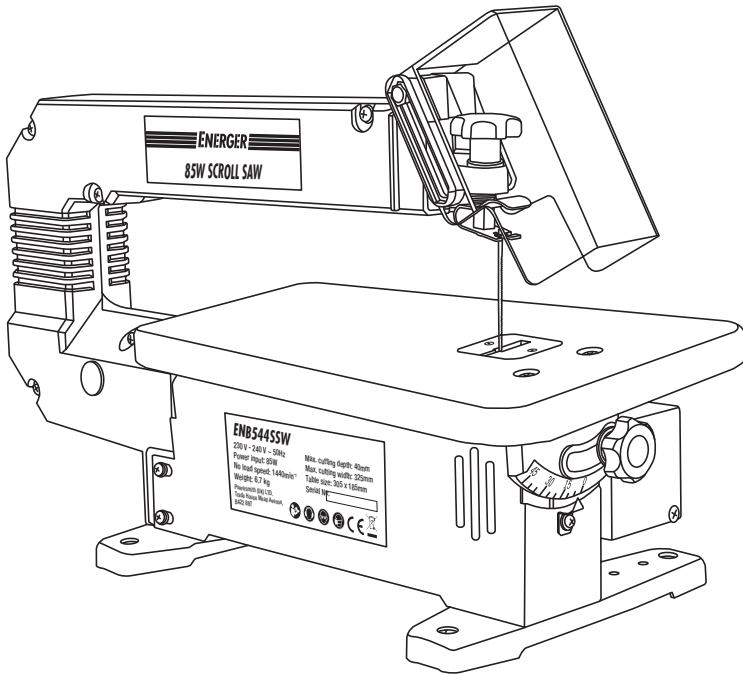


# ENERGER

## 85W Scroll Saw



# ENB544SSW

Barcode: 5052931253654



**WARNING! Read the instructions before using the product!**



Thank you for choosing a product **ENERGER** it will give you full satisfaction in your craft in the work.

The scroll saw is a product easy to use, it comes with accessories. For best use, you must read this notice. It will provide key information on the functions of the device and the rules to follow for maintenance.

Please keep this manual for future reference later.

# Let's get started...

These instructions are for your safety. Please read through them thoroughly before use and retain them for future reference.



## Getting **started**... 03

<b>Your product</b>	04
<b>Technical and legal information</b>	05
<b>Before you start</b>	12



## In more **detail**... 15

<b>Product functions</b>	16
<b>Care and maintenance</b>	19
<b>Trouble shooting</b>	27
<b>Recycling and disposal</b>	29
<b>Guarantee</b>	29
<b>EC declaration of conformity</b>	30



## Technical specifications

### General

- > **Input Voltage** : 230-240V~50Hz
- > **Power Input** : 85W
- > **No load speed** : 1440min<sup>-1</sup>
- > **Max. cutting depth** : 40mm
- > **Max. cutting width** : 325mm
- > **Insulation Class** : Class I
- > **Table size** : 305x185mm
- > **Table tilting range** : 0°~45°
- > **Blade Length** : 133mm
- > **Width** : 2.6mm
- > **Teeth** : 18TPI
- > **Thickness** : 0.25mm
- > **Net Weight** : 6.7kg

### VIBRATION

The European Physical Agents (Vibration) Directive has been brought in to help reduce hand arm vibration syndrome injuries to power tool users. The directive requires power tool manufacturers and suppliers to provide indicative vibration test results to enable users to make informed decisions as to the period of time a power tool can be used safely on a daily basis and the choice of tool.

Further Advice can be found at [www.hse.gov.uk](http://www.hse.gov.uk)


<b>Sound level according to EN 61029</b>	Sound pressure level $L_{pA}$ : 75.4dB(A)
	Sound power level $L_{WA}$ : 88.4dB(A)
	Uncertainty $K_{pA}, K_{WA}$ : 3dB(A)
<b>Vibration total values (triax vector sum) determined according to EN 61029:</b>	
<b>Work mode description 1 (if required by the relevant Part 2)</b>	Vibration emission value $a_n = 3.0m/s^2$
	Uncertainty $K = 1.5m/s^2$

The declared vibration emission value should be used as a minimum level and should be used with the current guidance on vibration.

Calculating the actual period of the actual period off use can be difficult and the HSE website has further information.

