

RotabroachTM **ELEMENT 9**



METAL CUTTING SAW **Model Number Element 9/1, Element 9/3**

This machine (Serial Number) is CE approved.

Rotabroach[®]

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**Thank you for purchasing our Element 9 Circular Saw.
We would really like your feedback on this machine.**

Other Products by Rotabroach:



Thank you for your purchase

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1) INTENDED USE

The metal cutting saw is powerful enough to cut steel sheet metal as thick as 12mm in box section. Metal cutting saws are designed to rapidly cut lengths or pieces of zinc coated, steel sheet metal and various metal without heating up either the blade or the material.

WARNING! To avoid shortening the life of motor and blade we do not recommend you continue to cut workpieces which are over 6mm in thickness.

2) GENERAL SAFETY RULES

1) 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, 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.
- f) Use of a cord suitable for outdoor use reduces the risk of electric shock.
- g) 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 personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, 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 energizing 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 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 dust collection can reduce dust-related hazards.

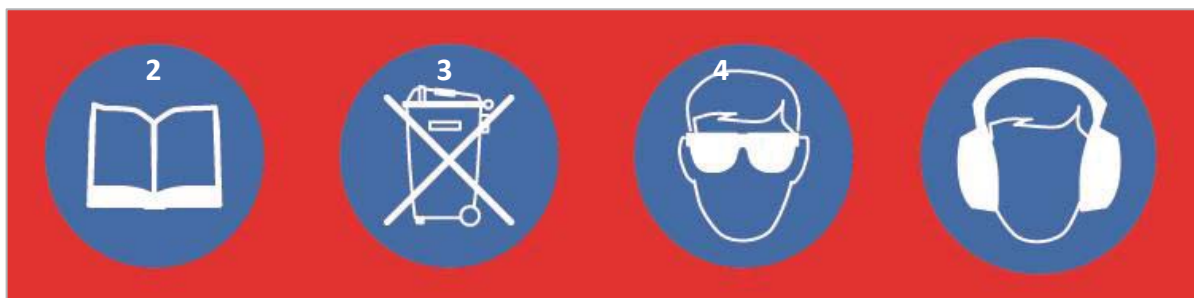
4) POWER TOOL USE AND CARE

- h) 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 the rate for which it was designed.
- i) 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.
- j) Disconnect the plug from the power source and/or the battery pack from the battery pack 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.
- k) 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.
- l) Maintain power tools. 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.
- m) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- n) Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5) 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.

3) INFORMATION PLATE SYMBOLS



1. Refer to the user manual for operational and safety issues with regard to this machine.
2. Dispose of the machine and electrical components correctly.
3. Eye protection must be worn when operating the machine.
4. Ear defenders must be worn when operating the machine.

4) SPECIFICATION

Rated voltage	110-120V~ 50/60Hz	220-240V~ 50/60Hz
Rated input	1800W	
No load speed	2300min ⁻¹ (RPM)	
Arbor	15.9mm	
Saw blade diameter	230mm(9")	
Arm-held vibration	6.75m/s ² k=1.5	
Weight	9.5kg	
Max. cutting depth at 90 °	83mm	
Max. cutting depth at 45 °	56.5mm	
Max. cutting thickness	6mm	
	12mm in section	
Sound power level	95.5 dB(A)	
Sound pressure level	93.8 dB(A)	

Ear and eye defenders must be worn when operating this machine. Wear gloves to protect hands when operating the machine.

Suitable only for a single phase 50-60Hz A.C. power supply

DO NOT USE ON D.C. SUPPLY

WARNING: THIS APPLIANCE MUST BE EARTHED!

NB: ANY MODIFICATIONS TO THIS MACHINE WILL INVALIDATE THE GUARANTEE

5) OPERATIONAL SAFETY PROCEDURES

DANGER:

- a) **Keep hands away from cutting area and the blade. Keep your second hand on auxiliary handle.** 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, such as a vice.** 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.

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

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 out of the workpiece toward the operator.
- When the blade is pinched or bound tightly by the kerf, the blade stalls and the motor reaction, forces the unit rapidly back toward the operator.
- 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 metal causing the blade to climb out of the kerf and jump back toward 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) **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is 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, center the saw blade in the kerf and check that saw teeth are not engaged into the material.** If saw blade is binding, it may kickback from the workpiece as the saw is restarted.
- d) **Support large panels to minimize 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) **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- f) **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.**
If blade adjustment shifts while cutting, it may cause binding and kickback.
- g) **Use extra caution when making a “plunge cuts” into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

Lower Guard Safety Instructions

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

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.

