

# evolution

## RAGE *TWIN*

125mm (5") Twin Blade Saw

# Original Instructions

Read instructions before operating this tool.

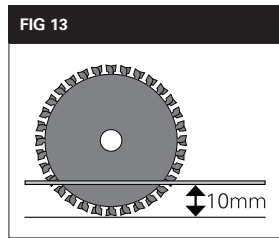
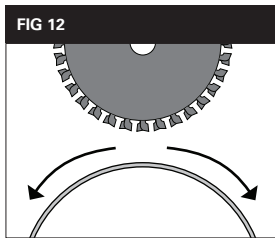
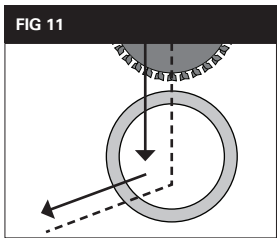
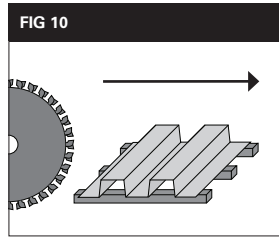
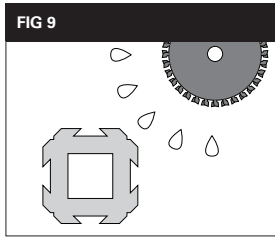
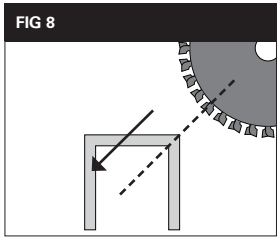
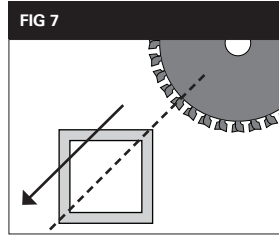
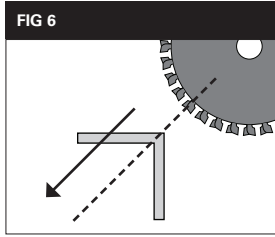
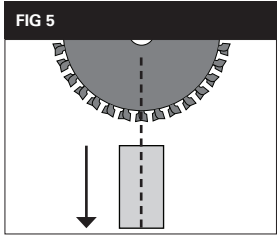
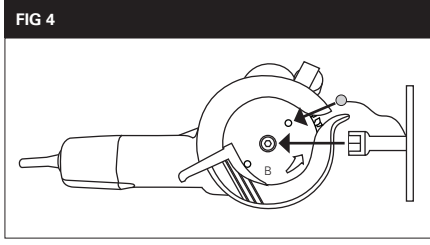
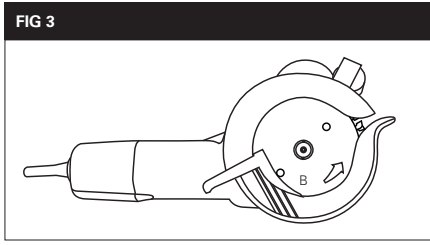
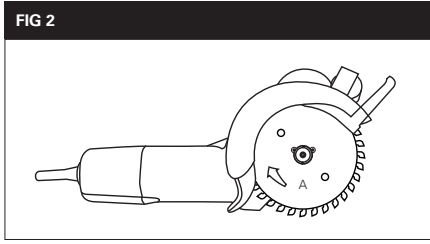
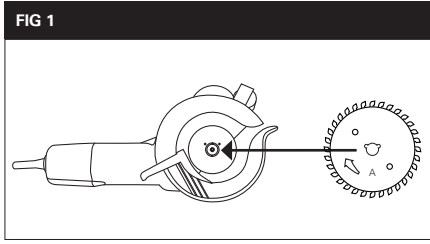
### FR Manuel D'Instruction Original

Lisez attentivement ces consignes avant d'utiliser cet outil.

### ES Manual de instrucciones

Lea las instrucciones antes de hacer funcionar esta herramienta.





