PROXXON

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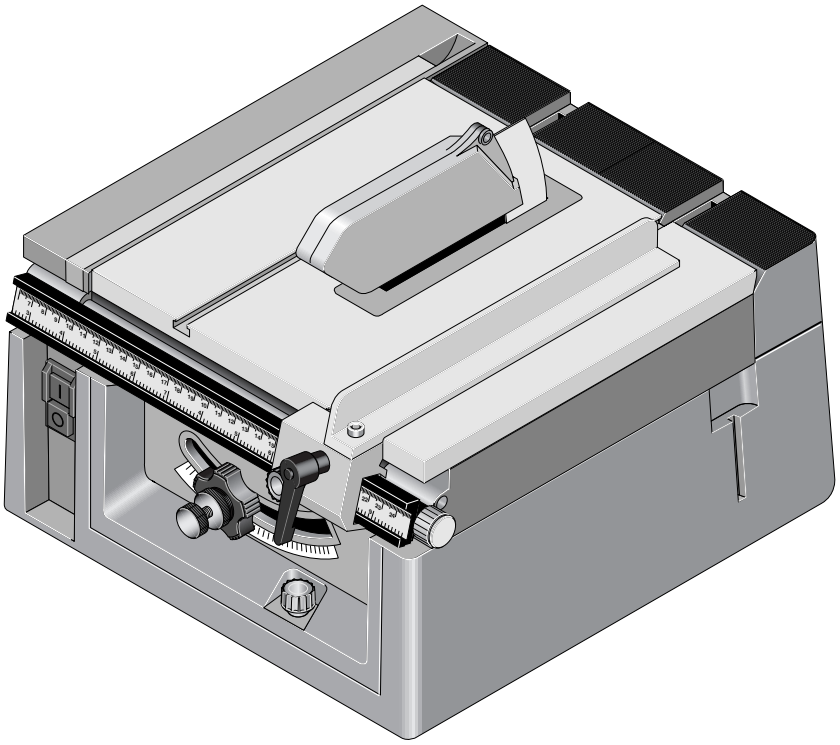


Manual

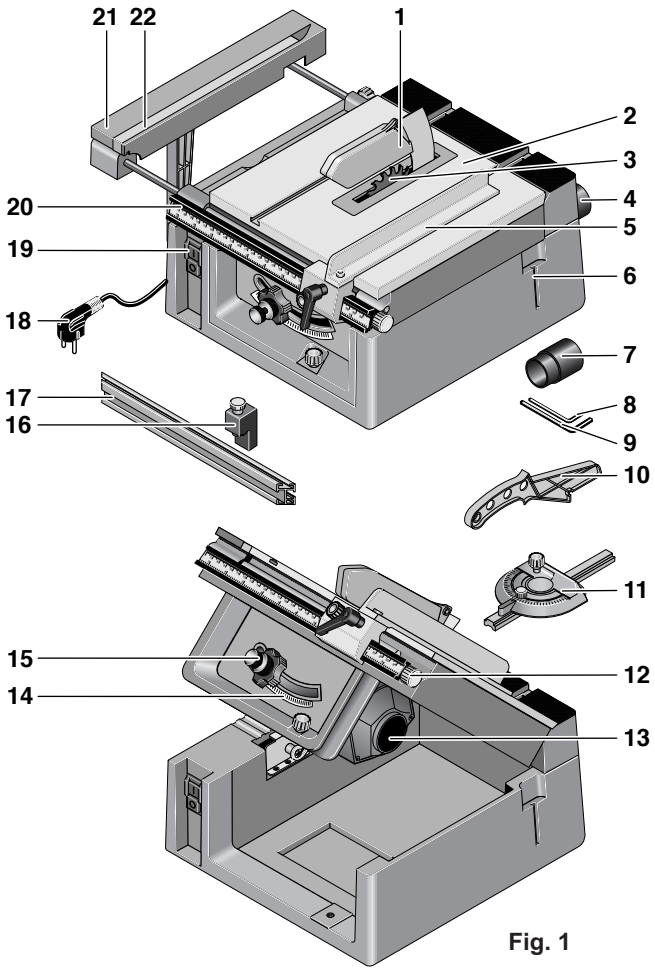


Fig. 1

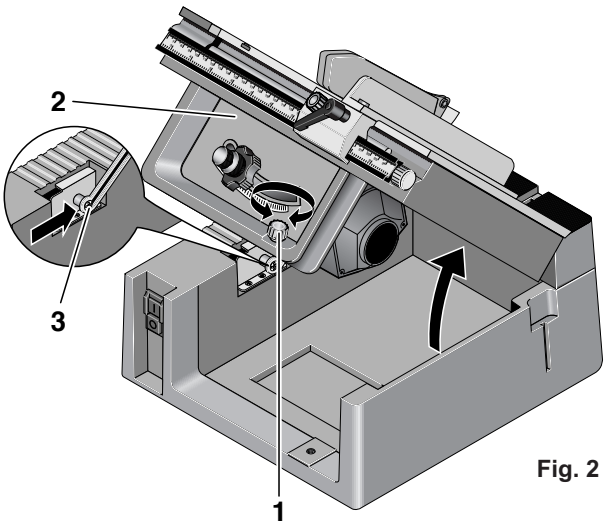


Fig. 2

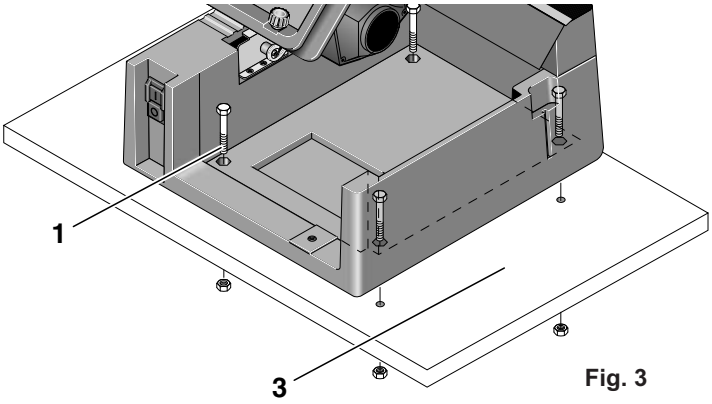


Fig. 3

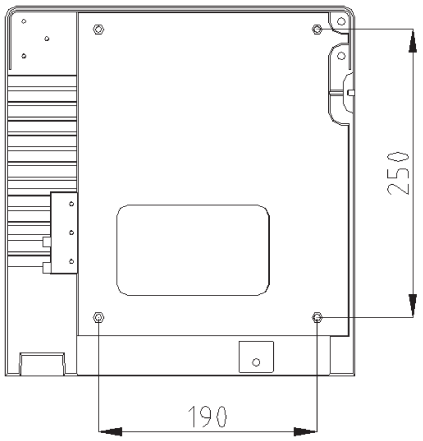


Fig. 4

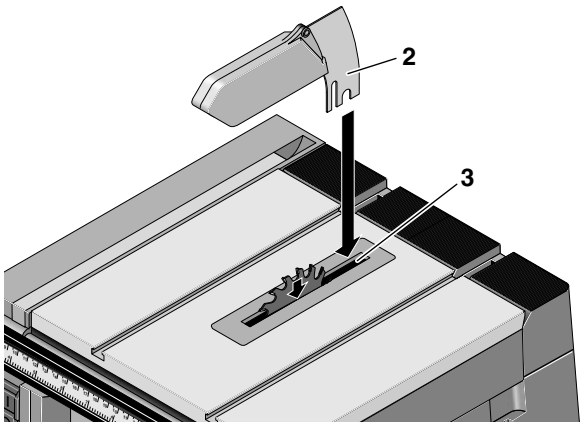


Fig. 5

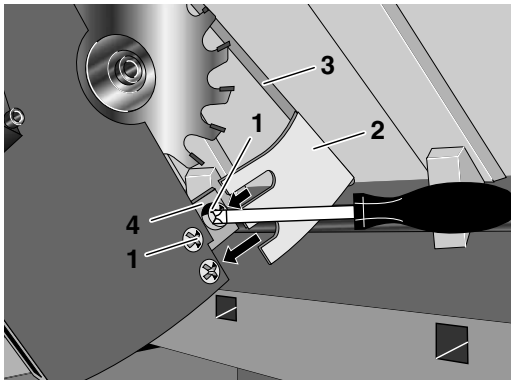
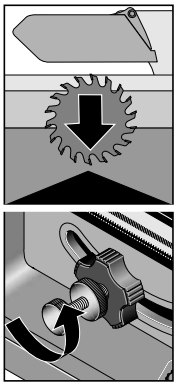
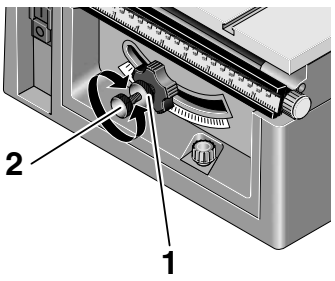


