



Woodworking machinery at its best!

**SCROLL SAW WITH FOOTSWITCH
OWNERS MANUAL
MODEL: SS16F**



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GENERAL SAFETY RULES



WARNING: Do not attempt to operate the machine until you have read thoroughly and understood completely all instructions, rules, etc. contained in this manual. Failure to comply may result in accidents involving fire, electric shock, or serious personal injury. Keep this owner's manual and review frequently for continuous safe operation.

1. Know your machine. For your own safety, read the owner's manual carefully. Learn its application and limitations, as well as specific potential hazards pertinent to this machine.
2. Make sure all tools are properly earthed.
3. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning, make sure it is properly replaced before using the machine again.
4. Remove adjusting keys and spanners. Form a habit of checking to see that the keys and adjusting spanners are removed from the machine before switched it on.
5. Keep your work area clean. Cluttered areas and workbenches increase the chance of an accident.
6. Do not use in dangerous environments. Do not use power tools in damp or wet locations, or expose them to rain. Keep work areas well illuminated.
7. Keep children away. All visitors should be kept a safe distance
8. from the work area.
9. Make workshop childproof. Use padlocks, master switches and remove starter keys.
10. Do not force the machine. It will do the job better and be safer at the rate for which it is designed.
11. Use the right tools. Do not force the machine or attachments to do a job for which they are not designed. Contact the manufacturer or distributor if there is any question about the machine's suitability for a particular task.
12. Wear proper apparel. Avoid loose clothing, gloves, ties, rings, bracelets, and jewellery which could get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
13. Always use safety glasses. Normal spectacles only have impact resistant lenses. They are not safety glasses.
14. Do not over-reach. Keep proper footing and balance at all times.
15. Maintain the machine in good condition. Keep the machine clean for best and safest performance. Follow instructions for lubrication and changing accessories.
16. Disconnect the machine from power source before servicing and when changing the blade.
17. Never leave the machine running unattended. Turn the power off. Do not leave the machine until it comes to a complete stop.
18. Do not use any power tools while under the effects of drugs, alcohol or medication.
19. Always wear a face or dust mask if operation creates a lot of dust and/or chips. Always operate the tool in a well ventilated area and provide for proper dust removal. Use a suitable dust extractor.



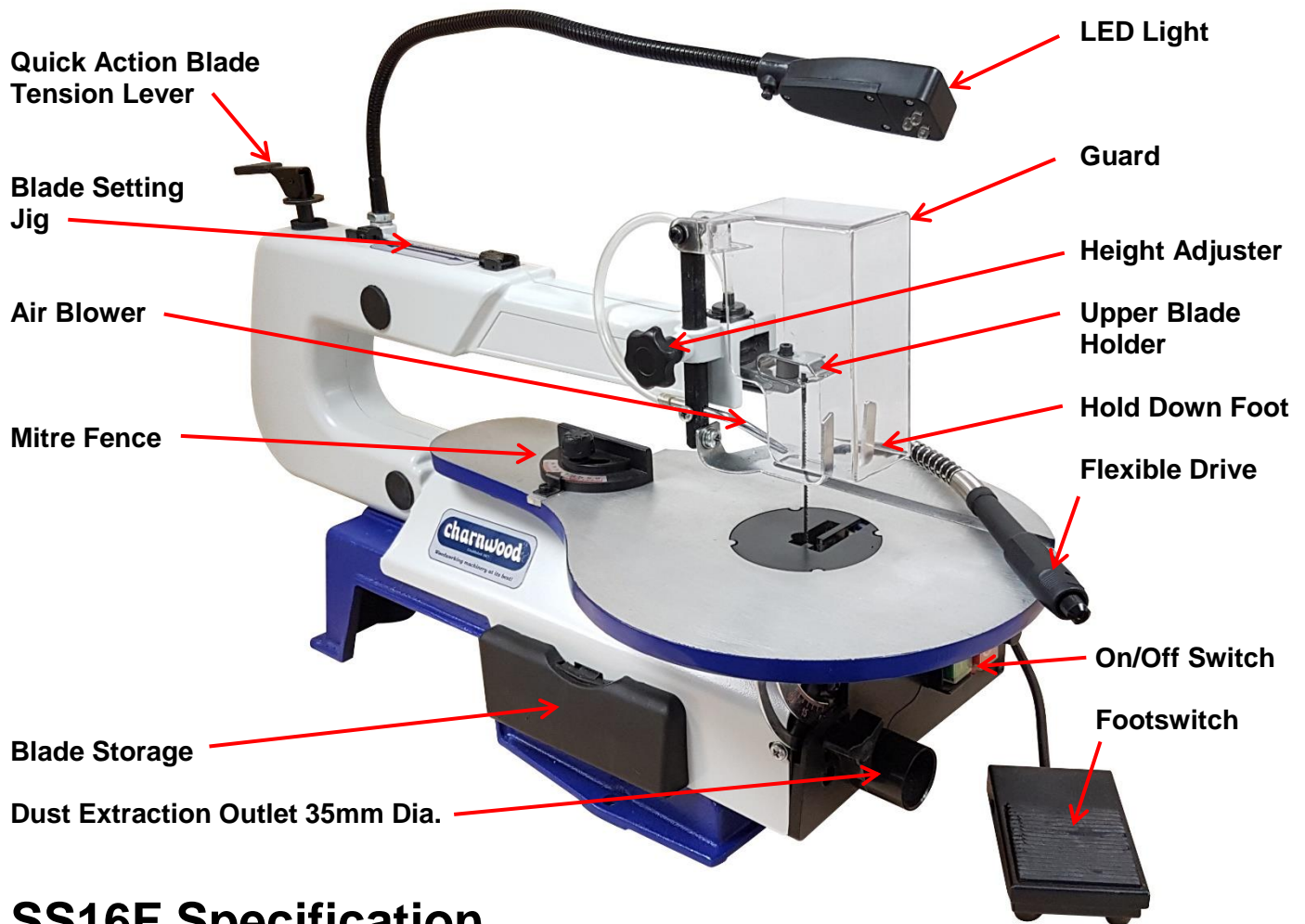
Risk of Injury: Never Reach Into A moving Part

