

scheppach HS110 Table Saw Instruction Manual

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Explanation of the symbols on the equipment

e symbols on the equipment				
\triangle	Warning! Failure to comply with possible danger to life, risk of injury or damage to the tool!			
(3)	Caution - Read the operating instructions to reduce the risk of inquiry!			
	Wear safety goggles!			
	Wear ear-muffs!			
3	Wear a breathing mask!			
	Wear protective gloves, when you work on or close to the saw blade.			
	Caution! Risk of injury! Never reach into the running blade.			
	Protection Class II (double shielded)			

Introduction

Manufacturer: scheppach Fabrikation von Holzbearbeitungsmaschinen GmbH Günzburger Straße 69 D-89335 Ichenhausen

Dear customer,

we hope your new tool brings you much enjoyment and success.

Note:

According to the applicable product liability laws, the manufacturer of the device does not assume liability for damages to the product or damages caused by the product that occurs due to:

- Improper handling
- Non-compliance of the operating instructions
- · Repairs by third parties, not by authorized service technicians
- Installation and replacement of non-original spare parts
- · Application other than specified
- A breakdown of the electrical system that occurs due to the non-compliance of the electric regu-lations and VDE regulations 0100, DIN 57113 /VDE0113.

We recommend:

Read through the complete text in the operating in-structions before installing and commissioning the device. The operating instructions are intended to help the user to become familiar with the machine and take advantage of its application possibilities in accord-ance with the recommendations.

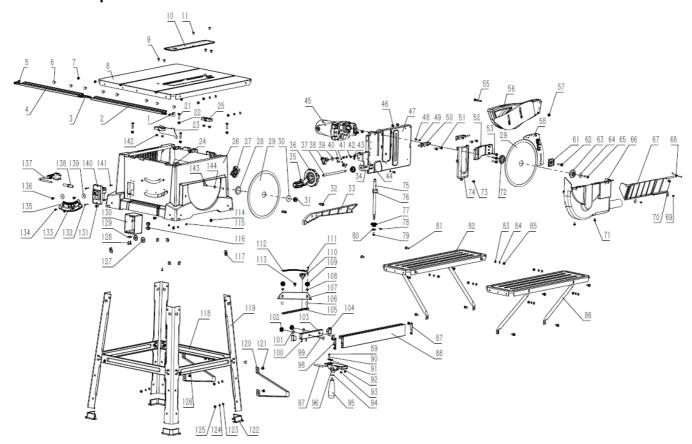
The operating instructions contain important information on how to operate the machine safely, profes-sionally and economically, how to avoid danger, cost-ly repairs, reduce downtimes and how to increase reliability and service life of the machine.

In addition to the safety regulations in the operating instructions, you have to meet the applicable regu-lations that apply for the operation of the machine in your country.

Keep the operating instructions package with the machine at all times and store it in a plastic cover to protect it from dirt and moisture. Read the instruction manual each time before operating the machine and carefully follow its information. The machine can only be operated by persons who were instructed concerning the operation of the machine and who are in-formed about the associated dangers. The minimum age requirement must be complied with.

In addition to the safety notes contained in the present operating instructions and the special regulations of your country, the generally recognized technical rules for the operation of woodworking machines must be observed. We accept no liability for damage or accidents which arise due to non-observance of these instructions and the safety information.

Device description



- 1. Table de sciage
- · 2. Saw blade guard
- 3. Riving knife (not visible)
- 4. Saw blade (not visible)
- 5. Table insert
- 6. Table width extender
- 7. Locking handle
- 8. Scale
- 9. Handwheel
- 10. Crank handle
- 11. Base frame
- 12. On/off switch
- 13. Cam lever
- 14. Parallel stop with knurled nut (i)
- 15. Guide rail long
- 15a. Guide rail short
- 15b. End caps
- 16. Suction adapter
- 17. Push stick
- 18. Bracket for saw blade storage
- 19. Legs
- 20a. Central strut A (2x)
- 20b. Central strut B (2x)

- 21. Rubber feet (4x)
- 22. Stand brackets (2x)
- 23. Attachment points
- 24. Table brackets,
- 25. Countersunk screws of the table insert
- 26. Fixing screws of the riving knife
- 27. Screw with nut and washer
- 28a. Groove
- 28b. Groove
- 29. Knurled screw
- 30. Stop rail
- 31. Transverse stop with knurled nut (i)
- 32. Sight glass
- 32a. Sight glass screw

Scope of delivery

- Table saw with pre-mounted 24 tooth saw blade
- · Saw blade guard
- · Riving knife
- · Parallel stop
- · Stop rail
- Transverse stop
- Table width extension (2x)
- · Push stick
- Pillars (4x)
- Centre struts (4x)
- Rubber feet (4x)
- Stand bracket (2x)
- Table supports (4x)
- Manual
- Hexagon head screw with cross slot with mounted U- washer / spring washer 16 units (a)
- Carriage bolt, 19 units (b)
- U-washer, 27 units (c)
- Spring washer, 20 units (d)
- Nuts, 27 units (e)
- Ring spanner SW 10/22 (f)
- Open-end spanner SW 10 (g)
- Allen key HX 6 (h)
- Hexagon head srew (k)

Intended use

• The table circular saw is used for cutting all types of wood lengthwise and crosswise (only with the trans-verse

stop), depending on the machine size. All types of round timbers must not be cut with it.

- The machine may be used only for its prescribed purpose. Any other use beyond that is considered to be not in accordance with the designated purpose.
- The user/operator is liable for all types of resulting damage or injury and not the manufacturer.
- The only saw blades which may be used are those which are suitable for the machine (HM or CV saw blades).

 The use of any type of HSS saw blades and cutting discs is prohibited.
- Use in accordance with the designated purpose is also deemed to include observance of the safety instructions, as well as the assembly and operating instructions in the operating manual.
- Individuals who operate and maintain the machine must be familiar with it and must have been instruct-ed in possible hazards. Moreover, the latest accident prevention regulations must be strictly observed. Other general rules in the fields of occupational health and safety technology must be complied with.

Caution!