Fig. 5a





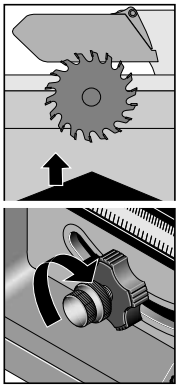


Fig. 6

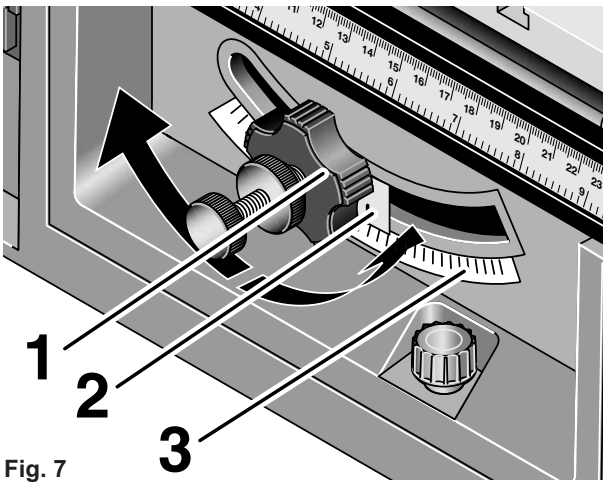


Fig. 7

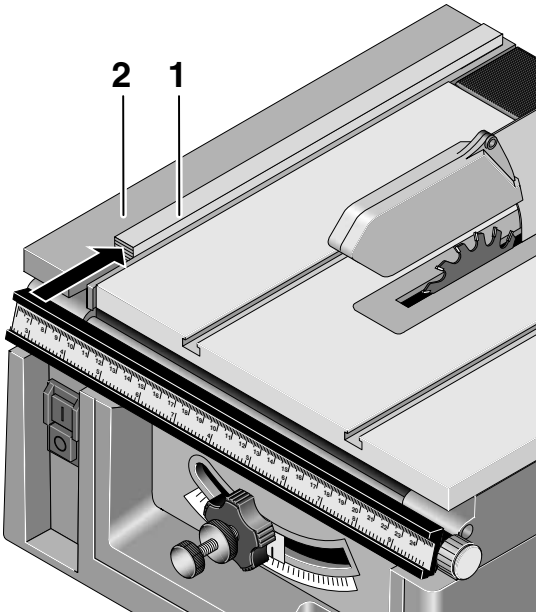


Fig. 8a

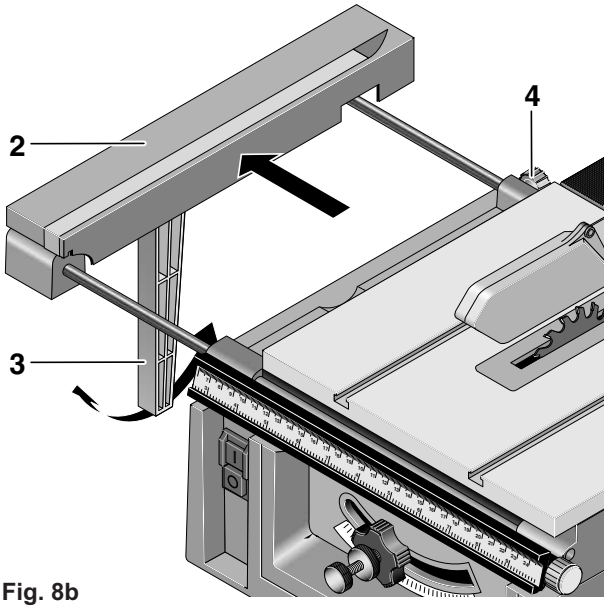


Fig. 8b

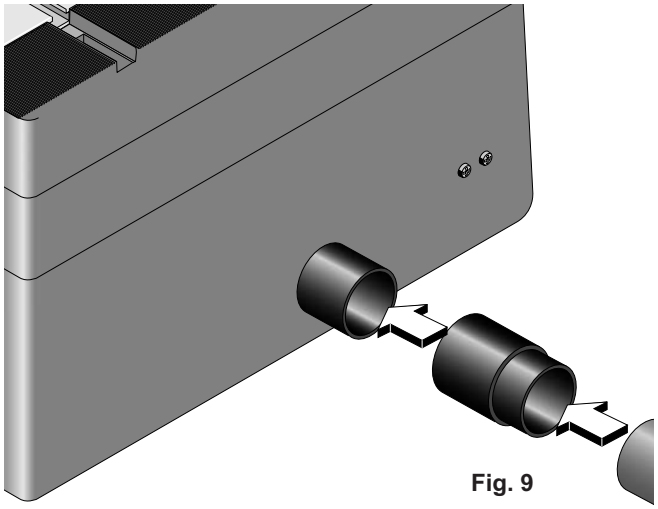


Fig. 9

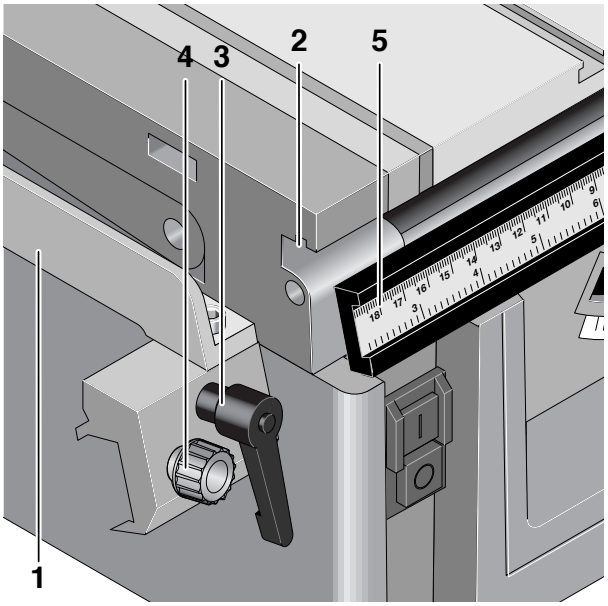


Fig. 10a

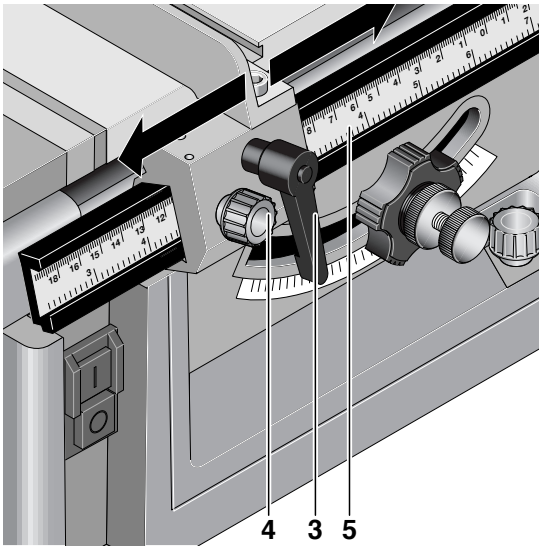


Fig. 10b

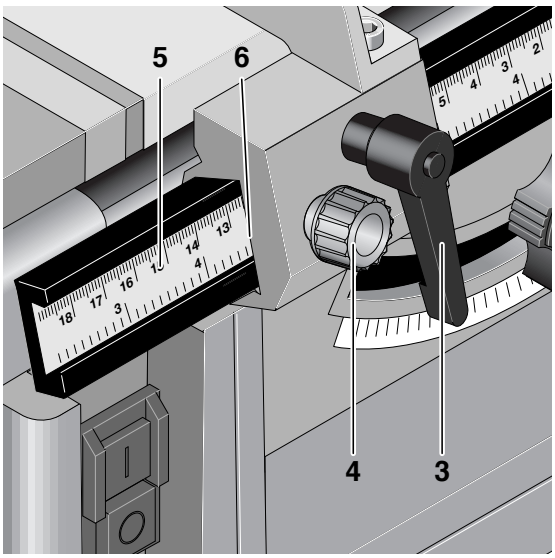


Fig. 10c

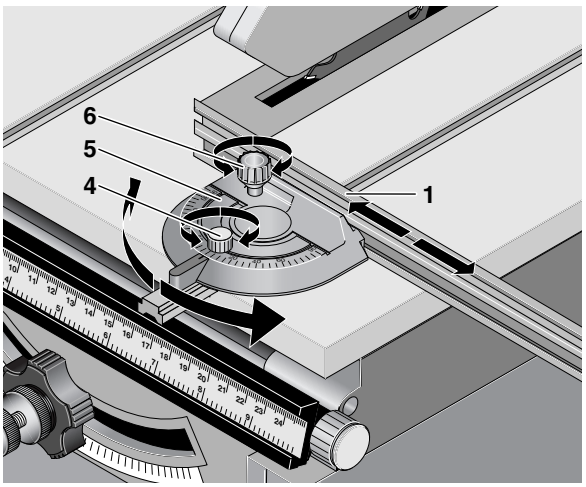


Fig. 11

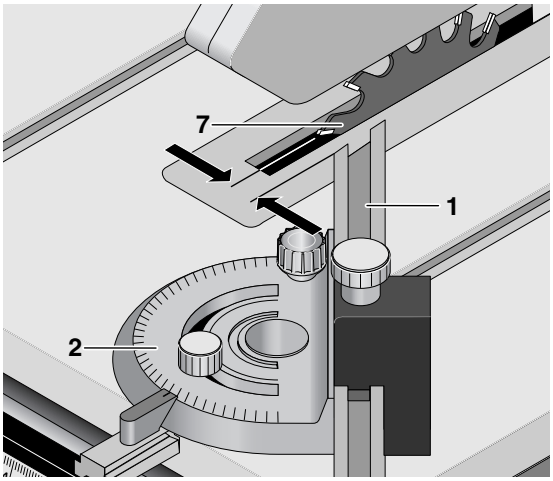


Fig. 12

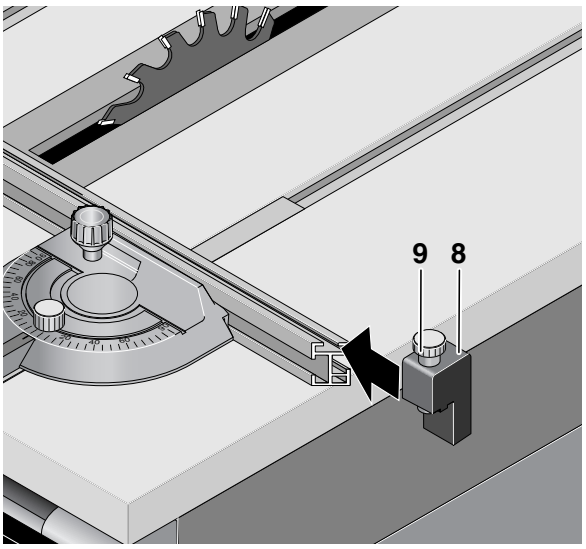


Fig. 13

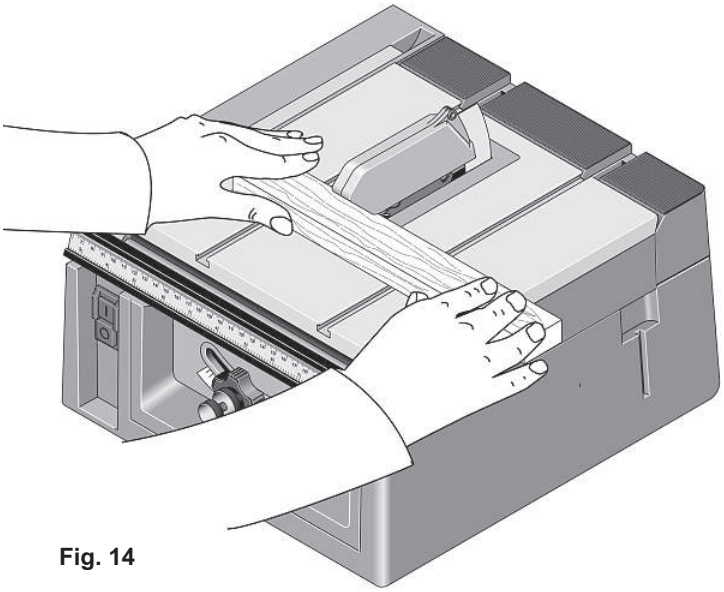


Fig. 14

Translation of the Original Operating Instructions

GB

Contents:

1. In general

Dear Customer!

The use of these instructions

- makes it easier to become acquainted with the device,
- prevents malfunctions due to improper handling, and
- increases the service life of your device.

Always keep these instructions close to hand.
Only operate this device with exact knowledge of it and comply with the instructions.

PROXXON will not be liable for the safe function of the device for:

- handling that does not comply with the usual intended use,
- other application uses that are not stated in the instructions,
- disregard of the safety regulations.

You will not have any warranty claims for:
- operating errors,
- lack of maintenance.

For your safety, please comply with the safety regulations at all costs.
Only use original PROXXON spare parts.
All rights reserved for further developments within the meaning of technical progress. We wish you much success with the device.

WARNING!

Read all safety warnings and instructions. Failure to follow all safety warnings and instructions listed below may result in electric shock, fire and/or serious injury.

KEEP ALL SAFETY WARNINGS AND INSTRUCTIONS FOR THE FUTURE!

2. Safety guidelines

2.1 Specific safety regulations for circular saw benches

- Do not use deformed or flawed saw blades.
- Replace worn bench inserts.
- Use only the saw blades recommended by Proxxon. Utilised saw blades must comply with EN 847-1. The saw-cut may not be smaller than the thickness of the splitting wedge.
- Make sure the saw blade is suitable for the material to be sawn.
- Wear hearing protection!
- The sawdust from certain materials can be hazardous to your health. Therefore, wear a respirator.
- Wear gloves when handling saw blades and rough materials!
- Only operate the saw with a dust suction device! Your saw has a connecting piece at the back for this purpose. You can connect a vacuum cleaner here.
- For smaller work pieces, use a push-rod for the feed!
- Never work with a device that has faulty or defective parts. Your circular saw might no longer be safe. Therefore, have any damage immediately repaired by the Proxxon Customer Service!

