

One-Stop Tools Station

MITER SAW





Security instructions

To use this equipment correctly, you must observe the safety regulations, assembly and operation instructions within this manual.

All those people who use and repair the machine must be familiar with the manual and informed of occupational hazards.

Children and untrained persons may not use the miter saw. Also, those children should be out of the work area.

It is also essential to observe the accident prevention regulations and apply them in the area where the equipment is to be used. The same applies to occupational health and safety regulations and rules.



Caution

Whenever you use a power tool, follow safety precautions to reduce the risk of fire, electric shock, and injury to persons.

It is also necessary to take into account the advice contained in the safety instructions section.

The machine must be used under all prescribed start-up and safety instructions, but bearing in mind that it is not possible to eliminate all risk factors. The following risks may arise during the assembly and use of the machine:

- Saw blade contact
- Kickback of machine or other work parts
- Saw blade fracture
- Hearing damage if you don't wear proper protection
- Harmful emissions of sawdust when the equipment is used inside closed areas without ventilation. Always use dust extractors and dust extraction.
- Always unplug the power cord before making any adjustments or maintenance to the equipment, including changing the blade.

To make the correct and safe use of the machine, follow the following rules:

- Select the proper blade for the material to be cut.
- Do not use the saw to cut materials other than those indicated by the manufacturer
- The machine can be moved by the main handle as long as it is not connected to the current and the blade is in a firm position, blocked and with the protection cover.
- Make sure the saw arm is in the correct position.
- Keep the machine on a level area, in good condition, and free of debris.
- Provide adequate lighting while working.
- Make sure you are trained in the use, adjustment and operation of the machine.
- Use properly sharpened blades and observe the maximum speed indicated.
- Do not handle any material in the cutting area until the blade guard is in the safe position and the blade is fully locked.
- Make sure the machine is fixed to the worktable.
- When pieces to be cut exceed the width of the worktable, be sure to use supports
 at the same level as the worktable on both ends of the pieces.
 Said support must be positioned so that the piece to be cut does not fall to the
 ground after the cut. If the piece to be cut is extremely long, position several
 supports.



Caution

The following risks may arise in relation to the use, maintenance and handling of the machine:

- 1. Keep work area organized and free of debris.
- 2. Consider the workplace where you use the machine. Do not use this electric machine in wet or damp areas. Do not use the machine in the presence of flammable gases or liquids.
- 3. Keep the work area lighted.
- 4. Keep people away from the work area. Do not allow people around you to come into contact with the machine or its power cord.
- 5. Store the machine carefully. When not in use, it should be well stored and out of the reach of children.
- 6. Do not overload the machine. It will be more efficient if you use it at the right pace and speed.
- 7. Do not use the machine for a purpose for which it was not designed or fit any non-machine accessory to it.
- 8. Equip yourself with the correct PPE. Do not wear loose clothing or clothing that can be caught by the machine. Use the machine with short or tied hair and wear rubber gloves and non-slip shoes suitable for this type of work.
- 9. Use other safety accessories such as glasses, hearing protectors and dust masks.
- 10. Keep cord away from hot components, oils, and sharp objects. Do not misuse the cable, do not pull on it to disconnect the machine.
- 11. Use proper tools to secure the material you want to cut such as clamps or vises. This will keep your hands free to use the machine.
- 12. Keep your body balanced and steady at all times.
- 13. Take care of your machine. Keep the miter saw and its components clean and in good condition for safety and smooth operation.
- 14. Periodically check each component of the machine and repair or replace when necessary. Keep the handles dry, clean and free of oil or grease.
- 15. Unplug the machine when not in use. Turn off and unplug before changing accessories, performing maintenance or for any other manipulation.
- 16. Check that all screws and other adjustable parts are tight and ready to start the machine.
- 17. Always check that the switch is in the off position before plugging the power cord into the outlet. Do not transport the machine with the switch on.
- 18. Before using the machine, check that there are no damaged parts. If it is, replace those parts and check if the equipment is ready to use.
- 19. Protect yourself from power outages. Avoid contact with electrical objects such as refrigerators, radiators, stoves and objects that contain water such as pipes.
- 20. Use approved parts. It is recommended that you use original spare parts. Take the equipment to an authorized service center.
- 21. Stay alert at all times, watching what you do. In no case use the machine if you feel fatigued.



