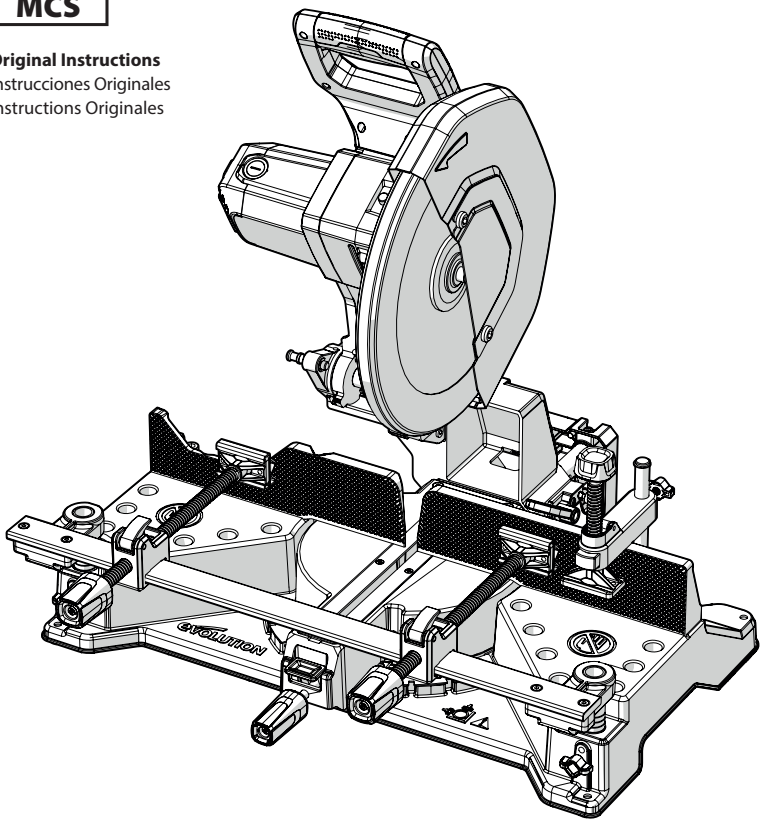
EVOLUTION®

evolutionpowertools.com

S355 MCS

Original Instructions
Instrucciones Originales
Instructions Originales



Date Published:12/05/2022

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
UK: customer.services@evolutionpowertools.com
US: evolutioninfo@evolutionpowertools.com

GUARANTEE
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 guarantee 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.

Evolution Power Tools reserves the right to make improvements and modifications to the product design without prior notice.
Please refer to the guarantee registration leaflet and/or the packaging for details of the terms and conditions of the warranty.

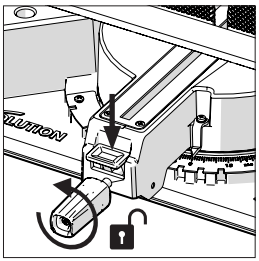


Fig. 1

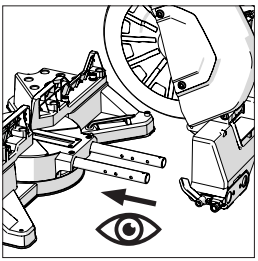


Fig. 2

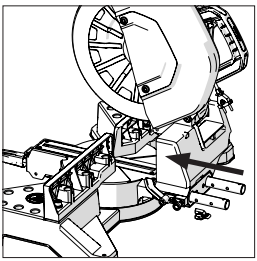


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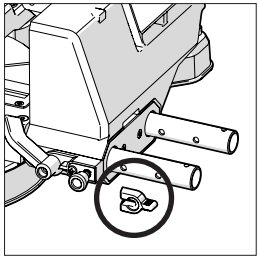


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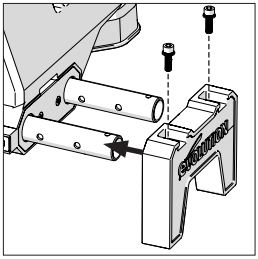


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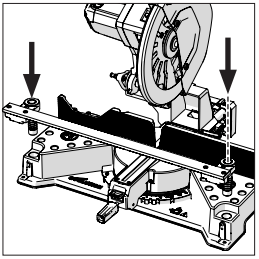


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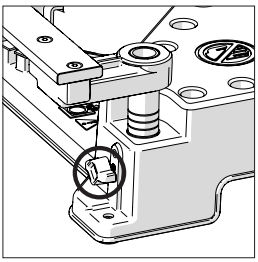


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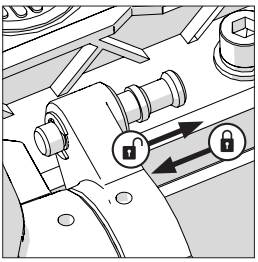


