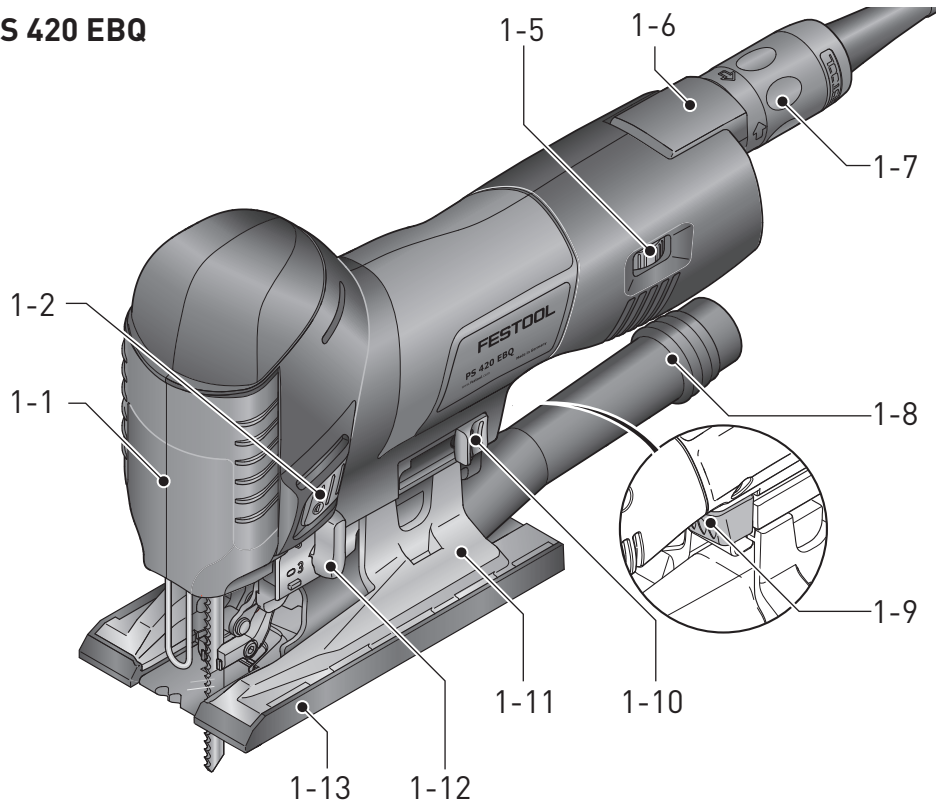


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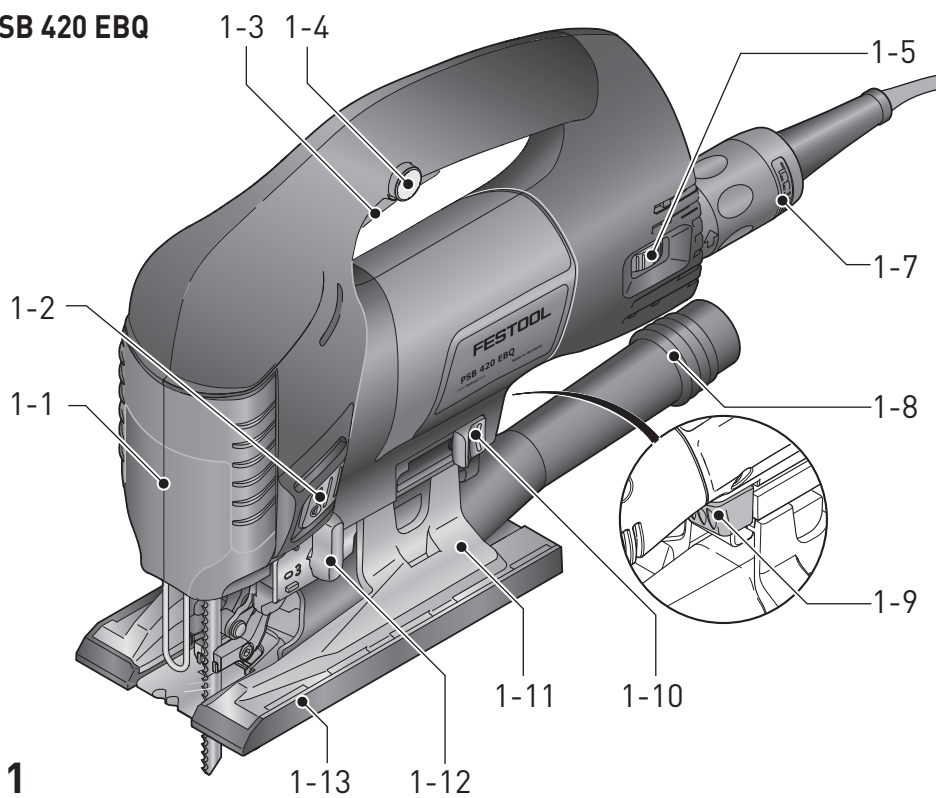
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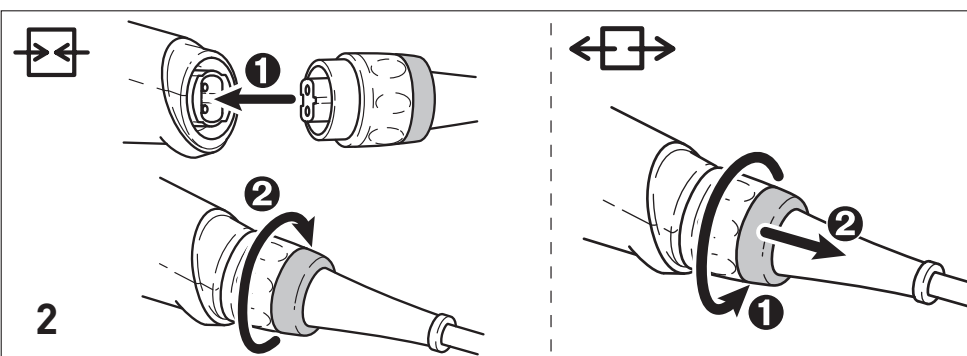
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