Warning

The use of accessories or adaptations to the equipment that are not recommended by the manufacturer may present a risk of injury to the user and people around the equipment.

Safety rules for correct use



Warning

Before connecting the machine to a power source or outlet, make sure that the voltage supply is the same as that specified on the machine's nameplate.

A power supply with a voltage higher than that specified for the machine can cause serious injury to both personnel and the machine. In case of doubt, do not plug in the machine and consult a specialist.

On the other hand, a power supply with a voltage lower than that specified is detrimental to the motor of the machine.

Note: Your machine is double insulated to provide additional protection against a possible electrical insulation failure within the tool.

Always remove the plug from the outlet before performing any adjustments or maintenance, including changing the blade.

- When operating the saw, wear safety equipment including safety glasses or shield, hearing protection, dust mask, and protective clothing, including safety gloves.
- Make sure there is adequate general or spot lighting.
- Do not use the saw to cut metal or masonry. Nor to chop firewood.
- Do not allow anyone under the age of 18 to operate this saw.
- Make sure the operator is properly trained in the use, adjustment and maintenance of the machine.
- Keep the area clear of hazards, including the possibility of tripping.
- Report faults on the machine, including guards and blades, as soon as they are detected.
- Make sure the machine is always secured to a bench, whenever possible.
- Always stand to one side when handling the saw.
- Never use a broken or deformed blade.
- Never use your hands to remove chips or other debris near the blade.
- Use only blades recommended by the manufacturer and that comply with EN 847-1.
- Do not use high speed steel (HSS) blades.
- If the table coupler is damaged or worn, have it replaced by an authorized service center
- Rags, cloths, cords, ropes or the like should never be left around the work area.
- Before using the machine, remove any foreign objects in the work area to prevent injuries and cuts.
- Shut down and completely stop the machine before moving any workpiece out of the cutting area
- Do not try to unclog a blade before turning off the machine.
- Do not slow down or stop the blade with a piece of wood. Let the blade stand naturally.
- Avoid distractions when working with the machine. Exercise caution and always attend to the work area.
- Do not store materials or equipment on top of the machine in a way that they could fall into it.
- Put the saw on places that are insulated, so that you do not accidentally cut hidden wiring or the machine's own cable. In case of doing so, turn off the power and remove the plug immediately.
- Note the direction of rotation of the motor and the blade.

- Do not block the cutting protection of the machine. Allow free movement to prevent blade from being exposed.
- Wear a dust mask when using the machine. Don't forget to connect a dust collector to the machine and make sure it works properly. Be aware of injuries that can be caused by exposure to dust. Pay attention to the type of material to be cut, the extractor/vacuum used and the adjustment of the components (deflectors/protectors).
- Handle and transport the blades always stored in a case.
- Use the correct saw blade for the material to be cut. They must be sharpened properly and observe the maximum indicated speed of the blade.
- The equipment can be safely moved by the main handle, provided that the equipment is secured, turned off, and disconnected from the power outlet.
- Keep the machine in a clean area free of debris and on safe, level ground.

And remember: wear safety glasses, hearing protector and respiratory mask. Wear safety gloves when handling blades and rough materials.

Description of the symbols



Wear ear protection
Wear eye protection
Wear respiratory protection



Double insulated for extra protection



Compliant with relevant safety standards

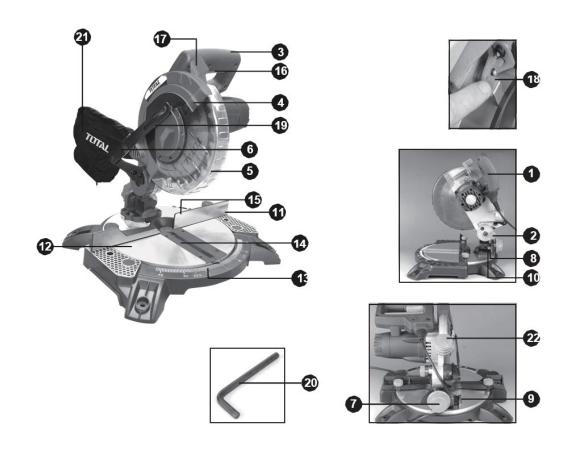
Technical data

| Technical sheet | |
|-------------------------|-----------------------|
| Input power | 1400W |
| Voltage | 220-240V~50/60Hz |
| No load speed | 5000/min |
| Blade surface | 210mm |
| Straight cut at 0° x 0° | 55x120mm |
| Accessories | 1x dust bag 1x wrench |

