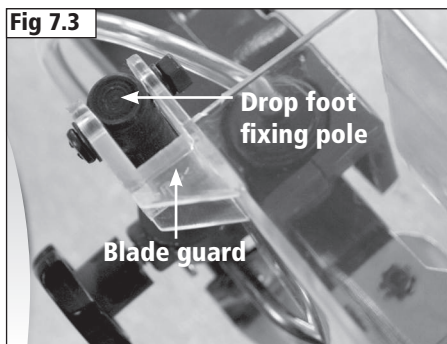
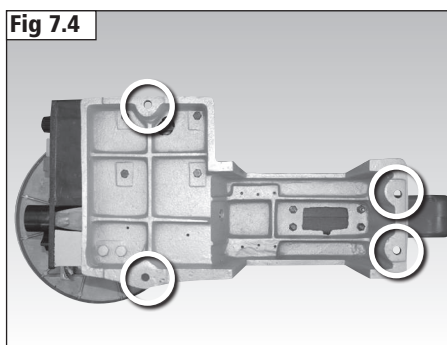


Fig 7.4



8. Operation

Fitting Scrollsaw Blades



WARNING: To prevent personal injury, always disconnect the plug from the power source before changing blades or making adjustments.

The **SS16V** Scrollsaw can accept both pin-end and plain-end blades.

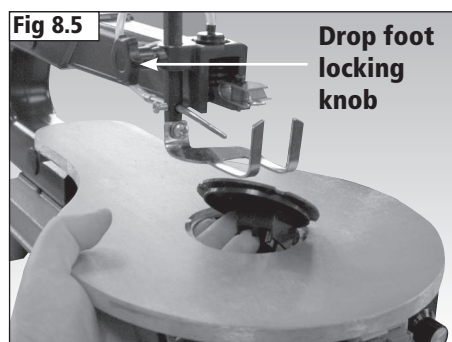
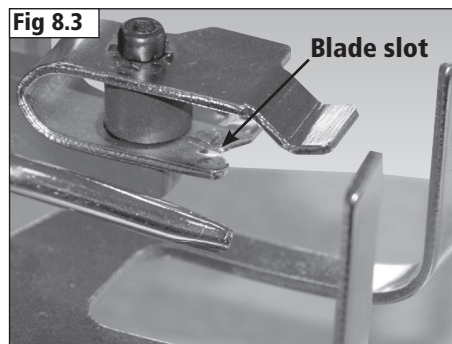
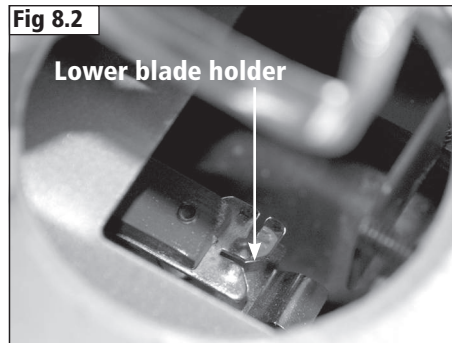
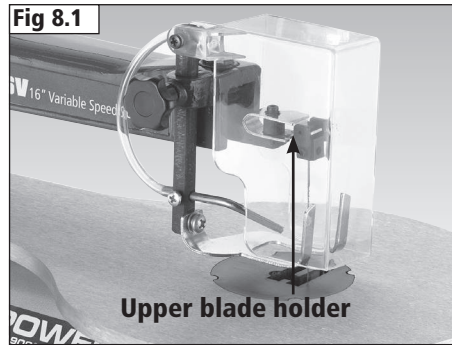
Fitting Pin-End Blades

The SS16V has 2 blade holders. The upper holder is located at the end of the arm as shown in **Fig 8.1** and the lower holder is beneath the table as shown in **Fig 8.2**, viewed through the table insert hole.

Each blade holder features a slot at the front designed to hold pin-end blades securely, as shown in **Fig 8.3**.

Before fitting the blade, ensure the tension is released by turning the blade tension knob anti-clockwise as shown in **Fig 8.4**.

To access the lower blade holder the table insert will need to be removed by pushing it upwards from beneath the table as shown in **Fig 8.5**. The drop foot must be raised to give the table insert enough room to be removed. Loosen the drop foot locking knob as shown in **Fig 8.5** to re-position.



8. Operation

Ensuring the teeth of the blade are pointing downwards, hook the end of the blade to the lower blade holder as shown in **Fig 8.6**.

Apply gentle pressure to the upper blade holder to lower its position and allow the top of the blade to be hooked in position on the blade holder as shown in **Fig 8.7**.

To apply tension to the blade, turn the blade tension knob clockwise until slight resistance is felt on the knob. Further tightening from this point is now required - for most blade types and applications, a further half turn to full turn of the knob is sufficient.



Please note: Over-tightening of the scrollsaw blade will shorten the blade's life and may cause it to break.

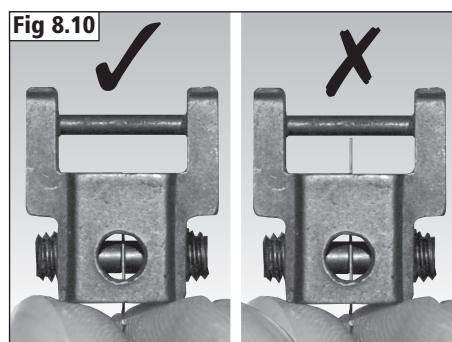
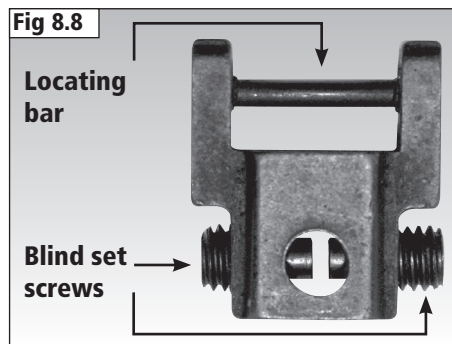
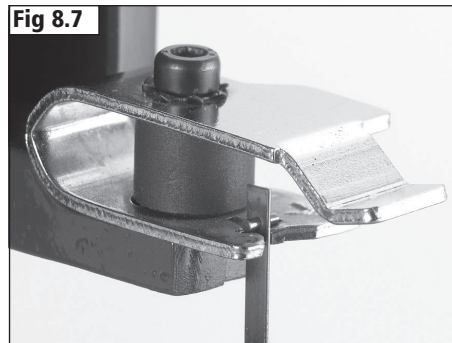
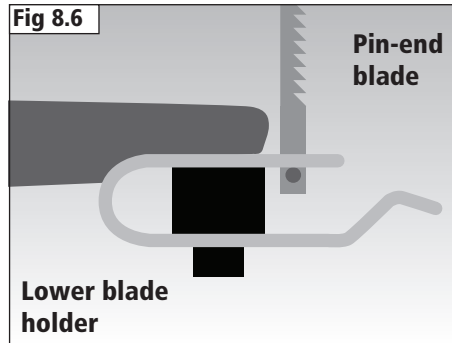
Fitting Plain-End Blades