Additional Safety Instructions

- ⓘ  **Caution!** The dust collect cover is very hot when cutting or after cutting. Don't touch it by hand!!
- Use clamps or another practical way to secure and support the work piece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- Keep your body positioned to either side of the blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards (see Causes and Operator Prevention of Kickback).
- Avoid cutting nails. Inspect for and remove all nails from lumber before cutting.
- Always make sure nothing interferes with the movement of the lower blade guard.
- Accessories must be rated for at least the speed recommended on the tool warning label. Wheels and other accessories running an over-rated speed can fly apart and injury. Accessory ratings must always be above tool speed as shown on tool nameplate.
- Always make sure the saw is clean before using.
- Stop using this saw and have it properly serviced if any unusual noise or abnormal operation occurs.
- Always be sure all components are mounted properly and securely before using tool.
- Always handle the saw blade with care when mounting or removing it or when removing the diamond knockout.
- Always wait until the motor has reached full speed before starting a cut.
- Always keep handles dry, clean and free of oil and grease. Hold the tool firmly with both hands when in use.
- Always stay alert, especially during repetitive, monotonous operations. Always be sure of your position.
- Stay clear of end pieces that may fall after cutting off. They may be hot, sharp and/or heavy. Serious personal injury
- Replace or repair damaged cords. Make sure your extension cord is in good condition. Use only 3-wire extension

ADDITIONAL SAFETY RULES OF METAL CUTTING SAWS

CAREFULLY READ THE FOLLOWING SAFETY WARNINGS PRIOR TO CONNECTING THE METAL CUTTING SAW TO POWER.

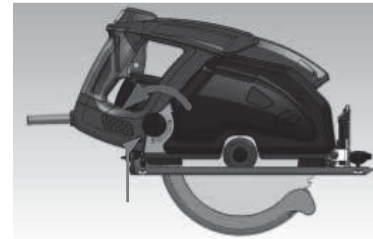
1. You must keep the safety device in the fixed position, and work according to the manual. Never wedging or binding the saw. Before using the metal cutting saw, you must check all safety warnings.
2. The blade should be kept clean and sharp.

Way to clean the cutting chips

Unscrew the Knob Bolts (A) on the blade housing. As shown in Fig.22

1. Remove chip shield (B). (keeping the Knob bolt screwed on guard. As shown in Fig.23
2. Release the chips.

Beware: Always keep the saw away from your body when removing the chip shield, the chips will fall out. The chips is very hot, Be careful not to touch it by hand when you remove the chip shield.



6) OPERATING INSTRUCTIONS

ASSEMBLY AND ADJUSTMENT INSTRUCTIONS

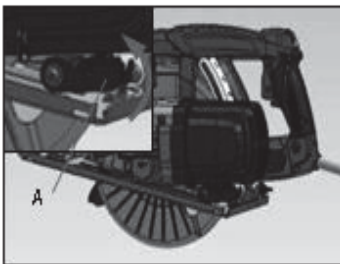
WARNING:

For your own safety, never connect the plug to a power source outlet until all assembly steps are complete and you have read and understood the safety and operating instructions. The safety cover is attached to the saw for your protection. Should the safety cover become damaged, do not use the saw until damaged cover has been replaced, by a new cover. If the safety cover becomes dirty, or chip adheres to it. Clean the safety cover carefully with a damp cloth.

Installing a New Saw Blade

WARNING: To prevent accidental or personal injury, always turn off the trigger switch and disconnect the power plug from the receptacle before removing or installing a blade.

Only use blades specially designed for metal cutting saws. Do not to use any abrasive wheels. Fitting of alternative purpose or different sizes blades will void the machine warranty and possibly result in personal injury. Check regularly that the blade is flat, ensuring the saw is disconnected from the power source.



Push the lower guard lever (A)

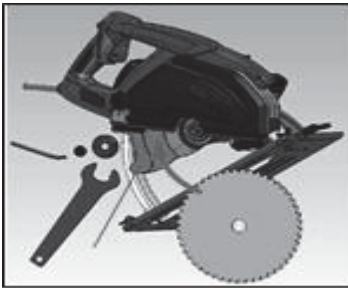


To open the plate become maximum.

