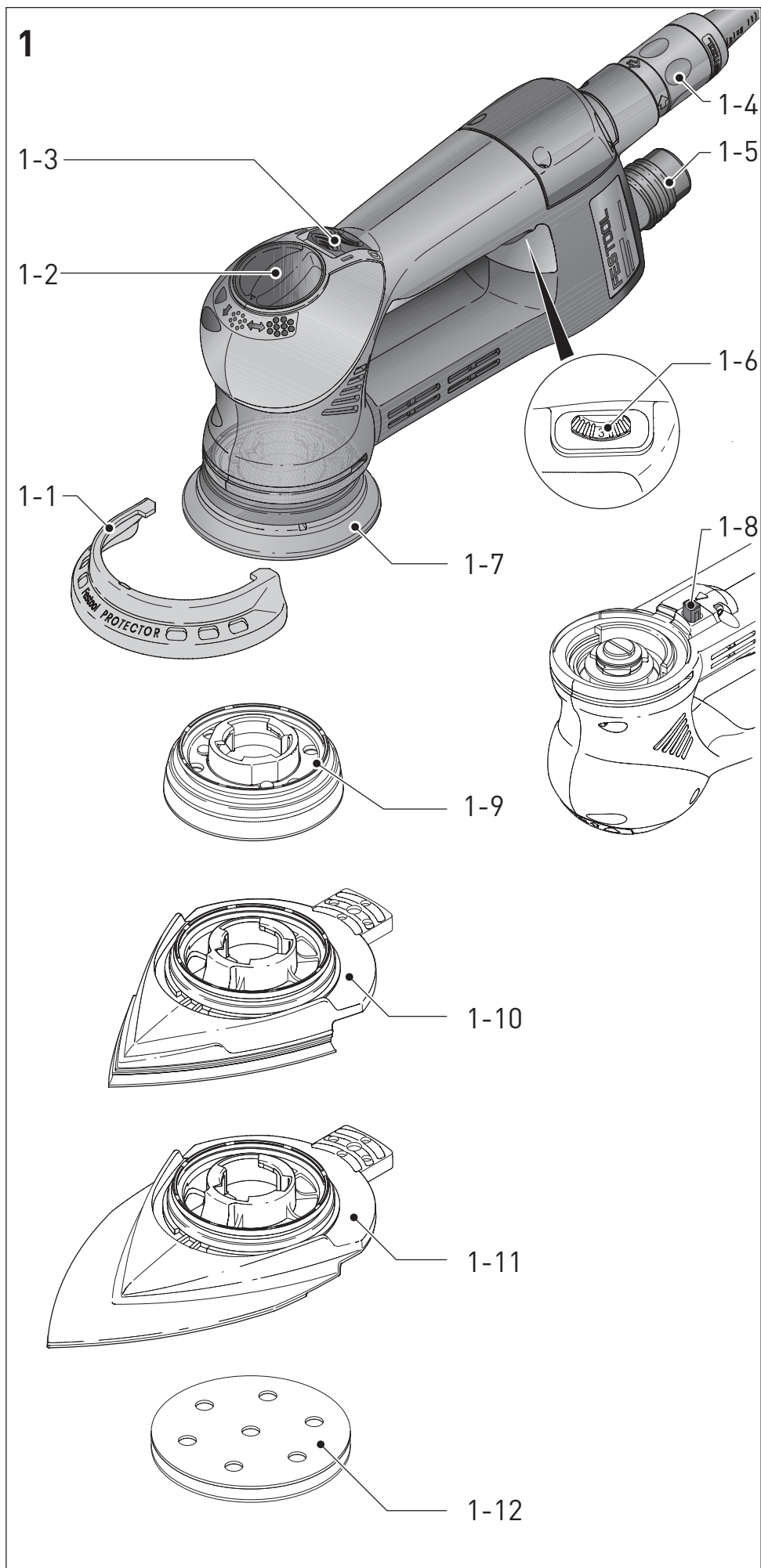
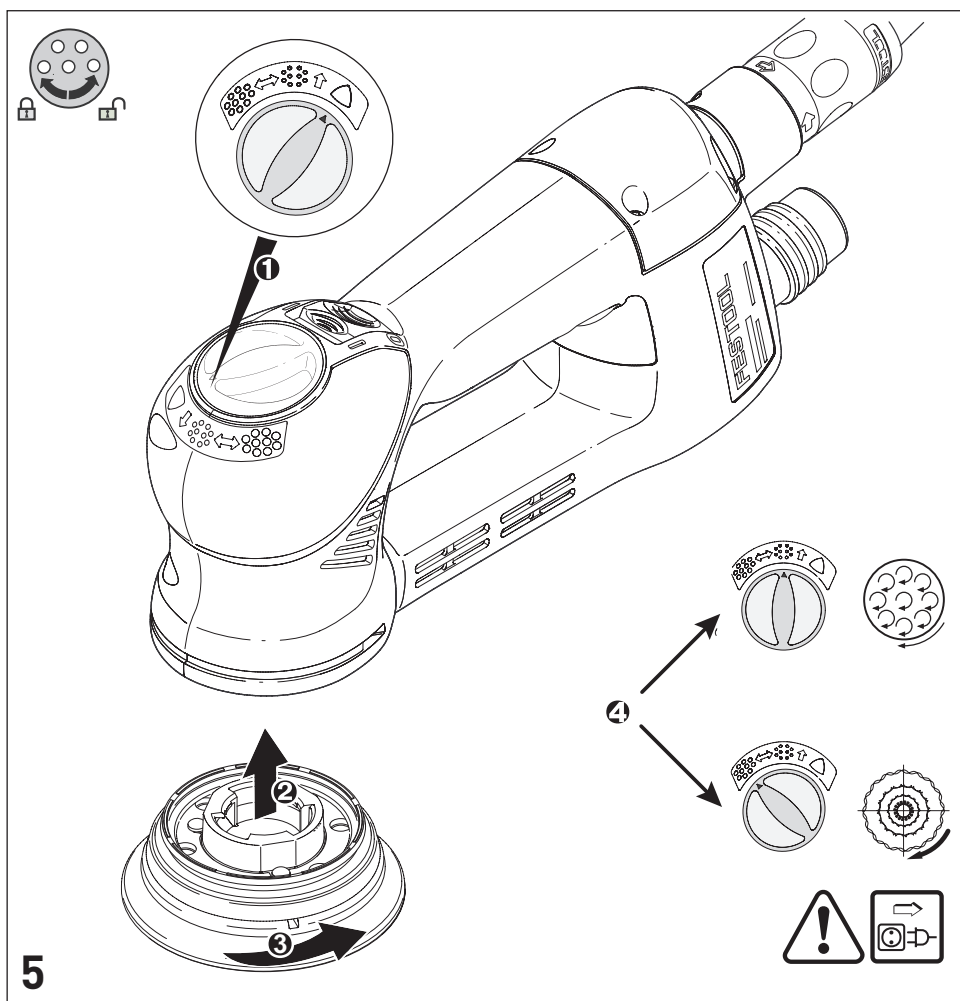
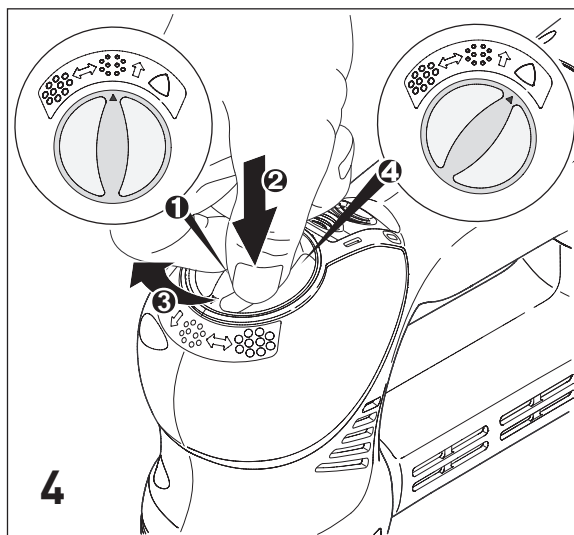
