

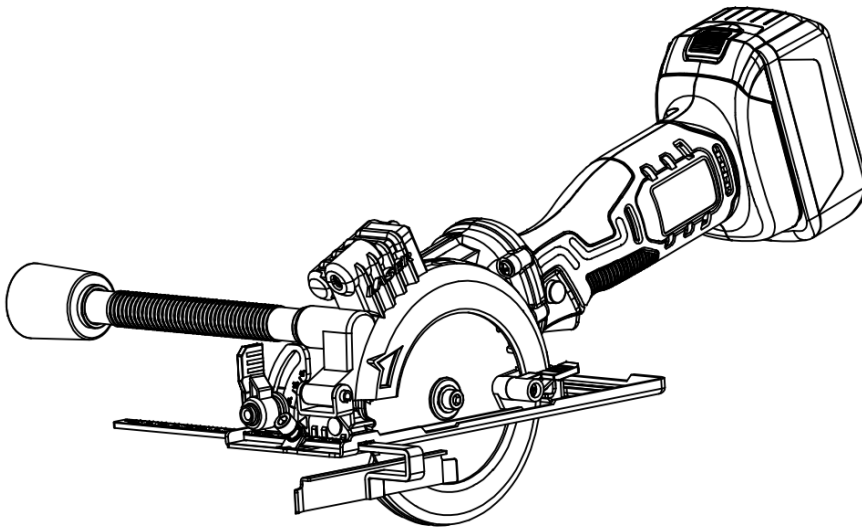
# POWERSMART<sup>®</sup>

## INSTRUCTION MANUAL

### 20V Cordless Mini Circular Saw

Model # PS76138A

Item#97612L



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

Website: [www.powersmartusa.com](http://www.powersmartusa.com)

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

Email: [support@amerisuninc.com](mailto:support@amerisuninc.com)



Website



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## **TECHNICAL DATA**

Cordless Mini Circular Saw	Model # PS76138A
Rated Voltage:	20 V
No Load Speed:	0~4500 rpm
Blade Diameter:	4-1/2 inch, 24 Teeth
Arbor:	3/8 inch
Cutting Capacity:	1-11/16 inch at 90°, 1-1/8 inch at 45°
Battery type:	20V Lithium-ion, 4.0 Ah
Battery model:	PS76440B
Charge time:	2.5 hours
Charger model:	PS76018C
Package dimensions (L x W x H):	15.4 x 7.6 x 6.2 inches
Weight:	7.5 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](mailto: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 your work area clean and well lit. Cluttered benches and 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 bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

### **ELECTRICAL SAFETY**

- 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.
- 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.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- 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.
- 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.
- If operating a power tool in a damp location is unavoidable, use a ground fault circuit.

### **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 safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure switch is off before connecting to power source and/ or battery pack, pick 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 tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enable better control of the power tool in unexpected situations.
- 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.

## **BATTERY TOOL USE AND CARE**

- Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use power tools only with specifically designated battery packs. Use of any another battery packs may create a risk of injury and fire. Use only POWERSMART battery (Model#PS76440B)
- When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under extreme usage or temperature conditions, battery leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.

## **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 CORDLESS 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.

- 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 following table 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.

Volts		Minimum Gauge for Cord Sets			
		Total Length of Cord in Feet			
120v		0-25 (0-7.6m)	26-50 (7.6-15.2m)	51-100 (15.2-30.4m)	101-150 (30.4-45.7m)
Ampere Rating		American Wire Gauge			
>	≤	18	16	16	14
0	6				

