

LiTool®



12V LI-ION Power Tool Set LT3IN1

Instruction Manual



Warning: Please make certain that the person intended to use this equipment carefully reads and understands these instructions before starting operations.

Product components:

Fig. A: Cordless Drill

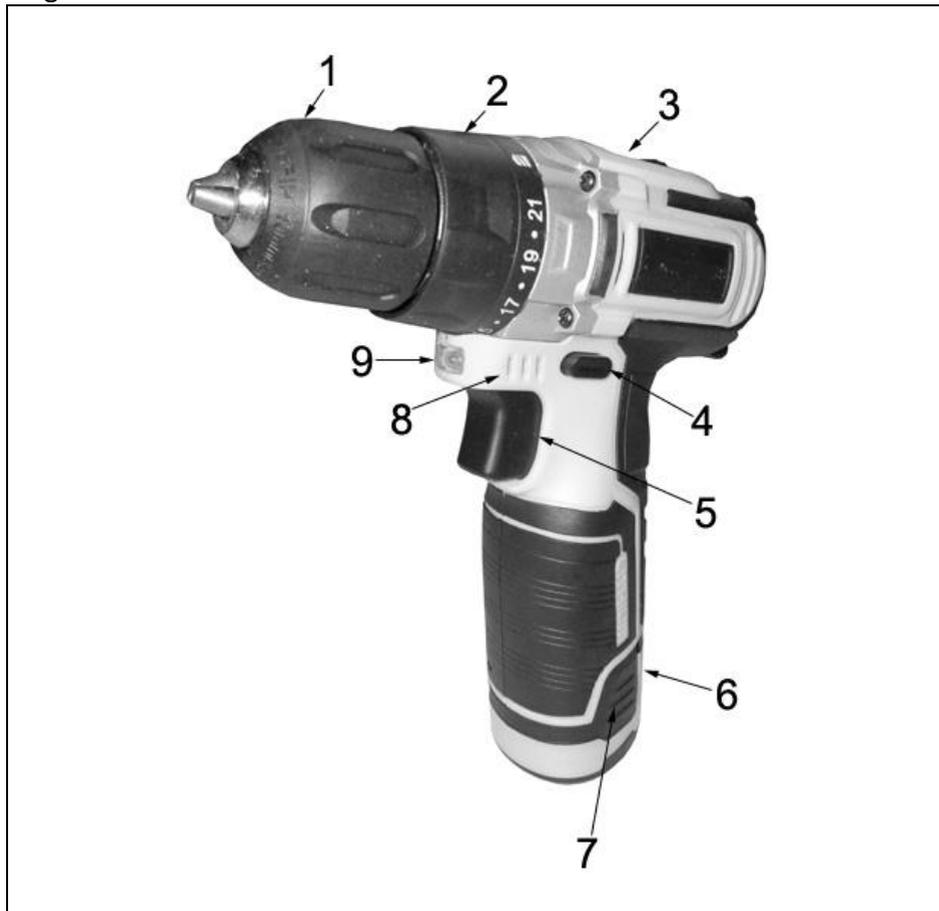


Fig. B: Cordless Multi Purpose Saw

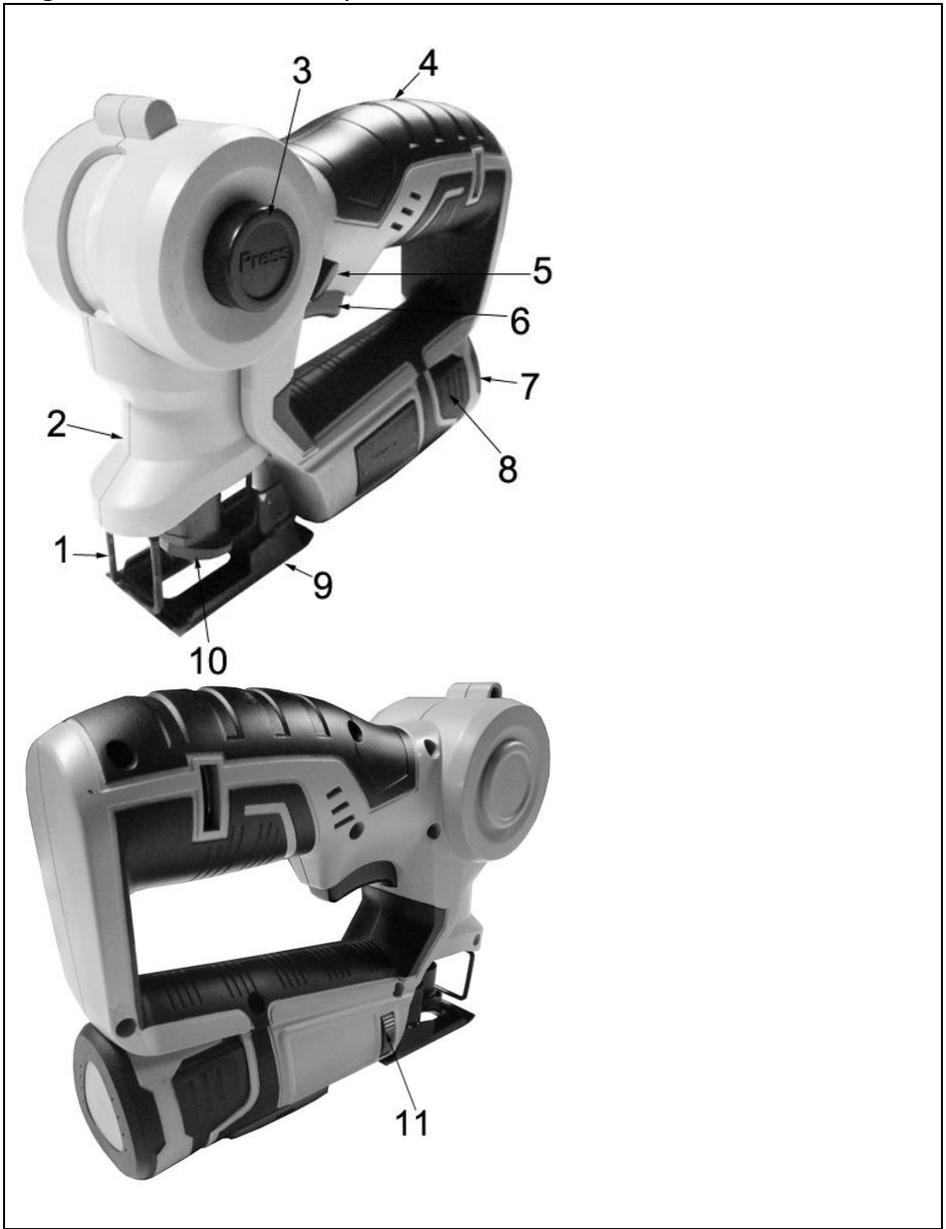
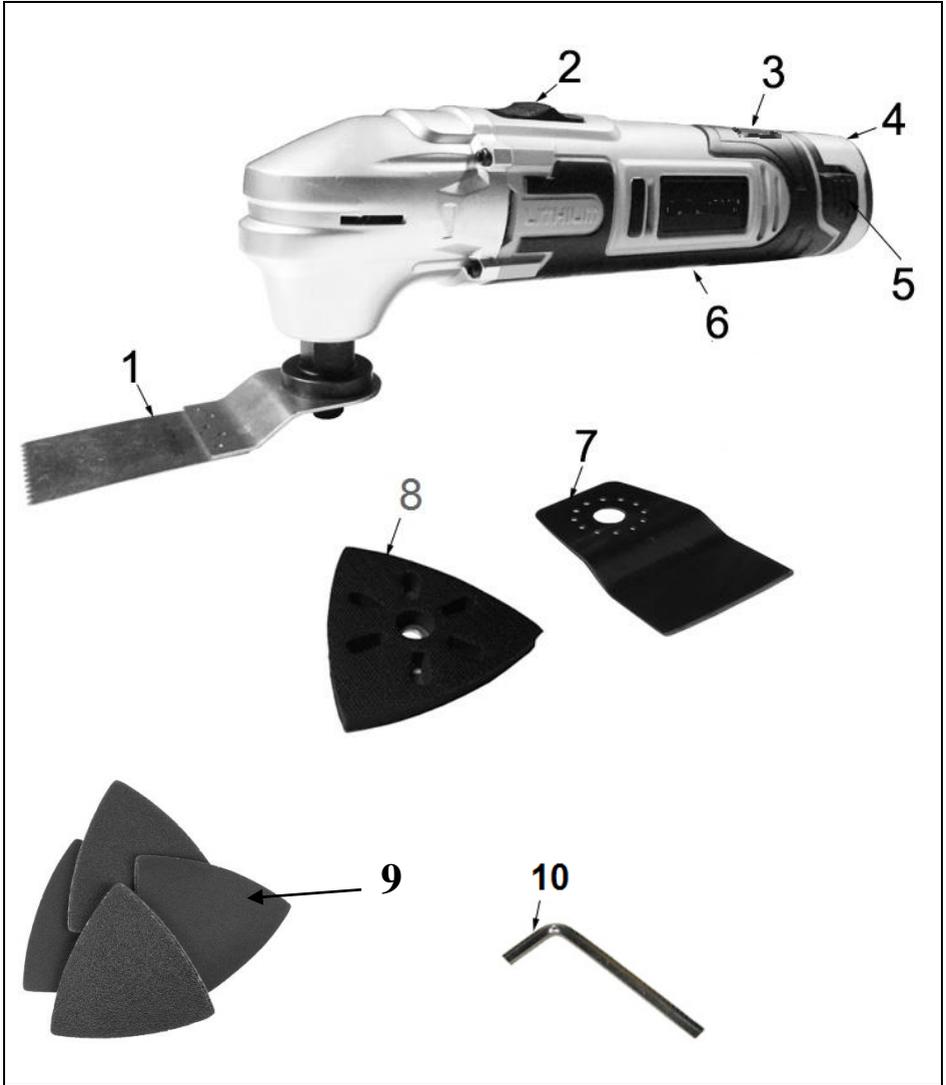