- Wear hearing protection! Exposure to noise can cause hearing loss! Make sure that the machine and its accessory parts are in technically perfect condition! Only the above establishes the optimal conditions for noise reduction. In particular, make sure that the saw blade is neither dull nor damaged. Worn or damaged saw blades have a negative effect on noise generation and also pose a safety risk! You can minimize noise generation by adjusting the work piece feed to the requirements of material and saw blade.
- Saw dust from certain materials can be hazardous to your health if inhaled or if it touches your skin. For that reason, always wear appropriate protective clothing (e.g. respirator) and always work with the suction device. Attention: Dust in certain concentrations can generate an explosive mixture in the air!
- Make sure your mains plug has a protective earthing conductor and is suitable to operate the device!

2.2 Safety guidelines regarding protective covers

a) **Leave the protecting covers assembled. Protecting covers must be functional and assembled correctly.** Loose, damaged or improperly functioning protecting covers must be repaired or replaced.

b) **For separating cuts, always use the saw blade protecting cover and the splitting wedge.** For separating cuts where the saw blade cuts through the entire work piece thickness, the protecting cover and other safety mechanisms reduce the risk of injuries.

c) **Once you have completed your operating procedure (e.g. groove, back-gouge or separating in reversal method) which requires the removal of protecting covers, splitting wedge and/or kickback protection, immediately reinstall the protective system.** The protecting cover, the splitting wedge and the kickback protection reduce the risk of injuries.

d) **Before switching on the power tool, make sure the saw blade does not touch the protecting cover, the splitting wedge or the work piece**. Unintentional contact of these components with the saw blade can lead to a dangerous situation.

e) **Adjust the splitting wedge according to the description in these operating instructions. Incorrect** distances, position and alignment could be the reason why the splitting wedge does not effectively prevent kickback.

f) **The splitting wedge and anti-kickback device need to act on the work piece in order to function.** The splitting wedge and anti-kickback device are ineffective for work piece sections which are too short for the splitting wedge to act upon. The splitting wedge and the anti-kickback device cannot prevent kickback under these conditions.

g) **Use the appropriate saw blade for the splitting wedge.** For the splitting wedge to act correctly, the saw blade diameter must match the corresponding splitting wedge, the steel blade of the saw blade must be thinner than the splitting wedge, and the tooth width must be greater than the splitting wedge thickness.