Product description

- 1. Saw arm
- 2. Shaft
- 3. Work handle
- 4. Top fixed blade guard
- 5. Rotating blade guard
- 6. Shield Retraction Arm
- 7. Bevel lock
- 8. Bevel scale
- 9. 45° bevel adjustment screw
- 10. 0° bevel adjustment screw
- 11. Depth stop

- 12. Miter table
- 13. Miter scale
- 14. Cut slot
- 15. Miter lock
- 16. Trigger switch
- 17. Security lock
- 18. Spindle lock button
- 19. Blade bolt cover
- 20. 6mm hex key
- 21. Dust extraction port
- 22. Dust extraction port cover



Assembly and operation

Unpacked

If you find any part of the machine in poor condition, do not operate it until the parts have been replaced or the fault has been fixed. Failure to do so could lead to serious injury.

- 1. Remove all loose parts from the box.
- 2. Remove the packing materials from around the machine.
- 3. Using the work handle (3) carefully lift the saw out of the box and place it on a level work surface.
- 4. The saw was shipped with the saw arm locked in the down position. To release the saw arm, push down the upper part of the saw arm, pull the shaft (2) (fig. A1), rotate it 45° and release (fig. A2), slowly lift the saw arm







Warning

Do not lift the saw while it is locked, use the work handle (3)

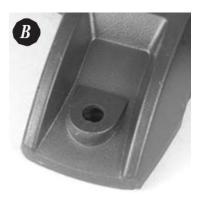
Transport

Raise the miter saw only when the saw arm is locked in the down position, the machine is turned off, and the plug is unplugged.

Lift the saw only by the handle (3) or the outer protection covers.

Mounting

The base of the saw has holes in each corner to facilitate bench mounting (fig. B).



- 1. Place the miter saw on a level horizontal bench or work table using bolts (not included) and attach the saw to the bench using 4 bolts.
- 2. If desired, the machine can be mounted to a piece of 13mm or thicker plywood which can then be clamped to your work support or moved to other job sites and reclamped.



Caution

Make sure the mounting surface is not deformed, as an uneven surface can cause binding and inaccurate sawing.

Axis

Shaft (2) is provided to hold the cutting head down while the miter saw is being transported or stored (fig. C). The machine should never be used with the release knob locking the head down.



Miter table locks

The miter table locks (15) are used to lock the table at the desired miter angle (fig. D).

The miter saw cuts from 0° to 45° both left and right. To adjust the miter angle, loosen the miter table locks and rotate the miter table to the desired position. The miter table features positive click stops at 0°, 15°, 22.5°, 30° and 45° for quick adjustment of common miter angles.



Warning



Be sure to tighten the miter table locks before making a cut. Failure to do so could cause the table to move during the cut and cause serious personal injury.

Bevel lock

The bevel lock (7) is used to position the blade at the desired bevel angle (fig. E). The miter 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.



Warning



Be sure to tighten the bevel lock before making a cut. Failure to do so could cause the saw arm to move during the cut and result in serious personal injury.

Spindle lock button

The spindle lock button (18) prevents the blade from turning (fig. F). Press and hold the spindle lock button while installing, changing, or removing the blade.



Rotating lower blade guard

The rotating lower blade guard (5) protects both sides of the blade (fig. G). It retracts onto the upper blade guard (4) when the saw is lowered into the work piece.



On and off

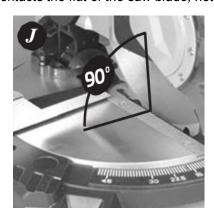
- 1. To turn on the machine, press and hold the on/off trigger switch (16) (fig. H).
- 2. To turn off the saw, release the On/Off Trigger Switch (16).