When using equipment, certain safety precautions must be complied with in order to avoid injuries and damage. You should therefore read these operating instructions / safety instructions carefully. Keep these in a safe place so that the information is available to you at all times. Should you give the device to anyone else, please give them these operating instructions / safety instructions as well. We assume no liability for accidents or damage caused by failure to observe these instructions or the safety instructions. Changes to the machine will cause the manufacturer's liability with respect to any resulting damage to be completely excluded.

Even when the device is used in accordance with the designated purpose, it is nevertheless not possible to completely eliminate certain residual risk factors.

Due to the design and structure of the machine, the following risks may occur:

- Touching the saw blade in the area of the saw which is not covered;
- Reaching into the running saw blade (cuts)
- · Kickback of workpieces and workpiece parts.
- · Saw blade breaks.
- Ejection of faulty hard metal parts of the saw blade.
- Hearing damage if the necessary hearing protec-tion is not used.
- Emissions of wood dust which are harmful to the health when used in closed rooms.

Please note that the use of our devices in accord-ance with the designated purpose does not include commercial, handicraft or industrial applications. We assume no warranty if the device is used in commercial, handicraft or industrial businesses or for equiv-alent purposes.

Safety information

General power tool safety warnings

WARNING: Read all safety warnings, instructions, illustrations and technical data provided with this power tool. Failure to follow the warnings and instructions may re-sult in electric shock, fire and/or serious injury. Save all warnings and instructions for future ref-erence.

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 at-mospheres, such as in the presence of flam-mable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.

• c) Keep children and bystanders away while op-erating 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 elec-tric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet con-ditions.
 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 in-crease 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 med-ication. 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 power tools allow you to become compla-cent and ignore power 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 can-not 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 parts of insert tools, 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 chil-dren 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 insert tools. Check for misalignment or binding of moving parts, break-age of parts and any other condition that may af-fect the power tool's operation. If damaged, have the power tool repaired before use. Many acci-dents 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, tak-ing 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.

WARNING

This electric tool generates an electromagnetic field during operation. This field can impair active or passive medical implants under certain conditions. In order to prevent the risk of serious or deadly injuries, we recommend that persons with medical implants consult with their physician and the manufacturer of the medical implant prior to operating the electric tool.

Safety instructions for table saws Guarding related warnings

- a) Keep guards in place. Guards must be in work-ing order and be properly mounted.
 A guard that is loose, damaged, or is not function-ing correctly must be repaired or replaced.
- b) Always use saw blade guard, riving knife and 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) After completing working procedures where the removal of the protective cover and/or riv-ing knife is necessary (e.g. producing folds and rebating, cutting grooves or cutting with a turnover), the protective system must be im-mediately reattached.

The guard helps 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 in-struction manual. Incorrect spacing, positioning and alignment can make the riving knife ineffective in reducing the likelihood of kickback.
- f) For the riving knife to work, they must be en-gaged in the workpiece. The riving knife are ineffective when cutting workpieces that are too short to be engaged with the riving knife. Under these conditions a kickback cannot be prevented by the riving knife.

• 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.

Safety information for sawing

- a) **DANGER:** Do not place your hands and fingers in the sawing area or close to the saw blade. A moment of carelessness or a slip could steer your hand towards the saw blade and result in se-rious injuries.
- b) Only guide the workpiece against the rotation-al direction of the saw blade or cutting tool. Guiding the workpiece in the same direction as the rotational direction of the saw blade above the ta-ble can lead to the workpiece and your hand being drawn into the saw blade.
- c) When performing longitudinal cuts, never use the mitre stop to guide the workpiece, and when transverse cutting with the mitre stop never additionally use the parallel stop for lon-gitudinal adjustment. Simultaneously guiding the workpiece with the parallel stop and mitre stop increases the probability that the saw blade will jam and kickback will result.
- d) When performing longitudinal cuts, always apply the feed force to the workpiece between the stop rail and the saw blade. Use a push rod if the distance between the stop rail and saw blade is less than 150 mm, and a push block if the distance is less than 50 mm.
 - This type of working aid ensures that your hands remain a safe distance from the saw blade.
- e) Only use the push rod provided by the manu-facturer, or a push rod that has been produced in accordance with instructions.
 - The push rod ensures a sufficient distance be-tween the hand and saw blade.
- f) Never use a damaged or partially sawn push rod. A damaged push rod may break and lead to your hand running into the saw blade.
- g) Never work "freehand". Always use the paral-lel stop or the mitre stop to position and guide the workpiece. "Freehand" means supporting or guiding the workpiece with the hands, rath-er than using the parallel stop or mitre stop. Free-handed sawing leads to incorrect alignment, jamming and kickback.
- h) Never reach around or over a turning saw blade. Reaching for a workpiece can lead to accidental contact with the rotating saw blade.
- i) Support long and/or wide workpieces at the rear and/or side of the saw table, so that they remain horizontal.

 Long and/or wide workpieces tend to tilt at the edge of the saw table; this leads to a loss of con-trol, jamming of the saw blade and kickback.
- j) Guide the workpiece steadily and evenly. Do not bend or twist the workpiece. If the saw blade jams, switch off the electric tool imme-diately, unplug the mains plug and remedy the cause of the jam.

 If the saw blade is jammed by the workpiece, this can lead to kickback or block the motor.
- **k)** Do not remove partially sawn material whilst the saw is running. Partially sawn material can stick between the saw blade and stop rail or in the protective cover, and may draw your fingers into the saw blade during removal. Switch the saw off and wait until the saw blade has come to a stand-still, before removing the material.
- I) For longitudinal cuts on workpieces that are thinner than 2 mm, use an additional parallel stop that is in contact with the table surface. Thin workpieces can wedge under the parallel stop and lead to kickback.

Kickback is a sudden reaction of the workpiece to a catching or jamming saw blade, or a cut created in the workpiece at an angle to the saw blade, or if part of the workpiece becomes jammed between the saw blade and the parallel stop, or another stationary object.

In the majority of cases, with kickback the workpiece is caught by the rear part of the saw blade, lifted off the saw table and thrust in the direction of the operator.