2.3 Safety guidelines for sawing process

a) **DANGER: Your fingers and hands should not come near the saw blade or within the sawing range.** A moment of carelessness or slipping could direct your hand towards the saw blade and result in serious injuries.

b) **Always guide the work piece against the direction of rotation of the saw blade.** Feeding the work piece in the same direction as the direction of rotation of the saw blade above the table can cause the work piece and your hand to be drawn into the saw blade.

c) **Never use the mitre stop to feed the work piece for long sections, and for cross sections with the mitre stop, never use the parallel limit stop additionally to the longitudinal adjustment.** Guiding the work piece simultaneously with the parallel limit stop and the mitre stop increases the probability that the saw blade will jam and kickback.

d) **For long sections, always exert the feeding force on the work piece between stop rail and saw blade. Use a push rod when the distance between stop rail and saw blade is less than 150 mm; use a push block when the distance is less than 50 mm.** Such working aids ensure that your hand remains at a safe distance to the saw blade.

e) **Use only the supplied push rod of the manufacturer, or one that has been manufactured according to instruction.** The push rod ensures a sufficient distance between hand and saw blade.

f) **Never use a damaged or partially cut pushing rod.** A damaged pushing rod can break and cause your hand to come against the saw blade.

g) **Do not work "freehand". Always use the parallel limit stop or the mitre stop to position and guide the work piece.** "Freehand" means supporting or guiding the work piece with the hands instead of with the parallel limit stop or the mitre stop. Freehand sawing leads to misalignment, jamming and kickback.

h) **Never reach around or over a rotating saw blade.** Reaching for a work piece can result in unintentionally touching the rotating saw blade.

i) **Support long and/or wide work pieces behind and/or to the side of the saw table so they stay horizontal.** Long and/or wide work pieces tend to tilt down at the end of the saw table; this leads to loss of control, jamming of the saw blade and kickback.

j) **Guide the work piece evenly. Do not bend or twist the work piece. If the saw blade jams, immediately shut off the power tool, disconnect the mains plug and eliminate the cause of jamming.** A work piece which has jammed the saw blade can lead to kickback or to blocking of the motor.

k) **Do not remove sawn off material whilst the saw is still operating.** Sawn off material can become fixed between saw blade and stop rail or in the protecting cover and will pull your fingers into the saw blade if you attempt to remove the material. Switch off the saw and wait until the saw blade has come to a complete standstill before you remove the material.

l) **For long sections on work pieces which are thinner than 2 mm, use an additional parallel limit stop that has contact with the table surface.** Thin work pieces can become wedged under the parallel limit stop and cause kickback.

2.4 Kickback – Causes and corresponding safety guidelines

A kickback is the sudden reaction of the work piece due to a catching, jamming saw blade or because a work piece is cut at an angle in relation to the saw blade, or if part of the work piece is jammed between the saw blade and parallel limit stop or other fixed object.
In most cases during a kickback, the work piece is caught by the rear part of the saw blade, lifted up from the saw table and then flung towards the operator. Kickback is the result of wrong or faulty use of the table saw. It can be avoided by using appropriate precautionary measures, as described in the following.

a. **Never stand directly in line with the saw blade. Always keep to one side of the saw blade where the stop rail is located.** During kickback, the work piece can be flung at high speeds towards anyone standing in front of and in line with the saw blade.

b. **Never reach over or behind the saw blade to pull on or support the work piece.** Unintentional contact may occur with the saw blade, or a kickback can cause your fingers to be pulled into the saw blade.

c. **Never hold and press the work piece being sawed against the rotating saw blade.** Pressing the work piece being sawed against the saw blade will cause jamming and kickback.

d. **Align the stop rail in parallel to the saw blade.** An unaligned stop rail will press the work piece against the saw blade and generate kickback.

e. **Use a featherboard when proceeding hidden saw cuts (e.g. groove, back-gouge or separating in reversal method). The featherboard allows you to guide the workpiece against table and longitudinal stop.** A featherboard helps you to control the workpiece in case of kickback.

f. **Be especially careful when sawing in out-of-sight areas of assembled work pieces.** A dipping in saw blade can saw into objects that could cause a kickback.

g. **Support large sheets to minimize the risk of kickback caused by a jammed saw blade.** Large sheets can sag under their own weight. Sheets need to be supported wherever they extend beyond the table surface.

h. **Be particularly careful whilst sawing work pieces which are twisted, knotted, or warped or do not have a straight edge to guide them along a mitre stop or stop rail.** A warped, knotted or twisted work piece is unstable and causes misalignment of the kerf with the saw blade, jamming and kickback.

i. **Never saw work pieces that have been stacked or lined up in succession.** The saw blade could catch one or several parts and cause kickback.

j. **If you want to restart a saw whose saw blade is still in a work piece, centre the saw blade in the sawing gap so that the saw teeth are not caught in the work piece.** If the saw blade is jammed, it can lift up the work piece and cause a kickback when the saw is restarted.

k. **Keep the saw blades clean, sharp and sufficiently set. Never use bent saw blades, or saw blades with cracked or broken teeth.** Sharp and correctly set saw blades minimise jamming, blocking and kickback.

2.5 Safety guidelines for operating table saws

a) **Switch off the table saw and disconnect it from the mains before you remove the table insert, replace the saw blade, carry out settings on the splitting wedge or the saw blade guard, and whenever leaving the machine unattended.** Precautions serve to prevent accidents.

b) **Never leave an operating table saw unattended. Switch off the power tool and do not leave until it has reached a complete standstill.** An unattended operating saw represents an uncontrollable risk.

c) **Set up the table saw in an area that is level and well lit and where you can stand securely and keep your balance. The set-up site must be spacious enough for you to comfortably handle the size of your work pieces.** Disarray, non-lit working areas and uneven and slippery floors can lead to accidents.

d) **Regularly remove chips and saw dust underneath the saw table and/or from the dust extraction.** Accumulated saw dust is combustible and can self-ignite.

e) **Secure the table saw.** An improperly secured table saw can move or fall over

f) **Remove adjusting tools, wood scraps etc. from the table saw before you switch it on.** Deflection or possible jams could be dangerous.

g) **Always use the correct size of saw blade and with matching mounting hole (e.g. diamond-shaped or round).** Saw blades which do not match the assembly parts of the saw will operate out of centre and will lead to loss of control.

h) **Never use damaged or wrong saw blade assembly material such as e.g. flanges, flat washers, screws or nuts.** This saw blade assembly material was constructed specifically for your saw, for secure operation and optimal performance.

i) **Never stand upon the table saw and never use the table saw as a foot stool.** Serious injuries could occur if the power tool falls over or if you accidentally come into contact with the saw blade.

j) **Ensure the saw blade is always mounted in the correct direction of rotation. Do not use sanding discs or wire brushes with the table saw.** Improper assembly of the saw blade or the use of not recommended accessories can lead to serious injuries.

3. Description of machine

The FET table saw is a well thought-out machine for all occurring sawing tasks in the range of small and fine applications.
A powerful motor, solid mechanics, high-quality materials and meticulous production make this a reliable tool for all possible sawing applications.
Depending on the utilised saw blades, all types of wood, many non-ferrous metals, ceramics and plastics as well as many other materials can be processed with the machine. The corresponding saw blades can be obtained from Proxxon and will be mentioned in more detail later on.
The bench is made of stable aluminium die casting and forms one unit together with the motor suspension: The guarantees the highest strength and naturally also affects the precision of the working results.

To guarantee the highest possible flexibility, we offer different types of limit stops that are included with the machine. So there is something for every application:

There is a longitudinal stop that runs in a guide along the front of the bench that can be easily shifted and arrested by hand, or which can be used with the precisely adjustable graduated scale.
Adjusting capabilities in the tenth of a millimetre range leave nothing to be desired and make it easy to saw work pieces to the desired, previously adjusted measure.
In addition there is a sophisticated and precise angle stop which can be extended with an aluminium profile strip with a moving clamping piece for the exact reproduction of many parts to be sawed out with equal angles and each with the same dimensions.

The safety aspect was taken care of as well: The saw blade is covered by a sturdy saw blade guard which automatically moves up when contact is made with the work piece, and which only releases as much of the saw blade as necessary.

Caution!
For your own safety, it is understood that the saw may never be operated without this protective guard!

The upper part of the device is hinged so that it can be opened for cleaning and maintenance purposes. Thus the interior of the device can be cleaned of chips and dust with a vacuum cleaner, for example. To exclude any kind of hazard, a switching contact disconnects the electrics from the power mains when the upper housing part is open.
But during all cleaning, maintenance and adjusting work (and of course during sawing) please remember that your FSK is not a play toy but a tool for woodworking and is thus a potential source of danger!

Among others a push-rod for the secure feed of more compact work pieces and two Allen keys are also included in the delivery. These can be stored in a „key parking slot“ on the right side of the housing.

In the interests of your own safety, please carefully read through and comply with the attached safety notes, which are also mentioned in these instructions, and make sure that you have also understood them!