Fig. C: Cordless Multi Function Tool



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LI-ION POWER TOOL SET 12V

1 APPLICATION

This set comes with 3 tools : A Cordless Drill, a Multi Purpose Saw and a Multi Function Tool.

Cordless Drill : The machine is intended to drill holes in wood, bricks or metal (when drilling in steel, keep the machine in low speed to improve the drilling efficiency). It can also be used for driving in and loosening screws and bolts.

Multi Purpose Saw : This tool is designed for cutting wood, iron, nonferrous metals and plastics, using a standard saw blade.

Multi Function Tool : Depending on the accessory mounted on the tool, this machine is intended for a variety of tasks such dry sanding small areas, sawing, scraping, polishing, rasping, cutting, separating, etc.

These 3 tools are not designed for commercial or industrial use.



WARNING! Read this manual and general safety instructions carefully before using the appliance, for your own safety. Your power tool should only be passed on together with these instructions.

2 DESCRIPTION (FIG A-B-C)

Cordless Drill Fig. A	Cordless Multi Purpose Saw Fig. B	Cordless Multi Function Tool Fig. C
<ol style="list-style-type: none">1. Keyless chuck2. 21+1 Torque setting3. Two-speed selector4. Forward/reverse selector5. ON/OFF switch trigger6. Battery pack7. Release latch for battery pack8. LED battery indicators9. LED work-light	<ol style="list-style-type: none">1. Safety guard2. Movable saw head3. Push button for movable saw head4. Soft grip5. Lock-off button6. ON/OFF switch trigger7. Battery pack8. Battery latch9. Base plate10. Quick-change blade clamping holder11. Speed control dial	<ol style="list-style-type: none">1. Cut saw blade2. ON/OFF switch button3. LED battery indicator4. Battery pack5. Latch for battery pack6. Speed controller7. Scraper8. Sanding base plate9. Sanding paper10. Hex key

3 PACKAGE CONTENT LIST

- Remove all packaging materials.
- Check that the package contents are complete.
- Check the appliance, the power cord, the power plug and all accessories for transportation damage.
- Keep the packing materials as far as possible until the end of the warranty period. Dispose of it into your local waste disposal system afterwards.



WARNING: Packaging materials are not toys! Children must not play with plastic bags! There is a danger of suffocation!

Cordless Drill	Cordless Multi Purpose Saw	Cordless Multi Function Tool
1 x Cordless Drill	1 x Multi Purpose Saw 2 x Wood Blade 2 x Metal Blade	1 x Multi Function Tool 1 x Straight blade 1 x Scraping blade 1 x Sanding base plate 10x Sandpaper sheets

- 1 x 1 hour fast charger
- 1 x Battery 1300mAh
- 1x Allen key
- 1 x Instruction manual

4 SYMBOLS

The rating plate on your tool may show certain symbols.

These represent important information about the product or instructions on its use.

	Denotes risk of personal injury or damage to the tool.		"Class II - The charger is double insulated; Earthing wire is therefore not necessary.
	To reduce the risk of injury, user must read manual before use.		

Symbols on the battery :

	Ambient temperature: 50°C max.		Only use indoors.
	Do not throw the battery into water.		Do not throw the battery into fire.

5 GENERAL POWER TOOL SAFETY WARNINGS



WARNING: Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference!

