

evolution[®]

www.evolutionpowertools.com

R255 MTS

Original Instructions



TABLE OF CONTENTS

INTRODUCTION	Page 3	OPERATION	Page 19
Warranty	Page 3	On/Off Safety Switch	Page 19
Machine Specification	Page 4	Raising/Lowering the Blade	Page 19
Vibration	Page 5	Tilting the Blade	Page 20
Labels and Symbols	Page 5	Rip Fence Guide	Page 21
Intended use of this Power Tool	Page 6	Dual Read Scale	Page 21
Prohibited use of this Power Tool	Page 6	Mitre Gauge	Page 21
		Anti-Bounce Device	Page 22
SAFETY PRECAUTIONS	Page 7	Basic Table Saw Operations	Page 22
Electrical Safety	Page 7	Cross-Cutting	Page 23
Outdoor Use	Page 7	Mitre Cross-Cutting	Page 23
General Power Tool	Page 7	Compound Mitre Cutting	Page 23
Safety Instructions		Repetitive Cross-Cutting	Page 23
Additional Safety Instructions - Table Saws	Page 9	Rip Cutting	Page 24
		Bevel Ripping	Page 25
GETTING STARTED	Page 11	MAINTENANCE	Page 25
Unpacking	Page 11	Changing the Blade	Page 25
Items Supplied	Page 11	Cleaning	Page 26
Additional Accessories	Page 11	Riving Knife	Page 26
Machine Overview	Page 12	Push Stick	Page 26
What's in the Box	Page 13		
		ENVIRONMENTAL PROTECTION	Page 27
ASSEMBLY	Page 14		
The Stand	Page 14	DECLARATION OF CONFORMITY	Page 28
Attaching the Table Extensions	Page 15		
The Fence Rail	Page 16		
Adjustment	Page 16		
Checking/Adjusting the Rip Fence	Page 17		
Sliding Mitre Gauge	Page 17		
Top Blade Guard	Page 18		

(1.3) IMPORTANT

Please read these operating and safety instructions carefully and completely.

For your own safety, if you are uncertain about any aspect of using this equipment please access the relevant technical helpline, the number of which can be found on the Evolution Power Tools website.

We operate several helplines throughout our worldwide organization, but technical help is also available from your supplier.

WEB: www.evolutionpowertools.com

EMAIL:

customer.services@evolutionpowertools.com

WARRANTY

(1.4) Congratulations on your purchase of an Evolution Power Tools Machine. Please complete your product registration 'online' as explained on the leaflet included with this machine. This will enable you to validate your machine's warranty period via Evolution's website by entering your details and thus ensure prompt service if ever needed.

We sincerely thank you for selecting a product from Evolution Power Tools.

EN

MACHINE SPECIFICATIONS

MACHINE	METRIC	IMPERIAL
Motor (UK/EU) 220-240v ~ 50Hz	S1 1300W S6 40% 1500W	6.5A
Table Dimensions	642 x 938mm	25-1/4 x 36-15/16"
Riving Knife Thickness	1.8mm	5/64"
No Load Speed	3250min ⁻¹	3250rpm
Weight	20.25kg	44.7lbs

CUTTING CAPACITY	METRIC	IMPERIAL
Maximum depth of cut at 90°	85mm	3-1/4"
Maximum depth of cut at 45°	65mm	2-1/2"
Mild Steel Plate – Optimal Cutting Thickness	3mm	1/8"
Mild Steel Box Section – Opt. Wall Thickness	3mm	1/8"
Rip Capacity - Right Of The Blade	410mm	16 1/8 In.

BLADE	METRIC	IMPERIAL
Diameter	255mm	10"
Bore	25.4mm	1"
Kerf	2mm	1/8"

(1.7)

VIBRATION

WARNING: When using this machine the operator can be exposed to high levels of vibration transmitted to the hand and arm. It is possible that the operator could develop "Vibration white finger disease" (Raynaud syndrome). This condition can reduce the sensitivity of the hand to temperature as well as producing general numbness. Prolonged or regular users of this machine should monitor the condition of their hands and fingers closely. If any of the symptoms become evident, seek immediate medical advice.

- The measurement and assessment of human exposure to hand-transmitted vibration in the workplace is given in: BS EN ISO 5349-1:2001 and BS EN ISO 5349-2:2002
- Many factors can influence the actual vibration level during operation e.g. the work surfaces condition and orientation and the type and condition of the machine being used. Before each use, such factors should be assessed, and where possible appropriate working practices adopted. Managing these factors can help reduce the effects of vibration:

Handling

- Handle the machine with care, allowing the machine to do the work.
- Avoid using excessive physical effort on any of the machines controls.
- Consider your security and stability, and the orientation of the machine during use.

Work Surface

- Consider the work surface material; its condition, density, strength, rigidity and orientation.

WARNING: The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used. The need to identify safety measures and to protect the operator 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 the tool is switched off, when it is running idle, in addition to trigger time).

(1.8)

LABELS & SYMBOLS

WARNING: Do not operate this machine if warning and/or instruction labels are missing or damaged. Contact Evolution Power Tools for replacement labels.

Note: All or some of the symbols on the next page may appear in the manual or on the product.

EN

(1.9)

Symbol	Description
V	Volts
A	Amperes
Hz	Hertz
min ⁻¹	Speed
~	Alternating Current
n ₀	No Load Speed
	Wear Safety Goggles
	Wear Ear Protection
	Wear Dust Protection
	Do Not Touch, Keep hands away
	Read Instructions
	CE Certification
	EAC Certification
	Triman - Waste Collection & Recycling
	Waste Electrical & Electronic Equipment
	Warning
	Double Insulated
	Adjust blade guard accordingly before cutting

(1.10)

INTENDED USE OF THIS POWER TOOL

WARNING: This product is a table saw and has been designed to be used with special Evolution blades. Only use accessories designed for use in this machine and/or those recommended specifically by **Evolution Power Tools Ltd.**

When fitted with an appropriate blade this machine can be used to cut:

Mild Steel (Max Thickness 3mm)
Aluminium (Max Thickness 3mm)
Wood and wood based materials
(Max Thickness 85mm)

(1.11)

PROHIBITED USE OF THIS POWER TOOL

WARNING: This product is a table saw and must only be used as such. It must not be modified in any way, or used to power any other equipment or drive any other accessories other than those mentioned in this Instruction Manual.

