

ORIGINAL INSTRUCTIONS

# FEIDER

## MACHINES

INSTRUCTIONS MANUAL

CORDLESS MITRE SAW

FSOR20V-U



**WARNING: READ THE FOLLOWING INSTRUCTIONS BEFORE USE THIS MACHINE**

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MADE IN PRC 2020



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# **SAFETY INSTRUCTIONS FOR BATTERY CHARGER**

**This charger can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.**

**If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.**

**CAUTION – Do not recharge non-rechargeable batteries**

## SYMBOLS



**Danger!** - Read the operating instructions to reduce the risk of injury



**Caution! Wear ear-muffs.** The impact of noise can cause damage to hearing.



**Caution! Wear a breathing mask.**



**Caution! Wear safety goggles.**



**Caution! Risk of injury!** Do not reach into the running saw blade.



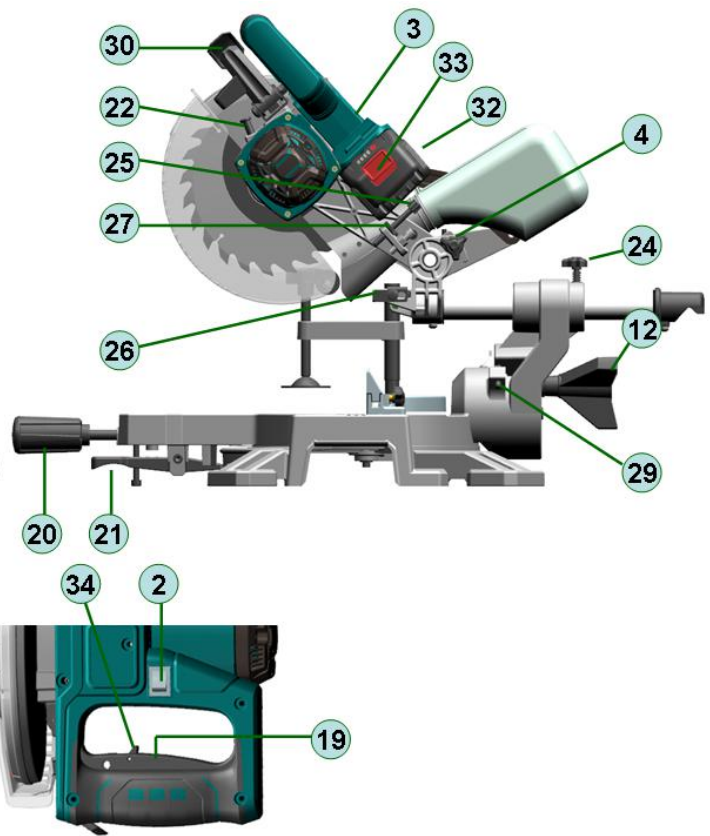
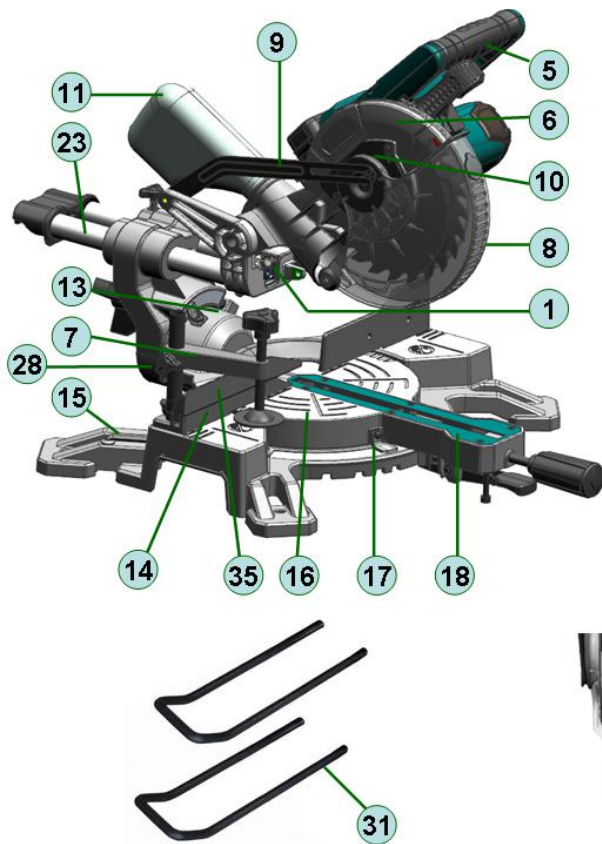
**class 2 product!**

