EXTOL 8792010 Angle Grinder with Extended Handle User Manual

Contents

EXTOL 8792010 Angle Grinder with Extended Handle

Product Specifications:

- **Model Numbers:** 8792010, 8892023, 8892025, 8892040, 8892060, 403127, 8792014, 8892024, 8892026, 8792060, 403114
- **Version:** 09/2024
- **Size:** 115mm, 125mm, 150mm

Product Usage Instructions

Long Life Cutting Discs:
The FastCut ThinCut GrabCut discs are designed for use on concrete, asphalt, and other materials. The Turbo and Turbo Segment discs offer high-speed cutting capabilities.

Compatibility:
Ensure compatibility with the correct model numbers listed in the specifications section.

Cutting Disc Selection:

- Choose the appropriate disc size based on your cutting requirements (115mm, 125mm, or 150mm).
- Select the grit size based on the desired finish (P40 to P120).

Operating Instructions:

1. Ensure the cutting disc is securely attached to the compatible tool.
2. Wear appropriate safety gear including goggles and gloves.
3. Power on the tool and carefully apply the cutting disc to the material to be cut.
4. Maintain a steady hand and consistent pressure during cutting.

Frequently Asked Questions (FAQ):

- **Q: What are the recommended safety precautions when using the cutting discs?**

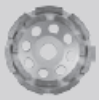
A: Always wear safety goggles and gloves when operating the cutting discs. Ensure that the work area is clear of obstructions and bystanders.

- **Q: How do I know which grit size to choose for my cutting needs?**
  A: The grit size selection depends on the material and finish requirements. Lower grit numbers (P40) are more abrasive for rough cuts, while higher grit numbers (P120) provide finer finishes.

ADDITIONAL ACCESSORIES

USING DIAMOND DISCS

	Cutting discs											
			EXTOL INDUSTRIAL				EXTOL PREMIUM		long life			
	 FastCut	 ThinCut	 GrabCut	 Concrete	 Asphalt	 Turbo +	 Turbo	 Segment	 Fullcircum.	 Turbo	 Segment	 Fullcircum.
based on properties												
quality	★★★	★★★	★★★	★★★	★★★	★★	★★	★★	★★	★★	★★	★★
dry cooling	yes	yes	yes	yes	yes	yes	yes	yes	—	yes	yes	—
wet cooling	yes	yes	—	yes	yes	yes	yes	—	yes	yes	—	yes
speed	★★★	★★★	★★★	★★★	★★★	★★	★★	★★	★★	★★	★★	★★
stability	★★★	★★★	★★★	★★★	★★★	★★	★★	★★	★★	★★	★★	★★
depending on material												
concrete	★★★	★	★★★	★★★	★★[1]	★★★	★★★	★★★	★	★★★	★★★	★
reinforced concrete	★★★	—	★★	★★	—	★★	★★★	—	—	★★★	★★	—
brick	★★	★	★★★	★★★	★★	★★	★★	★★	★★	★★	★★★	★★
masonry, stone	★★	★	★★★	★★★	★	★★	★★	★★	★★	★★	★★★	★★
floor and wall tiles	★★	★★★	★	★	—	★★	★★	—	★★★	★★	★	★★★
glass, porcelain, ceramics	★★	★★★	—	—	—	—	—	—	★★★	—	—	★★★
marble, shale	★★	★★	★★	—	—	★	★	★	★★	★	★★	★★
roof tiles	★★	★	★★	★	★	★★	★★	★★	★	★★	★★	★
granite	★★★	★★	★★★	★★	—	★★★	★★★	★★	★★	★★★	★★★	★★
sandstone	★	—	★★	★★★	★	★★	★★	★★	—	★★	★★	—
quartz	★	★	★	—	—	★★	★★	★	★	★★	★	★
asphalt	★	—	★	—	★★★	★★	★★	★	—	★★	★	—

	Cutting discs			Grinding discs		
	EXTOL CRAFT			EXTOL PREMIUM		
						
	Turbo	Segment	Fullcircum.	Abrasive	2-row	1-row
based on properties						
quality	★	★	★	★★	★★	★★
dry cooling	yes	yes	—	yes	yes	yes
wet cooling	yes	—	yes	yes	yes	yes
speed	★	★	★			
stability	★	★	★	★★★	★★★	★★★
depending on material						
concrete	★★★	★★★	★	★★★	★★★	★★★
reinforced concrete	★★	—	—	★	★	★
brick	★★	★★	★	★★★	★★★	★★★
masonry, stone	★★	★★	★★	★★★	★★★	★★★
floor and wall tiles	★★	—	★★	★★	★★	★★
glass, porcelain, ceramics	—	—	★★	—	—	—
marble, shale	★	★	★★	★★	★★	★★
roof tiles	★★	★★	★	★	★	★
granite	★★	★★	★★	★	★	★
sandstone	★★	★★	—	★★★	★★★	★★★
quartz	★★	★	★	—	—	—
asphalt	★★	★	—	—	—	—