The declared vibration emission been measured in accordance with a standardised

test stated above and may be used to compare one tool with another. The declared vibration emission value may also be used in a preliminary assessment of exposure.

 **Warning!** The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used dependant on the following examples and other variations on how the tool is used:

How the tool is used and the materials being cut or drilled.


The tool being in good condition and well maintained.

The use the correct accessory for the tool and ensuring it is sharp and in good condition.

The tightness of the grip on the handles.

And the tool is being used as intended by its design and these instructions.

### **This tool may cause hand-arm vibration syndrome if its use is not adequately managed**

 **Warning!** identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time). Note The use of other tools will reduce the users' total working period on this tool.

Helping to minimise your vibration exposure risk.

ALWAYS use sharp chisels, drills and blades.

Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate)

Avoid using tools in temperatures of 10°C or less.

Plan your work schedule to spread any high vibration tool use across a number of days.

Health Surveillance

All employees should be part of an employer's health surveillance scheme to help identify any vibration related diseases at an early stage, prevent disease progression and help employees stay in work.

### **Important note**

Remove the mains plug from socket before carrying out any adjustment or servicing.

Ensure your mains supply voltage is the same as your tool rating plate voltage.

## Symbols

On the product, the rating label and within these instructions you will find among others the following symbols and abbreviations.

Familiarise yourself with them to reduce hazards like personal injuries and damage to property.

V~	Volt	Hz	Hertz
W	Input power	kg	Kilogram
min <sup>-1</sup>	Per minute	dB(A)	Decibel (A-rated)
yyWxx	Manufacturing date code; year of manufacturing (20yy) and week of manufacturing (Wxx);		



Caution / Warning.



Wear hearing protection.



Read the instruction manual.



Wear eye protection.



Wear gloves.



Wear respiratory protection.



Switch the product off and disconnect it from the power supply before assembly, cleaning, adjustments, maintenance, storage and transportation.



The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.



WEEE symbol. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist.

Check with your Local Authority or local store for recycling advice.

## Safety warnings

### GENERAL SAFETY INSTRUCTIONS



**WARNING!** To ensure safe operation when using your scroll saw, make sure you follow basic safety principles to reduce risk of personal injury, electric shock and fire. Please read the following instructions prior to operating this product and keep for future use.

**SAVE THESE INSTRUCTIONS****1. Keep work area clear**

- > Cluttered areas and benches invite injuries.

**2. Consider work area environment**

- > Do not expose tools to rain.
- > Do not use tools in damp or wet locations.
- > Keep work area well lit.
- > Do not use tools in the presence of flammable liquids or gases.

**3. Guard against electric shock**

- > Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).

**4. Keep other persons away**

- > Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

**5. Store idle tools**

- > When not in use, tools should be stored in a dry locked-up place, out of reach of children.

**6. Do not force the tool**

- > It will do the job better and safer at the rate for which it was intended.

**7. Use the right tool**

- > Do not force small tools to do the job of a heavy duty tool.
- > Do not use tools for purposes not intended; for example do not use circular saws to cut tree limbs or logs.

**8. Dress properly**

- > Do not wear loose clothing or jewellery, they can be caught in moving parts.
- > Non-skid footwear is recommended when working outdoors.
- > Wear protective hair covering to contain long hair.

**9. Use protective equipment**

- > Use safety glasses.
- > Use face or dust mask if working operations create dust.

**10. Connect dust extraction equipment**

- > If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

**11. Do not abuse the cord**

- > Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

**12. Secure work**

- > Where possible use clamps or a vice to hold the work. It is safer than using your hand.

**13. Do not overreach**



- > Keep proper footing and balance at all times.

#### **14. Maintain tools with care**

- > Keep cutting tools sharp and clean for better and safer performance.
- > Follow instruction for lubricating and changing accessories.
- > Inspect tool cords periodically and if damaged have them repaired by an authorised service facility.
- > Inspect extension cords periodically and replace if damaged.
- > Keep handles dry, clean and free from oil and grease.

#### **15. Disconnect tools**

- > When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

#### **16. Remove adjusting keys and wrenches**

- > Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

#### **17. Avoid unintentional starting**

- > Ensure switch is in "off" position when plugging in.

#### **18. Use outdoor extension leads**

- > When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.

#### **19. Stay alert**

- > Watch what you are doing, use common sense and do not operate the tool when you are tired.