**Caution: Laser radiation. Do not look into the beam! Laser**

# KNOW YOUR PRODUCT


## PARTS LIST

1. Laser light
2. Laser light on/off switch
3. Saw arm
4. Release knob
5. Operating handle
6. Upper fixed blade guard
7. "G" Clamp
8. Rotating blade guard
9. Guard retraction arm
10. Blade bolt cover
11. Dust bag
12. Bevel lock
13. Bevel scale
14. Fence
15. Frame for fixing on workbench
16. Mitre table
17. Mitre scale
18. Table insert
19. Switch trigger
20. Mitre lock knob
21. Mitre latch
22. Spindle lock
23. Slide bars
24. Slide lock
25. Trenching depth adjustment screw
26. Trenching stop
27. Trenching depth lock nut
28. 45° Bevel adjustment screw
29. 0° Bevel adjustment screw
30. Release latch
31. Side support bars (x2)
32. Battery pack
33. Battery lock
34. Switch locker
35. Attach fence



(#) Not all the accessories illustrated or described are included in standard delivery.

## SPECIFICATIONS

- Voltage: 18V  (max 20V)
- Battery capacity: 4Ah Li-ion (#)
- No-load speed : 3300/min
- Saw blade: 210mmx30mm

Noise emission

- Sound power level: 98 dB(A) K = 3 dB(A)
- Sound pressure level: 90,4 dB(A) K = 3 dB(A)

The total vibration value does not exceed 2.5 m/s<sup>2</sup>.

### Battery:

- Model: FBA20U4
- 20V.d.c, 4Ah, 72 Wh

### Charger:

- Model: FFC20U
- Input: 220-240V~ 50-60Hz 60W
- Output: 20Vd.c, 2,2A

Information:

- The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another;
- The declared vibration total value may also be used in a preliminary assessment of exposure.

Warning:

- The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used;
- need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

## CUTTING CAPACITY

- Mitre table angles: 0° to 45° to the left & right
- Bevel cuts: 0° to 45° to the left
- Straight cut at 0° x 0° : 22 x 7 cm

- Mitre cut at 0° x 45° : 15.5 x 7 cm
- Bevel cut at 45° x 0° : 22x 3.5 cm
- Compound mitre cut at 45° x 45° : 15.5 x 3.5 cm
- Net weight: 9.8 kg

## INTENDED USE

**This mitre saw is intended for cutting wood and analogue materials, the saw is not designed for cutting firewood.**



**WARNING!** When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury including the following.

Read all these instructions before attempting to operate this product and save these instructions.

All persons who use and service the machine have to be acquainted with this Manual and must be informed about its potential hazards. Children and infirm people must not use this tool. Children should be supervised at all times if they are in the area in which the tool is being used. It is also imperative that you observe the accident prevention regulations in force in your area. The same applies for general rules of occupational health and safety

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:

- Contact with the blade.
- Kickback of workpiece
- Blade fracture.
- Catapulting of blade pieces.
- Damage to hearing if effective earmuffs are not worn.
- Harmful emissions of sawdust when the machine is used in closed rooms. Always use supplementary dust extraction where possible.
- Do not use blades that are deformed or cracked.
- Always remove the plug from the mains socket before making any adjustments or maintenance, including changing the blade. To ensure safe operation of the mitre saw you must follow these guidelines:
- Select the correct blade for the material to be cut.
- Do not use the saw to cut materials other than those recommended by the manufacturer.