Usability of material:

- ★★★ /Excellent
  ★★ /good
  ★/usable
  —/unsuitable

For discs for asphalt in the Extol Industrial range, the information relating to the cutting of concrete relates to so-called young concrete up to the age of 4 weeks.

DIAMOND CUTTING DISC TURBO THIN CUT
dry and wet cutting

Item No.	Description
8703041	115 × 22.2mm
8703042	125 × 22.2mm
8703043	150 × 22.2mm
8703045	230 × 22.2mm

DIAMOND CUTTING DISC TURBO FAST CUT
dry and wet cutting

Item No.	Description
8703051	115 × 22.2mm
8703052	125 × 22.2mm
8703053	150 × 22.2mm
8703055	230 × 22.2mm

DIAMOND CUTTING DISC SEGMENTAL GRAB CUT
dry cutting

Item No.	Description
8703031	115 × 22.2mm
8703032	125 × 22.2mm
8703033	150 × 22.2mm
8703035	230 × 22.2mm

DIAMOND CUTTING DISC TURBO PLUS
dry and wet cutting

Item No.	Description
8803031	115 × 22.2mm
8803032	125 × 22.2mm
8803033	150 × 22.2mm
8803034	180 × 22.2mm
8803035	230 × 22.2mm

DIAMOND CUTTING DISC TURBO
dry and wet cutting

Item No.	Description
108751	115 × 22.2mm
108752	125 × 22.2mm
108753	150 × 22.2mm
108754	180 × 22.2mm
108755	230 × 22.2mm

DIAMOND CUTTING DISC SEGMENTAL
dry cutting

Item No.	Description
108711	115 × 22.2mm
108712	125 × 22.2mm
108713	150 × 22.2mm
108714	180 × 22.2mm
108715	230 × 22.2mm

DIAMOND CUTTING DISC FULL-CIRCUMFERENTIAL
wet cutting

Item No.	Description
108731	115 × 22.2mm
108732	125 × 22.2mm
108733	150 × 22.2mm
108734	180 × 22.2mm
108735	230 × 22.2mm

DIAMOND CUTTING DISC SEGMENTAL LONG LIFE
dry cutting

Item No.	Description
108911	115 × 22.2mm
108912	125 × 22.2mm
108913	150 × 22.2mm
108915	230 × 22.2mm

DIAMOND DISC CUTTING SEGMENTAL
dry cutting

Item No.	Description
108811	115 × 22.2mm
108812	125 × 22.2mm
108813	150 × 22.2mm
108814	180 × 22.2mm
108815	230 × 22.2mm

DIAMOND CUTTING DISC TURBO LONG LIFE -
dry and wet cutting

Item No.	Description
108951	115 × 22.2mm
108952	125 × 22.2mm
108953	150 × 22.2mm
108955	230 × 22.2mm

DIAMOND CUTTING DISC TURBO
dry and wet cutting

Item No.	Description
108851	115 × 22.2mm
108852	125 × 22.2mm
108853	150 × 22.2mm
108855	230 × 22.2mm

DIAMOND DISC CUTTING FULL-CIRCUMFERENTIAL
wet cutting

Item No.	Description
108831	115 × 22.2mm
108832	125 × 22.2mm
108833	150 × 22.2mm
108835	230 × 22.2mm

DIAMOND DISC ABRASIVE SINGLE-ROW

Item No.	Description
8703111	115 × 22.2mm, sg. 5mm, number of segments 8
8703112	125 × 22.2mm, sg. 5mm, number of segments 7
8703113	150 × 22.2mm, sg. 5mm, number of segments 12

DIAMOND DISC GRINDING

Item No.	Description
8703101	115 × 22.2mm
8703102	125 × 22.2mm

DIAMOND DISC ABRASIVE SINGLE-ROW

Item No.	Description
903014	115 × 22.2mm
903015	125 × 22.2mm
903016	150 × 22.2mm

DIAMOND DISC ABRASIVE DOUBLE-ROW

Item No.	Description
8703121	115 × 22.2mm, sg. 5mm, number of segments 16
8703122	125 × 22.2mm, sg. 5mm, number of segments 14
8703123	150 × 22.2mm, sg. 5mm, number of segments 24