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**EC - DECLARATION OF CONFORMITY** **GB**

We, the importer  
 Evolution Power Tools Ltd.  
 Venture One  
 Longacre Close  
 Sheffield  
 S20 3FR

Declare that the product  
 Part numbers: RAGETWIN1251, RAGETWIN1252,  
 RAGETWIN1252EU  
 Evolution: RAGE125mm (5") Twin Blade Cutter

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.

These power tools have been designed in compliance with  
 the Council Directives:  
 2006/42/EC  
 2004/108/EC  
 2002/95/EC  
 2002/96/EC

The following standards have been applied:  
 EN55014-1  
 EN55014-2  
 EN61000-3-2 & EN61000-3-3  
 EN60745-1  
 EN60745-2-5

**NOISE & VIBRATION DATA**

LpA (sound pressure)	dB(A) 90.0
LwA (acoustic power)	dB(A) 101.0
KpA (sound pressure uncertainty)	dB(A) 3
KwA (acoustic power uncertainty)	dB(A) 3

**WEIGHTED RMS ACCELERATION VALUE**

Front Handle	m/s <sup>2</sup> 1.383
Rear Handle	m/s <sup>2</sup> 1.5

<b>VIBRATION</b>	m/s <sup>2</sup> 5.18
K	m/s <sup>2</sup> 1.5

The declared vibration value has been measured in accordance with a standard test method (EN60745) and may be used for comparing one tool with another. The declared vibration value may also be used in a preliminary assessment of exposure.

**WARNING:** The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used. Identify safety measures to protect the operator that are based on an estimation of the exposure in the actual conditions of use. Take into account all parts of the operating cycle including the times when the tool is switched off and when it is running at idle in addition to actual trigger time.

Authorised Signatory  
 Date: 1/8/2010

Name: Mr Matthew J Gavins  
 Position: Managing Director  
 Year of Manufacture: 2010



**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 Helpline.

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

**RAGETWIN**

Congratulations on your purchase of an Evolution Power Tools RAGE125mm Twin Blade 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**

**Please read all of these instructions before attempting to operate this machine. Save this manual for future reference.**

- 1. Keep work area clear.** Cluttered work areas invite accidents.
- 2. Consider work area environment.** Do not expose tools to rain. Do not use tools in damp or wet locations. Keep work area well lit. Never use tools near flammable liquids or gases.
- 3. Protect yourself against electric shock.** Avoid body contact with earthed or grounded surfaces.
- 4. Keep other people away.** Do not let others, especially children, come close to the work, and touch the tool or the extension lead. Keep them away from the work area.
- 5. Store idle tools.** When not in use, tools should be stored in a dry locked-up place, out of children's reach.
- 6. Never force the tools.** Your tools will be more efficient and safer when used at the rate for which they were intended.
- 7. Use the right tool.** Do not force small tools to do the job of a heavy duty tool. Do not use tools for purposes not intended; for example do not use circular saws to cut tree limbs or logs.
- 8. Dress properly.** Do not wear loose clothing or jewellery which may get caught in moving parts. Non-skid footwear is recommended when working outdoors. If you have long hair, tie it back and wear protective hair covering.
- 9. Use protective equipment.** Use safety glasses. Use face or dust mask if cutting operations create dust.
- 10. Connect dust extraction equipment.** If the machines have a connection for dust extraction equipment, ensure these are connected and properly used.
- 11. Do not damage the cable.** Never pull the power cable to disconnect the machine. Keep the cable away from heat, oil and sharp edges.
- 12. Secure workpiece.** Where possible, use clamps or a vice to hold the workpiece. It's much safer than using your hands.
- 13. Don't over reach.** Keep proper footing and balance at all times.

**14. Maintain tools in good working condition.** Keep cutting tools sharp and clean for better performance and optimum safety. Follow instructions for lubricating and changing accessories. Inspect power cables regularly and, if damaged, have them replaced by an authorised service centre. Inspect extension cables regularly and replace immediately if damaged. Keep handles dry, clean and free from oil and grease at all times.

**15. Disconnect tools.** Disconnect tools from the power supply when not in use, before any maintenance operation and when changing accessories such as blades, bits, cutters, etc.

