

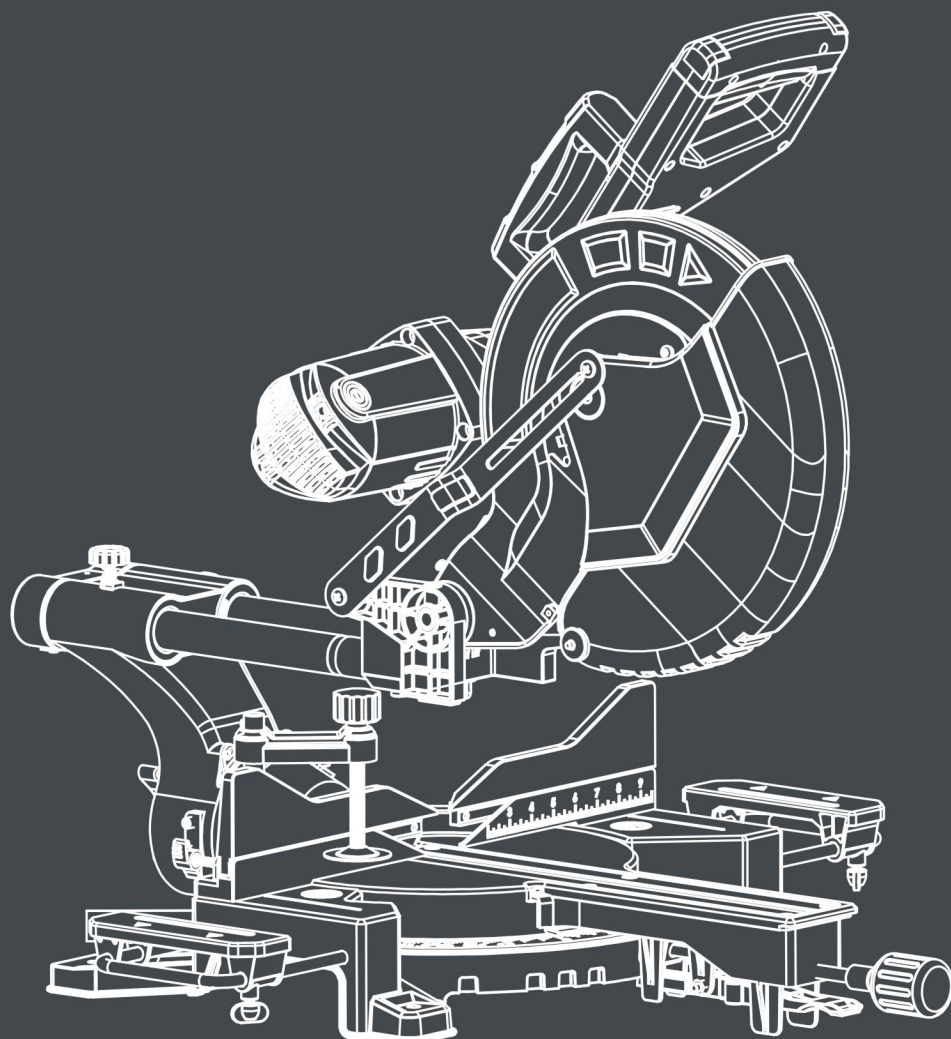
HYUNDAI
POWER PRODUCTS

RADIAL DUAL SLIDE MITER SAW

HSO20305-1

WARNING: PLEASE READ THE MANUAL CAREFULLY BEFORE USING THE UNIT!

ORIGINAL INSTRUCTIONS



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Year of fabrication: 2020

1. SAFETY INSTRUCTIONS

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) 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.*

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.**
NOTE The above warning is omitted for a simple pivoting arm mitre saw.
- 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 with the blade or the guarding system.** *Without turning the tool "ON" and with no 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.*
- NOTE The phrase "bevel or" does not apply for saws without bevel adjustment.
- 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.*

Additional instructions

- When using the saw, wear personal protective equipment such as safety goggles or a screen, helmet, dust mask, gloves, non-slip footwear and protective clothing
- Ensure that there is sufficient, generalized or localized lighting.
- Do not use the saw when the protective parts are not in place.
- Do not use the saw to cut metal or masonry parts.
- Do not allow persons under 18 to operate the tool.
- Ensure that users of this tool have received professional training and know how to set and use this tool.
- Do not use the saw to cut firewood
- Remove all stumbling blocks from the work area.
- Report or record any defects as soon as possible, including the guards and the saw blade.
- Install the saw as much as possible on a work stand. Always stay on the side when the saw is turning.
- Never use a saw blade that is cracked or deformed.
- When cutting round wood, use a clamping assembly to prevent slippage of the workpiece.
- Do not use your hand to remove sawdust, chips or debris near the saw blade.

- Use only blades recommended by the manufacturer that comply with EN847-1.
- Do not use high speed steel blades (HSS blades).
- If the plate inserted on the swivel table is worn or damaged, have it replaced by an authorized service center
- Objects such as cloth, strings, should never be left in the working zone. Avoid cutting nails. Check the workpiece and remove all nails and other foreign objects before starting the machine.
- Hold the workpiece firmly.
- Avoid collecting debris or sawdust on the saw before the saw is completely stopped and the blade guard is in the open position.
- Do not attempt to release a blocked blade before stopping the machine by pressing the switch
- Do not attempt to slow down or stop the blade when it is still in the workpiece.
- Let her stop by herself.
- When you want to pause, turn off the power and wait for the saw to stop completely before leaving the work area.
- Periodically check that all fasteners, screws, bolts and nuts are properly tightened.
- Do not put materials or equipment above the saw to prevent the possibility of an unfortunate fall.
- Use the saw to cut parts that are insulated from electricity. If you accidentally cut a wire hidden in the workpiece or cut the power cable of the saw, the metal parts of the saw are covered by the current, the power must then be switched off immediately and the plug removed from the saw. outlet.
- Never use the saw near any flammable liquid or gaseous material.
- Note and remember the direction of rotation of the motor and that of the blade.
- Do not block the movable blade guard in the open position and make sure it can move freely and fully cover the blade teeth.
- Place a saw on a dust collecting bag and ensure it is working properly. As an operator, you need to know the factors that influence the severity of pollution, such as material type, performance, and setting of the dust collection or evacuation device. In any case we recommend the use of a dust mask.
- Wear gloves when handling saw blades and rough materials.
- Put the saw blades in a sheath during transport.
- Select the saw blades according to the type of material to be cut.
- Use sharp saw blades and observe the maximum speed marked on the blade.
- Redouble your attention by machining a groove.
- The miter saw can be transported safely by the main handle, but only when it has been disconnected from the power outlet and locked in the locked position.
- Do not use the saw when the guards are not properly assembled, in good condition or well maintained.
- Make sure that the arm is securely secured during bevel cutting.
- Apply the workpiece strongly against the swivel table on which there should be no other pieces of wood.
- Ensure that you have received training and / or training and know how to adjust and use this tool.
- Use blades that are properly sharpened and do not exceed the maximum rated speed.
- Do not pick up debris from the cutting area until the blade guard closes and the saw is completely stopped.
- Attach the miter saw to a workbench if possible.
- When cutting a long piece that extends far beyond the width of the table, supports should be used to support the ends of the workpiece at the same height as the cutting table. The supports must be positioned so that the workpiece does not fall to the ground when the cutting has finished. If the part is very long, several supports must be provided.
- Use only a saw blade diameter in accordance with the markings on the saw.
- 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.