DIAMOND DISC GRINDING FLAP

Item No.	Description
903004	115 × 22.2mm
903005	125 × 22.2mm
903006	150 × 22.2mm

DIAMOND DISC ABRASIVE DOUBLE-ROW

Item No.	Description
903024	115 × 22.2mm
903025	125 × 22.2mm
903026	150 × 22.2mm

CUTTING DISC FOR STEEL AND STAINLESS STEEL, 10PCS

pack of 10pcs of individual discs in a marked metal case

Item No.	Description
8808101	115 × 1.0 × 22.2mm
8808103	125 × 1.0 × 22.2mm

CUTTING DISK FOR ALUMINIUM

Item No.	Description
8808400	115 × 1.0 × 22.2mm
8808402	125 × 1.0 × 22.2mm

CUTTING DISC FOR STEEL/STAINLESS STEEL

Item No.	Description
8808150	115 × 0.8 × 22.2mm
8808100	115 × 1.0 × 22.2mm
8808110	115 × 1.6 × 22.2mm
8808152	125 × 0.8 × 22.2mm
8808112	125 × 1.6 × 22.2mm
8808105	150 × 1.0 × 22.2mm
8808115	150 × 1.6 × 22.2mm
8808119	230 × 1.9 × 22.2mm

CUTTING DISCS FOR METAL, 5PCS

Item No.	Description
106901	115 × 1.0 × 22.2mm
106910	115 × 1.6 × 22.2mm
106902	125 × 1.0 × 22.2mm
106920	125 × 1.6 × 22.2mm
106930	150 × 1.6 × 22.2mm
106950	230 × 1.9 × 22.2mm

CUTTING DISC FOR STEEL/STAINLESS STEEL

Item No.	Description
8701000	115 × 1.0 × 22.2mm
8701002	125 × 1.0 × 22.2mm
8701019	230 × 1.6 × 22.2mm

GRINDING DISC FOR STEEL

Item No.	Description
8808700	115 × 6.0 × 22.2mm
8808702	125 × 6.0 × 22.2mm
8808705	150 × 6.0 × 22.2mm

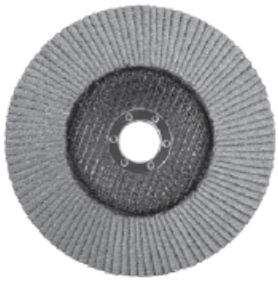
FLAP DISC DIAGONAL ZIRCON
quality abrasive zircon material developed for flap discs for professional use with a focus on stainless and special steel exhibiting increased hardness

Flap discs Extol Industrial are intended for professional/industrial use.

Item No.	Description
	∅ 115 mm
8803404	P40, 115mm
8803406	P60, 115mm
8803408	P80, 115mm
8803410	P100, 115mm
8803412	P120, 115mm
	∅ 125 mm
8803424	P40, 125mm
8803426	P60, 125mm
8803428	P80, 125mm
8803430	P100, 125mm
8803432	P120, 125mm
	∅ 150 mm
8803444	P40, 150mm
8803446	P60, 150mm
8803448	P80, 150mm
8803450	P100, 150mm
8803452	P120, 150mm

EXTOL® INDUSTRIAL

fibreglass carry pad



inner diameter 22.2mm for clamping in an angle grinder

FLAP DISC DIAGONAL CORUNDUM

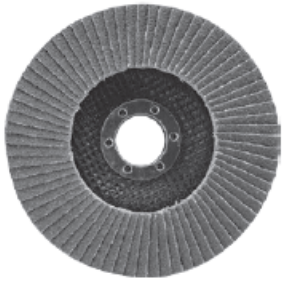
concave shape of the flap disc can be used for planar and flat sanding/grinding and is also suitable for sanding/grinding in hard-to-reach places

Flap discs are used most frequently for surface treatments, e.g. when cutting away, cleaning casts, chamfering edges, removing varnishes, caulks and paints as well as fine planar sanding/grinding.