The mitre saw can be safely carried by the main handle but only once it has been removed from the mains power and secured in the locked down position.

- Do not use the saw without the guards in position, in good working order and properly maintained.
- Ensure that the arm is properly secure when beveling.
- Keep the floor area around the machine level, well maintained and free of loose materials.
- Provide adequate lighting.
- Ensure that you are trained in the use, adjustment and operation of the machine.
- Use correctly sharpened blades and observe the maximum speed marked on the blade.
- Do not remove any cut-offs from the cutting area until the guard is fully locked in place and the blade has come to rest.
- Ensure that the mitre saw is fixed to a work bench wherever possible.
- When cutting long pieces which extend well over the table width ensure that the ends are adequately supported at the same height as the saw table top. Supports should be positioned in such a way to ensure that the workpiece does not fall to the ground. once the cut has been made. A number of supports at regular intervals may be required if the workpiece is extremely long.

#### **NOT INTENDED USE**

If not intended use, there are risk of fire, electric shock and personal injury. The provisions contained in this guarantee are not intended to limit, modify, take away from, disclaim or exclude any statutory guarantee set forth in any applicable provincial or federal legislation.

#### **RESIDUAL RISKS**

**Even if you use this electric power tool in accordance with instructions, certain residual risks cannot be ruled out. The following hazards may arise in connection with the equipment's construction and layout:**

1. Lung damage if no suitable protective dust mask is used.
2. Damage to hearing if no suitable ear protection is used.
3. Health damage caused by hand-arm vibrations if the equipment is used over a prolonged period or is not properly guided and maintained.

#### **General power tool safety warnings**

**WARNING Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below 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 residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

#### **3) Personal safety**

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as 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 and clothing 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.*

h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** *A careless action can cause severe injury within a fraction of a second.*

#### **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 remove the battery pack, if detachable, 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 and accessories. 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.*

h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** *Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.*

#### **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.*

e) **Do not use a battery pack or tool that is damaged or modified.** *Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.*

f) **Do not expose a battery pack or tool to fire or excessive temperature.** *Exposure to fire or temperature above 130 °C may cause explosion.*

*NOTE The temperature „130 °C“ can be replaced by the temperature „265 °F“.*

g) **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** *Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.*

#### **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.*

b) **Never service damaged battery packs.** *Service of battery packs should only be performed by the manufacturer or authorized service providers.*

#### **Safety instructions for mitre saws**

a) **Mitre saws are intended to cut wood or wood-like products, they cannot be used with abrasive cut-off wheels for cutting ferrous material such as bars, rods, studs, etc.** *Abrasive dust causes moving parts such as the lower guard to*



*jam. Sparks from abrasive cutting will burn the lower guard, the kerf insert and other plastic parts.*

**b) Use clamps to support the workpiece whenever possible. If supporting the workpiece by hand, you must always keep your hand at least 100 mm from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand. If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact.**

**c) The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut “freehand” in any way. Unrestrained or moving workpieces could be thrown at high speeds, causing injury.**

**d) Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece. Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.**

**e) Never cross your hand over the intended line of cutting either in front or behind the saw blade. Supporting the workpiece “cross handed” i.e. holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.**

**f) Do not reach behind the fence with either hand closer than 100 mm from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning. The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.**

**g) Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the workpiece, fence and table along the line of the cut. Bent or warped workpieces can twist or shift and may cause binding on the spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.**

**h) Do not use the saw until the table is clear of all tools, wood scraps, etc., except for the workpiece. Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.**

**i) Cut only one workpiece at a time. Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.**

**j) Ensure the mitre saw is mounted or placed on a level, firm work surface before use. A level and**

*firm work surface reduces the risk of the mitre saw becoming unstable.*

**k) Plan your work. Every time you change the bevel or mitre angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.**

