

Instruction Manual

18V Cordless Mini Saw

FT1003






Please read this handbook carefully before using the tool

⚠ PROP 65 WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. Additionally, the use of power tools can produce lead from lead-based paints, crystalline silica from masonry products and arsenic or chromium from chemically treated lumber. For more information go to the OEHHA website www.oehha.ca.gov

⚠ PROP 65 WARNING: The wires of this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling. (For more information please go to www.p65warnings.ca.gov)

Explain the symbol:

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

Symbol	Name	Designation/Explanation
V	Volts	Voltage (potential)
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
kg	Kilograms	Weight
min	Minutes	Time
s	Seconds	Time
Ø	Diameter	Size of drill bits, grinding wheels, etc.
n_0	No load speed	Rotational speed, at no load
n	Rated speed	Maximum attainable speed
.../min	Revolutions or reciprocation per minute	Revolutions, strokes, surface speed, orbits etc. per minute
0	Off position	Zero speed, zero torque...
1, 2, 3, ... I, II, III,	Selector settings	Speed, torque or position settings. Higher number means greater speed
	Infinitely variable selector with off	Speed is increasing from 0 setting
	Arrow	Action in the direction of arrow
	Alternating current	Type or a characteristic of current
	Direct current	Type or a characteristic of current
	Alternating or direct current	Type or a characteristic of current
	Class II construction	Designates Double Insulated Construction tools.
	Earthing terminal	Grounding terminal
	Warning symbol	Alerts user to warning messages
	Li-ion RBRC seal	Designates Li-ion battery recycling program
	Ni-Cad RBRC seal	Designates Ni-Cad battery recycling program
	Read manual symbol	Alerts user to read manual
	Wear eye protection symbol	Alerts user to wear eye protection



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

General Power Tool Safety Warnings

WARNING! Read all safety warnings and 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.

1) Work area safety

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.**
Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** 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 ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or 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.

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) 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.

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.

Additional Safety instructions for jig saw

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.

Always wear a dust mask when working with this tool



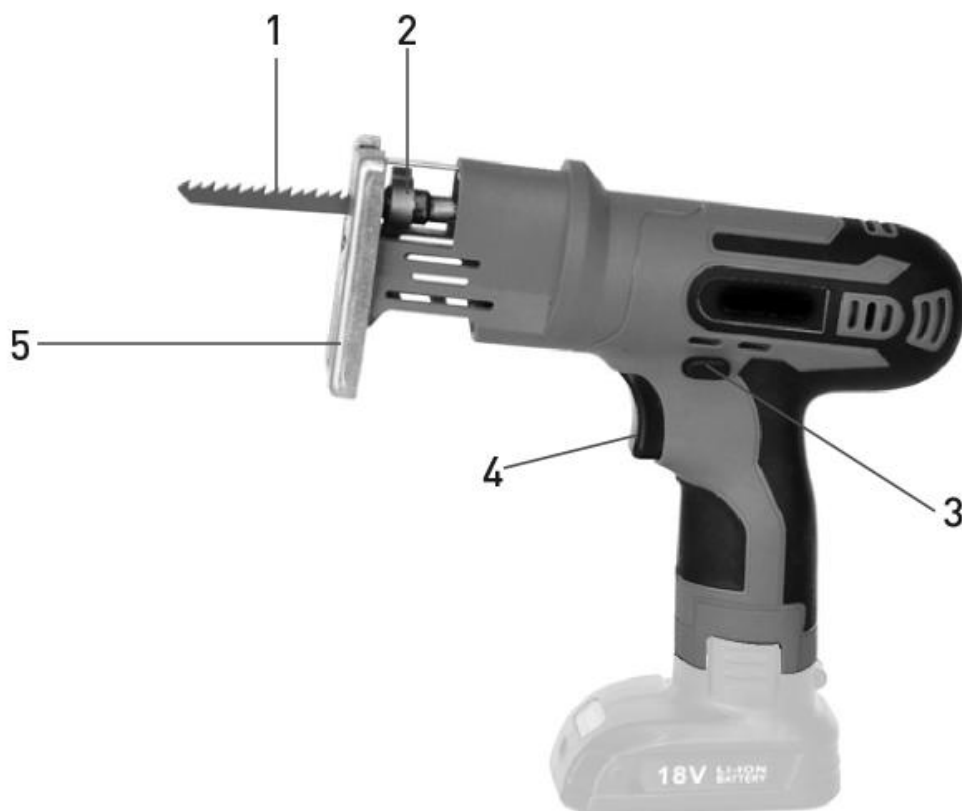
Residual risks

Even when the tool is used as prescribed it is not possible to eliminate all residual risk factors. The following hazards may arise in connection with the tool's construction and design:

- 1) Damage to lungs if an effective dust mask is not worn.

