



255mm TCT Multipurpose Table Saw

Original Instructions

Read instructions before operating this tool.



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EC - DECLARATION OF CONFORMITY

We, manufacturer and importer

Evolution Power Tools Ltd. Venture One Sheffield S20 3FR

Declare that the product

Part numbers:

RAGE 52551, RAGE 52552, RAGE 52552EU Evolution: RAGE TABLE SAW – 255mm

Complies with the essential requirements of the following European Directives:

2006/42/EC – Machine Directive 2006/95/EC – Low Voltage Directive 2004/108/EC – EMC Directive 2002/95/EC – Restriction of the use of Certain Hazardous Substances in Electrical and Electric equipment.

The following standards have been applied:

EN 55014-1:2006+A1 EN 55014-2:1997+A1+A2 EN 61000-3-2:2006+A1+A2 EN 61000-3-3:2008 EN61029-1:2009+A11 EN61029-2-1:2010



Mr Matthew J Gavins Managing Director 18th April 2011

All documentation is held on file at the above address and is available, on request for review.



IMPORTANT

Please read these operating and safety instructions carefully and completely. For your own safety, before using this equipment check that the voltage is correct and that all handles and parts are firmly secured. If you are uncertain about any aspect of using this equipment, please contact our Technical help resource.

Helpline.

UK	0870 609 2297
USA	1-866-EVO-TOOL

EVOLUTION 10" RAGE TABLE SAW

Congratulations on your purchase of an Evolution Power Tool 10" RAGE Table Saw. Please complete your product registration online to validate your machine's warranty period and ensure prompt service if needed. We sincerely thank you for selecting a product from Evolution Power Tools.

12 MONTH LIMITED WARRANTY

Evolution Power Tools reserves the right to make improvements and modifications to design without prior notice.

Evolution Power Tools will, within twelve (12) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship. This warranty is void if the tool being returned has been used to cut materials beyond the recommendations in the Instruction Manual or if the saw has been damaged by accident, neglect, or improper service. This warranty does not apply to machines and / or components which have been altered, changed, or modified in any way, or subjected to use beyond recommended capacities and specifications. Electrical components are subject to respective manufacturers' warranties. All goods returned defective shall be returned prepaid freight to Evolution Power Tools, Evolution Power Tools reserves the right to optionally repair or replace it with the same or equivalent item.

There is no warranty – written or verbal – for saw blades. In no event shall Evolution Power Tools be liable for loss or damage resulting directly or indirectly from the use of our merchandise or from any other cause. Evolution Power Tools is not liable for any costs incurred on such goods or consequential damages. No officer, employee or agent of Evolution Power Tools is authorised to make oral representations of fitness or to waive any of the foregoing terms of sale and none shall be binding on Evolution Power Tools. Questions relating to this limited warranty should be directed to the company's head office, or call the appropriate Helpline number.

IMPORTANT SAFETY INSTRUCTIONS

To reduce the risk of electric shock, this equipment is fitted with an approved cord and plug for its intended country of use. Do not change the cord or plug in any way.

GENERAL SAFETY RULES

Read and understand all instructions before operating this product. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury. **SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

WARNING: When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury including the following:

Read all these instructions before attempting to operate this product and save these instructions.

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

SAFETY INSTRUCTIONS FOR ALL SAWS

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

SAVE THESE INSTRUCTIONS

1. Work area safety

a. Keep work area clean and well lit. Cluttered and dark areas invite accidents. b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

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

Distractions can cause you to lose control.

2. 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 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.

3. 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 safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

c. Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.

d. Remove any adjusting key or spanner before turning the power tool on. A spanner or a key left attached to a rotating part of the 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 these are connected and properly used. Use of these devices can reduce dust related hazards.

4. 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 when used at the rate for which it was designed.

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



c. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive 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 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 and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

5. Service

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

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

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 dust masks that are specially designed to filter microscopic particles.