Fig. 8

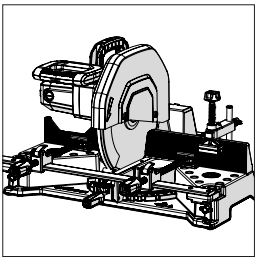


Fig. 9

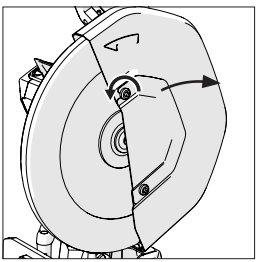


Fig. 10

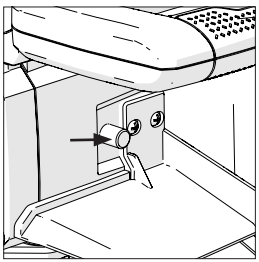


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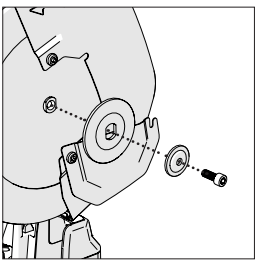


Fig. 12

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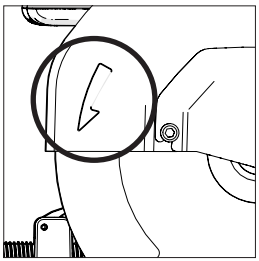


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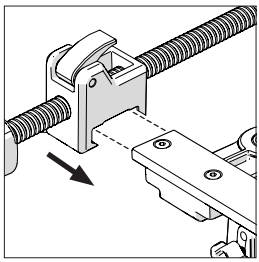


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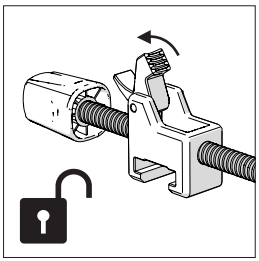


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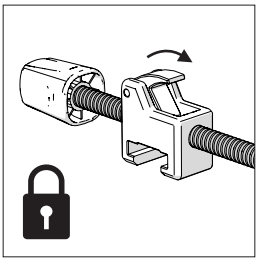


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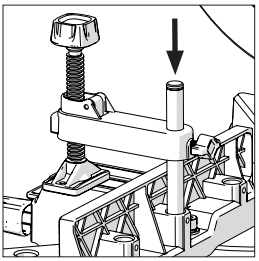


Fig. 17

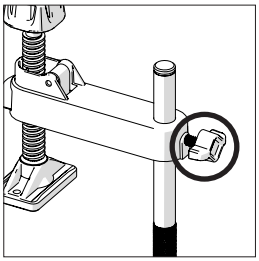


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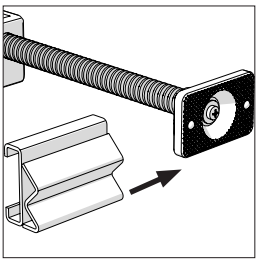


Fig. 19

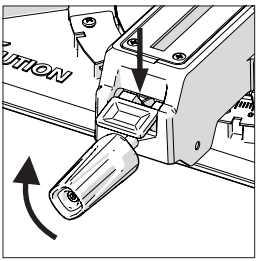


Fig. 20

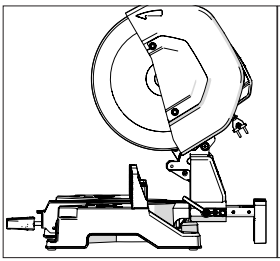


Fig. 21a

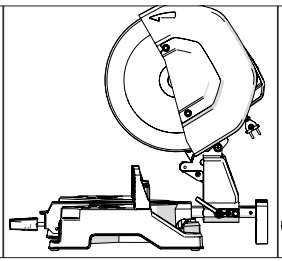


Fig. 21b

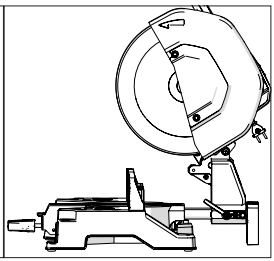


Fig. 21c

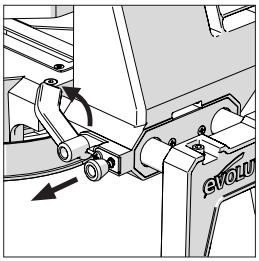


Fig. 22

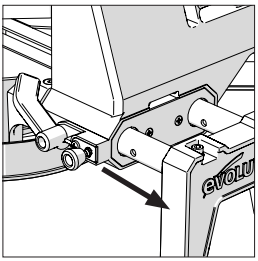


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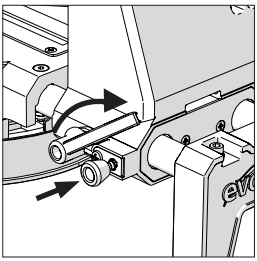