The SS16V is supplied with 2 plain-end blade adaptors. Each adaptor features 2 blind set screws as shown in **Fig 8.8** which are used to hold the blade in place. The locating bars are used to attach the adaptors to the blade holders on the machine.

To ensure the blade adaptors are attached in the correct position on the blade, the plain blade setting jig on the arm of the SS16V should be used as shown in **Fig 8.9**.

To fit the blade to the adaptor, position one of the blind set screws to protrude approximately halfway into the hole as shown in **Fig 8.8** using a 2.5 mm hex wrench. Retract the second blind set screw enough to allow the blade end to be placed between them and tighten the second screw to secure the blade end in place.

The end of the blade should not protrude from the main body of the blade adaptor into the gap between the main body and the locating bar as this would stop the blade holder of the machine from passing through the gap to secure it in position, see **Fig 8.10**.



8. Operation

Fit one end of the blade into one of the blade adaptors as shown in **Fig 8.11**.

Fit the other end of the blade into the second adaptor as shown in **Fig 8.12**.

Before tightening fully, ensure the blade is positioned parallel with the blade adaptors and the arm of the machine as shown in **Fig 8.13**.

Before fitting the blade, ensure the tension is released by turning the blade tension knob anti-clockwise as shown in **Fig 8.4**.

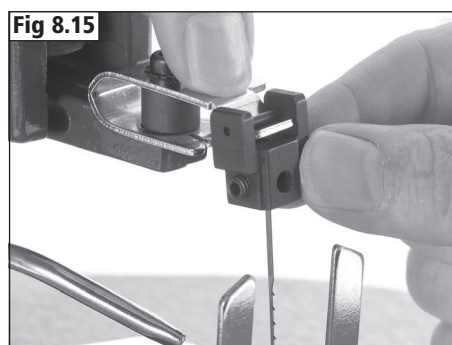
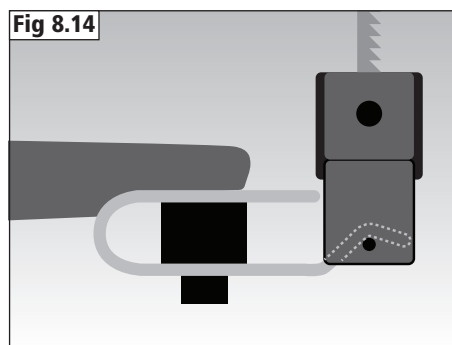
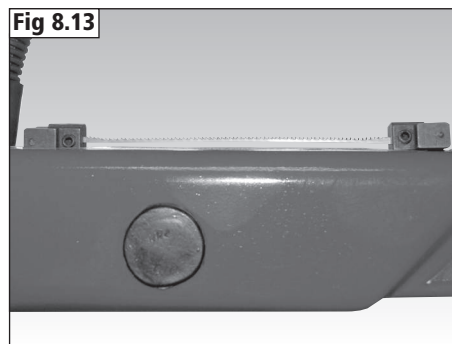
Ensuring the teeth of the blade are pointing downwards, hook the blade adaptor through the lower blade holder of the machine as shown in **Fig 8.14**.

Apply gentle pressure to the upper blade holder to lower its position and allow the blade adaptor to be hooked in position on the blade holder as shown in **Fig 8.15**.

To apply tension to the blade, turn the blade tension knob clockwise until slight resistance is felt on the knob. Further tightening from this point is now required - for most blade types and applications, a further half turn to full turn of the knob is sufficient.



Please note: Over-tightening of the scrollsaw blade will shorten the blade's life and may cause it to break.



8. Operation

Performing Cuts

After selecting and installing the correct blade type and setting the correct blade speed for the work, position the workpiece on the table.

Lower the drop foot on to the workpiece, so that it lightly rests on the surface of the material. Secure the foot in position with the drop foot lock knob, **Fig 8.16**, and lower the blade guard.



Take care to ensure fingers are kept clear of the blade whilst using the scrollsaw. Ensure the blade guard and drop foot are used during cutting.

Ensuring the material to be cut is not touching the blade, turn the power on by pressing the green button marked 'I', **Fig 8.17**.

When the saw has reached the required speed, gently push the workpiece into the blade to begin cutting. The speed can be adjusted by turning the speed control knob as shown in **Fig 8.17**.



Please note: In general, harder and thinner materials require finer saw teeth and higher speeds. Softer and thicker materials generally require slower speeds. Please see the blade manufacturer's instructions for further advice.

For cutting internal areas, first drill a hole through the area to be cut out. Pass the blade through the hole as shown in **Fig 8.18** and re-attach the blade to the upper holder. The internal area can now be cut.

Adjusting the Angle of the Table

Loosen the table locking knob, **Fig 8.19**, to allow the table to be tilted.

Place a small try square on the table next to the blade to ensure it is positioned at 90° to the blade as shown in **Fig 8.20**. If adjustment is needed, turn the table until it is at 90° then securely tighten the table locking knob.

After re-calibrating the angle of the table the degree scale pointer may also need adjusting. Loosen the screw holding the degree scale pointer with a Phillips screwdriver, **Fig 8.19**. Move the pointer to the 0° mark on the scale and re-tighten the screw.