**16. Remove adjusting keys and spanners.** Get into the habit of checking that adjusting keys and spanners have been removed from the machine before turning it on.

**17. Avoid unintentional starting.** Ensure switch is in “off” position before plugging in the machine.

**18. Use proper extension leads.** When the tool is used outdoors, use only extension leads intended for outdoor use and labelled as such.

**19. Stay alert.** Concentrate on what you are doing, use common sense and do not operate the tool when you are tired.

**20. Check that no part is damaged.** Before using a tool, make sure that it is in good working order. Check the alignment and condition of moving parts, mounting and any other aspect that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual. Do not use the tool

if the switch does not turn on and off.

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

**22. Have your tool repaired at an authorised service centre.** This electric tool complies with current safety rules. Repairs should only be carried out by an authorised service centre using original spare parts. Failing this, the user could expose themselves to considerable danger.

#### HEALTH ADVICE

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##### 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 INSTRUCTIONS FOR ALL SAWS

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**a) DANGER: Keep hands away from cutting area and the blade.** Keep your second hand on the auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.

**b) Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.

**c) Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.

**d) Never hold piece being cut in your hands or across your leg.** Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.

**e) Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a “live” wire will also make exposed metal parts of the power tool “live” and shock the operator.

**f) When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.

**g) Always use blades with correct size and shape (diamond versus round) of arbor holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.

**h) Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

##### Further safety instructions for all saws

Causes and operator prevention of kickback:

Kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator:

1. When the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
2. If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the workpiece causing the blade to climb out of the kerf and jump back towards the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

**a) Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces.** Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.

**b) If the blades are binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blades come to a complete stop.** Never attempt to remove the saw from the work or pull the saw backward while the blades are in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.

**c) When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.

**d) Support large panels to minimise the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.

**e) Blade depth and bevel adjusting locking levers must be tight and secure before making a cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.

**f) Do not use dull or damaged blades.** Unsharpened or improperly set blades produce a narrow kerf causing excessive friction, blade binding and kickback.

**g) Use extra caution when making a “plunge cut” into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

**Safety instructions for saws**

**a) Check lower guard for proper closing before each use.**

Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, the lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

**b) Check the operation of the lower guard spring.** If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.

**c) Lower guard may be retracted manually only for special cuts such as “plunge cuts” and “compound cuts.”** Raise lower guard by the retracting handle and as soon as the blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.

**d) Always observe that the lower guard is covering the blade before placing saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk

backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

Symbol	Description
V	Volts
A	Amperes
Hz	Hertz
min <sup>-1</sup>	Speed
~	Alternating Current
No	No Load Speed
	Double Insulated
	Wear Safety Goggles
	Wear Ear Protection
	Do Not Touch
	Wear Dust Protection
	Restriction of Hazardous Substances Directive
	CE certification
	Waste electrical and electronic equipment

Only use genuine Evolution replacement blades. Unauthorised 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. Never use any abrasive wheels. 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.evolutionbuild.com

**ADDITIONAL SPECIFIC SAFETY RULES** GB

**a) Keep guards in place and in working order.**  
**b) 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.

**c) Keep work area clean.** Cluttered areas and benches invite accidents.

**d) Don't use in dangerous environment.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lit.

**e) Keep children away.** All visitors should be kept a safe distance from the work area.

**f) Don't force the tool.** It will do the job better and safer if used at the rate for which it was designed.

**g) Use proper extension cord.** Make sure your 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.

**h) Wear proper apparel.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewellery which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.