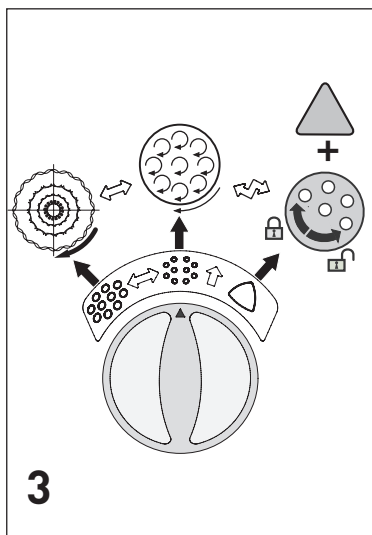
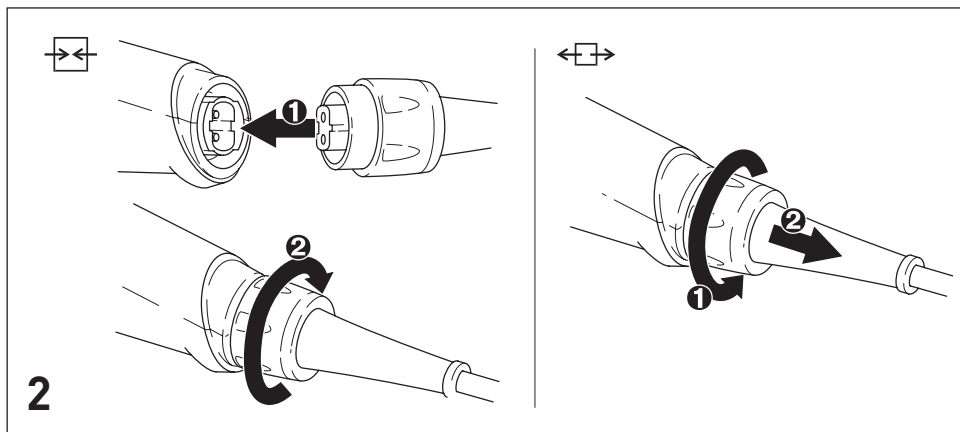