## 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.



**WARNING:** 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.



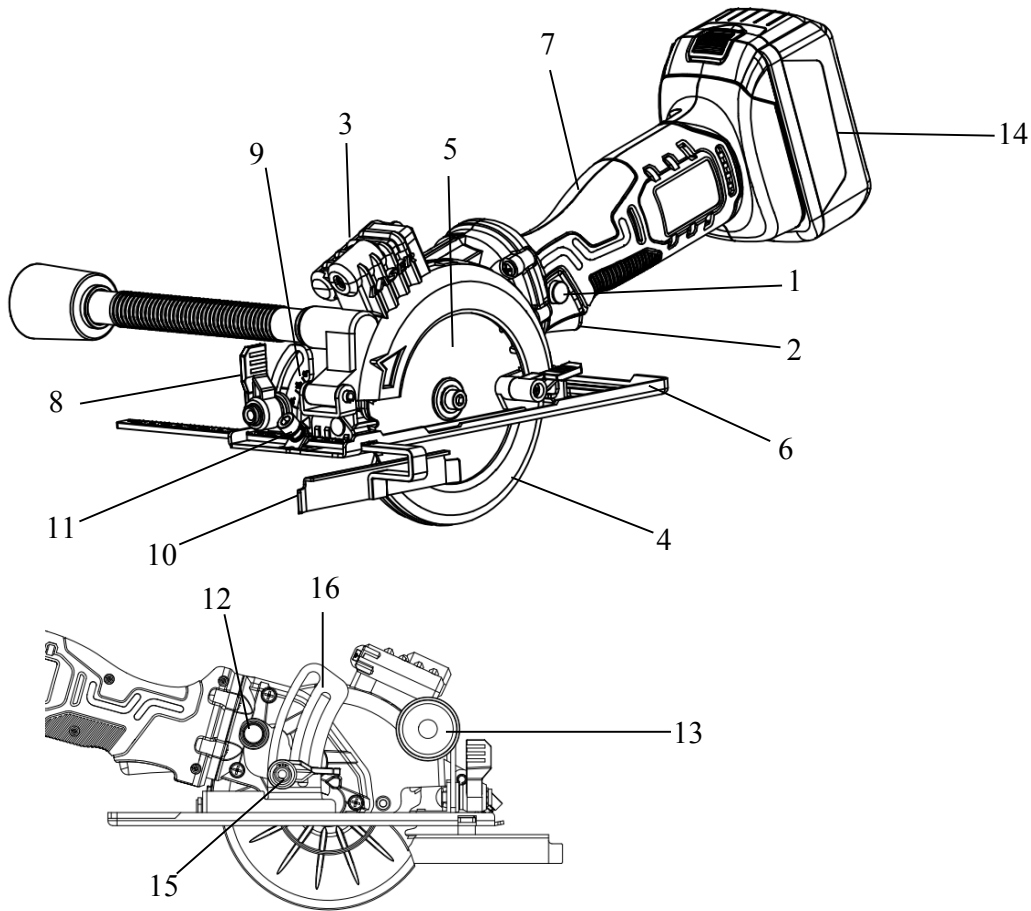
**CAUTION:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

## 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
	Safety Alert	Precautions that involve your safety.
	Li-ion RBRC seal	Designates Li-ion battery recycling program
	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 MINI CIRCULAR SAW



**Fig.1**

- |    |                                  |    |                               |
|----|----------------------------------|----|-------------------------------|
| 1  | Lock-off / Plunge release button | 2  | On/Off trigger switch         |
| 3  | Laser                            | 4  | Retractable lower blade guard |
| 5  | Saw blade                        | 6  | Base plate                    |
| 7  | Soft grip                        | 8  | Cutting angle clamp           |
| 9  | Cutting depth scale              | 10 | Rip guide                     |
| 11 | Rip guide locking screw          | 12 | Spindle lock                  |
| 13 | Dust extraction nozzle           | 14 | Battery                       |
| 15 | Cutting depth clamp              | 16 | Cutting depth scale           |

## **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](mailto:support@amerisuninc.com) if any parts are damaged or missing.

Including: Cordless mini circular saw/ Saw blade / Dust extractor /Rip guide/ Hex key/ Battery and Charger / 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**



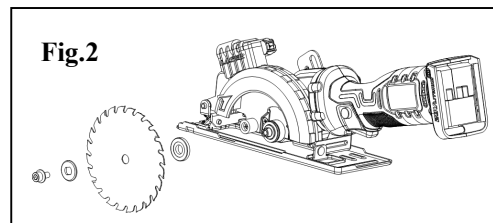
**WARNING:** Before any work on the power tool, remove the battery.

- When mounting the saw blade, wear protective gloves. Danger of injury when touching the saw blade.
- Only use saw blade that correspond with the characteristic data given in the operating instructions.
- Do not under any circumstances use grinding discs as the cutting tool.

### **Removal of the Saw Blade**

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

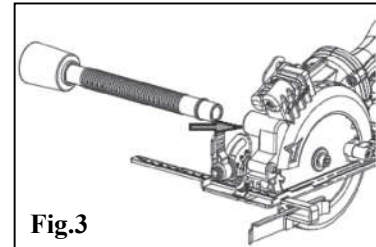
- Press the spindle button and keep it pressed.
- The spindle lock button may be actuated only when the saw spindle is at a standstill. Otherwise, the power tool can be damaged.
- With the Allen key, unscrew the clamping bolt turning in rotation direction.
- Tilt back the retracting blade guard and hold firmly.
- Remove the clamping flange and the saw blade from the saw spindle.