Fig. 24

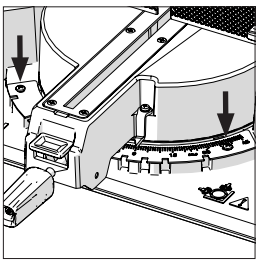


Fig. 25

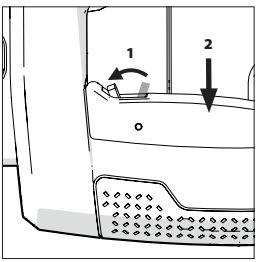


Fig. 26

SPECIFICATIONS	S355MCS	
MACHINE	**UK/EU**	**USA**
Product code	UK 220-240V:102-0001, UK 110V:102-0002, EU 220-240V:102-0003	UK 120V:102-0004
Motor (UK/EU) 220V-240V ~ 50Hz	2200W	-
Motor (UK) 110V ~ 50Hz	1600W	-
Motor (USA) 120V ~ 60Hz	-	15A
Speed (No Load)	1550 min^{-1}	1450 min^{-1}
Weight (With Blade)	35kg	
Power Cord	3 m	10 feet
CUTTING CAPACITY		
Mild Steel Plate (Max. Thickness)	12 mm	1/2 ″
Stainless Steel Plate (Max. Thickness)	5 mm ◊	13/64 ″ ◊
Square Tube at 90°	120 x 120mm	4-3/4″ x 4-3/4″
Square Tube at 45°	100 x 100mm	3-29/32″ x 3-29/32″
Rectangle Tube at 90°	100 x 165mm	3-29/32″ x 6-7/16″
Rectangle Tube at 45°	100 x 110mm	3-29/32″ x 4-3/8″
Round Tube at 90°	Ø 120mm	Ø 4-11/16″
Round Tube at 45°	Ø 110mm	Ø 4-5/16″
Minimum Cut Off Piece Length	8 mm	5/16 ″
BLADE		
Diameter	355mm	14″
Bore	25.4mm	1″
Kerf	2.4 mm	.094″
Mild Steel Blade No. Teeth	66	
NOISE EMISSION DATA*		
Sound Pressure Level L_{PA}	110V: 94,9 dB(A) / 220-240V: 94,8 dB(A)	
Sound Power Level L_{WA}	110V: 107,9 dB(A) / 220-240V: 107,8 dB(A)	
Uncertainty, K_{pA} & K_{WA}	3dB(A)	

◊ Stainless Steel blade must be fitted.

WARNING: Due to the power input of this product on start up, voltage drops may occur and this can influence other equipment (e.g. dimming lights). So for technical reasons we advise, if the mains-impedance is Zmax< 0.069Ω, these disturbances are not expected. If you require further clarification, you may contact your local power supply authority.

POLARIZED PLUG
WARNING (USA ONLY): To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

WARNING:
- that the vibration emissions during actual use of the power tool can differ from the declared values depending on the ways in which the tool is used especially what kind of workpiece is processed; and
- of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

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 following symbols may appear in the manual or on the product.

Symbol	Description
V	Volts
A	Amperes
Hz	Hertz
min^{-1}	Speed
~	Alternating Current
n_O	No Load Speed
	Wear Safety Goggles
	Wear Ear Protection
	Wear Dust Protection
	Read Instructions
	Double Insulation Protection

	CE Certification
	UKCA Certification
	TUV SUD Certification
	Waste electrical and electronic equipment
	Warning
	Do not touch - keep hands away

INTENDED USE OF THIS POWER TOOL
WARNING: This product 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
Thin Steel
Stainless Steel
Aluminium
Wood
Masonry
Note: Cutting galvanised steel may reduce blade life.

PROHIBITED USE OF THIS POWER TOOL
WARNING: This product is a hand operated mitreing chop 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.

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.

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ELECTRICAL SAFETY
This machine is fitted with the correct moulded plug and mains lead for the designated market. If the supply cord of this power tool is damaged, it must be replaced by a specially prepared supply cord available through the service organization

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.

GENERAL POWER TOOL SAFETYWARNINGS
These General Power Tool Safety Instructions are as specified in EN 62841-1: 2015 &
EN IEC 62841-3-9:2020/A11:2020

⚠ **WARNING:** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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.

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) 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.

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.
h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

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 plug from the power source and/or remove the battery pack, if detachable, from the power tool 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 and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's 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 fromthose intended could result in a hazardous situation.
h) Keep handles and grasping surfaces dry, clean and free from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

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.

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.**

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.

Safety instructions for mitre saws
a) Mitre saws are intended to cut wood or wood-like products, they cannot be used with abrasive cut-off wheels for cutting ferrous material such as bars, rods, studs, etc. Abrasive dust causes moving parts such as the lower guard to jam. Sparks from abrasive cutting will burn the lower guard, the kerf insert and other plastic parts.
b) Use clamps to support the workpiece whenever possible. If supporting the workpiece by hand, you must always keep your hand at least 100 mm from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand. If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact. **c) The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut "freehand" in any way.** Unrestrained or moving workpieces could be thrown at high speeds, causing injury.
d) Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece. Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.
e) Never cross your hand over the intended line of cutting either in front or behind the saw blade. Supporting the workpiece "cross handed" i.e. holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.
f) Do not reach behind the fence with either hand closer than 100 mm from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning. The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.
g) Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence.