Kickback is the result of incorrect or deficient use of the circular table saw. It can be prevented by suitable precautionary measures, as described in the following.

- a) Never stand directly in line with the saw blade. Always stand at the side of the saw blade on which the stop rail is located.
 - With kickback, the workpiece may be thrust at high speed towards those persons who stand in front of, or in line with the saw blade.
- **b)** Never reach over or behind the saw blade to pull or support the workpiece.
 - This can result in accidental contact with the saw blade, or kickback can lead to your fingers being drawn into the saw blade.
- c) Never hold and push the workpiece against the turning saw blade during sawing.

 Pushing the workpiece against the saw blade during sawing will lead to jamming and kickback.
- d) Align the stop rail parallel to the saw blade. A stop rail that is not aligned will push the work-piece against the saw blade and create kickback.
- e) With concealed saw cuts (e.g. folds, grooves or slits in the turning process), use a thrust collar to guide the workpiece against the table and stop rail.
 - Using a thrust collar, you are able to better control the workpiece in the event of kickback.
- f) Apply particular caution when sawing assem-bled workpieces in areas that are not visible. The plunging saw blade can saw into objects that could cause a kickback.
- g) Support large panels, in order to avoid the risk of kickback due to a jammed saw blade. Large panels may bend under their own weight. Panels must be supported in all areas where they overhang the table surface.
- h) Apply particular caution when sawing workpiec-es that are twisted, knotted or warped, or that do not have a straight edge that can be used to guide them with a mitre stop or along a stop rail. A twisted, knotted or warped workpiece is unstable and results in incorrect alignment of the kerf with the saw blade, jamming and kickback.
- i) Never saw multiple workpieces stacked on top of each other, or one behind the other.

 The saw blade could engage in one or more parts and result in kickback.
- j) If you wish to restart a saw, the saw blade of which is inserted in a workpiece, centre the saw blade in the sawing gap so that the saw teeth are not hooked in the workpiece. If the saw blade is jammed, it can lift the workpiece and cause kickback when the saw is restarted.
- **k)** Always keep saw blades clean, sharp and suf-ficiently set. Never use warped saw blades or saw blades with cracked or broken teeth. Sharp and correctly set saw blades minimise jam-ming, blocking and kickback.

Safety instructions for the operation of circular table saws

- a) Switch off the circular table saw and discon-nect it from the power supply before removing the table insert, changing the saw blade, im-plementing settings on the riving knife or the saw blade protective cover, and if the machine is left unattended.
 - Precautionary measures serve to prevent acci-dents.
- b) Never leave the circular table saw running unattended. Switch off the electric tool and do not leave it until it has come to a complete standstill.

An unattended running saw poses an uncontrolled risk.

- c) Set up the circular table saw in a location that is level and well ventilated, and where it can stand safely and remain balanced. The instal-lation site must provide sufficient space for easily handling the size of your workpieces. Disorganised and unlit working areas, and une-ven, slippery floors may lead to accidents.
- d) Regularly remove chips and sawdust from be-neath the saw table and/or from the dust ex-traction system.

 Accumulated sawdust is flammable and can self-ignite.
- e) Secure the circular table saw.

 If a circular table saw is not secured correctly, it can move or topple.
- f) Remove the adjustment tools, wood residues, etc. from the circular table saw before switch-ing it on.

 Deflections and possible jams could be dangerous.
- **g)** Always use the right size of saw blade and an appropriate location hole (e.g. dia-mond-shaped or round). Saw blades that do not fit with the mounting parts of the saw will run out-of-centre and result in a loss of control.
- h) Never use damaged or incorrect saw blade mounting materials, such as flanges, washers, screws or nuts. These saw blade mounting materials have been specially designed for your saw, for optimum per-formance and operational safety.
- i) Never stand on the circular table saw and do not use it as a step stool.

 Serious injuries can arise if the electric tool topples or if you accidentally come into contact with the saw blade.
- j) Make sure that the saw blade is mounted in the correct direction of rotation. Do not use grinding discs or wire brushes with the circular table saw. Incorrect assembly of the saw blade or the use of accessories that have not been recommended can result in serious injuries.

Safety instructions for handling saw blades

- 1. Only use tools which you know how to handle.
- Pay attention to the maximum speed. The max-imum speed stated on the tool being used must not be exceeded. Keep within the speed range if one is specified
- 3. Note the direction of rotation of the motor and saw blade.
- 4. Do not use any insertion tools with cracks. Sort out cracked insertion tools. Repairs are not permitted.
- 5. Clean grease, oil and water off of the clamping surfaces.
- 6. Do not use any loose reducing rings or bushes to reduce holes on circular saw blades.
- 7. Make sure that fixed reducer rings for securing the insertion tool have the same diameter and have at least 1/3 of the cutting diameter.
- 8. Make sure that fixed reducer rings are parallel to each other.
- 9. Handle the tools used with care. It is best to store these in their original packaging or special con-tainers. Always wear protective gloves to improve your grip and further reduce the risk of injury.
- 10. Before using any of the tools, ensure that all pro-tective devices are correctly attached.
- 11. Before use, ensure that all of the tools used by you full the technical requirements of this power tool and are properly attached.
- 12. The saw blade supplied should only be used for sawing wood and never for working metal.
- 13. Use the saw blade intended for the material to be processed.
- 14. Use only a saw blade with a diameter that match-es the specifications on the saw.
- 15. Use only saw blades that are marked with an equal or higher rotational speed than that marked on the power tool.

- 16. Use only saw blades recommended by the manu-facturer which conform to EN 847-1, if intended for cutting wood or similar materials.
- 17. Wear suitable personal protective equipment, such as:
 - · hearing protection;
 - · protective gloves when handling saw blades.
- 18. Use only saw blades recommended by the manu-facturer which conform to EN 847-1. Warning! When changing the saw blade, make sure that the cutting width is not smaller and the thickness of the saw blade is not greater than the thickness of the splitter.
- 19. When sawing wood and plastics, avoid overheat-ing the saw teeth. Reduce the feed speed to avoid the plastic melting.

