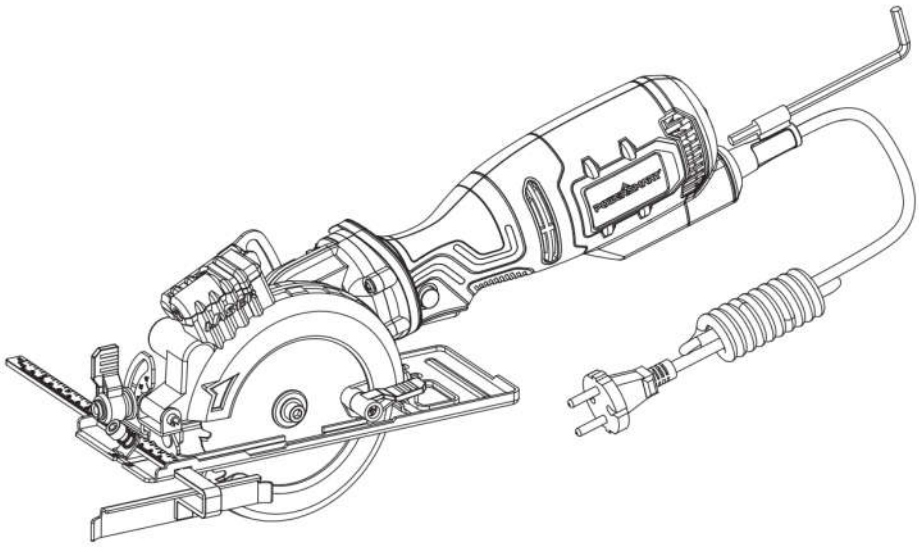
INSTRUCTION MANUAL

Electric Mini Circular Saw

Model # PS4006

Item# 76604L



Have product questions or need technical support? Please scan the QR code to enter our official website and contact us!

Website: www.powersmartusa.com

Toll free: 1-800-791-9458 M-F 9-5 EST

Email: support@amerisuninc.com

Website

CONTENTS

TECHNICAL DATA

Electric Mini Circular Saw	Model # PS4006
Motor:	120 V, 60 Hz, 5.8 Amp
No Load Speed:	3500 rpm
Blade Diameter:	4-1/2 inch
Arbor Size:	3/8 inch
Cutting Capacity at 90° :	1-11/16 inch
Cutting Capacity at 45° :	1-1/8 inch
Package dimensions (L x W x H):	16.9 x 4.7 x 12.4 inches
Weight:	8.8 lb.

INTRODUCTION

Thank You for Purchasing a PowerSmart® Product. This manual provides information regarding the safe operation and maintenance of this product. Every effort has been made to ensure the accuracy of the information in this manual. PowerSmart® reserves the right to change this product and specifications at any time without prior notice.

Please keep this manual available to all users during the entire life of the power tool.

This manual contains special messages to bring attention to potential safety concerns, power tool damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.

QUESTIONS? PROBLEMS?

Please contact our Customer Service Dept. with any questions and/or comments, either by Email: support@amerisuninc.com, or Toll Free at (800)791-9458. We are available Mon-Fri 9am-5pm EST to help solve any issues that you might encounter.

SAFETY INFORMATION

Before operating this power tool, read and observe all warnings, cautions, and instructions on the power tool and in this Owner's Manual.

NOTE: The following safety information is not meant to cover all possible conditions and situations that may occur. Read the entire Owner's Manual for safety and operating instructions. Failure to follow instructions and safety information could result in serious injury or death.

This safety alert symbol is used to identify safety information about hazards that can result in personal injury.

A signal word (DANGER, WARNING, or CAUTION) is used with the alert symbol to indicate the likelihood and the potential severity of injury. In addition, a hazard symbol may be used to represent the type of hazard.

DANGER Indicates a hazard, which, if not avoided, will result in death or serious injury.

WARNING Indicates a hazard, which, if not avoided, could result in death or serious injury.

CAUTION Indicates a hazard, which, if not avoided, might result in minor or moderate injury.

CAUTION Without the alert symbol, indicates a situation that could result in damage.