Always make certain that there is no gap between the workpiece, fence and table along the line of the cut. Bent or warped workpieces can twist or shift and may cause binding on the spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.
h) Do not use the saw until the table is clear of all tools, wood scraps, etc., except for the workpiece. Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.
i) Cut only one workpiece at a time. Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.
j) Ensure the mitre saw is mounted or placed on a level, firm work surface before use. A level and firm work surface reduces the risk of the mitre saw becoming unstable.
k) Plan your work. Every time you change the bevel or mitre angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere with the blade or the guarding system. Without turning the tool "ON" and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.
l) Provide adequate support such as table extensions, saw horses, etc. for a workpiece that is wider or longer than the table top. Workpieces longer or wider than the mitre saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.
m) Do not use another person as a substitute for a table extension or as additional support. Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.
n) The cut-off piece must not be jammed or pressed by any means against the spinning saw blade. If confined, i.e. using length stops, the cut-off piece could get wedged against the blade and thrown violently.
o) Always use a clamp or a fixture designed to properly support round material such as rods or tubing. Rods have a tendency to roll while being cut, causing the blade to "bite" and pull the work with your hand into the blade.
p) Let the blade reach full speed before contacting the workpiece. This will reduce the risk of the workpiece being thrown.
q) If the workpiece or blade becomes jammed, turn the mitre saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material. Continued sawing with a jammed workpiece could cause loss of control or damage to the mitre saw.
r) After finishing the cut, release the switch, hold the saw head down and wait for the blade to stop before removing the cut-off piece. Reaching with your hand near the coasting blade is dangerous.
s) Hold the handle firmly when making an incomplete cut or when releasing the switch before the saw head is completely in the down position. The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.

WARNING: If any parts are missing, do not operate your machine until the missing parts are replaced. Failure to follow this rule could result in serious personal injury.

ADDITIONAL WARNINGS
1. Keep guards in place and in working order.
2. Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. Keep work area clean. Cluttered areas and benches invite accidents.
4. 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.
5. Keep children away. All visitors should be kept safe distance from work area.
6. Make workshop child proof with padlocks, master switches, or by removing starter keys.
7. Don't force the tool. It will do the job better and safer at the rate for which it was designed.
8. Use the right tool. Don't force the tool or attachment to do a job for which it was not designed.
9. 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 product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table on the next page shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
10. 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.
11. 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.
12. Secure work. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
13. Don't overreach. Keep proper footing and balance at all times.
14. Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

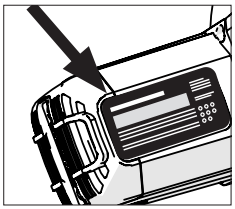
15. Disconnect tools before servicing; when changing accessories, such as blades, bits, cutters, and the like.
16. Reduce the risk of unintentional stating. Make sure switch is in off position before plugging in.
17. Use recommended accessories. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
18. Never stand on the tool serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
19. Check 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.
20. Direction of feed. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
21. Never leave tool running unattended. Turn power off. Don't leave the tool until it comes to a complete stop.

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.

SERIAL NO. / BATCH CODE

The serial number can be found on the motor housing of the machine.
For instructions on how to identify the batch code, please contact the Evolution Power Tools helpline or go to:
www.evolutionpowertools.com



ITEMS SUPPLIED

Description	Quantity
Instruction Manual	1
14" (355mm) Mild Steel TCT Blade	1
Double ended hex key 5mm/8mm (Blade Change)	1
V-Block	3
Cutting head assembly	1
Base/table assembly	1
Rail bracket and fixings	1
Thumb screws	3
Top clamp	1
Clamp cross bar	1
Front clamp	2