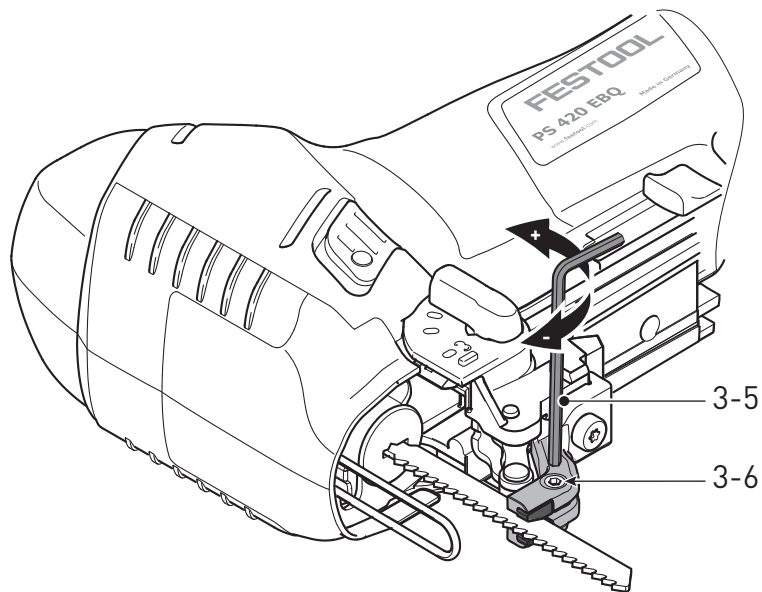
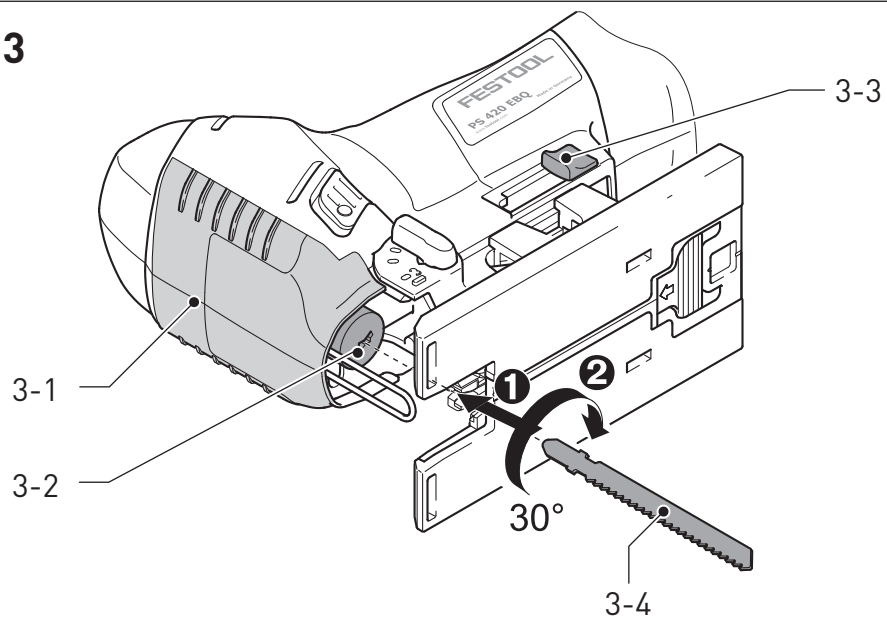
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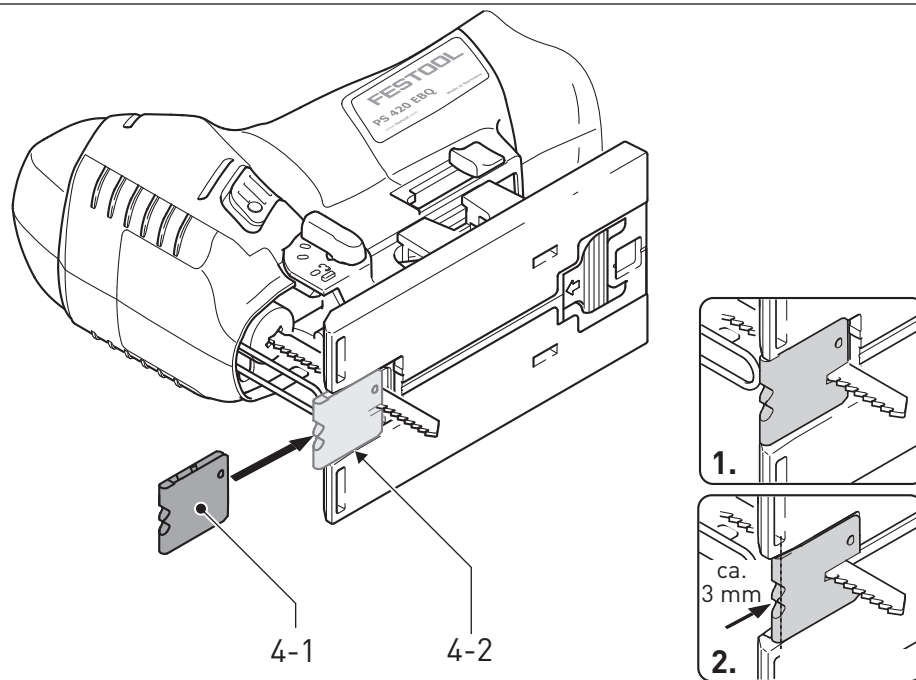
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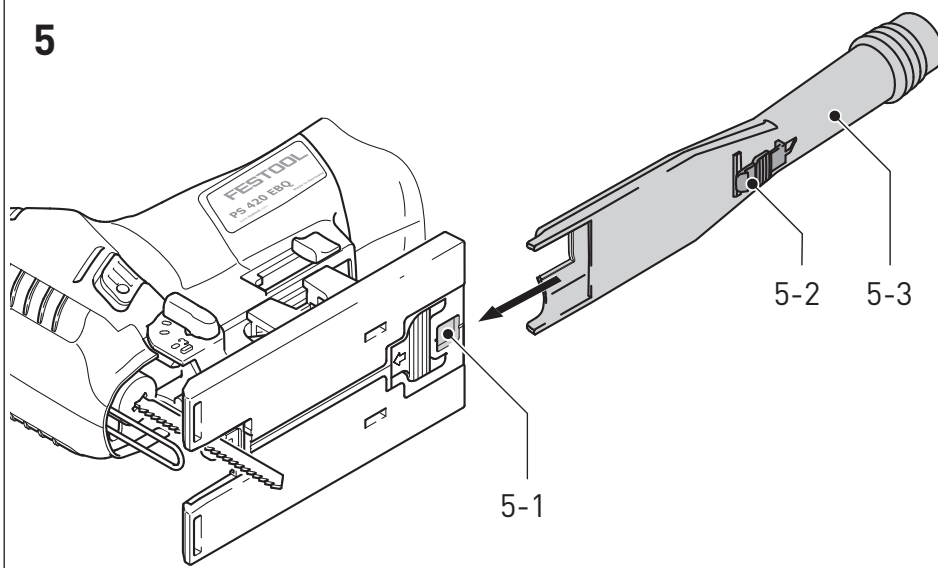