Please note: The scale is a guide only. If extremely accurate cuts are required, perform practice cuts in scrap wood to determine if your angle settings are correct.

Setting the Table for Horizontal or Bevel Cutting

Loosen the table locking knob in order to position the table between 0 and 45° and re-tighten once the table is in the desired position.

Fig 8.16

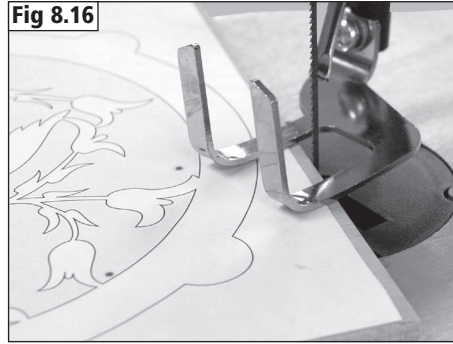


Fig 8.17

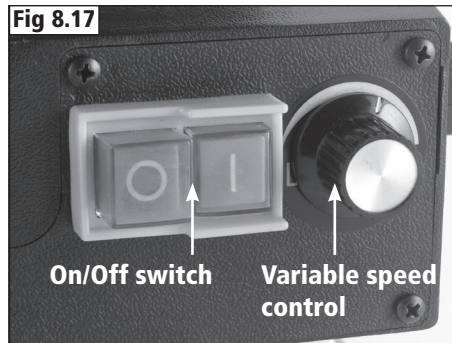


Fig 8.18

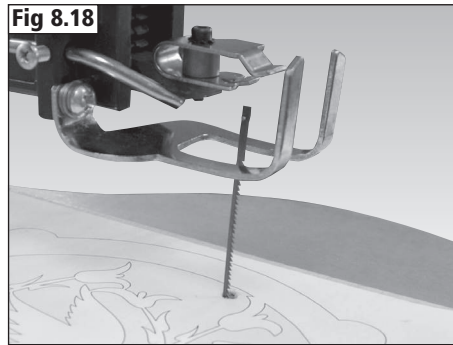


Fig 8.19

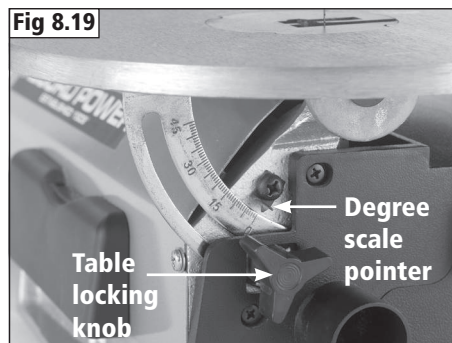
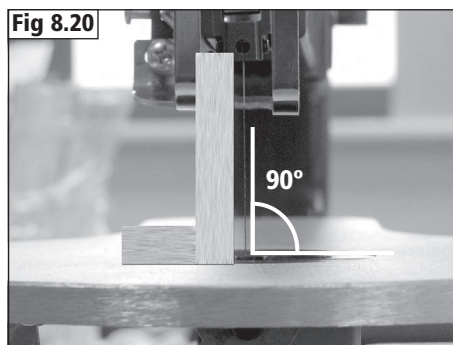


Fig 8.20



8. Operation

When cutting at angles, the drop foot should be tilted so it is parallel with the table surface, allowing it to rest flush against the workpiece. To tilt the drop foot, loosen the securing screw using a Phillips screwdriver, **Fig 8.21**, tilt the foot so it is parallel with the table then re-tighten the securing screw.

Cutting Workpieces Larger than 406 mm (16")

If the workpiece exceeds 406 mm (16") it may not be possible to cut into it with the blade facing forwards, as shown in **Fig 8.22**.

To cut large workpieces, the scrollsaw blade can be position at 90° to the machine arm, allowing the workpiece to pass freely from the right hand to the left hand side of the machine as shown in **Fig 8.22**.

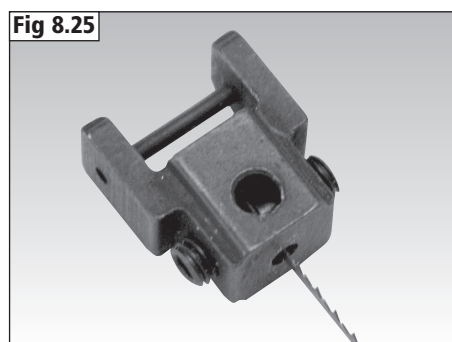
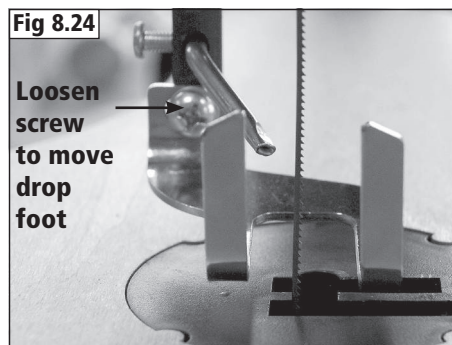
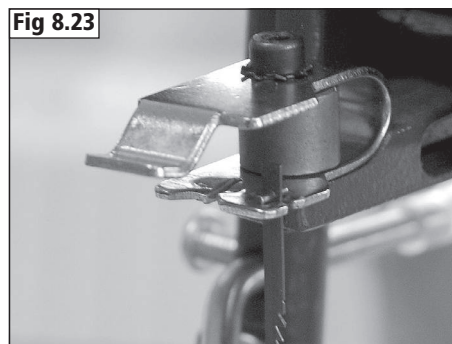
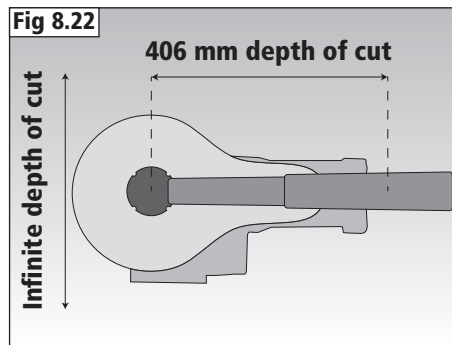
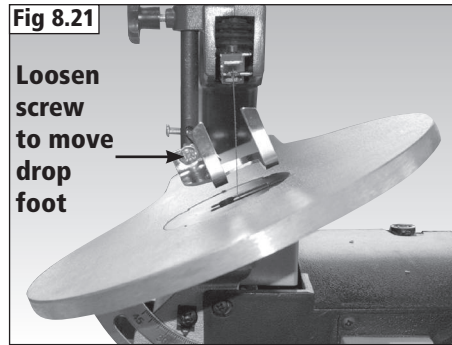
Fitting Pin-End Blades to the Scrollsaw at 90°

To fit pin-end blades to the machine at 90° follow the instructions given for fitting the blade in the standard position but use the slots to the right hand side of the blade holders as shown in **Fig 8.23**.