- 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).

Laser safety instructions

- Warning: Do not look directly at the laser beam.

The laser light / laser radiation used on this saw is of class 2 with 1mV at the maximum and the wavelengths of 650 nm. These lasers do not usually constitute an optical hazard, but stare at the beam can cause flash blindness. The danger exists if you deliberately look at the laser beam. To avoid optical hazards, please observe the following guidelines:

- o Never point the laser beam at a person or object other than the workpiece.
- o The laser cannot be pointed at a person's eye for more than 0.25s.
- o Always make sure that the laser beam is directed to a solid piece that does not have a reflective surface such as a piece of wood or a rough, matte surface. A glossy steel sheet or similar material is not suitable for use with the laser because a reflective surface can return the laser to the operator.
- o Do not replace the laser light device with a different laser product. Repairs must be performed by the manufacturer of the laser product or its authorized dealer.

Caution: Use of controls or adjustment or application of procedures other than those specified in this manual may result in exposure to hazardous radiation.

Residual risks

Warning: When using a power tool, basic safety precautions should be taken to avoid the risk of fire, electric shock or injury to persons.

Please read the additional safety instructions in this manual carefully and note that even if the power tool is used in accordance with the operating instructions, it is not entirely certain that all residual risk factors will be eliminated. The following hazards can occur:

- o Contact with blade
 - o Rebound of the workpiece or debris of the workpiece
- Fracture of the blade.
 - Ejection of debris from the machined part.
 - Hearing damage if you do not wear ear plugs.
 - Projection of wood chips that are harmful to health when the tool is used in a poorly sealed room.

It is therefore important to take preventive measures:

- o Always use a sawdust disposal device if possible.
- o Do not use deformed or cracked blades.
- o Remove the plug from the power tool before any adjustment or maintenance, including replacement of the blades.
- o Choose a suitable blade for the material to be cut.
- o Do not use the saw to cut material other than those designated by the manufacturer

The miter saw can be transported safely by the main handle, but only when it has been disconnected from the power outlet and locked in the locked position.

Do not use the saw when the guards are not properly assembled, in good condition or properly maintained.

Make sure that the arm is securely secured during bevel cutting.

Apply the workpiece strongly against the swivel table on which there should be no other pieces of wood.

Install sufficient lighting.

Make sure you have been trained or trained and know how to adjust and use this tool.

Use blades that are properly sharpened and do not exceed the maximum rated speed.

Do not pick up debris from the cutting area until the blade guard closes and the saw comes to a complete stop.

Attach the miter saw to a workbench if possible.

When cutting a long piece that extends far beyond the width of the table, supports must be used to support the ends of the workpiece at the same height as the cutting table.

The supports must be positioned so that the workpiece does not fall to the ground when the cutting has finished. If the part is very long, several supports must be provided.

- keep the floor area free of loose material e.g. chips and cut-offs;
- ensure that any spacers and spindle rings used are suitable for the purpose as stated by the manufacturer

Symbol explanation



To reduce the risk of injury, the user must read and understand this manual before using this product.



Wear ear protectors. Exposure to noise can cause hearing loss.



Wear protective goggles.



Wear respiratory protection.



Double insulation.



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.



In accordance with essential applicable safety standards of European directives



WARNING!



Laser radiation - Do not fix the laser beam



Warning ! Cutting element; do not touch the saw blade directly



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

2. TECHNICAL DATA

Model	HSO20305-1
Mains voltage/ frequency	230-240 V~ 50 Hz
Power	2000W
Speed	4350/min
Type	Single Phase
Blade size	Ø305 x Ø 30 x 40TX2.8 mm
Tilting swing arm	45° G/D
Swivel base	45° G/D
Sound pressure level LpA	94.6 dB(A)
Sound power level LwA	107.6 dB(A)
Uncertainty K:	3 dB(A)
Max. Cutting depth at :	
0° - 90°	90 x 340 mm
45° - 90°	90 x 240 mm
0° - 45° left	48 x 340 mm
0° - 45° right	40 x 240 mm
Table Tilting Range:	Left45° - Right45°
Saw Body Tilting:	45° - 45°