4. Legend (fig. 1)

1. Saw blade guard
2. Saw table
3. Saw blade
4. Connection for dust suction
5. Longitudinal stop
6. Key parking slot
7. Rubber connecting piece for suction
8. Allen key
9. Allen key
10. Push-rod
11. Angle stop
12. Knurled screw for fine adjusting
13. Motor unit
14. Angle scale for saw blade tilt
15. Saw blade adjustment for depth of cut
16. Clamping piece
17. Limit stop strip
18. Mains cable
19. On - Off switch
20. Scale for longitudinal stop
21. Extendable saw support
22. Auxiliary stop

5. Technical data

Rotational speed:	7000/min
Saw blade diameter max.:	85 mm
Depth of cut max. (0°):	ca. 25 mm
Depth of cut max. (45°):	ca. 17 mm
Saw blade drill hole:	10 mm
Splitting wedge thickness:	1.2 mm
Weight:	7 kg
Blade body thickness:	≥ 1 mm
Tooth thickness/setting:	≥ 1.5 mm
Dimensions (in mm):	
Width:	300 mm
Depth:	320 mm
Height:	170 mm (with saw blade guard approx. 220 mm)
Motor:	
Voltage:	230 Volt, 50/60 Hz
Power consumption:	200 W
	Short-term operation SO 10 min
Noise level:	LPA 89.7 dB(A)
	LWA 102.7 dB(A)
Vibration:	< 2.5 m/s

General measuring uncertainty K=3 dB

Noise/vibration information

The information on vibration and noise emission has been determined in compliance with the prescribed standardised and normative measuring methods and can be used to compare electrical devices and tools with each other.

These values also allow a preliminary evaluation of the loads caused by vibration and noise emissions.

Warning!
Depending on the operating conditions while operating the device, the actually occurring emissions could differ from the values specified above!

Please bear in mind that the vibration and noise emission can deviate from the values given in these instructions, depending on the conditions of use of the tool. This is especially applicable in dependence on the work piece to be machined and the utilised saw blade and its wear condition. Always ensure you have an adequately sharp saw blade and a well-maintained drive. Poorly maintained tools, inappropriate working methods, different work pieces, too high a feed or unsuitable work pieces or materials or unsuitable bits and cutters (here: saw blade) can significantly increase the vibration load and noise emission across the entire work period.

To more accurately estimate the actual vibration and noise load, also take the times into consideration where the device is switched off, or is running but is not actually in use. This can clearly reduce the vibration and noise load across the entire work period.

Warning:
- To reduce vibrations, make sure your tool and the cutting disc or the saw blade are in proper condition!
- Ensure regular and proper maintenance of your tool
- Stop operation of the tool immediately if excessive vibration occurs!
- Unsuitable bits and cutters (here e.g. cutting disc or saw blade) can cause excessive vibration and noises. Only use suitable bits and cutters!
- Take breaks if necessary when working with the device!

Please note that the sound and vibration measurements in particular have been performed with Proxxon bits and cutters. When using third-party brands we cannot guarantee compliance with the statements given here!

Only use in the house 

Do not dispose of the device in household waste 

Your fingers and hands should not come near the saw blade or within the sawing range. 

Risk of injury!
Never work without dust protection mask and safety glasses. Some dusts have a hazardous effect! Materials containing asbestos may not be machined! 

For your safety, always wear hearing protection while working! 

6. Setting up the saw

6.1. Unpacking

Caution!
Please note that transport blocks have been attached to the device during packing to avoid damage during transportation. Make sure you remove all of them before commissioning! Carefully read through the instructions and especially observe the following chapter!
A transport block made of cardboard is inserted on the inside of the saw. This must be removed before initial commissioning. How to swing up the upper housing part is explained in the following chapter.

6.2. Swinging open the upper housing part

Caution!
Always use extreme caution if the work requires you to swing up the upper housing part of the saw: You could be injured (e.g. crush injury) if the upper housing part drops down accidentally or is closed carelessly!

1. Please open the packaging box to unpack, carefully remove the saw and deposit it on a firm and level surface.
2. Release the knurled screw 1 (fig. 2) and swing up the upper housing part 2.
3. Permit the latch 3 to engage.
4. Before first commissioning, remove the cardboard that was used as safeguard during the transport.
5. Release the latch 3 of the support and push the upper housing part back down. Caution! Hold on to the upper part when pushing down! Injuries might be caused if the upper part drops down unchecked.
6. Retighten knurled screw 1.

6.3. Fastening the saw

Attention:
When transporting the saw, the saw blade must be retracted in the housing (see Chapter 6.1: Height adjustment of the saw blade). Transport the saw only by carrying it by the housing bottom. Do not hold the attachment parts to carry the saw: These could break off and cause the saw to drop. Risk of injuries!

Generally the saw must be set up on a fixed and level surface, ideally on a heavy workbench or a solid table. To obtain a secure hold, your FET should be screwed to the surface: For this purpose there are four holes in the housing bottom so that fastening screws can be screwed into them.
Note:
Safe and precise work is only possible with careful fastening! Therefore, please proceed as follows:

Caution!
Make sure the mains plug is disconnected!

1. Swing up the upper part of the saw
2. Permit the latch to engage
3. Now you can see four hexagonal indentations on the inside above the four screw holes in the housing bottom, see fig. 3. These are intended to receive M5 hexagon nuts, or the heads of M5 hexagon screws. Insert sufficiently long screws 2 from inside through the opening in the housing bottom and bolt them through the drill holes that you previously drilled in the underlay 3.
   Use a drilling template for the required hole spacing. You will find a sketch with the dimensions at fig. 4.
4. Then release the latch of the support and push the upper housing part back down.
5. Do not forget to tighten the knurled screw 1 (fig. 2)!

6.4. Saw blade guard

Your FET is equipped with a saw blade guard. It is designed in such a way that moves up as far as necessary during sawing and then drops back into its home position. It also adapts to the various adjusted cutting depths.

Caution!

The saw blade guard is an important safety tool and may in no way be tampered with or even dismantled. Operating the saw without this guard is dangerous!
While setting up and transporting the saw, always may sure that the upper saw blade cover is in its correct position. The free-lying, sharp teeth of the saw blade pose a considerable risk of injury!

6.4.1. Secure the saw blade guard with the splitting wedge

Caution!

For packaging reasons, the saw blade guard and the splitting wedge are not attached when the device is delivered. However, assembly is rather simple:

Caution!

Make sure the mains plug is disconnected!

1. Swing open the upper housing part and arrest.
2. Please note that the saw blade in its delivered condition is in the lower position to guarantee accessibility to the drive unit. Otherwise, please proceed as explained in the section „Height adjustment of the saw blade“.
3. If the two screws 1 (fig. 5a) are not loose, please release them slightly with a screwdriver. Insert the orange-coloured saw blade guard with the splitting wedge 2 in the saw blade slot 3 and insert behind the little plate clip 4. Please ensure correct fit: The splitting wedge is seated on the upper of the two screws 1 with its **longer** cut-out (fig. 5b) **up to the limit stop**! Make sure the splitting wedge is fitted correctly in any case! Only tighten both screws 1 afterwards! After you have tightened the screws, please check once more if the splitting wedge is seated firmly and if the saw blade can be turned freely.
4. Push the upper housing part back down and secure with the knurled screw.
5. Set the desired saw blade position as described further down in the chapter „Height adjustment of the saw blade“.

7. Settings

7.1. Height adjustment of the saw blade

To adapt the depth of cut, the position of the saw blade can be regulated in the height. On the one hand, this optimises the sawing performance, and on the other hand the risk of injury is reduced due to the restriction of the free saw blade part.
Caution!

Make sure the mains plug is disconnected for all adjusting work!

1. Release the larger knurled button 1 (fig. 6) at the front operating plate and unscrew by a few revolutions
2. The saw blade position can now be set using the smaller knurled button 2: Turning clockwise will adjust the blade upwards, and turning counter-clockwise will adjust the blade downwards.
3. After the desired position is achieved, retighten the knurled button 1.

7.2. Adjusting the saw blade tilt

The saw blade can be tilted to manufacture mitre cuts. The desired value is set, or read, with the help of the angle scale.

Caution!

Make sure the mains plug is disconnected for all adjusting work!

1. Release handwheel 1 (fig. 7).
2. Swing the saw blade to the right with the handwheel.
3. Set or read off the desired angle with indicator 2 at the angle scale 3.
4. Arrest the saw blade position by turning the handwheel 1 shut

8. Extendable saw table

Caution!

Make sure the mains plug is disconnected for all adjusting work!

In order to place larger work pieces easily and securely on the saw table, it has been designed as an extendable saw table. The extension is quite simple:
Please note:

1. Use your finger to push the curry-coloured limit stop edge 1 (fig. 8a) towards the back. This makes it move out upwards.
2. Pull out the saw table 2 with the limit stop edge into the desired position, see fig. 8b. If necessary, support with the swivelling lever 3.
3. The small knurled screw 4 can be used to clamp the extendable saw table into the desired position, as necessary.
4. Now push the limit stop edge 1 back into its initial position to achieve a plane surface. It is now possible to work with the saw. Please note: The limit stop edge can also be used for larger work pieces as a longitudinal stop, of course.
5. After completing your work, simply push the extendable saw table 2 back into the initial position. If necessary, fold up the swivelling lever 3 before.