GENERAL SAFETY RULES

Safety is a combination of common sense, staying alert, and knowing how your power tool works.
SAVE THESE SAFETY INSTRUCTIONS.

WARNING: Do not operate this unit until you read this instruction manual for safety, operation and maintenance instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- 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.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SATETY

Grounding instructions

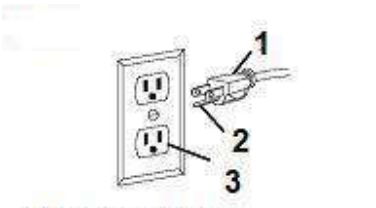
IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and a grounding plug. The plug MUST be plugged into a matching outlet that is properly installed and grounded in accordance with ALL local codes and ordinances.

DO NOT MODIFY THE PLUG PROVIDED. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

IMPROPER CONNECTION of the equipment grounding conductor can result in electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, DO NOT connect the equipment grounding conductor to a live terminal.

CHECK with licensed electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure if the tool is properly grounded.

USE ONLY THREE-WIRE EXTENSION CORDS that have 3-pronged plugs and outlets that accept the tool's plug as shown in Fig. A. Repair or replace a damaged or worn cord immediately.



1 3-pronged plug
2 grounding prong
3 properly grounded outlet

CAUTION: In all cases, make certain the outlet in question is properly grounded. If you are not sure if it is, have a licensed electrician check the outlet.

WARNING: Do not expose to rain or use in damp locations.

Guidelines for using extension cords

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 below shows the correct size to be used according to cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Minimum Gauge for Extension Cords (AWG)
(When using 120 V only)

Ampere Rating		Total Length of Cord in feet			
More Than	Not More Than	25	50	100	150
0	6	18	16	16	14
6	10	18	16	14	12
10	12	16	16	14	12
12	16	14	12	Not Recommended	

Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than a #12 wire and should be protected with a 15 A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

WARNING: This tool must be grounded while in use to protect the operator from electric shock.

PERSONAL SAFETY

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

- 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.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- 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.

POWER TOOL USE AND CARE

- Do not force 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 is designed.
- Do not use the power tool if switch does not turn it on or off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the power tool. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Store idle power tools out of reach of children and other untrained persons. Power tools are dangerous in the hands of untrained users.
- Maintain power tools with care. Keep cutting tools sharp and clean. Properly maintained power tools, with sharp cutting edges are less likely to bind and are easier to control.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the power tools operation. If damaged, have the power tool serviced before using.
- 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.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend them these instructions.

SERVICE

- Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES FOR ELECTRIC MINI CIRCULAR SAW

- Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring. Cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- When not in use, place tool on its side on a stable surface where it will not cause a tripping or falling hazard. Some tools with large battery packs will stand upright but may be easily knocked over.
- Keep hands away from cutting area. Never reach underneath the material for any reason. Hold front of saw by grasping the contoured gripping area. Do not insert fingers or thumb into the vicinity of the reciprocating blade and blade clamp. Do not stabilize the saw by gripping the shoe.
- Keep blades sharp. Dull blades may cause the saw to swerve or stall under pressure.
- Use extra caution when cutting overhead and pay particular attention to overhead wires which may be hidden from view. Anticipate the path of falling branches and debris ahead of time.
- When cutting pipe or conduit ensure that etc.

WARNING: Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

WARNING: ALWAYS use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIP- MENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3),
- ANSI S12.6 (S3.19) hearing protection,
- NIOSH/OSHA/MSHA respiratory protection.

WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

- Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

WARNING: Use of this tool can generate and/or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

WARNING: Do not operate this tool for long periods of time. Vibration caused by the operating action of this tool may cause permanent injury to fingers, hands, and arms. Use gloves to provide extra cushion, take frequent rest periods, and limit daily time of use.

Cutting Procedures

WARNING: Keep hands away from the cutting area and the saw blade.