The vibration value does not exceed 2,5 m/s²

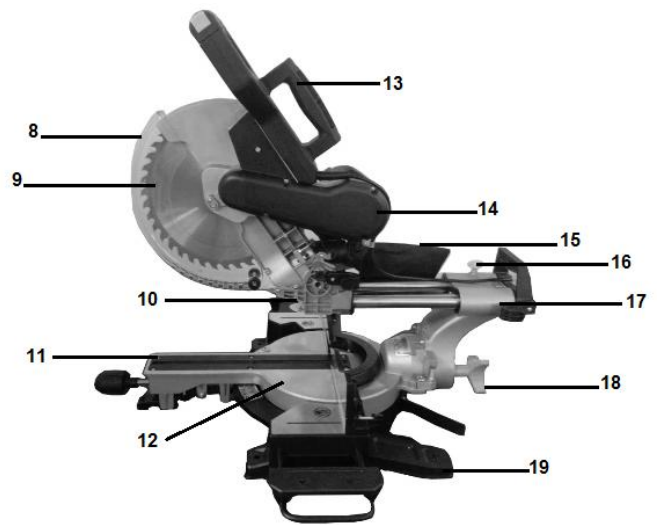
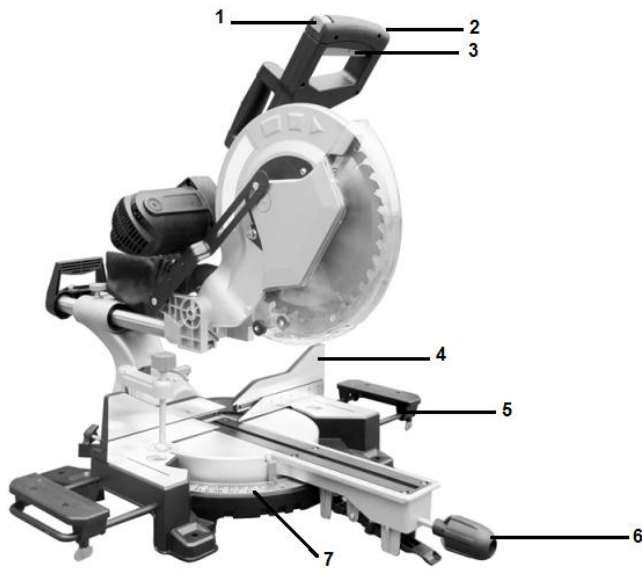
Information:

- 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).

3. DESCRIPTION



1. Trigger lock
2. Handle
3. Trigger
4. Stopper
5. Side extensions
6. Locking screw for the saw table
7. Graduation scale
8. Blade protection
9. Saw blade
10. Laser
11. Blade slide
12. Swivel table
13. Carrying handle
14. Protective cover for the drive belt
15. Dust collection bag
16. Arm release screw
17. Cutting arms
18. Handle for adjusting the tilt of the saw head
19. Pre-drilled frame for fixing on bench



Wear safety glasses, hearing protection, a dust mask and protective gloves.

4. UTILISATION

Intended use

This mitre saw should only be used for to cut rafters, baseboards, panelling, wooden floors, boards, or cutting pieces of aluminium, processed wood or similar materials.

Caution, do not use the machine beyond the maximum capacity provided and do not cut branches, logs and any other material with presenting risks of ignition, explosion or release of pollutant or dangerous for the user or the environment

Any other use, different from that provided in these instructions, may cause damage to the device and represent a serious danger for the user.

This device is intended solely for private use and not industrial.

Store it carefully and keep these instructions at hand, so that you can consult them in case of need.

Only the blades of the same diameter, bore and kind are allowed.

Conditions of use

- The saw should be placed in a covered and dry place. The ambient temperature should be between +15°C and +30°C. Humidity should be less than 60%.

- The saw should be mounted on a stable and strong work plan by means of the fixing holes provided for this purpose on the base.

- Suitable blades should be used depending on the material to be cut

Be careful when cutting hard materials.

Move the workpiece forward slowly, do not force the workpiece against the blade.

Warning: For normal operations of sawing wood, use a 24 teeth tungsten carbide blade. For other sawing operations and other materials, use depending on the case a 30 teeth, 40 teeth or 60 teeth tungsten carbide blade (ask for advice to the dealer).

Always check that the recommended speed on the saw blade is equal or greater than the one provided on the nameplate of the machine.

Capacity

Capacity	F305MAX - 3
0° - 90°	90 x 340 mm
45° - 90°	90 x 240 mm
0° - 45° left	48 x 340 mm
0° - 45° right	40 x 240 mm

Unpacking

You have opened the carton and found this user manual attached to the machine. Keep the packaging for storage and the instructions for future reference.

Remove the saw from the packaging and check its condition. If the product does not seem correct, or if the items are broken or missing according to the description above, contact your dealer.

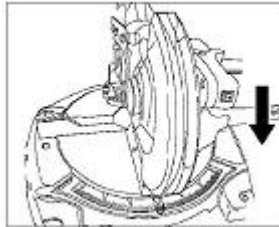
CAUTION! A small anti - moisture bag may be found in the packaging. Do not leave it within reach of children and discard.



WARNING!
Unplug the machine before any intervention.

a) Unlock and lock the saw head

During transport, handling or storage, the saw head should be folded and locked in this position. To unlock the saw head, exercise a downward pressure on the handle and pull out the locking pin located at the rear of the machine, so the head can return to its proper operating position. Fully press down on the saw head to lock it in the down position. A click is heard when it is locked.



b) Mounting of the saw on a stable base

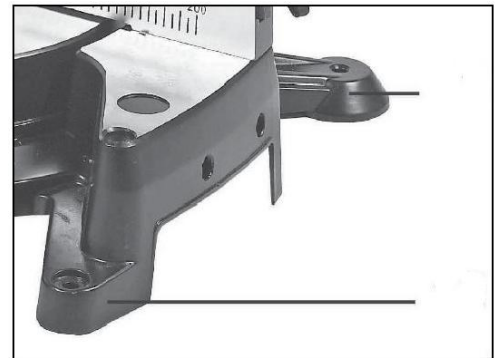
This machine has 4 mounting holes at its base. These can be used to secure permanently the saw to a workbench with screws or bolts as appropriate.

It should be fixed on a workbench with the screws.

Drill the marked areas of the holes whose diameter and depth is suitable to the screws to be used.

Place the machine on the workbench and insert the screws into the fixing holes, then tighten firmly.

Alternatively, if the machine needs to be moved frequently, it can be fixed to a plywood base of 19 mm, provide a more stable base.

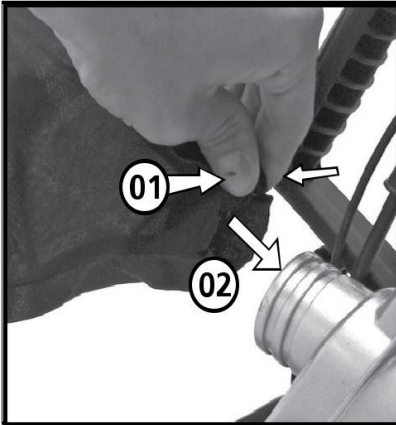


c) Unlocking the cutting arm

Unscrew the screw (1) on the cutting arm to unlock it. To lock the arm, tighten the screw.



d) Connection of the dust and chips collector bag



Insert the dust bag over the extraction outlet located at the rear of the machine.