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

5.1 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.*

5.2 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 the risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

5.3 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 a 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 energising 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.*

5.4 Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **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.*
- c) **Disconnect the plug from the power source and/or 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.*
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

5.5 Battery Tool use and care

- a) **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.
- b) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- c) **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.
- d) **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

5.6 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.*

6 ADDITIONAL SAFETY INSTRUCTIONS FOR BATTERIES AND CHARGERS

6.1 Batteries

- Never attempt to open for any reason.
- Do not store in locations where the temperature may exceed 40 °C.
- Charge only at ambient temperatures between 4 °C and 40 °C.
- Charge only using the charger provided with the tool.
- When disposing of batteries, follow the instructions given in the section "Recycling".
- Do not cause short circuits. If connection is made between the positive (+) and negative (-) terminal directly or via accidental contact with metallic objects, the battery is short circuited and an intense current will flow causing heat generation which may lead to casing rupture or fire.
- Do not heat. If batteries are heated to above 100 °C, sealing and insulating separators and other polymer components may be damaged resulting in electrolyte leakage and/or internal short circuiting leading to heat generation causing rupture or fire. Moreover do not dispose of the batteries in fire, explosion and/or intense burning may result.
- Under extreme conditions, battery leakage may occur. When you notice liquid on the battery, proceed as follows:
 - Carefully wipe the liquid off using a cloth. Avoid skin contact.
 - In case of skin or eye contact, follow the instructions below:
 - Immediately rinse with water. Neutralize with a mild acid such as lemon juice or vinegar.
 - In case of eye contact, rinse abundantly with clean water for at least 10 minutes. Consult a physician.



Fire hazard! Avoid short-circuiting the contacts of a detached battery. Do not incinerate the battery.

6.2 Charger

- Use the charger provided with the tool only to charge the battery.
- Never attempt to charge non-rechargeable batteries.
- If the supply cord is damaged, it must be replaced by manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- Do not expose to water.
- Do not open the charger.
- Do not probe the charger.
- The charger is intended for indoor use only.
- This charger is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

7 ADDITIONAL SAFETY INSTRUCTIONS FOR CORDLESS DRILLS

- Use auxiliary handle(s), if supplied with the tool. *Loss of control can cause personal injury.*
- Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. *Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*
- Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring. *Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*

8 ADDITIONAL SAFETY INSTRUCTIONS FOR THE CORDLESS MULTI PURPOSE SAWS

- a) 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.*
- b) Do not stare at the tool with the blade touching any surface. *The blade action will bounce the tool and may cause bodily injury.*
- c) Allow the tool to come to a complete stop before putting it down. *A running tool will jerk when the blade tip contacts any surface.*
- d) Always wear safety glasses or goggles, normal prescription eye or sunglasses are not safety glasses.
- e) Do not cut oversized work pieces.
- f) Do not cut nails or screws unless you are using a blade specifically designed for this purpose, inspect your material before cutting.
- g) Before switching on the tool, be sure the blade is not in contact with the work piece.
- h) Keep hands away from moving parts and on the top surface of the work piece. Do not place hands below work surface while saw is operating.
- i) Check your area for proper clearance before cutting. This will avoid cutting into your workbench, the floor, etc.

8.1 Special safety precautions for cordless multi purpose saws.

- Do not use for cutting pipes or cables.
- Do not use cracked, blunt or damaged blades.
- Do not start the saw if no blade is fitted.
- Check there are no obstructions in/on the surface under the item to be cut.
- Do not attempt to cut items thicker than the maximum cutting depth of the blade, or where there is insufficient space for the blade under the item.
- The saw's metal parts may become conductive if the saw comes into contact with a live wire. Therefore only hold the saw by its insulated handle.
- Check that the ventilation slots are not blocked.
- Always use a face mask if excessive amounts of dust are generated or cutting harmful materials. Never cut asbestos materials.
- Never remove dust, obstructions or the like from the work area while the blade is operating.
- Never stop the saw blade by applying pressure to the saw or to the side of the blade.
- Do not lift the saw from the item being cut if the blade is still running.
- Never place the saw on a table or workbench if it has not stopped completely.
- The saw blade will continue to run a short time after the machine has been switched off.

- Do not touch the blade or metal filings until they have cooled.

9 ADDITIONAL SAFETY INSTRUCTIONS FOR THE CORDLESS MULTI FUNCTION TOOL



Risk of injury !

- Only use an undamaged plug and cable of charger.
- Do not treat any materials that produce any particles that are detrimental to health (e.g. asbestos).



Risk of damage to property/material !

- Mains voltage must correspond with the voltage specifications on the charger.
- Only use original accessories.

9.1 *Personal protective equipment*

When using this power tool wear the following protective items:

	Protective glasses
	Ear protection
	Breathing mask
	Wear gloves

10 GENERAL CHARGING INFORMATION (APPLICABLE FOR ALL 3 CORDLESS TOOL BATTERIES)

10.1 Charging the battery pack (Fig. 3)

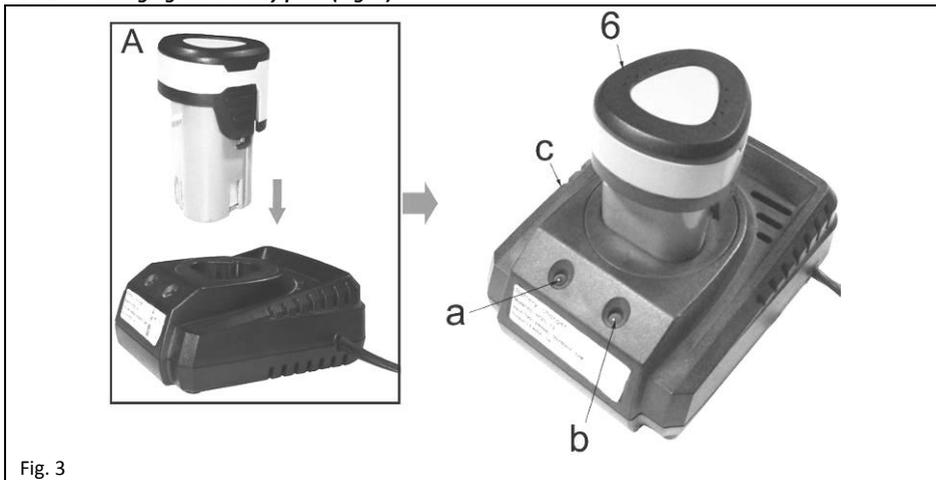


Fig. 3

a. Red LED light

b. Green LED light

c. Charger

The battery pack for this tool has been shipped in a low charge condition to prevent any possible problems. You should charge the batteries prior to use.