(1.13)

WARNING: This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the safe use of the machine by a person responsible for their safety and who is competent in its safe use.

Children should be supervised to ensure that they do not have access to, and are not allowed to play with this machine.

SAFETY PRECAUTIONS

(1.14)

ELECTRICAL SAFETY

This machine is fitted with the correct moulded plug and mains lead for the designated market. If the supply cord is damaged, it must be replaced with a special cord or assembly available from the manufacturers or its service agent.

(1.15)

OUTDOOR USE

WARNING: For your protection, if this tool is to be used outdoors, it should not be exposed to rain, or used in damp locations. Do not place the tool on damp surfaces. Use a clean, dry workbench if available. For added protection use a residual current device (R.C.D.) that will interrupt the supply if the leakage current to earth exceeds 30mA for 30ms. Always check the operation of the residual current device (R.C.D.) before using the machine.

If an extension cable is required it must be a suitable type for use outdoors and so labelled.

The manufacturers instructions should be followed when using an extension cable.

(2.1)

POWER TOOL GENERAL SAFETY INSTRUCTIONS

(These General Power Tool Safety Instructions are as specified in BS EN 60745-1:2009 & EN 61029-1:2009)

WARNING: Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

(2.2)

1) General Power Tool Safety Warnings

[Work area safety]

a) Keep work area clean and well lit.

Cluttered or dark areas invite accidents.

b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gasses or dust.

Power tools create sparks which may ignite the dust or fumes.

c) Keep children and bystanders away while operating power tool.

Distractions can cause you to lose control.

(2.3)

2) General Power Tool Safety Warnings

[Electrical Safety]

a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.

Unmodified plugs and matching outlets will reduce the risk of electric shock.

b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.

There is an increased risk of electric shock if your body is earthed or grounded.

c) Do not expose power tools to rain or wet conditions.

Water entering a power tool will increase the risk of electric shock.

d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.

Damaged or entangled cords increase the risk of electric shock.

e) When operating a power tool outdoors, use an extension cord suitable for outdoor use.

Use of a cord suitable for outdoor use reduces the risk of electric shock.

f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.

Use of an RCD reduces the risk of electric shock.

EN

(2.4)

3) General Power Tool Safety Warnings [Personal Safety].

a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust masks, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.

c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising the power tools that have the switch on invites accidents.

d) Remove any adjusting key or wrench before turning the power tool on. A wrench or key left attached to a rotating part of a power tool may result in personal injury.

e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

g) If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used. Use of dust collection can reduce dust-related hazards.

(2.5)

4) General Power Tool Safety Warnings [Power tool use and care].

a) Do not force the power tool. Use the correct power tool for your application.

The correct power tool will do the job better and safer at a rate for which it was designed.

b) Do not use the power tool if the switch does not turn it on or off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c) Disconnect the power tool from the power source and/or battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventative safety measures reduce the risk of starting the power tool accidentally.

d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of moving parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

(2.6)

5) General Power Tool Safety Warnings [Service]

a) Have your power tool serviced by a qualified repair person using only identical replacement parts.

This will ensure that the safety of the power tool is maintained.

(2.7)

HEALTH ADVICE

WARNING: When using this machine, dust particles may be produced. In some instances, depending on the materials you are working with, this dust can be particularly harmful. If you suspect that paint on the surface of material you wish to cut contains lead, seek professional advice. Lead based paints should only be removed by a professional and you should not attempt to remove it yourself. Once the dust has been deposited on surfaces, hand to mouth contact can result in the ingestion of lead. Exposure to even low levels of lead can cause irreversible brain and nervous system damage. The young and unborn children are particularly vulnerable.

You are advised to consider the risks associated with the materials you are working with and to reduce the risk of exposure. As some materials can produce dust that may be hazardous to your health, we recommend the use of an approved face mask with replaceable filters when using this machine.

You should always:

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

(2.8)

WARNING: The operation of any power tool can result in foreign objects being thrown towards your eyes, which could result in severe eye damage. Before beginning power tool operation, always wear safety goggles

or safety glasses with side shield or a full face shield where necessary.

ADDITIONAL SAFETY INSTRUCTIONS - TABLE SAWS

WARNING: Before using your table saw it is important that you read and understand these safety rules. Failure to follow these rules could result in serious injury to the operator or damage to the table saw.

- **Do not use saw blades which are damaged or deformed.**
- **Replace the table insert/access plate if worn.**
- **Use only blades as recommended in this manual, which conform to EN 847-1.**

When changing a saw blade ensure that the width of the groove (kerf) cut by the blade is slightly greater than the thickness of the riving knife. Also the thickness of the blade body must not be greater than the thickness of the riving knife.

- **Take care that the selection of the saw blade is suitable for the material to be cut.**

- **Wear suitable personal protective equipment when necessary.**

This could include:

- Hearing protection to reduce the risk of induced hearing loss.
- Respiratory protection to reduce the risk of inhalation of harmful dust.
- Wearing gloves when handling saw blades or rough material.

- **Saw blades should be carried in a holder whenever practicable.**

- **Never perform any operation freehand.** This means using only your hands to support or guide the workpiece. Always use either the fence or mitre gauge to position and guide the work.

WARNING: Freehand cutting is a major cause of accidents and should not be attempted.

- **Never attempt to free a stalled blade without first turning the saw off.**

EN

Turn the power off immediately to prevent damage to the motor.

- **Provide adequate support for long or wide workpieces.**
- **Avoid awkward operations and hand positions where a slip could cause your hand to move into the blade.**
- **Always use the blade guard.** The blade guard must always be used in every operation.
- **Hold the work firmly.** Against the mitre gauge or rip fence.
- **Always use a push stick.** Especially when rip cutting narrow stock.
- **Keep guards in place and in working order.** Always ensure that the riving knife is fitted and correctly adjusted. Inspect the riving knife regularly and replace it if it is worn. Use only a genuine Evolution riving knife as this is a dedicated component for this machine.
- **Remove adjusting keys and wrenches.** Form the habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- **Do not use in a dangerous environment.** Do not use power tools in damp or wet locations, or expose them to rain. Keep work area well lit. Keep the area well ventilated.
- **Keep children away.** All children and visitors should be kept at a safe distance from the work area.
- **Do not use High Speed Steel (HSS) blades.** Ensure that the correct blade is selected for the material being cut.
- **The push stick or push block should always be stored with the machine when not in use.**
- **Connect the saw to a dust collection device when sawing wood.** The operator should be informed of the factors that influence exposure to dust e.g. type of material being cut and the importance of local extraction (capture or source) and the proper adjustment hoods/baffles/chutes.
- **Use proper extension cord.** Make sure any extension cord is in good condition.