Residual Risks

This power tool has been constructed in accordance with the latest technology and the generally recognised safety regulations. Nevertheless, it is possible that individual residual risks may occur during operation.

- Electrical hazard if improper electrical connection cables are used.
- In addition, concealed residual risks may be present in spite of all the precautions that have been taken.
- Residual risks can be minimised by observing the "Safety instructions" and "Use in accordance with the designated purpose", as well as the operating instructions.
- Do not put any unnecessary stresses on the ma-chine: excessive pressure during sawing will quickly damage the saw blade. This may result in a reduc-tion in the performance of the machine, as well as a reduction in the cutting accuracy.
- Avoid switching the machine on by accident: when inserting the plug into the socket, the power button must not be pressed.
- Use the tool which is recommended in this manual. This will ensure the optimal performance of your saw.
- Keep your hands away from the working area when the machine is in operation.
- Before you carry out any adjustments or servicing work, turn the device off and remove the mains plug.

Technical data

- AC motor 230 V~ 50Hz
- Power 2000 Watt
- Operating mode S1 & S6 40% *
- Idling speed 4800 min-1
- Carbide saw blade ø 254 x ø 30 x 2,8 mm
- Number of teeth 24
- Thickness riving knive 2,5 mm
- Min. workpiece size
- W x L x H 10 x 50 x 1 mm
- Table size 546 x 630 mm
- Cutting height max. 90° 87 mm
- Cutting height max. 45° 55 mm
- Height adjustment 0 87 mm
- Saw blade, swivelling 0 45°

- Extraction connection ø 40 mm
- Weight ca. 21/22 kg

Operating mode S6 40%: Continuous operation with intermittent load (cycle time 10 min). In order not to heat the motor more than permitted, the motor may only be operated for 40% of the cycle time with the stated nominal power and must then continue running for 60% of the cycle time without a ol ad.

Noise emission values

- Sound values were measured in accordance with EN 62841.
- Sound pressure level LpA 93,5 dB(A)
- · Uncertainty KpA 3 dB
- Sound power level LWA 106,5 dB(A)
- Uncertainty KWA 3 dB

Wear hearing protection.

The effects of noise can cause a loss of hearing. Total vibration values (vector sum of three directions) determined according to EN 62841.

NOTE: The specified device emissions values have been measured in accordance with a standardised test procedure and can be used for comparison of one electric tool with another.

The specified device emissions values can also be used for an initial estimation of the load.

WARNING: The noise emission values can vary from the specified values during the actual use of the electric tool, depending on the type and the manner in which the electric tool is used, and in particular the type of workpiece being processed. Implement measures to protect against noise nuisance. In doing so, take into account the complete working process, including the times when the electric tool is working without load or switched off. Suitable measures include regular maintenance and care of the electric tool and the insertion tools, regular breaks as well as proper planning of the working process.

Before putting into operation

- Open the packaging and remove the device carefully.
- Remove the packaging material as well as the packaging and transport bracing (if available).
- Check that the delivery is complete.
- Check the device and accessory parts for trans port damage.
- If possible, store the packaging until the warranty period has expired.

ATTENTION

The device and packaging materials are not toys! Children must not be allowed to play with plastic bags, film and small parts! There is a risk of swallowing and suffocation!

- The machine must be securely installed, i.e. bolted down on a workbench, base frame or similar.
- Before the machine is put into operation, all covers and safety devices must be properly attached.
- The saw blade must be able to move freely.
- In the case of wood which has already been worked with, check for foreign bodies such as nails or screws etc.
- Before pressing the on/off switch, make sure that the saw blade is correctly attached and that moving parts are free-running.
- Before connecting the machine, check that the data on the type plate matches those of the mains system.
- The machine must only be connected to a properly installed safety socket which is protected by a fuse of at

Assembly

Warning! Risk of injury!

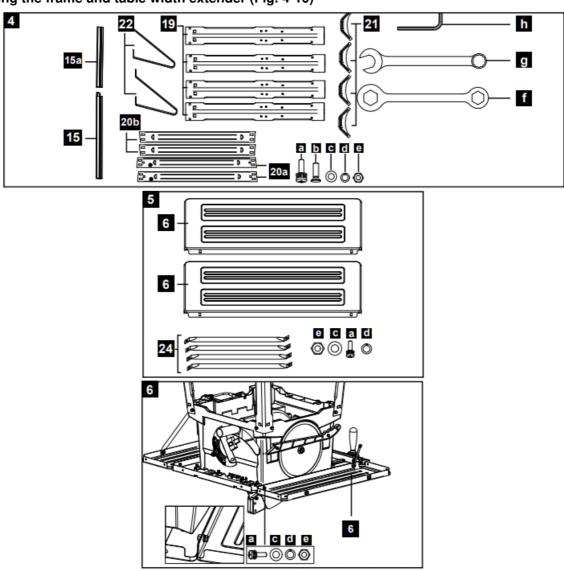
Improper installation of the circular table saw may result in serious injury.

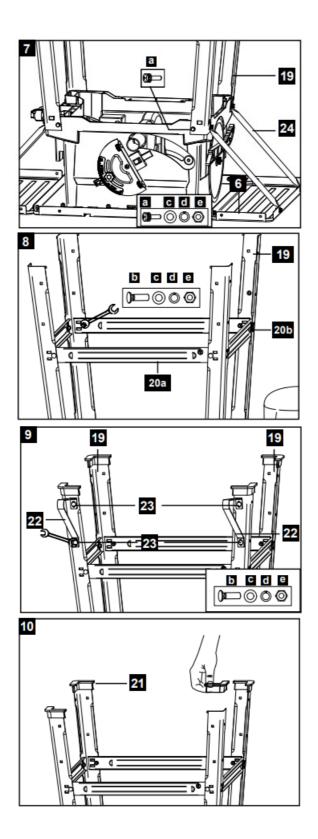
Before commissioning, properly and completely install the circular table saw, including all covers and safety devices.

Never plug the mains plug into the power outlet before completing the installation. If connections are secured with a hexagon screw, nut, spring washer and washer, the washer and spring washer must be fitted under the hexagon screw. The spring washer always lies directly on the (inner) hexagon screw or nut.