SAFETY PRECAUTIONS FOR TABLE SAWS

a) Do not use saw blades which are damaged or deformed.

b) Replace the table insert/access plate if worn.

c) 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.

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

e) 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.

f) Saw blades should be carried in a holder whenever practicable.

g) 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.

h) Never attempt to free a stalled blade without first turning the saw off. Turn the power off immediately to prevent damage to the motor.

i) Provide adequate support for long or wide workpieces.

j) Avoid awkward operations and hand positions where a slip could cause your hand to move into the blade.

LABELS & SYMBOLS

WARNING: Do not operate the saw if any warning and / or instruction labels are missing or damaged. Contact evolution power tools for replacement labels.

Symbol	Description	
V	Volts	
А	Amperes	
Hz	Hertz	
Min ⁻¹	Speed	
~	Alternating Current	
no	No Load Speed	
	Wear Safety Goggles	
\bigcirc	Wear Ear Protection	
	Do Not Touch	
	Wear Dust Protection	
Romes	Restriction of Hazardous Substances Directive	
CE	CE certification	
X	Waste electrical and electronic equipment	

Only use genuine Evolution replacement blades. Unauthorized blades may be dangerous! Keep the blades securely fastened. Check for debris before installing any new blades and do not use dull or broken blades. Check the blades regularly for condition and wear. Damaged or worn blades should be replaced immediately. Loose fitting or damaged guards must be replaced immediately. Beware of ejecting chips as they may be HOT. Always make provisions for safe handling of excess material.

To obtain an additional copy of your manual, please contact Evolution Power Tools at:

- UK 0870 609 2297
- USA 1-866-EVO-TOOL

WEB www.evolutionpowertools.com

ADDITIONAL SPECIFIC SAFETY RULES FOR 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.

a) Always use the blade guard. The blade guard must always be used in every operation.
b) Hold the work firmly. Against the mitre gauge or rip fence.

c) Always use a push stick. Especially when rip cutting narrow stock.

d) 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.

e) 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.

f) Do not use in 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.

g) Keep children away. All children and visitors should be kept at a safe distance from the work area.

h) Do not use High Speed Steel (HSS) blades. Ensure that the correct blade is selected for the material being cut.

i) The push stick or push block should always be stored with the machine when not in use.

j) 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.

k) 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.



I) 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.

m) Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

n) Disconnect from the power supply before servicing, cleaning or and when changing accessories, such as blades.

o) Use recommended accessories. Only use genuine Evolution accessories.

p) 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.

q) Keep hands out of the path of the saw blade.

r) Never reach around the saw blade.

s) Turn off machine and wait for saw blade to stop before making any fence adjustments.

t) 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.

u) When transporting the machine use a transportation device. Never use the guards for handling or transportation.

v) During transportation the upper part of the saw blade must be lowered fully and covered by the guard.

w) All operators using this machine must read the instructions and familiarize themselves with the machines workings.

x) 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.

SPECIFICATION RAGE 255MM TABLE SAW

Voltage	230V ~ 50Hz	- 110V ~ 50Hz
Input power	2	230V ~ 1800W
	110V (UK C	Only) ~ 1600W
No load speed		2500min ⁻¹
Blade diameter	Ø10″	(255mm) TCT
Blade bore		Ø25.4mm
Blade kerf		2mm
Blade teeth		28T
Maximum depth	n of cut at 90°	79mm
Maximum depth	n of cut at 45°	55mm
Net weight		30kg
Riving Knife Thio	ckness	1.8mm

NOISE AND VIBRATION DATA

Sound Pressure Level:	96.8dB(A)
Sound Power Level:	104.5dB(A)
Uncertainty K	3 dB(A)

Vibration level:

The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.

The declared vibration total value may also be used in a preliminary assessment of exposure.

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).