NOTE: Batteries will not reach full charge the first time they are charged. Allow several cycles (working followed by recharging) for the item to fully charge. The battery should only be charged indoors. The battery pack will become slightly warm to the touch while charging, this is normal and does not indicate a problem.

Do not place the charger in an area of extreme heat or cold, it will work best at normal room temperature.

When the battery is fully charged, unplug your charger from the power supply and remove the battery pack from the charger.

NOTE:

- Allow the battery pack to cool completely before charging.
- Inspect the battery pack before charging; do not charge a cracked or leaking battery pack.

Charging indication:

The charger (c) has two LED lights (Red and Green) (Refer to Fig. 3)

1. Plug the charger (c) into a suitable outlet. Do not use an extension cord. The green light (b) will light to show the power is connected.
2. Push the battery pack to make sure contacts on battery pack engage properly with contacts in charger (Refer to Fig. 3(A)). The red light (a) will illuminate to show the battery is charging and the green light (b) will extinguish at the same time.

3. When the battery is loaded, the red light (b) extinguishes and green light illuminates until the charger disconnect from the mains.

NOTE: If the battery does not fit properly, disconnect it and confirm that the battery pack is the correct model for this charger as shown on the specification chart. Do not charge any other battery pack or any battery pack that does not securely fit the charger.

- Frequently monitor the charger and battery pack while connected.
- Unplug the charger and disconnect it from the battery pack when finished.
- Store the charger and battery pack indoors, out of reach of children.

NOTE: If the battery is hot after continuous use, allow it to cool down to room temperature before charging. This will extend the life of your battery.

11 OPERATION INFORMATION SPECIFIC FOR THE CORDLESS DRILL

11.1 Assembly - Cordless Drill

This product has been shipped completely assembled.

Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing list are included.



WARNING: Do not use this product if it is not completely assembled or if any parts appear to be missing or damaged. Use of a product that is not properly and completely assembled could result in serious personal injury.

Inspect the tool carefully to make sure no breakage or damaged occurred during shipping. Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.



WARNING: If any parts are damaged or missing do not operate this tool until the missing 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 tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.



WARNING: To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the tool when assembling parts.



WARNING: Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.



WARNING: Do not use any attachments or accessories not recommended by the manufacturer of this tool. The use of attachments or accessories not recommended can result in serious personal injury.

11.2 Insertion/ removal of the battery (Fig. 4)



WARNING: Before making any adjustments ensure the drill is switched off with the forward/reverse selector (4) in the centre position.

1. Align the raised rib inside tool with groove on the battery pack (6).
2. Make sure the latches (7) on each side of the battery pack snap into place and the battery pack is secured in the tool before beginning operation.



WARNING: Always remove the battery pack from your tool when you are assembling parts, making adjustments, cleaning it, or when not in use. Removing the battery pack will prevent accidental starting that could cause serious personal injury.

To remove the battery : depress the latches on each side of the battery pack to remove the battery pack from the tool.



WARNING: Battery products are always in operating condition. Therefore, you should keep your fingers away from the trigger when the tool is not in use. Carrying power tools with your finger on the switch invites accidents.

11.3 Installing and removing a drill bit

1. Hold the cordless drill firmly with one hand.
2. Turn the chuck ring clockwise with the other hand until the drill chuck opening is large enough to accept the bit.
3. Insert the bit into the drill chuck.
4. Turn the chuck ring anticlockwise until the tool is clamped tightly.

Remove the bit in the opposite way.

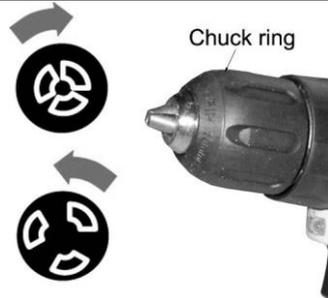
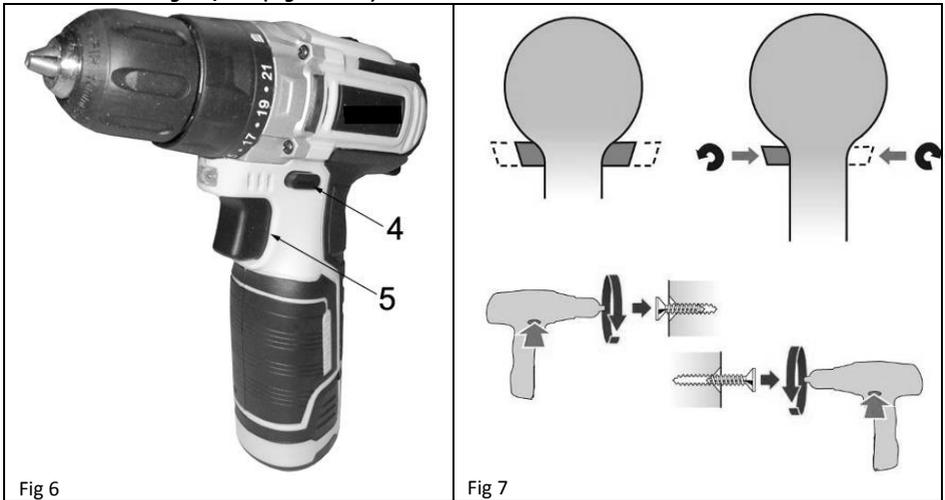


Fig. 5

11.4 Switching ON/OFF (Fig. 6 and 7)



The cordless drill starts and stops by depressing and releasing the ON/OFF switch trigger (5).

This cordless drill is equipped with an electric brake, when the ON/OFF switch is released completely the chuck stops immediately.

11.4.1 Switch lock

The switch trigger can be locked in the OFF position.

This helps to reduce the possibility of accidental starting when not in use.

To lock the switch trigger, place the forward/reverse selector (4) in the centre position.

11.4.2 Forward and reverse

The forward and reverse direction is controlled by the forward and reverse selector (4) located above the switch trigger.



Clockwise rotation: To select forward rotation, release the on/off switch and push the forward/reverse selector (4) to the right side of the tool (See Fig. 6 / 7).



Anticlockwise rotation: To select reverse rotation, push the forward/reverse selector (4) to the left side of the tool. When the selector is in centre position, the switch trigger is locked and the machine cannot be switched on. (See Fig. 6 / 7)

11.4.3 Variable speed

This tool has a variable speed switch that delivers higher speed and torque with increased trigger pressure.

Speed is controlled by the amount of switch trigger depression.

11.5 **LED battery indicators.**



Fig. 8

There are 3 LED battery indicators (8) positioned above the ON/OFF switch trigger. You can check the battery capacity status by squeezing the ON/OFF switch trigger. Before using the drill, press the switch trigger to check if the battery is full enough to work properly.