Always Wear Eye Protection

Always Wear A Dust Mask

Always Wear Ear Protection

Overview of Scroll Saw



SS16F Specification

| | |
|---------------------------------------|-------------------------------|
| Motor (DC) 240v, 50hz | 90w |
| Blade Speed | 550 – 1600 strokes per minute |
| Blade Length – Pin Type | 127mm |
| Blade Length – Pinless Type | 130mm |
| Table Size | 254 x 414mm |
| Max. Cutting Depth (90 / 45 degrees) | 52mm / 20mm |
| Throat Depth | 406mm (16") |
| Table Tilt (Left) | 90 to 45 degrees |
| PTO Flexible Drive Speed | 1650 – 4800rpm |
| Sound Pressure Level (No Load / Load) | 67.2 / 77.3 dB (A) |
| Sound Power Level (No Load / Load) | 78.4 / 87.4 dB (A) |
| Weight | 12kg |
| Manufacturer's Warranty | 1 year |
| Rating | Hobby |

Rating Description

Hobby: Suitable for Weekend DIY'ers and woodworking enthusiasts.

Generally lighter weight machines with lower power ratings and smaller tooling capacities. Typically only ever used by one person for short periods of time or longer periods of time infrequently. Machinery should be well maintained in a clean, dry environment such as a home workshop, garage or timber shed.

Expected maximum use of 100 hours annually.

Please Note: Using a product in excess of its rating will void the manufacturer's free warranty.

Unpacking



All items are contained in one cardboard carton.

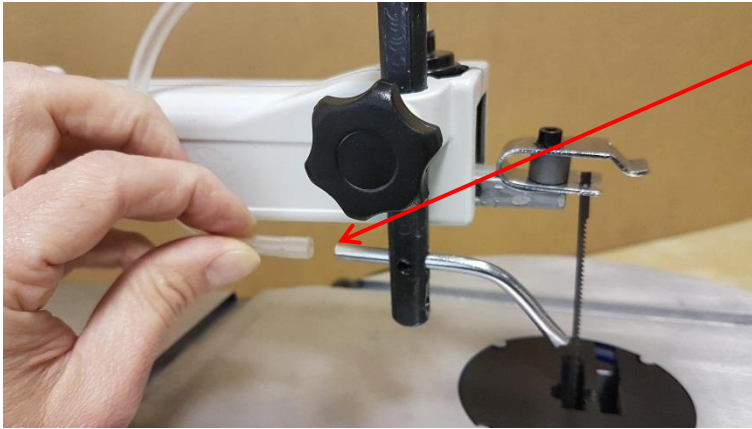


Carefully unpack and check that all items are included as in the photograph.