9. Dust suction

At the back of the housing of your FSK you will find a connecting piece for dust suction, see fig. 9: a vacuum cleaner is connected here.
This should always be operational while working! Not only because it guarantees a clean working environment, but also because this prevents the interior of the saw from becoming contaminated from sawdust.
The vacuum cleaner hose is simply connected to the rubber adapter, as shown in the picture.

Here's another tip:
Using the Proxxon CW-matic vacuum cleaner omits that annoying manual activation and deactivation. The CW-matic is

equipped with an automatic control that switches on and off automatically whenever the electrical tool is activated or deactivated.

10. Working with the limit stops

10.1 Working with the longitudinal stop

Assembly (Fig. 10 a):

Is pushed on to the side (from the left or right) over the ruler 5.

Caution:

Locking handle 3 and knurled screw 4 must be loosened for this procedure!

Adjusting the longitudinal stop (without fine adjustment function, Fig 10b):

Is possible on both sides of the saw blade. Is done by simply shifting and then clamping with locking handle 3.

Important:

The knurled screw 4 must be loosened during the adjustment.

Adjusting the longitudinal stop via fine adjustment by handwheel 7 (fig. 10 c):

1. After a rough preliminary adjustment, tighten knurled screw 4 (toggle screw 3 must be loosened).
2. Fine adjustment now follows by turning the handwheel 7 (one rotation moves the limit stop by 1 mm).
3. After completed adjustment it is recommended to fix the limit stop additionally by tightening the locking handle 3.

Adjusting the zero position of the limit stop scale:

1. Align the longitudinal stop with the left edge 6 over the zero mark of the scale (alternatively left or right).
2. Tighten the knurled screw 4 (toggle screw 3 must be loosened).
3. Put the longitudinal stop into position via handwheel 7 where the side facing the saw blade hits the outside edge of the saw blade teeth.
4. The stop can now be aligned with edge 6 with the help of the scale (shows the work piece width in mm).
5. Lock the limit stop after completing positioning by tightening the locking handle 3.

10.2 Working with the angle stop (Fig. 11)

Caution:

Saw cuts of bevels or wedges must always be made by using the angular stop!

Assembly:

Push the stop rail 1 into the guide of the angle stop and clamp into the required position with the knurled screw 4.

Using the angle stop (Fig. 12):

Is placed in the designated guides in the table of the FET, either to the right or left of saw blade 7.

Working with the angle stop without limit stop Fig. 12:

You absolutely must ensure sufficient distance of the end of the stop rail to the saw blade. To do so, disconnect the device plug and try shifting the limit stop. Warning: The mains plug must always be disconnected during all adjustment work! Danger of injuries due to inadvertent starting up!

Working with the angle stop and the limit stop (Fig. 13):

Insert limit stop 8 in the guide of the stop rail and clamp into the required position with knurled screw 9.

10.3. Auxiliary stop

Appropriate use of the auxiliary stop is made to be able to easily cut somewhat larger work pieces as well. For this, the saw table must be extended first, as described in the chapter „Extendable saw table“; but the limit stop edge is not „sunk“ in the extendable part by „pressing in“ but simply stays outside.
The distance to the saw blade determines the sawing width, which can therefore be varied depending on by how much the saw table is pushed in, or extended. To saw, always fix the limit stop by tightening the knurled screw. See fig. 8b.

11. Sawing

Caution!

Hold the work piece on the saw table as shown in fig. 14. Adapt the feed according to the material, the saw blade and the work piece thickness! Hard materials, fine saw blades and thick work pieces do not “tolerate” as much feed as soft materials, rough saw blades and thin materials.

Always operate the saw from the position as shown in Fig. 14a so that you are always in optimal control of the work piece. Stand in front of the saw while sawing! Never saw with your FET from the side or even from the back. Ensure sufficient stability while you work!

If you process correspondingly small work pieces then use the included push-rod, as shown in fig. 15. This prevents your hands from coming to close to the revolving saw blade and thus reduces the risk of injury:
Always keep the push-rod close to hand while working!
If the device is not in use, please use the supplied push-rod in the designated housing fixture (fig. 14b)!

Please note:

- Only use perfect saw blades.
- Always remove the mains plug for maintenance and upkeep work.
- Do not let the device operate unsupervised.

When sawing, press the work piece onto the work plate, guide with sensitivity and with little force, more pressure on the work plate, less pressure against the saw blade. Guide the work piece slowly into the saw blade, particularly if the blade is very thin and the teeth very fine or if the work piece is very thick.

11.1. General tips on sawing

For good results, please note the following points:

- When sawing, press the work piece onto the work plate, guide with sensitivity and with little force; more pressure on the work plate, less pressure against the saw blade.
- Make sure that the work piece is lying properly on the saw table (no burrs or sawdust)
- Adapt the feed to the requirements by saw blade, speed and work piece material.
- Guide the work piece slowly into the saw blade, particularly if the blade is very thin and the teeth very fine or if the work piece is very thick.
- Only use perfect saw blades. Make sure that the saw blades are suitable for use with the FET. You must comply with the dimensions specified in the technical data.
- Do not let the device operate unsupervised.
- Carefully mark out the check line.
- Make sure there is good lighting.
- Always work with connected dust suction!
- If necessary, use the included push-rod to feed the work piece.
- Always work with the saw blade guard and splitting wedge. Make sure that the protective devices are in a perfect condition.
- Prevent the saw blade from blocking! Always work with adjusted feed and avoid jamming the work piece. If the saw blade blocks all the same, please carefully pull out the work piece against the feed direction so that the saw blade can rotate freely again.

When sawing plastics, it may happen that the plastic is melted in the cutting gap of the workpiece due to the friction heat. This condition is to be avoided by selecting the right saw blade and the optimum feed.

12. Changing the saw blade

Your saw is equipped with a carbide-tipped saw blade with 36 teeth and an 80 mm diameter ex works.
This is very well suited for most „sawing jobs“, guarantees clean cuts in the most various materials and guarantees long service life. But it will not last for ever, of course: Wear will occur depending on the intensity of use: The saw blade will become dull, more force to push the work piece is required and the quality of the cut is reduced, the mechanics of the machine are stressed more strongly than necessary.
Then it is high time to replace the saw blade with a new one. It can also be necessary to use a different saw blade type for a particular task (see also the chapter „Choosing the right saw blade“ below) so that it needs to be exchanged for the standard blade. The work steps remain the same, naturally.

1. Disconnect the mains plug!
2. Turn the saw blade down as described in the chapter „Height adjustment of the saw blade“.
3. Swing open the housing as described in section 6.2
4. To release the screw 1 (fig 16a), the shaft on which the saw blade 2 is mounted must be blocked. To do so, insert the smaller of the two included Allen keys 3 through the small drill hole 4 in the saw table and from there insert it into the saw blade shaft through a cross-hole, see fig. 16b. If necessary, this drill hole must be „found“ somewhat by turning the saw blade by hand. A hint: For this procedure we recommend you adjust the saw blade to a relatively high height and then to lower it somewhat after finding the latching drill hole with inserted Allen key in order to gain full access to screw 1.
5. Release the cheese-head screw 1 with the larger of the two Allen keys and remove together with disc 5.

Caution!

The teeth of even worn saw blades are still very sharp! Risk of injury!

6. Remove the old saw blade upwards and through the saw blade opening and place the new saw blade on the shaft. Make sure the saw blade drill hole is seated correctly at the shaft shoulder!
7. Please also make sure that the teeth are pointing in the direction as shown in the figures!
8. Screw on disc 5 with the cheese-head screw 1 and tighten. Note that the saw shaft still needs to remain blocked with the small Allen key.
9. Release the latch, push down the upper housing part and lock with the knurled screw.

12.1. Choosing the right saw blade

Caution!

When choosing the saw blade, make sure at all costs that the highest permissible speed is sufficiently high enough for the idling speed of the saw!

The choice of the suitable saw blade has an enormous impact on the work result: Various characteristics such as work piece material, saw job intensity and the desired quality of the result must be considered. Proxxon has different saw blades that can be used to operate the machine.

Accessories
For more detailed information on accessories, please request our device catalogue from the address specified on the last page in the warranty information.

Please note in general:
Proxxon bits and cutters have been designed to work with our machines, which makes them optimal for their use.

We will not assume any liability whatsoever for the safe and proper function of our devices when using third-party bits and cutters!

13. Maintenance and repairs:

Caution!

Always disconnect the mains plug before doing any cleaning, setting, maintenance or repair works!

The device is maintenance-free apart from the necessity of regular cleaning (see below).