## Dust/Chip Extraction

Dusts from materials such as lead-containing coatings, some wood types, minerals and metal can be harmful to one's health. Touching or breathing in the dusts can cause allergic reactions and/or lead to respiratory infections of the user or bystanders, certain dusts, such as oak or beech dust, are considered as carcinogenic, especially in connection with wood-treatment additives (chromate, wood preservative). Materials containing asbestos may only be worked by specialists.

- To achieve a high level of dust extraction, use a suitable dust extractor together with this power tool.
- Provide for good ventilation of the working place.
- It is recommended to wear a P2 filter-class respirator.



## CONNECTING AND REMOVING BATTERY

### IMPORTANT!

The battery pack is not charged when it is purchased. Before using the power tool for the first time, place the battery pack in the battery charger and charge. Make sure to read all safety precautions, and follow the instructions in the battery charger section.

### To install the battery pack

To install the battery pack into the bottom of the handle, align the rails of the battery pack with the rails in the handle and push the battery into the handle. To connect the battery, slide the battery pack fully forward. Until the latch locks into place.

### To remove the battery pack

Press the battery release button, slide the battery pack backward, and then pull or lift the battery out of the tool.



### WARNING:

Follow these instructions in order to avoid injury and to reduce the risk of electric shock or fire:

- Replace the battery pack or the charger immediately if the battery case or charger cord is damaged.
- Verify that the battery pack is removed before inspecting, adjusting, or performing maintenance on any part of the power tool.
- Read, understand, and follow the instructions.

# OPERATING INSTRUCTION

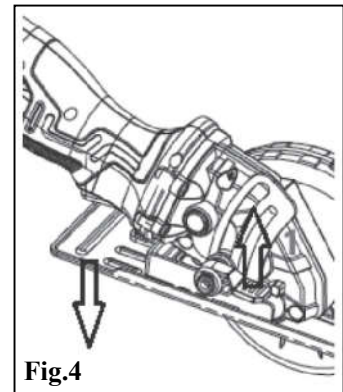
## **Mounting the Extraction Adapter**

Before any work on the power tool, remove the battery. Fasten the extraction adapter to the dust port without tools.

- The extraction adapter may not be mounted when no external dust extraction is connected. Otherwise the extraction channel can become clogged.
- Do not connect a dust bag to the extraction adapter.
- Otherwise the extraction system can become clogged. To ensure optimum extraction, the extraction adapter must be cleaned regularly.

## **Adjusting the Cutting Depth**

- Adjust the cutting depth to the thickness of the work-piece. Less than a full tooth of the blade teeth should be visible below the workpiece.
- Loosen wing bolt. For a smaller cutting depth, pull the machine from the base plate; for a larger cutting depth, push the machine toward the base plate.
- Adjust the desired cutting depth at the cutting-depth scale.
- Tighten wing bolt again. When setting the cutting depth, use the reference mark to the side of the cutting-depth scale.

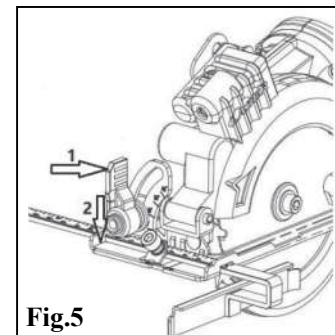


## **Adjusting the Cutting Angle**

It is best to place the machine on the face side of the blade guard.

- Loosen wing bolt.
- Tilt the saw side-wards.
- Adjust the desired setting at the scale.
- Tighten wing bolt again.

Note: For bevel-cuts, the cutting depth is smaller than the setting indicated on the cutting-depth scale.



## **Switching On and Off**

To start the machine

- First push the lock-off button for the On/Off switch.
- Then press the On/Off switch and keep it pressed.
- When cut the wood, put the machine on the workpiece and push it along the wood.

To switch off the machine

- First take out of the machine from workpiece.
- Then release the On/Off switch.

Note: For safety reasons, the On/Off switch cannot be locked; it must remain pressed during the entire operation.

## Pressing the Laser Button

Note: Laser light can cause severe eye damage. Never look directly into the laser beam. Do not point the laser beam at other people or animals, either directly or through reflective surfaces. The laser feature on your saw is powered by two LR44 1.5V button batteries (installed). The Laser feature clearly shows you an extended cut-line, even over debris on the work piece.