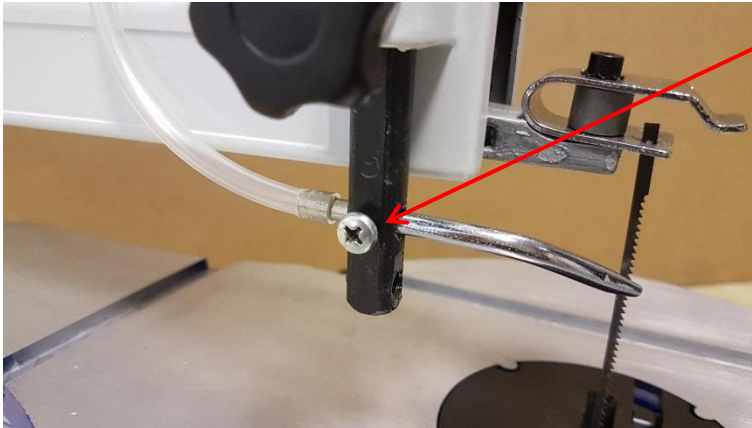
Assembly



Attach the air pipe to the top of the bellows.

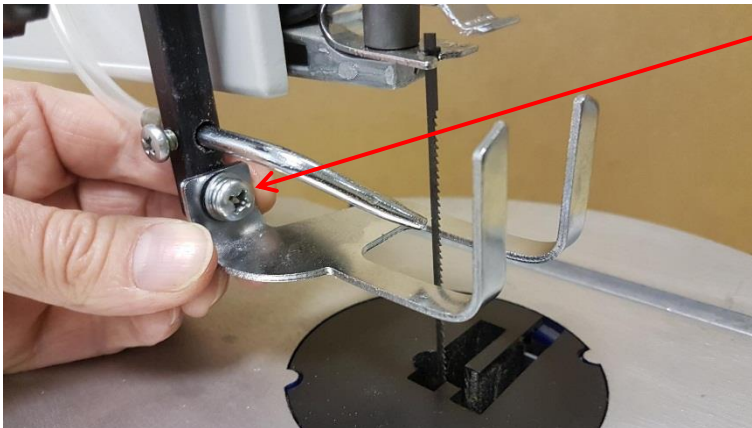


Attach the air pipe to the metal tube.



Fix the metal tube in place, with the nozzle pointing down to the middle, using the phillips screw.

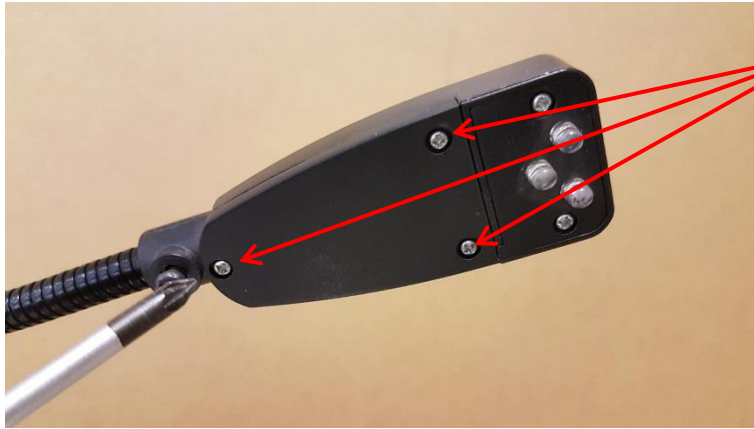
CAUTION DO NOT OVERTIGHTEN
AS THIS CAN CRUSH THE PIPE



Attach the hold down foot using the screw making sure it is parallel to the table.



Attach the transparent guard using the screw, washer and nut.



Undo the three small screws on the light cover and put in a safe place.



Fit the two batteries provided ensuring they are the correct way around.

Replace the cover and refit the screws.



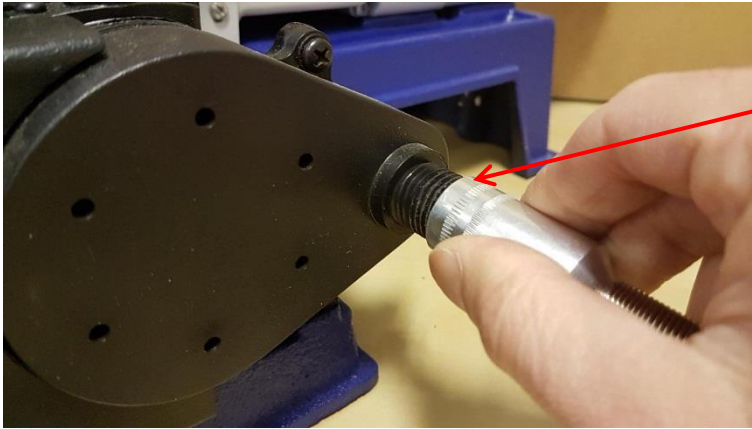
Put your spare blades in the storage box on the left hand side of the scroll saw.



ONLY ATTACH THE FLEXIBLE SHAFT WHEN YOU INTEND TO USE IT.