Item No.	Description
	∅ 115 mm
8803461	P36, 115mm
8803462	P40, 115mm
8803463	P60, 115mm
8803464	P80, 115mm
8803465	P100, 115mm
8803466	P120, 115mm
	∅ 125 mm
8803471	P36, 125mm
8803472	P40, 125mm
8803473	P60, 125mm
8803474	P80, 125mm
8803475	P100, 125mm
8803476	P120, 125mm
	∅ 150 mm
8803481	P36, 150mm
8803482	P40, 150mm
8803483	P60, 150mm
8803484	P80, 150mm
8803485	P100, 150mm
8803486	P120, 150mm

EXTOL CRAFT

max. speed 13 200/min

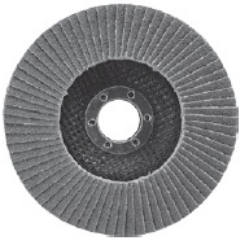


inner diameter 22.2mm for clamping in an angle grinder

FLAP DISC DIAGONAL ZIRCON

EXTOL INDUSTRIAL

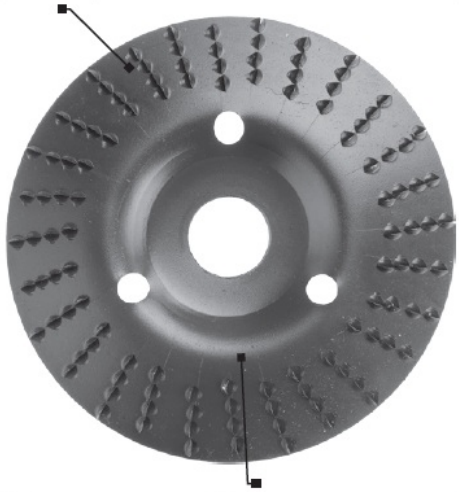
Item No.	Description
	∅ 115 mm
8803404	P40, 115mm
8803406	P60, 115mm
8803408	P80, 115mm
8803410	P100, 115mm
8803412	P120, 115mm
	∅ 125 mm
8803424	P40, 125mm
8803426	P60, 125mm
8803428	P80, 125mm
8803430	P100, 125mm
8803432	P120, 125mm
	∅ 150 mm
8803444	P40, 150mm
8803446	P60, 150mm
8803448	P80, 150mm
8803450	P100, 150mm
8803452	P120, 150mm



ROTARY DISC RASP COARSE

EXTOL PREMIUM

for use in angle grinders for grinding/ sanding away soft and hard wood, plasterboard, laminate, plastic, rubber, soft non-ferrous metals and for removing glue and old paint coats



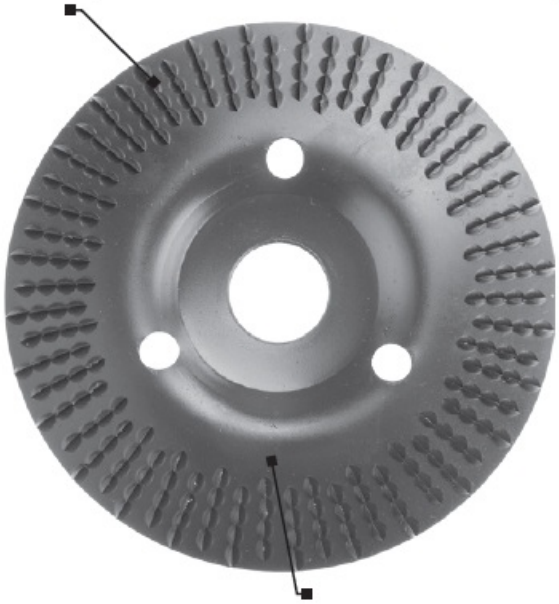
Item No.	Description
8803705	∅ 125 × 3 × 22,2mm, coarse cut, max.13 000 rpm

inner diameter 22.2mm for clamping in an angle grinder

ROTARY DISC
RASP SEMI-COARSE

EXTOL® PREMIUM

for use in angle grinders for grinding/ sanding away soft and hard wood, plasterboard, laminate, plastic, rubber, soft non-ferrous metals and for removing glue and old paint coats