You can also connect a vacuum hose to the dust extraction bend to improve suction. The dust bag should be emptied frequently. The dust bag is equipped with a zipper to empty it more easily. A full bag greatly reduces its effectiveness. This bag needs to be cleaned regularly in soapy water; before reuse, be sure to dry thoroughly.

Caution: Dust particles can cause respiratory problems. For your protection, wearing a dust mask according to the standards in force is advisable.

e) Mounting and adjustment of the table extensions

You can use the table extensions to work on long pieces of wood. These extensions can be placed on the right or left according to your needs.

Insert the extensions in the notches provided and tighten the locking screw so that the extensions do not move while using the machine.



f) Installation and change of the blade:



An accessory should be changed when the machine is idle and disconnected.

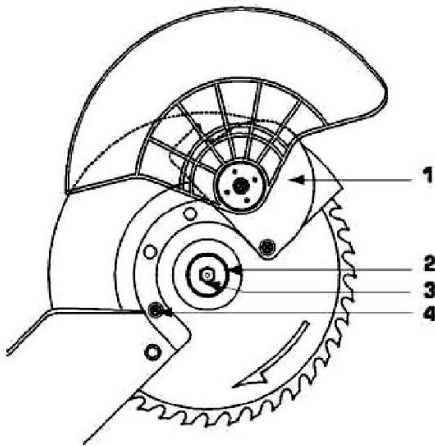
To install or change the blades, your mitre saw should be in raised position,

- Remove the front screw from the housing of the blade bolt (4).
- Lift the motor block blade and then the lower blade guard as high as possible (note: take care, the lower blade guard is equipped with a spring.)

Using the wrench, hold the flange (2) and then loosen the bolt of the shaft (3) using the Allen key.

- Remove the flange of the blade and install or replace the blade on the shaft. Make sure that the blade is properly installed, the teeth directed downwards at the front of the saw.
- Place again the flange of the blade firmly against the blade.
- Tighten the bolt of the shaft by turning it to the left. Using the wrench, hold the flange and tighten the bolt of the shaft using the Allen key.

- Push with your thumb on the locking device of the lower blade guard so that the blade guard covers the blade.
- Tighten the housing screw of the blade bolt.
- Check the locking device of the lower blade guard is properly in place and that it properly blocks the latter.

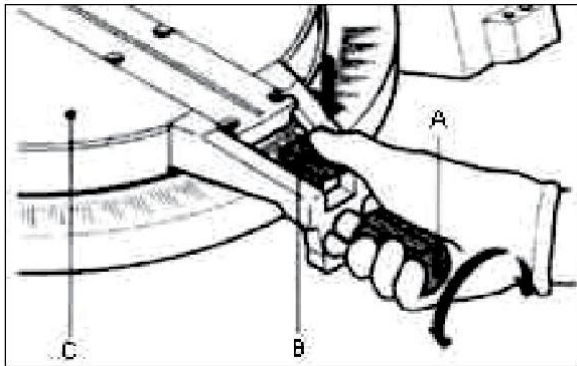


Pay attention to the direction of blade rotation, a superimposed arrow on the head of the saw shows the direction of the blade rotation. The teeth of the saw blade should be oriented in the arrow direction. Choose also a blade with a marking showing the rotation direction to observe.

Use only sharp blades and not damaged. Cracked or twisted blades should be replaced immediately.

Do not use HSS steel blades. Use only blades that are appropriate for the speed provided. Make sure that the axis diameter and the axis hole are consistent.

g) Adjusting the mitre angle



Your saw allows performing mitre cutting from 0° to 45° both to the right and to the left.

To adjust the table, loosen the locking handle of the table (A) as shown in the diagram, move the table (C) until you get the desired angle by using the handle (A).

Finally, lock the table using the locking handle to lock the table in the proper position.

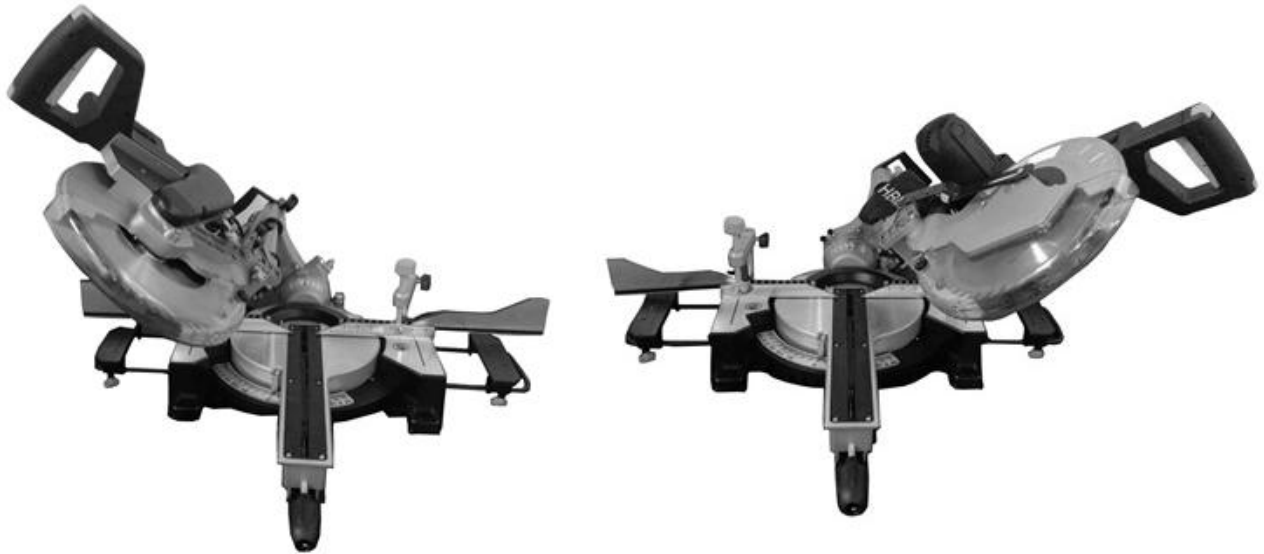
h) Adjusting the tilt of the saw head

You can tilt the saw head of your machine from 0° to 45°.