ITEMS SUPPLIED

Blade Changing Tools:	3pcs
Mitre Gauge Assembly:	1pc
Hold Down Clamp Assembly:	1pc
Adjustable Rip Fence:	2pc
Push Stick:	1pc
Blade Guard:	1pc
Instruction Manual:	1pc
TCT Multi Purpose Blade (Fitted):	1pc
Riving Knife:	1pc



KNOW YOUR PARTS

- 1. ON/OFF SWITCH
- 2. SLIDING CARRIAGE
- 3. MITRE GAUGE
- 4. BLADE GUARD
- 5. RIP FENCE
- 6. RIP FENCE LOCKING HANDLE
- 7. TRANSPORTATION HANDLE

- 8. TRANSPORTATION WHEELS
- 9. HOLD DOWN CLAMP
- **10. DUAL FUNCTION ADJUSTMENT HANDLE**
- **11. RH TABLE EXTENSION**
- **12. RH TABLE LOCKING LEVER**
- **13. PUSH STICK**
- **14. REAR CANTILEVER BRACES**



ASSEMBLY

Note: Some minor assembly is required to prepare this machine for use. Please refer to the Service Parts Diagram. Some of the following tasks can be carried out with the machine still in its packaging if desired.

WARNING: Do not connect this machine to a power supply until assembly has been completed, and a thorough safety check of the machine and all of its systems has been carried out.

Check that all the contents (as listed in this Instruction Manual) are present.

Follow these instructions if the leg set and plastic lower safety guard are fastened to the machine.

- Read and understand these instructions.
- Visually check the inside of the machine body to locate any polystyrene transit packing. This polystyrene is present to provide protection for the machines internal components during shipping. It is not required operationally and must be removed before the machine can be used.
- Remove 6 of the 8 cross-head screws which fasten the lower plastic safety guard to the body of the machine. The 2 screws positioned underneath the sliding transportation handle can be left in place.
- Carefully ease the guard upwards to gain access to the inside of the machine.
- Reach inside and remove any transit packing present.
- Replace the lower plastic safety guard and replace the 6 cross-head screws.
- Remove the machine from the packaging.

WARNING: This machine is heavy. Enlist competent help when removing this machine from its packaging.

1. Deploying the Legs

The legs are stored underneath the machines main body.

- Release the retaining hook found to the front of the machine.
- Swing the legs outwards
- Secure the legs by hooking the safety hook over the protruding metal screw.
- Unhook and deploy the 2 rear cantilever braces and re-hook them into their operational position. (Fig. 1)

Note: The cantilever braces, and one of the main legs have an adjustable foot which can be screwed in or out to obtain maximum stability for the machine, particularly on uneven surfaces.





Fig 1

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Fig



Fig







Fig 5

2. Fitting the Riving Knife.

WARNING: Ensure that this procedure is only carried out with the machine disconnected from the mains supply.

The Riving Knife is a very important component, and must be fitted correctly. The Riving Knife has two functions:

- It prevents the workpiece from binding as it passes through the blade.
- It provides a suitable connection point for the blade guard.

To fit the Riving Knife:

- Remove the table insert by rotating its fixing screw (Fig 2) approx 1/4 turn.Lift & slide the table insert from the table.
- Raise the blade to its highest position. (see Operations 2)
- Loosen the Riving Knife fixing bolt by several turns.
- Slide the Riving Knife (it is slotted for convenience) between the fixing plate and mounting block. (Fig. 3) Ensure that the mounting blocks projecting lugs engage with the slot in the Riving Knife.
- Adjust the Riving Knife so that it is between 3 5mm from the saw blade. (Fig. 4)
- When correct alignment is achieved tighten the fixing bolt.
- Check the saw blade rotates freely and teeth are within 3-5mm of the Riving Knife.
- Be-install the Table insert

3. The Rip Fence

This machine has a two (2) piece Rip Fence. The Rip Fence Face Plate must be attached to the Rip Fence.

- Loosen the two thumb nuts to the RH side of the Rip Fence.
- Slide the Rip Fence Face Plate onto the Rip Fence. (Fig. 5)
- Tighten the two thumb nuts.