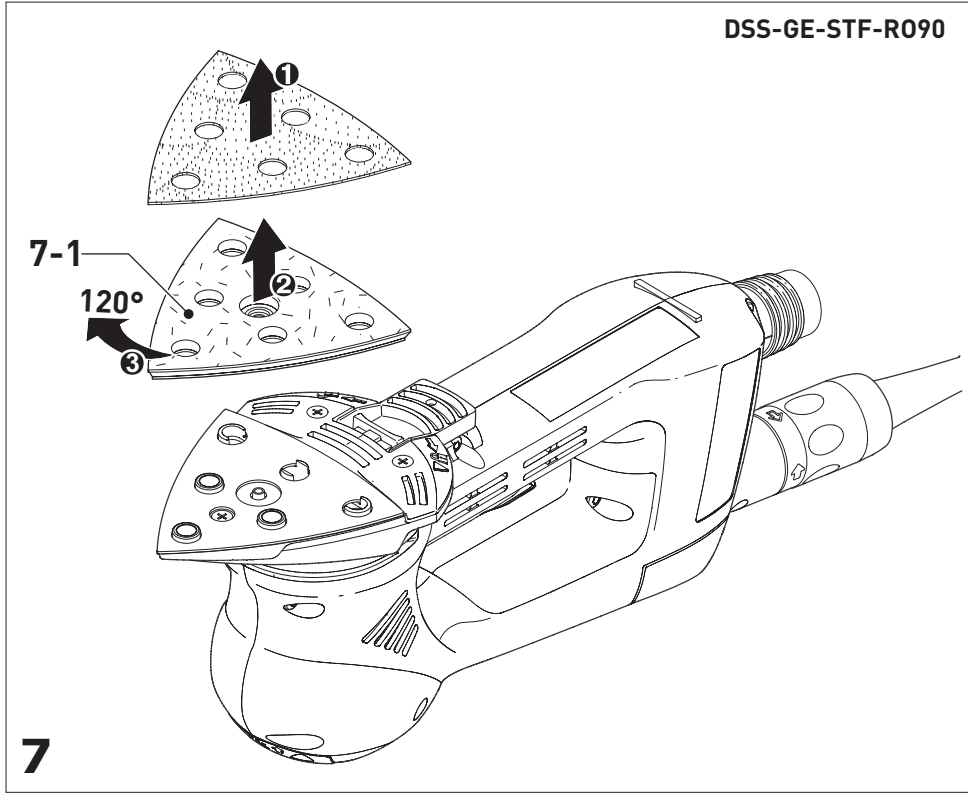
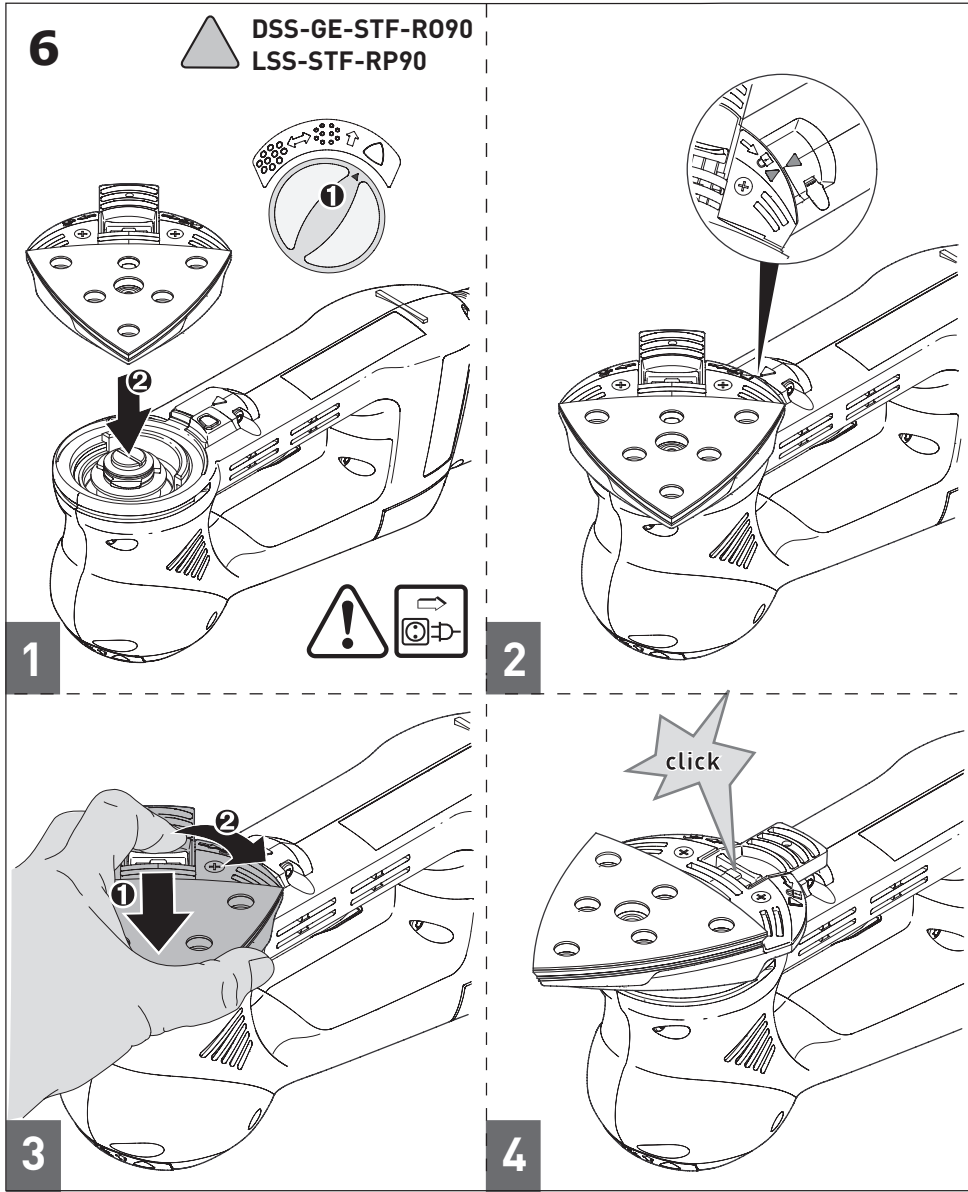
(D)	Originalbedienungsanleitung/Ersatzteilliste	6
(GB)	Original operating manual/Spare parts list	12
(F)	Notice d'utilisation d'origine/Liste de pièces de rechange	17
(E)	Manual de instrucciones original/Lista de piezas de repuesto	23
(I)	Istruzioni per l'uso originali/Elenco parti di ricambio	29
(NL)	Originele gebruiksaanwijzing/Lijst met reserveonderdelen	35
(S)	Originalbruksanvisning/Reservdelslista	41
(FIN)	Alkuperäiset käyttöohjeet/Varaosaluettelo	46
(DK)	Original brugsanvisning/Reservedelsliste	51
(N)	Originalbruksanvisning/Reservedelsliste	56
(P)	Manual de instruções original/Lista de peças sobresselentes	61
(RUS)	Оригинал Руководства по эксплуатации/Перечень запасных частей	67
(CZ)	Originál návodu k obsluze/Seznam náhradních dílů	73
(PL)	Oryginalna instrukcja eksploatacji/Lista części zamiennych	78