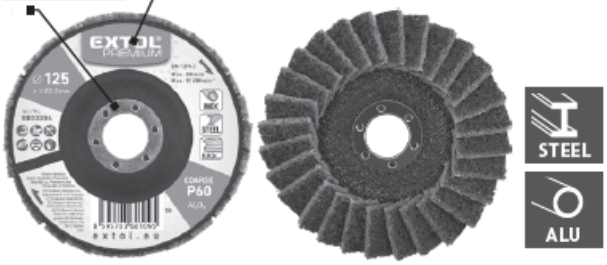
Item No.	Description
8803706	∅ 125 × 3 × 22.2mm, medium coarse cut, max.13000 rpm

inner diameter 22.2mm for clamping in an angle grinder

DIAGONAL FLAP DISC FROM ABRASIVE CORUNDUM FLEECE

the disc is usable on all metal materials such as stainless steel, steel, soft non-ferrous metals for polishing them, cleaning layers of oxidation, matting and satining

fibreglass carry pad



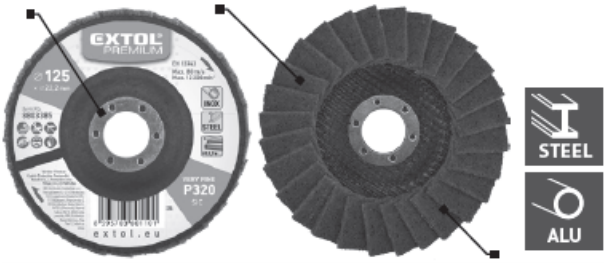
max. speed 12 200 rpm

Item No.	Description
8803384	∅125mm, P60-coarse

DIAGONAL FLAP DISC FROM ABRASIVE CARBIDE FLEECE

the disc is usable on all metal materials such as stainless steel, steel, soft non-ferrous metals for polishing them, cleaning layers of oxidation, matting and satining

fibreglass carry pad



compared to corundum, carbide abrasive is harder and thus has a sharper take-off of material and a longer disc lifetime

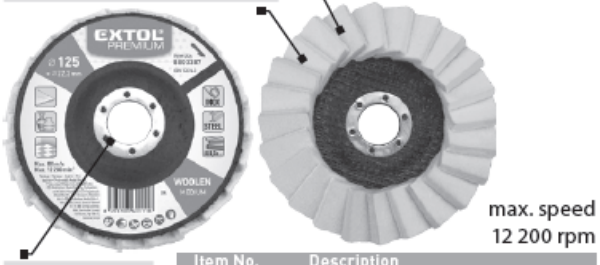
max. speed 12 200 rpm

Item No.	Description
8803385	∅125mm, P320-very fine

POLISHING FELT DISC, FLAP DIAGONAL

felt is medium fine and produced from natural wool fibres

disc is used predominantly for polishing stainless steel, steel, soft non-ferrous metals, ceramic surfaces and glass



max. speed 12 200 rpm

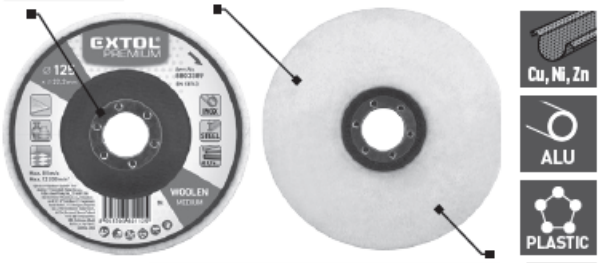
fibreglass carry pad

Item No.	Description
8803387	∅125mm × 12mm

POLISHING FELT DISC, FLAP DIAGONAL, FULL-CIRCUMFERENTIAL, STRAIGHT

diagonal flap

disc is used predominantly for polishing stainless steel, steel, soft non-ferrous metals, ceramic surfaces and glass



felt is medium fine and produced from natural wool fibres

max. speed 12 200 rpm

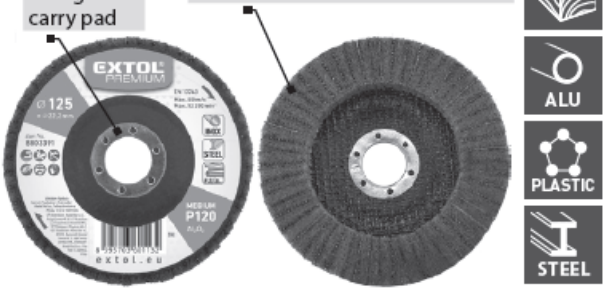
Item No.	Description
8803389	∅125mm × 15mm

DISC FROM CORUNDUM ABRASIVE FLEECE COMBINATION, FULL-CIRCUMFERENTIAL

the disc is usable on various materials such as stainless steel, steel, soft non-ferrous metals and their sanding/grinding, cleaning, mating and satining, or also polishing of wood or alternatively roughening of plastic surfaces prior to gluing

max. speed 12 200 rpm

fibreglass carry pad



Item No.	Description
8803391	∅125mm × 15mm, P120-medium coarseness

BRAIDED CUP BRUSH

Item No.	Description
17007	∅ 65mm, wavy wire
	S 0.5mm, M14 × 2mm
17008	∅ 80mm, wavy wire
	S 0.5mm, M14 × 2mm