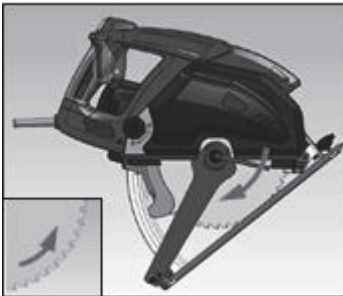


Use the a spanner to hold the flange, draw out 6mm HEX wrench to loosen the arbor screw by counterclockwise

direction.



Move out the HEX wrench and open wrench, then open the lower Blade guard to move over the arbor screw, flange and blade in turn



Put on the new blade, flange and arbor screw in proper order. Use the open wrench to hold the flange and use the Hex wrench to fix the arbor screw by clockwise direction

Note: Put the blade in right direction, the arrow on blade must be same direction as arbor turn

CUTTING DEPTH ADJUSTMENT

DIRECTION OF SAWING

Please align the right side's cut in front of the base with a level cutting line of workpiece for longitudinal sawing. Trigger on the switch before the blade touches the workpiece. Wait until the blade attains full speed before cutting. Push the saw into the workpiece slowly, to ensure that the blade operates at full speed. For a smooth cut surface, keep the saw at full speed while cutting.

Operation of Switch

Press the stop button first and pull the trigger at the same time to start rotating. To stop rotating, release trigger.

Operation

Please use right hand(A) to hold the rear Handle, and left hand(B) hold the tool after the blade reaches the maximum speed rate and push forward the tool along the surface of workpiece. Keep moving smoothly till the cut is finished.

Usage for bevel

Release the lock lever "A", and the wing nut "B". Then to change the bevel plate angle from 0° to 45° Fix the lock lever "A" and wing nut "B" as fig.7.

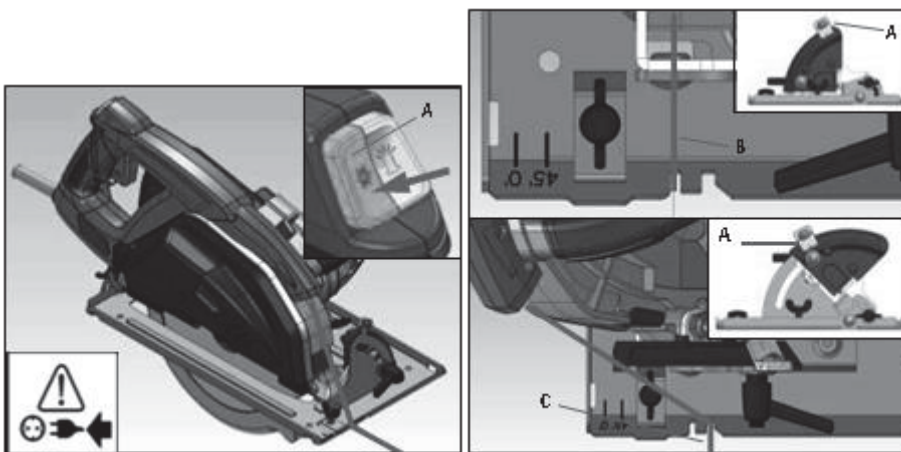
WARNING : please be sure to disconnect the power plug.



LASER

The method for laser usage.

1. Push the left bottom "A" to start the laser (B), push again to turn off as fig 8.
2. The laser will change according to the angle plate for guiding the cutting. Example: the bevel indicator at (A) 0° the laser is at the notch (B), if the bevel indicator at 45° then laser is at the notch (c) as fig 9. others angle is without reference



ALIGNING THE LASER GUIDE LINE

DANGER:

Laser radiation. Avoid direct eye contact with light source

WARNING:

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposures. When you adjust the laser please don't turn on switch. Fig.10 Otherwise starting the blade can be dangerous.

1. Adjusting the laser: Tighten or loose the (A), for adjusting the laser indication direction. Adjusting tooling: M2 Hex wrench (A) as Fig.11.
2. Adjusting the laser indication direction to be same line as cutting line. Adjusting tooling: parallel screwdriver (A) Fig.12
3. Adjust the laser line (B) on the notch (C) then set up the bevel scale at 0 positions as fig 13

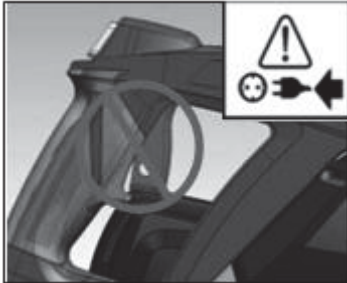


Fig.10.