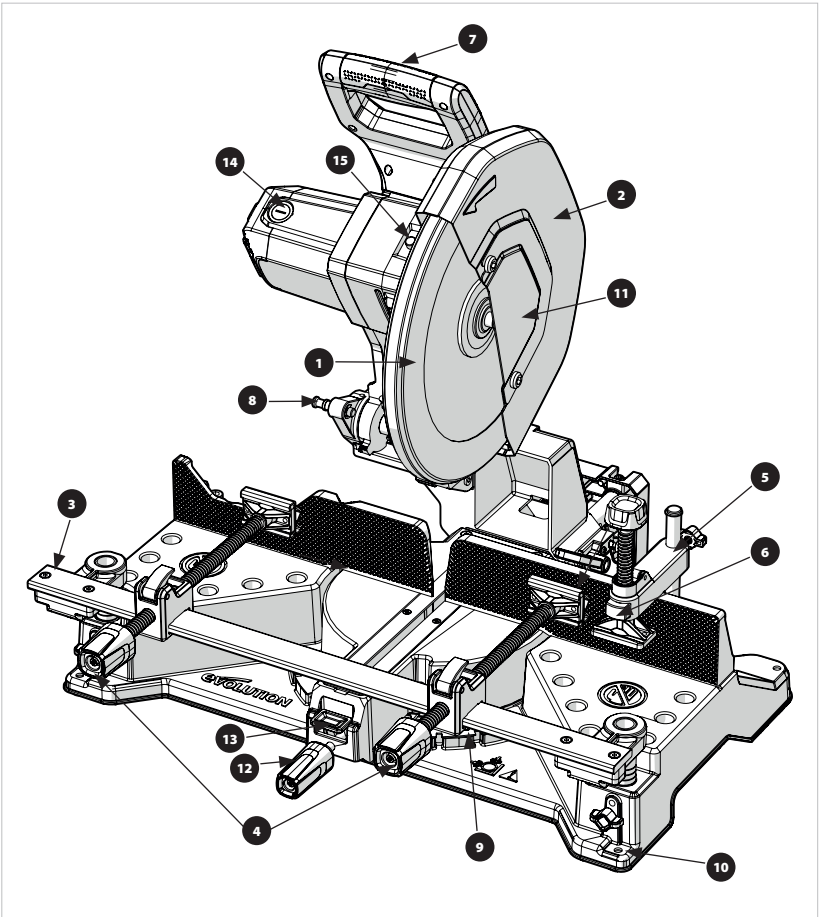
REPLACEMENT BLADES

Description	Part No
14" (355mm) Multi-Material Cutting TCT Blade	**(UK/EU)** RAGEBLADE-355MULTI **(USA)** RAGE355BLADE
14" (355mm) Diamond Blade	**(UK/EU)** RAGEBLADE-355DIAMOND **(USA)** 14BLADEDM
14" (355mm) Mild Steel Cutting Blade	**(UK/EU)** M355TCT-66CS **(USA)** 14BLADEST
14" (355mm) Stainless Steel Cutting Blade	**(UK/EU)** S366TCT-90CS **(USA)** 14BLADESS
14" (355mm) Thin Steel Cutting Blade	**(UK/EU)** T355TCT-90CS **(USA)** 14BLADETS
14" (355mm) Aluminium/ Aluminum Cutting Blade	**(UK/EU)** A355TCT-80CS **(USA)** 14BLADEAL
14" (355mm) Wood Cutting Blade*	**(USA)** GW355TCT-60

*Complies with EN 847-1

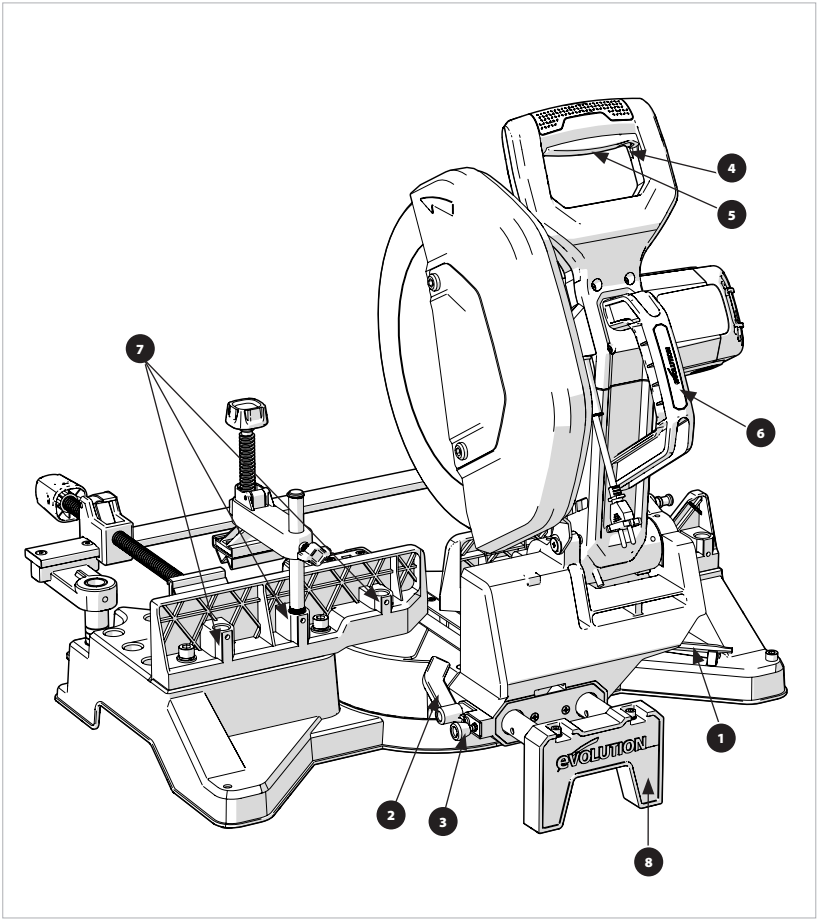
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MACHINE OVERVIEW



1. LOWER BLADE GUARD
2. UPPER BLADE GUARD
3. CLAMP CROSS BAR
4. FRONT CLAMP X2
5. TOP CLAMP
6. TOP CLAMP QUICK RELEASE BUTTON
7. CUTTING HANDLE
8. CUTTING HEAD HOLD DOWN PIN
9. MITRE ANGLE SCALE
10. WORK BENCH MOUNTING HOLES X4
11. BLADE ARBOR GUARD
12. MITRE LOCKING KNOB
13. MITRE INDEX PUSH BUTTON
14. CARBON BRUSHES ACCESS CAP
15. ARBOR LOCK BUTTON

MACHINE OVERVIEW



1. DOUBLE ENDED HEX KEY
2. SLIDE LOCKING LEVER
3. SPRING LOADED SLIDE LOCK PIN
4. TRIGGER LOCK OFF
5. ON/OFF TRIGGER SWITCH
6. CARRY HANDLE
7. TOP CLAMP SOCKETS
8. REAR RAIL SUPPORT

ASSEMBLY & PREPARATION

There are 6 main parts to be assembled:
- **Rotary base and table assembly**
- **Cutting head in the up position**
- **Clamp cross bar assembly**
- **Front clamps**
- **Top Clamp**
- **Blade**

Remove top foam insert, housing all clamping and ancillary parts from the main carton.
Remove second foam insert housing the cutting head assembly. Remove cutting head assembly from the foam and set aside.
Remove base/table assembly from carton and place on stable surface.