**i) Always use safety glasses.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.

**j) Secure work.** Use clamps to hold work when practical.

**k) Don't overreach.** Keep proper footing and balance at all times.

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

**m) Disconnect tools before servicing and when changing accessories, such as blades.**

**n) Reduce the risk of unintentional starting.** Make sure switch is in off position before plugging in.

**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 blades.**

**r) Never reach around the saw blades.**

**s) Turn off tool and wait for saw blades to stop before moving workpiece.**

**t) Disconnect power before changing blades, servicing or cleaning.**

**u) Never carry the tool by the power cord.** Carrying 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.

### Blade Dimensions

Maximum Diameter: 125mm  
 Thickness: Blade A: 1.5mm  
 Blade B: 1.7mm

### ASSEMBLY

Your Evolution Power Tools Twin Blade Saw is shipped complete. Remove all the contents from the box and inspect to ensure no damage has occurred during shipping, and that the items listed below are included:

Description	Qty
Instruction Manual	1
125mm TCT Blade (Fitted)	1 Pair
Spanner	1
Assist Handle	1
Lubrication Unit (Fitted)	1

**CAUTION!** ALWAYS DISCONNECT THE TWIN BLADE SAW FROM THE POWER SOURCE BEFORE MAKING ANY ADJUSTMENTS.

### OPERATION

GB

Before commencing any operations, please check the following:

#### 1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the machines nameplate.

#### 2. Power Switch

Ensure that the power switch is in the OFF position. If the plug is connected to a power source with the switch in the ON position, the machine will start operating immediately. This could cause a serious accident.

#### 3. Extension cord

When the work is remote from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as possible, and routed so that it does not constitute a trip or other safety hazard.

#### 4. Checking the Blades

Check that the blades are the specified ones, and are not cracked, broken or bent. Do not use the machine if there is any doubt about the integrity of the blades.

### SPECIFICATIONS

GB

#### RAGETWIN 125mm (5")

Motor (230V or 110V 50Hz) (Watts): 850W  
 RPM No Load (min<sup>-1</sup>): 5500min<sup>-1</sup>  
 Max Cut Depth: 28mm  
 Weight: 3.2kg

## INSTALLING/REMOVING THE TCT BLADES

**NOTE:** It is recommended that the operator considers wearing protective gloves when handling the blades during installation or when changing the blades.

### 1. Installation

1. Ensure that the machine is not connected to any power source.
2. Lay the saw down on a bench with the blade arbor pointing upwards.
3. Open the lower guard (see **fig 2**)
4. Place blade 'A' onto the flange with the letter 'A' clearly visible (see **fig 1**)
5. Align the two offset cut-outs in the blade with the drive pins on the flange and securely fit the blade onto the flange.
6. Place blade 'B' onto the adaptor with the letter 'B' clearly visible, and then thread the locknut onto the shaft. (see **fig 3**) **HAND TIGHTEN** only.
7. Turn the blades so that the holes in both blades are lined up.
8. Place the pin (included with the wrench) into the aligned holes.
9. Tighten the locknut clockwise with a wrench, and then remove the pin from the blades (see **fig 4**). This will allow the blades to rotate freely.
10. Carefully turn the blades by hand to ensure that they rotate easily in opposite directions.

### 2. Removal

1. Ensure that the machine is disconnected from the mains supply.
2. Allow the blades to cool.
3. Rotate the blades until the holes in both blades are in alignment.
4. Place the pin attached to the wrench through the holes in the blades.
5. Unscrew the locknut by rotating it counter clockwise, and remove it (see **fig 4**).
6. Open the lower guard (see **fig 2**)
7. Lift and remove blade 'B'.
8. Lift and remove blade 'A'.

## CUTTING PROCEDURES

1. Mark out the material to be cut (use an appropriate pencil etc) with clear, precise cutting lines.
2. Offer the saw up to the material to be cut and align the blades with a pre-marked cutting line. Do not start the machine until correct alignment has been achieved
3. Ensuring that the blades are not touching the material to be cut, turn on the machine and allow to run up to full speed.
4. Gently feed the saw blades into the workpiece. Cutting can be performed smoothly if you cut straight ahead and allow the saw time to work without forcing or pressing the blade.