- 2) Damage to hearing if effective hearing protection is not worn.
- 3) Health defects resulting from vibration emission if the power tool is being used over longer period of time or not adequately managed and properly maintained.

WARNING! This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their physician and the medical implant manufacturer before operating this machine.



1. Blade
2. Blade clamp release lever
3. Lock-off button
4. On/off switch
5. Base plate

Technical Data

Model	FT1003
Rated Voltage	DC 18 V
No-load Speed	2100 rpm
Cutting capacity;	
Wood	25mm
Steel	4mm
Plastic	5mm
Charging Time	Apr. 3-5 h

Safety Warnings and Instructions: Batteries

- . Do not disassemble or open, drop (mechanical abuse), crush, bend or deform, puncture, or shred.
- . Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, excessive heat including soldering irons, or put in microwave oven.
- . Only use the battery/tool with a charging system specified by the manufacturer/supplier.
- . Do not short-circuit a battery or allow metallic or conductive objects to contact both battery terminals simultaneously.
- . Dispose of used batteries promptly according to the manufacturer/supplier's instructions.
- . Improper battery/tool use may result in a fire, explosion, or other hazard.
- . Battery/tool usage by children should be supervised.

Safety Warnings and Instructions: Charging

1. This manual contains important safety and operating instructions.
2. Before using battery charger, read all instructions and cautionary warnings on battery charger and product using battery. **CAUTION:** To reduce the risk of injury, use this charger only with this product. Batteries in other products may burst causing personal injury or damage.
3. Do not expose charger to rain or snow.
4. Use of an attachment not recommended or sold by the manufacturer may result in a risk of fire, electric shock, or injury to persons.
5. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
6. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
7. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire, electric shock or electrocution.
 - a. An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable; that is, 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each extension contains at least the minimum wire size.

CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS
NAMEPLATE RATING AMPS – 0 – 10.0

Total Extension Cord Length (ft)	0-25	26-50	51-100	101-150
	(0-7.6m)	(7.6-15.2m)	(15,2-30.4m)	(30,4-45.7m)
Wire Gauge	18	16	16	14

8. Use only the supplied charger when charging your tool. The use of any other charger could damage the tool or create a hazardous condition.
9. Use only one charger when charging.
10. Do not attempt to open the charger.
11. DO NOT incinerate the tool or batteries even if they are severely damaged or completely worn out. The batteries can explode in a fire. Toxic fumes and materials are created when lithium ion battery packs are burned.
12. Do not charge or use battery in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Inserting or removing the battery from the charger may ignite the dust or fumes.
13. If battery contents come into contact with the skin, immediately wash area with mild soap and water. If battery liquid gets into the eye, rinse water over the open eye for three minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.

WARNING: Burn hazard. Battery liquid may be flammable if exposed to spark or flame.

Charging (battery and charger are not included)

- Put the battery pack in the charger stand. Make sure it is placed correctly (+ and -)
- Plug in the socket-outlet(100-240V~)
- When the green indicator light lights up and the red light will come on, this means the battery pack is now being charged. Normally it will take 3-5 hour to fully charge the battery.
- when the light will turn green on the charger when the battery is fully charged
- Unplug the plug after charging



Caution

- Fully charge battery before first use. The battery will reach full capacity after being charged and discharged several times
- Adaptor, charger and battery pack will be warm when charging. This is normal.

WARNING: Fire Hazard. When disconnecting the battery pack from the battery socket, be sure to unplug the charger from the outlet first, then disconnect the charger output from the charge socket.

IMPORTANT:

- 1.The battery should be recharged when the product does not operate up to it's normal performance level. Do not continue to use when this occurs. Recharge the battery at least every 6 months.
- 2.Overcharging may reduce the life of the battery Do not leave the battery charging for more than 5 hours.
- 3.Never charge a battery pack again immediately it has been charged.
- 4.If the product is not used, the battery will lose it's power capacity. To ensure maximum performance, recharge the battery after prolonged storage or non-use periods. If charging more than one battery, wait at least fifteen minutes between each charge
- 5.Never leave a charging battery unattended

OPERATING INSTRUCTIONS

WARNING: Always wear proper eye and respiratory protection while operating this tool.