Hexagon screws must each be inserted from outside inwards, and the connections must be secured from the inside with nuts. During assembly nuts and screws must only be tightened until hand-tight, so that they cannot fall out. If you tighten the nuts and screws fully before final assembly, the circular table saw cannot be erected in a correct and stable manner.

Assembling the frame and table width extender (Fig. 4-10)



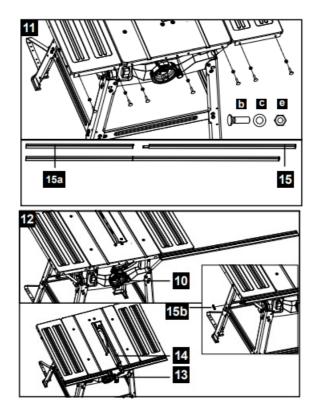


- 1. Turn the table circular saw over and place it on the floor.
- 2. Loosely tighten the table width extender (6) on the saw table (1) using the hexagon bolts (a), washer (c), spring washer (d) and nuts (e). (Fig. 6)
- 3. Screw the four legs (19) and the table supports (24) onto the housing. (Fig. 7)
- 4. Loosely tighten the table supports (24) on the table width extender (6) using hexagon bolts (a), washer (c), spring washer (d) and nuts (e). Loose-ly tighten the four legs (19) and table supports (24) onto the housing using the hexagonal bolts (a).
- 5. Now loosely screw the four central struts (20a,20b) with the legs (19) using the carriage bolts (b), washer (c), spring washer (d) and nuts (e). (Fig. 8)
- 6. Screw the stand brackets (22) to the holes in the rear stand legs (19). Assembly material: 2 car-riage bolts (b),

washers (c), spring washers (d) and nuts (e). (Fig. 9)

- 7. **ATTENTION:** Both stand brackets (22) must be attached to the rear of the machine at the fixing points (23). (Fig. 9)
- 8. Align the table width and length extension lush with the saw table.
- 9. Next, tighten all the screws of the legs (19) and the table width extender (6).
- 10. Now attach the rubber feet (21) to the legs (19)(Fig. 10).
- 11. Place the table circular saw on the base frame (11).

Insert guide rail (Fig. 11+12)

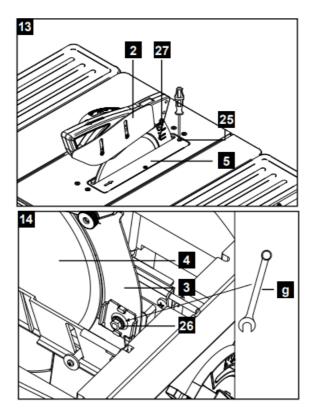


- 1. Mount the carriage bolts (b) in the holes provided in the worktable and the table extensions (6) by securing them from behind with the flange nuts (e).
- 2. Loosely tighten the flange nuts (e).
- 3. Connect both guide rails (15, 15a).
- 4. Slide the connected reails over the guide groove on the back over the carriage bolts (b) until they are centred on the table surface.

Aligning the guide rail

- 1. Turn the saw blade out of the sawing table at maximum by turning the crank (10) clockwise as far as it will go.
- 2. Position the rip fence (14) with the cam lever (13) open on the guide rails (15) on the sawing table and fix it in the 0-position by pushing the cam lever (13) down completely.
- 3. Slide the connected guide rails to the left until the rip fence is at the outer right side of the saw blade.
- 4. Then tighten the flange nuts (e) to fix this setting.
- 5. No fit the end caps (15b) on both sides of the rail.

Mounting / dismounting the Saw Blade Guard



- 1. Loosen the screw with nut and washer (27)of the saw blade guard (2). Place the saw blade guard (2) from the top onto the riving knife (3).
- 2. Mount the screw with nut and washer (27) so that the bolt sits firmly in the slot.
- 3. Do not overtighten the bolt (27) The saw blade guard must be able to move freely.
- 4. Dismantling is carried out in reverse order.

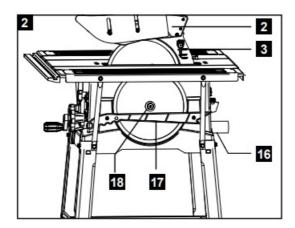
CAUTION: Before you start sawing, the saw balde guard (2) has to be lowered onto the item being sawn. After fitting, check that the saw blade guard (2) is functioning properly. Lift the saw blade guard and then release it. The saw blade guard should automatically move back to its starting position.

Mounting / adjusting the riving knife;

Caution! Remove the mains plug! The setting of the saw blade (4) must be checked whenever a blade has been replaced.

- 1. Adjust the saw blade (4) to a max. cutting depth, move to the 0° position and lock in place.
- 2. Dismantle the saw blade guard (2) (not during in-itial assembly).
- 3. Release the two countersunk screws of the table insert (25) and remove the table insert (5).
- 4. Loosen the fixing srew of the riving knife (26). (use the open-ended spanner AF8 supplied).
- 5. Push the riving knife (3) upwards.
- 6. The distance between the saw blade (4) and riv-ing knife (3) should be between 3 mm and max. 5 mm, (Figure. 18)
- 7. Retighten the fixing screw of the riving knife (26) and mount the table insert (5).
- 8. Mount the saw blade guard (2) with the screw and knurled nut and washer (27).

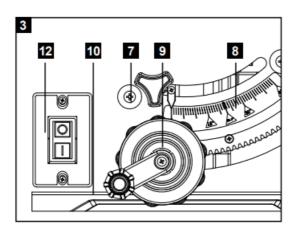
Connect the suction device (Fig. 2)



- 1. Attach a suction hose to the suction adapter (16). If necessary, secure the suction hose with a hose clamp to prevent it from slipping off the suction adapter (16).
- 2. A household vacuum cleaner is not suitable as a suction device. Use a multi-purpose vacuum cleaner or a swarf extraction machine.