Rotate table to 0 degree mitre angle by loosening locking knob, depressing index override button and retightening locking knob **(Fig.1)**

Ensure the rear of the machine is facing towards you, giving access to the rails **(Fig.2)**

NOTE: In this position the left hand rail includes through holes which engage with the slide controls on the cutting head.

Carefully fit the cutting head assembly onto the rails with the motor oriented to the right.
Slide cutting head assembly fully on to the rails. **(Fig.3)**
Remove and discard slide locking pin override spacer **(Fig.4)**
Ensure spring loaded pin engages with the hole closest to the rotating table for stability during assembly.

Fit rear rail support on to the rails so the mounting holes are visible facing up. Fasten the rail support with 2x cap screws and washers supplied with the on board hex key **(Fig.5)**

Rotate the machine around so the front of the machine is facing you. Fit clamp cross bar by sliding vertical posts into the sockets on the base, ensuring the cross bar remains level **(Fig.6)**
Fit thumb screws in base. **(Fig.7)**

Whilst holding the blade guard, cut and remove the plastic zip tie and carefully allow the blade guard to move to it's safe operating closed position.
Ensure locking pin **(Fig.8)** is retracted before moving the cutting head into the down position.

PERMANENTLY MOUNTING THE SAW

WARNING: Only attempt the following procedures with the machine disconnected from the mains power supply.

There are four mounted holes on the base through which suitable bolts (not supplied) can be placed to secure the machine.

Site the machine giving consideration to the following guidelines:
- To avoid injury from flying debris, position the saw so that other people or bystanders cannot stand too close (or behind) it.
- Locate the saw on a firm, level surface where there is plenty of room for handling and properly supporting the workpiece.
- Ensure that the workbench or other supporting structure is firm and stable and does not 'rock'.
- Ensure that the power cord cannot become entangled with any part of the machine during cutting operations.
- Ensure that the power cord is routed in such a way that it does not pose a trip (or any other type) of hazard to the operator or any bystanders.

TRANSPORTING THE SAW

Only transport this machine with the Cutting Head in the locked down position **(Fig. 8 & 9)** and the Locking Pin fully engaged in its socket.
Caution! This saw weighs 35kg and requires two person lift. Use the carry handles moulded into the machine base (See machine overview).

REMOVING OR INSTALLING A BLADE

WARNING: Only use genuine Evolution blades designed for this machine see 'replacement blades'. It is recommended that the operator considers wearing protective gloves when handling the blade during installation or when changing the machine's blade.

Note: Only use saw blades that are marked with a speed equal or higher than the speed marked on the tool.

REMOVING A BLADE:

- Ensure that the Cutting Head is in its upper position.
- Using the hex key supplied, loosen the front arbor cover bolt and rotate the arbor cover out of the way. **(Fig. 10).**
- Press the arbor lock button **(Fig. 11)** and use the supplied hex key to remove the blade bolt. The blade may rotate slightly until the arbor lock engages.
- Remove the arbor bolt, washer and outer blade flange. **(Fig. 12).**
- Open the blade guard and carefully remove the old blade. Leave the inner blade flange in place

INSTALLING A BLADE:

- Install the new blade, ensuring the directional arrow on the blade matches the direction of the arrow on the upper blade guard **(Fig. 13)**.

- Allow the blade guard to close and refit the outer blade flange and washer.
- Partially refit the arbor bolt, press the arbor lock button and fully tighten with the supplied hex key.
- Return arbor cover to closed position and retighten arbor cover bolt.

After replacing a blade, always run the machine, without load to ensure the blade is seated correctly.

CROSS BAR & FRONT CLAMPS, FITMENT AND OPERATION

The cross bar is the mount for the front clamp assemblies.
2 front clamps are supplied to allow a wide range of safe clamping options.
When installed, the cross bar has a range of vertical movement so that the front clamps can be aligned in the optimum position for different workpieces.

The vertical posts feature 6 small, and 1 large grooves which, when installed, make audible clicks as the bar height is adjusted throughout the range of vertical movement.
This aids the user in ensuring the clamp bar is kept level.
At maximum safe operating height, a final larger groove indicates end of travel.
Thumb screws are used to secure the cross bar at the selected height.

Fit front clamp assemblies by sliding on to the cross bar, **(Fig.14)** this can be done from either the left or the right side.
Front clamps are equipped with a long lead/acme screws and quick release levers to aid in rapid setting and releasing of workpieces.
(Fig.15 & 16)

OPERATE THE QUICK RELEASE MECHANISM:

- Lift and rotate quick release lever **(Fig. 15)** rearwards.Slide the front jaw to the required position.
- Return the lever to its normal service position to tighten the clamp **(Fig. 16).**
- Check the security of the workpiece before attempting to make a cut.