**l) Provide adequate support such as table extensions, saw horses, etc. for a workpiece that is wider or longer than the table top. Workpieces longer or wider than the mitre saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.**

**m) Do not use another person as a substitute for a table extension or as additional support. Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.**

**n) The cut-off piece must not be jammed or pressed by any means against the spinning saw blade. If confined, i.e. using length stops, the cut-off piece could get wedged against the blade and thrown violently.**

**o) Always use a clamp or a fixture designed to properly support round material such as rods or tubing. Rods have a tendency to roll while being cut, causing the blade to “bite” and pull the work with your hand into the blade.**

**p) Let the blade reach full speed before contacting the workpiece. This will reduce the risk of the workpiece being thrown.**

**q) If the workpiece or blade becomes jammed, turn the mitre saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material. Continued sawing with a jammed workpiece could cause loss of control or damage to the mitre saw.**

**r) After finishing the cut, release the switch, hold the saw head down and wait for the blade to stop before removing the cut-off piece. Reaching with your hand near the coasting blade is dangerous.**

**s) Hold the handle firmly when making an incomplete cut or when releasing the switch before the saw head is completely in the down position. The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.**

Use only a saw blade diameter in accordance with the markings on the saw and information about the bore diameter and the maximum kerf of the saw blade.

Use only saw blades that are marked with a speed equal or higher than the speed marked on the tool.

Adjust the saw for proper cutting capacity, if applicable.

If adjustable and/or removable workpiece support extensions are provided always fix and use these extensions during operation.

Avoid overheating the saw blade tips.

Use only saw blades recommended by the manufacturer, which conform to EN 847-1.

Always check if the saw blade guard is working properly. It shall be well assembled, and it shall be easily moving with hand and that it can be locked when operating the tool (see in instructions for use).

## IMPORTANT SAFETY INSTRUCTIONS FOR ALL BATTERY PACKS

When ordering replacement battery packs, be sure to include the catalog number and voltage. Consult the technical specifications for compatibility of chargers and battery packs. The battery pack is not fully charged out of the carton. Before using the battery pack and charger, read the safety instructions below and then follow charging procedures outlined.

- **Do not charge or use the battery pack in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Inserting or removing the battery pack from the charger may ignite the dust or fumes.
- **NEVER force the battery pack into the charger. DO NOT modify the battery pack in any way to fit into a non-compatible charger as battery pack may rupture causing serious personal injury.**
- Charge the battery packs only in designated chargers.
- **DO NOT** splash or immerse in water or other liquids.
- **Do not store or use the tool and battery pack in locations where the temperature may reach or exceed 104 °F (40 °C) (such as outside sheds or metal buildings in summer).** For best life store battery packs in a cool, dry location.  
**NOTE: Do not store the battery packs installed in the tool.**

The battery should be charged and used at ambient temperatures between 10 and 40°C (ideally around 20°C).

Store the battery in a safe place, out of reach of children, in an ambient temperature between 10 and 40°C.



**WARNING:** Fire hazard. Never attempt to open the battery pack for any reason. If the battery pack case is cracked or damaged, do not insert into the charger. Do not crush, drop or damage the battery pack. Do not use a battery pack or charger that has received a sharp blow, been dropped, run over or damaged in any way (e.g., pierced with a nail, hit with a hammer, stepped on). Damaged battery packs should be returned to the service center for recycling.

## SPECIFIC SAFETY INSTRUCTIONS FOR LITHIUM ION (Li-Ion)

- **Do not incinerate the battery pack even if it is severely damaged or is completely worn out.** The battery pack can explode in a fire. Toxic fumes and materials are created when lithium ion battery packs are burned.
- **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 15 minutes or until irritation ceases. Consult a doctor.
- **Contents of opened battery cells may cause respiratory irritation.** Provide fresh air. If symptoms persist, seek medical attention.