WHEN NOT IN USE LEAVE THE PLASTIC THREADED COVER IN PLACE.

To use the flexible drive, firstly remove the cover.



Locate the power take off.

Insert the drive shaft into the hole and then screw the outer cap onto the outlet by hand.



THE FLEXIBLE SHAFT ONLY NEEDS TO BE HAND TIGHTENED.

Setting Up the Scroll Saw



It is normal for scroll saws to create a lot of vibration.

Fixing the saw down to a heavy duty work bench is recommended.

Some people also find using a vibration absorbing mat helps.

There are three bench mounting points provided.

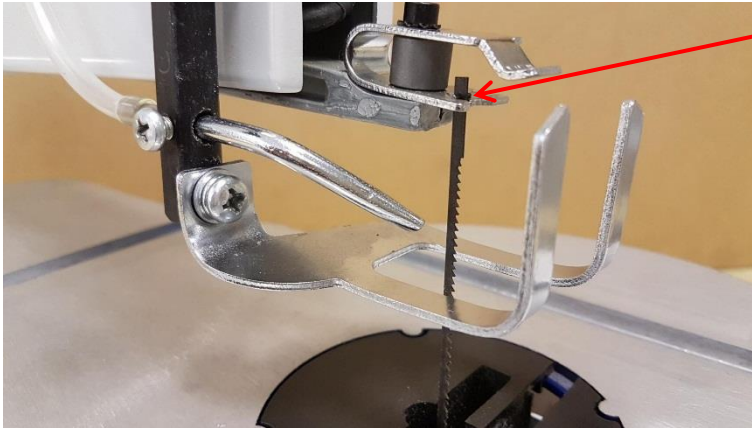


There are two types of blade that can be used with this scroll saw.

When fitting a blade, always ensure the teeth of the blade are pointing down and facing towards the direction of feed.

Plain End Type Blade

Pin End Type Blade



USING PIN END BLADES

The pin type blade simply hooks over the upper and lower blade holder.

Make sure the pins sit in the indentation.

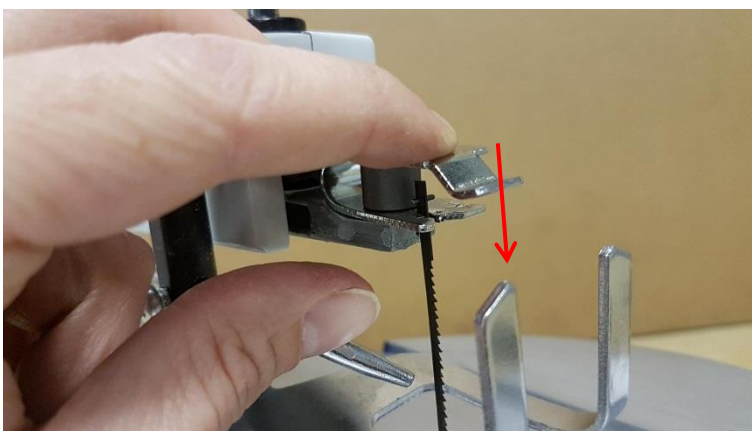
Pin type blades are quick and easy to change, but are not available in very narrow widths for making the most intricate cuts.

To Fit the blade:

Remove the table insert by pressing upwards from underneath the table



Take the tension off the blade, by lifting the quick release blade tension lever.



Hook the lower pin over the lower blade holder.

Press down lightly on the upper blade holder and hook the upper pin over the upper blade holder.

Replace the table insert and lower the blade tension lever.

To remove the blade, follow these instructions in reverse.



If the tension setting is not correct, it can be adjusted as follows:

Lift the blade tension lever.

To increase tension to the blade, rotate the tension lever arm clockwise.

To decrease tension, turn the lever anticlockwise.



To check the tension, lower the quick release tension lever.

Do not force it down as this may break the blade.

If the lever will not go down easily then back the tension off slightly and try again.

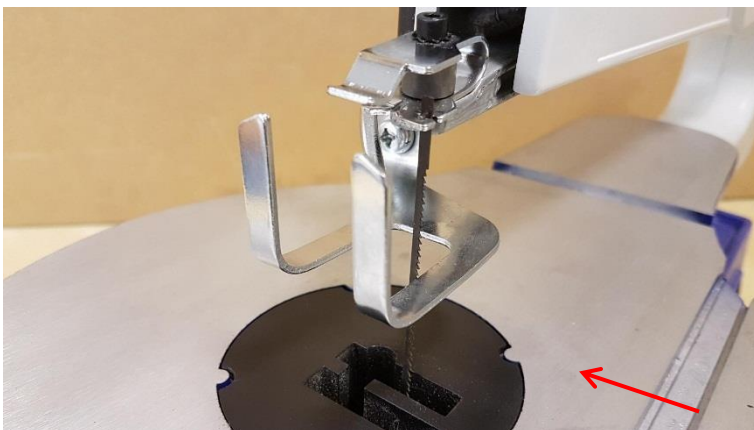
DO NOT OVERTIGHTEN AS THE BLADE MAY BREAK.