TOP CLAMP, FITMENT AND OPERATION

Fit the remaining T bolt to the top clamp arm.
Top clamp can be fitted at one of 5 different positions in the rear fence depending upon the cut.
To fit the top clamp slide the vertical post into the chosen socket in the rear fence. **(Fig.17)**
The bottom section of the vertical post is knurled, to engage in the sockets in the fence to secure the clamp when in use.
There are 2 methods to adjust the height of the top clamp.
1. The Acme/Lead screw has a quick release button to allow free movement.
2. The clamp arm can be moved along the vertical post and secured using the thumb screw. **(Fig.18)**

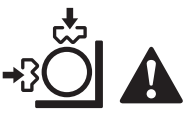
NOTE: Additional M6 tapped holes are available on each fence socket which can be used with older Evolution mitre saw top clamps which do not have knurling.

V BLOCKS
V blocks are supplied with this product and should be used where necessary on both top and front clamps for safe cutting.

V blocks should particularly be used for safe cutting on workpieces that are round or have corners.
For safe and easy retention of V blocks, the clamp feet feature spring loaded ball catches.
V blocks are fitted by sliding on to clamp feet **(Fig.19)**

MITRE CUT ADJUSTMENT
The saw will allow mitre cuts to be made at any angle between 0 and 46 degrees left and right, there are also detents at popular angles to help locate these including 0, 15, 22.5, 30 and 45.
To adjust the mitre angle, first turn the mitre locking knob to loosen and depress index override button **(Fig.20)** rotate the table to the required angle, release index override button and securely tighten the mitre locking knob for safe cutting.

NOTE: When selecting a mitre angle, prior to cutting, ensure all clamps are fully clear of the blade path and cutting head through its full rotation.



WARNING:
Always use both front and top clamps when making any cut.
Prior to making any cut, ensure all clamps are fully clear of the blade path and cutting head through its full rotation. Always perform a test rotation of the cutting head without the blade spinning.

ADJUSTING CUT HEAD POSITION

The rail adjustment function on this product is to allow the user to move the blade to the optimum position to cut several popular sizes and profiles of metal. **(Fig.27)**
There are 3 indexed positions available, Front, Centre and Rear. See **(Fig.21 a,b,c)**

To adjust the position of the cutting head, rotate the locking lever **(Fig.22)** Retract the spring loaded locking pin, move the cutting head on the rails to the required position **(Fig.23)** Ensure locking pin fully engages into the relevant rail hole, tighten locking lever. **(Fig.24)**

WARNING: This machine is not to be used for sliding cuts, The cutting head **MUST** be locked into one of the 3 index positions during all cutting.

This product is preset and calibrated in the factory so the blade is at 90-degrees to the rear fences. If a user wants to calibrate their machine after transportation / assembly > dis-assembly the following method can be employed.

Firstly loosen the screws securing the mitre angle plate **(Fig.25)** with the cutting head in the locked down position. Check, using an engineers square if the blade is at right angles to the fence – if not adjust to the square position; and retighten the screws.

After this, check the pointer is aligned with the zero graduation mark – if not loosen its retaining screw, reposition as necessary and retighten this.

WARNING: Only clear chippings from the machine with the machine disconnected from the mains power supply.
Some of the chippings may be sharp, or in other ways pose a hazard to the operator. It may be necessary for the operator to wear suitable PPE. Dispose of the chippings in an environmentally responsible way.

OPERATING ADVICE
(PRE OPERATION CHECKS)
Note: As all operating environments are unique and diverse, Evolution Power Tools offers the following general advice on safe operational procedures and practices for consideration by the operator.
This advice cannot be exhaustive as Evolution has no influence on the type of workshops or working environments in which this machine may be used. We recommend that the operator seeks advice from a competent authority or the workshop supervisor if they are at unsure about any aspect of using these machines.
It is important that routine safety checks are carried out (at each time of usage) before the operator uses the machine.

WARNING: These pre-use safety checks should be carried out with the machine disconnected from the mains power supply.
- Check that all safety guards are operating correctly, and that all adjustment handles/ screws are securely tightened.
- Check that the blade is secure and installed correctly. Also check that it is the correct blade for the material being cut.
- Check the security of the workpiece in the machine.
- Check the integrity of the power cord and its position and routing.

PPE
The operator should wear all relevant PPE **(Personal Protection Equipment)** necessary for the task ahead. This could include safety glasses, dust masks, safety shoes etc.

PREPARING TO MAKE A CUT
WARNING: Do not overreach. Keep good footing and balance. Stand to one side so that your face and body are out of line of a possible kickback.

WARNING: Freehand cutting is a major cause of accidents and **should not be attempted**.
- The machines base should be clean and free from any 'swarf' or sawdust etc. before the workpiece is clamped into position.
- Ensure that the workpiece is firmly secured in the vice.
- Ensure that the 'cut-off' material is free to move sideways away from the blade when the cut is completed.
- Ensure that the 'cut-off' piece cannot become 'jammed' in any other part of the machine.

If the workpiece being cut could cause your hand or fingers to come within 150mm of the saw blade, the workpiece is too small.

THE ON/OFF TRIGGER SWITCH
These models are equipped with a none latching safety start trigger switch.

TO START THE MOTOR:
- Slide the safety lock on the left side of the trigger switch to the left **(Fig. 26)**.
- Depress the main trigger switch.

WARNING: Never start the saw with the cutting edge of the saw blade in contact with the workpiece surface.