When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and possible overheating.

- **Always use safety glasses.** Also use a face or dust mask if the cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- **Maintain tools with care.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **Disconnect from the power supply** before servicing, cleaning and/or when changing accessories, such as blades.
- **Use recommended accessories.** Only use genuine Evolution accessories.
- **Check for damaged parts.** Before further use of the tool, a guard or other part that is damaged 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.
- **Keep hands out of the path of the saw blade.**
- **Never reach around the saw blade.**
- **Turn off machine and wait for saw blade to stop before making any fence adjustments.**
- **Never pull or carry the tool by the power cord.** Carrying or pulling the tool by the power cord could cause damage to the insulation or the wire connections resulting in the possibility of electric shock or fire.
- **When transporting the machine use a transportation device.** Never use the guards for handling or transportation.
- **During transportation the upper part of the saw blade must be lowered fully and covered by the guard.**
- **All operators using this machine must read the instructions and familiarize**

themselves with the machines workings.

- **Never leave the saw running and unattended.** Do not leave the saw until the saw has been switched OFF, and the blade has come to a complete halt.

(4.1)

GETTING STARTED

UNPACKING

Caution: This packaging contains sharp objects. Take care when unpacking. Remove the machine, together with the accessories supplied from the packaging. Check carefully to ensure that the machine is in good condition and account for all the accessories listed in this manual. Also make sure that all the accessories are complete. If any parts are found to be missing, the machine and its accessories should be returned together in their original packaging to the retailer. Do not throw the packaging away; keep it safe throughout the guarantee period. Dispose of the packaging in an environmentally responsible manner. Recycle if possible. Do not let children play with empty plastic bags due to the risk of suffocation.

(4.2)

ITEMS SUPPLIED

Description	Quantity
Instruction Manual	1
Multi-Material TCT Blade	1
Table Extensions	2
Table Extension Support Struts	4
Leg Set (4 corner Legs)	1 Set
Cross Braces	4
Rubber Feet	4
Blade Guard with Extraction Port	1
Dust Extraction Hose	1
Mitre Gauge	1
Anti-Bounce Device	1
Adjustable Rip Fence	1
Rear Cantilever Braces	2
Push Stick	1
Fence Rail (2 piece)	1
Fence Rail Joining Tongue	1
Hex Key	1
Blade Changing Spanners (2pc)	1 Set
Assorted fixings	1 Bag

(4.3)

ADDITIONAL ACCESSORIES

In addition to the standard items supplied with this machine the following accessories are also available from the Evolution online shop at www.evolutionpowertools.com or from your local retailer.

(4.4)

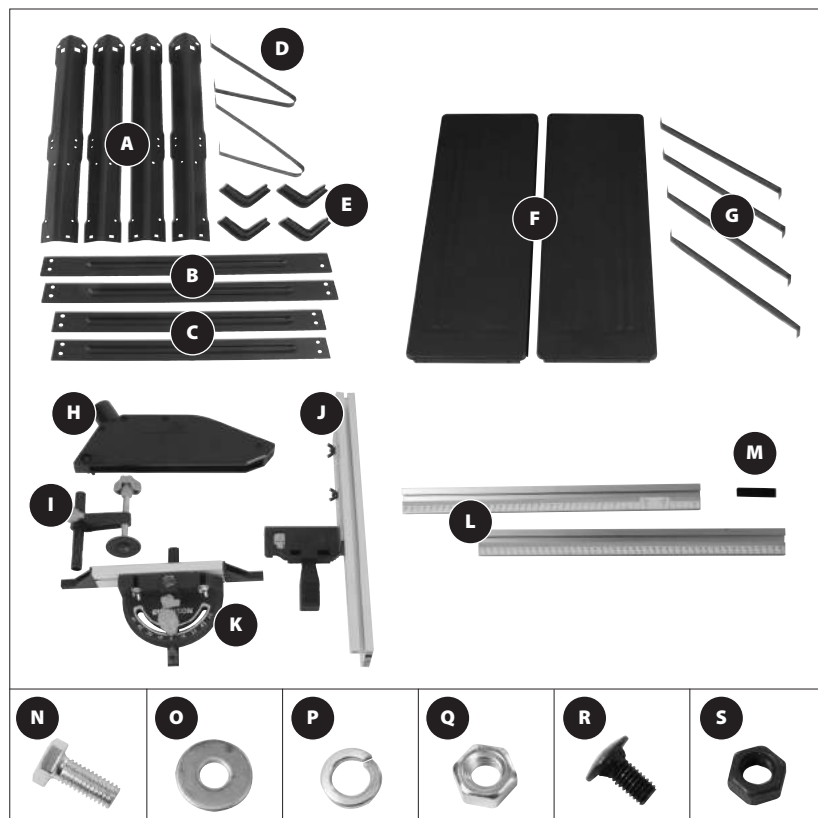
Description	Part No
FURY Multi-Material TCT Blade	FURYBLADE255MULTI
RAGE Multi-Material TCT Blade	RAGEBLADE255MULTI

MACHINE OVERVIEW



- | | |
|---|-------------------------------------|
| 1. ON/OFF SWITCH | 7. RIP FENCE SCALE MAGNIFIER |
| 2. RIVING KNIFE | 8. RIP FENCE LOCKING HANDLE |
| 3. BLADE GUARD | 9. PUSH STICK |
| 4. BLADE | 10. RIP FENCE |
| 5. BEVEL LOCKING KNOB | 11. REAR CANTILEVER BRACES |
| 6. RISE AND FALL/BEVEL ADJUSTMENT
HAND WHEEL | 12. ANTI-BOUNCE DEVICE |
| | 13. SLIDING MITRE FENCE |