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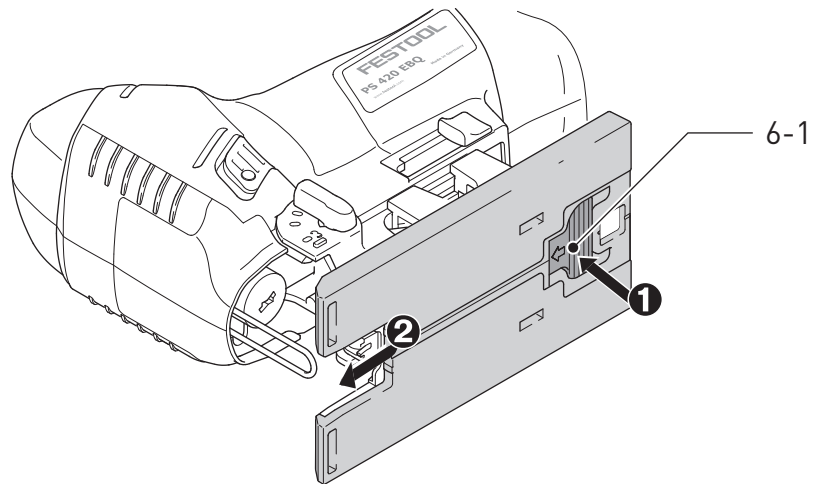
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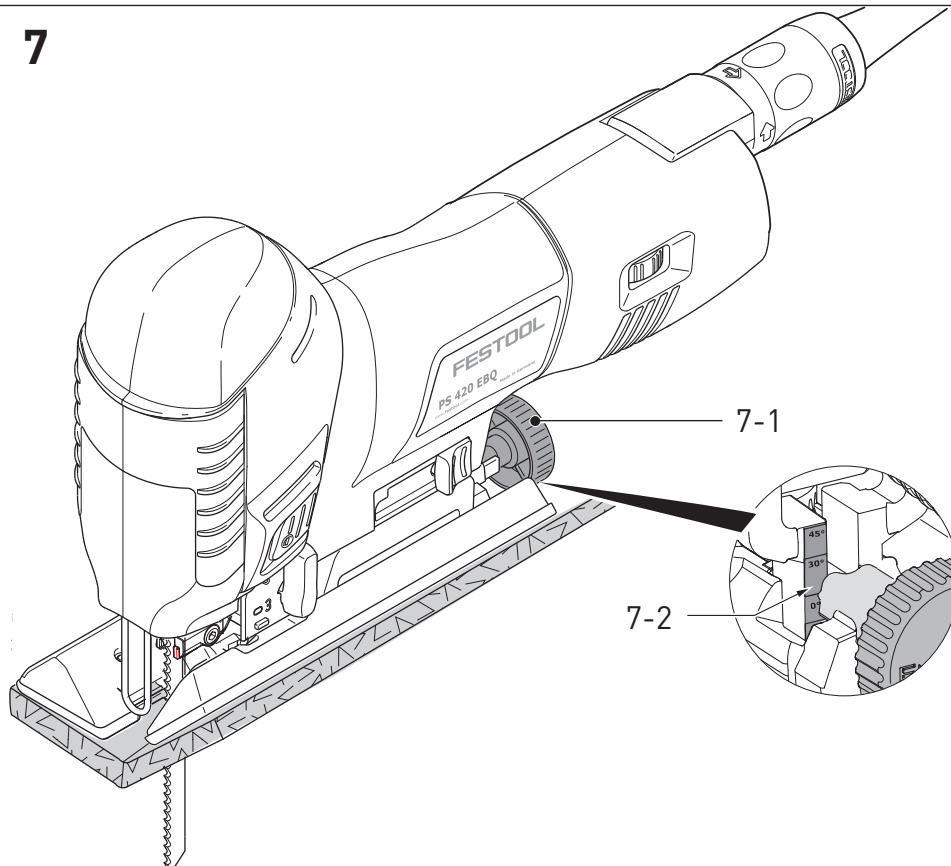
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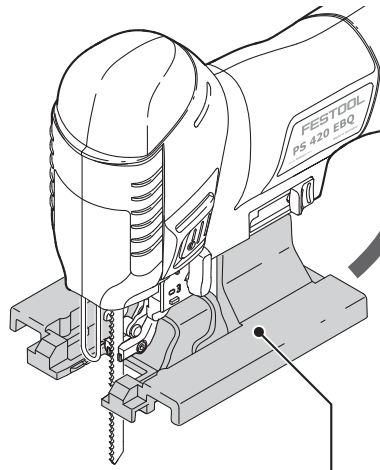