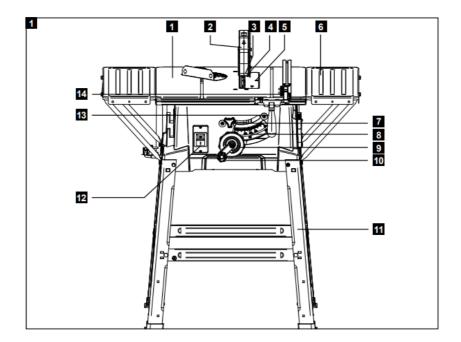
Operation

Switchin on and off (Fig. 3)



- The saw can be switched on by pressing the green "I" button on the on/off switch. Before you start saw-ing, wait until the saw blade has reached its maxi-mum speed.
- To switch the saw off again, press the red "0" button on the on/off switch.

Adjusting the Cutting Depth (Fig. 1+3)



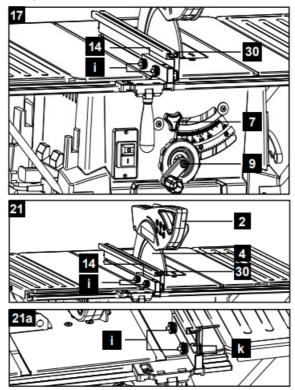
The saw blade (4) can be (continuously) adjusted to the required cutting depth by turning the hand wheel for the height adjustment (9)

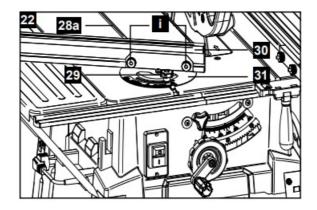
• Anticlockwise: reduces the cutting depth

• Clockwise: increases the cutting depth

Check the adjustment by means of a test cut.

Angle adjustment (Fig. 1, 17, 21, 22)



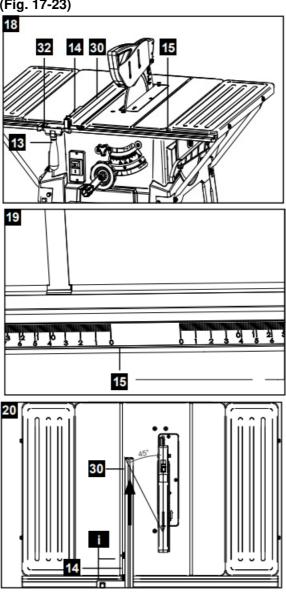


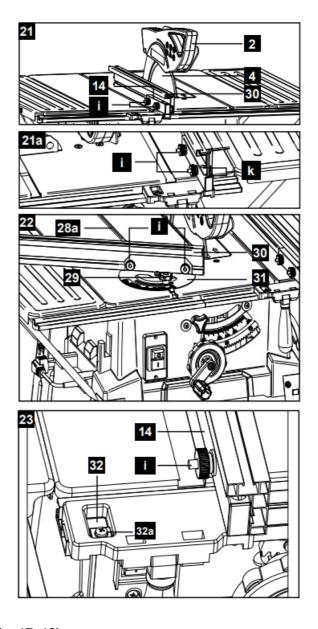
With the table circular saw it is possible to make bevel cuts to the left at an angle of 0° to 45° to the stop rail (14).

Before making every cut, check that no collision can occur between stop rail (30), transverse stop (31) and saw blade (4).

- 1. Release the locking handle (7).
- 2. Set the desired angle on the scale by pushing in and turning the hand wheel (9).
- 3. Lock the locking handle (7) in the desired angular position.

Working with the parallel Stop (Fig. 17-23)





Adjusting the stop height (Fig. 17+18)

- The stop rail (30) of the parallel stop (14) has two guide surfaces at different heights.
- Depending on the thickness of the material to be cut, the stop rail (30) must be used for thick material (workpiece thickness exceeding 25 mm) and for thin material (workpiece thickness below 25 mm).

Turning the stop rail (Fig. 17)

- 1. In order to turn the stop rail (30), irst release the two knurled nuts(i).
- 2. Now the stop rail (30) can be pulled off the guide rail (14) and pushed back over it again with the groove.
- 3. Tighten the knurled nuts (i) again.
- 4. The stop rail (30) can be attached to the left or right of the parallel stop (14) as required. To do this, only mount the screws from the other side of the parallel stop (14).

9.4.3 Adjusting the cutting width (Fig. 18+19)

When wooden pieces are being cut lengthwise, the parallel stop (14) has to be used.

- 1. Place the parallel stop (14) from above on the guide rail (15) for the parallel stop (14).
- 2. On the guide rail (15) for the parallel stop (14) there are 2 scales. These show the distance be-tween the stop

rail (14) and saw blade (4).

- 3. Select the suitable scale according to whether the stop rail (30) has been turned around for working with thick or thin material.
 - High stop rail: thick material
 - Low stop rail: thin material
- 4. Adjust the parallel stop (14) to the desired dimen-sion on the inspection glass and use the cam le-ver (13) to fix in place for the parallel stop (14).

Adjusting the stop length (Fig. 20)

In order to prevent the material being cut from jam-ming, the stop rail (30) can be moved in the longitu-dinal direction.

Rule of thumb: the rear end of the stop abuts on an imaginary line. This begins at about the middle of the saw blade and runs towards the back at an angle of 45°.

- 1. Adjust the required cutting width.
- 2. Release the knurled nuts (i) and push the stop rail (30) forward until the imaginary 45° line is touched.
- 3. Tighten the knurled nuts (i) again.

Adjusting the parallel stop (Fig. 21+21a)

CAUTION: Remove the guard (2) (see 8.4).

- 1. Adjust the saw blade (4) to the maximum cutting depth.
- 2. Adjust the parallel stop (14) such that the stop rail (30) touches the saw blade (adjustment for thick material, see 9.4.3).

If the parallel stop (14) is not parallel to the saw blade(4) please proceed as follows.

- 1. Release the screws (k) on the parallel stop until the parallel stop (14) can be aligned to be parallel with the saw blade(4).
- 2. Retighten the screws (k).

Transverse stop (Fig. 22)

When the wood is being cut to size, the transverse stop (31) must be extended with the stop rail (30) of the parallel stop (14).