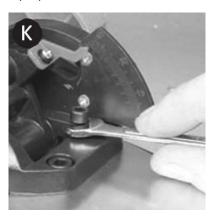
Square the table with the blade

- 1. Make sure the electrical plug is disconnected from the outlet.
- 2. Push the saw arm (1) down to its lowest position and engage the spindle (2) to hold the saw arm in the transport position.
- 3. Loosen the miter locks (15).
- 4. Rotate the table (12) until the pointer is positioned at 0°.
- 5. Tighten the miter locks (15).
- 6. Loosen the bevel lock (7) and set the saw arm (1) to a 0° bevel (blade at 90° to the miter table). Tighten the bevel lock (7).
- 7. Place a square against the table (12) and the flat part of the blade (fig. J).

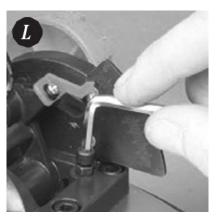
Note. Make sure the square contacts the flat of the saw blade, not the teeth.



- 8. Rotate the blade by hand and check the alignment of the blade with the table at various points.
- 9. The edge of the square and the saw blade must be parallel.
- 10. If the saw blade runs off square, adjust as follows.
- 11. Use an 8mm wrench or adjustable wrench to loosen the jam nut that holds the 0° bevel adjustment screw (10). Also, loosen the bevel lock (7) (fig. K).

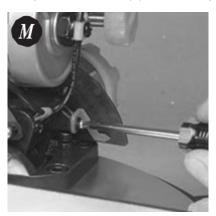


12. Adjust the 0° bevel adjustment screw (10) with a 4mm hex key to align the blade with the square (fig. L).



- 13. Loosen the Phillips head screw holding the bevel scale pointer (8) and adjust the position of the pointer so that it accurately indicates zero on the scale. Retighten the screw (fig. M).
- 14. Retighten the bevel lock (7) and jam nut holding the 0° bevel adjustment screw (10).

Note. The above procedure can also be used to check the angle of the saw blade to the table at a 45° bevel angle. The 45° bevel adjustment screw (9) is on the opposite side of the saw arm.

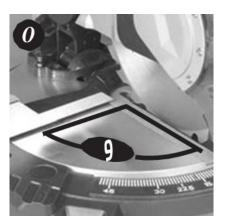


Place the fence square with the table

- 1. Make sure the machine is unplugged.
- 2. Push the saw arm (1) down to its lowest position and engage the spindle (2) to hold the saw arm in the transport position.
- 3. Loosen the miter locks (15).
- 4. Rotate the table (12) until the pointer is positioned at 0°.
- 5. Tighten the miter locks (15).
- 6. Using a 5mm hex wrench, loosen the two screws that hold the depth stop (11) to the base (fig. N).



7. Place a square against the guide or depth stop (11) and next to the blade (fig. O).



- 8. Adjust the fence (11) until it is square with the blade.
- 9. Tighten the screws that hold the guide (11).
- 10. Loosen the Phillips head screw holding the miter scale pointer (13) and adjust it so that it accurately indicates the zero position on the miter scale (fig. P).



11. Retighten the screw that holds the miter scale indicator.

Change a blade

Attention



Never try to use a blade larger than the rated capacity of the saw. It could come into contact with the blade guards. Never use a blade that is too thick to allow the outer blade washer to engage with the flats on the shaft. That will not let the blade screw properly secure the blade on the shaft. Do not use the saw to cut metal or masonry. Make sure any arbor spacers and rings that may be required fit the arbor and mounted blade.

- 1. Make sure the electrical plug is disconnected from the outlet.
- 2. Press down on the work handle (3) and pull on the shaft (2) to disengage the saw arm (1).
- 3. Raise the saw arm (1) to its highest position.
- 4. Using a Phillips head screwdriver, loosen and remove the Phillips head screw that secures the guard retraction arm (6) to the rotary blade guard (5) (fig. Q).
- 5. Using a Phillips screwdriver, loosen the Phillips head screw that secures the blade bolt cover (19) (fig. R).
- 6. Pull the rotary blade guard (5) down and then rotate it up along with the blade bolt cover (19). When the rotary blade guard (5) is placed over the upper stationary knife guard (4), the blade bolt can be accessed (fig. S).