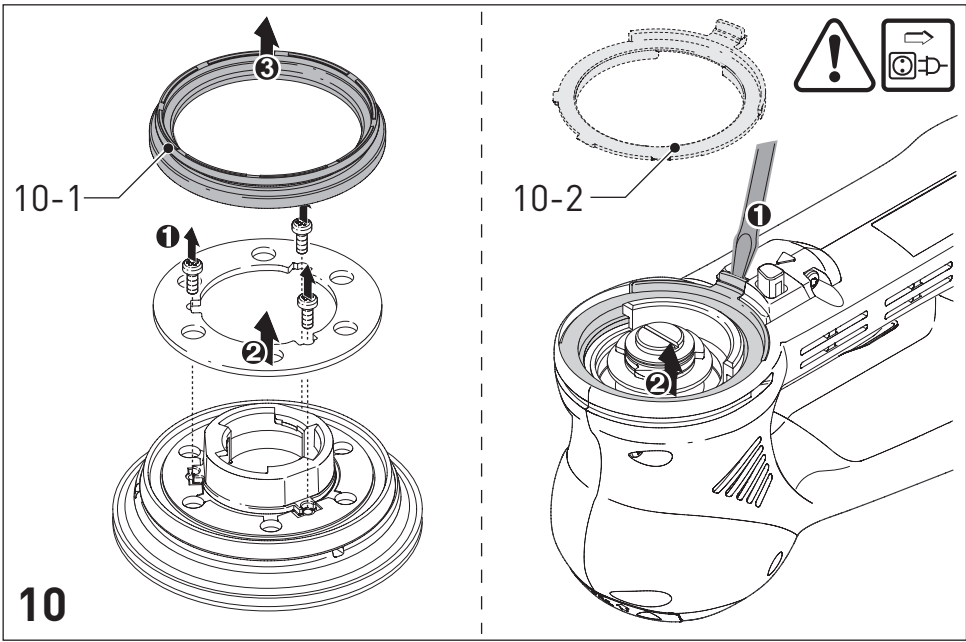
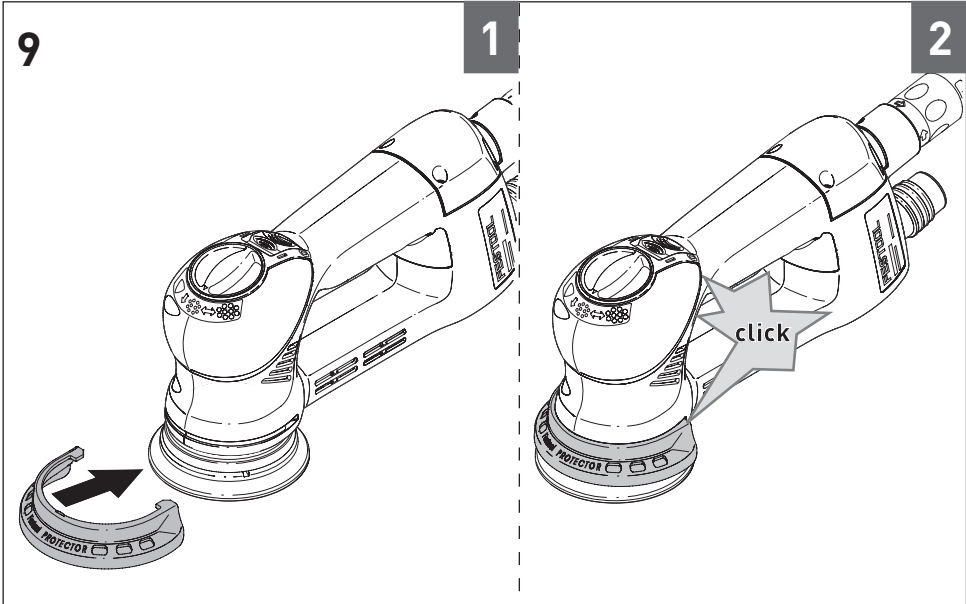
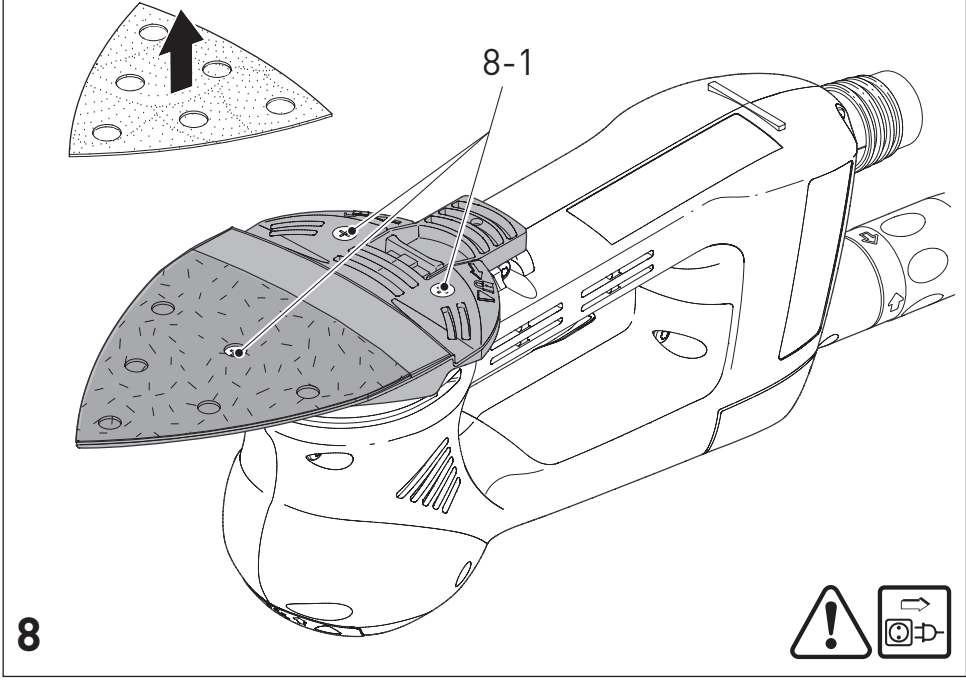
ROTEX RO 90 DX FEQ


