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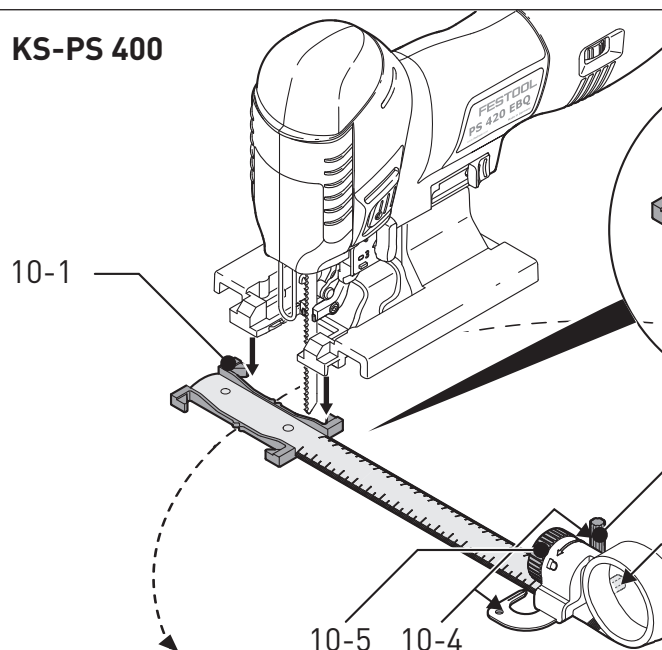
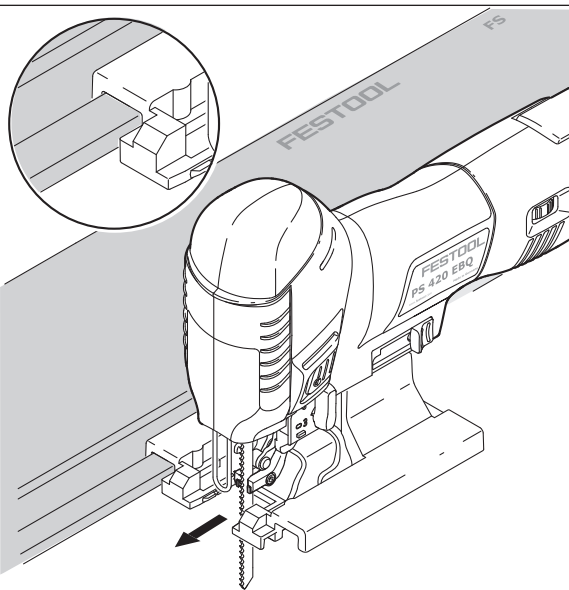
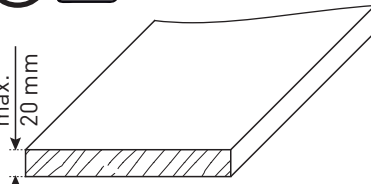