WHAT'S IN THE BOX



A. BLACK CORNER LEGS (STAMPED A)	x 4	K. MITRE GAUGE	x 1
B. CROSS-BRACES (STAMPED B)	x 2	L. FENCE RAIL	2 pieces
C. CROSS-BRACES (STAMPED C)	x 2	M. FENCE RAIL JOINING TONGUE	x 1
D. REAR CANTILEVER BRACES	x 2	N. HEX HEADED SCREW	x 28
E. RUBBER FEET	x 4	O. WASHER	x 28
F. SIDE TABLE EXTENSION PANELS	x 2	P. SPRING WASHER	x 28
G. SIDE TABLE SUPPORT STRUTS	x 4	Q. NUT (SILVER)	x 28
H. BLADE GUARD	x 1	R. COACH BOLT (BLACK)	x 7
I. ANTI-BOUNCE DEVICE	x 1	S. NUT (BLACK)	x 7
J. RIP FENCE	x 1		

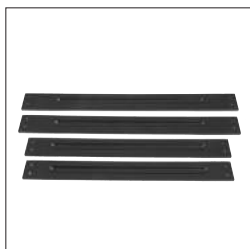


Fig. 1



Fig. 2



Fig. 3



Fig. 4

ASSEMBLY

Note: This process can be considerably aided by studying the images of an assembled machine as found on the machine overview page.

THE STAND

Four corner legs (**A**) (stamped **A**) and four cross-braces (**B+C**) comprise the main stand components.

Four cross-braces are supplied (**Fig 1**). The cross-braces stamped with the letter **B** are for the front and rear of the machine stand. The cross-braces stamped with the letter **C** are for the right and left hand sides of the machine stand.

Identify all the parts before proceeding with the assembly.

Note: The rubber feet (**E**) are a simple push fit onto the legs (**A**), and are attached to the end of the leg opposite to the stamped letter **A** (this is the top of the leg)

- Carefully position the main body of the machine (inverted) on a secure, clean work-surface or workbench with the table top on the work-surface. (**Fig. 2**)

Note: A large clean cloth positioned on the work-surface would help protect the table top from accidental damage.

- Remove the eight Ø10 mm hex headed screws and their associated washers from the corners of the machines main body (**Fig. 3**).
- Attach the four legs (**A**) to the main body of the machine using the previously removed hex headed screws. Do not tighten the screws at this stage. Hand tight is sufficient and be careful to ensure that the rectangular boss moulded into the machines body engages with the rectangular slot found in the top of the legs (**Fig. 4**)
- Attach the front and rear cross-braces (**B**) across the front and rear of the stand using the Ø10mm hex headed screws (**N**), washers (**O**), spring washers (**P**) and nuts (**Q**) provided.

Note: The cross-braces should be positioned to the inside of the stand with the sloping ends of the braces echoing the splay of the attached legs. Ensure that the screws (**N**) are inserted from the outside of the stand with the plain washer (**O**), spring washer (**P**) and nut (**Q**) positioned to the inside of the stand. Again only hand-tighten these screws at this stage.

- Attach the side cross-braces (**C**) to the corner legs (**Fig. 5**) in the same manner as the front and rear cross-braces were attached.

Note: The machine can now be lifted from the work-surface/workbench.

WARNING: This machine is heavy. Enlist competent help when lifting this machine from the workbench.

Allow the machine a few minutes to settle. When satisfied that the machine is standing squarely, upright and is firm and secure (**Fig. 6**) thoroughly tighten all of the fixing screws.

- Attach the cantilever braces to the rear two corner legs (**D**) of the machine stand (**Fig. 7**).

Note: These cantilever braces provide extra security and stability when the machine is in use.

ATTACHING THE TABLE EXTENSIONS

Note: The pressed steel table extension panels (**F**) are not handed and can fit on either side of the machine.

Each table extension attaches to the main table of the machine using two hex headed machine screws (**N**), washer (**O**), spring washer (**P**) and nut (**Q**). The holes for the screws to pass through in the table extension panels are positioned to the very front and rear of the side flanges. (**Fig. 8**) Insert the hex headed machine screws and attach the table extension panels to the main table using the hex headed screws (**N**) and nuts (**O**) etc.

Note: The support struts (**G**) should be attached to the outer flange of the extension panels. Fasten one end of the support strut to the inside the panel. Use the two inner holes of the four that are provided. It is also good practice, in this application, to use a large washer (**P**) underneath the head of the hex headed machine screw (**N**), as well as underneath the fastening nut (**Q**).

The other end of the support strut attaches to the top of its accompanying corner leg.

- Carefully remove the relevant machine screw from the top of the corner leg.
- Insert the machine screw through the end of the support strut and refit the machine screw to the machines main body. (**Fig. 9**)



Fig. 5



Fig. 6



Fig. 7

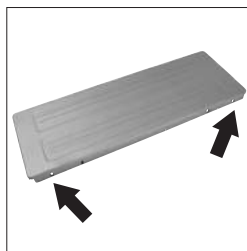


Fig. 8

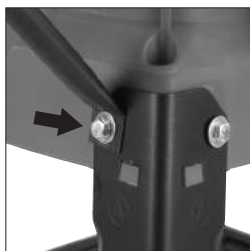


Fig. 9

Use a straight edge or similar placed across the table and the extension panel to check the alignment. The extension panels should be exactly level with and flush to the main table of the machine.

Note: The support struts and the extension panels are provided with elongated slotted holes. These facilitate slight adjustment and realignment of components as necessary.

- Final micro adjustment and alignment of the table extensions is possible by repositioning the relevant components using the flexibility provided by the slotted holes.
- When exact alignment of all of the components is achieved all the fixing screws should be securely tightened.

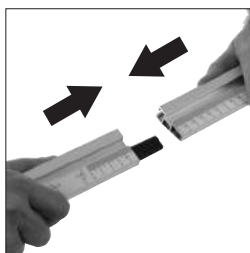


Fig. 10

THE FENCE RAIL

Note: The fence rail is supplied in two pieces (**L**) which slot together. The plastic connecting tongue (**M**) should be inserted into the rectangular voids in the two extrusions to bridge both parts of the Fence Rail. (**Fig. 10**)

- Attach the seven coach bolts (**R**) within the seven holes of the machine (two in each extension and three in the main aluminium table) using washers (**O**) and ø6mm nuts (**S**). Hand tighten only. (**Fig. 11**)
- Slide the fence rail over the seven protruding bolt heads (**Fig. 12**) until the fence rail is central across the front of the machine and fully tighten the bolts.