To attach the assembled Rip Fence to the machine:

- Hook the rear of the Rip Fence Guide over the rear Rip Fence Rail. (Fig. 6A)
- With the handle in its upper position, locate the front of the Rip Fence over the front Rip Fence Rail. (Fig. 6B)
- Push the handle down to lock the Rip Fence in place.







Fig 6A



Fig 6B



Fig 7



Fig 8

4. The Mitre Gauge

The Mitre Gauge has an adjustable Face Plate.

- Insert the Hold Down Clamp Pillar into the socket in the Mitre Gauges main body.
- Ensure that the hole in the Pillar lines up with the hole in the vertical face of the Mitre Gauge. (Fig. 7)
- Attach the Face Plate to the Mitre Gauge by sliding its attachment screw through the Mitre Gauges vertical face and the hole in the Pillar.
- Attach the locking thumb nut to the attachment screw.
- The Mitre Gauge is used on the LH side of the table and runs in an inverted T slot in the table top.

5. Blade Guard

A fully side shielded blade guard is provided with this machine. This guard must be attached to the blade riving knife, and the machine should never be used without this guard in position.

WARNING: The machine must be disconnected from the mains supply when installing the blade guard. **To attach the Blade Guard:**

- Raise the blade to its full height (Refer to Operations 2) to fully reveal the riving knife.
- The guards locating pin should be positioned at the rear of the 'L' shaped slot machined in the riving knife and the washer and wing nut fitted to one side. (Fig. 8) The blade guard must move up and down easily and smoothly, so do not over-tighten this wing nut.
- Check the operation of the blade guard. Ensure that it is working efficiently and covers the blade entirely 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. (Fig. 9)
- Check that when the blade is fully lowered, the blade guard and side covers are in contact with the table top.

6. Transporting your Table Saw

WARNING: This machine is heavy. Enlist competent help whenever you have to transport this machine.

 Ensure that the machine is disconnected from the power supply and that the power cord is securely stored on the machine.
 Lower the blade completely into the machine so that the bottom of the blade guard lies flat on the machine table.

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Fig 9



Fig 10



Fig 11



Fig 12

3. Remove and store safely any accessories e.g. mitre gauge, push stick, rip fence etc that are not secured to the machine.

4. Release the legs and fold them and the cantilever braces up into the base, securing them with the locking hooks. Competent help is useful when attempting this and when lowering the saw to the ground.

5. Pull out the transportation handle, located at the opposite side of the saw to the transportation wheels.

6. Lift the handle and allow the machines integral transportation wheels to touch the ground. **(Fig.10)**

7. Wheel the machine to its new location.

8. Re-commission the machine and reattach the accessories.

OPERATIONS

CONTROLS

1. ON/OFF Safety Switch

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

To start the machine, press the tab on LH side of the red safety button and lift it and the switch cover plate upwards to reveal the on and off buttons. Push the 'ON' button to start the machine and the '**OFF**' button to stop the machine. **(Fig.11)**

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

2. 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 folding handle hand-wheel. In its 'normal' (outer) position the hand-wheel is used to raise or lower the blade. When the hand-wheel is pushed in against its bias spring it engages with the curved toothed rack incorporated in 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 its 'normal' position.
- Turn clockwise to lower the blade. (Fig. 12)
- Turn counter clockwise to raise the blade.

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Fig 13



Fig 14



Fig 15

3. Tilting the Blade

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

- Loosen the tilt locking screw (Fig. 13) by turning the tilt locking lever.
- Push the hand-wheel in against its bias spring until it engages the tilt rack.
- Use the hand-wheel to set the required angle. An angle gauge to aid setting can be found behind the hand-wheel
- Tighten the tilt locking screw when the required angle is achieved.
- Allow the hand-wheel to return to its 'normal' position.

Note: The tilt locking lever is sprung loaded and adjustable This enables the lever to be repositioned on the locking screw.

- Pull out the lever and move to the desired position.
- Release the lever and allow the spring to re-seat the lever.