- Do not reach underneath the workpiece. The guard cannot protect you from the blade below the workpiece.
- 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.
- 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.
- Hold power tool by the insulated gripping surfaces, when performing an operation where the cutting tool may run into hidden wiring. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- When ripping always use a rip fence or straight edge guide. This improves the accuracy of cut and reduces the chance of blade binding.
- 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.
- Kickback causes and related warnings
  - 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;
  - 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;
  - 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 wood causing the blade to climb out of the kerf and jump back toward the operator.
- Maintain a firm grip on the saw and position your arms to allow you to resist kickback force. Always stay to the side of the saw blade, never putting the saw blade in line with your body. The saw can jump backwards in the event of kickback, but the operator can control kickback force if proper precautions are taken.
- 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.
- 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.
- 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.
- Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- 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.
- Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

Lower Guard Function

- 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.
- 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.
- The lower guard may be retracted manually only for special cuts such as "plunge cuts and angle cuts". Raise the lower guard by retracting the handle and as soon as the blade enters the material, release the lower guard. For all other sawing operations, 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.

Safety Rules for Laser Lights

The laser light/laser radiation used in the system is Class 2 with maximum 1mW and 650nm wavelengths. These lasers do not normally present an optical hazard, although staring at the beam may cause flash blindness.

WARNNING: Do not stare directly at the laser beam. A hazard may exist if you deliberately stare into the beam, please observe all safety rules as follows:

- The laser shall be used and maintained in accordance with the manufacturer's instructions.
- Never aim the beam at any person or an object other than the workpiece.
- The laser beam shall not be deliberately aimed at personnel and shall be prevented from being directed towards the eye of a person for longer than 0.25s.
- Always ensure the laser beam is aimed at a sturdy workpiece without reflective surfaces. I.e. wood or rough coated surfaces are acceptable. Bright shiny reflective sheet steel or the like is not suitable for laser use as the reflective surface could direct the beam back at the operator.
- Do not change the laser light assembly with a different type. Repairs must be carried out by the laser manufacturer or an authorized agent.

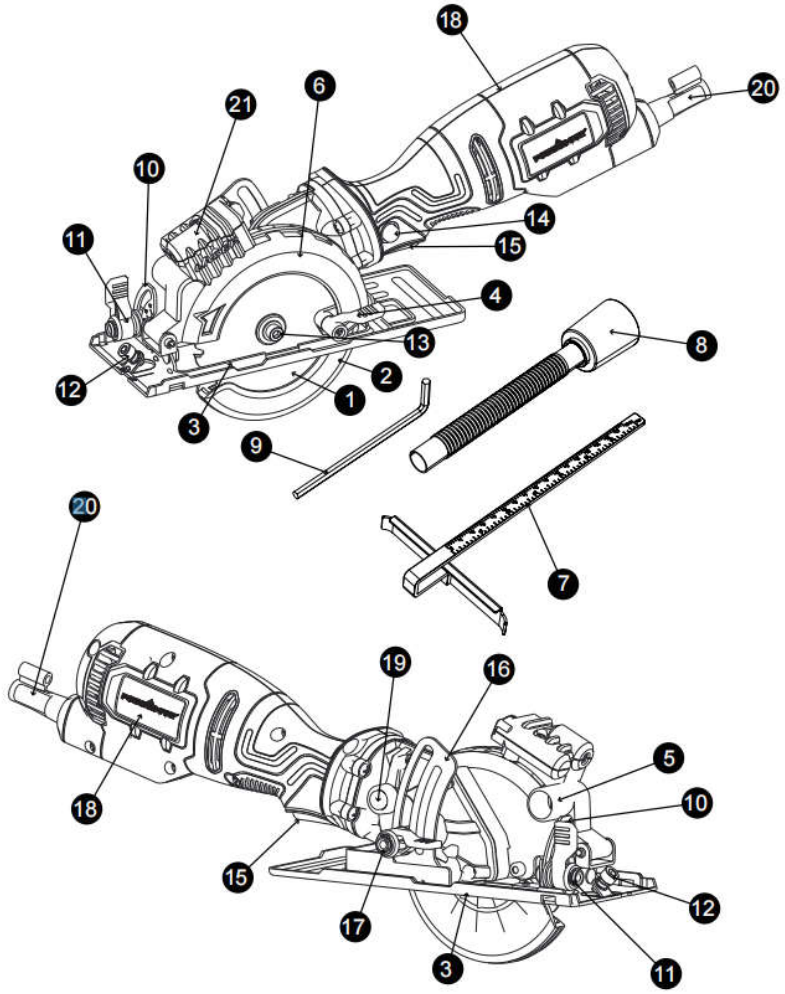
CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
MIN	Minutes	Time
	Double Insulated	Class II construction Double Insulated construction
	Safety Alert	Precautions that involve your safety.
	Read the user's manual	To reduce the risk of injury, user must read and understand user's manual before using this product.
	Eye protection	Wear eye protection when operating this equipment.
	Hearing protection	Use proper hearing protection when operating this equipment.
	Laser Radiation	Do not stare into beam.
	Respiratory protection	Use proper respiratory protection when operating this equipment.
	Wet conditions alert	Do not expose to rain or use in damp locations.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Electric shock alert	Beware of electric shock hazard.