BRAIDED CUP BRUSH

Item No.	Description
17009	∅ 80mm, wire
	S 0.5mm, M14 × 2mm

BRAIDED CUP BRUSH

Item No.	Description
17010	∅ 100mm, wavy wire
	S 0.5mm, M14 × 2mm

BRAIDED BOWL BRUSH

Item No.	Description
17012	∅ 100mm, wavy wire
	S 0.5mm, M14 × 2mm

CUP BRUSH

Item No.	Description
17002	∅ 75mm, wavy wire
	S 0.3mm, M14 × 2mm
17003	∅ 100mm, wavy wire
	S 0.3mm, M14 × 2mm

BEVEL BRUSH

Item No.	Description
17006	∅ 100mm, wavy wire
	S 0.3mm, M14 × 2mm

BRAIDED RADIAL BRUSH

Item No.	Description
17024	∅ 100mm, wavy wire
	S 0.5mm, M14 × 2mm
17025	∅ 115mm, wavy wire
	S 0.5mm, M14 × 2mm
17026	∅ 125mm, wavy wire
	S 0.5mm, M14 × 2mm

OVERVIEW OF SPEEDS OF INDIVIDUAL BRUSHES

Part number	Maximum speed (RPM)
17007	12 500
17008	12 500
17010	7 000
17012	11 000
17002	12 500
17003	8 500
17006	12 500
17009	12 500
17024	12 500
17025	12 500
17026	12 500

CARRY PADS OF ABRASIVE FIBROUS CUT-OUTS M14

Item No.	Description
108550	∅ 125mm Max.12 500 min^{-1}

Item No.	Description
108551	∅ 125mm Max.12 500 min^{-1}

CARRY PADS OF ABRASIVE CUT-OUTS M14

Item No.	Description
108525	∅ 125mm, Max.12 500 min^{-1}
108526	∅ 115mm, Max.12 500 min^{-1}

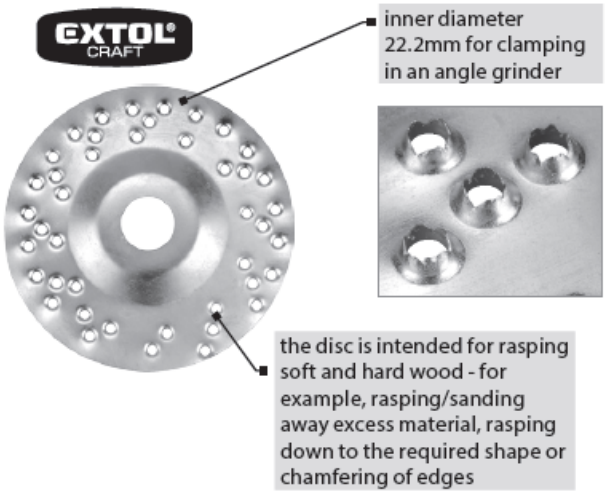
Item No.	Description
108575	∅ 150mm, Max.8 500 min^{-1}
108500	∅ 125mm, Max.12 500 min^{-1}
108501	∅ 115mm, Max.12 500 min^{-1}

SANDING CUT-OUT HOLDER - M14, VELCRO ZIP WITH REDUCTION DRILL SHANK

max. speed
12 500 rpm

Item No.	Description
108530	∅ 125mm, reduction stem 8mm
108531	∅ 115mm, reduction stem 8mm

DISC FOR WOOD, EXTRA COARSE



Item No.	Description
10801	125 × 3 × 22.2mm, for angle grinders, extra coarse

QUICK COUPLING NUT FOR ANGLE GRINDERS, CLICK-NUT

Item No.	Description	
8798050	M14	
	for angle grinders	
	∅ body	47mm
	∅ contact	41mm
	thickness	13.5mm
	weight	107g