8-1



max.
20 mm

FSG



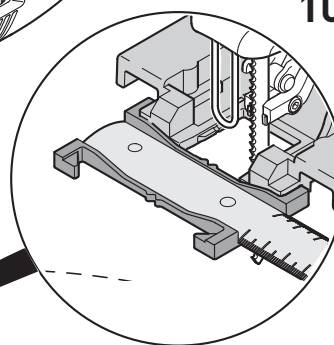
10-1

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Original operating manual

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1 Symbols



Warning of general danger



Risk of electric shock



Read the Operating Instructions/Notes!



Wear a dust mask.



Wear ear protection.



Wear protective goggles.



Wear protective gloves.

4 Technical data

Jigsaws	PS 420 EBQ	PSB 420 EBQ
Power		550 W
	(110 V version)	400 W
Stroke speed	1500 - 3800 rpm	1000 - 3800 rpm
Stroke length		26 mm
Pendulum stroke		4 steps
max. inclination (only with accessory angle table WT-PS 400)		45° to both sides
max. cutting depth (depending on saw blade)		
	Wood	120 mm
	Aluminium	20 mm
	Steel	10 mm
Weight		1,9 kg
Safety class		□ /II



Do not throw in the household waste.

2 Machine features

- [1-1]** Chip guard
- [1-2]** On/Off switch
- [1-3]** Variable speed trigger (only PSB 420 EBQ)
- [1-4]** Switch lock (only PSB 420 EBQ)
- [1-5]** Adjusting wheel for stroke speed control
- [1-6]** Swivel plug-it connection (only PS 420 EBQ)
- [1-7]** Mains power cable
- [1-8]** Extractor connector
- [1-9]** Saw table change lever
- [1-10]** Saw blade ejection
- [1-11]** Replaceable saw table
- [1-12]** Pendulum stroke switch
- [1-13]** Base runner

The specified illustrations appear at the beginning of the Operating Instructions.

3 Intended use

Jigsaws are designed for sawing wood and similar materials similar to wood. With the special saw blades offered by Festool, these machines can also be used for sawing plastic, steel, aluminium, non-ferrous metal and ceramic plates.



The user is liable for improper or non-intended use.

5 Safety instructions

5.1 General safety instructions



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

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

5.2 Machine-related safety instructions

- **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- **Festool electric power tools must only be installed on work tables provided by Festool for this purpose.** If the tool is installed in another, or self-made, work table, it can become unstable and result in serious accidents.
- **Wait until the power tool stops completely until placing it down.** The tool can become entangled and lead to a loss of control of the power tool.
- Deformed or cracked saw blades and saw blades with blunt or broken cutting edges must not be used.
- Always place the pendulum jigsaw on the workpiece with the saw blade running.