Original operating manual

1 Symbols

-  Warning of general danger
-  Risk of electric shock
-  Read the Operating Instructions/ Notes!
-  Wear protective goggles.
-  Wear ear protection.
-  Wear a dust mask.
-  Disconnect from the power supply!

2 Technical data

Gear-driven eccentric sander		RO90 DX FEQ
Power		400 W
Speed		
Eccentric motion	3000 - 7000 rpm	
Rotex rotary motion	220 - 520 rpm	
Sanding stroke		3,0 mm
FastFix sanding pad		dia. 90 mm
Weight (without mains cable, with sanding pad)		1,45 kg
Safety class		□ /II

3 Machine features


- [1-1] Protector
 - [1-2] Change-over switch/spindle stop
 - [1-3] On/Off switch
 - [1-4] Mains power cable
 - [1-5] Extractor connector
 - [1-6] Speed control
 - [1-7] Sanding pad
 - [1-8] Stop rod
 - [1-9] Polishing pad*
 - [1-10] Delta sanding pad
 - [1-11] Slat sanding pad*
 - [1-12] Interface pad*
- * not on all versions included in the scope of delivery

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

4 Intended use


As specified, the machine is designed for sanding and polishing plastic, metal, wood, composite materials, paint/clear coats, filler and similar materials. Materials containing asbestos must not be processed.

To guarantee electrical safety, the machine must not be damp or operated in a damp environment. The machine must only be used for dry sanding.

 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


– **Harmful/toxic dusts can be produced during your work (e.g. lead-containing paint, some types of wood and metal).** Contact with these dusts, especially inhaling them, can represent a hazard for operating personnel or persons in the vicinity. Comply with the safety regulations that apply in your country. Connect the electric power tool to a suitable extraction system.