When fitting blades at 90°, the drop foot will have to be re-positioned so as not to touch the blade. To do so, loosen the phillips head screw, re-position the drop foot and re-tighten the screw as shown in **Fig 8.24**.

Fitting Plain-End Blades to the Scrollsaw at 90°

The plain-blade adaptors are supplied with their blind set screws installed in the correct holes for accepting blades in the standard position. The adaptors also feature 2 holes on the adjacent sides to these holes, see **Fig 8.25**.



8. Operation

Remove both blind set screw screws from each adaptor, thread them through the adjacent holes and fit the blade as shown in **Fig 8.26**. The plain-blade setting jig on the machine arm should be used for setting the adaptors in the correct positions as shown in **Fig 8.27**, with the adaptors placed on their sides.

The blade can now be fitted as shown in **Fig 8.28**. When the adaptors are fitted to the blade holders on the machine, the blade will be at 90° to the arm of the scrollsaw as shown.

When fitting blades at 90°, the drop foot will have to be re-positioned so as not to touch the blade. To do so, loosen the phillips head screw, re-position the drop foot and re-tighten the screw as shown in **Fig 8.24**.

Using the Work Light

To use the work light, position the flexible arm to illuminate the work piece as shown in **Fig 8.29**. When the power switch is turned on, the light will be operational.

In the event of a Blockage

Extreme care should be taken when cutting to prevent the blade from becoming trapped in the work piece. In the event that the blade does become trapped, switch the scroll saw OFF immediately by pressing the red button marked 'O' and wait for the machine to come to a complete stop. Disconnect the machine from the power supply before attempting to free the blade from the work piece.

In order to free the blade, first release the tension from the blade by rotating the tension knob anti-clockwise. It may then be necessary to gently prize apart the work piece to allow the blade to be pulled free. Once the blade is removed, check it for signs of damage and replace if necessary and adjust to the correct tension before attempting to re-start the machine.

Dust Extraction

The scrollsaw has a 35 mm diameter dust extraction outlet located at the front of the machine below the table. A dust extractor should be connected to the outlet using a hose and connector of the appropriate diameter. The Record Power DX1500B power tool hose and DX1500C stepped adaptor can be used for this purpose.

The dust extractor should be switch ON before starting to cut with the scrollsaw and then left running for a few seconds after the last cutting operation in order to clear any residual waste left within the outlet and hose.

Fig 8.26

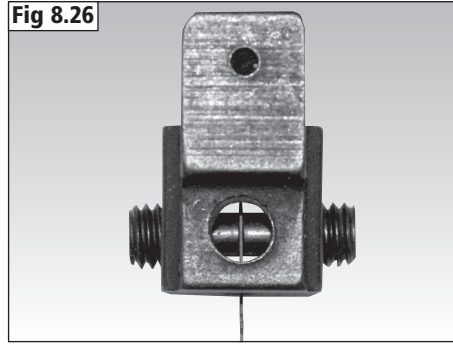


Fig 8.27

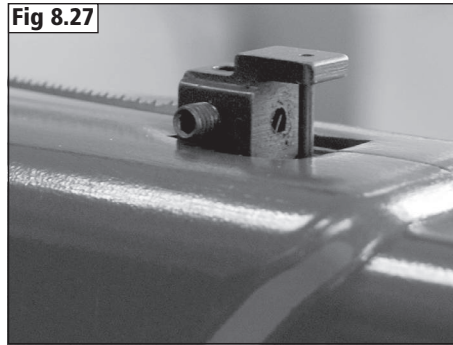


Fig 8.28

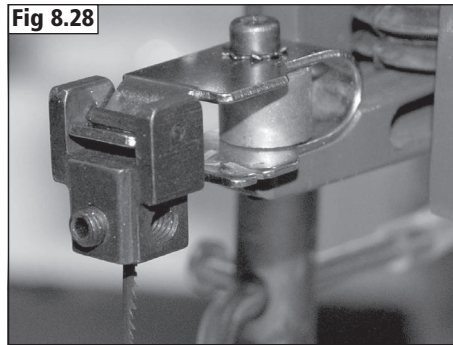
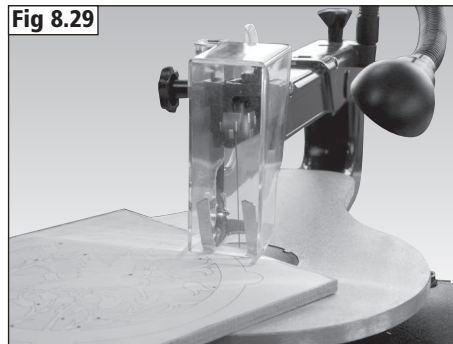


Fig 8.29



9. Electrical Connection & 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.

It is important that the machine is effectively earthed. Some machines will be clearly marked with the double insulated logo:



In this case there will not be an earth wire within the circuit.

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.

Where the current rating of the machine exceeds 13 A at 230 V, or if the machine is designated for use on a 400 V 3 phase supply a connector conforming to BS4343 (CEE17 / IEC60309) will be used.

230 V machines will be fitted with a blue 3 pin connector. The wiring for this type of this connector will be the same as shown above.