- Wear suitable protection such as ear protection, safety goggles, a dust mask for work which generates dust, and protective gloves when working with raw materials and when changing tools.
- Always secure the workpiece in such a manner that it cannot move while being sawed.
- Always connect the machine to a dust extractor when work involves dust generation.
- Check the plug and the cable regularly and should either become damaged, have them replaced by an authorised after-sales service workshop.
- **Stroboscopic light can cause epileptic seizures.** Do not use this machine if you are susceptible to epileptic seizures.
- Do not look into the stroboscope light. Looking into the light source can damage your vision.

5.3 Metalworking



The following precautions are to be taken when processing metals for safety reasons:

- Pre-connect a residual current circuit-breaker (FI, PRCD).
- Connect the machine to a suitable dust extractor.
- Clean tool regularly of dust accumulations in the motor housing.



Wear protective goggles.

5.4 Emission levels

Levels determined in accordance with EN 60745 are typically:

Sound pressure level	$L_{PA} = 88 \text{ dB(A)}$
Noise level	$L_{WA} = 99 \text{ dB(A)}$
Measuring uncertainty allowance	$K = 3 \text{ dB}$



CAUTION

Operating noise

Damage to hearing

► Use ear protection!

Vibration emission value a_h (vector sum for three directions) and uncertainty K measured in accordance with EN 60745:

	PS 420 EBQ	PSB 420 EBQ
Sawing wood		
Handle	$a_h = 6,0 \text{ m/s}^2$ $K = 2,0 \text{ m/s}^2$	$a_h = 10,0 \text{ m/s}^2$ $K = 2,0 \text{ m/s}^2$
Gear head	$a_h = 11,0 \text{ m/s}^2$ $K = 2,0 \text{ m/s}^2$	
Sawing metal		
Handle	$a_h = 7,0 \text{ m/s}^2$ $K = 2,0 \text{ m/s}^2$	$a_h = 11,0 \text{ m/s}^2$ $K = 2,0 \text{ m/s}^2$
Gear head	$a_h = 12,0 \text{ m/s}^2$ $K = 2,0 \text{ m/s}^2$	

The specified emissions values (vibration, noise)

- are used to compare machines.
- They are also used for making preliminary estimates regarding vibration and noise loads during operation.
- They represent the primary applications of the power tool.

Increase possible for other applications, with other insertion tools or if not maintained adequately. Take note of idling and downtimes of machine!

6 Operation



WARNING

Unauthorised voltage or frequency!

Risk of accident

- ▶ The mains voltage and the frequency of the power source must correspond with the specifications on the machine's name plate.
- ▶ In North America, only Festool machines with the voltage specifications 120 V/60 Hz may be used.

Connecting and detaching the mains power cable [1-7] see Fig. [2].

- ▶ Insert the plug into a socket.

The electric power tool has one button [1-2] on each side for switching on/off.

The PSB 420 EBQ also has a variable speed trigger [1-3] with switch lock [1-4]. For continuous operation, use the button [1-2].

7 Settings



WARNING

Risk of injury, electric shock

- ▶ Always pull the mains plug out of the socket before performing any type of work on the machine!

7.1 Changing tools



CAUTION

Hot and sharp tools

Risk of injury

- ▶ Wear protective gloves.

Selecting saw blade



Only use saw blades with a T-shank. The saw blade should not be longer than that required for the intended cut. To ensure safe guidance, during the cut the saw blade should emerge at the bottom of the workpiece at every point.

- ① Only use cross-set saw blades when using the angle and adapter table. We recommend Festool saw blade S 105/4 FSG.

Inserting saw blade



Always pull the mains plug out of the socket before changing blades.

- ▶ If necessary, lift up the chip guard [3-1].
- ▶ Slide the saw blade [3-4] into the opening [3-2] as far as the stop with its teeth in the cutting direction.
- ▶ Turn the saw blade [3-4] clockwise approx. 30°.



Check that the saw blade is secure. A loose saw blade can fall out and cause an injury.

① If the saw blade is very small, it is advisable to remove the saw base (see chapter 7.4) before inserting the saw blade.

Adjust the saw blade guide after every saw blade change:

The saw blade guide was designed to improve guidance of the saw blade.

- ▶ Remove the saw base (see chapter 7.4).
- ▶ Tighten the screw [3-6] using the Allen key [3-5] until the jaws are almost touching the saw blade.

NOTE

Damage to the machine or saw blade

- ▶ Do not tighten the screw [3-6] too firmly! It must be possible to move the saw blade slightly.

Ejecting saw blade

- ① When ejecting the saw blade, hold the electric power tool such that no persons or animals can be injured.
- ▶ Push the saw blade ejection [3-3] forwards as far as the stop.
- ① A tool change is only possible when the tool holder is located in the upper position!

If the saw blade is stuck and cannot be changed: Operate the jigsaw at high speed for 3 - 10 seconds. Actuate the saw blade ejection [3-3] again.

7.2 Using the chip guard

The chip guard [3-1] prevents chips flying away and improves the efficiency of the chip extraction system.