Repositioning may be necessary to avoid fouling the machines hand-wheel when the blade is tilted.

4. Rip Fence Guide

This machine is fitted with a two piece Rip Fence. We recommend that the Rip Fence is normally used in conjunction with its adjustable Face piece

The Rip Fence should be positioned to the RH side of the blade and is locked in position by using the locking lever. Push down to lock, and pull up to unlock.

When repositioning the Rip Fence use the mid-point of the fence to push or pull the fence to the desired position.

(Fig. 14) Using the mid-point aids accuracy and speed of setting. The clamping system is designed to correctly align the fence when the locking lever is pushed down.

Check alignment by sighting either side of the fence with any of the ' lines' that run across the table.

If misalignment is suspected, the pressure being applied by the Rip Fence locking lever could be at fault.

To adjust the locking lever pressure:

- Ensure that the locking lever is in the unlocked position.
- Turn the clamp pressure adjustment nut (Fig. 15) one flat either clockwise or counter-clockwise.
- Recheck Rip Fence operation and alignment.
- Continue nut adjustment until the Rip Fence operation is satisfactory and alignment and clamping is always achieved wherever the fence is positioned.

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Fig 16



Fig 17



Fig 18



Fig 19

Note: The Rip Fence guide incorporates a 'transparent window' with a datum line to aid reading the measurement scale found on the fence rail. **(Fig. 16)**

Forwards and backwards adjustment of the Rip Fence Face is possible. Loosen the two thumb nuts and slide the aluminium Fence Face extrusion to the desired position. Tighten the thumb nuts securely.

Note: We recommend that normally the Rip Fence Face be adjusted so that the rear of the Fence Face is level with the rear of the blade where it emerges from the table. This will provide clearance for the workpiece as it passes the blade.

The Rip Fence Face has a 'Hi' and 'Lo' position. The 'Lo' position can be very useful when cutting thin sheet material as it gives the operator a better view of the workpiece as it passes through the blade. **(Fig.17)**

To reposition the Rip Fence Face:

- Loosen the two thumb nuts to the RH side of the Rip Fence.
- Slide out the Rip Fence Face extrusion.
- Re-attach the Rip Fence Face in the 'Lo' position.
- Adjust to suit and tighten the two thumb nuts.
- Return to the normal 'Hi' position when cutting has been completed.

5. Mitre Gauge

The mitre gauge is used on the LH side of the table and runs in an inverted T slot in the sliding carriage table top.

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

Note: We recommend that the Mitre Gauge Slide Locking screw **(Fig. 18)** be removed and stored safely off the machine for future use when the Mitre Gauge is being used with the sliding carriage in the 'locked' position.

We further recommend that the Hold Down Clamp be removed from the Mitre Gauge and stored safely when the machine is being used with the sliding carriage in the 'locked' position.

Note: The extruded aluminium face plate of the mitre gauge should be adjusted so that it is close to, but does not foul the blade guard. Adjust by loosening the finger nut and sliding the faceplate to the required position. Securely tighten the thumb nut. **(Fig. 19)**





Fig 20



Fig 21



Fig 22



Fig 23 (Blade guard removed for clarity)

The Mitre Gauge can be set at any angle between 60° Left and 60° Right.

Fast index positions are incorporated into the design for $90^{\rm o},\,45^{\rm o}L$ and $45^{\rm o}R.$

To use the Fast Index facility:

- 90° Ensure that the 'stop plate' is in the down position and the 90° index screw is resting against its RH side. (Fig. 20)
- 45° L– Open the 'stop plate' by pivoting it upwards. Loosen the vertical locking handle and rotate the Mitre Gauge so that the 45° L index screw just passes through the 'stop plate'. Close the 'stop plate' and bring the 45° L index screw to rest against the RH side of the closed 'stop plate'. Tighten the handle
- 45° R– Open the 'stop plate' by pivoting it upwards. Loosen the vertical locking handle and rotate the Mitre Gauge so that the 90° index screw passes through the 'stop plate'. Close the 'stop plate' and bring the 45°R index screw to rest against the RH side of the 'stop plate'.