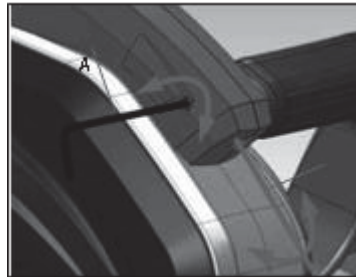


Fig.11.

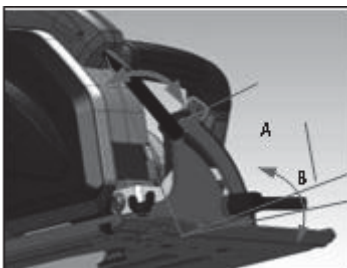


Fig.12.

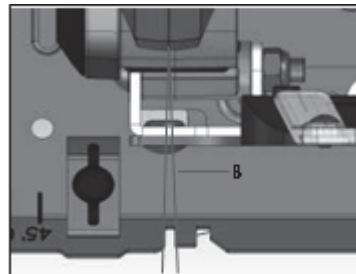


Fig.

How to use LED light

- Push the LED button(A) to start the LED light, push again to turn off, as fig 14.

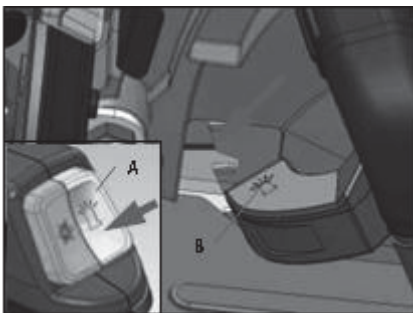


Fig.14.

OVERLOAD PROTECTION

Under extreme overload, the current consumption may considerably exceed the permissible nominal value. In this case, overload protection prevents the motor from burning out. The saw has a reset button(A) that will restart the motor after it shuts off due to extreme overload, if the motor stops during operation, turn the ON/OFF switch to the OFF position.

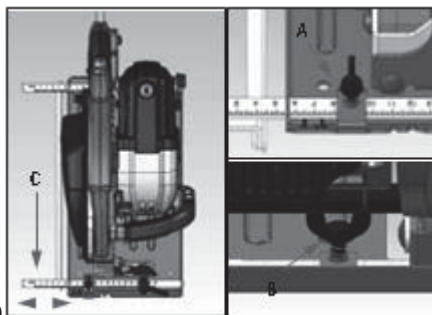
Unplug the saw from its power source. Wait about three minutes for the motor to cool down. Push in on the reset button and turn the switch to the on position. As shown in Fig. 19



Fig.19

THE GUIDE RULER

First to release the wing screw (A) at front and (B) at rear, adjust the scale ruler(C) to the position you need then fasten the (A) (B) wing screw then start for cutting



with guiding.Fig.20

Fig.20

TRIANGLE SHAPED SIGHTING NOTCH BLADE SET-IN

Sighting notch (A) near the front of the base plate provide guidance. When performing free-hand cuts following a cutting line as shown in Fig.21 When performing cuts, the cutting line for the saw blade can be observed via a triangle shaped sighted notch at the front of base plate. Align the cutting line on the workpiece with the triangle shaped Sighting Notch at the front of the Base Plate.

Push the saw toward the workpiece.

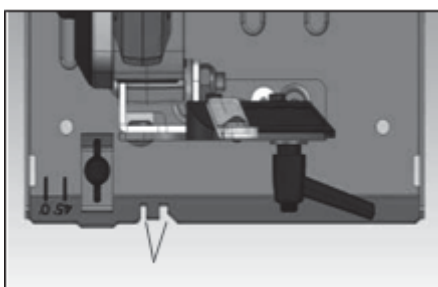


Fig.21.

7) EXTENSION CABLE SELECTION

Note: Make sure the proper extension cord is used and is in good condition.

The use of any extension cord will cause loss of power. To keep this to a minimum and prevent overheating and motor burnout, use the information below to determine the minimum wire size extension cord.

EXTENSION CORDS

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug. When using a power tool at a considerable distance from the power source, use an extension cord heavy enough to carry the current that the tool will draw. An undersized extension cord will cause a drop-in line voltage, resulting in a loss of power and causing the motor to overheat. Use the information provided below to determine the minimum wire size required in an extension cord. Only round jacketed cords listed by Underwriter's Laboratories approval should be used.

For 110v supply: 3.5metres of 3 core x 1.5mm²

For 230v supply: 26metres of 3 core x 1.5mm²

When work with the tool outdoors, use an extension cord that is designed for outside use. This is indicated by the letters WA on the cord's jacket.