To adjust the tilt, loosen the locking handle of the table (located at the rear of the machine as shown on the diagram).

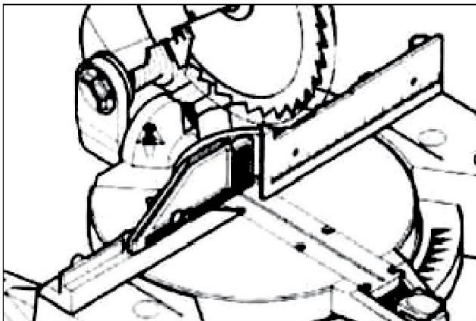
Tilt the saw from 0° to 45° to obtain the desired tilt by using the handle.

Once set, tighten the handle firmly.



i) Use of the stop:

Your mitre saw is equipped with a fixed part stop as well as removable stop, on the right and left side: they allow immobilizing the workpiece during the cutting operation and thus prevent it from moving. You should always push the workpiece against the latter, regardless of the type of cut to be performed. The mitre gauge should be systematically adjusted to perform a cut.



CAUTION: This mitre saw is also equipped with an adjustable stop. These stops should be adjusted to match the cutting angle (straight cut, bias cut, etc...).

j) Adjustment of the drive belt tension

Checking, adjustment of the drive belt tension and replacement:

Remove the black plastic cover by unscrewing each screw

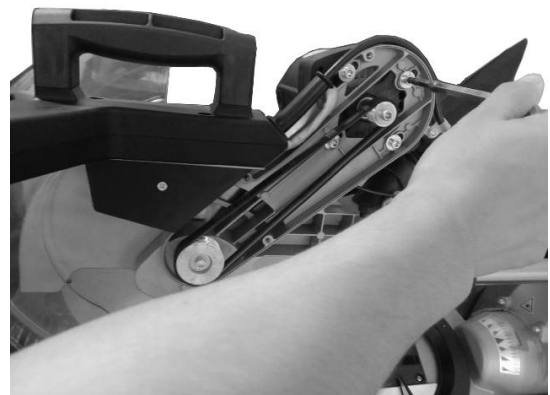
- Check the belt tension by exerting pressure with the thumb.
- When the belt should be tightened or replaced.

Unscrew the four fixing screws of the motor by about a turn.

Tighten or replace the drive belt.

For rear tension move the motor backwards.

Tighten the fixing screws of the motor crosswise.



- Put back in place the black plastic cover and then tighten it.

k) Start-up

The base of your saw should be placed and well fixed on a solid, flat surface in a place inaccessible to children.

Ensure the proper tightening of the safety components and blade before starting.

Connect the machine to the 230V mains.

To turn the saw on, press the locking device and then press the trigger switch. To stop the saw, release the trigger switch.

You should never stop the blade rotation by exerting side pressure on it.

As a safety measure, the lower blade guard is locked systematically as soon as you release the trigger switch.

The lower guard retracts over the top blade guard when the top blade is in contact with the workpiece.

You can stop the device by releasing the power switch located on the handle.

Before you start cutting, the saw should reach its maximum speed.

Lower the saw head slowly and exert pressure depending on the composition of the materials to be cut.

When cutting, the wood should be well pressed against the stop rail.

For longer wood, you need to use side extensions.

After cutting, release the switch and re - attach the head in upper and locked position, making sure of locking it.

After the cutting, the translucent blade guard closes automatically and covers the saw blade.

Run idle for 30 seconds in a safe position, stop the machine immediately if there is a relevant vibration or other faults are detected.

If that is the case, check the machine to determine the cause of the fault.

You can stop the machine by releasing the trigger.

Use

Before any use, check that the blade is properly mounted and the stop is properly adjusted according to the desired use.

Make sure that the lower mobile guard works properly and that the blade enters freely into the groove of the working table by lowering the idle head while the motor is turned off.

If necessary re - adjust the cutting angle.

The translucent mobile guard should be replaced if it is cracked or damaged.

Tighten the workpiece in the vise on the working table.

CAUTION!

- Always observe the maximum widths and heights of the workpiece provided in the paragraph "Technical features".
- If the workpiece's length is greater than 1 m, special precautions should be taken, such as support by using shims at regular intervals under each end beyond the working table.
- Connect the power cable to a wall socket, checking that the voltage corresponds to that shown on the nameplate of the machine.
- After turning the power on, wait a few seconds for the blade to reach its speed.
- Lower the cutting head slowly towards the workpiece and start working.
- Do not force the head: the advancement speed should be compatible with the material to be cut.
- At the end of the work, release the trigger switch and slowly raise the cutting head in upper position.
- The opening of the vise and cleaning of the waste should be done only when the machine is turned off, the cutting head back in upper position, the movable guard closed and the blade completely stopped.

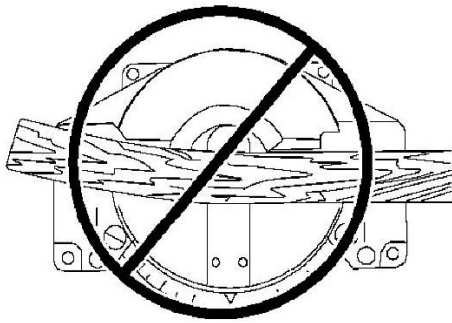
Instructions for cutting:

1. Unlock the head of the saw: exert pressure downward on the handle, pull the locking pin located at the rear of the machine so that the head can return to its proper operating position.
2. Unlock the table

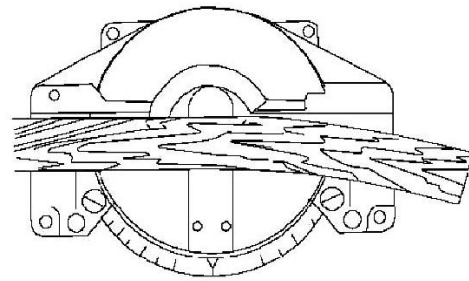
3. Rotate the table until the indicator reaches the desired angle on the scale tab
4. Secure the tab lock lever.
5. Before turning the saw on, run a test on the idle machine to make sure that the cutting is not difficult.
6. Firmly grasp the handle of the saw and squeeze the trigger. Wait a few seconds so that the blade can reach its maximum speed.
7. Press your thumb against the lower blade guard locking device located on the handle.
8. Slowly lower the blade through the workpiece.
9. Release the trigger and wait until the blade stops spinning before removing it from the workpiece.
10. Raise gently the blade motor block to its highest position and release the lower blade guard locking device.

