



说明书材质要求：105g 有光铜版纸	说明书成品尺寸：105*143mm
Black（单色印刷）	
折叠方式：骑马订	备注：
特别注意：此页内容不印刷	

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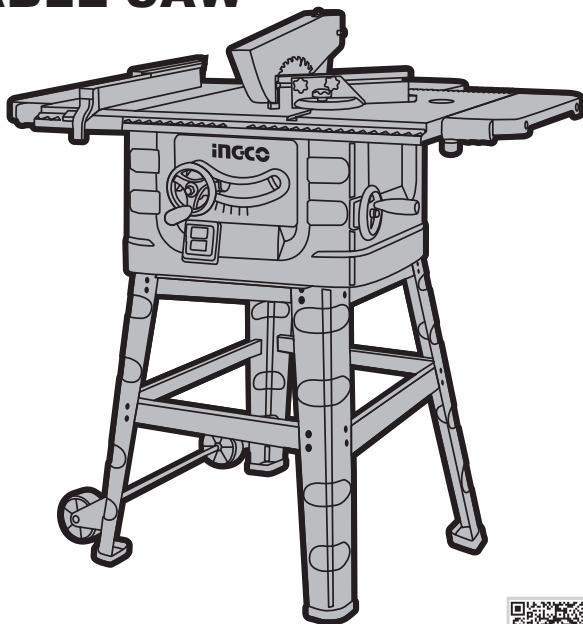
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	0324.V01	2024.03.06	YJJ
	版本号	日期	设计师

INGCO

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**PRODUCT
MANUAL**

TABLE SAW



TS180028 TS180028xy UTS180028 UTS180028xy
x(blank,1,2,3,4,5,6,7,8,9,E,S,A,M)
y(blank,-1,-2,-3,-4,-5,-6,-7,-8,-9,E,S,A,M)



SCAN FOR VIDEO

GENERAL SAFETY WARNINGS** WARNING****Work area safety**

- a) **Keep work area clean and well lit. Cluttered and 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. Distractions can control.**

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.

Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool.** Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while

operating power tools may result in serious personal injury.

- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing 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.** Always keep proper footing and balance. This enables better control of the power tool in unexpected situations.
- f) **Dress properly.** Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools. Check for misalignment or binding of moving parts,**

breakage of parts and any other condition that may affect the power tools 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, considering 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) **Have your power tool serviced by a qualified repair person using only identical.** This will ensure that the safety of the power tool is maintained.

Service

- a) **Have your power tool serviced by a qualified repair person using only identical.** This will ensure that the safety of the power tool is maintained.

THE SYMBOLS IN INSTRUCTION MANUAL

	Double insulated for additional protection
	Read the instruction manual before using.
	CE conformity.
	Safety alert. Please only use the accessories supported by the manufacturer.
	Wear safety glasses, hearing protection and dust mask.
	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.

ADDITIONAL SAFETY INSTRUCTIONS FOR TABLE SAWS

Guarding related warnings

- a) **Keep guards in place. Guards must be in working order and be properly mounted.** A guard that is loose, damaged, or is not functioning correctly must be repaired or replaced.
- b) **Always use saw blade guard, riving knife and anti-kickback device for every through-cutting operation.** For through-cutting operations where the saw blade cuts completely through the thickness of the workpiece, the guard and other safety devices help reduce the risk of injury.
- c) **Immediately reattach the guarding system after completing an operation (such as rabbeting, adding or resawing cuts) which requires removal of the guard, riving knife and/or anti- kickback device.** The guard, riving knife, and anti- kickback device help to reduce the risk of injury.
- d) **Make sure the saw blade is not contacting the guard, riving knife or the workpiece before the switch is turned on.** Inadvertent contact of these items with the saw blade could cause a hazardous condition.
- e) **Adjust the riving knife as described in this instruction manual.** Incorrect spacing, positioning and alignment can make the riving knife ineffective in reducing the likelihood of kickback.
- f) **For the riving knife and anti-kickback device to work, they must be engaged in the workpiece.** The riving knife and anti-kickback device are ineffective when cutting workpieces that are too short to be engaged with the riving knife and anti- kickback device. Under these conditions a kickback cannot be prevented by the riving knife and antikickback device.
- g) **Use the appropriate saw blade for the riving knife.** For the riving knife to function properly, the saw blade diameter must match the appropriate riving knife and the body of the saw blade must be thinner than the thickness of the riving knife and the cutting width of the saw blade must be wider than the thickness of the riving knife.

Cutting procedures warnings

DANGER

Never place your fingers or hands in the vicinity or in line with the saw blade.

- a) A moment of inattention or a slip could direct your hand towards the saw blade and result in serious personal injury.