#### **20. Check damaged parts**

- > Before further use of tool, 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, mounting and any other conditions that may affect its operation.
- > A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual.
- > Have defective switches replaced by an authorised service centre.
- > Do not use the tool if the switch does not turn it on and off.

#### **21. Warning**

- > The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.

#### **22. Have your tool repaired by a qualified person**

- > This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

### **HEALTH ADVICE**



**Warning!** When drilling, sanding, sawing or grinding, dust particles will be produced. In some instances, depending on the materials you are working with, this dust can be particularly harmful to you (e.g. lead from old gloss paint). You are advised to consider the risks associated with the materials you are working with and to reduce the risk of exposure. You should:

- Work in a well-ventilated area.
- Work with approved safety equipment, such as those dust masks that are specially designed to filter microscopic particles.

### ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR TOOLS

- > Before operator the machine a thorough check is recommended to make sure that there are no missing, or damaged parts, if so turn the switch off, remove the plug from the power source and replace the missing or damaged parts.
- > Ensure that the teeth of the saw point downwards prior to using the machine.
- > The scroll saw should be bolted securely to a stand or work bench before any operations are performed.
- > Never exert pressure on the sides of the saw blade because it may break.
- > Check wooden work pieces for possible protruding nails etc. and remove these.
- > To avoid any injuries during moving the saw from one location to another, make sure that the plug is unplugged from the power source.
- > An operator should avoid the following for maximum safety.
  - Cutting small pieces of material where the hand is close to the blade.
  - Awkward hand positions where a sudden slip could cause the hand to move into the blade.
  - Blade breakage due to too much tension on the blade, make sure that the tension is correct.
  - Losing control of the workpiece.
- > When backing the blade out of the workpiece the blade may bind in the kerf, this is caused by sawdust clogging up the kerf. If this happens, turn the switch off, remove the plug from the power source, wedge open the kerf and back the blade out of the workpiece.
- > Never leave the scroll saw running and unattended.



**WARNING! Some dust particles created by power sanding, sawing, grinding, drill and other construction jobs contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending upon how often you do this type of work. To reduce your exposure to these chemicals:

- Work in a well-ventilated area.
- Work with approved safety equipment, such as those dust masks that are specially designed to filter microscopic particles.

## Unpack

---

- > Unpack all parts and lay them on a flat, stable surface.
- > Remove all packing materials and shipping devices if applicable.
- > Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
- > Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

## You will need

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(items not supplied)

- > Phillips screwdriver
- > Sharp-nose pliers
- > Combination square
- > 13 mm Spanner



**WARNING!** Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious injury.

## Mounting protective guard

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Your scroll saw is fully assembled, except for the protective guard (1), To attach this components, proceed as follows:

- > Line up the slotted hole in the protective guard (1) with the hole in the upper arm casing, and insert the bolt (11) from left side as shown in Fig. 1.
- > Tighten the knurled nut (12) sufficient on the right side, so that the guard is firm but capable of movement. Do not over tighten.

> Align the opening of the retaining collar (13) with the sharp-nose pliers (not supplied) to the groove (14) on the bolt (11), then push down the retaining collar (13), and secure it to the groove. (Fig. 2)

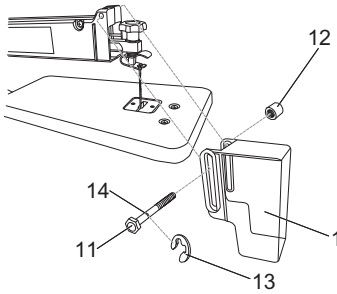


Fig. 1

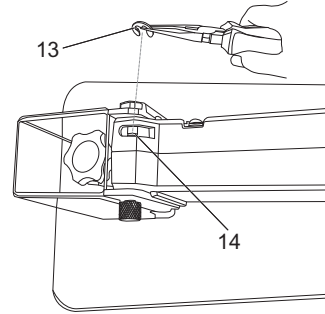


Fig. 2

## Mounting your saw

Your scroll saw is provided with 4 mounting holes (10), and it is strongly recommended that you mount the machine on a solid surface. In order to reduce noise and vibration, a pad (15) between the saw and the workbench is further recommended. The best dimensions being - 24" x 12" x 1/2". Insert the bolts M8 x 50mm (16), spring washers M8 (17), flat washers M8 (18) and nut M8 (19) into the holes in turns as shown in Fig. 3. If this is done, do not over-tighten the mounting bolts with 13mm spanner (not supplied) but leave some vibration absorbing "cushion" in the pad.