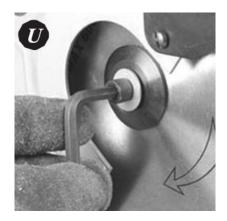




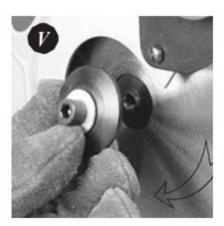
7. Hold the swivel guard (5) up and press the spindle lock button (18). Rotate the blade until the shaft locks (fig. T).



8. Use the 6mm hex key provided to loosen and remove the blade bolt. (Loosen clockwise as the blade screw has a left hand thread) (fig. U).



- 9. Remove the flat washer, outer blade washer and blade (fig. V).
- 10. Clean the inner blade washer and the outer blade washer where they contact the blade with a drop of oil.
- 11. Fit the new blade onto the shaft taking care that the inner blade washer is behind the blade (fig. W).







Caution

To ensure proper blade rotation, always install the blade with the blade teeth and the printed arrow on the side of the blade pointing down. The direction of blade rotation is also marked with an arrow on the upper blade guard.

- 12. Replace outer blade washer.
- 13. Depress shaft lock button (26) and replace flat washer and blade bolt.
- 14. Use the 6mm hex key to tighten the blade bolt securely (tighten counterclockwise).
- 15. Lower the blade guard, hold the rotating lower blade guard (12) and blade bolt cover (14) in position and tighten the set screw to secure the blade bolt cover in position .
- 16. Replace the guard retraction arm (6) and secure it on the rotating blade guard (5).
- 17. Check that the blade guard works properly and covers the blade while the saw arm is lowered.
- 18. Plug the saw into the power source and run the blade to make sure it is working properly.

Miter Saw Uses

Cross-section

A cross cut is made by cutting along the grain of the workpiece. A 90° cross cut is made with the miter table at 0°. Miter crosscuts are made with the table set at a non-zero angle (fig. X).



- 1. Pull the shaft (2) and raise the saw arm (1) to its maximum height.
- 2. Loosen the miter locks (15).
- 3. Rotate the miter table (12) until the pointer lines up with the desired angle.
- 4. Retighten the miter locks (15) (fig. Y).





Warning

Be sure to tighten the miter locks before making a cut. Failure to do so could cause the table to move during the cut and cause serious personal injury.

- 5. Lay the workpiece flat on the table with one edge firmly against the fence (11). If the board is warped, place the convex side against the guide (11). If the concave side is placed against the fence, the board could break and jam the blade.
- 6. When cutting long pieces of wood, support the opposite end of the wood 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 verify that there are no problems.
- 8. Firmly hold the work handle (3) and pull the switch trigger (16). Let the blade reach full speed.

- 9. Press the release latch (17) and slowly lower the blade into and through the workpiece.
- 10. Release the switch trigger (16) and allow the saw blade to stop rotating before removing the blade from the workpiece. Wait until the blade stops before removing the work piece.

Bevel cut

A bevel cut is made by cutting along the grain of the workpiece with the blade angled toward the fence and miter table. The miter table is set to the zero degree position and the blade is set at an angle between 0° and 45° (fig. Z).



- 1. Pull the shaft (2) and raise the saw arm to its maximum height.
- 2. Loosen the miter locks (15).
- 3. Rotate the miter table (12) until the pointer lines up with zero on the miter scale (13).
- 4. Retighten the miter locks (15).



Warning

Be sure to tighten the miter locks before making a cut. Failure to do so could cause the table to move during the cut and cause serious personal injury.