- b) Feed the workpiece into the saw blade or cutter only against the direction of rotation. Feeding the workpiece in the same direction that the saw blade is rotating above the table may result in the workpiece, and your hand, being pulled into the saw blade.
- c) Never use the mitre gauge to feed the workpiece when ripping and do not use the rip fence as a length stop when cross cutting with the mitre gauge. Guiding the workpiece with the rip fence and the mitre gauge at the same time increases the likelihood of saw blade binding and kickback.
- d) When ripping, always apply the workpiece feeding force between the fence and the saw blade. Use a push stick when the distance between the fence and the saw blade is less than 150 mm, and use a push block when this distance is less than 50 mm. "Work helping" devices will keep your hand at a safe distance from the saw blade.
- e) Use only the push stick provided by the manufacturer or constructed in accordance with the instructions. This push stick provides sufficient distance of the hand from the saw blade.
- f) Never use a damaged or cut push stick. A damaged push stick may break causing your hand to slip into the saw blade.
- g) Do not perform any operation "freehand". Always use either the rip fence or the mitre gauge to position and guide the workpiece. "Freehand" means using your hands to support or guide the workpiece, in lieu of a rip fence or mitre gauge. Freehand sawing leads to misalignment, binding and kickback.
- h) Never reach around or over a rotating saw blade. Reaching for a workpiece may lead to accidental contact with the moving saw blade.
- i) Provide auxiliary workpiece support to the rear and/or sides of the saw table for long and/or wide workpieces to keep them level. A long and/or wide workpiece has a tendency to pivot on the table's edge, causing loss of control, saw blade binding and kickback.
- j) Feed workpiece at an even pace. Do not bend or twist the workpiece. If jamming occurs, turn the tool off immediately, unplug the tool then clear the jam. Jamming the saw blade by the workpiece can cause kickback or stall the motor.
- k) Do not remove pieces of cut-off material while the saw is running. The material may become trapped between the fence or inside the saw blade guard and the saw blade pulling your fingers into the saw blade. Turn the saw off and wait

until the saw blade stops before removing material.

- l) Use an auxiliary fence in contact with the table top when ripping workpieces less than 2 mm thick. A thin workpiece may wedge under the rip fence and create a kickback.

Kickback causes and related warnings

Kickback is a sudden reaction of the workpiece due to a pinched, jammed saw blade or misaligned line of cut in the workpiece with respect to the saw blade or when a part of the workpiece binds between the saw blade and the rip fence or other fixed object.

Most frequently during kickback, the workpiece is lifted from the table by the rear portion of the saw blade and is propelled towards the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- a) **Never stand directly in line with the saw blade. Always position your body on the same side of the saw blade as the fence.** Kickback may propel the workpiece at high velocity towards anyone standing in front and in line with the saw blade.
- b) **Never reach over or in back of the saw blade to pull or to support the workpiece.** Accidental contact with the saw blade may occur or kickback may drag your fingers into the saw blade.
- c) **Never hold and press the workpiece that is being cut off against the rotating saw blade.** Pressing the workpiece being cut off against the saw blade will create a binding condition and kickback.
- d) **Align the fence to be parallel with the saw blade.** A misaligned fence will pinch the workpiece against the saw blade and create kickback.
- e) **Use a feather board to guide the workpiece against the table and fence when making non- through cuts such as rabbeting, adding or resawing cuts.** A feather board helps to control the workpiece in the event of a kickback.
- f) **Use extra caution when making a cut into blind areas of assembled workpieces.** The protruding saw blade may cut objects that can cause kickback.
- g) **Support large panels to minimize the risk of saw blade pinching and kickback.** Large panels tend to sag under their own weight. Support(s) must be placed under all portions of the panel overhanging the table top.

- h) **Use extra caution when cutting a workpiece that is twisted, knotted, warped or does not have a straight edge to guide it with a mitre gauge or along the fence.** A warped, knotted, or twisted workpiece is unstable and causes misalignment of the kerf with the saw blade, binding and kickback.
- i) **Never cut more than one workpiece, stacked vertically or horizontally.** The saw blade could pick up one or more pieces and cause kickback.
- j) **When restarting the saw with the saw blade in the workpiece, center the saw blade in the kerf so that the saw teeth are not engaged in the material.** If the saw blade binds, it may lift up the workpiece and cause kickback when the saw is restarted.
- k) **Keep saw blades clean, sharp, and with sufficient set. Never use warped saw blades or saw blades with cracked or broken teeth.** Sharp and properly set saw blades minimize binding, stalling and kickback.