- ▶ Using minimal pressure, push the chip guard [3-1] downwards.

7.3 Inserting the splinterguard

The splinterguard prevents the edges of the material from splintering during the cut, even at the end where the saw blade exits the material.

- ▶ Switch off the machine and slide the splinterguard [4-1] into the guide [4-2] and up to the

saw blade,

- ▶ Switch on the jigsaw,
- ▶ On a level surface, slide in the splinterguard **(not using your hand!)** while the machine is operating until it is flush with the front edge of the saw base (speed setting 5). This beds in the splinterguard.
- ① When it is worn, push the splinterguard approx. 3 mm further to the rear and continue using it.
- ① To guarantee reliable operation of the splinterguard, it must seal tightly on both sides of the saw blade. A new splinterguard should therefore be fitted after every saw blade change to guarantee splinter-free cuts.

7.4 Changing saw table

- ▶ Open the change lever [1-9].
- ▶ Removing the saw table downwards.
- ① Assembly is performed in reverse sequence to removal. Ensure that the saw table is firmly seated in the guide.

Instead of the saw table, the angle table WT-PS 400 or adaptation table ADT-PS 400 can be installed at the support.



Never saw without the saw table, or one of the other tables offered in the Festool accessories program.

7.5 Dust extraction



WARNING

Dust hazard

- ▶ Dust can be hazardous to health. Always work with a dust extractor.
- ▶ Always read applicable national regulations before extracting hazardous dust.

The extraction adapter [5-3] allows jigsaws to be connected to a dust extractor (hose diameter 27 mm).

- ▶ Insert the extraction adapter into the rear opening of the saw table so that the hook [5-2] engages in the [5-1] recess.
- ▶ To remove the extraction adapter, press the hook [5-2].
- ① Due to the low power consumption of the machine (low energy consumption), dust extractors with an automatic switch-on function will sometimes only start up when the actual cut is made.
- ▶ Set the dust extractor to continuous operation for special applications (e.g. low stroke rate, soft wood).

7.6 Adjusting the pendulum stroke

In order to process different materials with an optimum feed movement the pendulum jigsaws have an adjustable pendulum stroke. Select the desired setting with the pendulum stroke switch [1-12]:

setting 0 = pendulum stroke off

setting 3 = maximum pendulum stroke

Recommended settings of the pendulum stroke

Hard and soft wood, chip board, wood fibre board	1 - 3
Wood core plywood, plywood, plastics	1 - 2
Ceramic	0
Aluminium, NF metals	0 - 2
Steel	0 - 1

7.7 Stroke speed control

The number of strokes can be adjusted steplessly with the adjusting wheel [1-5] between 1500 and 3800 rpm (PSB 420 EBQ: 1000 - 3800 rpm). This enables you to optimise the cutting speed to suit the respective material.

In position **A**, the automatic load detection is activated: The stroke speed is reduced in idling and is controlled to the highest value when the blade enters the workpiece.

Recommended stroke speed (position of the adjusting wheel)

Hard and soft wood, plywood board, plywood, chip board	A
Hardboard	4 - A
Plastic	3 - A
Ceramic, aluminium, non-ferrous metals	3 - 5
Steel	2 - 4

8 Working with the machine



CAUTION

Material with high dust generation (e.g. plaster-board)

Damage to machine through dust penetration, risk of injury

- ▶ Do not work overhead!

When working on small or thin workpieces, always use a stable base, or the CMS module (accessory).

When working, hold the electric power tool by the handle and guide it along the desired cutting line. For precise cuts and smooth running, use two hands to guide the electric power tool.

Free saw guidance along a scribe mark

The triangular pointer on the splinterguard [4-1] indicates the cutting line of the saw blade. This facilitates sawing along a scribe mark.

8.1 Lighting



WARNING

The stroboscope light may make it difficult to determine the saw blade position

Risk of injury

- Ensure the work area is well illuminated.

A continuous light or stroboscope is installed for illuminating the cutting line:

up to approx. 2100 rpm: continuous light

from approx. 2100 rpm: stroboscope light

- ① In overhead position (+/- 45°), the lighting is switched off completely.

If required, you can adjust the lighting:

- Plug in the electric power tool.
- Press both buttons simultaneously [1-2] and hold for approx. 10 s until a beep sounds.
- Release both buttons [1-2].
- Press the left button (on the pendulum stroke side) to select the stroke speed and consequently the desired operating mode:

Mode	Indication during configuration	Behaviour during operation
1	Light flashes	With stroboscope (standard)
2	Light on	Permanent light without stroboscope
3	Light off	Light switched off

- Press the right button to save the setting.