WARNING!!

Always place the workpiece flat on the table with one edge pressed firmly against the stop. If the board is bent, place the convex side against the stop and secure it. If the concave side is placed against the stop, the board may press against the blade at the end of the cutting, blocking it.



WRONG



RIGHT

To prevent bouncing and serious bodily injury, never locate the concave side of a bent or curved piece against the stop.

When cutting long pieces of wood or mouldings, support the opposite end of the workpiece. Align the cutting line of the workpiece with the cutting edge of the blade. Hold the work piece firmly with one hand and press it firmly against the stop.

WARNING!!

To avoid the risk of serious bodily injury, make sure that the mitre lock lever is securely locked before starting cutting. If the mitre lock lever is not locked, the table may move during the cut.

To avoid serious bodily injury, your hands should always stay out of the "forbidden hands" area, at least 75 mm away from the blade. Never perform freehand cutting (without pressing the workpiece against the stop). The blade could hook the workpiece if the latter slides or twists.

I) User's guide

Cross-sections

A cross section consists in cutting transversely through the workpiece. To perform a straight cross-section cut (90°), the table should be set on position 0°. To perform mitre cuts - cutting, the table should be positioned at an angle other than 0°.

Bias cuts

Bias cuts are performed with the table positioned on the tab 0° and the blade tilted at an angle between 0° and 45°.

- Rotate the table so that the indicator shows 0° on the scale tab.
- Lock the table by blocking the locking lever.
- Loosen the tilt locking knob and tilt the blade motor block to the left or right up to the desired angle.
- The bias cutting angle can be set between 0° and 45°.
- Align the indicator with the desired angle.

Mitre cuts

A mitre cut consists in cutting a piece placed against the end of the rear guide at an angle between 0° and 45° to the right or left.

Double mitre cuts

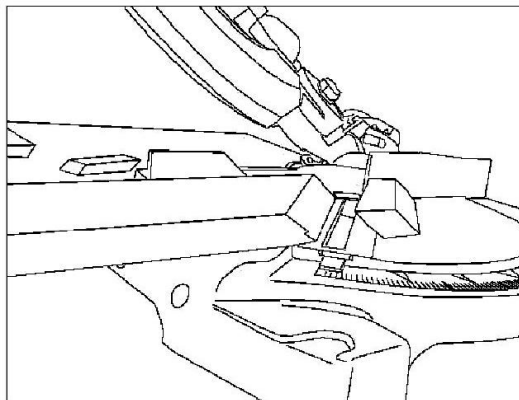
A double mitre cut consists in using both a mitre angle and a tilt angle. This type of cut is used to make frames, cut mouldings, make boxes with inclined sides, and for certain framework cutting.

To perform this type of cut, the table should be placed on the desired mitre angle and the blade motor block should be tilted up to the selected bias angle.

The settings for double mitre cutting should be adjusted with great care, due to the interaction between the two angles. The settings for mitre and bias cutting are interdependent. When you change the mitre angle setting, you change the impact of the tilt adjustment. Similarly, when you change the tilt setting, you change the impact of the mitre cutting angle setting. You may need to try several settings before getting the desired cut. When you have completed the setting of the second angle, check again the first angle setting, as the setting of second angle may have changed that of the first.

Once you have the two proper settings for a for a given cut, always perform a cutting test with scrap material before making the final cut on the workpiece.

- The bias cutting angle can be set between 0° and 45°.
- Align the indicator with the desired angle.



Positioning of mouldings flat on the table

In order to use this method to cut with precision crown mouldings for inner and external right - angled corners, lay the moulding with its broadest backside flat on the table, pressed against the stop.

When setting up the bias and mitre angles and the tab for double mitre cuts, remember that the settings are interdependent: when you change an angle, the other is modified.

The angles for crown mouldings are very precise and difficult to adjust. Given that the angles tend to go out of adjustment, all settings should first be tested on scrap mouldings. In addition, most walls are not exactly perpendicular, so adjustments should be made accordingly.

5. MAINTENANCE AND STORAGE

a. General maintenance



Remove the plug from the power outlet before performing any adjustment or maintenance.

This machine does not require special mechanical maintenance, such as the lubrication of the bearings. Remember to keep your machine in clean condition to avoid any risk of failure.

Lubricate regularly all parts requiring it, as the shaft for instance.

Remove regularly sawing dust from the housing and protective casings.

Periodically check the power cable and, if it is damaged, replace it with an identical cable.

Having this operation performed by the After - Sales Service is advisable.

Periodically check the power cable extension cords and replace them if they are damaged.

The use of extension cords leads to a loss of power.

To limit the power loss to a minimum and prevent the tool overheating, use an extension cord with sufficient calibre to carry the necessary current to the tool.

If the replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.

If the power cord is damaged, unplug it immediately.

The cleaning of plastic parts should be performed when the machine is turned off, using a soft, damp cloth and mild soap.

Do not use solvents to clean plastic parts.

Most plastics may be damaged by the solvents commercially available.

Never immerse the machine and do not use detergent, alcohol, gasoline, etc.

The blades should be stored and handled with care.

Replace the blade as soon as it shows signs of wear.

In case of problems or for a thorough cleaning, consult the After - Sales Service.

b. Brush replacement



Check periodically the condition of the brushes. They should be replaced when the carbon length is about 5mm. Brushes should always be replaced in pairs. Always keep brushes clean and free to move in the brush holder.

For their replacement or inspection: remove the threaded plugs using a flat - head screwdriver, replace the brushes, making sure of inserting properly the new brushes and ensuring that they slide properly in their housing, replace the plugs, taking care not to pinch the spring - loaded brushes.

c. Storage

To store the machine, follow these tips:

1. Carefully clean the entire machine and its accessories (see the maintenance paragraph).
2. Keep it out of the reach of children, in a stable and secure position, in a dry and temperate place and avoid temperatures being too high or too low.