Table saw operating procedure warnings

- a) **Turn off the table saw and disconnect the power cord when removing the table insert, changing the saw blade or making adjustments to the riving knife, antikickback device or saw blade guard, and when the machine is left unattended.** Precautionary measures will avoid accidents.
- b) **Never leave the table saw running unattended. Turn it off and don't leave the tool until it comes to a complete stop.** An unattended running saw is an uncontrolled hazard.
- c) **Locate the table saw in a well-lit and level area where you can maintain good footing and balance. It should be installed in an area that provides enough room to easily handle the size of your workpiece.** Cramped, dark areas, and uneven slippery floors invite accidents.
- d) **Frequently clean and remove sawdust from under the saw table and/or the dust collection device.** Accumulated sawdust is combustible and may self-ignite.
- e) **The table saw must be secured.** A table saw that is not properly secured may move or tip over.
- f) **Remove tools, wood scraps, etc. from the table before the table saw is turned on.** Distraction or a potential jam can be dangerous.
- g) **Always use saw blades with correct size and shape (diamond versus round) of arbor holes.** Saw blades that do not match the mounting hardware

of the saw will run off-center, causing loss of control.

- h) **Never use damaged or incorrect saw blade mounting means such as flanges, saw blade washers, bolts or nuts.** These mounting means were specially designed for your saw, for safe operation and optimum performance.
- i) **Never stand on the table saw, do not use it as a stepping stool.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
- j) **Make sure that the saw blade is installed to rotate in the proper direction. Do not use grinding wheels, wire brushes, or abrasive wheels on a table saw.** Improper saw blade installation or use of accessories not recommended may cause serious injury.

WARNING

The equipment and packaging material are not toys. Do not let children play with plastic bags, foils or small parts. There is a danger of swallowing or suffocating!

INTENDED USE

The bench-type circular saw is designed for the slitting and cross-cutting (only with the cross stop) of all types of timber commensurate with the machine's size. The equipment is not to be used for cutting any type of round wood.

The equipment is to be used only for its prescribed purpose. Any other use is deemed to be a case of misuse. The user / operator and not the manufacturer will be liable for any damage or injuries of any kind caused as a result of this.

Please note that our equipment has not been designed for use in commercial, trade or industrial applications. Our warranty will be voided if the machine is used in commercial, trade or industrial businesses or for equivalent purposes.

The equipment is to be operated only with suitable saw blades (saw blades made of HM or CV) It is prohibited to use any type of HSS saw blade and cutting-off wheel.

To use the equipment properly you must also observe the safety information, the assembly instructions and the operating instructions to be found in this manual.

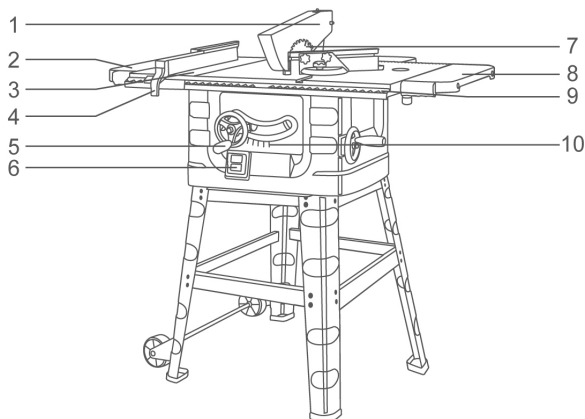
All persons who use and service the equipment have to be acquainted with these operating instructions and must be informed about the equipment's potential hazards. It is also imperative to observe the accident prevention regulations in force in your area. The same applies for the general rules of health and safety at work.

The manufacturer will not be liable for any changes made to the equipment nor for any damage resulting from such changes. Even when the equipment is used as prescribed it is still impossible to eliminate certain residual risk factors.

The following hazards may arise in connection with the machine's construction and design:

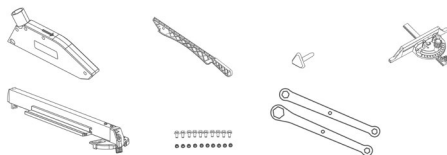
1. Contact with the saw blade in the uncovered saw zone.
2. Reaching into the running saw blade (cut injuries).
3. Kick-back of workpieces and parts of work- pieces.
4. Saw blade fracturing.
5. Catapulting of faulty carbide tips from the saw blade.
6. Damage to hearing if essential ear-muffs are not used.
7. Harmful emissions of wood dust when used in closed rooms.

SPECIFICATIONS



- | | |
|-------------------------|-------------------------------------|
| 1. Blade guard | 6. Hight/ Bevel adjusting handwheel |
| 2. Left extension table | 7. Riving knife |
| 3. Push sliding table | 8. Rip fence |
| 4. Mitre gauge | 9. Grass catcher |
| 5. Switch | 10. Bevel scale |

Accessories



Technical specifications

Model No.	TS180028 TS180028xy	UTS180028 UTS180028xy
Rated Voltage	220-240V~50/60Hz	110-120V~60Hz
Rated Power	1800W	1800W
Blade size	254 x16mm	10"x5/8"
No load speed (/min)	4500	4500
Max.cutting capacity	85mm (90°)x60mm(45°)	3-11/32"x2-3/8"
Blade tilting range	0°-45°	0°-45°
Main table size	722mm×520mm	28-27/64"×20-30/64"
Extension table size(right)	440mm×125mm	17-21/64"×5"
Safety class	 I	 / II