KNOWING YOUR ELECTRIC MINI CIRCULAR SAW



1	Saw blade	2	Lower blade guard
3	Base plate	4	Lower guard lever
5	Dust extraction port	6	Upper blade guard
7	Rip guide	8	Vacuum adaptor
9	Allen wrench for blade	10	Bevel scale bracket
11	Bevel clamp lever	12	Rip guide locking screw
13	Blade bolt& washer	14	Lock-off button
15	On/Off switch	16	Depth guide bracket
17	Depth clamp lever	18	Rear motor
19	Spindle lock button	20	Allen wrench storage
21	Laser		

Unpacking

Unpack the power tool and all its parts, and compare against the list below. Do not discard the carton or any packaging materials. Please call 1-800-791-9458 or E-mail us at support@amerisuninc.com if any parts are damaged or missing.

Including: Electric mini circular saw/ Saw blade / Dust extractor /Rip guide/ Hex key/ User manual

ASSEMBLY INSTRUCTION

WARNING:
Do not use this product if any parts on the packing list are already assembled to your product when you unpack it. Parts on this list are not assembled to the product by the manufacturer and require customer installation. Use of a product that may have been improperly assembled could result in serious personal injury.

WARNING:
If any parts are damaged or missing do not operate this product until the parts are replaced. Use of this product with damaged or missing parts could result in serious personal injury.

WARNING:
Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

WARNING:
Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

MOUNTING/REPLACING THE SAW BLADE

WARNING: Before any work on the machine itself, keep the mains plug out of the supply. To avoid accidental starting, make sure Lock-Off button is not engaged prior to plugging in tool and you finger is not touching the on/off switch trigger.

For changing the cutting tool, it is best to place the machine on the face side of the motor housing.

Removal of the Saw Blade

- Press the spindle lock button (19) and keep it pressed.
- The spindle lock button (19) may be actuated only when the saw spindle is at a standstill. Otherwise, the power tool can be damaged.
- With the allen wrench (9), unscrew the bolt (13) turning in rotation direction.
- Tilt back the retracting blade guard (2) and hold firmly.
- Remove the clamping flange (13) and the saw blade (1) from the machine.

Mounting the Saw Blade

- Clean the saw blade (1) and all clamping parts to be assembled.
- Tilt back the retracting blade guard (2) and hold firmly.
- Place the saw blade (1) on to the mounting bolt (13). The cutting direction of the teeth (direction or arrow on saw blade) and the direction-of-rotation arrow on the blade guard (2) must correspond.
- Mount the blot & screw (13) in turning in rotation direction.
- Press the spindle lock button (19) and keep it pressed.
- With the allen wrench (9), tighten the clamping bolt (13) turning in rotation direction.

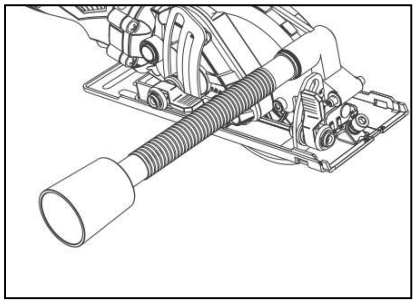
INSTALL THE RIP GUIDE

To install the rip guide on the machine, perform the following steps.