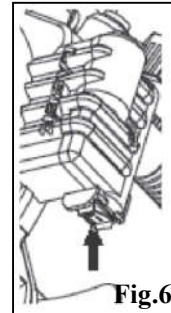


Fig.6

- Turn it on with the laser light ON/Off switch right before cutting.
- Turn it off immediately after use to conserve battery and laser life.

## Application

This tool is primarily intended for the sawing, longitudinally and transversely, of solid wood, chipboard, plywood, soft metal, tile and stone held in a fixed position please note that the blade pre-installed in the saw as supplied is intended for use with wood only. Any other use or modification to the device shall be considered as improper use and could give rise to considerable dangers.

## Installing Parallel Guide

NOTE: The parallel guide enables exact cuts along a workpiece edge and cutting strips of the same dimension.

Release the lock screw for guide fence on the base plate and set the guide fence in the guide fence slot.

Set a desired width and retighten the lock screw for the guide fence.

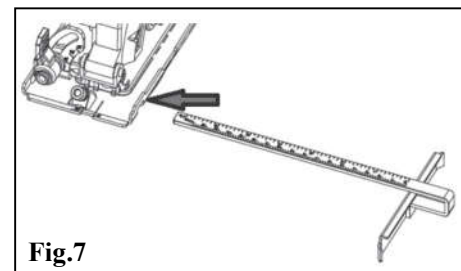


Fig.7

## TEMPERATURE CONTROL /OVERLOAD PROTECTION

When the temperature of battery is too high and the machine switches off automatically.

- Switch the power tool off.
- Allow the battery to cool down before continuing to work.

When the power tool is blocked and switches off automatically.

- Remove the power tool from the workpiece.
- As soon as the blockage is corrected, the power tool will continue to work at the set stroke rate.

## IMPORTANT CHARGING NOTES



**WARNING:** Battery packs are shipped in a low charge condition to prevent possible problems. Therefore, you should charge them before first use.

- Use only POWERSMART battery charger (Model#PS76018C)
- Charge time is approximately 2.5 hours, and is dependent upon the type of battery pack.
- Make sure the power supply is normal household voltage, 120V, AC only, 60Hz.
- Attach the battery pack to the charger by aligning the raised ribs on the battery pack with the grooves in the charger, then slide the battery pack onto the charger.
- Press down on the battery pack to be sure contacts on the battery pack engage properly with contacts in the charger. Latches should snap into ensure charger is correctly connected.
- Do not place the charger in an area of extreme heat or cold. It will work best at normal room temperature.
- The battery pack may become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- The red LEDs will remain on while charging.
- When the green LEDs is light, this indicates the battery is fully charged.
- To remove the battery pack from the charger, depress latches and pull up on the battery pack.
- When the battery pack is fully charged, remove it from the charger.

## MAINTENANCE



**WARNING:** In order to avoid personal injury and the risk of fire and electric shock, remove the battery pack before adjusting, inspecting, or cleaning the power tool.



**WARNING:** When servicing, use only identical replacement parts. Use of any other parts could create a hazard or cause product damage.

- Be alert for battery packs that are nearing their end of life. If you notice decreased tool performance or significantly shorter running time between charges then it is time to replace the battery pack. Failure to do so can cause the tool to operate improperly or damage the charger.
- Clean the saw blade holder preferably with compressed air or a soft brush. Remove the saw blade from the power tool for this. Ensure proper operation of the saw blade holder by applying a suitable lubricant.
- Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through opening.
- Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean clothes to remove dirt, oil, grease, etc.