Only have repairs carried out by qualified specialist personnel or, even better, by the PROXXON central service. Never repair electrical parts, but always exchange them for original spare parts from PROXXON!

13.1. Cleaning the housing

For a long service life, the device should be cleaned after every use with a soft cloth, hand brush or a soft brush. Even a vacuum cleaner can be recommended.

Cleaning the outside of the houses can be done with a soft, possibly moist cloth. A soft detergent or other suitable cleaning agent may be used. Avoid using solvents or alcohol-based cleaning agents (e.g. benzine, rubbing alcohol, etc.) as these will affect the plastic housing shells.

If, despite using the dust suction during operation, it is necessary to clean the inside of the device, please simply swing up the upper housing part and vacuum the inside of the device with a vacuum cleaner.

13.2. Cleaning the inside of the device

Caution!

Never use compressed air for blowing out! The fine wood dust could become lodged inside the motor or on electrical components and impair the reliability and the safety of the machine!

1. Make sure the mains plug is disconnected!
2. Swing open the upper housing part (see also section 6.2 „Unpacking“)
3. Vacuum the inside of the device with a vacuum cleaner
4. Push down the upper housing part and lock.

13.3. Replacing the toothed belt

A toothed belt transmits the power from the motor to the saw blade shaft. The belt has a very long service life, but when the machine is used extensively, it could be necessary to replace it after a longer operating period. The procedure is described here. In case you are unsure, please send the saw to our Central Service.

1. Make sure the mains plug is disconnected!
2. Set the saw blade to an approx. 40° tilt as explained in section „Adjusting the saw blade tilt“.
3. Swing up the upper housing part as explained in section 6.2
4. Block the shaft with the small Allen key as described in the Chapter 12.
5. Unscrew the Phillips screw 1 (fig. 17). Remove thrust washer 2.
6. Pull off the old toothed belt 3 and fit the new toothed belt. Turn the drive at the toothed belt pulleies slightly back and forth until the new toothed belt sits correctly.
7. Replace the thrust washer 2 and tighten with the Phillips screw 1.
8. Close the upper housing part and correct the saw blade tilt as desired.
9. Make sure to remove the Allen key for blocking the shaft before commissioning.

14. Disposal

Please do not dispose of the device in the household waste! The device contains valuable substances that can be recycled. For any further questions, please contact your municipal disposal company or other appropriate municipal institutions.

15. EC Declaration of Conformity

Name and address:
PROXXON S.A.
6-10, Härebierg
L-6868 Wecker

Product designation: Fine cut circular saw FET
Article No.: 27070

In sole responsibility, we declare that this product conforms to the following directives and normative documents:

EU EMC Directive 2014/30/EU
DIN EN 55014-1 / 05.2012
DIN EN 55014-2 / 01.2016
DIN EN 61000-3-2 / 03.2015
DIN EN 61000-3-3 / 03.2014

EU Machinery Directive
2006/42/EC
DIN EN 62841-1/07.2016
DIN EN 62841-3-1/05.2015
DIN EN ISO 14121-1 / 09.2010

CE-Type certification according to Macine Guidline 2006/42/EC Art. 12.3 (b) was made by VDE Test- and Certification body (NB 0366), Merianstraße 28, 63069 Offenbach, Germany

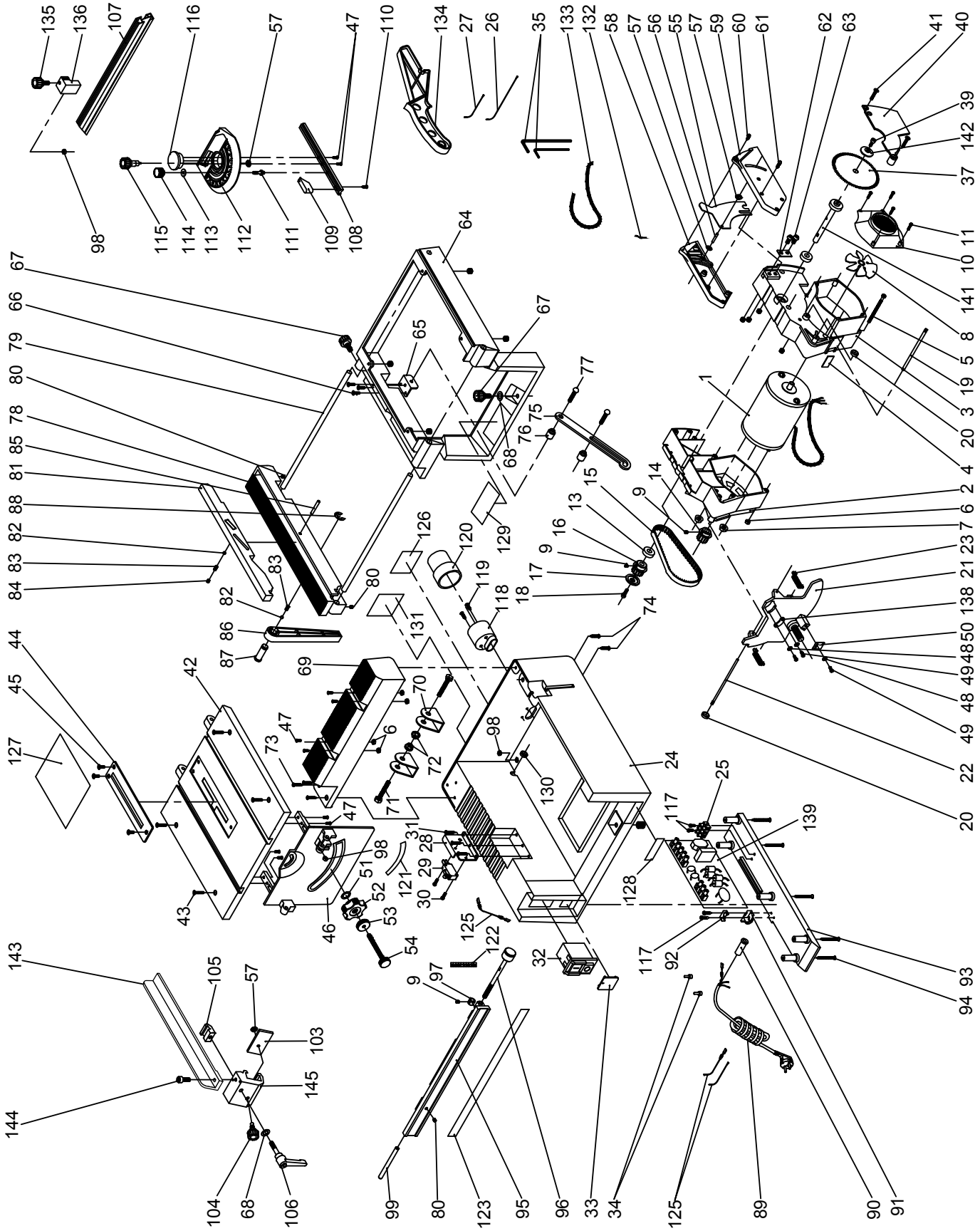
Certification number: 40045123

Date: 05.12.2016

Dipl.-Ing. Jörg Wagner

PROXXON S.A.
Machine Safety Department

The CE document authorized agent is identical with the signatory.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83 82 86 87 126 120 129 16 13 9 17 18 119 118 74 131 80
44 45 127 42 69 70 47 6 73 72 71 98 130 24 25 117 139 128 31 28 29 30 121 51 52 53 54 43 46
125 122 32 9 97 99 80 123 95 96 33 34 125 89 90 91 92 93 94
143 105 57 103 145 144 104 68 106

Spare Parts List

ET - Nr.:	Description
27070 - 01	Motor
27070 - 02	Motor Casing, small
27070 - 03	Motor Casing, big
27070 - 04	Stop plate
27070 - 05	Screw
27070 - 06	Nut
27070 - 07	Nut
27070 - 08	Fan
27070 - 09	Set screw
27070 - 10	Cap
27070 - 11	Screw
27070 - 13	Ball bearing
27070 - 14	Poully
27070 - 15	Toothed belt
27070 - 16	Poully
27070 - 17	Spacer disc
27070 - 18	Screw
27070 - 19	Connecting rod
27070 - 20	Distance bushing
27070 - 21	Angle adjusting plate
27070 - 22	Axis
27070 - 23	Extension spring
27070 - 24	Lower casing
27070 - 25	Lustre terminal
27070 - 26	Connecting cable
27070 - 27	Connecting cable
27070 - 28	Holder
27070 - 29	Switch
27070 - 30	Screw
27070 - 31	Screw
27070 - 32	On-Off switch
27070 - 33	Cover
27070 - 34	Screw
27070 - 35	Allen key set
27070 - 37	Saw blade
27070 - 39	Screw
27070 - 40	Cover plate
27070 - 41	Screw
27070 - 42	Saw table
27070 - 43	Screw
27070 - 44	Cover plate
27070 - 45	Screw
27070 - 46	Front cover
27070 - 47	Screw
27070 - 48	Washer
27070 - 49	Screw
27070 - 50	Indicator
27070 - 51	Washer
27070 - 52	Hand wheel
27070 - 53	Knurled nut
27070 - 54	Knurled screw
27070 - 55	Riving knife
27070 - 56	Pin
27070 - 57	Shaft locking clip
27070 - 58	Saw blade cover, left half
27070 - 59	Saw blade cover, right half
27070 - 60	Screw
27070 - 61	Screw
27070 - 62	Plate
27070 - 63	Screw
27070 - 64	Upper casing part
27070 - 65	Holder
27070 - 66	Screw
27070 - 67	Knurled nut
27070 - 68	Washer
27070 - 69	Holder for upper casing part
27070 - 70	Hinge
27070 - 71	Screw
27070 - 72	Nut
27070 - 73	Screw