400 V, 3 phase machines will be fitted with a red 4 or 5 pin connector. The wiring for this type of connector is as shown below:

400 V (3 phase)

Brown: Live (L1)
Black: Live (L2)
Grey: Live (L3)
Blue: Neutral (N)
Green and Yellow: Earth (E)

The wire coloured brown must always be connected to the terminal marked 'L1'.

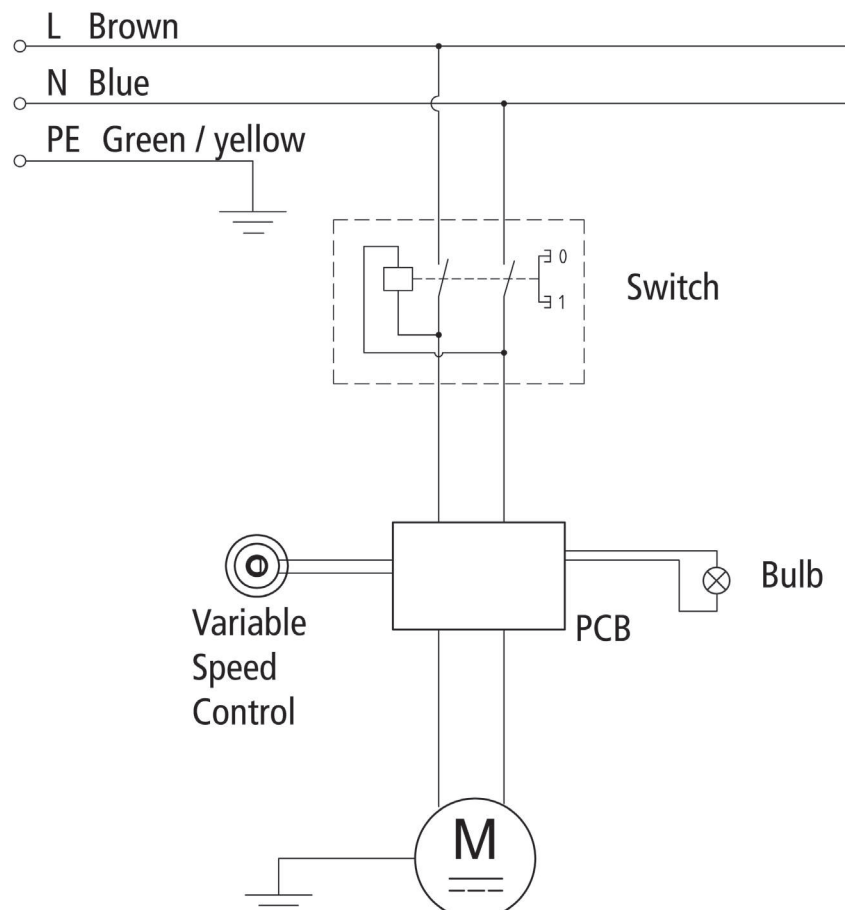
The wire coloured black must always be fitted to the terminal marked 'L2'.

The wire coloured grey must always be connected to the terminal marked 'L3'.

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

If in doubt about the connection of the electrical supply, always consult a qualified electrician.



10. Dust Extraction

The Importance Of Dust Extraction

Before the machine is started, ensure that adequate dust extraction provisions have been installed. Dust extraction is extremely important not only for health and safety but also for the correct upkeep of the machine. Saw dust can cause the machine not to operate properly or even fail completely. By keeping the machine free of large amounts of waste the performance will be optimised.

If a large amounts of MDF or toxic woods are to be cut we recommend that there is a good ventilation system in place and that in addition to proper extraction a mask or respirator be worn as minimum protection.

Record Power Extractors

Record Power offer a range of high quality dust extractors, we offer both drum and bag type extractors which filter down 0.5 micron providing protection from harmful fine dusts. All Record Power dust extractors & chip collectors have 100 mm inlets and hoses.

DX1000 High Filtration Dust Extractor

Drum type extractor, 45 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.

0.5 micron filtration

RSDE1 High Filtration Dust Extractor

Drum type extractor, 45 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.

0.5 micron filtration

RSDE2 High Filtration Dust Extractor

Drum type extractor, 50 litre capacity, single 1 kW motor, suitable for intermittent use ie must be switched off for 20 minutes every hour.

0.5 micron filtration

RSDE/2A High Filtration Dust Extractor with Auto Switching

Drum type extractor, 50 litre capacity, single 1 kW motor, auto switching allows the machine to be turned on and off as machines and power tools are operated. Suitable for intermittent use ie must be switched off for 20 minutes every hour. Maximum auto switch capacity tools up to 1.1 kW.

0.5 micron filtration

DX4000 High Filtration Dust Extractor

Drum type extractor, 80 litre capacity, Twin 1 kW motor, suitable for heavy usage ie if one motor is switched off for 20 minutes then the other can be used thus enabling continuous usage. Or both motors can be used simultaneously giving maximum suction but in this mode the extractor must be switched off for 20 minutes every hour. **0.5 micron filtration**

DX5000 High Filtration Dust Extractor

Bag type extractor, 200 litre capacity, Twin 1 kW motor, suitable for heavy usage ie if one motor is switched off for 20 minutes then the other can be used thus enabling continuous usage. Or both motors can be used simultaneously giving maximum suction but in this mode the extractor must be switched off for 20 minutes every hour. **0.5 micron filtration**

CX2000 Compact Chip Extractor

Medium capacity chip collector, with a powerful 0.56 kW induction motor. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

CX2600 Chip Collector

Large capacity chip collector, with a powerful 0.37 kW induction motor. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

Suitable for chip collection or finer dust using the optional filter cartridge

CX3000 Chip Collector

Larger capacity chip collector, with a more powerful 0.75 kW induction motor and heavy duty construction. An extremely smooth running unit suitable for continuous usage. Very quiet impeller system extracts dust and chippings.

Suitable for chip collection or finer dust using the optional filter cartridge

Air Cleaners

It is strongly advised to also use an air cleaner to remove the fine airborne dust present in the workshop which cannot be removed using machine extraction. Record Power offer a range of air cleaners suitable for all home workshops. Please contact your preferred stockist or visit www.recordpower.info.