Note: Each of the fast index screws has been factory set for angular accuracy. All the index screws can be adjusted if necessary.

The 'stop plate' should rotate easily. It is important that the punched swage on the plate **(Fig. 21)** which prevents it from being over-rotated and potentially fouling the 'T' slot be checked and adjusted.

To check and adjust the 'stop plate':

- Rotate the 'stop plate' forward.
- Visually check that the punched swage is resting upon the plastic index pointer preventing over-rotation.
- If necessary adjust the 'stop plate' mounting screw so that plate moves easily and the swage always rests upon but cannot slide past the plastic index pointer. (Fig. 22)

Index Screw Checking and Adjustment

To check the accuracy of the angular settings the operator will require an Engineers Square and a 45° Square. (Not supplied)

WARNING: Only carry out these procedures with the machine disconnected from the mains supply.

To Check 90° Setting (Fig. 23)

- Raise the blade to its full height.
- Place the engineers square on the machine table with one leg resting accurately against the saw blades body.
- Check that the Mitre Gauge is set at 90°.
- Slide the Mitre Gauge into its 'T' slot and slide it up to the other leg of the engineers square.
- The Mitre Gauges Face Plate should index precisely with the engineers square.

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Fig 24



Fig 25 (Blade guard removed for clarity)



Fig 26



Fig 27

If adjustment is required:

- Loosen the index screws locking nut.(Fig. 24)
- Turn the index screw clockwise or counter-clockwise until precise alignment with the engineers square is achieved.
- Re-tighten the locking nut.

To Check 45° Settings

- Raise the blade to its full height.
- Place the 45° square on the machine table with one face resting accurately against the saw blades body. (Fig. 25)
- Check that the Mitre Gauge is set at one of the 45° settings.
- Slide the Mitre Gauge into its 'T' slot and slide it up to the edge of the 45° square.
- The Mitre Gauge Face Plate should index precisely with the edge of the 45^o square.

If adjustment is required follow the instructions as for the setting of the 90° setting.

6. Multi-Function Table Top

This Table Saw is equipped with a versatile table top capable of various adjustments which are designed to aid operator efficiency and safety.

Table extensions

The table can be extended to the RH and to the LH side, to provide extra workpiece support when necessary. Both sides of the table can be extended at the same time, or just one side at a time as required operationally.

To extend the table to the RH side:

- Pull up the table extension locking lever found just above the machines **ON/OFF** switch. (Fig. 26)
- Deploy the table extension to give the required workpiece support.
- Push the locking lever down to lock the table in the required position.
- Re-attach and/or adjust the Rip Fence as required.
- When cutting is completed return the table to its original setting.

Note: The Fence Rail will 'travel' with the RH table extension when it is deployed. A window with datum index line is built into the front edge of the table to aid setting.

(Fig. 27)





Fig 28



Fig 29

To extend the table to the LH side:

- Loosen the two locking knobs (one to the front and one to the rear of the machine) underneath the LH side of the machines table. (Fig. 28)
- Deploy the table extension.
- Tighten the locking knobs.
- When cutting is completed return the table to its original setting.

Sliding Carriage System

This machine is fitted with a Sliding Carriage to the LH side of the blade. This facility can be particularly useful when crosscutting small section material such as metal box-section or extrusions etc.

The sliding carriage should always be used with the Mitre Gauge locked to it in the desired position.

Material can be clamped to the Sliding Carriage by using the Mitre Gauge with its Hold Down Clamp, thus enhancing operator control and safety.

The sliding carriage system can also be very useful (when used in conjunction with a locked on Mitre Gauge) for repetitive cross-cutting.

To Release the Sliding Carriage

WARNING: The machine must be switched off, the blade stationary, and the switch cover plate in the closed (safe) position whenever adjustments etc are being made to the machine or the workpiece.