- Unplug your circular saw.
- Insert the rip guide (7) through all three slots on the base plate (3) at the front of the saw, starting with slot in the left side edge of the base.
- Slide the left guide (7) through the slots until it extends out the right side of the base plate(3).
- Adjust the rip guide for the desired width of cut and then securely tighten the rip guide locking screw (12).

INSTALL THE VACUUM ADAPTOR HOSE

- Connect the small end of the vacuum adaptor (8) to the dust extraction port (5) on the tool.
- Connect the other end of the vacuum adaptor(8) to the end of a vacuum hose.



OPERATING INSTRUCTION

WARNING: Observe correct main voltage! The voltage of the power source must agree with the voltage specified on the nameplate of the machine.

SWITCHING ON AND OFF

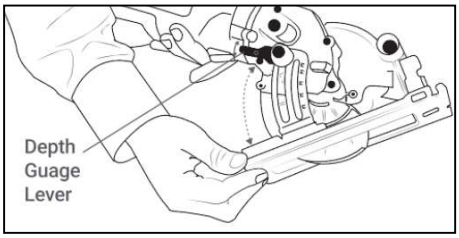
Note: Before engaging the on/off switch, check the saw blade to see if it is fitted properly and runs smoothly, and the blade clamp bolt is well tightened.

- To start the machine, press the ON/OFF switch (15) and keep it pressed.
- To stop the machine, release the ON/OFF switch (15) or when it is locked with the lock-off button (14), briefly press the ON/OFF switch (15) and then release it.

ADJUSTMENT

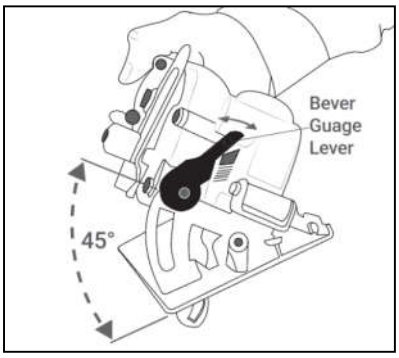
Depth adjustment

- Unplug your circular saw.
- Loosen the depth clamp lever (17)on the depth guide at the back of saw.
- Hold the base plate (3) against the edge of the work piece and lift the body of the saw until the blade is at the right depth determined by the depth gauge (align the scale line).
- Secure the base plate(3) by tightening the lever(17).



WARNING: Always maintain the correct blade depth setting. For all cuts the blade depth should not exceed 1/4" below the material being cut. Excessive blade depth increases the chance of saw KICKBACK.

Angle Adjustment



- Loosen the bevel scale bracket (10) for angle adjustment.
- Adjust the base plate (3) to the desired angle between 0°to45°
- Tighten the bevel scale bracket（10）.

CUTTING METHODS

Parallel Cut Adjustment

- Loosen the lock knob of edge guide.
- Slide the edge guide through the slots in the shoe to the desired width.
- Tighten the lock bolt to secure it in the position.
- Ensure that the edge guide rests against the wood along its entire length to give a consistent parallel cuts.

Pocket Cuts

A pocket cut is a cut that must be made inside the area of the work-piece rather than starting from an outside edge and working inward. Pocket cuts can be very dangerous for the novice to attempt because of the need to manually retract the lower guard and perform a plunge cut which is potential hazardous.

- Hold the lower blade guard by the handle.
- Rest the front of the base flat against the work-piece with the rear handle related so the blade does not touch the work-piece.
- Start the saw and let the blade reach full speed.
- Guide the saw down into the work-piece and make the cut.

WARNING: Always cut in a forward direction when pocket cutting. Cutting in the reverse direction could cause the saw to climb up on the work-piece and back toward you.