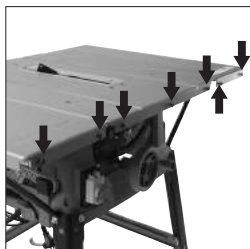


Fig. 11

ADJUSTMENT

WARNING: The machine must not be connected to the mains supply when carrying out the following procedure(s).

Note: The fence rail needs to be positioned correctly for the scale to read accurately. Even when correctly adjusted the scale should always be regarded as a useful cutting guide. The scale does not supplant the need for accurate marking out.

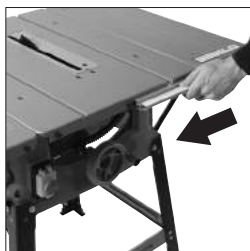


Fig. 12

- Locate the rip fence (**J**) in the fence rail to the RH side of the blade.
- Raise the saw blade (refer to **OPERATION RAISING/ LOWERING THE BLADE** on page 19).
- Slide the rip fence along the fence rail until it rests against the raised saw blade.
- Look through the rip fence magnifier.
- Loosen slightly the seven coach bolts (**R**) which hold the fence rail to the machine.

- Gently move the fence rail to the right or left until the '0' position on the scale coincides with the datum line in the magnifier. **(Fig. 13)**
- Check, and when satisfied that calibration has been achieved, tighten the seven fence rail nuts **(S)** securely.
- Lower the blade.

Note: The rip fence simply slots into the fence rail, and can be locked into position anywhere along the rails length, and at either side of the machine by pressing the locking lever downwards.

CHECKING/ADJUSTING THE RIP FENCE

When the fence rail and rip fence have been attached to the machine, the rip fence should be checked to ensure that it lies parallel to the blade.

- Raise the blade to its full height.
- Rest a straight-edge or similar against the blade.
- Bring the rip fence up to the straight-edge and check for parallelism.
- If adjustment is needed, gain access to the two socket headed screws through the two holes in the carrier. **(Fig. 14)**
- Loosen these screws using the correct sized hex key, and adjust the fence as required.
- Tighten and re-check the rip fence when correct alignment has been achieved.
- Lower the blade.

SLIDING MITRE GAUGE

Note: The sliding mitre gauge **(K)** fits in either of the inverted 'T' slots in the machine table.

The adjustable aluminium faceplate is held in the protractor base of the mitre gauge by two machine screws and thumb nuts.

The anti-bounce device **(I)** can be fitted into the socket incorporated into the mitre gauge base. **(Fig. 15)** Turning the locking handle anti-clockwise **(Fig. 16)** allows the mitre gauge angle to be adjusted. Use the protractor scale and pointer and set the gauge to the desired angle. Tighten the vertical handle when the required angle has been selected.

Note: It is recommended that the anti-bounce device is fitted only when needed (e.g. when cutting thin sheet material or thin walled metal tube etc). At other times safely store the device off the machine.

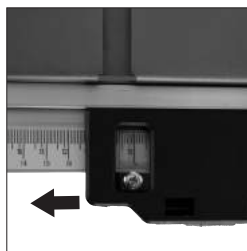


Fig. 13



Fig. 14

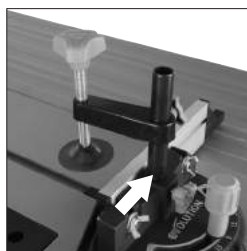


Fig. 15

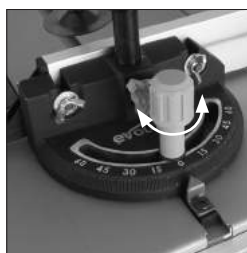


Fig. 16

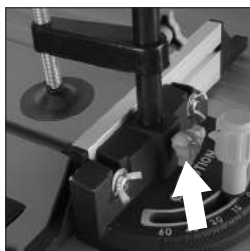


Fig. 17

The pillar of the anti-bounce device fits into the socket in the mitre gauge base, and is held in place by a thumb screw. **(Fig 17)**

TOP BLADE GUARD

The top blade guard **(H)** **(Fig. 18)** (sometimes referred to as a crown guard) must always be fitted to the machines riving knife. The 'split' line along the top of the guard indicates the centre line of the saw blade below. Graphics on the guard further reinforce the cutting line of the saw blade.

WARNING: The top blade guard **must be fitted** to the machines riving knife.

WARNING: The machine must be disconnected from the mains supply when installing the blade guard.



Fig. 18

- Raise the blade to its full height to fully reveal the riving knife. **(Fig. 19)**
- The guards locating pin should be positioned through the hole machined in the top edge of the riving knife **(Fig. 20)**. A washer and wing nut are fitted to one side of the top guard.

Note: Adjust the blade guard for the material you are cutting. To adjust to the thickness of the material being cut, the blade guard must pivot up and down easily and smoothly, so **do not over-tighten this wing nut.**

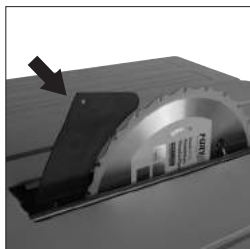


Fig. 19

- Check the operation of the blade guard. Ensure that it is working efficiently and covers the blade at the sides as well as the crown.
- Lower the blade a little and recheck that the blade guard operation.
- When satisfied that the blade guard works throughout the blades height adjustment range, check that the guard works equally well with the blade set to a bevel angle.
- Check that when the blade is fully lowered, the blade guard is in contact with the table top.



Fig. 20

Note: The top blade guard is equipped with a dust extraction port (Fig.21).

- Connect the supplied dust extraction hose to the top blade guard. The hose is a 'push fit' onto the extraction port.
- Connect the other end of the hose to the 2 way connector found to the rear of the machines main body. (Fig. 22)

Note: The 'free' port of the 2 way connector can be used to attach a workshop dust extraction machine to this Evolution machine. If such a machine is connected to this Table Saw follow the Instructions provided by the supplier/manufacturer of the dust extraction equipment.

Use of such equipment will ensure that the workplace is kept clean and tidy, and that dust is kept to a minimum.