- 1. Push the transverse stop (31) into a groove (28a) of the saw table.
- 2. Loosen the knurled screw (29).
- 3. Turn the transverse stop (31) until the desired an-gle is set. The notch on the guide bar shows the angle that has been set.
- 4. Retighten the knurled screw (29).
- 5. To extend the lateral end stop (31) with the end stop rail (30), the end stop rail (30) must be re-moved from the parallel end stop (14). Now the stop rail has to be mounted as shown in Figure 22; use the knurled nuts (i) for this purpose.

CAUTION: Do not push the stop rail (30) too far in the direction of the saw blade. The distance between the stop rail (30) and saw blade (4) should be approx-

imately 2 cm.

Adjusting the scale of the parallel stop (Fig. 23)

Check whether the display on the sight glass (32) of the parallel stop (14) shows the correct values with re-spect to the cutting line. If this is not the case, please proceed as follows:

- 1. Release the screw (32a) with which the display on the sight glass (32) of the parallel stop (14) is attached. The sight glass (32) display can now be set to the correct position.
- 2. Now, retighten screw (32a) on the sight glass (32).

Usage

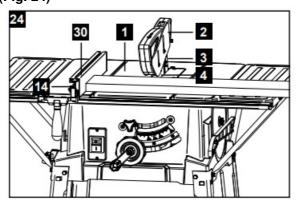
Working instructions

- After each new adjustment, we recommend a trial cut in order to check the set dimensions.
- After the saw has been switched on, wait until the saw blade has reached its maximum speed before you carry
 out the cut.
- Secure long workpieces against tilting at the end of the cutting process (e.g. unwinding stand etc.)
- · Caution with incision cutting.
- Operate the device only with a suction system.
- Check and clean the suction channels regularly.

Suitability of the saw blades

- 24 teeth: high chip removal, rough cut image
- 48 teeth (not included in the scope of delivery): hard materials, lower chip removal, iner cut image

Performing longitudinal cuts (Fig. 24)



Here, a workpiece is cut in its longitudinal direction. One edge of the workpiece is pressed against the parallel stop (14) while the lat side lies on the saw table (1).

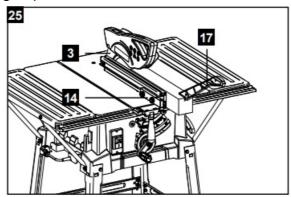
The saw blade guard (2) must always be lowered onto the workpiece. The working position during longitudinal cutting must never be in a straight line with the cutting line.

- 1. Adjust the parallel stop (14) and stop rail (30) according to the workpiese height and the desired width.
- 2. Switch on the saw.
- 3. Place your hands with the fingers closed together flat on the workpiece and push the workpiese along the stop rail (30) into the saw blade (4).

- 4. Guide from the side with your left or right hand (depending on the position of the parallel stop) only up to the front edge of the saw blade guard (2).
- 5. Always push the workpiece through to the end of the riving knife (3).
- 6. The cutting waste remains on the saw table (1) until the saw blade (4) is back in its resting position.
- 7. Secure long workpieces against tilting at the end of the cutting process! (e.g. unwinding stand etc.)

ATTENTION: The parallel stop must be set parallel with the saw blade. Check the alignment and firm seating of the rip fence (14), especially during use and when not in use for long periods Vibrations can cause screw connections to loosen. If necessary, readjust the rip fence (14) and retighten the knurled nut(i). Secure the screw connections (k) with the Allen wrench (not supplied) (Fig. 21a).

Cutting narrow workpieces (Fig. 25)



Longitudinal cuts of workpieces with a width of less than 120 mm always have to be cut with the help of a push stick (17). The push stick (17) is included in the scope of delivery. Replace a worn or damaged push stick (17) immediately.

- 1. Adjust the parallel stop (14) according to theplanned workpiece width.
- 2. Advance the workpiece with both hands, making sure that you use a push stick (17) as a pushingaid in the vicinity of the saw blade.
- 3. Always push the workpiece through to the end of the riving knife.

CAUTION: In the case of short workpieces, the push stick should be used from the beginning of thecutting process.

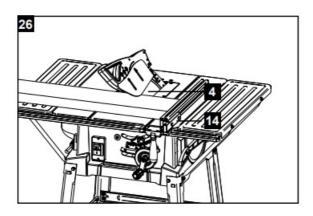
Cutting very narrow workpieces

For longitudinal cuts of very narrow workpieces with a width of 30 mm and less, a push block must be usedwithout fail. There is no push block included in the scope of delivery! (Available from specialist shops) Replace a worn push block as soon as possible.

During sawing, workpieces can become jammed between the parallel stop and the saw blade, caught bythe saw blade and then ejected at speed. For this reason, the lower guide surface of the parallel stop should be favoured. Shift the stop rail if required (see 9.4.2).

- 1. The parallel stop should be adjusted to the cutting width of the workpiece.
- 2. Press the workpiece with the push block against the stop rail and push the workpiece with the pushstick (17) through to the end of the riving knife (3).

Performing bevel cuts (Fig. 26)



All bevel cuts are made using the parallel stop (14).

The parallel stop (14) must always be fitted to the right of the saw blade. Otherwise, workpieces can become jammed between the parallel stop and the saw blade during sawing and ejected at speed.

- 1. Adjust the saw blade to the desired angle.
- 2. Adjust the parallel stop (14) according to the workpiece width and height.
- 3. Perform the cut according to the workpiece width Installation of the new table insert (5) takes place in reverse order.

Carbon brushes

If excessive sparks are generated, have an electri-cian check the carbon brushes. Attention! The carbon brushes must only be replaced by an electrician.

Service information

Please note that the following parts of this product are subject to normal or natural wear and that the following parts are therefore also required for use as consumables.

Wear parts*: Carbon brush, saw blade, table inserts, push stick

* Not necessarily included in the scope of delivery!

Storage

- Store the device and its accessories in a dark, dry and frost-proof place that is inaccessible to children. The optimum storage temperature is between 5 and 30°C.
- Store the electrical tool in its original packaging. Cover the electrical tool in order to protect it from dust and moisture.
- Store the operating manual with the electrical tool.