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

## SAFETY RULES FOR LASER LIGHTS



**WARNING** Before connecting a tool to a power source (mains switch power point receptacle, outlet, etc.) be sure that the voltage supply is the same as that specified on the nameplate of the tool. A power source with a voltage greater than that specified for the tool can result in serious injury to the user, as well as damage to the tool. If in doubt, do not plug in the tool. Using a power source with a voltage less than the nameplate rating is harmful to the motor. Your tool is double insulated for additional protection against a possible electrical insulation failure within the tool.

## OPERATING INSTRUCTIONS

## ACCESSORIES

The Compound Mitre Saw is supplied with the following accessories as standard:

- Saw blade (fitted)
- 6mm hex key
- Dust bag
- Instruction manual
- Battery capacity: 4Ah Li-ion (#)
- Charger (#)

(#) Not all the accessories illustrated or described are included in standard delivery.

## TRANSPORTATION

Lift the mitre saw only when the saw arm is locked in the down position, the saw is switched off and the battery is removed from the power tool.

Only lift the saw by the operating handle (5) or outer castings. Do not lift the saw using the guards.

## BENCH MOUNTING

The saw base has holes in each corner to facilitate bench mounting.

1. Place the saw on a level, horizontal bench or work table using bolts (not supplied) and fix the saw to the bench using 4 bolts.

2. If desired, you can mount the saw to a piece of 1/2" (13 mm) or thicker plywood which can then be clamped to your work support or moved to other job sites and re-clamped.

**CAUTION.** Make sure that the mounting surface is not warped as an uneven surface can cause binding and inaccurate sawing.

## RELEASE KNOB

The release knob (4) is provided for holding the cutting head down while transporting or storing the mitre saw. The saw must never be used with the release knob locking the head down.

## MITRE TABLE LOCKS

The mitre table locks (20) are used to lock the table at the desired mitre angle.

The mitre saw cuts from 0° to 45° both left and right. To adjust the mitre angle loosen the mitre table locks(20)(21) and rotate the mitre table to the desired position.

The mitre table features positive click stops at 0°, 15°, 22.5°, 30° and 45° for quick setting of common mitre angles.

## BEVEL LOCK

The bevel lock (12) is used to set the blade at the desired bevel angle. The mitre saw bevel cuts from 0° to 45° to the left. To adjust the bevel angle loosen the bevel lock and adjust the saw arm to the desired bevel angle.

## SPINDLE LOCK BUTTON

The spindle lock button (22) prevents the blade in the saw from rotating. Depress and hold the spindle lock button while installing, changing, or removing the blade.

## ROTATING LOWER BLADE GUARD

The rotating lower blade guard (8) provides protection from both sides of the blade. It retracts over the upper blade guard (6) as the saw is lowered into the workpiece.

## TURNING ON AND OFF

1. To turn the saw on press switch lock (34) to left and depress and hold the on/off trigger switch (19)
2. To turn the saw off release the switch lock (34) and on/off trigger switch (19).

## DUST EXTRACTION

1. Fit the dust bag (11) to the dust extraction port.
2. A vacuum dust extraction device can be connected to the dust extraction port. Use a suitable vacuum adapt or if necessary. The dust extraction port has an internal diameter of 40 mm.