Model No. Note: x (blank, 1,2,3,4,5,6,7,8,9,E,S,A,M); y (blank, -1,-2,-3,-4,-5,-6,-7,-8,-9,E,S,A,M)

Accessories

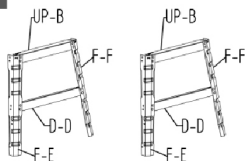
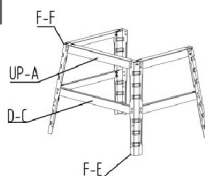
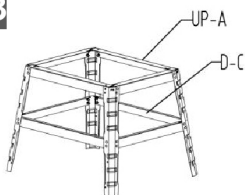
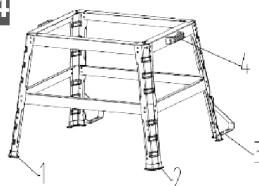
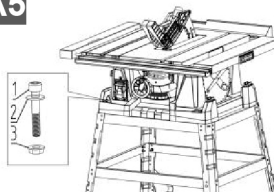
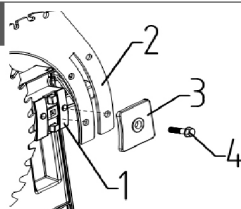
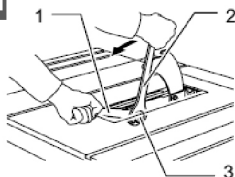
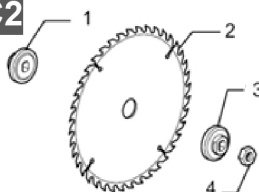
WARNING

These accessories or attachments are recommended for use with your tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

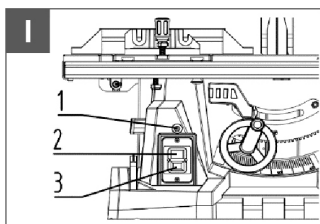
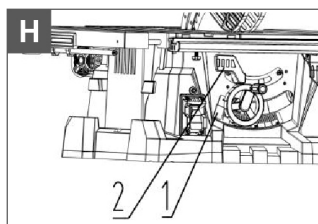
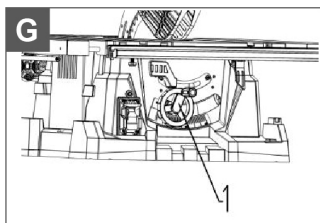
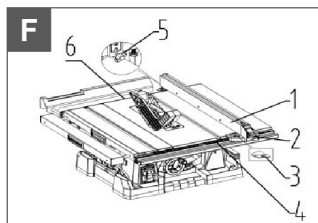
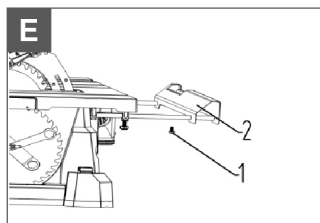
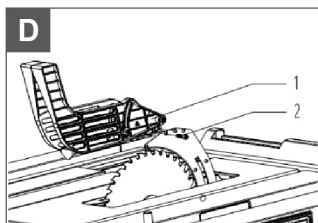
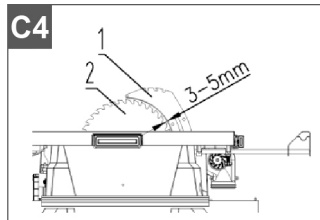
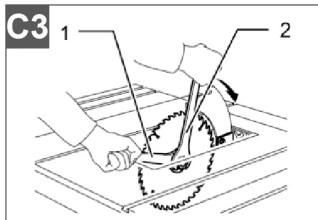
If you need any assistance for more details regarding these accessories, ask your local Service Center.

- Saw blades 1pcs
- Rip fence 1pcs
- Miter gauge 1pcs
- Wrench 1pcs
- Open-end wrench 1pcs
- Stand set 1set