OPERATION

ON/OFF SAFETY SWITCH

WARNING: Before operating the switch make sure that the blade guard is correctly installed and operating properly.

To start the machine, lift the safety cover (Fig. 23) to reveal two buttons.

- Push the 'ON' button to start the machine.
- Push the 'OFF' button to stop the machine.

WARNING: Never start the machine until all safety checks and procedures have been carried out.

RAISING/LOWERING THE BLADE

WARNING: Only make adjustments to the machine when the machine is switched OFF and the blade is stationary.

Note: This machine is equipped with a dual function hand- wheel (Fig. 24) in its 'normal' (outer) position this hand-wheel is used to raise or lower the blade.



Fig. 21



Fig. 22



Fig. 23



Fig. 24

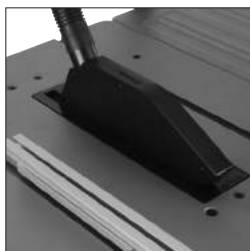


Fig. 25

When the hand-wheel is pushed in against its bias spring a cog engages with a curved toothed rack incorporated into the machines main body. This allows the hand-wheel to be used to adjust the tilt/bevel angle of the blade

To raise or lower the blade:

- Ensure that the hand-wheel is in the 'normal' (outer) position.
- Turn the hand-wheel clockwise to raise the blade.
- Turn counter clockwise to lower the blade.

Note: When the machine is not in use we recommend that the blade is fully lowered into the machine and that the top guard is lying flush on the saw table. **(Fig. 25)**



Fig. 26

TILTING THE BLADE

The blade can be tilted by up to 45° to the left hand side.

To tilt the blade:

- Loosen the tilt locking knob **(Fig. 26)**
- Push in the dual function hand-wheel and ensure that the cog engages with the track.
- Turn the hand-wheel to tilt the blade.

Note: A protractor scale and pointer **(Fig. 27)** are readily visible allowing the operator to quickly set the blade to the desired angle.



Fig. 27

- When the desired angle has been achieved the tilt locking knob should be tightened to secure the blade angle.

Note: We recommend that when any tilt cutting operation is concluded that the blade be returned to its normal (vertical) setting and the tilt locking knob tightened.

RIP FENCE GUIDE

The rip fence **(J)** can be positioned either side of the blade and is locked in position by using the locking handle.

- Push down to lock, and pull up to unlock. Do not use undue force on the locking handle. Gently push down on the handle with the palm of your hand until the handle 'clicks' into place.

Forwards and backwards adjustment of the rip fence faceplate (**Fig. 28**) is possible. Loosen the two wing nuts and slide the aluminium faceplate to the desired position. Tighten the wing nuts securely.

Note: We recommend that normally the rip fence faceplate be adjusted so that the rear of the faceplate guide is 'in line' with the rear of the blade where it emerges from the table. (**Fig. 29**)

Note: If the rip fence is used on the LH (left hand) side of the blade, the aluminium faceplate will have to be repositioned to the RH (right hand) side of the plastic carrier.

- Loosen the two wing nuts and slide the aluminium faceplate from the plastic carrier.
- Remove the dome headed machine screws from the carrier.
- Reposition the faceplate to the RH side of the carrier and re-attach using the machine screws and the wing nuts. Adjust as necessary.

Return to the original configuration when the rip fence is in the normal (RH) operating position.

THE DUAL READ SCALE

Note: The rip fence guide incorporates a viewing window to aid reading the measurement scale found on the fence rail. (**Fig. 30**). The scale should be regarded as a useful guide. It is not a substitute for careful and accurate 'marking out'.

This machine has a dual read scale that shows the distance from the blade to the rip fence through the viewing window. This can be used to aid setting the cutting distance from the blade to the rip fence. With the rip fence faceplate attached by its shorter side, use the black scale to set the distance of the rip fence. When the faceplate is attached by its longer side, use the green scale.

MITRE GAUGE

Note: The mitre gauge (**K**) (**Fig. 31**) can be used on either side of the table and runs in either of the two inverted 'T' slots in the table top.

Carefully slide the mitre gauge into the required slot in the table top.

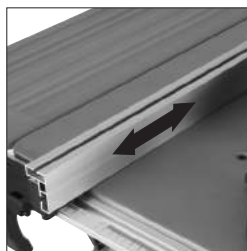


Fig. 28

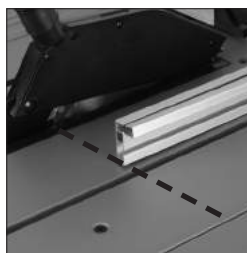


Fig. 29



Fig. 30

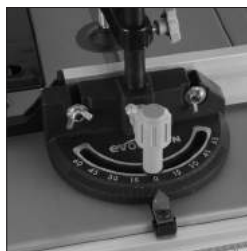


Fig. 31

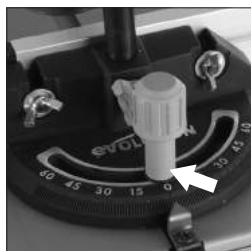


Fig. 32

Turn the vertical handle counter-clockwise to unlock the mitre gauge, and adjust to the required angle. Turn the handle clockwise to lock the mitre gauge at the chosen angle. **(Fig. 32)**

Note: The extruded aluminium faceplate of the mitre gauge should be adjusted so that it passes close to, but does not touch the blade or blade guard. Adjust the faceplate by loosening the two wing nuts **(Fig. 33)** and slide the faceplate to the required position. Securely tighten the wing nuts.

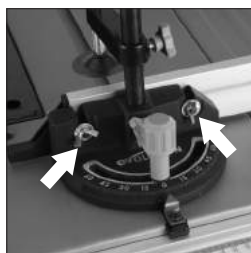


Fig. 33

WARNING: Conduct a 'dry run' with the machine disconnected from the mains supply to ensure that the mitre gauge does indeed slide passed the blade and blade guard without any interference.

ANTI-BOUNCE DEVICE

Note: When cutting thin sheet or similar material the anti-bounce device can be usefully employed. **(Fig 34)**

Insert the anti-bounce device into the socket provided in the mitre gauge. Position the anti-bounce device for optimum efficiency and secure in place using the thumb screws.