- .Use clamps or another practical way to secure and support the work piece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- . Place blade and shoe lightly against work to be cut.
- . Switch on saw motor and allow it to obtain maximum speed before applying pressure.

TRIGGER SWITCH (FIGURE C)

- .The tool is equipped with a switch lock-off feature to prevent unintentional operation.
- . To switch the tool on, press the lock off button (2) from either side, then squeeze the on/off switch (1).
- . . After the tool is running, release the switch lock-off button. The tool will continue to run as long as the trigger is depressed.
- . To switch the tool off, release the on/off switch. There is no provision for locking the tool on.

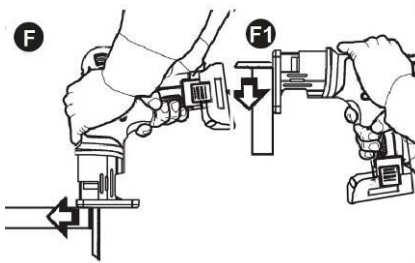
Two SAW MODES (FIGURES F, F1)

The MS002 can be used in two different ways:

Forward MODE-Blade teeth face forward as Shown in **figure F.**

Backward MODE-Blade teeth face Downward as shown in **figure F1.**

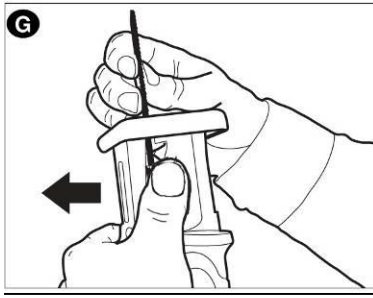
The MS002 accepts T-shank blades only.



BLADE CLAMP RELEASE LEVER (FIGURE G)

CAUTION: Burn hazard. Recently used Blades may be hot.

To install blade into saw:



- . Turn counterclockwise on the blade clamp release lever to its full open position as shown.
- . Insert blade shank from the front.
- . Release the blade clamp release lever.

To remove blade from saw:

- . Turn counterclockwise on the blade clamp release lever to its full open position.
- . Remove the blade.
- . Release the blade clamp release lever.

WOOD CUTTING

NOTE: Use "T" shank 10tpi or higher, thin kerf blades.

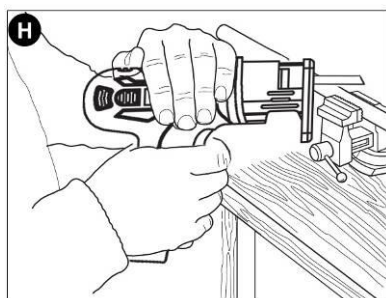
- . Before cutting any type of wood, use lamps or another practical way to secure and support the work piece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- . Place shoe firmly against work to be cut.
- . Switch on saw motor before applying pressure.
- . Whenever possible, the shoe must be held firmly against the material being cut. This will prevent the saw from jumping or vibrating and minimize blade breakage.

TREE TRIMMING

- . Hold shoe firmly against tree branch .if possible cut close to the trunk to minimize movement of the branch.

METAL CUTTING (FIGURE H)

NOTE: Use "T" shank 18-24 tpi metal cutting blade.



- . In thin gauge sheet metals it is best to clamp thin plywood to underside of sheet. This will ensure a clean cut without excess vibration or tearing of metal.
- . Avoid forcing cutting blade as this reduces blade life and causes costly blade breakage.
- . When cutting metal piping, do not cut directly through the pipe as you would saw a wooden dowel. Instead cut around the circumference of the pipe to avoid pinching the blade. Only one section of the blade should be in contact with the pipe.
- . **NOTE:** You should spread a thin film of oil or other coolant along the line ahead of the saw cut for easier operation and longer blade life. For cutting aluminum, kerosene is preferred.

PROJECT TIPS

- . Cut only with sharp blades; they cut cleaner, faster and put less strain on the motor while cutting.
- . When cutting, always ensure that the shoe is resting against the workpiece. This will improve operator control and minimize vibration.

MAINTENANCE

Use only mild soap and damp cloth to clean the tool. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

IMPORTANT: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (other than those listed in this manual) should be performed by authorized service centers or other qualified service personnel, always using identical replacement parts.

WARNING: The use of any accessory not recommended for use with this tool could be hazardous.