ANGLE GRINDER STAND 115/125mm

Item No.	Description
8888100	

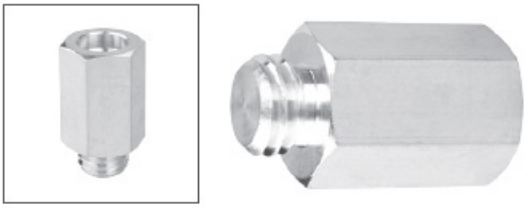
QUICK COUPLING NUT FOR ANGLE GRINDERS

Item No.	Description	
8898050	M14, up to 1000 W, for angle grind. 115-125mm	
	∅ body	49mm
	∅ contact	42mm
	thickness	9mm
	weight	60g

ANGLE GRINDER STAND 180/230mm

Item No.	Description
8888110	

ADAPTER FOR ANGLE GRINDER



Item No.	Description
8804491	M14 × 5/8"-11UNC, 40mm for polishing disc 8804576

EXTRACTION GUARD FOR SANDING/GRINDING WITH THE ANGLE GRINDER

Item No.	Description
8807020	∅ 125mm with a brush collar, also included are 3 pieces of spacer inserts for the attachment of the an angle grinder with the fastening clamp of diameters 39-42-45-48-50mm, 1 piece of disc heigh adjustment washer and a wrench

EXTRACTION GUARD/ADAPTER FOR CUTTING WITH THE ANGLE GRINDER

Item No.	Description
8807026	∅ 125mm with a brush collar, also included are 3 pieces of spacer inserts for the attachment of the an angle grinder with the fastening clamp of diameters 39-42-45-48-50mm, 1 piece of disc height adjustment washer and a wrench

Introduction

Dear customer,

- Thank you for the confidence you have shown in the Extol® brand by purchasing this product.
- This product has been tested for reliability, safety, and quality according to the prescribed norms and regulations of the European Union.
- Contact our customer and consulting center for any questions at: **www.extol.eu**
- Manufacturer: Madal Bal a. s., Průmyslová zóna Příluky 244, 76001 Zlín, Czech Republic
- Date of issue: 19. 3. 2019
- Date of last revision: 15/05/2024

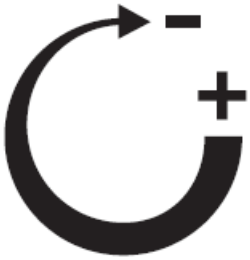
Description

Purpose of use

ANGLE GRINDERS ARE INTENDED FOR THE CUTTING AND SANDING/GRINDING WORK TASKS LISTED BELOW WITHOUT THE USE OF LIQUID COOLANTS AND USING DISCS INTENDED FOR THIS PURPOSE

- Cutting metal using a cutting disc from bonded abrasive.
- Cutting stone, glass, etc. using a diamond cutting disc.
- The sanding/grinding of profiles, welds, surfaces, trimming, cleaning of casts, removing surface paint coats using flap discs (with abrasive on the carry pad).
- Sanding/grinding metals using grinding discs from bonded abrasive with a thickness up to 6 mm.
- Rasping of wood (chamfering edges, rasping away excess material) using a wood rasping disc.
- Sanding/grinding away rust, patina, cleaning, de-burring surface paint coats on metals using rotary wire brushes with a M14 thread.
- Using designated abrasive cut out holders with an M14 thread it is possible to also use the angle grinder with sandpaper.

SPEED CONTROL
Angle grinder models that have speed control can be used for special sanding/grinding or cutting work tasks that require disc rotation speed changes and thanks to the option to reduce the rotation speed, the angle grinder can also be used for polishing under the conditions set out hereafter.



FORBIDDEN USE

Without an additional external dust extraction connection adapter being installed, the angle grinder must not be used for cutting and grinding/sanding materials during which a significant amount of dust is generated such as grooving of masonry, cutting plasterboard, bricks, tiles, and ceramics since this would result in the motor burning up due to the clogging of the motor vents with dust or to the short-circuiting of the trigger due to the accumulated dust becoming damp inside the trigger, or other types of motor damage caused by dust. For this purpose, there are special masonry grooving machines or tile cutters that have greater protection against generated dust with a differently adapted guard, which is additionally equipped with a socket for attaching external dust extraction, which angle grinders do not have in the standard design. The fact that it is possible to clamp cutting discs intended, amongst other things, for cutting or grooving masonry, does not necessarily mean that it is possible to cut materials with an angle grinder when the angle grinder is not inten-ded for such cutting (see also described determining use contained in user's manuals of professional angle grinders of other brands on the market).