## CAUTION

- Always check the TCT blades before starting work.
- Never use a cracked, broken or bent TCT blade.
- Do not apply water or coolant to a TCT blade.
- Start cutting only when the machine reaches full operating speed.
- If the blade seizes or there is any abnormal noise, immediately turn the power off.
- Never use a TCT blade to cut zig zag or curved lines.
- Never use the side surface of the TCT blade. Never use to perform inclination cutting.
- If excessive force is applied to the TCT blade to make it align with a pre-marked line during cutting, this could overload the motor, cause burn damage and may overheat the blades and shorten their service life.
- Take care not to allow the machines power cord to come into contact with the rotating TCT blades during cutting operations.
- Support the workpiece in such a way that it is possible to predict what will happen, and so that the cut remains open while cutting.
- Feed the machine down in line with the blades. Sideways pressure on the blades can damage them and can be dangerous.
- When the work is completed, turn off the power and disconnect the power plug from the power supply.

## CUTTING CROSS SECTIONAL MATERIALS

The life span of the blades and the quality of the cutting edge is dependent upon vibration being kept to a minimum. For this reason the material should always be clamped in place before work begins.

### Flat bar iron

The blade is fed at an angle of 90° to the work surface (see **fig 5**).

### Corner piece

The blade is fed diagonally through the work surface (see **fig 6**).

### Rectangular pipe

The blade is fed from corner to corner (see **fig 7**).

### U Section

The blade is fed from corner to corner (see **fig 8**)



### Aluminium / Copper

This machine is equipped with a lubricating unit and this should be used when cutting all kinds of aluminium and copper (see fig 9). Refer to the section 'Lubricating Instructions'.

### Shaped plate

Plate must always rest on at least three mounts, with one on either side of the cut (see fig 10).

### Pipes

The blade is fed through the object until it reaches the lower edge, angled as it goes so that the blade hits the material at an angle of 90° (see fig 11).

### Spiral tube and longitudinal cutting

Feed the blade into the material, so that the blade protrudes through by approximately 10mm. Do not drive the blade as far as its entire cutting edge. When the blade is through the materials wall, start to feed the blade forwards and backwards (see fig 12).

### Thin plate

Only feed the blade down approximately 10mm. Then start cutting (see fig 13)

## LUBRICATION INSTRUCTIONS

1. The blades are equipped with 'Dry Cut' teeth and as a general rule these need not be lubricated. However, with some materials and in some extreme conditions, cutting paste can be applied.
2. When cutting Aluminium / Copper / Stainless Steel and Cast Iron, the lubricating device should be used.
3. Insert the cutting paste rod (not included) into the hole in the lubrication unit. This unit is located on the top of the steel blade guard. Push the lubricant rod down firmly, and rotate the lubricant feed hand-wheel until it grips the lubricant rod.
4. Switch on the cutter, and using the feed hand-wheel, bring the lubricant rod to gently bear on the rotating teeth of the blades.
5. Operator discretion will be required to determine the frequency of lubrication application. To apply extra lubricant, turn the lubricant feed hand wheel.

**NOTE:** We recommend that you use cutting paste in rod form, available from your Evolution Power Tool retailer.

## MAINTENANCE

1. Inspecting the TCT Blades. A worn blade overloads the motor and reduces working efficiency. If either blade shows signs of wear replace with a new pair.
2. Inspecting the mounting screws. Regularly inspect all mounting screws and ensure they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in a serious hazard.
3. Maintenance of the motor. Exercise due care to ensure that the winding does not become damaged and/or wet with oil or water.
4. Keep machine clean and free from debris. Avoid using cleaning products which include benzene, trichloroethylene, chloride or ammonia as these can damage plastic components.
5. In the case of electrical or mechanical malfunction immediately switch off the machine and disconnect the plug from the power supply.
6. Excessive sparking may indicate the presence of dirt in the motor or worn out carbon brushes. Check the brushes for wear and replace when they reach  $\frac{1}{4}$ " (6mm)
7. If the supply cord of this power tool is damaged, it must be replaced by a specially prepared cord available through the service organisation.
8. For all other service take the machine to your local dealer, or if bought in the USA to Evolution Power Tools USA, Iowa.