## SETTING THE TABLE SQUARE WITH THE BLADE

1. Make sure that the battery is removed from the power point.
  2. Push the saw arm (3) down to its lowest position and engage the release knob (4) to hold the saw arm in the transport position.
  3. Loosen the mitre locks (20) and lifting up the mitre latch(21) .
  4. Rotate the table (16) until the pointer is positioned at 0°.
  5. Release mitre latch(21) and tighten the mitre locks (20).
  6. Loosen the bevel lock (12) and set the saw arm (3) at 0°bevel (the blade at 90°to the mitre table). Tighten the bevel lock (12).
  7. Place a set square against the table (16) and the flat part of the blade.
  8. Rotate the blade by hand and check the blade-to-table alignment at several points.
  9. The edge of the set square and the saw blade should be parallel.
  10. If the saw blade angles away from the set square, adjust as follows.
  11. Use an 10 mm wrench or adjustable wrench to loosen the lock nut securing the 0° bevel adjustment screw (29). Also, loosen the bevel lock (12).
  12. Adjust the 0° bevel adjustment screw (29) using a 4 mm hex key to bring the saw blade into alignment with the square.
  13. Loosen the Phillips head screw holding the pointer of the bevel scale (13) and adjust the position of the pointer so that it accurately indicates zero on the scale. Retighten the screw.
  14. Retighten the bevel lock (12) and the lock nut securing the 0° bevel adjustment screw (29).
- ## SETTING THE FENCE SQUARE WITH THE TABLE
1. Make sure that the battery is removed from the power point.
  2. Push the saw arm (3) down to its lowest position and engage the release knob (4) to hold the saw arm in the transport position.
  3. Loosen the mitre locks (20) and lifting up the mitre latch (21).
  4. Rotate the table (16) until the pointer is positioned at 0°.
  5. Release mitre latch (21) and tighten the mitre locks (20).

6. Using a 5 mm hex key, loosen the two screws securing the fence (14) to the base.
7. Place a square against the fence (14) and alongside the blade.
8. Adjust the fence (14) until it is square with the blade.
9. Tighten the screws securing the fence (14).
10. Loosen the Phillips head screw holding the pointer of the mitre scale (17) and adjust it so that it accurately indicates the zero position on the mitre scale.
11. Retighten the screw securing the mitre scale pointer.

### **CHANGING A BLADE**

1. Make sure that the battery is removed from the power point.
2. Push down on the operating handle (5) and pull the release knob (4) to disengage the saw arm (3).
3. Raise the saw arm (3) to its highest position.
4. Loosen the cover plate screw about 2 turns with a Phillips screwdriver. Do not remove this screw from the tool.
5. Pull the rotating blade guard (8) down. When the rotating blade guard (8) is positioned over the upper fixed blade guard (6) it is possible to access the blade bolt.
6. Lift and hold up the lower blade guard (8) to expose the threaded blade bolt.
7. Hold the rotating guard (8) up and press the spindle lock button (22). Rotate the blade until the spindle locks.
8. Use the 6 mm hex key provided to loosen and remove the blade bolt. (Loosen in a clockwise direction as the blade screw has a left hand thread).
9. Remove the flat washer, outer blade washer and the blade.
10. Wipe a drop of oil onto the inner blade washer and the outer blade washer where they contact the blade.
11. Fit the new blade onto the spindle taking care that the inner blade washer sits behind the blade.
12. Replace the outer blade washer.
13. Depress the spindle lock button (22) and replace the flat washer and blade bolt.
14. Use the 6 mm hex key to tighten the blade bolt securely (tighten in an anti-clockwise direction).
15. Lower the blade guard, hold the rotating lower blade guard (8) and blade bolt cover (10) in position and tighten the fixing screw to secure the blade bolt cover in position.
16. Check that the blade guard operates correctly and covers the blade as the saw arm is lowered.
17. Connect the saw to the power supply and run the blade to make certain that it is operating correctly.

### **CROSS CUT**

If possible, always use a clamping device such as a 'G' clamp to secure your workpiece.

When cutting your workpiece, keep your hands well away from the blade area.

Do not remove a cut-off piece on the right-hand side of the blade using your left hand.

A crosscut is made by cutting across the grain of the workpiece. A 90° crosscut is made with the mitre table set

at 0°. Mitre crosscuts are made with the table set at some angle other than zero.