ET - Nr.:	Description
27070 - 74	Screw
27070 - 75	Blocking lever
27070 - 76	Bushing
27070 - 77	Screw
27070 - 78	Extenable saw bearing
27070 - 79	Guiding rod
27070 - 80	Set screw
27070 - 81	Supporting stop
27070 - 82	Resting ball
27070 - 83	Compression spring
27070 - 84	Set screw
27070 - 85	Pin
27070 - 86	Supporting lever
27070 - 87	Metal core
27070 - 88	Lock washer
27070 - 89	Cable connection
27070 - 90	Tension relief
27070 - 91	Downer strain relief clamp
27070 - 92	Upper strain relief clamp
27070 - 93	Cover
27070 - 94	Screw
27070 - 95	Ruler
27070 - 96	Fine adjusting screw
27070 - 97	Nut
27070 - 98	Nut
27070 - 99	Guiding rod
27070 - 100	Guidin piece
27070 - 101	Longitudinal stop
27070 - 102	Screw
27070 - 103	Plate
27070 - 104	Knurled nut
27070 - 105	Clamping piece
27070 - 106	Clamping lever
27070 - 107	Stop bar
27070 - 108	Guidance
27070 - 109	Pointer
27070 - 110	Screw
27070 - 111	Set screw
27070 - 112	Mitre gauge
27070 - 113	Washer
27070 - 114	Knurled screw
27070 - 115	Knurled screw
27070 - 116	Centering device
27070 - 117	Screw
27070 - 118	Connecting piece
27070 - 119	Screw
27070 - 120	Rubber hose
27070 - 121	Label "angle scale"
27070 - 122	label " fine adjustment"
27070 - 123	Label "scale"
27070 - 125	Connecting cable
27070 - 126	Label "Exhaustion"
27070 - 127	Label "Transport lock"
27070 - 128	Label "Proxxon"
27070 - 129	Label
27070 - 130	Grommet
27070 - 131	Rating plate
27070 - 132	Cable grommet
27070 - 133	Cable grommet
27070 - 134	Work piece pusher
27070 - 135	Knurled nut
27070 - 136	Stop
27070 - 137	Manual (not shown)
27070 - 138	Sheet
27070 - 139	Board
27071 - 141	Shaft
27070 - 142	Washer
27070 - 143	Longitudinal stop
27070 - 144	Screw
27070 - 145	Clamping piece

Fig. 14a

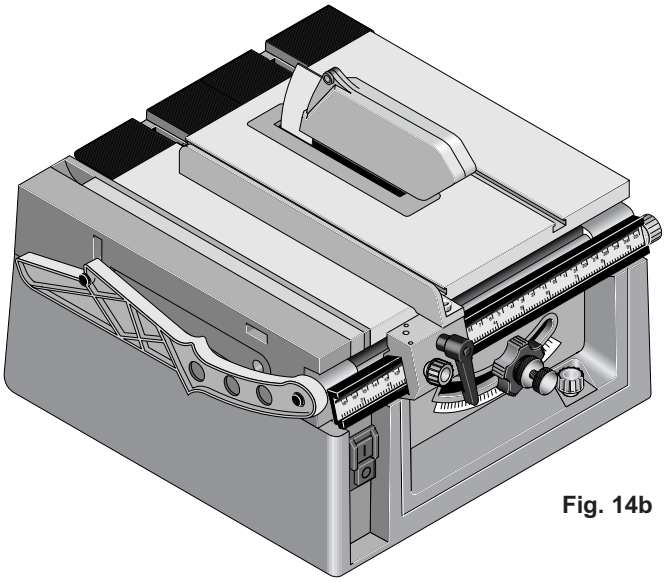

Fig. 14b

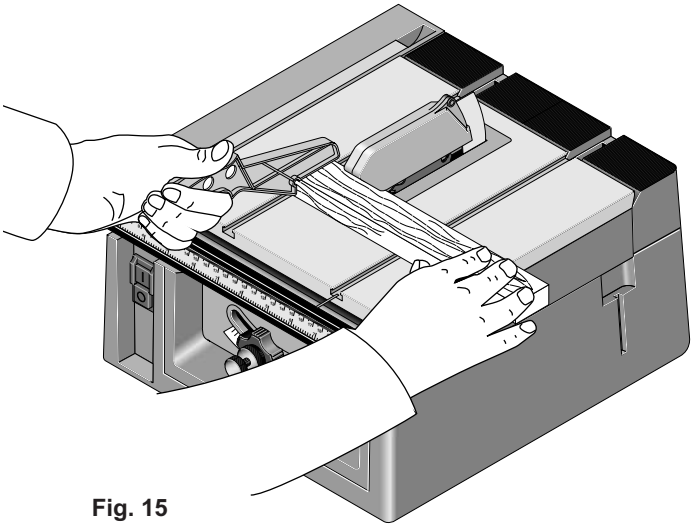

Fig. 15

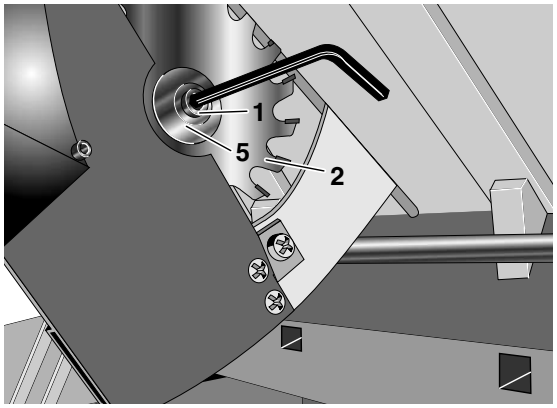

Fig. 16a

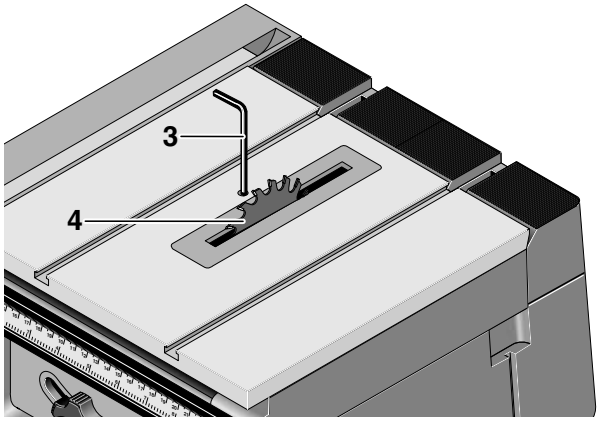

Fig. 16b

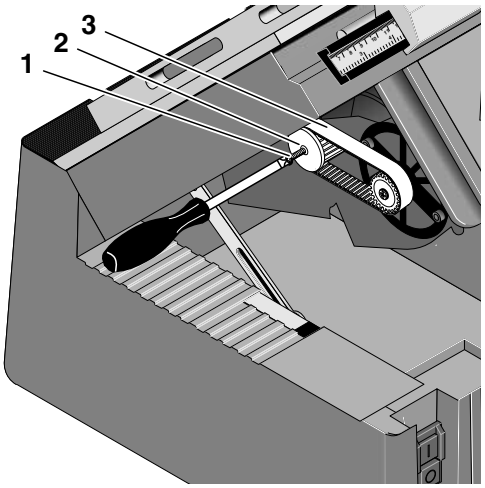

Fig. 17

PROXXON

GB **Service note**

All PROXXON products are thoroughly inspected after production. Should a defect occur nevertheless, please contact the dealer from whom you purchased the product. Only the dealer is responsible for handling all legal warranty claims which refer exclusively to material and manufacturer error.

Improper use, such as capacity overload, damage due to outside influences and normal wear are excluded from the warranty.

You will find further notes regarding "Service and Spare Parts Management" at www.proxxon.com.