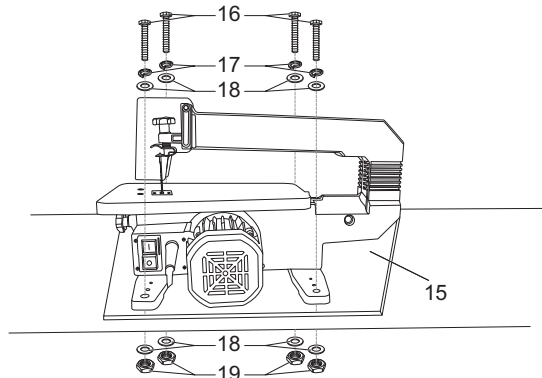


Fig. 3

## To align the bevel indicator

- > Loosen the table bevel lock knob (4) and move the table until it is approximately perpendicular, or at a right angle to the blade. (Fig. 4)
- > Use a small square (20) (not supplied) to set the table at 90° to the blade. (Fig. 5)
- > When the space between the square and the blade is minimal tighten the bevel lock knob (4).

The table should now be approximately 90° to the blade. Two set screws are provided on rear table for accurate adjustment of 90° and 45° cutting.

- > Loosen the screw holding the bevel scale pointer and adjust pointer to 0°. Tighten the screw. Remember the bevel scale is a convenient guide but should not be relied upon for precision. Make practice cuts in scrap wood to determine if your angle settings are correct. Adjust the table as required. (Fig. 6)

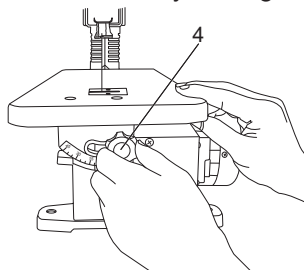


Fig. 4

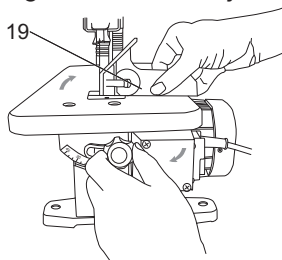


Fig. 5

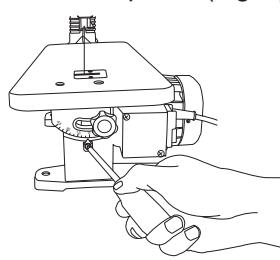


Fig. 6

## Switch ON/OFF

To start the machine, press the on/off switch (8) to ON position ("I"). To stop, press the switch to OFF position ("O").

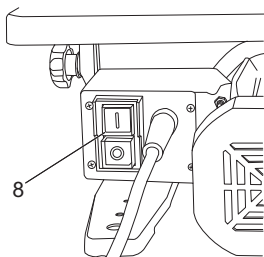


Fig. 7

## In more detail...



<b>Product functions</b>	16
<b>Care and maintenance</b>	19
<b>Trouble shooting</b>	27
<b>Recycling and disposal</b>	29
<b>Guarantee</b>	29
<b>EC declaration of conformity</b>	30

This scroll saw is designed for cutting wood pieces within the maximum recommended capacity with the exception of any material with risk of ignition, explosion or release of hazardous or dangerous to the user or environment.

Limitation of wood piece is 325mm wide and 40mm thick (at 90 °).

This device is intended solely for private use and not industrial or household. Any other use, other than that indicated in the instructions, may cause damage to the device and represent a serious hazard to the user.

Only accessories of the same type as the one supplied with the product are allowed. Do not use this unit in the rain or other wet conditions.



**NOTE:** Before using the tool, read the instruction book carefully.

## Bevel cutting

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When cutting bevels, set the table to your desired angle using the pointer as an indicator.

It should be remembered however that the bevel scale is a convenient indicator only, it is not guaranteed to be 100% accurate. Where absolute accuracy is required, always double check with a protractor before starting a cut.

## Scroll saw operating characteristics

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The scroll saw's unique ability is cutting intricate curves which other saws cannot do. A scroll saw can also be used for straight line cutting such as cross cuts, ripping and bevels, The following is a list of points to remember when using a scroll saw.

- > The saw does not cut wood by itself. You feed the workpiece into the blade, letting the blade cut the wood as you move the piece ahead.