Cutting large sheets

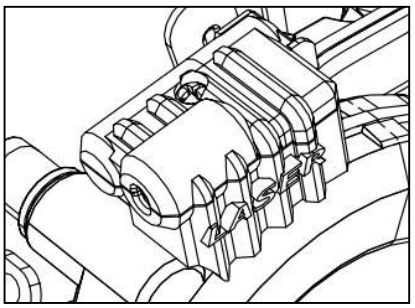
- Large sheet or boards require support to prevent bends or sags. If you attempt to cut without levelling and properly supporting the work piece, the blade will tend to bind, causing kickback.
- Support the panel or board close to the cut. Be sure to set the blade adjustment so that you can cut through the material without cutting into the table or workbench.

Suggestion: use two by fours to support the board or panel to be cut. If the piece is too large for the workbench, use the floor with the two-by fours supporting the wood.

LASER FUNCTION

WARNING: Do not stare directly at the laser beam, do not deliberately aim the beam at personnel and ensure that it is not directed towards the eye of a person for longer than 0.25s.

When you make the line of the cut on the work piece, the laser line generator can help you get better alignment.



The laser generator switch is located at the front of the safety lock button for the mechanical plunge stop.

Turn on: Press the laser generator switch to “I” position, the laser generator (1) works.

Turn off: Press the switch to “O” position.

1. Make sure line of the cut is on the work piece.
2. Adjust the depth of cut as required.
3. Plug in the machine and start the motor.
4. When the blade is at its maximum speed (approximately 5 seconds), place the saw on the work-piece.
5. Switch on the laser generator from the laser aperture using the laser switch(21).
6. Align the beam with the mark on the work-piece and slowly push the saw forward using both hands, keeping the red-light beam on the mark.
7. Switch off the laser beam after completion of the cut.

MAINTENANCE

WARNING: Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

Regular cleaning is required for the safe operation of the tool, as an excessive buildup of dust will prevent the tool from operating correctly.
The dust extraction port (5) may block and require cleaning occasionally, especially if damp wood is being cut.

1. Unplug from mains supply.
2. Clean thoroughly with a small soft brush, like a paint brush.
3. Keep the cooling vents on the motor housing clean and unobstructed at all times.
4. Never use any caustic agents or solvents to clean the plastic parts.

Blade

- Always use a sharp blade.
- If the tool does not cut as well as expected or if it overheats (temperature cut out may trip) the most common cause is a blunt blade.
- It is difficult to see or feel if the blade is blunt. When in doubt use a new blade.
- Blades are consumable items.
- Beware when changing blade as they can become hot during use. Allow the blade to cool before replacing it.

Carbon brush

For safety reasons, the machine automatically switches off if the carbon brushes are so worn out that they no longer have contact with the motor. In that case, the carbon brushes must be replaced by a pair similar carbon brush available through the after-sales service organization or qualified professional person.

If they are 6 mm or less then they must both be replaced. Fit new carbon brushes and replace the brush housing.

CAUTION: The brushes must always be replaced in pairs.
CAUTION: Always disconnect the machine from the power supply before removing any electrical covers.