 To protect your health, wear a P2 protective mask.

 Always wear protective goggles to protect against sanding hazards.

– **Prevent liquid polish from entering the machine.** The penetration of liquid polish into the electric power tool increases the risk of an electric shock.

5.3 Metal processing

 When processing metal, the following measures must be taken for safety reasons:

- Install an upstream residual-current circuit-breaker (FIG, PRCD).
- Connect the machine to a suitable dust extractor.
- Regularly remove dust deposits in the motor housing.



Wear protective goggles.

5.4 Emission levels

Levels determined in accordance with EN 60745 are typically:

Sound pressure level	$L_{PA} = 81 \text{ dB(A)}$
Noise level	$L_{WA} = 92 \text{ dB(A)}$
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:

Fine sanding ^{1.}	$a_h = 5,0 \text{ m/s}^2$
Uncertainty	$K = 2,0 \text{ m/s}^2$
Coarse sanding ^{1.}	$a_h = 5,0 \text{ m/s}^2$
Uncertainty	$K = 2,0 \text{ m/s}^2$
Triangular sanding	$a_h = 5,0 \text{ m/s}^2$
Uncertainty	$K = 2,0 \text{ m/s}^2$
Polishing	$a_h = 5,0 \text{ m/s}^2$
Uncertainty	$K = 2,0 \text{ m/s}^2$

^{1.} with W-HT.

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 **[1-4]** see Fig. **[2]**.

The switch **[1-3]** is an on/off switch (I = ON, 0 = OFF).

- ① The circuit closer can only be actuated if the change-over switch **[1-2]** is in an engaged position.
- ① In case of a power failure or if the mains connector is removed, move the on/off switch immediately to the Off position. This prevents uncontrolled restarting.

7 Settings



WARNING

Risk of injury, electric shock

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

7.1 Electronics

The machine features full-wave electronics with the following features:

Smooth start-up

The electronically controlled smooth start-up ensures that the machine starts up jolt-free.

Speed control

You can regulate the speed steplessly with the adjusting wheel **[1-6]** in the speed range (see Technical data). This enables you to optimise the cutting speed to suit the surface (see table).

Constant speed

The preselected motor speed remains constant through electronic control to ensure a uniform cutting speed even when under load.

Temperature cut-out

The machine power supply is limited and the speed reduced if the motor exceeds a certain temperature. The machine continues operating at reduced power to allow the ventilator to cool the motor quickly. If the machine temperature exceeds the maximum permitted value for longer periods, the machine switches off completely after approx. 40 seconds and can only be switched on again once the motor has cooled sufficiently.

7.2 Setting sanding motion [3]

The change-over switch [1-2] can be used to set three different sanding motions.

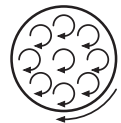
- ① This change-over can only be carried out with the sanding pad stationary because the switch is locked during operation.

Coarse sanding, polishing - ROTEX rotary motion



The Rotex rotary motion is a combination of rotary and eccentric motions. This position is selected for sanding with high output (coarse sanding) and polishing.

Fine sanding - eccentric motion



This position is selected for sanding with low output for a scratch-free surface (fine sanding).

Triangular sanding and pad change [4]



This position is used for sanding with the delta sanding pad and slat sanding pad; the rotary motion is blocked.



You can change the sanding pad in this position.

- ① The stop rod [1-8] blocks the installation of the sanding pad in the change-over switch positions ROTEX rotary motion and eccentric motion.

7.3 Changing sanding/polishing pad [5]

- ① Only use sanding and polishing pads that are suitable for the maximum speed specified.

Tuned to the surface being processed, the machine can be equipped with two sanding pads of different hardnesses.

Hard: Coarse and fine sanding on surfaces. Sanding edges.

Soft: Universal for coarse and fine sanding, for flat and convex surfaces.

When the interface pad [1-12] is fitted on the sanding pad, strength is reduced = extra soft.

- Following the sanding pad change, switch the change-over switch [1-2] to the desired sanding motion.

7.4 Changing sanding pad [6]

The delta sanding pad DSS-GE-STF-RO90 can be used for sanding close to borders, in corners or on edges. The slat sanding pad LSS-STF-RO90 can be used for sanding in narrow gaps, e.g. louveres.