- > You must guide the wood into the blade SLOWLY, because the teeth are very small, and cut ONLY on the down stroke. If you push the wood into the blade too rapidly, you can easily break the blade.
- > Although the capacity of the saw accepts wood up to 40mm thick, better results are obtained with wood no more than 20mm thick. For wood thicker than 20mm, you must guide the wood into the blade very slowly, taking care not to bend or twist the blade.
- > The teeth on the blade will wear out sooner or later. The blade must therefore be replaced often to obtain the best cutting results. A blade will stay sharp for ½ hour to 2 hours of continuous running, depending on the material being cut.
- > Be aware that the blade has a tendency to follow the grain of the wood - the line of least resistance. You can compensate for this by watching the grain carefully and guiding the wood past the saw blade.
- > If you are not familiar with scroll saws, there will naturally be a learning period - a period to learn the saw itself, and a period to learn how the wood and saw work together. Expect some blade breakages, Scroll Saw blades are fairly fragile - not the same types of blade you find on a handsaw or circular saw.

## Straight line cutting

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A little practice will be necessary in order to create a straight line cut. This is due to the very design and nature of the machine itself. The saw blade is quite fragile and due to several different influences, will tend to wander off line. These influences include the following:

- > Blade tension. A slack blade will naturally wander off line.
- > Condition of the blade. A dull blade requires a greater effort to guide it through the work. Thereby tending to force it off line.
- > Blade holders misaligned. The holders are secured with a single hex. socket head screw. Slacken the screw and adjust the holder so as to align correctly. The blade should be in line with the table, and not twisted.

## Cutting intricate patterns

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One capability a scroll saw has that other saws do not, is cutting intricate patterns inside a workpiece. To do this, you should adopt the following procedure:

- > Drill a 1/4" hole in the middle of the workpiece, in a area which will not be a part of the finished object.
- > Switch off and unplug the machine from the supply.
- > Remove the blade from the machine.
- > Place the workpiece on the table, with the 1/4" hole over the access hole in the table.
- > Replace the blade, through the hole in the workpiece, (teeth downwards), and Re-tension the blade.
- > Plug the saw back in. Check to ensure that the workpiece is not touching the blade before switching ON.

When you are finished doing the work inside the workpiece, turn the saw off, unplug it, remove the blade, remove the workpiece, reinstall the blade, and plug the saw back in.

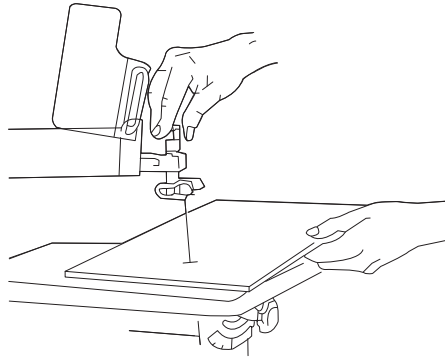


Fig. 8

## The golden rules for care



**WARNING!** Always switch the product off, disconnect it from the power supply and let the product cool down before performing inspection, maintenance and cleaning work!



- > Keep your machine and its cord clean. The outside of the machine can be cleaned using a damp soft cloth with a mild detergent if required.
- > Regular and proper cleaning will help ensure safe use and prolong the life of the product.
- > An occasional coat of paste wax on the work table will allow the wood being cut to glide smoothly across the work surface.
- > Inspect the product before each use for worn and damaged parts. Do not operate it if you find broken and worn parts.



**WARNING!** Only perform repairs and maintenance work according to these instructions! All further works must be performed by a qualified specialist!

## General operation

- > Some maintenance products and solvents may damage the plastic parts; these include products containing benzene, trichloroethylene, chloride and ammonia.
- > Take special care to keep the ventilation inlets/outlets free from obstruction; cleaning with a soft brush followed by a compressed air jet will usually be sufficient to ensure acceptable internal cleanliness. Wear eye protection when carrying out cleaning. If the supply cord needs replacing, the task must be carried out by the manufacturer, the manufacturer's agent, or an authorised service centre in order to avoid a safety hazard.
- > Clean the product with a dry cloth. Use a brush for areas that are hard to reach.
- > Switch the product off immediately if you are disturbed while working by other people entering the working area.
- > Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the product.



**CAUTION!** Do not use cleaning agents to clean the plastic parts of the tool. A mild detergent on a damp cloth is recommended. Water must never come into contact with the tool. Regularly check that all the fixing screws are tight. They may vibrate loose over time.