Alternate fitting:

The pin type blade can also be used in the sideways position as shown.

Feed direction will be right to left.

This option allows cuts to be made in materials longer than 400mm (16") in length.



USING PLAIN END BLADES

To set the blade clamps onto plain end blades, use the setting jig located on the top arm.

Loosen the grub screws on either side of the clamps then slot a new blade into each end.

Tighten up the grub screws to hold the blade in place making sure it is held centrally.





Take off the blade tension.

Hook the blade clamp onto the lower blade holder (may be easier using a hand under the table).

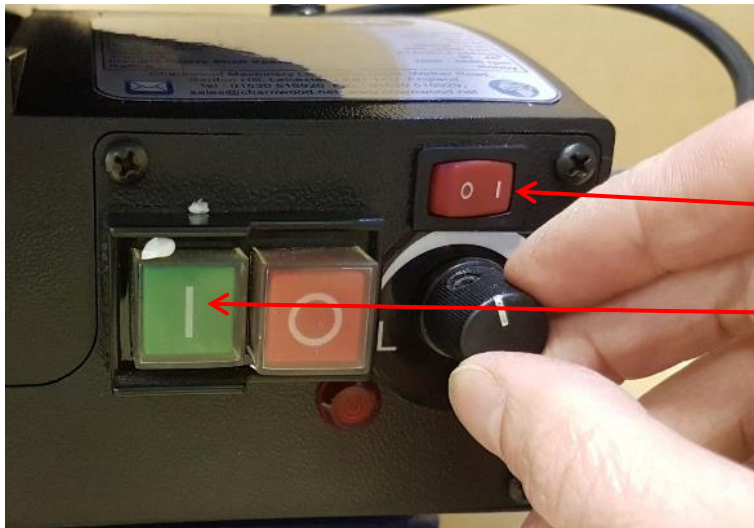
Once the lower clamp is in place, press down the top arm so that you can hook the top holder into place.

Refit the table insert plate.

Follow the blade tensioning instructions as for Pin End blades.

Using the Scroll Saw

A suitable dust extractor should always be used.



There are two ways to control the scroll saw:

The control panel or The foot switch

To use the control panel:

Set the red rocker switch to position labelled 'I'

Press the green 'On' button labelled 'I'

The red light will illuminate and saw will start.

Set the desired speed by turning the speed dial.

Clockwise to increase the speed and anti-clockwise to decrease the speed.



To use the foot switch:

Set the red rocker switch to position labelled '0'

Press the green 'On' button labelled 'I'

The red light will illuminate but the saw will not start.



To start the saw, press down on the foot switch. The blade will move at the set speed.

Using the foot switch allows both hands to be used to guide the work piece and the convenience of stopping and starting without taking your hands off.



The speed can be changed at any time by turning the speed dial.

Clockwise to increase the speed and anti-clockwise to decrease.



The scroll saw is fitted with a battery powered light which can be turned on using the switch on the top.



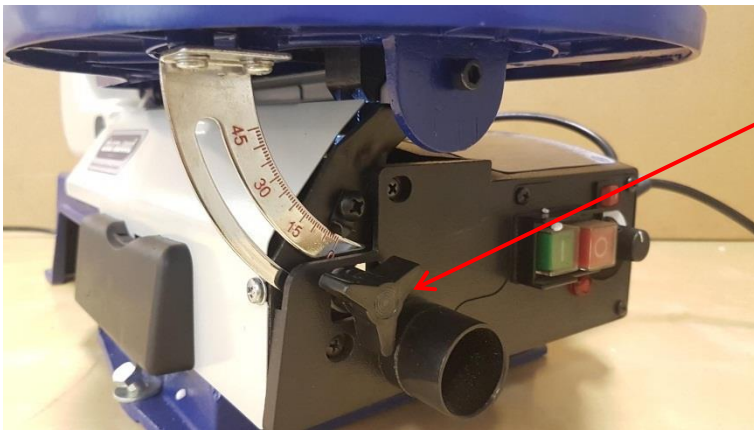
The light is on a flexible arm and can be adjusted so that it shines onto the work piece.