The statuses of the three LED lights show the capacity level of the battery:

-When the battery is fully charged the Green LED L1, the yellow LED L2 and the red LED L3 are all lit.

-If the Green LED L1 and yellow LED L2 are lit the battery has about 60% of its capacity left.

-If only the red LED L3 is lit, the battery is almost fully discharged.

NOTE: The LED battery indicators always light during operation.

NOTE: Please charge the battery each time after use, it is necessary to charge the battery every month if the machine is out of work.

11.6 **LED work-lights**



Fig. 9

There is an LED work-light (9) in front of your cordless drill.

The LED work-light can light prior to the motor running if you press the switch lightly, which will keep the work area illuminated for checking clearly at first, and it also lights during operation.



WARNING:

- Do not stare directly at the light beam.
- Never aim the beam at any person or an object other than the work piece.
- Do not deliberately aim the beam at people and ensure that it is not directed towards the eye of a person for longer than 0.25 sec.

11.7 Adjusting the torque

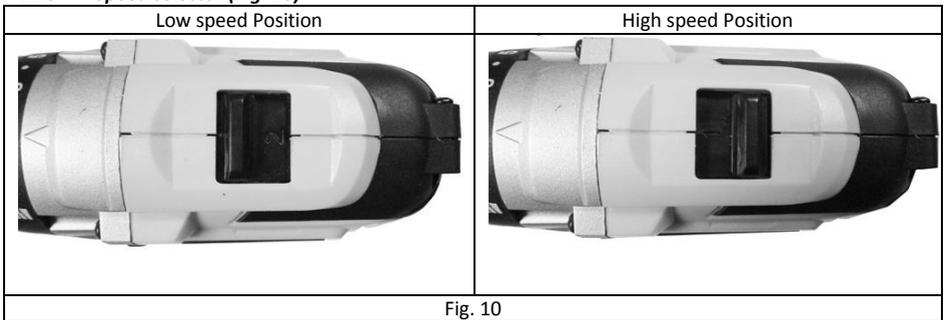
The torque is adjusted by rotating the torque setting (2), the torque is greater when the torque setting is set on a higher position. The torque is less when the torque setting is set on a low position “1” denote

lowest and “” denote highest.

Torque is set by means of a torque setting according to different screw types and different materials. If the screw is long and the material is hard, you can adjust to a higher torque setting as follows:

1 - 5	For driving small screws
6 - 10	For driving screws into soft material
11 - 16	For driving screws into soft and hard material
17 - 21	For driving screws into hard wood
	For heavy drilling

11.8 Speed selector (Fig. 10)



NOTE : Mark “1” is the Low speed position, mark “2” is the High speed position. It is moulded into the button of two speed selector (3).

The drill has a two-speed gear train designed for drilling at 1 (LOW) or 2 (HIGH) speed.

A gear selector is located on top of the drill to select either low or high speed. When you push the button (3) forward and select low speed range, the speed will decrease but will provide more power and torque.

When using the cordless drill in the high speed range, the speed will increase but will provide less power and torque.

Use low speed for high power and torque application and high speed for fast drilling applications.



IMPORTANT: To avoid damage NEVER adjust this two speed selector (3) whilst the drill is running. Always let it come to a complete stop first.

11.9 Drilling

Before drilling, the torque setting should be set on drill position “**2**”.

When drilling hard smooth surface, use a centre punch to mark the desired hole location. This will prevent the drill bit from slipping off centre as the hole is started. Hold the tool firmly and place the tip of the drill or bit into the work piece, applying only enough pressure to keep the bit cutting. Do not force or apply side pressure to elongate a hole.

11.9.1 Wood Drilling

For maximum performance, use high speed steel drill bits for wood drilling, turn the torque setting on the drill position “**2**”. Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Increase the speed as the drill bit bites into the material. When drilling through holes, place a block or wood behind the work piece to prevent ragged or edges on the back side of the hole.

11.9.2 Metal drilling

For maximum performance, use high speed steel bits for metal or steel drilling. Turn the torque setting on the drill position “**2**”. Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Maintain a speed and pressure which allows cutting without overheating the bit. Applying too much pressure will overheat the drill; wear the bearings, bend or burn bits, produce off-centre or irregular shaped holes.

When drilling large holes in metal, it is recommended that you drill with a small bit at first, then finish with a large bit, also lubricate the bit with oil to improve drilling action and increase bit life.

12 OPERATION INFORMATION SPECIFIC FOR THE MULTI PURPOSE SAW

12.1 *Installing/replacement of the blade.*



Warning: Always remove the battery pack before making any adjustment or attaching any accessories.

Select the saw blade best suitable for your application. Wood blades have a coarser tooth pitch; metal blades have a finer tooth pitch. Use each blade only for its specified material.



Fig. 11

1. Push and hold the lever of the quick-change blade clamping holder (10).
2. Slide the saw blade into the locating groove with the teeth pointing forward for the jig saw function (refer to Fig. 11) or downward for the reciprocating saw function (refer to Fig. 12).
3. Make sure that the saw blade fits into the blade clamping holder firmly and then release the lever.

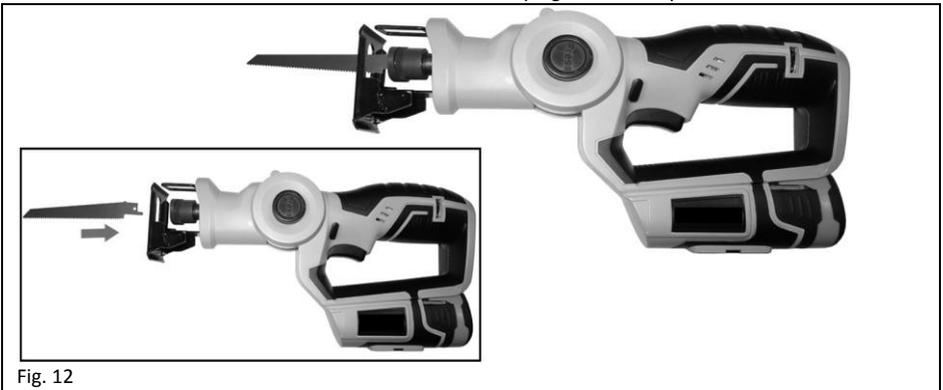


Fig. 12

NOTE: Remove the saw blade in the opposite way.



Warning: Before installing the battery pack with this tool, always carefully pull on the blade to make sure it is securely locked in the saw clamping holder. Failure to do so may result in serious injury.

12.2 To install or remove the battery pack.



Fig. 13

1. **To install :** Slide the battery pack (3) into the battery port, make sure the latches on each side of the battery pack snap into place and battery pack is secured in the tool before beginning operation
2. **To remove :** Locate latches on both sides of the battery pack and depress them to slide the battery out from the tool.