9 Service and maintenance



WARNING

Risk of injury, electric shock

- Always disconnect the mains plug from the socket before performing maintenance work on the machine!
- All maintenance and repair work which requires the motor housing to be opened must only be carried out by an authorised service workshop.



Customer service and repair only through manufacturer or service workshops: Please find the nearest address at:

www.festool.com/Service



Use only original Festool spare parts! Order No. at:

www.festool.com/Service

Damaged safety devices and components must be repaired or replaced in a recognised specialist workshop, unless otherwise indicated in the operating manual.

To ensure constant air circulation, always keep the cooling air openings in the motor housing clean and free of blockages.

- Check the guidance roller regularly for wear.
- Regularly remove dust deposits from the chip guard.
- Regularly clean the base runner to prevent scratches and cores on the surface.

10 Accessories

The order numbers of the accessories and tools can be found in the Festool catalogue or on the Internet under "www.festool.com".

10.1 Saw blades, other accessories

In order to saw different materials quickly and cleanly, Festool offers saw blades for all applications that are specially designed for your Festool jigsaw.

10.2 Sawing with special base runners

The special base runners protect high-quality surfaces against scratches and scores.

- Press in the base runner at position [6-1].
- At the same time, push the base runner forwards.
- Mount another base runner and push it to the rear until it engages.

10.3 Sawing with the angle table

The angle table WT-PS 400 is used for cutting pipes or interior and exterior angles up to 45°.



Dust extraction is not possible when sawing with the angle table!

Installing the angle table

- Remove the saw base [1-11], (see chapter 7.4).
- Position the angle table against the saw base support.
- Close the lever [1-9].

Ensure that the angle table is firmly seated in the guide.

Setting the angle

- ▶ Turn the adjusting wheel [7-1] to select the required angle.

You can select the angles -45° , 0° and $+45^\circ$ on the scale [7-2].



WARNING

Sawing cutting depths

Risk of injury

- ▶ Select the saw blade length and cutting depth so that the saw blade remains plunged in the work-piece.

- ① For 90° cuts, we recommend setting the angle table to a small negative angle to guarantee smooth operation.

10.4 Sawing with the adaptation table

The adaptation table ADT-PS 400 is used for attaching your jigsaw to the Festool guide rail, the circle cutter KS-PS 400 and the CMS modular system.



With guide rail and circle cutter: do not exceed max. material thickness of 20 mm and always use cross-set saw blades (FSG).

Installing the adaptation table

- ▶ Remove the saw table [1-11], (see chapter 7.4).
- ▶ Mount the adaptation table [8-1] on the saw table support.
- ▶ Close the change lever [1-9].

Ensure that the adaptation table is firmly seated in the guide.

- ① Use the extractor connector [1-8] also with the adaptation table.

Adaptation to the guide rail FS 2

The Festool guide system FS 2 (Fig. [9]) makes it much easier to manufacture straight precision cuts.

- ▶ Place the jigsaw with attached adaptation table [8-1] on the guide rail.

Adaptation to the circle cutter

The circle cutter can be used to create circular cuts with a diameter between 120 and 3000 mm. The circle cutter can be installed from both sides on the adaptation table.

- ▶ Place the jigsaw with attached adaptation table on the adapter [10-1] on the circle cutter.
- ▶ Insert the centring mandrel [10-2] in the hole [10-4] on the circle cutter aligned with the saw blade.

- ▶ Clamp the measuring tape to the circle cutter using the rotary knob [10-5].

Recommended when using the circle cutter:

- ▶ Cut in an anticlockwise direction.
- ▶ Work at a slow rate of advance.
- ▶ Set the pendulum stroke [1-12] to 0 - 1.
- ▶ Set the stroke rate [1-5] to 1 - 5.

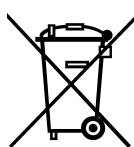
- ① Store the centring mandrel in the depot [10-3].

Semi-stationary sawing with the Festool CMS system

When combined with the Festool CMS system, the jig-saw becomes a semi-stationary bench saw for profiled cuts. See the CMS brochure for more information.

- ▶ Install your jigsaw with adaptation table in the CMS as described in the operating manual for the CMS-PS.

11 Environment



Do not dispose of the device in household waste! Recycle devices, accessories and packaging. Observe applicable country-specific regulations.

EU only: European Directive 2002/96/EC stipulates that used electric power tools must be collected separately and disposed of at an environmentally responsible recycling centre.

Information on REACH: www.festool.com/reach

12 EU Declaration of Conformity

Jigsaw	Serial no.
PSB 420 EBQ	10003822, 10004924, 10003822
PS 420 EBQ	10003702, 10004876, 10003702
Year of CE mark: 2012	

We declare under sole responsibility that this product complies with the following directives and standards:

2006/42/EG, 2004/108/EG, 2011/65/EU, EN 60745-1, EN 60745-2-11, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3.

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31.01.2013