## After use

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- > Switch the product off, disconnect it from the power supply and let it fully cool down before storing.
- > Store the product and its accessories in a dry, frost-free place.
- > Always store the product in a place that is inaccessible to children.

## Motor

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- > The motor is permanently lubricated. Do not try to oil the motor bearings or service any internal parts of the motor. If the power cord is worn, frayed, cut or damaged, replace it.
- > Do not try to patch it up with electrical tape this could lead to more trouble.

## Arm bearings

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Lubricate the arm bearing after every 50 hours of use, to do so:

- > Turn saw on its side.
- > Squirt a generous amount of SAE 20 oil around the shaft end and bronze bearing.
- > Let the oil soak in overnight in this condition.
- > Next day repeat the above procedure for the opposite side of the saw.
- > Do not try to patch it up with electrical tape this could lead to more trouble.

## Power cord

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- > If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a safety hazard.

## Setting the table for horizontal or bevel cutting

- > The scroll saw work table can be tilted to the left for bevel cutting up to 45° from the 0° on the horizontal cutting position.
- > A bevel scale is provided under the work table as a convenient reference for setting the approximate table angle for bevel cutting.
- > When greater precision is required, make practice cuts and adjust the table as necessary for your requirements.

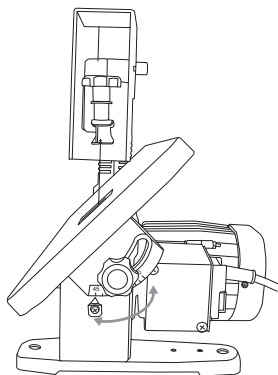


Fig. 9

## Notes on saw blades



**IMPORTANT:** Always use good quality blades.

## Blades break for five principal reasons

- > Too much tension or too little tension on the blade.
- > Overworking the blade by feeding the workpiece too fast.
- > Twisting or bending the blade by feeding the workpiece off-centre.
- > Over use - the blade has reached the end of its useful life.

> Feeding too much material into the saw, - more than the maximum 40mm (1-1/2") depth for which it was designed.

## How to determine the right blade for the job

This scroll saw accepts a wide variety of blade widths and thickness. The width of the blade, the thickness of the blade, and the number of teeth per inch (TPI) are determined by the type of material and size of the radius being cut. Here are several examples:

TPI	WIDTH	THICKNESS	MATERIAL
10	2.8mm 0.11"	0.5mm 0.020"	Medium curves on 1/4" to 1-1/2" wood, wallboard, hardboard.
15	2.8mm 0.11"	0.5mm 0.020"	Same as above, plus wood 1/8" to 1-1/4" thick.
18	2.4mm 0.095"	0.25mm 0.011"	Extra thin cuts on soft woods to 1/4" and parquetry

As a general rule, select the narrowest blades recommended for intricate curve cutting and widest blades for straight and large curve operations.

## Plug replacement

If you need to replace the fitted plug then follow the instructions below.

### Important

The wires in the mains lead are coloured in accordance with the following code:

**Green & yellow - Earth**

**Blue - Neutral**

**Brown - Live**

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows. The wire which is coloured **green & yellow** must be connected to the terminal which is marked with **E** or  $\perp$ .

The wire which is coloured **blue** must be connected to the terminal which is marked with N. The wire, which is coloured brown, must be connected to the terminal, which

is marked with the letter **L**.

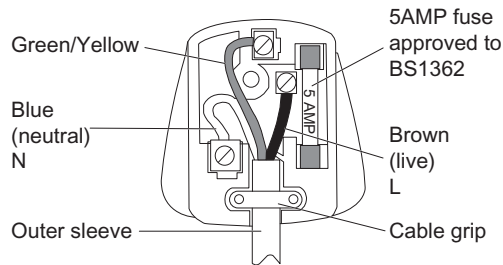


Fig. 10



**Warning:** Never connect live or neutral wires to the earth terminal of the plug. Only fit an approved 5 Amp BS1363/A plug and the correct rated fuse.



**NOTE:** If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket. If the supply cord is damaged it must be replaced by a service agent or a similarly qualified person in order to avoid hazard.