12.3 Switching on and off



Fig. 14

- Make sure the battery pack is installed.
- Push the lock-off button (5) and squeeze the ON/OFF switch trigger (6) as the arrows show on Fig. 13.
- When you release the switch trigger, the saw turns off.

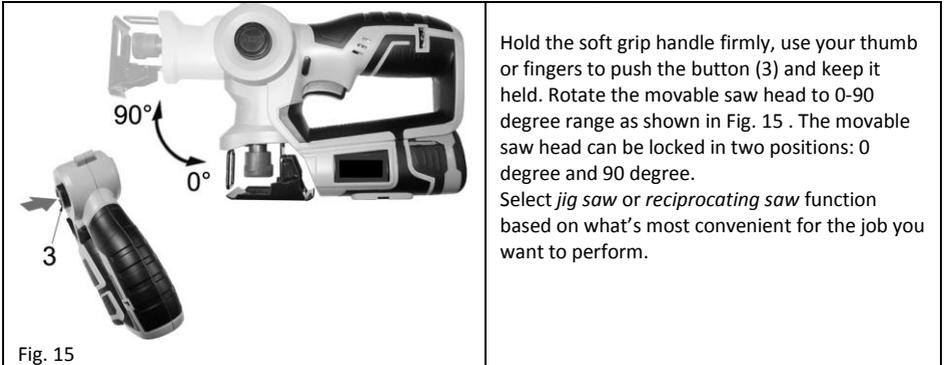
12.4 Speed adjustment (Refer to Fig. B)

By turning the speed control dial (1) upward or downward, you can vary the speed.

The speed should be adapted to the material being cut. In general, higher speeds will allow you to cut work-pieces faster but the service life of the blade will be reduced.

Position "1" denotes the lowest speed. Position "6" denotes the highest speed.

12.5 Convert from Jig saw to Reciprocating saw (or visa versa)



Hold the soft grip handle firmly, use your thumb or fingers to push the button (3) and keep it held. Rotate the movable saw head to 0-90 degree range as shown in Fig. 15 . The movable saw head can be locked in two positions: 0 degree and 90 degree.
Select *jig saw* or *reciprocating saw* function based on what's most convenient for the job you want to perform.

12.6 Operation cautions

Special caution: Never touch the saw blade with your free hand when operating the machine!

Check the saw blade to make sure it does not have missing teeth or cracks. Do not use a damaged saw blade.

Check that there is enough space under and behind the work-piece for the reciprocating blade. Be sure that you will not be cutting through any electrical wires or your workbench.

Do not put side-to-side pressure on the blade. It will break the blade.

Never attempt to remove material stuck in the moving parts of the saw while the saw is "On".

Never cut wood that is thicker than the length of the blade.

Do not attempt to cut curves with your saw. This will break the blade.

General cutting guide:

Clamp your work piece if it is portable. Rest the base plate of the saw on your work piece (be sure the blade is not contacting the work piece) and start the saw, exerting enough pressure in the direction of the cut to keep the shoe pressed firmly against the work piece at all times. Do not force the cut or stall the saw. Don't bend or twist the blade - let the tool and the blade do the work.

In general, coarser blades are for wood, plastics, and composites, and finer blades are for cutting metal. Chattering or vibration may indicate you need a finer blade or higher speed. If the blade overheats or clogs, it may indicate you need a coarser blade. Dull blades will produce poor results and may overheat the saw.

Plunge cutting guide:

Clearly mark the line of cut, from a convenient starting point within the cut out area, place the tip of the blade over that point with saw parallel to the line of cut, slowly lower the saw until the button edge of the shoe rests on the work piece and the blade is not touching the work piece, start the saw and allow it to reach full speed. With the saw resting on the shoe, slowly tilt the saw forward to lower the blade onto the cut line. Continue this motion until the saw blade is perpendicular to the work piece.

Metal cutting

Blades specifically designated for cutting metals must be used for this purpose. You may use light oil as a coolant when cutting metal, this will prevent overheating of the blade, help the blade cut faster, and promote longer blade life.

12.7 Function of the jig saw

Sawing wood

Check that the item does not contain nails or other metal objects. Always wear a mask.

Sawing metal

We recommend lubricating the material and saw blade with cutting oil to protect the tool and avoid overheating. Support the item with wooden blocks on either side.

Sawing plastic

Make a test cut first to check if the material can tolerate the heat generated by sawing.

Important !

Check all screws on the saw regularly, particularly those that hold the blade. Tighten if required. Check regularly that the carbon brushes are in a good condition. If the carbon brushes are worn, they should be replaced.

13 OPERATION INFORMATION SPECIFIC FOR THE MULTI FUNCTION (OSCILLATING) TOOL

13.1 To install or remove the battery pack.(Fig. 16)

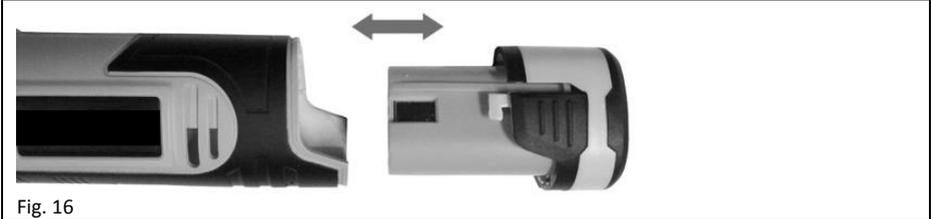


Fig. 16

1. Turn the ON/OFF switch button of this tool to its “OFF” position.
2. To install, slide the battery pack into the battery port. Make sure the latches on each side of the battery pack snap into place and battery pack is secured in the tool before beginning operation.
3. To remove, locate latches on both sides of battery pack and depress both sides to slide out battery pack from the cordless Multi Function Tool body.

13.2 LED battery indicators (Fig. 17)

The machine has 3 LED battery indicators located on the top of the tool.

L1:Green / L2:yellow / L3:red

The battery capacity status can be checked by switching the tool on and pressing the ON/OFF switch button.

The LED lights give you an idea of the capacity level of the battery:

If all 3 LEDs are lit: The battery is fully charged.

If L1 & L2 are lit: the battery has about 60% of its capacity left.

If only L3 is lit : the battery is almost discharged and should be recharged.



Fig. 17

To ensure proper performance, always check if the battery is full enough for prior to operation.

NOTE: The LED battery indicators always light during operation.

NOTE: Please charge the battery after each use. If the tool is not used frequently, it is recommended to charge the battery on a monthly basis.