1. Pull on the release knob (4) and lift the saw arm (3) to its full height.
2. Loosen the mitre locks (20) and lifting up the mitre latch (21).
3. Rotate the mitre table (16) until the pointer aligns with the desired angle.
4. Release mitre latch (21) and retighten the mitre locks (20).
5. Place the workpiece flat on the table with one edge securely against the fence (14). If the board is warped, place the convex side against the fence (14). If the concave side is placed against the fence, the board could break and jam the blade.
6. When cutting long pieces of timber, support the opposite end of the timber with side support bars, a roller stand or a work surface that is level with the saw table.
7. Before turning on the saw, perform a dry run of the cutting operation to check that there are no problems such as a clamp interfering with the cutting action.
8. Hold the operating handle (5) firmly and squeeze the release latch (30). Allow the blade to reach maximum speed and slowly lower the blade into and through the workpiece.
9. Release the switch trigger (19) and allow the saw blade to stop rotating before raising the blade out of the workpiece. Wait until the blade stops before removing the workpiece.

### **BEVEL CUT**

If possible, always use a clamping device such as a 'G' clamp to secure your workpiece.

When cutting your workpiece, keep your hands well away from the blade area.

Do not remove a cut-off piece on the right-hand side of the blade using your left hand.

A bevel cut is made by cutting across the grain of the workpiece with the blade angled to the fence and mitre table. The mitre table is set at the zero degree position and the blade set at an angle between 0° and 45°.

1. Pull on the release knob (4) and lift the saw arm to its full height.
2. Loosen the mitre locks (20) and lifting up the mitre latch (21).
3. Rotate the mitre table (16) until the pointer aligns with zero on the mitre scale (17).
4. Release mitre latch (21) and retighten the mitre locks (20).
5. Loosen the bevel lock (12) and move the saw arm (3) to the left to the desired bevel angle (between 0° and 45°). Tighten the bevel lock (12).
6. Place the workpiece flat on the table with one edge securely against the fence (14). If the board is warped, place the convex side against the fence. If the concave side is placed against the fence, the board could break and jam the blade.
7. When cutting long pieces of timber, support the opposite end of the timber with side support bars, a roller stand or a

work surface that is level with the saw table.

**8.** Before turning on the saw, perform a dry run of the cutting operation to check that there are no problems such as a clamp interfering with the cutting action.

**9.** Hold the operating handle (5) firmly and squeeze the release latch (30). Allow the blade to reach maximum speed and slowly lower the blade into and through the workpiece.

**10.** Release the switch trigger (19) and allow the saw blade to stop rotating before raising the blade out of the workpiece. Wait until the blade stops before removing the workpiece.

### **ATTACH FENCE**

1. For cutting safety always use two attach fence.
2. If use bevel cut , drag out the attach fence. The attach fence distance moving parts about 3-8mm at any times.

### **COMPOUND MITRE CUT**

If possible, always use a clamping device such as a 'G' clamp to secure your workpiece.

When cutting your workpiece, keep your hands well away from the blade area.

Do not remove a cut-off piece on the right-hand side of the blade using your left hand.

A compound mitre cut involves using a mitre angle and a bevel angle at the same time. It is used in making picture frames, to cut mouldings, making boxes with sloping sides and for roof framing. Always make a test cut on a piece of scrap wood before cutting into the good material.

1. Pull on the release knob (4) and lift the saw arm to its full height.
2. Loosen the mitre locks (20) and lifting up the mitre latch (21) ..
3. Rotate the mitre table (16) until the pointer aligns with the desired angle on the mitre scale (17).
4. Release mitre latch (21) and retighten the mitre locks (20).
5. Loosen the bevel lock (12) and move the saw arm (3) to the left to the desired bevel angle (between 0° and 45°). Tighten the bevel lock (12).
6. Place the workpiece flat on the table with one edge securely against the fence (14). If the board is warped, place the convex side against the fence. If the concave side is placed against the fence, the board could break and jam the blade.
7. When cutting long pieces of timber, support the opposite end of the timber with the side support bars, a roller stand or a work surface that is level with the saw table.

**8.** Before turning on the saw, perform a dry run of the cutting operation to check that there are no problems such as a clamp interfering with the cutting action.