## Removing and installing blades

- > Loosen knurled nut (12), and remove the protective guard (1). (see Fig. 1)
- > Loosen tension on blade by turning tension knob (2) counterclockwise just until the tension spring is fully compressed. (Fig. 11)

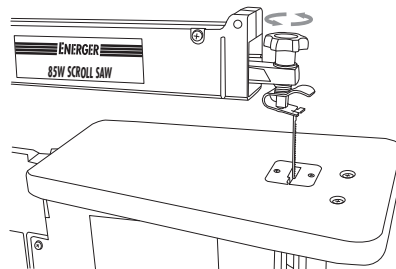


Fig. 11

- > Remove blade by pulling forward on blade and then lifting the blade through the access hole in the table. Slight downward pressure against the upper arm may be helpful when removing blade from upper holder. (Fig. 12)

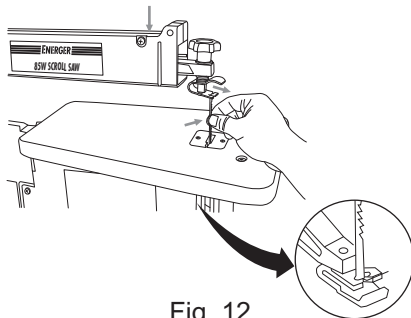


Fig. 12

- > The blade holder allows the blade to be fitted either in the front of the holder or to its side. In order to place the blade in the required position it is necessary to align the blade correctly. By cutting from the side of the saw it will be possible to cut longer work-pieces as this overcomes the restriction of the throat depth. The table must remain set in the 0 degree level position. (Fig. 13)

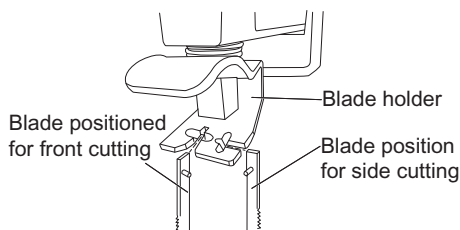


Fig. 13



**WARNING!** Do not attempt to cut a bevel with the blade positioned for side cutting.

Specifications of the replaceable blade: Length: 133mm Width: 2.6 mm

- > Replace the protective guard (1) referring to the previous section “mounting the protective guard” on page 12 & 13.
- > In order to cut and to avoid uncontrollable lifting of the work piece, the teeth of the blade used on the scroll saw should always point downward when installed on the scroll saw.



- > Install the blade by inserting one end of the blade through the slot in the table then the access hole in the table until you can hook the blade pin in the pin recess in the bottom blade holder. Slide the top blade pin into the pin recess of the top blade holder. You may need to press down lightly on the arm to install the blade. (Fig. 14 & 15)

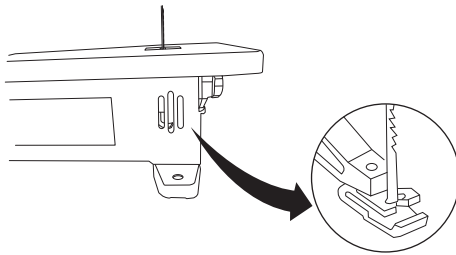


Fig. 14

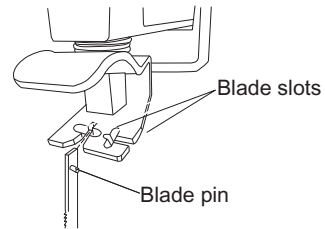


Fig. 15

- > Carefully tighten the blade tension by turning the tension knob clockwise just until the tension spring is fully compressed. (Fig. 16)

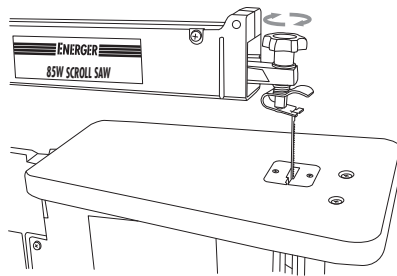


Fig. 16

- > Double check to see that pins are properly located in the blade holder recesses. Before applying power, pull up and push down on the front of the upper arm to move blade through a complete cutting cycle. This is done to make sure the blade is installed properly.



**NOTE:** Whilst the blade is out of the housings, look at the blade housing closely. You will observe that the blade slots and pin recesses are made so you can position the blade for cutting from the front, or from the side. Cutting from the side is necessary when your workpiece is over 13" long.