13.3 Switching ON/OFF (Fig. 18)



Fig.18

1. Make sure the battery pack is installed.
2. Switch the power tool on: push the ON/OFF switch button (2) forwards onto the “ON” position.
3. Switch the power tool off: pull the ON/OFF switch button backwards to the “OFF” position.

13.4 Mounting an accessory (tool)

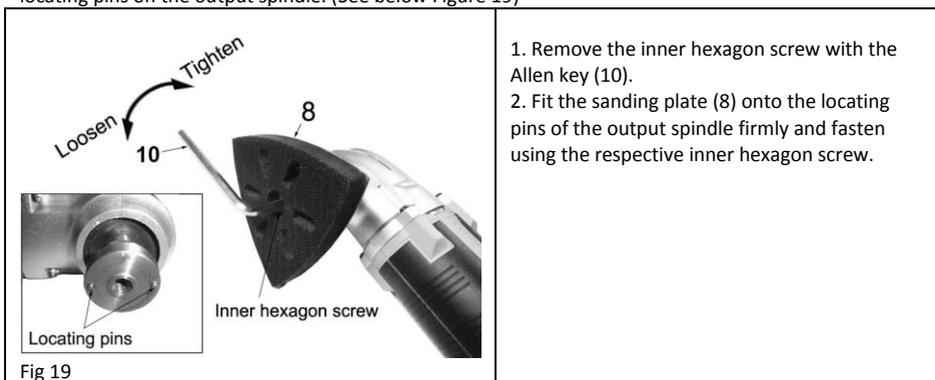


Risk of injury !

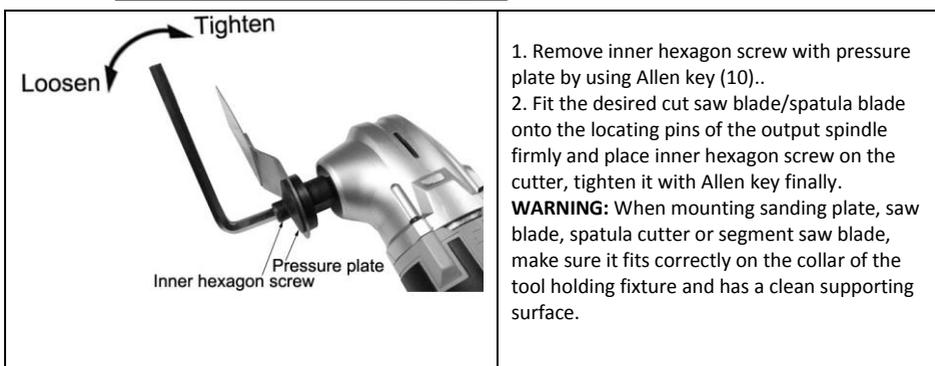
To prevent switching the tool on unintentionally, remove the battery pack from the battery port of this tool before changing the tool.

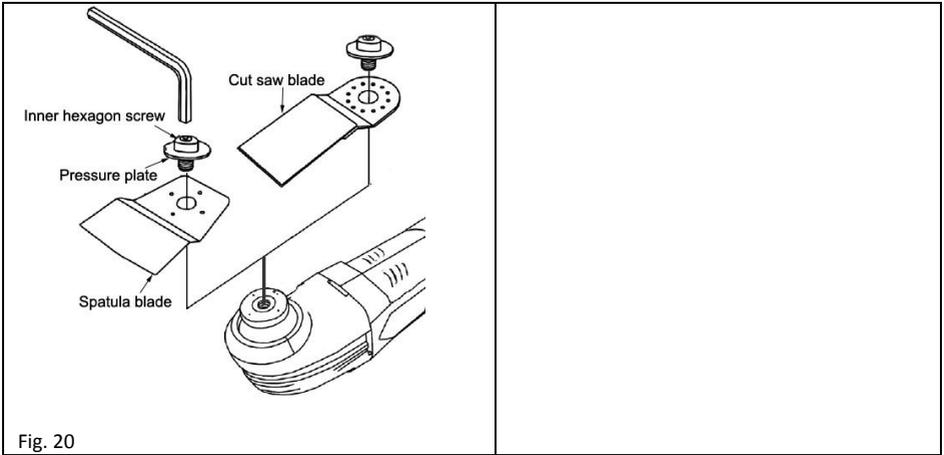
13.4.1 Mounting the sanding plate (Fig. 19)

Note: The sanding plate is fixed firmly to the Multi Function Tool and can not rotate due to the four locating pins on the output spindle. (See below Figure 19)



13.4.2 Mounting a cut saw blade or scraper (Fig. 20)



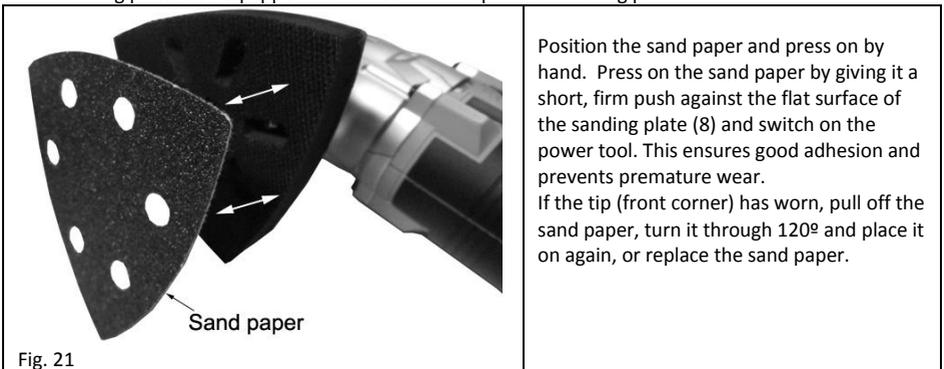


WARNING! When mounting the sanding plate, cut saw blade, scraper, or segment saw blade, make sure it fits correctly on the collar of the tool holding fixture and has a clean supporting surface.

13.4.3 Attaching / replacing the sand paper (Fig. 21)

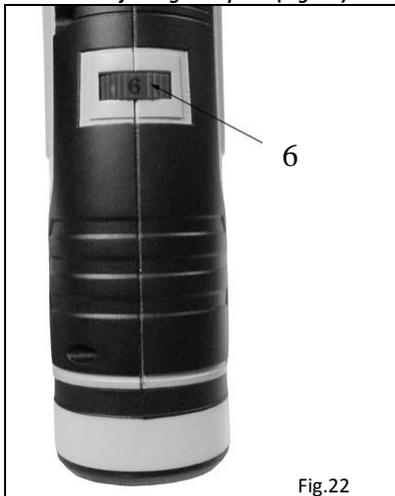
With fast hook/loop fixation

This sanding plate is equipped with a hook and loop rubber backing pad.