Regular Cutting

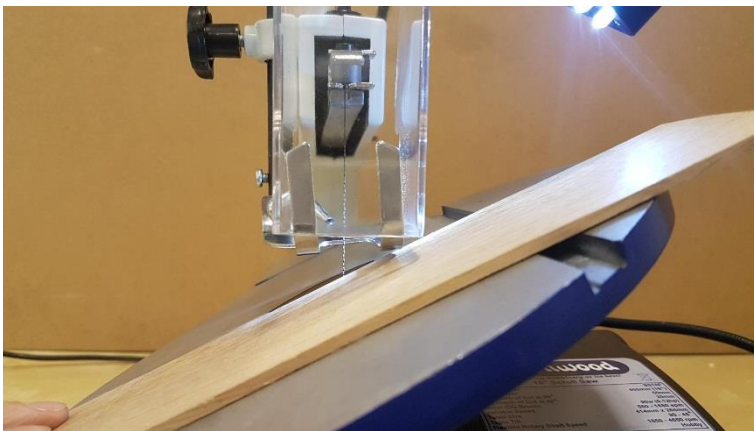
Lower the hold down foot so that it is just above the height of the wood to be cut. It prevents the work piece lifting off the table during the upstroke of the blade.

Adjust the air blower so that it is pointing down at the cutting area. This enables a clearer view of the cut, particularly useful when following pencil lines.



Bevel Cutting

To adjust the angle of the work table slacken off the knob.

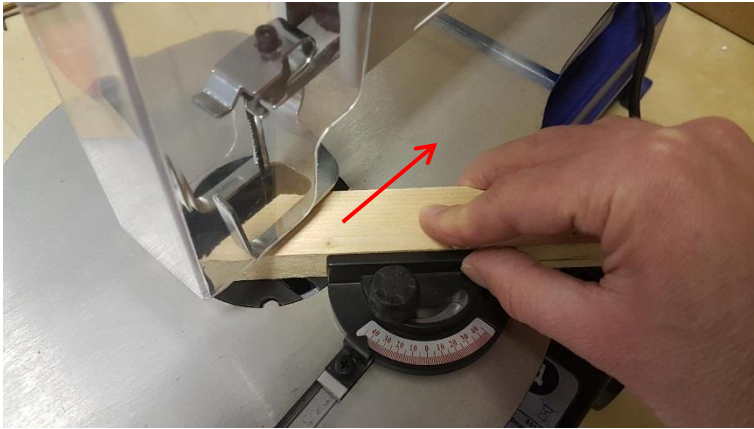


Tilt the table to the desired angle and tighten the locking knob.



Mitre Cutting

A mitre guide is provided to allow straight cuts on small pieces of timber.



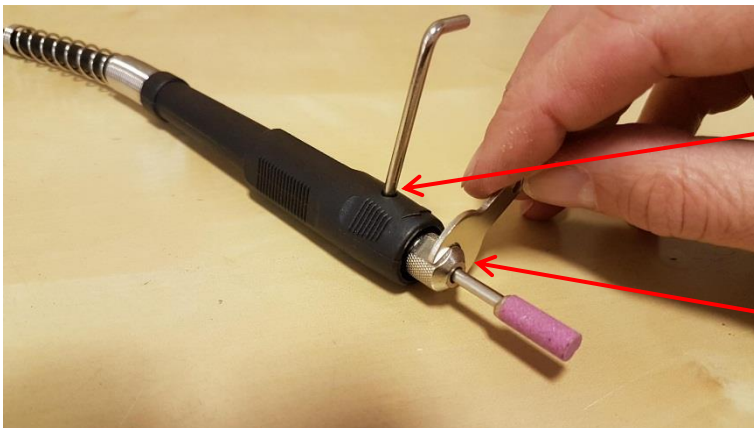
The mitre guide can be set up to a 45 degree angle for performing mitre cuts.



With the Pin type blade set in the sideways position the mitre guide can be used in the rear table slot.

Using the Flexible Shaft

When using the Flexible shaft ensure the blade guard on the scroll saw is fully down – the blade will still be moving.



To fit a tool into the flexible shaft:

Insert the spindle lock tool into the hole in the outer case of the spindle to stop the spindle rotating.

Put the chosen tool into the collet.

Use the spanner to tighten the collet.

Caution: DO NOT OVERTIGHTEN



Various flexible drive accessories are supplied for sanding, polishing, grinding and shaping operations.

They can be used on wood, metal and plastics.

ALWAYS REMOVE THE FLEXIBLE SHAFT FROM THE SCROLL SAW WHEN NOT IN USE

Troubleshooting

| Problem | Cause | Remedy |
|--|---------------------------|------------------------|
| Machine does not start | Blown Fuse | Replace Fuse |
| | Loose switch terminal | Inspect back of switch |
| | Damaged / worn brushes | Replace brushes |
| | Faulty switch | Replace switch |
| Only starts when Green button is held down | Faulty switch | Replace switch |
| Blade snaps | Too much tension on blade | Replace blade |
| Rough cut | Blade is blunt | Replace Blade |
| Burnt edges on cut | Blade is blunt | Replace Blade |

Packaging



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.