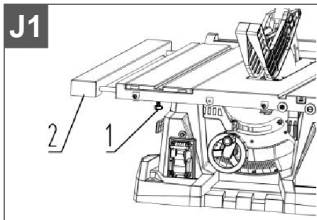
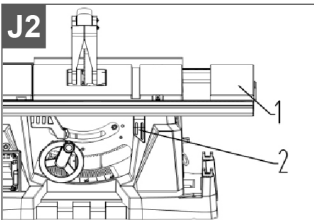
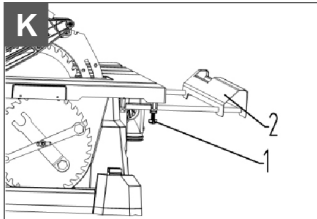
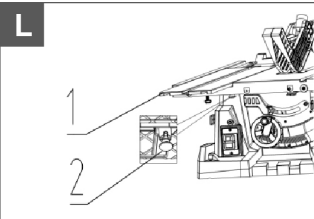
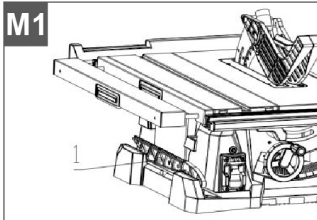
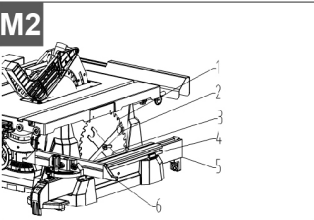
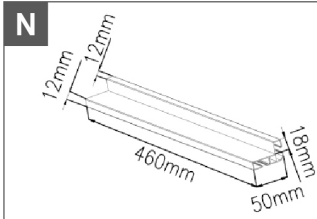
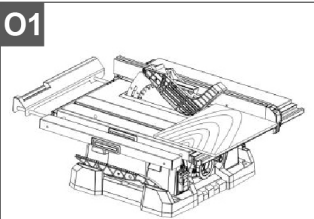
OPERATION PICTURE

A1

A2

A3

A4

A5

B

C1

C2


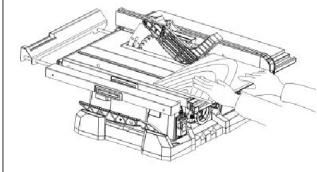
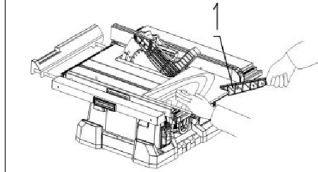
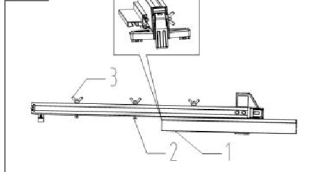
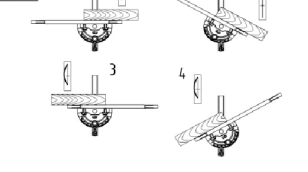
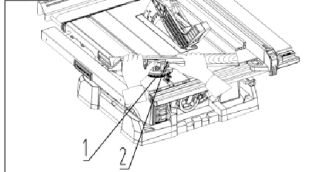
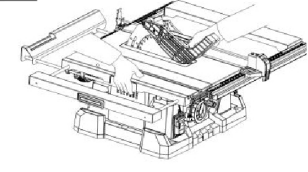
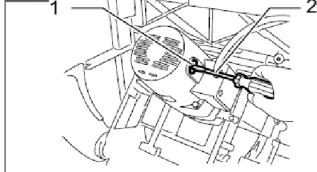
OPERATION PICTURE



OPERATION PICTURE

J1

J2

K

L

M1

M2

N

O1


OPERATION PICTURE

O2

O3

O4

P

Q

R

S


OPERATION

WARNING

Misuse or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

Installation

WARNING

- Always be sure that the tool is switched off and unplugged before carrying out any work on the tool.
- The accessories are not installed on the tool when it is shipped from the factory. Please follow below steps to install before using.

1. Installation of saw stand and positioning table saw

Installation of saw stand

Each stand component has a corresponding Alphabetical number.

a) Use the left and right legs F-F and F-E, the upper short rod UP-B and the lower short rod D-D to place as below drawing. and fix the two holes at the joint with half-round head square neck screws and flange locknuts (see Figure A1).

Repeat the action to complete the installation of two side frames.

b) Place the two side frames in opposite directions, connect the side frames with the upper long rod UP-A and the lower long rod D-C, and fix the two holes at the joint with half-round head square neck screws and flange locknuts(see Figure A2).

c) Connect another set of upper long rod UP-A and lower long rod D-C to the side frame and fix them with half-round head square neck screws and flange lock nuts(see Figure A3).

d) At the back side, install the back support feet on the left and right legs F-F and F-E, and fix them with half-round head square neck screws and flange lock nuts. Put the corresponding rubber feet on the four legs. On both sides fix handle to upper short rod UP-B with M5 screw to complete the installation of the saw stand (see Figure A4).

Figure A4: 1. F-E rubber feet; 2. F-F rubber feet; 3. Back support feet; 4. Handle.

e) When securing the table saw on the work bench or saw stand, make sure that there is an opening in the top of the work bench the same size as the opening in the bottom of the table saw so the sawdust can drop through (see Figure A5).

Dia A5: 1. 8mm mounting bolt; 2. 8 mm washer; 3. 8mm nut.

f) If during operation there is any tendency for the table saw to tip over, slide or move, the work bench or table saw stand should be secured to the floor.