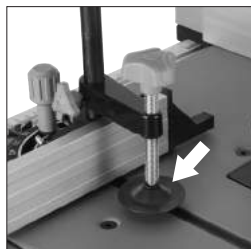


Fig. 34

Adjust the anti-bounce device so that the head does not quite touch the material to be cut. You can achieve this by gently clamping the material to be cut with the anti-bounce device, and then backing off the head by 1/2 to 1 turn.

BASIC TABLE SAW OPERATIONS

WARNING: Never attempt freehand cuts on this machine. Always use the appropriate guide or fence to minimise the possibility of the blade binding and/or kickback occurring.

We recommend that the saw blade protrudes through the material to be cut by approximately 3mm. **(Fig. 35)** Adjust the height of the blade accordingly, meanwhile keep the distance between top guard and upper surface workplace within 5mm.

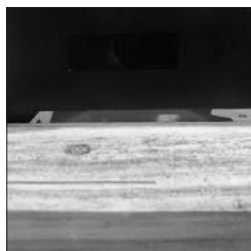


Fig. 35

WARNING: This machine is **not suitable** for **cutting rebates** or **stopped grooves**.

A workshop dust extraction machine can be connected to the extraction port found at the rear of the machine if required.

CROSS-CUTTING

Set the mitre gauge to 0° and tighten using the vertical handle. Position in the desired 'T' slot and adjust the mitre face plate as previously described. Index and hold the material to be cut against the mitre gauge faceplate (**Fig.36**). Switch on the saw and allow the blade to reach full operating speed before making the cut.

MITRE CROSS-CUTTING

Mitre cross-cutting is cutting across material at an angle of other than 90°. Set the mitre gauge to the desired angle, tighten and proceed as cross-cutting above.

COMPOUND MITRE CUTTING

Note: Compound mitre cutting is achieved when the machines blade is tilted from the vertical and the mitre gauge is set to an angle. A compound cut is therefore a combination of a mitre cut and a bevel cut. (**Fig. 37**)

- Adjust the mitre gauge and set to the desired angle.
- Tilt the blade to the desired angle and lock in place by tightening the tilt locking knob.
- Check that the mitre gauge will pass the saw blade without any interference. Adjust the mitre gauge faceplate if necessary.
- Index and securely hold the material against the mitre gauge faceplate and make the cut.

REPETITIVE CROSS-CUTTING

Repetitive cross-cutting is the process of cutting a number of pieces to the same length without having to mark out each piece separately.

Note: We recommend that repetitive cross-cutting is carried out with the mitre gauge positioned on the LH side of the machine, with the rip fence on the RH side of the machine. (**Fig. 38**)

WARNING: The rip fence can be used as a length stop only as long as it is properly set and adjusted.



Fig. 36

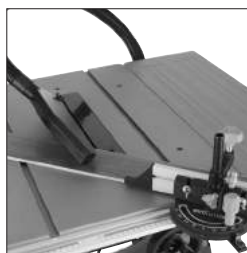


Fig. 37



Fig. 38



Fig. 39

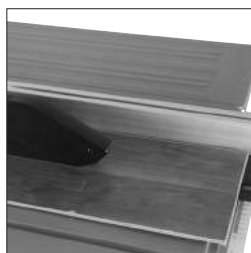


Fig. 40

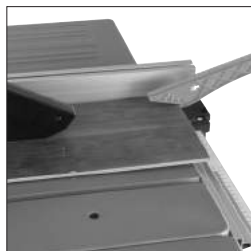


Fig. 41

To set the rip fence for repetitive cross-cutting:

- Set the rip fence at the required distance from the saw blade.
- Adjust and align the back of the rip fence faceplate with the front of the saw blade. (**Fig. 39**) This setting will afford clearance for the material as it passes through the saw blade. It will allow the cut material to move sideways away from the saw blade, with little risk of any binding or kickback occurring.

Index and hold the material to be cut against the mitre gauge faceplate and the also index the material gently against the rip fence. Hold the material and mitre gauge securely with your left hand. Gently push the workpiece through the saw. Use a push stick, if necessary, in your right hand to guide the workpiece on the RH side of the blade.

RIP CUTTING

Rip cutting is the process of cutting along the length of a piece of material rather than across it.

Rip cutting should be done with the rip fence set at the desired width from the saw blade and normally on the RH side of the machines table. (**Fig 40**)

The mitre gauge is not required for this operation, and should be stored safely off the machine for future use.

WARNING: Check that the rip fence is locked in position and is parallel to the saw blade.

Check that the riving knife is properly aligned with the saw blade.

When ripping small section material a push stick should be used to feed/guide the final **300mm** of the material past the blade. A push stick should always be used when making cuts of less than **300mm**. (**Fig 41**)

Note: When ripping long boards or large panels we recommend the use of remote work-piece support(s) to aid material handling.

Feed the work-piece through the saw keeping it indexed against the rip fence. Use smooth, steady pressure and employ a push stick when necessary.

When the ripping width is greater than 300mm, and with care, both hands can be used to guide/feed the material through the saw. The operators left hand will be to the LH side of the

saw blade. The operators right hand will be close to the rip fence on the RH side of the sawblade.

WARNING: The operators hands should **never** be in line with the blade.

BEVEL RIPPING

Bevel ripping is cutting along the length of a work-piece with the saw blade tilted at an angle.

When bevel ripping material 150mm or narrower use the rip fence on the RH side of the blade only. **(Fig 42)**

MAINTENANCE

WARNING: Ensure that the machine is disconnected from the mains supply before any maintenance tasks or adjustments are attempted.

CHANGING THE BLADE

Note: We recommend that the operator considers wearing protective gloves when handling or changing the machines blade.

- Disconnect the machine from the power supply
- Remove the top blade guard. **(refer to TOP BLADE GUARD on p.18)**
- Remove the table access plate by removing the countersunk head screw from the front edge of the access plate. **(Fig. 43)**
- Lift the plate away and carefully store it and its fixing screw for future use.
- Raise the blade to its highest position.
- Use the two blade changing spanners provided. One spanner will fit the hexagonal nut machined onto the outer blade flange, and thus prevent the arbor from rotating. The other spanner will fit the arbor nut. **(Fig 44)**
- Remove the arbor nut, the outer blade flange and the blade.
- Thoroughly clean any debris from these parts and also from the exposed motor arbor and inner blade flange. The inner blade flange can be left in situ.
- Fit the new blade. Ensure that the teeth are facing to the front of the saw **(Fig. 45)**, and that the rotation arrow on the blade is in conformism with the rotation arrow on the motor housing.
- Replace the outer flange and nut and tighten securely with the spanners provided. Check that both blade flanges are in contact with the blade.
- Replace the table access plate and its fixing screw. Ensure that the fixing screw is correctly seated.
- Replace the top blade guard.