Position the sand paper and press on by hand. Press on the sand paper by giving it a short, firm push against the flat surface of the sanding plate (8) and switch on the power tool. This ensures good adhesion and prevents premature wear. If the tip (front corner) has worn, pull off the sand paper, turn it through 120° and place it on again, or replace the sand paper.

13.5 Adjusting the speed (Fig. 22)



Before beginning, adjust the speed control according to the application.

For example, we recommend a higher speed for work with the scraper. Conduct a test run in order to find a suitable speed.

The speed controller (6) can be set at 6 positions. The “1”-position indicates the lowest speed and the “6”-position indicates the highest speed.

You can adjust different speeds by turning the controller from the “1” to the “6” position.

The operator may have to vary the speed to optimize cutting efficiency.

Fig.22

13.6 Application tips

Sanding

Typical application: Sanding wood & metal; sanding small areas, especially corners, edges and places difficult to access.

Sanding with a constant movement and light pressure.

Pressing on heavily does not increase the removal – the sand paper merely becomes worn even faster.

The sand paper lasts longer if the wear is distributed evenly. To ensure an even distribution, loosen the sand paper, turn it round by 120° and then tighten it again firmly.

13.7 Sawing with the Cut saw blade (Fig. 22)



Risk of injury !

To prevent switching the tool on unintentionally, remove the battery pack from the battery port of this tool before changing the tool.



WARNING: The teeth of the Cut saw blade are very sharp. Do not touch during mounting and application !

Before sawing make sure that no live cables will be damaged.

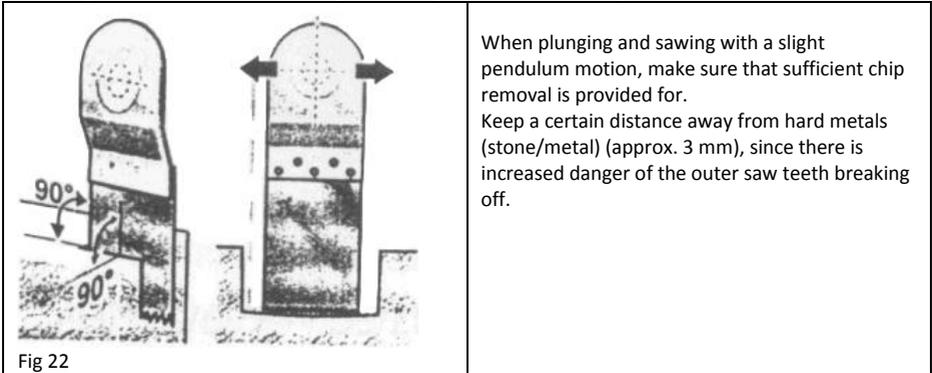
The Cut saw blade must be inserted firmly or clamped tightly before it is put into operation.

Typical application: Wood, plasterboard and soft plastics. Not suitable for metal (e.g. nails) and stone.

Only clamp the Cut saw blade in a straight position. For fixation, use a inner hexagon screw with a pressure plate (Refer to 15.2.2 “Mounting a cut / saw blade or Scraper”)

Always set the Cut saw blade straight (at 90°) and guide it in the gap without tilting.

Always guide the Cut saw blade along the cutting line without exerting any pressure.



When plunging and sawing with a slight pendulum motion, make sure that sufficient chip removal is provided for. Keep a certain distance away from hard metals (stone/metal) (approx. 3 mm), since there is increased danger of the outer saw teeth breaking off.

13.8 *Scraper*

Scraper blade is suitable for removing vinyl, varnish, paint layers, carpeting, caulk and other adhesives. Use a rigid scraper blade to remove harder materials, such as vinyl flooring, carpeting and tile adhesives in large area.

Use a flexible scraper blade (not included) to remove softer material such as caulk.

Tips:

1. When removing strong, tacky adhesive, grease the scraper blade surface to reduce gumming up.
2. Begin with light pressure. The oscillating motion of accessory only occurs when pressure is applied to the material to be removed.
3. If you are removing caulk from a delicate surface, such as a bath tub or tile back splash, we recommend taping to protect the surface that blade will rest on.

WARNING: Do not deliberately aim the scraper blade and the other blades at personnel when operation which to avoid personal injury.

14 CLEANING AND MAINTENANCE



Always ensure that the battery is removed from the tool before making any adjustments or maintenance procedures.

- Keep the tools air vents unclogged and clean at all times.
- Regularly wipe off the plastic parts which are accessible from the outside using a cloth without cleaning agent.
- Always allow the power tool to cool off after use.
- Regularly blow out the motor space from outside with dry compressed air.
- Tool service and maintain must be performed only by qualified repair personnel.

15 TECHNICAL DETAILS

Model nr.	LT3IN1
General tool data (applicable for each listed tool)	
Charger IFC-HT22V-12	
Rated input	220-240V~ 50/60Hz, 16W
Rated output	12.6V, 1A
Battery 12V – 1300mAh	
Rated Voltage	12V DC
Type	Li-ion
capacity	1300mAh
Charging time	1 hour
Specific tool data	
Cordless drill 12V	
No-load speed (dual speed)	0-350 / 0-1300 min ⁻¹
Torque setting	21+1 positions
Chuck capacity	Ø10mm
Left/right rotation	yes
Cordless Multi purpose saw	
No-load speed	0-2100 min ⁻¹
Stroke length:	13mm (1/2")
Cordless Multi Function Tool (oscillating tool)	
No-load speed:	10,000-20,000 min ⁻¹
Sanding pad size:	80x80x80mm

16 NOISE

Noise emission values measured according to relevant standard. (K=3dB(A))

	Cordless drill	Cordless Multipurpose saw	Cordless Multipurpose tool
Acoustic pressure level LpA	78 dB(A)	74 dB(A)	84 dB(A)
Acoustic power level LwA	89 dB(A)	85 dB(A)	95 dB(A)



ATTENTION! Wear hearing protection when sound pressure is over 85 dB(A).

	Cordless drill	Cordless Multipurpose saw	Cordless Multipurpose tool	
Max. a _w (Vibration)	2.549 m/s ²	8.069 m/s ²	3.020 m/s ²	K = 1.5 m/s ²

17 RECYCLING



Meaning of crossed-out wheeled dustbin:

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local council for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

17.1 Preparing battery pack for recycling



After removing it from the machine, cover the battery pack's terminals with heavy-duty adhesive tape.

- Do not attempt to destroy or take the battery pack apart or remove any of its components.
- Do not touch both terminals with metal object or body parts ! Short circuit may result !
- Keep away from children.
- Failure to comply these warning could result in fire and /or serious injury.

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