2. Riving Knife Positioning and Blade installing

Riving Knife Positioning

WARNING

Always be sure that the tool is switched off and unplugged before installing or removing the riving knife.

Figure B: 1. Riving knife bracket; 2. Riving knife; 3. Riving knife cover; 4. Hex bolt. Remove table insert from saw table (see Figure B).

Raise the seat position as high as it with handle wheel, loose the hex bolt. Slide down the riving knife between bracket and cover, and align the two holes in the bottom of riving knife with two pins of the bracket.

Tighten the hex bolt.

Installing or removing saw blade

WARNING

- **Always be sure that the tool is switched off and unplugged before installing or removing the blade.**
- **Use the wrench provided to install or remove the blade. Failure to do so may result in overtightening or insufficient tightening of the hex bolt. This could cause an injury.**
- **Be sure to hold the hex nut carefully with the wrench.**

If your grip should slip, the wrench may come off the hex nut, and your hand could strike the sharp blade edges (see Figure C1).

Figure C1: 1. Open-end wrench; 2. Wrench; 3. Hex nut; 4. Hex bolt.

Hold the outer flange with the wrench and loosen the hex nut counterclockwise with the wrench. Then remove the outer flange (see Figure C2).

Figure C2: 1. Inner flange; 2. Saw blade; 3. Outer flange; 4. Hex nut.

Assemble the inner flange, blade, outer flange and hex nut onto the arbor, making sure that the teeth of the blade are pointing down at the front of the table.

Always install the hex nut with its recessed side facing the outer flange (see Figure C3).

Figure C3: 1. Open-end wrench; 2. Wrench.

To secure the blade in place, hold the outer flange with the open-end wrench, then tighten the hex nut clockwise with the wrench. Be sure to tighten the hex nut securely.

⚠ CAUTION

- Keep the flange surface clean of dirt or other adhering matter; it could cause blade slippage. Be sure that the blade is installed so that the teeth are aligned in the cutting (turning) direction.
- Always make sure the blade is properly aligned with the riving knife. If the blade and the riving knife are not aligned this could cause interference with the feeding and/or the pinching of the work piece resulting in a kickback situation and possible serious personal injury.
- Never make any adjustments while the tool is running. Always disconnect the tool before making any adjustments, accidental startup of the tool could result in serious personal injury.

Adjust the blade and the riving knife to be properly aligned, and leave 3-5mm interval between blade and riving knife. Adjust the riving knife according to the situation and tighten the hex bolts to fix riving knife (see Figure C4).

Figure C4: 1. Riving knife; 2. Blade.

Install the table insert on the table and check whether the saw blade is working smoothly before cutting.

3. Blade Guard Installation**Riving Knife Positioning****⚠ WARNING**

Raise the blade up to maximum elevation before install blade guard.

Figure D: 1. Blade guard; 2. Hex bolt.

Put blade guard into the groove of riving knife. Use the included wrench to tighten the hex bolt to fix the saw blade guard (see Figure D).

4. Stop screw installation

Figure E: 1. Stop screw; 2. Slide shaft.

If there's back scale, tight stop screw to slide shaft of back sub table (see Figure E).

5. Installing and adjusting rip fence**⚠ WARNING**

Always be sure the tool is switched off and unplugged before attempting to perform the installation and adjustment of the rip fence.

Figure F: 1. Rip fence; 2. Lock lever; 3. Pointer; 4. Front scale;
5. Back lock screw; 6. Back scale.

Install the rip fence so that the fence holder engages with the near most guide rail. To secure the rip fence, pivot fully the lever on the fence holder. To check to be sure that the rip fence is parallel with the blade, secure the rip fence 2 - 3 mm (5/64" - 1/8") from the blade (see Figure F).

Raise the blade up to maximum elevation. Adjust the rip fence, align the front and back pointer in 0 scale. Tighten the back lock screw and press down the lock lever.

6. Dust chute connection

WARNING

To prevent fire hazard, clean and remove sawdust from under the saw frequently.

Functional description

CAUTION

Always be sure that the tool is switched off and unplugged before adjusting or checking function on the tool.

1. Adjusting the depth of cut

Figure G: 1. Handle wheel.

The depth of cut may be adjusted by turning the handle wheel.

Turn the handle clockwise to raise the blade or counterclockwise to lower it.

NOTE

Use a shallow depth setting when cutting thin materials in order to obtain a cleaner cut.

2. Adjusting the bevel angle

Figure H: 1. Arrow pointer; 2. Lock lever.

Loosen the lock lever counterclockwise and turn the hand wheel until the desired angle (0° - 45°) is obtained.

The bevel angle is indicated by the arrow pointer. After obtaining the desired angle, tighten the lock lever clockwise to secure the adjustment (see Figure H).

CAUTION

After adjusting the bevel angle, be sure to tighten the lock lever securely.