Electrical connection

The installed electric motor is connected readyfor operation. The connection complies with the relevant VDE and DIN regulations. The custom-er's network connection and any extension cable used must comply with these regulations.

- The product meets the requirements of EN 61000-3-11 and is subject to special connection condi-tions. This
 means that its use at freely selectable connection points is not permitted.
- If the network conditions are unfavourable, the de-vice may result in temporary voltage luctuations.
- a) The product is intended for use only in properties which a) not exceed a maximum permissible system impedance `Z; or

- b) which have a continuous current carrying capac-ity of the network of at least 100 A per phase.
- As a user, you must ensure, if necessary in consul-tation with your power supply company, that your
 connection point at which you wish to operate the product meets one of the two mentioned require-ments a) or
 b).

Important Instructions

If the motor is overloaded, it switches itself off auto-matically. After cooling down (times vary), the motor can be switched on again

Faulty electrical connection cable

Insulation damage often occurs to electrical connec-tion cables.

The causes of this may be as follows:

- Pressure points if connection cables are routed through windows or door gaps.
- Kinks caused by improper attachment or routing of the connection cable.
- Cut surfaces caused by vehicles driving over the connection cable.
- Insulation damage caused by tearing out of the wall socket.
- · Cracks resulting from the insulation becoming old.

Such faulty electrical connections must not be used and may endanger life due to the damage to the insulation. Electrical connection cables should be checked regularly for damage. Ensure that during such checks, the connection cable is not connected to the mains. Electrical connection cables must comply with the relevant VDE and DIN regulations. Only use connection cables with the marking. It is stipulated by law that the type of connection cable must be printed on it. If it is necessary to replace the power cable this should be done by the manufacturer or their repre-sentative to avoid safety hazards.

Alternating current motor

• The mains voltage must be 230 V~.

Extension cables up to 25 m in length must have a cross-section of 1.5 mm². Connections and repairs to the electrical equipment may only be performed by a qualified electrician. If you have any queries, please provide the following information:

- · Current type of the engine
- Data from the machine type plate
- · Data from the motor type plate

Disposal and recycling

The equipment is supplied in packaging to prevent it from being damaged in transit.

The raw materials in this packaging can be reused or recycled. The equipment and its accessories are made of various types of material, such as metal and plastic. Do not throw batteries away with house-hold waste, or throw them into fire or water. Batteries should be collected and recycled or disposed of in an environmentally friendly manner. Defective components must be disposed of as special waste. Ask your dealer or your local council!

Old devices must not be disposed of with house- hold waste!

This symbol indicates that this product must not be disposed of together with domestic waste in compliance with

the Directive (2012/19/EU) pertaining to waste electrical and electronic equipment (WEEE). This product must be disposed of at a designated collection point. This can occur, for example, by handing it in at an authorised collecting point for the recycling of waste electrical and electronic equipment. Improper handling of waste equipment may have

negative consequences for the environment and human health due to potentially hazardous substances that are often contained in electrical and electronic equipment. By properly disposing of this product, you are also contributing to the effective use of natural resources. You can obtain information on collection points for waste equipment from your municipal ad-ministration, public waste disposal authority, an au-thorised body for the disposal of waste electrical and electronic equipment or your waste disposal company.

Troubleshooting

Fault		Possible cause	Remedy
Blade dissolves afte r switching off the en- gine		To slightly tightened fastening nut	Tighten the right hand thread nut
Engine will not start		Failure mains fuse	Check mains fuse
		Defective extension cable	Replace extension cord
		Connections on motor or switch not in or der	Repair by electrical specialist
		Motor or switch faulty	Repair by electrical specialist
Motor will not work, t he fuse is active		Cross section of the extension cable doe s	see "Electrical connection"
		not sufficienty	
		Overload by a blunt saw blade	Change saw blade
Fire marks on cutting surface	th e	Blunt saw blade	Sharpen saw blade (only by an authorised
			sharpening service) or replace
		Wrong saw blade	Change saw blade

Declaration of Conformity

hereby declares the following conformity under the EU Directive and standards for the following article

Marke / Brand: scheppach

Article name: TISCHKREISSÄGE HS110

TABLE SAW

Art. no.

2014/29/EU 2014/35/EU X 2014/30/EU 2004/22/EC 2014/68/EU X 2011/65/EU* 89/686/EC_96/58/EC 90/396/EC

2006/42/EC

Χ

Annex IV

Notified Body: TÜV SÜD Product Service GmbH; Ridlerstraße 65 D-80339 München Germany

Notified Body No.: 0123

Certificate No.: M6A 011284 0226

2000/14/EC 2005/88/EC

Annex VI

Noise: measured LWA = xx dB(A); guaranteed LWA = xx dB(A)

 $P = xx KW; L/\emptyset = cm$

Notified Body: Notified Body No.: 2010/26/EC Emission, No:

Standard references:

EN 62841-1:2015; EN 62841-3-1:2014/A11:2017; EN 55014-1:2017; EN 55014-2:2015; EN 61000-3-2:2014; EN 61000-3-11:2000

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The object of the declaration described above fulfils the regulations of the directive 2011/65/EU of the European Parliament and Council from 8th June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Warranty

Apparent defects must be notified within 8 days from the receipt of the goods. Otherwise, the buyer's rights of claim due to such defects are invalidated. We guarantee for our machines in case of proper treatment for the time of the statutory warranty period from delivery in such a way that we replace any machine part free of charge which provably becomes unusable due to faulty material or defects of fabrication within such period of time. With respect to parts not manufactured by us we only warrant insofar as we are entitled to warranty claims against the upstream suppliers. The costs for the installation of the new parts shall be borne by the buyer. The cancellation of sale or the reduction of purchase price as well as any other claims for damages shall be excluded.

www.scheppach.com / service@scheppach.com / +(49)-08223-4002-99 / +(49)-08223-4002-58

Documents / Resources



scheppach HS110 Table Saw [pdf] Instruction Manual HS110 Table Saw, HS110, Table Saw, Saw

References

5 scheppach | scheppach

Manuals+,