The Sliding Carriage Locking Latch is located to the rear of the machine table and slightly to the LH side of the blade. (Fig. 29)

- Slide the latch to the right to unlock the carriage and pull the carriage forward.
- When operations are completed, return the carriage to its original position and slide the locking latch to the left to lock the carriage.
- Check that the carriage is locked in its 'locked' position.



Fig 30



Fig 31



Fig 32



Fig 33

BASIC TABLE SAW OPERATIONS

Multi-purpose blade.

The Rage 5 comes fitted with a multi-purpose TCT blade which is capable of cutting many materials. We recommend that a workshop dust extraction system is always attached to the dust extraction port (**Fig. 30**) when cutting wood or wooden products to prevent any possible build up of sawdust in the lower blade guard.

When changing the blade (See Maintenance) the operator should visually check for any dust build up in the lower blade guard. With the blade removed any residual dust can be sucked away using a suitable crevice nozzle vacuum extraction machine. The blade can then be reinstalled.

Metallic materials should not be cut if it is suspected that there could be residual sawdust in the lower blade guard. The machine should be disconnected from its power supply and the table insert removed (refer to 'Assembly 2 & 4 Figs 2 & 8) so that a visual check can be made. **(Fig. 31)** If there is evidence of sawdust build-up, remove this sawdust before commencing metal cutting 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 kickback.

We recommend that the saw blade protrudes through the material to be cut by approximately 3mm. Adjust the height of the blade as previously described. This machine is not suitable for cutting rebates or stopped grooves.

A workshop dust extraction device should be connected to the extraction port found at the rear of the machine. (Fig. 30)

1. Crosscutting

Set the mitre gauge to 90° and tighten using the vertical handle. Position in the 'T' slot and adjust the mitre face plate as previously described. Index the material to be cut against the mitre gauge faceplate. Switch on the saw and allow to reach full operating speed before sliding the mitre gauge and workpiece towards the rear of the table making your cut. **(Fig. 32)**

2. Mitre crosscutting

Mitre crosscutting is cutting the material at an angle other than 90°. Set the mitre gauge to the desired angle, tighten and proceed as cross-cutting above. **(Fig. 33)**





Fig 34



Fig 35



Fig 36

3. Bevel crosscutting

Bevel crosscutting is the same as crosscutting but with the blade tilted at an angle. Tilt the blade to the desired angle as previously described, and ensure that it is locked in place.

Set the mitre gauge to 90° and adjust the faceplate so that it does not touch or foul the saw blade as it passes. Index the material against the mitre gauge and make your cut. (Fig. 34)

4. Compound mitre cutting

Compound mitre cutting is a combination of mitre cutting and bevel crosscutting.

Adjust the mitre gauge and the blade to the desired angles. Lock both in place.

Check that the mitre gauge will pass the saw blade without fouling. Adjust the mitre gauge faceplate if necessary.

Index the material against the mitre gauge and make your cut. (Fig. 35)

5. Repetitive crosscutting

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

Note: 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.

Caution: The Rip Fence can be used as a length stop only if it is properly set and adjusted.

To use the Rip Fence as length stop align the back of the adjustable Fence Face with the back of the saw blade and set at the required distance from the blade. This will allow clearance for the material as it passes through the saw blade. **(Fig. 36)**

- Check that the Rip Fence is set at the required distance and is lying parallel to the saw blade.
- Index the material to be cut against the Mitre Gauge and the Rip Fence Face.
- Hold the material and Mitre Gauge with your left hand.
- Gently push the workpiece through the saw. Use a push stick in your right hand to guide the workpiece on the RH side of the blade.

Note: If the Sliding Carriage system is deployed for repetitive cross-cutting, the Mitre Gauge must be fastened to the carriage.

We recommend that the mitre gauge be fixed in its dedicated position to the front of the carriage, where the locking screw will engage in a hole in the sliding carriage body.

6. Rip cutting

Rip cutting is cutting along the length of a piece of material rather than across it. Rip cutting should always be done with the Rip Fence Face set to the desired width and on the RH side of the machines table.