3. Switch action and overload reset button

CAUTION

After the tool is switched off, always plug off the tools.

Figure I: 1. Restart button; 2. Switch ON button; 3. Switch OFF button.

To start the tool, press the switch ON button. To stop the tool, press the switch OFF button.

This saw has an overload reset button that relay the motor after it shuts off due to overloading.

If the motor stops during operation, unplug the saw. Wait about five minutes for the motor to cool, plug in the saw, push in the reset button and turn switch ON to restart tool(see Figure I).

4. Sub table

This tool is provided with sub table on the left side and sub table on the right side of the main table.

To use the sub table on the left side, loosen the screw on the left side, pull out the table fully and then tighten the screw (see Figure J1).

Figure J1: 1. Screw; 2. Sub table on the left side.

To use the sub table on the right side, pull up the lock lever on the right side, pull out the table fully and then press down the lever (see Figure J2).

Figure J2: 1. Sub table on the right side; 2. Lock lever.

5. Sub table (back)

Figure K: 1. Screws; 2. Sub table (back).

To use the sub table (back), loosen the screws on the left and right sides under the table and pull it out backwards to the desired length. At the desired length, tighten the screw securely (see Figure K).

6. Slide table

WARNING

Always be sure that lock pin is in vertical position after using the slide table.

Figure L: 1. Slide table; 2. Lock pin.

This tool is provided with the slide table on the left side. The slide table slides back and forth. Pull down the lock pin and make it horizontal position. Hold work piece firmly with the miter gauge using a clamp on the miter gauge and slide the work

piece together with the slide table at the time of cutting operation (see Figure L).

7. Storage of blade guards and accessories

Figure M1: 1. Push stick.

Figure M2: 1. Saw blade; 2. Wrench; 3. Open- end wrench; 4. Auxiliary fence;
5. Rip fence; 6. Miter scale.

Push sticker can be stored on the left side of the base. Saw blade, wrenches, auxiliary fence, rip fence and miter gauge can be stored at the right side of the base

Operation

CAUTION

- Always use "work helpers" such as push sticks when there is a danger that your hands or fingers will come close to the blade.
- Always hold the work piece firmly with the table and the rip fence or miter gauge. Do not bend or twist it while feeding. If the work piece is bent or twisted, dangerous kickbacks may occur.
- NEVER withdraw the work piece while the blade is running. If you must withdraw the work piece before completing a cut, first switch the tool off while holding the work piece firmly. Wait until the blade has come to a complete stop before withdrawing the work piece.
- Failure to do so may cause dangerous kickbacks.
- NEVER remove cut-off material while the blade is running.
- NEVER place your hands or fingers in the path of the saw blade. Be especially careful with bevel cuts.
- Always secure the rip fence firmly, or dangerous kickbacks may occur.
- Always use "work helpers" such as push sticks and push blocks when cutting small or narrow work pieces, or when the dado head is hidden from view while cutting.

1. Auxiliary fence

Push sticks or auxiliary fence are types of "work helpers". Use them to make safe, sure cuts without the need for the operator to contact the blade with any part of the body (Figure N).

2. Ripping

CAUTION

- When ripping, remove the miter gauge from the table.

- **When cutting long or large work pieces, always provide adequate support behind the table.**

Do not allow a long board to move or shift on the table. This will cause the blade to bind and increase the possibility of kickback and personal injury. The support should be at the same height as the table.

- Adjust the depth of cut a bit higher than the thickness of the work piece.
 - Position the rip fence to the desired width of rip and lock in place by pivoting the grip. Before ripping, make sure the rear end of the rip fence is secured firmly.
 - Turn the tool on and gently feed the work piece into the blade along with the rip fence.
- When the width of rip is 150 mm (6") and wider, carefully use your right hand to feed the work piece. Use your left hand to hold the work piece in position against the rip fence (Figure O1).
 - When the width of rip is 65 mm - 150 mm (2-1/2" - 6") wide, use the push stick to feed the work piece (Figure O2).
 - When the width of rip is narrower than 65 mm (2- 1/2"), the push stick cannot be used because the push stick will strike the blade guard. Use the auxiliary fence and push block. Put in three half-round head square neck bolt into the rip fence, slide the auxiliary fence to the rip fence with its groove, tighten the wing nut to lock auxiliary fence(Figure O3).
- Figure O3: 1. Push stick.
- Feed the work piece by hand until the end is about 25 mm (1") from the front edge of the table. Continue to feed using the push stick on the top of the auxiliary fence until the cut is complete (Figure O4).
- Figure O4: 1. Auxiliary fence; 2. Half- round head square neck bolt; 3. Wing nut.