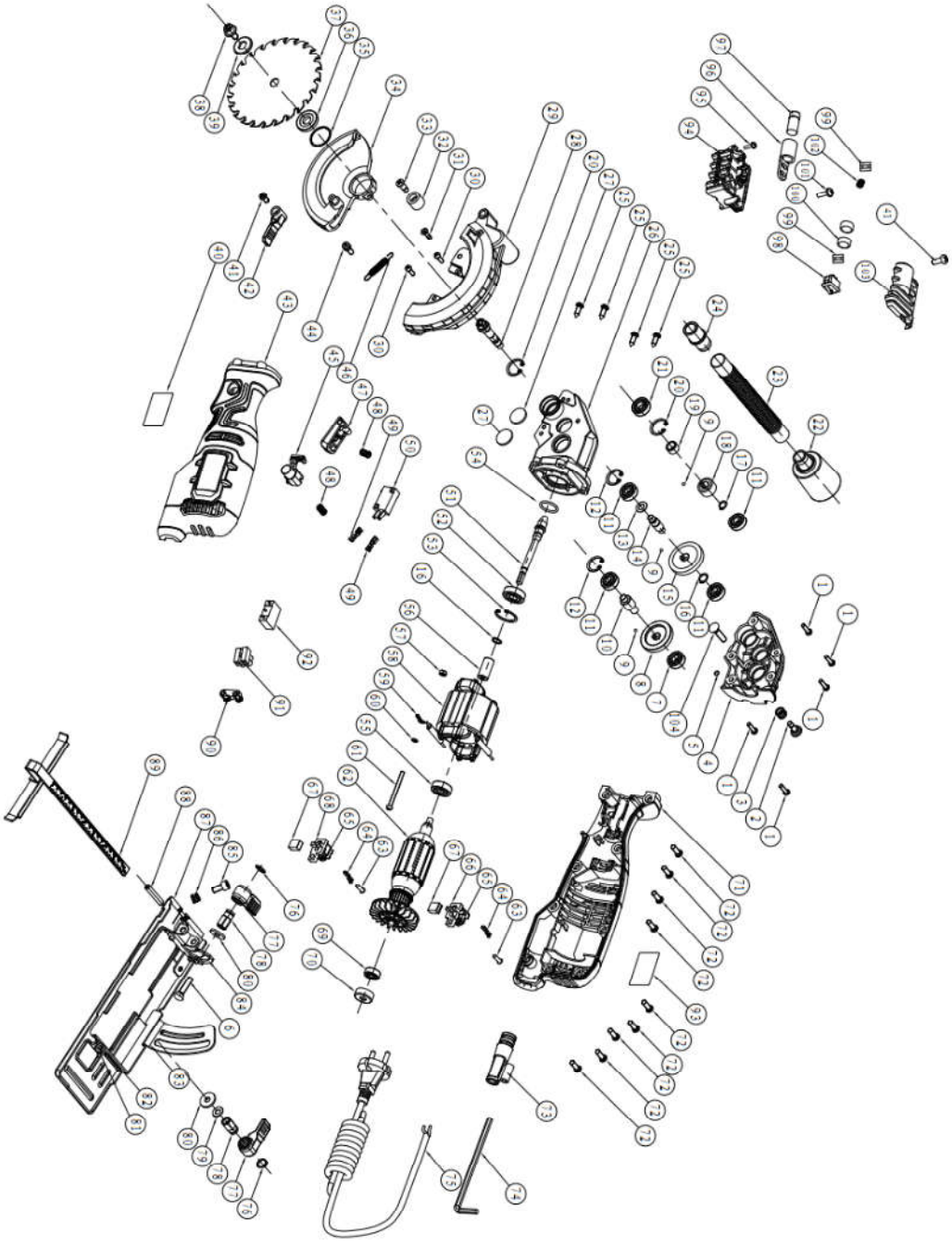
Changing the button batteries for Laser generator

Unplug the saw from power mains.

WARNING: Failure to unplug your tool could result in accidental starting causing possible serious personal injury.

1. Open the battery cover located on the top of the motor by using a screwdriver.
2. Take out the old button batteries from battery holder and replace with new button batteries. Dispose of old batteries properly.
3. Close the battery cover.

EXPLODED VIEW& PARTS LIST



Item	Stock#	Description	Qty
1	PS4006-001	Pan Head Philips screw M4X14(with washer)	5
2	PS4006-002	Spindle lock cap	1
3	PS4006-003	Spring for spindle lock	1
4	PS4006-004	Gear box cover	1
5	PS4006-005	Spring φ0.8Xφ4	1
6	PS4006-006	Nut M6X26	1
7	PS4006-007	Deep groove ball bearing	1
8	PS4006-008	Big spiral bevel gear	1
9	PS4006-009	Steel ball	3
10	PS4006-010	Primary gear shaft	1
11	PS4006-011	Deep groove ball bearing	4
12	PS4006-012	Circlip for hole	2
13	PS4006-013	Washer	1
14	PS4006-014	Middle axis	1
15	PS4006-015	Big spiral bevel gear	1
16	PS4006-016	Circlip for shaft	2
17	PS4006-017	Circlip for shaft	1
18	PS4006-018	Pinion	1
19	PS4006-019	Distance tube	1
20	PS4006-020	Circlip for shaft	2
21	PS4006-021	Deep groove ball bearing	1
22	PS4006-022	Dust port	1
23	PS4006-023	Dust pipe	1
24	PS4006-024	Vacuum port	1
25	PS4006-025	Pan Head Philips screw	6
26	PS4006-026	Gear box	1
27	PS4006-027	Dust cover	2
28	PS4006-028	Spindle	1
29	PS4006-029	Guard cover	1
30	PS4006-030	Pan Head Philips screw M4X12(with washer)	2