3. Protect it from direct light. If possible, store it in the dark.
4. Do not lock it nylon bags as moisture could form.

6. TROUBLESHOOTING

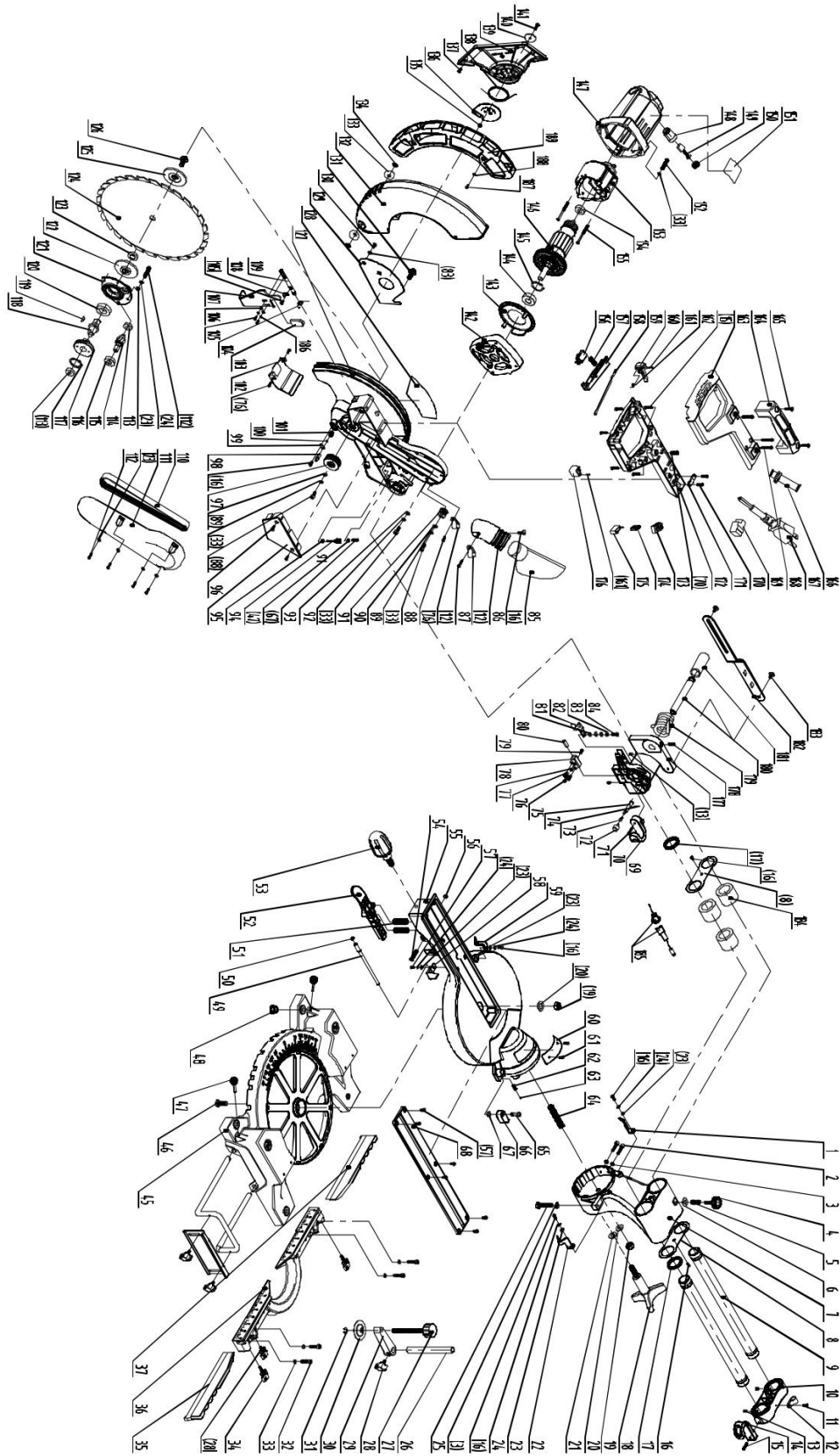
PROBLEMS	POSSIBLE CAUSES	SOLUTIONS
The motor does not start	<ol style="list-style-type: none"> 1. Under voltage 2. Poor connection 	Check the connections and the mains voltage.
The motor does not start and disconnects.	<ol style="list-style-type: none"> 1. Short circuit in the socket 2. Short circuit in the motor 3. Bad fuse, or cut circuit breaker 	<ol style="list-style-type: none"> 1. Check the plugs 2. Inspect the connections on the machine 3. Check the fuses
The motor heats up	The motor is overloaded	Reduce the load on the motor
The rotation speed drops	<ol style="list-style-type: none"> 1. The motor is in short circuit 2. The tension drops 3. Bad fuse 4. Overheating engine 	<ol style="list-style-type: none"> 1. Check the connections on the motor and the insulation of the connections 2. Check the voltages and fuses 3. Reduce the load
The machine vibrates, trembles	<ol style="list-style-type: none"> 1. The saw blade is not circular 2. The saw blade is damaged 3. The saw blade is badly fixed 	<ol style="list-style-type: none"> 1. Replace or sharpen the saw blade 2. Replace the blade with a suitable blade adapted for the materials to cut 3. Tighten the screw of the shaft
Burn points appear on the workpiece	<ol style="list-style-type: none"> 1. Malfunction 2. The saw blade is dull or not suitable 	<ol style="list-style-type: none"> 1. Replace or sharpen the blade 2. Replace the blade with a suitable blade for the materials to cut
The cutting angle is not accurate	<ol style="list-style-type: none"> 1. The alignment is bad 	<ol style="list-style-type: none"> 1. Check the tightness of the different axes
The blade engine block oscillates	<ol style="list-style-type: none"> 1. The pivot is moving 	<ol style="list-style-type: none"> 1. Check the tightness of the pivot

7. DISPOSAL



Electrical products should not be discarded with household products. According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation into national law, electrical products used must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.