Fig. 42

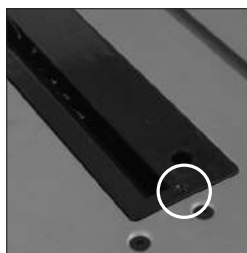


Fig. 43



Fig. 44

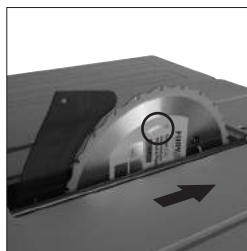


Fig. 45

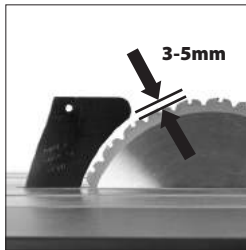


Fig. 46

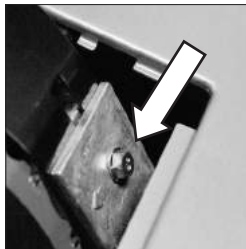


Fig. 47



Fig. 48



Fig. 49

CLEANING

After each use the machine should be cleaned. Remove all sawdust, etc from the visible parts of the machine with a workshop vacuum cleaner. A workshop dust extraction can also be connected to the machine dust extraction port at the rear of the machine. This should remove debris from the inside of the machine. Never use solvents to clean plastic parts, as solvents can damage them. Clean only with a soft damp cloth.

RIVING KNIFE

The riving knife is a very important component and comes factory fitted and correctly aligned and adjusted. The riving knife prevents the work from chattering and/or binding as it passes through the blade. Inspect the riving knife at regular intervals and if it is worn or damaged have it replaced with an original replacement part, fitted by a competent technician.

Note: Use only a genuine **Evolution riving knife**, as this is a dedicated component for this machine. Non genuine parts could be dangerous. If in any doubt, please contact the helpline.

ADJUSTING THE RIVING KNIFE

The riving knife should be adjusted so that the teeth of the blade are within 3-5mm of the edge of the riving knife (**Fig. 46**).

To adjust the riving knife, remove the table insert as shown on **p. 25**, raise the blade to its maximum height and loosen the bolt securing the riving knife (**Fig. 47**) with the spanner supplied. Adjust the riving knife to the correct distance of 3-5mm, ensuring the fixing hole for the blade guard is level with the top of the blade and re-tighten the bolt. Replace the table insert.

PUSH STICK

A plastic push stick (**Fig. 48**) is provided with the machine and has its own dedicated storage bracket to the LH side of the machines main body. When not in use store the push stick on the machine. (**Fig. 49**)

Note: If the push stick becomes damaged it should be replaced. If the operator makes their own push stick, we recommend that it follows the same pattern as that supplied. Replacement push sticks are available from Evolution Power Tools.

(6.4)

ENVIRONMENTAL PROTECTION

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.



EC DECLARATION OF CONFORMITY

In accordance with EN ISO 17050-1:2004

**The manufacturer of the product covered by this Declaration is:**

Evolution Power Tools, Venture One, Longacre Close, Holbrook Industrial Estate, Sheffield, S20 3FR.

The manufacturer hereby declares that the machine as detailed in this declaration fulfils all the relevant provisions of the Machinery Directive and other appropriate directives as detailed below. The manufacture further declares that the machine as detailed in this declaration, where applicable, fulfils the relevant provisions of the Essential Health and Safety requirements.

The Directives covered by this Declaration are as detailed below:

2006/42/EC.	Machinery Directive.
2014/30/EU.	Electromagnetic Compatibility Directive.
2011/65/EU.	The Restriction of the Use of certain Hazardous Substances in Electrical Equipment (RoHS) Directiv
2012/19/EU.	The Waste Electrical and Electronic Equipment (WEEE) Directive.

And is in conformity with the applicable requirements of the following documents:


EN61029-1:2009/A11: 2010 • EN61029-2-1:2012 • EN55014-1:2017
EN55014-2:2015 • EN61000-3-2:2014 • EN61000-3-3: 2013

Product Details

Description: R255MTS 255mm (10") MULTI-MATERIAL TABLE SAW
 Evolution Model No: 056-0008, 056-0008A, 056-0010, 056-0010A
 Brand Name: EVOLUTION
 Voltage: 220-240v ~ 50Hz
 Input: S1 1300W S6 40% 1500W

The technical documentation required to demonstrate that the product meets the requirements of directive has been compiled and is available for inspection by the relevant enforcement authorities, and verifies that our technical file contains the documents listed above and that they are the correct standards for the product as detailed above.

Name and address of technical documentation holder.

Signed:  Print: Barry Bloomer
 Supply Chain & Procurement Director
 Date: 05.02.18

EN

evolution®

evolutionpowertools.com

AUS

Total Tools (Importing) Pty Ltd
20 Thackray Road
Port Melbourne
Vic 3207

T: 03 9261 1900

FR

Evolution Power Tools SAS
61 Avenue Lafontaine
33560, Carbon-Blanc
Bordeaux

T: +33 (0)5 57 30 61 89

UK

Evolution Power Tools Ltd
Venture One, Longacre Close
Holbrook Industrial Estate
Sheffield, S20 3FR

T: +44 (0)114 251 1022

USA

Evolution Power Tools LLC
8363 Research Drive
Davenport, IA
52806

T: 866-EVO-TOOL

DE +44 (0)114 251 1022

ES +34 91 114 73 85

NL +44 (0)114 251 1022

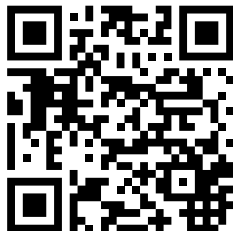
PL +48 33 822 09 22

PT +34 91 114 73 85

RO +44 (0) 114 2050458

RU +7 499 350 67 69

TR +90 (0) 312 9001810



EPT QR CODE

V5 - BK1