Observe the following instructions:

Work in corners and on edges tends to subject the tip to increased stress and results in increased heat development. In such cases, work with reduced contact pressure.

Delta sanding pad DSS-GE-STF-RO90 [7]

If the front tip of the StickFix pad [7-1] of your delta sanding pad is worn, take it off and turn it 120°.

Slat sanding pad LSS-STF-RO90 [8]

If the StickFix coating of the slat sanding pad is worn, the complete table can be replaced. Open the screws to do this [8-1].

7.5 Attaching sanding accessories

The suitable StickFix sandpaper and StickFix sanding cloth can be attached quickly and simply to the StickFix sanding pad.

- Press the self-adhesive sanding accessory onto the sanding pad [1-7].

7.6 Attaching polishing accessories

To prevent damage, PoliStick accessories (polishing sponges, polishing felt, sheepskin) must only be used on the special polishing pad.

- Press the self-adhesive polishing accessory onto the sanding pad [1-9].

7.7 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.

At the extractor connector **[1-5]**, a Festool mobile dust extractor with an extraction hose diameter of 27 mm can be connected.

7.8 Edge protector [9]

The edge protector **[1-1]** reduces contact of the sanding pad circumference with a surface (e.g. when sanding along a wall or a window), thus preventing back-kick of the machine, or machine damage.

8 Working with the machine



WARNING

Risk of injury

- Always secure the workpiece in such a manner that it cannot move while being machined.

Observe the following instructions:

- Do not overload the machine by pressing with excessive force! The best sanding results are achieved with moderate application pressure. The sanding capacity and quality are mainly dependent on the selection of the correct abrasive.
 - Hold the machine with two hands, one on the motor housing and one on the gear head.
- ① Tables A and B show the settings we recommend for different sanding and polishing work.

9 Service and maintenance



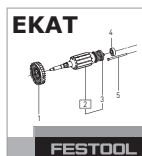
WARNING

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

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

The machine is equipped with special carbon brushes. If they are worn, the power is interrupted automatically and the machine comes to a standstill.

9.1 Sanding pad brake

The rubber collar **[10-1]** on the sanding pad and the stop ring **[10-2]** on the machine prevent uncontrolled excessive turning of the sanding pad during eccentric motion (fine sanding). As these parts are subject to wear in the course of time, they must be replaced when reduced braking force is observed (for order no., see spare parts list).

10 Accessories

Only use original sanding and polishing pads from Festool. Low-quality sanding and polishing pads may cause serious machine imbalance that decreases the quality of the working results and increases machine wear. The order numbers of the accessories and tools can be found in the Festool catalogue or on the Internet under "www.festool.com".

11 Environment

Do not throw the power tool in your household waste! Dispose of machines, accessories and packaging at an environmentally responsible recycling centre. Observe the valid national 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

Gear-driven eccentric sander Serial no.

RO DX 90 FEQ

495618, 496428

Year of CE mark: 2010

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

2006/42/EG, 2004/108/EG, 2011/65/EU (from 01.01.2013), EN 60745-1, EN 60745-2-4, EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3.

Festool GmbH

Wertstr. 20, D-73240 Wendlingen, Germany



Dr. Johannes Steimel

Head of Research, Development and Technical Documentation

25.01.2010
























Table A:		Coarse sanding				Fine sanding			
Sanding									
	Clear coat, filler, putty	x		5 - 6	soft		x	1 - 3	extra soft
	Clear coat, paint	x		5 - 6	hard		x	3 - 6	hard
	Wood, veneered surface	x		5 - 6	hard		x	3 - 6	soft
	Plastic	x	x	1-4	soft		x	1 - 4	soft/ extra soft
	Steel, copper, aluminium	x		6	soft		x	3 - 6	soft
	VOC clear coats						x	2 - 4	extra soft - hard

Table B:				
Polishing		Polishing	Sealing	High-gloss polishing
Clear coat 		6	3	4 - 6
		Sponge rough/smooth	Sponge fine/honeycombed	Sheepskin
		Polishing paste	Hard wax	-
Plastic 		6	3	6
		Felt hard	Felt soft	Sheepskin
		Polishing paste	Hard wax	-