**9.** Hold the operating handle (5) and firmly and squeeze the release latch (30). Allow the blade to reach maximum speed and slowly lower the blade into and through the workpiece.

**10.** Release the switch trigger (19) and allow the saw

blade to stop rotating before raising the blade out of the workpiece. Wait until the blade stops before removing the workpiece.

### **To Slide Cut Wide Boards**

To slide cut wide boards, Unlock the slide lock knob (24) and allow the cutting head assembly to move freely.

### **SETTING CUTTING DEPTH**

The depth of cut can be preset for even and repetitive shallow cuts.

1. Slide the stop plate (24) towards the front position.
2. Loosen the lock nut (25) to free the lock knob (23), turn the stop knob until the cutting head down until the teeth of the blade are at the desired depth.
3. While holding the upper arm in that position, tighten the lock nut to secured the stop knob.
4. Recheck the blade depth by moving the cutting head front to back through the full motion of typical cut along the control arm.

### **TO REMOVE OR INSTAL BATTERY PACK**



**WARNING:** Never remove the battery pack while the tool is working.

Depress the battery pack lock button to release and slide the battery pack out from your tool. After recharge, slide it back into your tool. A simple push and slight pressure will be sufficient.

### **CHARGING THE BATTERY PACK**

1. The battery charge supplied (according the model) is matched to the battery installed in the machine. Do not use another battery charger.
2. The battery pack is protected against deep discharging. When the battery pack is empty, the machine is switched off by means of a protective circuit.
3. Connect the charger to the power supply. The charger lights up (green light indicator). Insert the battery into the charger, the indicator light turns red. The battery is charging. When the charge is finished, the indicator light changes color. You can remove the battery from the charger.

### **MAINTENANCE**

1. Store the tool, instruction manual and accessories in a secure place. In this way you will always have all the information and parts on hand.
2. Keep the tool's air vents unclogged and clean at all times.
3. Remove dust and dirt regularly. Cleaning is best done with compressed air or a rag.
4. Never use caustic agents to clean plastic parts.

### **GENERAL INSPECTION**

1. Regularly check that all the fixing screws are tight. They may vibrate loose over time.

### **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.

#### **GUARANTEE**

We guarantee this product for 2 full years.

The warranty period for this item starts on the day of purchase. You can prove the date of purchase by sending us the original receipt.

We insure over the entire warranty period:

- Free repair of possible malfunctions.
- Free replacement of damaged parts.
- Including the free service of our specialized personnel (i.e. free assembly by our technicians)

Provided that the damage is not due to improper use of the device.

To help you with your product, we invite you to use this link or call us on +33 (0)9 70 75 30 30:

<https://services.swap-europe.com/contact>

You must create a "ticket" via their platform:

- Register or create your account
- Indicate the reference of the tool
- Choose the subject of your request
- Explain your problem
- Attach these files: Invoice or receipt, identification

plate photo (serial number), photo of the part you need (eg broken transformer plug pins)



#### **DECLARATION OF CONFORMITY**

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EC Declaration of conformity

BUILDER SAS

32, rue Aristide Bergès - ZI 31270 Cugnaux – France

Declares that the machine

Designation: CORDLESS MITRE SAW

FSOR20V-U

Serial number: 20200322292-20200323343

Is in conformity with the European Directives:

Machine Directive 2006/42/EC

EMC Directive 2014/30/EU

RoHS Directive 2011/65/EU+(EU) 2015/863

Noise directive 2000/14/EC +Annex VI & 2005/88/EC

This product is also in conformity with the following standards:

EN 62841-1:2015

EN 62841-3-9:2014

EN55014-1:2017

EN55014-2:2015

Responsible of the technical file: Mr Olivier Patriarca

Cugnaux, 31/12/2019

Philippe MARIE / PDG

A handwritten signature in black ink, appearing to be "Philippe Marie", written over a light blue horizontal line.