- 5. Loosen the bevel lock (7) and move the saw arm (1) to the left to the desired bevel angle (between 0° and 45°). Tighten the bevel lock (7).
- 6. Lay the workpiece flat on the table with one edge firmly against the fence (11). 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 wood, support the opposite end of the wood 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 verify that there are no problems.
- 9. Hold the work handle (3) firmly and pull the switch trigger (16). Let the blade reach full speed.
- 10. Press the release latch (17) and slowly lower the blade into and through the workpiece.
- 11. Release the switch trigger (16) and allow the saw blade to stop rotating before removing the blade from the workpiece. Wait until the blade stops before removing the work piece.

Compound miter cut

A compound miter cut involves using a miter angle and a bevel angle at the same time. It is used for making picture frames, cutting moldings, making boxes with sloping sides,

and for framing ceilings. Always make a test cut on a piece of scrap wood before cutting good material (fig. a).



- 1. Pull the shaft (2) and raise the saw arm to its maximum height.
- 2. Loosen the miter locks (15).
- 3. Rotate the miter table (12) until the pointer lines up with the desired angle on the miter scale (13).
- 4. Retighten the miter locks (15).



Warning

Be sure to tighten the miter lock before making a cut. Failure to do so could cause the table to move during the cut and cause serious personal injury.

- 5. Loosen the bevel lock (7) and move the saw arm (1) to the left to the desired bevel angle (between 0° and 45°). Tighten the bevel lock (7).
- 6. Lay the workpiece flat on the table with one edge firmly against the fence (11). 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 wood, support the opposite end of the wood 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 verify that there are no problems.
- 9. Hold the work handle (3) firmly and squeeze the switch trigger (16). Let the blade reach full speed.
- 10. Press the release latch (17) and slowly lower the blade into and through the workpiece.
- 11. Release the switch trigger (16) and allow the saw blade to stop rotating before removing the blade from the workpiece. Wait until the blade stops before removing the work piece.

Environment

Maintenance

Warning

Always make sure the tool is turned off and the plug is removed from the outlet before making any adjustments or maintenance procedures.

Maintenance of the power cord

If it is necessary to replace the power cord, the task must be carried out by the manufacturer, the manufacturer's agent or an authorized service center to avoid a safety hazard.

Cleaning

- 1. Keep the air outlets of the tool unobstructed and clean at all times.
- 2. Remove dust and dirt regularly. Cleaning is best done with a soft brush or cloth.
- 3. Relubricate all moving parts at regular intervals.
- 4. Never use caustic agents to clean plastic parts.

Caution

Do not use cleaning agents to clean the plastic parts of the saw. A mild detergent on a damp cloth is recommended.

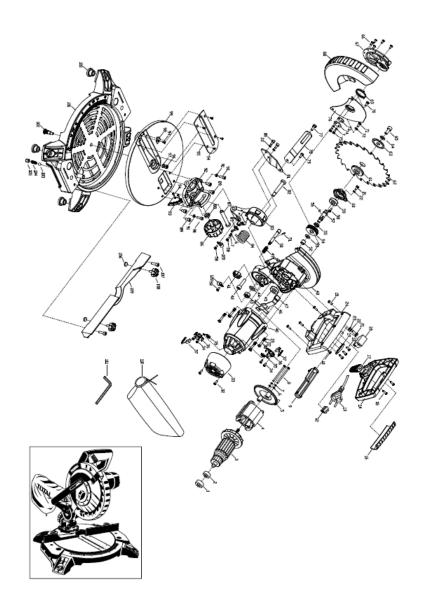
General inspection

Periodically check that all fixing screws are tight. They can vibrate loose over time.

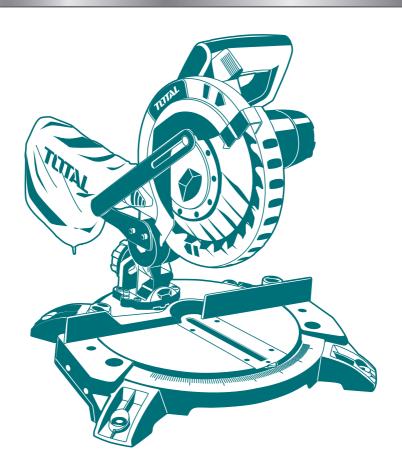
Environmental Protection

Recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging must be sorted, taken to the local recycling center and disposed of in an environmentally safe manner.

Exploded view







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