MAKING A CUT

- With the Cutting Head in the upper position, switch on the motor and allow it to reach full operational speed.
- Gently lower the Cutting Head to the material and use light pressure at first to prevent the blade from grabbing. Do not 'force' the machine. Let the saw blade do the work.
- Cutting performance will not improve by applying undue pressure on the machine, and doing so may cause blade and motor life to be reduced.
- Reduce the pressure as the blade begins to exit the material.

On completion of a cut release the ON/OFF trigger switch to turn off the motor.

- Allow the Cutting Head to return to its upper position.
- Only remove your hands, or the workpiece from the machine, after the motor has completely stopped and the stationary blade is covered by the lower blade guard.

WARNING: These machines must never be used to cut Asbestos or any material that contains, or is suspected to contain, Asbestos.
Consult/inform the relevant authorities, and seek additional guidance if Asbestos contamination is suspected.

MAINTENANCE & ADJUSTMENTS

NOTE: Any maintenance must be carried out with the machine switched off and disconnected from the mains power supply.

- Check on a regular basis that all safety features and guards etc are operating correctly.
- All motor bearings in this machine are lubricated for life. No further lubrication is required.
- Use a clean, slightly damp cloth to clean the plastic parts of the machine. Do not use solvents or similar products which could damage the plastic parts.
- The machines air vents should be cleaned using compressed dry air only.

CHECKING/REPLACING THE CARBON BRUSHES

Excessive sparking may indicate the presence of dirt in the motor or worn out carbon brushes. Disconnect the machine from the power supply before attempting to check or replace the Carbon Brushes.
Replace both carbon brushes if either has less than 6mm length of carbon remaining, or if the spring or wire is damaged or burned.

TO REMOVE THE BRUSHES:

- Unscrew the plastic caps found at the back of the motor. Be careful as the caps are spring-loaded.
- Withdraw the brushes with their springs.
- If replacement is necessary renew the brushes and replace the caps.

Used but serviceable brushes can be replaced, but only as long as they are returned to the same position, and inserted the same way round, as they were removed from the machine.

- Run new brushes without load for approximately 5 minutes. This will help the bedding-in process.

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.



EN

EC DECLARATION OF CONFORMITY

CE

The manufacturer of the product covered by this Declaration is:
UK: Evolution Power Tools Ltd. Venture One, Longacre Close, Holbrook Industrial Estate, Sheffield, S20 3FR.
FR: Evolution Power Tools SAS. 61 Avenue Lafontaine, 33560, Carbon-Blanc, Bordeaux, France.

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 & 2015/863/EU.	The Restriction of the Use of certain Hazardous Substances in Electrical Equipment (RoHS) Directive.
2002/96/EC as amended by 2003/108/EC.	The Waste Electrical and Electronic Equipment (WEEE) Directive.

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

EN 62841-1:2015 • EN IEC 62841-3-9:2020/A11:2020 • EN ISO 12100:2010 • EN IEC 55014-1:2021 • EN IEC 55014-2:2021 • EN IEC 61000-3-2:2019/A1:2021 • EN 61000-3-3:2013 /A2:2021

Product Details

Description:	S355MCS 355mm Metal cutting mitering chop saw
Evolution Model No:	102-0001, 102-0003
Brand Name:	EVOLUTION
Voltage:	220 - 240 V ~ 50 Hz
Input:	2200W

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 - CEO
Date: 12/05/2022

UK: Evolution Power Tools Ltd. Venture One, Longacre Close, Holbrook Industrial Estate, Sheffield, S20 3FR.
FR: Evolution Power Tools SAS. 61 Avenue Lafontaine, 33560, Carbon-Blanc, Bordeaux, France.

UKCA DECLARATION OF CONFORMITY

The manufacturer of the product covered by this Declaration is:
UK: Evolution Power Tools Ltd. Venture One, Longacre Close, Holbrook Industrial Estate, Sheffield, S20 3FR.
FR: Evolution Power Tools SAS. 61 Avenue Lafontaine, 33560, Carbon-Blanc, Bordeaux, France.

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The Directives covered by this Declaration are as detailed below:

This is fine for CE DoC page.Please use following for UKCA page:
UK legislation_Supply of Machinery (Safety) Regulations 2008
UK legislation_Electromagnetic Compatibility Regulations 2016
UK legislation _The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012
Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001
The Waste Electrical and Electronic Equipment Regulations 2013

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

BS EN 62841-1:2015 • BS EN IEC 62841-3-9:2020/A11:2020 • BS EN ISO 12100:2010 • EN IEC 55014-1:2021 • BS EN IEC 55014-1:2021 • EN IEC 55014-2:2021 • BS EN IEC 55014-2:2021 • EN IEC 61000-3-2:2019/A1:2021 • BS EN IEC 61000-3-2:2019/A1:2021 • EN 61000-3-3:2013 / A2:2021 • BS EN 61000-3-3:2013 /A2:2021

Product Details

Description:	S355MCS 355mm Metal cutting mitering chop saw
Evolution Model No:	102-0001, 102-0002
Brand Name:	EVOLUTION
Voltage:	110V~,50Hz: 102-0002; 220 - 240V ~, 50Hz:102-0001
Input:	1600W:102-0002; 2200W: 102-0001

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 - CEO
Date: 12/05/2022

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

Notes

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