Before using an extension cord, inspect it for loose or exposed wires and cut or worn insulation.

Power Connections

A separate electrical circuit should be used for your tools. This circuit should not be less #12 wire and should be protected with a 20 Amp fuse. Have a certified electrician replace or repair a worn cord immediately. Please connecting the motor as nameplate mentioned, Running low voltage will damage the motor.

WARNING: DO NOT EXPOSE THE TOOL TO RAIN OR OPERATE THE TOOL IN DAMP

8) MAINTENANCE

REPLACING CARBON BRUSHES

► **Caution: Must turn off the switch and disconnect plug from power supply before checking.**

REPLACE CARBON BRUSHES

To replace and check regularly. Carbon brushes must be replaced when worn down to 6 mm closest to the spring. And keep carbon brush clean and sliding freely in the holder. 2 carbon brush should be replaced at same time, please use the carbon brush made by original factory. Use a screwdriver to remove the brush Cap (A), take out the carbon brushes (B) insert new carbon brushes and secure the brush holder caps. As shown in Fig.25.

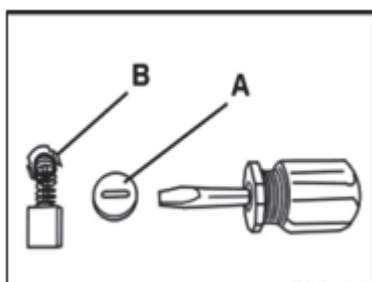


Fig.25.

MAINTENANCE AND SERVICING

Remove the plug before carrying out any adjustment, servicing or maintenance. Keep the machine clean.

Never use a saw blade that is damaged or distorted.

Replace the saw blade when it becomes blunt. For service and replacement pieces see the part list and manufacturer address. Inspect the safety cover to assure that it is in good condition and that it moves smoothly. Never use the tool unless the safety cover operates properly, and it is in good operating condition.

After operation of the tool has been completed, make sure power plug has been removed from the receptacle and store it in a secure place out of the reach of children.

Periodically remove chips in the dust cover and dust from the surface of the power tool with a damp cloth. Keep the tool from contact with water or oil.

If the replacement of the supply cord is necessary, this must be done by the manufacturer or his agent in order to avoid a safety hazard.

LUBRICATION

See Figure 24

This tool has been properly lubricated and is ready to use. The recommended grease: Mobil HD 85W/140 Oil.

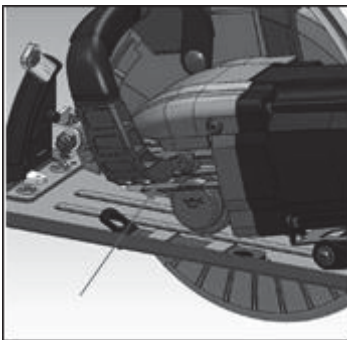


Fig.24.