Only for EU countries

Do not dispose of electric tools together with household waste material!

In observance of European Directive 2002/96/EC on waste electrical and electronic equipment (EEE) and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

■ Your local refuse amenity will have a separate collection area for EEE goods

Declaration of Conformity for CE Marking

Charnwood Declare that Scroll Saw, Model SS16F

Conforms with the following Directives: Machinery Directive 2006/42/EC
 EMC Directive 2014/30/EU

And further conforms to the machinery example for which the EC type examination Certificate No. AM50278793 and AE50395361 have been issued by TUV Rheinland LGA Products GmbH, Tillystrasse 2, 90431 Nurnberg, Germany.

I hereby declare that equipment named above has been tested and found to comply with the relevant sections of the above referenced specifications. The machinery complies with all essential requirements of the directive.

Signed: 

Dated: 11/07/2014

Location: Leicestershire, UK

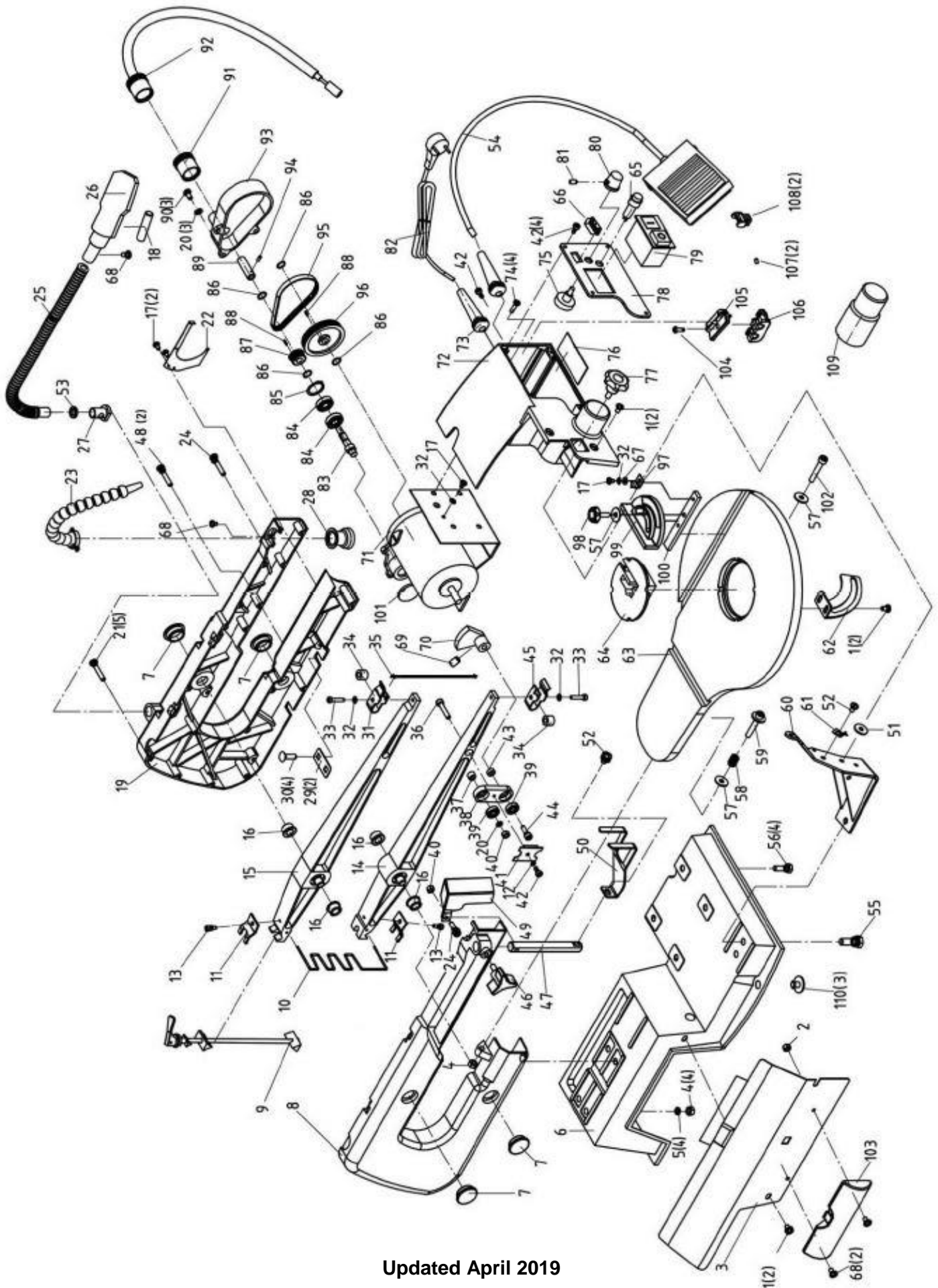
Richard Cook, Director

Charnwood SS16F Parts List

| Part No. | Description | | Part No. | Description |
|----------|------------------|--|----------|-------------|
| 001 | Screw M5 x 8 | | 002 | Nut M4 |
| 003 | Left Side Cover | | 004 | Nut M6 |
| 005 | Spring Washer M6 | | 006 | Base |

| | | | | |
|-----|---------------------------|--|-----|------------------------|
| 007 | Oil Cushion | | 008 | Left Arm Housing |
| 009 | Tension Bolt Assembly | | 010 | Extension Spring |
| 011 | Pressure Plate | | 012 | Spring Washer M4 |
| 013 | Screw M4 x 10 | | 014 | Lower Arm |
| 015 | Upper Arm | | 016 | Arm Bearing |
| 017 | Screw M4 x 6 | | 018 | Battery |
| 019 | Right Arm Housing | | 020 | Washer M5 |
| 021 | Screw M5 x 35 | | 022 | Right Safe Cover |
| 023 | Air Tube | | 024 | Screw M5 x 28 |
| 025 | Flexible Arm Assembly | | 026 | LED Light Assembly |
| 027 | Sleeve Support & Nut | | 028 | Bellows |