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

Note: 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.

When ripping long boards or large panels always use a remote work support or enlist trained competent help.

Feed the workpiece through the saw keeping it indexed against the rip fence. Use smooth, steady pressure and employ a push stick if necessary. (Fig. 37)

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. Hands should **never** be in line with the blade.

7. Bevel ripping

When bevel ripping material 150mm or narrower use the rip fence on the RH side of the blade only.

8. Using the Sliding Carriage System

WARNING: All 'setting up' operations should be undertaken with the machine switched off, the blade stationary, and the switch cover plate in the closed (safe) position.

Release the carriage by sliding the table latch (located at the rear of the table and just to the LH of the blade) to the unlocked position.

- Set the Mitre Gauge to the required angle and lock in place with the vertical locking handle.
- Slide the Mitre Gauge into the inverted 'T' slot and lock in the required place by tightening the locking knob.



Fig 37





Fig 38



Fig 39



Fig 40



Fig 41

Note: Although the Mitre Gauge can be locked in any desired position along the 'T' slot it does have a dedicated position to the front of the carriage, where the locking screw will engage in a hole in the sliding carriage body. **(Fig. 38)**

- Install the Hold Down Clamp, if required, onto the pillar fitted into the Mitre Gauges main body. (Fig. 39) Tighten in the required position using the locking screw.
- Place the workpiece in the required position and against the Mitre Gauge Face Plate.
- Clamp the workpiece to the Sliding Carriage by adjusting the Hold Down Clamp for best position and tightening the vertical locking screw using the large knob. (**Fig. 40**)
- The Mitre Gauge has its own locking screw to lock it to the sliding carriage, but when used with the Hold Down Clamp, additional security is obtained. Check the integrity of the installation.

Note: We recommend that the above set up procedure is completed with the Sliding Carriage pulled out from the machine table to give the operator the clearance and space to make any measurements, confirm cutting lines etc.

When satisfied that all adjustments and cutting line positionings etc are correct, and all adjustment screws are securely tightened, open the On/Off switch cover plate. Start the machine and push the Sliding Carriage (by using the Mitre Gauge) to the rear of the Table to make the cut.

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.

- 1. Disconnect the machine from the power supply
- 2. Remove the blade guard. (Refer to Assembly 4)

3. Remove the table insert by rotating its fixing screw approximately 1/4 turn. Lift & slide the insert from the table & safely store it for future use.

4. Raise the blade to its highest position.

5. Use the two blade changing tools provided. One to hold the motor arbor, and the other to loosen the arbor nut. (Fig. 41)



Fig 42



Fig 43

6. Remove the nut, outer flange and blade.

7. Fit the new blade. Ensure that the teeth are facing to the front of the saw, and that the arrow on the blade is in line with the motor direction.

8. Replace the outer flange and nut and tighten securely with the spanners provided. Check that both blade flanges are in contact with the blade.

9. Replace the table insert and its fixing screw. Ensure that the fixing screw is correctly seated.

10. Replace the blade guard and check all operational functions of the blade and its guarding system.

11.Only connect the machine to its main supply after a complete safety check of the machine has been carried out.

Cleaning

After each use the machine should be cleaned. Remove all sawdust etc from the visible parts of the machine with a vacuum cleaner. A vacuum cleaner 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 very slightly damp cloth.

Riving Knife

The riving knife is a very important component and must be fitted correctly aligned and adjusted. The riving knife prevents the work from binding as it passes through the blade.

Inspect the riving knife at regular intervals and replace it if it is worn or damaged.

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.

Push Stick

A plastic push stick is provided with the machine and has its own dedicated storage brackets to the RH side of the machines main body. (Fig. 42) When not in use store the push stick on the machine.

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.



Blade Storage

A blade storage facility is available at the RH side of the machine. **(Fig. 43)** Undo the centre hand nut and place any spare blades onto the ø25.4mm metal flange. Secure the blades with the centre hand nut.

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.









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