Add the oil

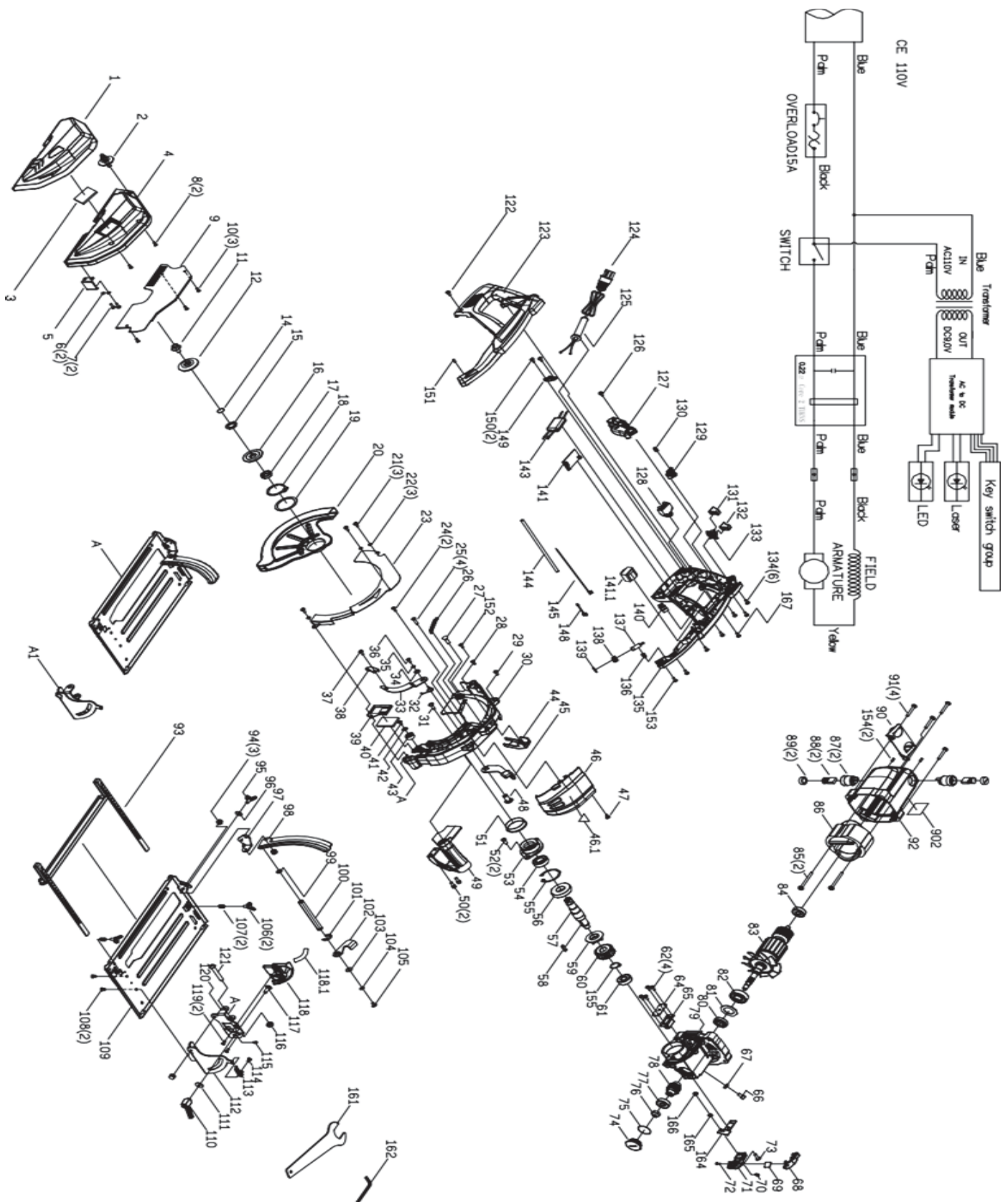
Check oil level of the gear case once a year. Follow the below procedure to check and fill the oil. Unplug and power off the tool. Place the saw on a horizontal position. Use the 5mm hex wrench to loosen the screw and remove the oil plug. Using a small funnel (spout size is less than 5mm) Take care! Make sure to evacuate the air out in order to fill enough oil, that fills the oil tank, approximately 1.3 oz (40cc) avoid spilling by visual checking. Please use "**Mobil HD 85W/140**" Oil. Fill the gear case, replace the oil plug with a 5mm hex wrench, do not over tighten. The O-ring under the head should be compressed slightly, over tightening will cause the o-ring to unseat and not seal properly.