8. EXPLODED VIEW



9. CE DECLARATION OF CONFORMITY



Declaration of conformity

BUILDER SAS

32, rue Aristide Bergès –Z1 31270 Cugnaux - France
Phone: +33 (0) 5.34.508.508 Fax: +33 (0) 5.34.508.509

Declares that the machinery designated below:
RADIAL DUAL SLIDE MITER SAW
HSO20305-1

Serial number: 20200806945-20200807184

Complies with the provisions of the Directive “Machinery” 2006/42/EC and national laws transposing it:

Also complies with the following European directives:

EMC Directive 2014/30/EU

ROHS Directive (EU) 2015/863 amending 2011/65/EU

Also complies with European standards, with national standards and the following technical provisions:

EN62841-1:2015

EN62841-3-9:2015/A11:2017

EN 55014-1:2017

EN 55014-2:2015

EN 61000-3-2: 2014

EN 61000-3-11: 2000

Responsible of the technical file: Mr Olivier Patriarca

Cugnaux, 29/05/2020

Philippe MARIE

10. WARRANTY

HYUNDAI

WARRANTY

The manufacturer guarantees the product against defects in material and workmanship for a period of 2 years from the date of the original purchase. The warranty only applies if the product is for household use. The warranty does not cover breakdowns due to normal wear and tear.

The manufacturer agrees to replace parts identified as defective by the designated distributor. The manufacturer does not accept responsibility for the replacement of the machine, in whole or in part, and/or ensuing damage.

The warranty does not cover breakdowns due to:

- insufficient maintenance.
- abnormal assembly, adjustment or operations of the product.
- parts subject to normal wear and tear.

The warranty does not extend to:

- shipping and packaging costs.
- using the tool for a purpose other than that for which it was designed.
- the use and maintenance of the machine done in a manner not described in the user manual.

Due to our policy of continuous product improvement, we reserve the right to alter or change specifications without notice. Consequently, the product may be different from the information contained therein, but a modification will be undertaken without notice if it is recognized as an improvement of the preceding characteristic.

READ THE MANUAL CAREFULLY BEFORE USING THE MACHINE.

When ordering spare parts, please indicate the part number or code, you can find this in the spare parts list in this manual. Keep the purchase receipt; without it, the warranty is invalid. To help you with your product, we invite you to contact us by phone or via our website:

- **+33 (0)9.70.75.30.30**
- **<https://services.swap-europe.com/contact>**

You must create a "ticket" via the web platform.

- Register or create your account.
- Indicate the reference of the tool.
- Choose the subject of your request.
- Describe your problem.
- Attach these files: invoice or sales receipt, photo of the identification plate (serial number), photo of the part you need (for example: pins on the transformer plug which are broken).



11. PRODUCT FAILURE

WHAT TO DO IF MY MACHINE BREAKS DOWN?

If you bought your product in a store:

- a) Empty the fuel tank.
- b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.

Go to the store with the complete machine and with the receipt or invoice.

If you bought your product on a website:

- a) Empty the fuel tank.
- b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.
- c) Create a SWAP-Europe service ticket on the site: <https://services.swap-europe.com> When making the request on SWAP-Europe, you must attach the invoice and the photo of the nameplate (serial number).
- d) Contact the repair station to make sure it is available before dropping off the machine.

Go to the repair station with the complete machine packed, accompanied by the purchase invoice and the station support sheet downloadable after the service request is completed on the SWAP-Europe site

For machines with engine failure from manufacturers BRIGGS & STRATTON, HONDA and RATO, please refer to the following instructions.

Repairs will be done by approved engine manufacturers of these manufacturers, see their site:

- <http://www.briggsandstratton.com/eu/fr>
- <http://www.honda-engines-eu.com/fr/service-network-page;jsessionid=5EE8456CF39CD572AA2AEEDFD290CDAE>
- <https://www.rato-europe.com/it/service-network>

Please keep your original packaging to allow for after-sales service returns or pack your machine with a similar cardboard box of the same dimensions.

For any question concerning our after-sales service you can make a request on our website <https://services.swap-europe.com>

Our hotline remains available at +33 (9) 70 75 30 30.



12. WARRANTY EXCLUSIONS

THE WARRANTY DOES NOT COVER:

- Start-up and setting up of the product.
- Damage resulting from normal wear and tear of the product.
- Damage resulting from improper use of the product.
- Damage resulting from assembly or start-up not in accordance with the user manual.
- Breakdowns related to carburetion beyond 90 days and fouling of carburetors.
- Periodic and standard maintenance events.
- Actions of modification and dismantling that directly void the warranty.
- Products whose original authentication marking (brand, serial number) has been degraded, altered or withdrawn.
- Replacement of consumables.
- The use of non-original parts.
- Breakage of parts following impacts or projections.
- Accessories breakdowns.
- Defects and their consequences linked to any external cause.
- Loss of components and loss due to insufficient screwing.
- Cutting components and any damage related to the loosening of parts.
- Overload or overheating.
- Poor power supply quality: faulty voltage, voltage error, etc.
- Damages resulting from the deprivation of enjoyment of the product during the time necessary for repairs and more generally the costs related to the immobilization of the product.
- The costs of a second opinion established by a third party following an estimate by a SWAP-Europe repair station
- The use of a product which would show a defect or a breakage which was not the subject of an immediate report and/or repair with the services of SWAP-Europe.
- Deterioration linked to transport and storage*.
- Launchers beyond 90 days.
- Oil, petrol, grease.
- Damages related to the use of non-compliant fuels or lubricants.

* In accordance with transport legislation, damage related to transport must be declared to carriers within 48 hours maximum after observation by registered letter with acknowledgement of receipt.

This document is a supplement to your notice, a non-exhaustive list.

Attention: all orders must be checked in the presence of the delivery person. In case of refusal by the delivery person, it you must simply refuse the delivery and notify your refusal.

Reminder: the reserves do not exclude the notification by registered letter with acknowledgement within 72 hours.

Information:

Thermal devices must be wintered each season (service available on the SWAP-Europe site). Batteries must be charged before being stored.

HYUNDAI
POWER PRODUCTS

For Inquiries, please contact:

BUILDER SAS

32, rue Aristide Bergès Z1 31270 Cugnaux, France

Tél. : +33 (0) 5.34.502.502 Fax : +33 (0) 5.34.502.503

<http://www.hyundai-power-fr.com/>

Fabriqué en République Populaire de Chine (PRC)