3. Cross cutting

CAUTION

- **When making a crosscut, remove the rip fence from the table.**
- **When cutting long or large work pieces, always provide adequate support to the sides of the table. The support should be at the same height as the table.**
- **Always keep hands away from path of blade.**

Miter gauge

Figure P: 1. Cross cutting; 2. Mitering; 3. Bevel cutting; 4. Compound mitering (angles)

Use the miter gauge for the 4 types of cutting shown in the figure (Figure P).

⚠ CAUTION

- **Secure the knob on the miter gauge carefully.**
- **Avoid movement of the work piece and gauge by firmly securing the work piece and gauge, especially when cutting at an angle.**
- **Never hold or grasp the intended "cut-off" portion of the work piece.**

Use of miter gauge

Figure Q: 1. Miter gauge; 2. Knob.

Slide the miter gauge into the thick grooves in the table. Loosen the knob on the gauge and align to desired angle (0° to 60°). Bring stock flush up against fence and slide table, secure it with the clamp on the miter gauge and feed gently forward into the blade (Figure Q).

4. Carrying tool

⚠ CAUTION

Always be sure that the tool is switched off and unplugged, and the blade guard is assembled well before carrying.

Holding the position as the drawing shows to carry table saw (Figure R).

Maintenance

⚠ WARNING

Always be sure that the tool is switched off and unplugged before attempting to perform inspection or maintenance.

1. Cleaning

Clean out sawdust and chips from time to time. Carefully clean the blade guard and moving parts inside the table saw.

2. Lubrication

To keep the table saw in tip-top running condition, and to assure maximum service life, oil or grease the moving parts and rotating parts from time to time.

Lubrication places:

- Threaded shaft to elevate the blade
- Hinge to rotate the frame
- Elevation guide shafts on motor

- Gear to elevate the blade

3. Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to 3 mm (1/8") in length. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes. Use a screwdriver to remove the brush holder caps. To replace the carbon brushes, remove the blade guard and blade and then loosen the lock lever, tilt the saw head and secure it at 45° bevel angle. Carefully lay the tool on itself backward. Then loosen the brush holder cap. Remove the worn carbon brushes, insert the new ones and secure the brush holder caps.

After replacing brushes, plug in the tool and break in brushes by running tool with no load for about 10 minutes. Then check the tool while running and electric brake operation when releasing the switch trigger. If electric brake is not working well, ask your local service center to repair.

Figure S: 1. Brush holder cap; 2. Screw driver.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by service centers, always using original replacement parts (Figure S).

MAINTENANCE&MALFUNCTIONS

Possible malfunctions and methods of their eliminations

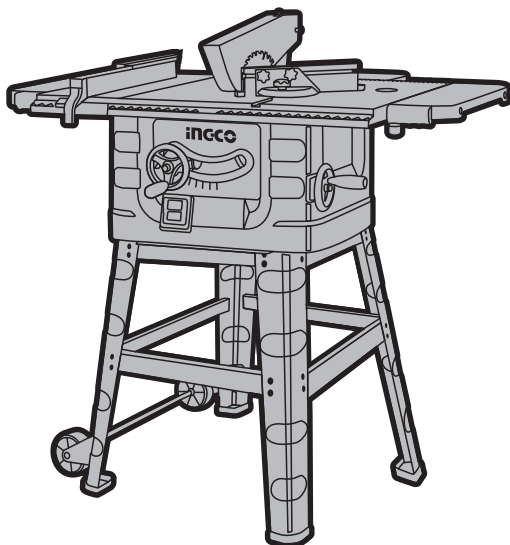
Malfunction	Probable causes	Actions
When the machine is turned on, the electric motor does not work.	● Switch failure ● The power cord or wiring is broken, power cord plug malfunction; ● No brush contact with the collector; ● Wear/damage of brushes	Disconnect the machine from the mains and contact a qualified specialist.
Formation of a circular fire on the collector	● Brush wear/damage of the brush holder; ● Malfunction in the armature coil	Disconnect the machine from the mains and contact a qualified specialist. Please don't repair the machine by your own.
When working, smoke or the smell of burning insulation appears from the ventilation openings.	● Malfunction in the electric motor coil; ● Malfunction of the electrical part of the tool.	
Increased noise in the gearbox	● Wear/breakage of gears or bearings	
When the machine is turned on, the spindle does not rotate	● Gearbox failure.	

Critical state criteria

Critical state criteria	Probable causes	Actions
Cracks on the surfaces of bearing and housing parts	Fatigue deformation of metal	Disconnect the machine from the mains and contact a qualified specialist. Please don't repair the machine by your own.
The power cord or plug is damaged	Overload or breakage	
Excessive wear or damage to the motor or reductor mechanism, or a combination of signs	Fatigue deformation of metal	

Critical state criteria

List of critical failures	Actions
Electric motor sparking	It is necessary to contact a qualified specialist
The appearance of extraneous noise	It is necessary to contact a qualified specialist
If the above malfunctions are detected, it is necessary to disconnect the machine from the mains and contact a qualified specialist	



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