| 029 | Fixing Plate | | 030 | Screw M6 x 20 |
| 031 | Upper Blade Support | | 032 | Lock Washer M4 |
| 033 | Screw M4 x 20 | | 034 | Support Cushion |
| 035 | Blade | | 036 | Screw M5 x 25 |
| 037 | Big Cushion | | 038 | Eccentric Assembly |
| 039 | Bearing | | 040 | Nut M5 |
| 041 | Bracket | | 042 | Screw ST4 |
| 043 | Small Cushion | | 044 | Screw M5 x 16 |
| 045 | Lower Blade Support | | 046 | Foot Lock Knob |
| 047 | Foot Fixing Pole | | 048 | Screw M5 x 30 |
| 049 | Blade Guard | | 050 | Hold Down Foot |
| 051 | Washer M6 | | 052 | Screw M6 x 10 |
| 053 | Washer M10 | | 054 | Foot Switch |
| 055 | Screw M8 x 16 | | 056 | Screw M6 x 20 |
| 057 | Washer M6 | | 058 | Spring |
| 059 | Screw M6 x 40 | | 060 | Work Table Support |
| 061 | Pointer | | 062 | Scale |
| 063 | Work Table | | 064 | Work Table Insert |
| 065 | Light | | 066 | Switch |
| 067 | Washer M4 | | 068 | Screw M4 x 8 |
| 069 | Screw M4 x 8 | | 070 | Eccentric Pulley |
| 071 | Dc Motor 240v | | 072 | Switch Box |
| 073 | Strain Relief | | 074 | Screw M4 x 10 |
| 075 | Potentiometer | | 076 | Circuit Board |
| 077 | Work Table Lock Knob | | 078 | Switch Box Cover |
| 079 | Switch KJD20-2 | | 080 | Variable Speed Knob |
| 081 | Screw M5 x 6 | | 082 | Power Cord |
| 083 | Gear Shaft | | 084 | Bearing 80018 |
| 085 | Washer M22 | | 086 | Washer M8 |
| 087 | Small Wheel | | 088 | Key 3 x 8 |
| 089 | Shaft Connector Sleeve | | 090 | Screw M5 x 12 |
| 091 | Safety Screw Cap | | 092 | Flexible Shaft |
| 093 | Belt Cover | | 094 | Pin 3x8 |
| 095 | Belt | | 096 | Big Wheel |
| 097 | Mitre Gauge Scale Pointer | | 098 | Mitre Gauge Scale Knob |
| 099 | Mitre Gauge Body | | 100 | Mitre Gauge Bar |
| 101 | Dust Proof Cover | | 102 | Screw M6 x 25 |
| 103 | Blade Storage | | 104 | Screw M6 x 20 |
| 105 | Clip Plate Upper | | 106 | Clip Plate Lower |
| 107 | Screw M5 x 8 | | 108 | Pinless Blade Holder |
| 109 | Dust Outlet | | 110 | Rubber Foot |

Charnwood SS16F Parts Drawing



Updated April 2019