	DX1000	RSDE1	RSDE2	RSDE/2A	DX4000	DX5000	CX2000	CX2600	CX3000
Bandsaws Circular saws Sanders Intermittent usage	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended			
Bandsaws Circular saws Sanders Heavy usage					✓ Recommended	✓ Recommended			
Planer Thicknessers Spindle Moulders Universals Intermittent usage	✓ Recommended	✓ Recommended			✓ Can be used	✓ Recommended	✓ Recommended	✓ Recommended	✓ Recommended
Planer Thicknessers Spindle Moulders Universals Heavy usage					✓ Can be used	✓ Recommended		✓ Recommended	✓ Recommended
Dust Extraction System Intermittent usage					✓ Can be used	✓ Recommended			

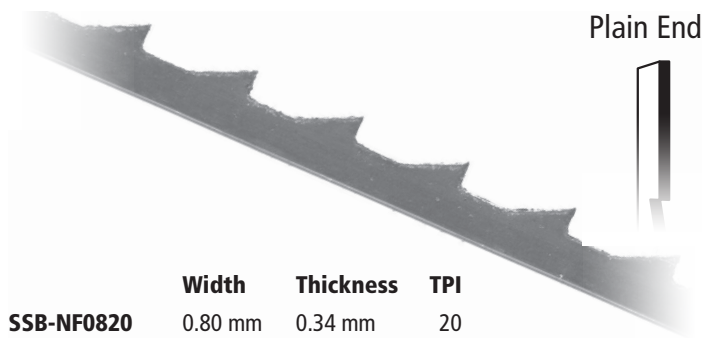
11. Scrollsaw Blade Choice

Choosing the correct blade for a particular application is critical to successful scrollsaw use.

Record Power scroll saw blades are a premium quality range of blades made in Germany. They have been specifically chosen to offer cutting solutions to the vast array of possibilities a scroll saw offers and include both plain and pin end types.

NF Blades (Available in packs of 12)

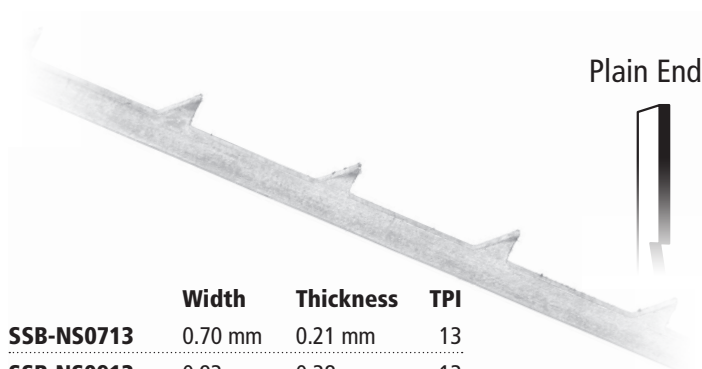
These HSS skip tooth, plain end blades are ideal for faster cutting. They give good chip clearance to minimise burning and create a smooth finish.



	Width	Thickness	TPI
SSB-NF0820	0.80 mm	0.34 mm	20
SSB-NF1115	1.10 mm	0.42 mm	15
SSB-NF1512	1.50 mm	0.48 mm	12

NS Blades (Available in packs of 12)

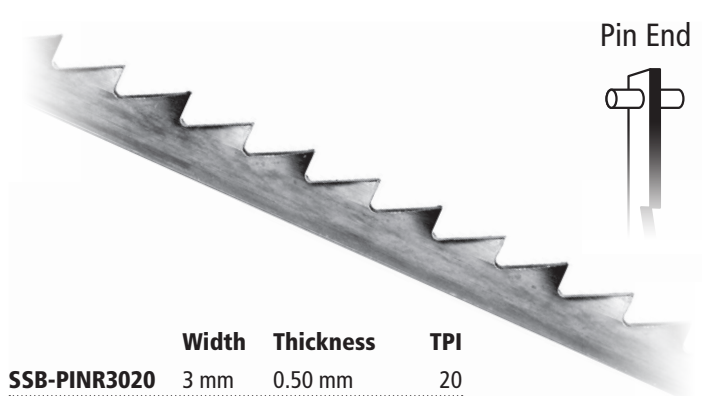
These HSS plain blades feature a reverse tooth skip pattern, giving a splinter free finish on both the top and bottom faces of the workpiece as well as providing excellent chip clearance and reducing burning.



	Width	Thickness	TPI
SSB-NS0713	0.70 mm	0.21 mm	13
SSB-NS0913	0.93 mm	0.38 mm	13
SSB-NS1408	1.35 mm	0.46 mm	8

Regular Pin End Blades (Available in packs of 12)

These blades are ideal for use in machines that only accept pin end blades, but can also be used in machines that feature universal jaws. Their width makes them ideal for straighter cuts and for more arduous cuts, such as deep hard woods. Perfect for small joints and box making.

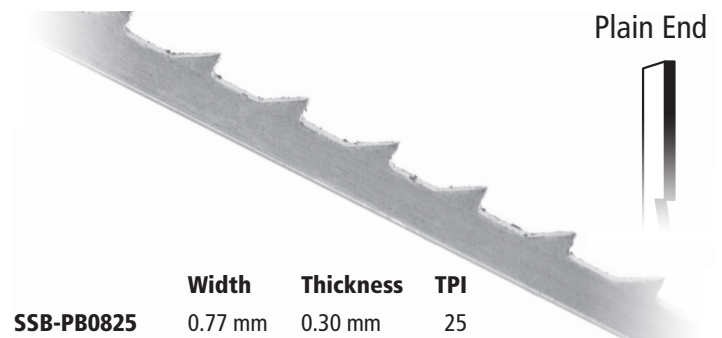


	Width	Thickness	TPI
SSB-PINR3020	3 mm	0.50 mm	20
SSB-PINR3015	3 mm	0.50 mm	15
SSB-PINR3050	3 mm	0.50 mm	10

Depending on blade thickness, width, tooth patterns and numbers, these blades will cut a large number of materials, including hardwood, softwood, MDF, plywood, plastic, non ferrous metals and horn.