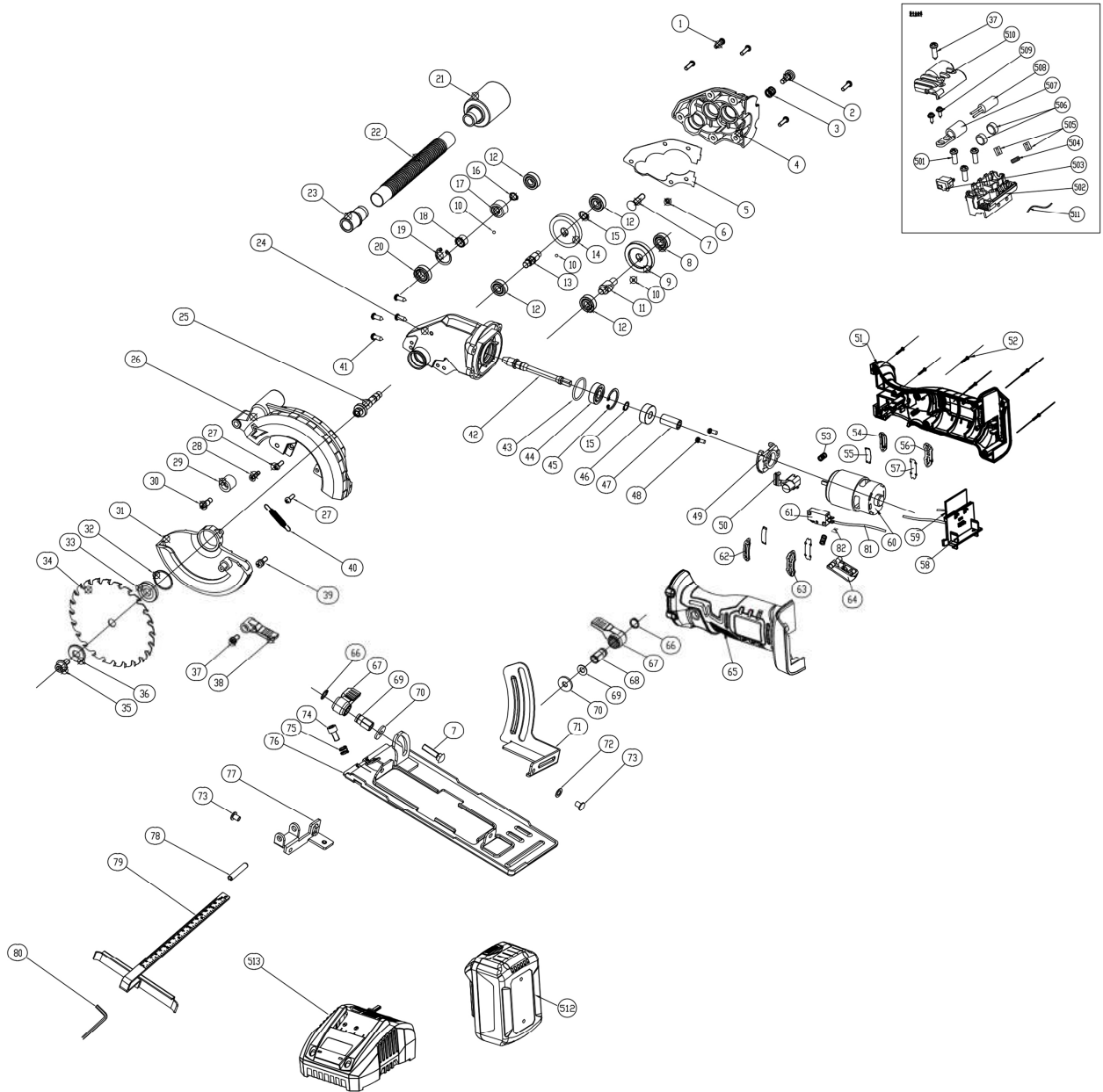
## **TROUBLE SHOOTING**



**WARNING:** Read instruction manual first! Remove battery pack from the tool before making adjustments or assembling accessories.

Problem	Possible Cause	Possible Solution
Unit will not start	Battery pack not installed properly	Check battery pack installation.
	Battery pack not charged.	Check battery pack charging requirements.
Battery pack will not charge.	Battery pack not inserted into charger.	Insert battery pack into charger until LED appears
	Charger not plugged in	Plug charger into a working outlet. Refer notes “for more details.
	Surrounding air temperature too hot or too cold	Move charger and battery to a surrounding air temperature of above 40 degrees F(4.5°C) or below 105 degrees F(+40.5°C)
Unit shuts off abruptly	Battery pack has reached its maximum thermal limit.	Allow battery pack to cool down
	Out of charge. (To maximize the life of the battery pack, it is designed to shutoff abruptly when the charger is depleted.	Place on charger and allow to charge