9) PARTS LIST

Ref. No.	Part No.	Description.	Qty.	Ref. No.	Part No.	Description.	Qty.
1	Q230-001	SET FLUTE COVER	1	82	Q230-082	BALL BEARING	1
2	Q230-002	PIVOT	1	83	Q230-083	ARMATURE ASS'Y	1
3	Q230-003	GLASS	1	84	Q230-084	BALL BEARING	1
4	Q230-004	DUST COVER SET	1	85	Q230-085	PAN HD SELF-TAP SCREW/WASHER	2
5	Q230-005	DUST COVER HOOK PLATE	1	86	Q230-086	FIELD ASS'Y	1
6	Q230-006	LOCK WASHER	2	87	Q230-087	BRUSH HOLDER	2
7	Q230-007	BOLT,M4X0.7,10MM,PAN HEAD,PHILLIPS	2	88	Q230-088	BRUSH	2
8	Q230-008	FLAT HD SCREW	2	89	Q230-089	BRUSH CAP	2
9	Q230-009	DUST COVER PLATE	1	90	Q230-090	REINFORCE PLATE	4
10	Q230-010	FLAT HD SCREW	3	91	Q230-091	SCREW PAN HEAD M5+WASHER	1
11	Q230-011	ARBOR BOLT(BLADE BOLT)	1	92	Q230-092	MOTOR HOUSING	1
12	Q230-012	FLANGE	1	93	Q230-093	GUIDE RULER	1
14	Q230-014	O-TYPE RING	1	94	Q230-094	RIVET	3
15	Q230-015	WASHER	1	95	Q230-095	WING SCREW	1
16	Q230-016	BLADE WASHER	1	96	Q230-096	WASHER	1
17	Q230-017	SPACER RING	1	97	Q230-097	BEVEL PLATE	1
18	Q230-018	EXTL RETAINING RING	1	98	Q230-098	CUTTING DEPTH SCALE PLATE	1
19	Q230-019	WASHER	1	99	Q230-099	FLAT WASHER	1
20	Q230-020	GUARD LOWER	1	100	Q230-100	HEX BAR	1
21	Q230-021	BOLT,M4X0.7,10MM,PAN HEAD,PHILLIPS	3	101	Q230-101	E-RING (ETW)	1
22	Q230-022	LOCK WASHER	3	102	Q230-102	SECURE LEVER	1
23	Q230-023	INNER BLADE GUARD	1	103	Q230-103	FLAT WASHER	1
24	Q230-024	SCREW (SELF-TAPPING, CLAMP)	2	104	Q230-104	LOCK WASHER M5	1
25	Q230-025	SCREW	4	105	Q230-105	SOCKET SCREW	1
26	Q230-026	SPRING	1	106	Q230-106	WING SCREW	2
27	Q230-027	BOLT, FLAT HD	1	107	Q230-107	SPRING SHAFT LOCK BUTTON	2
28	Q230-028	SCREW (SELF-TAPPING, CLAMP)	1	108	Q230-108	SCREW	2
29	Q230-029	SCREW (SELF-TAPPING, CLAMP)	1	109	Q230-109	BASE PLATE	1
30	Q230-030	UPPER GUARD	1	110	Q230-110	LOCK LEVER	1
31	Q230-031	SELF TAPPING SCREW	1	111	Q230-111	FLAT WASHER	1
32	Q230-032	TORSION SPRING	1	112	Q230-112	BEVEL LOCKING PLATE	1
33	Q230-033	BLADE GUARD LIFTER	1	113	Q230-113	MITER INDICATOR	1
34	Q230-034	FLAT WASHER	1	114	Q230-114	CROSS RECESSED TRUSS HEAD SCREW	1
35	Q230-035	LOCK WASHER	1	115	Q230-115	SET SCREW	1
36	Q230-036	CROSS RECESSED TRUSS HEAD SCREW	1	116	Q230-116	NUT LOCKING	1
37	Q230-037	CROSS RECESSED TRUSS HEAD SCREW	1	117	Q230-117	CARRIAGE SCREW	1
38	Q230-038	BLADE GUARD LIFTING BLOCK	1	118	Q230-118	RACKET	1
39	Q230-039	LENS HOLDING PLATE	1	118.1	Q230-118.1	BEVEL SCALE	1
40	Q230-040	GLASS	1	119	Q230-119	FLAT HD SCREW	2