PB Blades (Available in packs of 12)

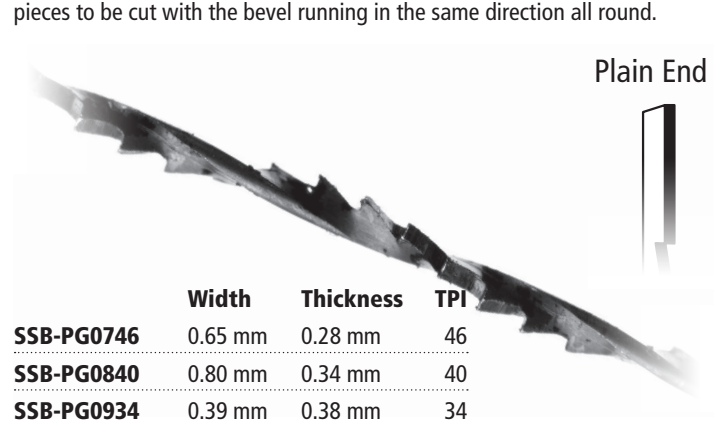
These plain end blades feature a positive cutting angle on the teeth, making for a more aggressive cut and are suitable for faster operation.



	Width	Thickness	TPI
SSB-PB0825	0.77 mm	0.30 mm	25
SSB-PB1017	1.03 mm	0.39 mm	16.5
SSB-PB1514	1.50 mm	0.48 mm	14

PG Blades (Available in packs of 12)

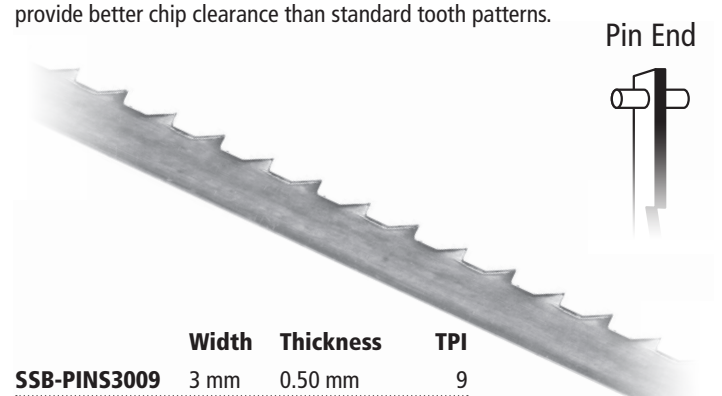
Featuring a spiral twist, these HSS plain end blades can cut in any direction without the need to turn the workpiece. This is particularly useful for projects that are too big for the throat depth of the scroll saw. They also allow for pieces to be cut with the bevel running in the same direction all round.



	Width	Thickness	TPI
SSB-PG0746	0.65 mm	0.28 mm	46
SSB-PG0840	0.80 mm	0.34 mm	40
SSB-PG0934	0.39 mm	0.38 mm	34

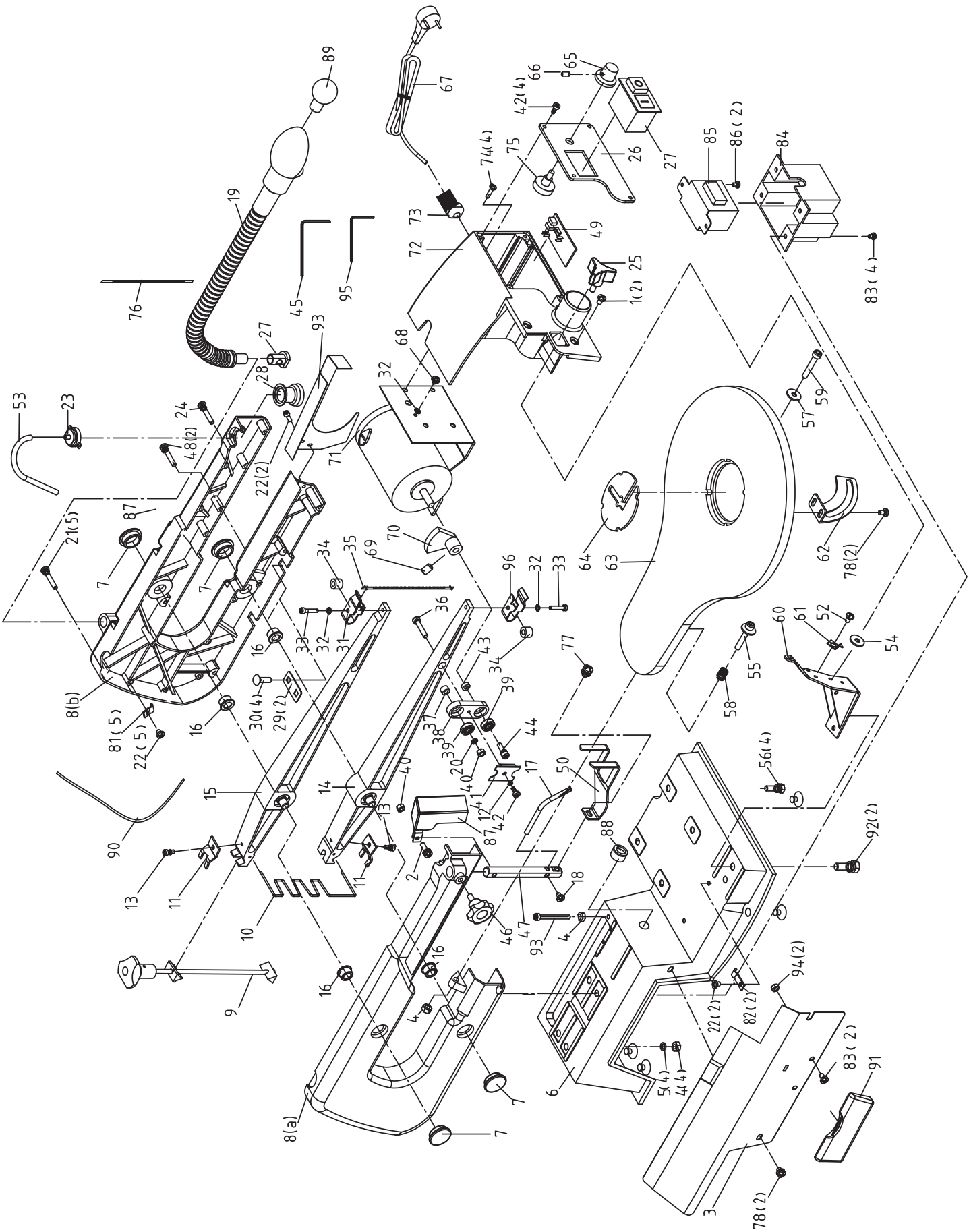
Skip Tooth Pin End Blades (Available in packs of 12)