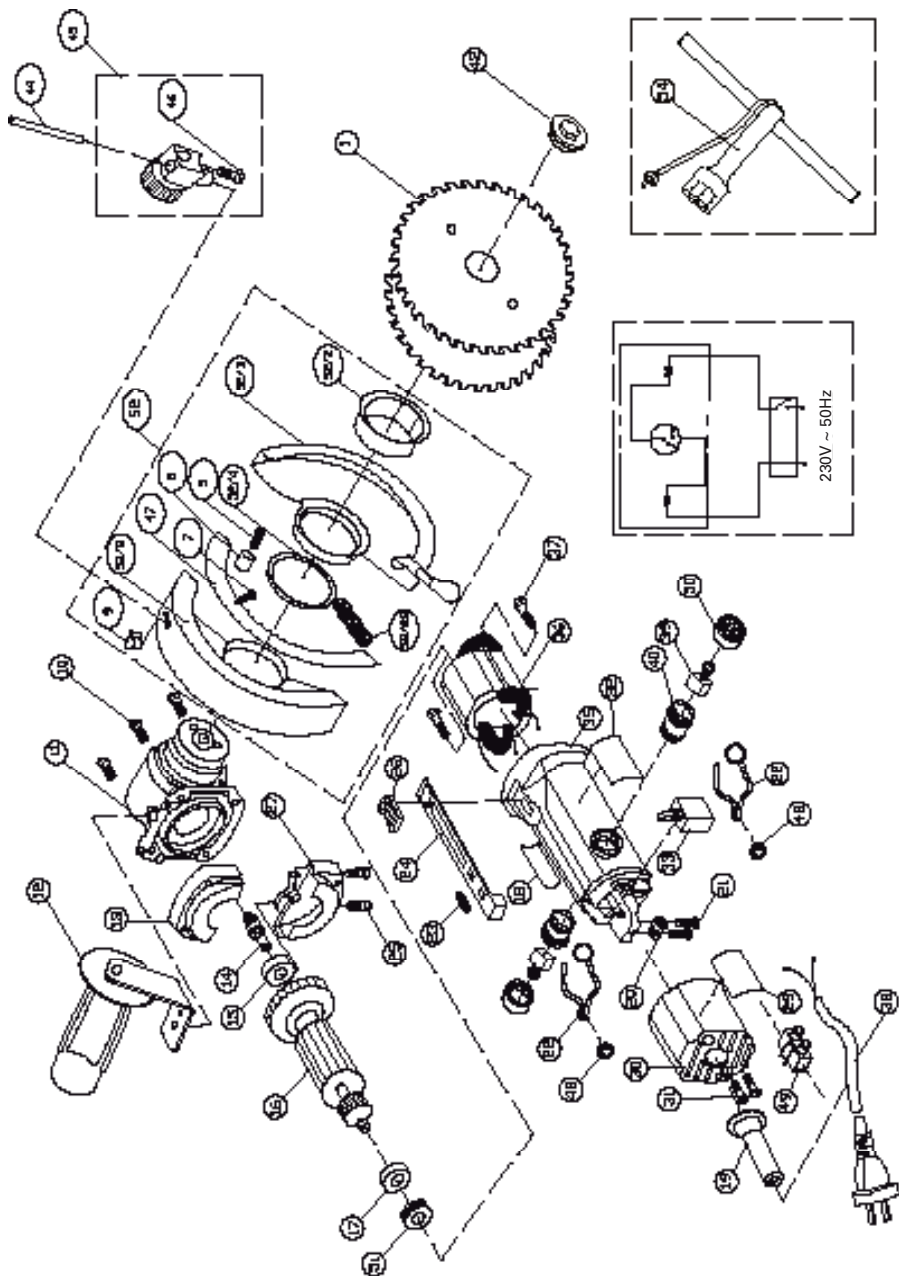
## ACCESSORIES

- Evolution Blades
- 2 x 125mm TCT Blades

## 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.





The logo features a grey, curved swoosh that starts from the bottom left and curves upwards and to the right, ending under the 'e' of 'evolution'.

**evolution<sup>®</sup>**

[www.evolutionbuild.com](http://www.evolutionbuild.com)