41	Q230-041	CROSS RECESSED SCREW	1	120	Q230-120	BRACKET	1
42	Q230-042	FLAT WASHER	1	121	Q230-121	SOCKET SCREW	1
43	Q230-043	CUSHION	1	122	Q230-122	SCREW (SELF-TAPPING, CLAMP)	1
44	Q230-044	WIRE CAP	1	123	Q230-123	REAR RIGHT HANDLE	1
45	Q230-045	BLADE GUARD PUSH LEVER	1	124	Q230-124	POWER CORD	1
46	Q230-046	AIR BAFFLE COVER	1	125	Q230-125	CORD GUARD	1
46.1	Q230-046.1	WARNING LABEL	1	126	Q230-126	SCREW (SELF-TAPPING, CLAMP)	1
47	Q230-047	CROSS RECESSED TRUSS HEAD SCREW	1	127	Q230-127	SWITCH	1
48	Q230-048	GUARD PIVOT SCREW	1	128	Q230-128	OVERLOAD	1
49	Q230-049	GRASP HANDLE	1	129	Q230-129	LOCK BUTTON	1
50	Q230-050	HEX SOC HD SCREW	2	130	Q230-130	SPRING	1
51	Q230-051	WASHER	1	131	Q230-131	LED BUTTON	1
52	Q230-052	FLAT HD SCREW	2	132	Q230-132	LASER BUTTON	1
53	Q230-053	BEARING BASE	1	133	Q230-133	BUTTON SWITCH ASSEMBLY	1
54	Q230-054	BALL BEARING	1	134	Q230-134	SCREW (SELF-TAPPING, CLAMP)	6
55	Q230-055	INT'RETAINING RINGS	1	135	Q230-135	REAR LEFT HANDLE	1
56	Q230-056	OIL SEAL	1	136	Q230-136	SPRING	1
57	Q230-057	JACKSHAFT	1	137	Q230-137	LASER ASS'Y	1
58	Q230-058	KEY	1	138	Q230-138	LASER FIXED RING	1
59	Q230-059	OIL BAFFLE	1	139	Q230-139	O-TYPE RING	1
60	Q230-060	WORM WHEEL	1	140	Q230-140	TERMINAL BLOCK	1
61	Q230-061	BALL BEARING	1	141	Q230-141	AC TO DC TRANSFORMER MODULES	1
62	Q230-062	PAN HD SCREW	4	141.1	Q230-141.1	TRANSFORMER	1
64	Q230-064	OIL SEAL	1	143	Q230-143	FILTER ASSEMBLY	1
65	Q230-065	OIL SEAL BOX	1	144	Q230-144	EXTRUDED TUBING	1
66	Q230-066	SCREW	1	145	Q230-145	WIRING CONNECTOR	1
67	Q230-067	WASHER	2	148	Q230-148	WIRING CONNECTOR	1
68	Q230-068	LED LIGHT CAP	1	149	Q230-149	CORD CLAMP	1
69	Q230-069	LED COVER	1	150	Q230-150	SELF TAPPING SCREW	2
70	Q230-070	LED LIGHT	1	151	Q230-151	SET SCREW	1
71	Q230-071	LED SEAT	1	152	Q230-152	SELF TAPPING SCREW	1
72	Q230-072	PAN HEAD,PHILLIPS,PLASTITE	1	153	Q230-153	SELF TAPPING SCREW	1
73	Q230-073	PAN HD SCREW	1	154	Q230-154	SET SCREW	2
74	Q230-074	NYLON SCREW PIUGS	1	155	Q230-155	C RING (OUTPUT SHAFT)	1
75	Q230-075	O-TYPE RING	1	161	Q230-161	WRENCH	1
76	Q230-076	M10X1.5 LOCK NUT	1	162	Q230-162	6MM HEX WRENCH	1
77	Q230-077	BALL BEARING	1	164	Q230-164	LED FIXED PLATE	1
78	Q230-078	WORM GEAR	1	165	Q230-165	LOCK WASHER M5	1
79	Q230-079	GEAR HOUSING	1	166	Q230-166	NUT HEX M5X0.8	1
80	Q230-080	OIL SEAL	1	167	Q230-167	PAN HEAD CROSS RECESS SCREW	1
81	Q230-081	OIL SEAL PLATE	1				

10) MACHINE BREAKDOWN



RotabroachTM

11) WARRANTY STATEMENT

RotabroachTM warrants its machines to be free from faulty materials, under normal usage of machines, for a period of 12 months from initial date of purchase. All other parts (excluding cutters) are under warranty for 90 days, provided that the warranty registration card (or online registration) has been completed and returned to RotabroachTM or its designated distributor within a period of (30) days from the purchase date. Failure to do so will void the warranty. If the stated is adhered to RotabroachTM will repair or replace (at its option) without charge any faulty items returned.

This Warranty does not cover:

1. Components that are subject to natural wear and tear caused by the use not in accordance with the operators instructions
2. Defects in the tool caused by non-compliance with the operating instructions, improper use, abnormal environment conditions, inappropriate operating conditions overload or insufficient servicing or maintenance.
3. Defects caused by using accessories, components or spare parts other than original RotabroachTM parts.
4. Tools to which changes or additions have been made.
5. Electrical components are subject to manufacturer's warranty.

Your online registration can be submitted at www.rotabroach.co.uk

The warranty claim must be logged within the warranty period. This requires the submission or sending of the **complete** tool in question with the original sales receipt which must indicate the purchase date of the product. A complaint form must also be submitted prior to the return.

This can be found online at www.rotabroach.co.uk. Failure to complete this form will result in the delay of your claim.

All goods returned defective must be returned pre-paid to RotabroachTM, in no event shall Rotabroach[®] be liable for subsequent direct, or indirect loss or damage.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, (EXPRESSED OR IMPLIED) INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ROTABROACHTM RESERVE THE RIGHT TO MAKE IMPROVEMENTS AND MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE

Known and Trusted Worldwide for Quality, Performance and Reliability