These blades are ideal for use in machines that only accept pin end blades, but can also be used in machines that feature universal jaws. Their width makes them ideal for straighter cuts and for more arduous cuts, such as deep hard woods. The tooth pattern makes them ideal for faster cutting as they provide better chip clearance than standard tooth patterns.



	Width	Thickness	TPI
SSB-PINS3009	3 mm	0.50 mm	9
SSB-PINS2019	2 mm	0.25 mm	18.5

12. Parts List & Diagram



12. Parts List & Diagram

Item	Description	Quantity	Item	Description	Quantity
1	Philips screw M5 x 8	4	49	PCB	1
2	Philips screw, spring washer and flat washer assembly M5 x 25	1	50	Drop foot	1
3	Side cover	1	51	Flat washer D6	1
4	Hex nut, type I M6	5	52	Philips screw M6 x 10	1
5	Standard spring washer D6	4	53	PVC pipe	1
6	Base HT150	1	54	Big washer D6	1
7	Oil cap	4	55	Hex socket screw and flat washer assembly M6 x 40	1
8a	Left arm housing	1	56	Hex socket screw and spring washer assembly M6 x 20	4
8b	Right arm housing	1	57	Flat washer D6	1
9	Tension bolt assembly	1	58	Spring	1
10	Extension spring	1	59	M6 x 40 socket head screw	1
11	Pressure plate	2	60	Work table bracket	1
12	Standard spring washer D4	1	61	Pointer	1
13	Philips screw and spring washer assembly M4 x 10	2	62	Bevel scale	1
14	Lower arm	1	63	Work table	1
15	Upper arm	1	64	Work table insert	1
16	Arm bearing	4	65	Speed adjusting knob	1
17	Blast pipe	1	66	Socket head cap screw M5 x 6	1
18	Philips screw M5 x 6	1	67	Power cord 3 x 18 AWG	1
19	Light assembly	1	68	Philips screw, spring washer and flat washer assembly M4 x 8	2
20	Standard spring washer D5	1	69	Socket head cap screw M8 x 12	1
21	Philips screw, spring washer assembly M5 x 35	5	70	Eccentric wheel	1
22	Philips screw M4 x 6	9	71	DC motor Z56 (230 V)	1
23	Bellows cap	1	72	Switch box	1
24	Philips screw, spring washer assembly M5 x 28	1	73	Cord clamp	1
25	Table lock knob	1	74	Philips screw M4 x 10	4
26	Switch fixing board	1	75	Potentiometer C104	1
27	Switch	1	76	Blade 18 TPI	1
28	Bellows	1	77	Philips screw, spring washer and flat washer assembly M6 x 10	1
29	Fixing plate	2	78	Philips screw and flat washer assembly M5 x 8	4
30	Carriage bolt M6 x 20	4	79	Holder handle	2
31	Upper blade support	2	80	Spring washer D6	1
32	Star washer D4	4	81	Clip 1	5
33	Hex Socket screw M4 x 20	2	82	Clip 2	2
34	Support cushion cover	2	83	Philips screw M4 x 8	6
35	Blade 15 TPI	1	84	Transformer box	1
36	Hex Socket Screw M5 x 25	1	85	Transformer	1
37	Big cushion	1	86	Philips screw M4 x 6	2
38	Eccentricity connector assembly	1	87	Protection cover	1
39	Bearing 625Z (80025)	2	88	Wire sheath	1
40	Hex nut M5	1	89	Bulb 12V / 10 W	1
41	Clamping board	1	90	Wiring harness	1
42	Self tapping screw ST4.2X9.5	5	91	Tool box	1
43	Washer	1	92	Hex bolt and spring washer assembly M8 x 20	2
44	Hex Socket screw, spring washer assembly M5 x 16	1	93	Guard plate	1
45	Wrench S3	1	94	M4 hex nut	2
46	Drop foot lock knob	1	95	2.5 mm hex wrench	1
47	Drop foot fixing pole	1	96	Blade subframe	1
48	Philips screw and spring washer assembly M5 x 30	2			

EU Declaration of Conformity

Cert No: EU / SS16V / 1

Record Power Ltd, Centenary House, 11 Midland Way, Barlborough Links, Chesterfield, Derbyshire S43 4XA
declares that the machinery described:-

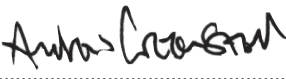
- 1 Type: Scroll Saw
- 2 Model No: SS16V
- 3 Serial No

Conforms with the following directives:-

MACHINERY DIRECTIVE (repealing / replacing Directives)	2006/42/EC
LOW VOLTAGE DIRECTIVE	2006/95/EC
ELECTROMAGNETIC COMPATIBILITY DIRECTIVE	2004/108/EC EN55014-1:2006+A1+A2 EN55014-2:1997+A1+A2 EN61000-3-2:2006+A1+A2 EN61000-3-3:2013

and conforms to the machinery example for which the
EC Type-Examination Certificate No. AN501609670001, AM501609690001, AE501629190001
at: Am Grauen Stein, D-51105. Cologne, Germany

and complies with the relevant essential health and safety requirements.

Signed  Dated: 01.09.2015
Andrew Greensted
Managing Director



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ESTABLISHED 1909®

Woodworking Machinery & Accessories

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