**IMPORTANT:** Side cutting can only be performed when the table is set at 0°.

Undertensioning of the blade will cause blades to break rapidly. The thicker, harder and more abrasive the wood you are cutting the more blades you will have to use blade breakage is caused by the following:

- under tension.
- over working the blade by going fast.
- twisting or bending the blade.
- over use blade life exhausted.
- over aggressive feeding of the workpiece into the blade.

## Repair

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- > This product does not contain any parts that can be repaired by the consumer. Contact a qualified specialist to have it checked and repaired.

## Storage

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- > Clean the product as described previous.
- > Store the product and its accessories in a dry, frost-free place.
- > Always store the product in place that is inaccessible to children. The ideal storage temperature is between 10 and 30°C.
- > We recommend using the original package for storage or covering the product with a suitable cloth to protect it against dust.

## Transportation

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- > Switch the product off and disconnect it from power supply before transporting it anywhere.
- > Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
- > Secure the product to prevent it from slipping or falling over.

## Trouble shooting

Suspected malfunctions are often due to causes that the users can fix themselves. Therefore check the product using this section. In most cases the problem can be solved quickly.



**WARNING!** Only perform the steps described within these instructions! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified specialist if you cannot solve the problem yourself!



**Caution:** Troubleshooting could lead to an increased risk to the operator due to the fact that safety guards / covers may have to be removed. It is therefore particularly important that all the measures necessary for safe working are taken.

Problem	Possible cause	Solution
1. Breaking Blades	1.1 Incorrect tension 1.2 Overworked (worn out) blade 1.3 Wrong blade being used  1.4 Twisting blade in wood	1.1 Adjust blade tension 1.2 Reduce feed rate or replace blade 1.3 Use narrow blades for thin wood, wider blades for thicker wood 1.4 Avoid side pressure on blade
2. Motor Will Not Run	2.1 Defective cord, plug or outlet 2.2 Defective motor	2.1 Unplug saw, replace defective parts 2.2 Repairs MUST be made by a qualified technician. Call Service dept. for advice

<b>Problem</b>	<b>Possible cause</b>	<b>Solution</b>
3. Excessive Vibration (Some vibration is inevitable when the saw and motor are running)	3.1 Improper mounting of saw 3.2 Unsuitable mounting surface 3.3 Loose table or table rubbing against motor 3.4 Motor mount is loose	3.1 See proper mounting instruction 3.2 Replace plywood workbench surface with solid lumber surface 3.3 Tighten table adjuster knob 3.4 Tighten motor mount screws
4. Blade runout	4.1 Insufficient blade tension 4.2 Dull blade causing excessive force to be used at workpiece	4.1 Increase blade tension 4.2 Renew blade and correctly tension

## Recycling and disposal

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- > Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.

## Guarantee

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This ENERGER product carries a guarantee of 12 months.

If your product develops a fault within this period, you should, in the first instance contact the retailer where the item was purchased.

This guarantee specifically excludes losses caused due to:

- > Fair wear and tear
- > Misuse or abuse
- > Lack of routine maintenance
- > Failure of consumable items
- > Accidental damage
- > Cosmetic damage
- > Failure to follow manufacturer's guidelines
- > Loss of use of the goods This guarantee does not affect your statutory rights.

This guarantee is only valid in the UK. For any enquiries relating to the guarantee please refer to your retailer.

# ENERGER

## Declaration of Conformity

We, Importer  
**Powersmith Ltd., BA22 8RT**

Declare that the product:  
**Designation: 85W scroll saw**  
**Model: ENB544SSW**

Complies with the following Directives:  
**2004/108/EC** Electromagnetic Compatibility Directive  
**2006/42/EC** Machinery Directive  
**2006/95/EC** Low Voltage Directive

**2011/65/EU** Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment

**2002/96/EC and 2003/108/EC** Waste Electrical and Electronic Equipment (WEEE)

Standards and technical specifications referred to:

**EN 61029-1:2009+A11**  
**EN55014-1**  
**EN55014-2**  
**EN61000-3-2**  
**EN61000-3-3**

Authorised Signatory and technical file holder  
Date : 20/07/2013

Signature: P.C. Harries

Name / title: Peter Harries / Quality Manager  
Powersmith (UK) LTD. Trade House Mead Avenue, BA22 8RT



In more detail...

**85W SCROLL SAW**

**ENB544SSW**



Powersmith (UK) LTD.  
Trade House Mead Avenue, BA22 8RT

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