# EXPLODED VIEW



## PARTS LIST

Item	Stock#	Description	Qty.
1	PS76138A-001	screw with washer M4×14	5
2	PS76138A-002	Spindle lock cap assembly	1
3	PS76138A-003	Spinding lock spring	1
4	PS76138A-004	Gear box cover	1
5	PS76138A-005	Dustproof paper pad	1
6	PS76138A-006	Clamp Spring(φ4×φ0.8)	1
7	PS76138A-007	Square neck bolt M6×26	2
8	PS76138A-008	Bearing 698	1
9	PS76138A-009	Spiral bevel gears	1
10	PS76138A-010	Steel ballφ3	3
11	PS76138A-011	Gear shaft	1
12	PS76138A-012	Bearing 607-2RS	4
13	PS76138A-013	Intermediate shaft	1
14	PS76138A-014	Intermediate gear	1
15	PS76138A-015	Circlip for shaft D9	2
16	PS76138A-016	Circlip for shaft D8	1
17	PS76138A-017	Pinion	1
18	PS76138A-018	Separation sleeve	1
19	PS76138A-019	Circlip for hole D20	1
20	PS76138A-020	Bearing 699	1
21	PS76138A-021	Connecting tube B	1
22	PS76138A-022	Corrugated tube	1
23	PS76138A-023	Connecting tube D	1
24	PS76138A-024	Gear box	1
25	PS76138A-025	Spindle shaft	1
26	PS76138A-026	Upper guard	1
27	PS76138A-027	Screw with washer ST4.2×12	2
28	PS76138A-028	Screw M4×12	1
29	PS76138A-029	Rubber block for lower guard	1
30	PS76138A-030	Screw M5 for rubber block	1

Item	Stock#	Description	Qty.
31	PS76138A-031	Lower guard	1
32	PS76138A-032	Baffle	1
33	PS76138A-033	Inner flange	1
34	PS76138A-034	TCT blade φ115	1
35	PS76138A-035	Blade fixed screw	1
36	PS76138A-036	Outer flange	1
37	PS76138A-037	Screw with washer ST4.2×12	2
38	PS76138A-038	Lever for lower guard	1
39	PS76138A-039	Screw for reset spring	1
40	PS76138A-040	Reset spring	1
41	PS76138A-041	Screw ST4×14	4
42	PS76138A-042	Gear for connecting rod	1
43	PS76138A-043	O-ring	1
44	PS76138A-044	Bearing 609-2RS	1
45	PS76138A-045	Circlip for hole D24	1
46	PS76138A-046	Bearing 606-2Z	1
47	PS76138A-047	Connecting sleeve	1
48	PS76138A-048	screw with washer M4×8	2
49	PS76138A-049	Motor support	1
50	PS76138A-050	Switch self-locking cap	1
51	PS76138A-051	Right housing	1
52	PS76138A-052	Screw ST2.9×14	6
53	PS76138A-053	Spinding lock spring	2
54	PS76138A-054	rightfront dustproof window	1
55	PS76138A-055	steel wire for front window	2
56	PS76138A-056	rightrear dustproof window	1
57	PS76138A-057	steel wire for rear window	2
58	PS76138A-058	hardware pine	1
59	PS76138A-059	PCB board	1
60	PS76138A-060	Motor	1

Item	Stock#	Description	Qty.
61	PS76138A-061	Microswitch	1
62	PS76138A-062	leftfront dustproof window	1
63	PS76138A-063	leftrear dustproof window	1
64	PS76138A-064	Trigger	1
65	PS76138A-065	Left housing	1
66	PS76138A-066	Circlip for shaft D10	2
67	PS76138A-067	Depth locking lever	2
68	PS76138A-068	M6 locking pole	1
69	PS76138A-069	Belleville spring 6	1
70	PS76138A-070	Big washer	2
71	PS76138A-071	Depth frame	1
72	PS76138A-072	Washer $\Phi 5 \times \Phi 9 \times 0.8$	1
73	PS76138A-073	Rivet D5×8	2
74	PS76138A-074	Screw M6×12	1
75	PS76138A-075	Edge guide locking spring	1
76	PS76138A-076	Base plate	1
77	PS76138A-077	Angle frame	1
78	PS76138A-078	Cylindrical spring pin	1

Item	Stock#	Description	Qty.
79	PS76138A-079	Guide ruler	1
80	PS76138A-080	Hex key 5	1
81	PS76138A-081	inner wire	1
82	PS76138A-082	Molding jokes	1
501	PS76138A-501	Screw M3X8	3
502	PS76138A-502	Laser seat	1
503	PS76138A-503	Rocker switch	1
504	PS76138A-504	Tower spring	1
505	PS76138A-505	Spring seat	2
506	PS76138A-506	1.5V battery	2
507	PS76138A-507	Laser support	1
508	PS76138A-508	Laser	1
509	PS76138A-509	Screw ST3.5×12	2
510	PS76138A-510	Laser cover	1
511	PS76138A-511	inner wire	1
512	PS76440B	Battery pack	1
513	PS76018C	Charger	1

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