Item	Stock#	Description	Qty
31	PS4006-031	Pan Head Philips screw M4X12	1
32	PS4006-032	Lower guard baffle	1
33	PS4006-033	Nut M5	1
34	PS4006-034	Lower guard	1
35	PS4006-035	Sheet steel retaining ring	1
36	PS4006-036	Inner flange	1
37	PS4006-037	TCT saw blade	1
38	PS4006-038	Flange nut	1
39	PS4006-039	Outer flange	1
40	PS4006-040	Logo label	1
41	PS4006-041	Screw ST4.2X12	2
42	PS4006-042	Guard spanner	1
43	PS4006-043	Left housing	1
44	PS4006-044	Spring nut	1
45	PS4006-045	Switch knob	1
46	PS4006-046	Retaining spring	1
47	PS4006-047	Switch trigger	1
48	PS4006-048	Spring	2
49	PS4006-049	Socket terminal	2
50	PS4006-050	Switch	1
51	PS4006-051	Gear	1
52	PS4006-052	Deep groove ball bearing	1
53	PS4006-053	Circlip for shaft	1
54	PS4006-054	O ring	1
55	PS4006-055	Deep groove ball bearing	1
56	PS4006-056	Adapter sleeve	1
57	PS4006-057	NUT M4	1
58	PS4006-058	Stator	1
59	PS4006-059	Coil	1
60	PS4006-060	Spring washer	1

Item	Stock#	Description	Qty
61	PS4006-061	Pan Head Philips screw M4X45	1
62	PS4006-062	Rotor	1
63	PS4006-063	Screw ST2.9X10	2
64	PS4006-064	Socket terminal	2
65	PS4006-065	Soil spring	2
66	PS4006-066	Left carbon holder	1
67	PS4006-067	Carbon brushes	2
68	PS4006-068	Right carbon holder	1
69	PS4006-069	Deep groove ball bearing	1
70	PS4006-070	Bearing sleeve	1
71	PS4006-071	Right housing	1
72	PS4006-072	Screw ST4.2X16	9
73	PS4006-073	Cable sleeve	1
74	PS4006-074	Hex 5	1
75	PS4006-075	Power cord	1
76	PS4006-076	Circlip for hole	2
77	PS4006-077	Spanner	2
78	PS4006-078	M6 PIN	2
79	PS4006-079	Butterfly spring	1
80	PS4006-080	Washer φ6Xφ18X2	2
81	PS4006-081	Nut 5x8	2
82	PS4006-082	Pin washer	1

Item	Stock#	Description	Qty
83	PS4006-083	Depth frame	1
84	PS4006-084	Angle frame	1
85	PS4006-085	Screw M6X12	1
86	PS4006-086	Spring	1
87	PS4006-087	Base assemble	1
88	PS4006-088	Round pin D6X35	1
89	PS4006-089	Guide rules	1
90	PS4006-090	Cable clamp assembly	1
91	PS4006-091	Wires connecting blocks	2
92	PS4006-092	Capacitance 0.33μF	1
93	PS4006-093	Label	1
94	PS4006-094	Nut M6X26	1
95	PS4006-095	Screw M3x8	3
96	PS4006-096	Laser frame	1
97	PS4006-097	Laser	1
98	PS4006-098	Switch for laser	1
99	PS4006-099	Spring seat	1
100	PS4006-100	Battery	2
101	PS4006-101	Screw ST3.5x12	2
102	PS4006-102	Spring	1
103	PS4006-103	Laser cover	1
104	PS4006-104	Nut M6X26	1

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