WARNING

Dust extraction adapters intended for installation on angle grinders are supplied to the market by several manufacturers. For perpendicular cutting using the angle grinder, it is possible to use the dust extraction guard adapter Extol® 8807026 for 115/125 mm angle grinders. For planar sanding/grinding using the angle grinder, it is possible to use the dust extraction guard adapter Extol® 8807020 for a 125 mm angle grinder. For the safe use of the angle grinder with the dust extraction adapter it is, however, necessary for the dust extraction adapter to be properly installed and secured onto the angle grinder, whilst the dust extraction adapter must enable the proper and safe clamping of the disc on the spindle under the condition that the disc must not be touching any part of the disc guard. After installation of the dust extraction adapter on the angle grinder and before starting it, first, check that the dust extraction adapter has been safely installed and that the disc is safe for the operation of the angle grinder.

Technical information

specifications

Angle grinder model	Disc diameter *)	Revolutions per minute	Power input	Weight without the power cord	Class	Thread handle
8792010 1)	125 mm	2 800-9 800 min-1	1 300 W	1.7 kg	Industrial	M8
8792014	125 mm	2 850-9 800 min-1	1 400 W	2.5 kg	Industrial	M8
8892023	115 mm	11,000 min-1	750 W	1.8 kg	Premium	M8
8892024	125 mm	11,000 min-1	800 W	1.7 kg	Premium	M8
8892025	125 mm	11,000 min-1	900 W	2.0 kg	Premium	M8
8892026	125 mm	11,000 min-1	950 W	1.8 kg	Premium	M8
8892040	150 mm	8,500 min-1	1 600 W	3.4 kg	Premium	M10
8792060	230 mm	6,500 min-1	2 600 W	6.0 kg	Industrial	M14
8892060	230 mm	6,300 min-1	2 400 W	5.6 kg	Premium	M14
403114	115 mm	11,000 min-1	750 W	1.5 kg	Craft	M8
403127	125 mm	11,000 min-1	1 200 W	2.1 kg	Craft	M8

Table 1

*) Maximum disc thickness for clamping into an angle grinder is 6 mm.

BRUSHLESS MOTOR (without carbon brushes) utilizes innovative motor technology that increases efficiency, reduces wear, and provides outstanding performance. The electronic control system enables precise performance control, which delivers better overall performance of the power tool and a long lifetime.

PROFESSIONAL EXTOL® INDUSTRIAL
Professional angle grinders Extol® Industrial are characterized by their smooth operation (achieved through precision workmanship and seating of the rotating parts, self-balancing units on the spindle and premium ball bearings), high dust resistance (using dust-proof switches and ball bearings, steel-clad motor windings and dual fins on the air intake grills) and stable circumferential disc speed on all model sizes (achieved thanks to highly effective gears and motors with sufficient performance reserves).

- An important feature of our large professional angle grinders is the slow start-up function (soft start), which prevents the unpleasant shock and overloading of current circuit breakers when the power tool is turned on.

TRADE EXTOL® PREMIUM
The performance and parameters of angle grinders in the Extol® Premium category are very similar to professional grade angle grinders, they differ ho-wever in the components that are used and do not utilize certain state-of-the-art technologies, which we find in the profession product line.

- These power tools are the ideal choice for short-term but high load, where they deliver high performance and solid work comfort.

HOBBY EXTOL® CRAFT
Angle grinders Extol® Craft provide great service when cutting thinner materi-als, when sanding or brushing them, etc. They represent the top of the hobby class thanks to their solid workmanship and quality materials.

- Are you considering the purchase of an angle grinder with a diameter of 150 mm or more, or do you plan on subjecting the angle grinder to an extended load, greater pressure, or dustier environment, then we recommend choosing an angle grinder from the Extol® Premium range.

			Vibrations ah, AG (m/s2); uncertainty K (sum of three axes)	
Angle grinder model	**Acoustic pressur e LpA (dBA); unc ertainty K**	**Acoustic power LwA (dBA); unce rtainty K**	**Vibrations on the main handle**	**Vibrations on the au xiliary handle**
8792010	90.6±3	100.4±3	3.2±1.5	2.32±1.5
8792014	80.9 ±3	91.9±3	3.589±1.5	2.41±1.5
8792040	93.4±3	103.4±3	3.90±1.5	3.71±1.5
8892023	87±3	97±3	7.60±1.5	2.52±1.5
8892024	88±3	99±3	7.91±1.5	2.7±1.5
8892025	87.3±3	98.3±3	3.589±1.5	2.41±1.5
8892026	90±3	101±3	8.52±1.5	2.9±1.5
8892040	94.7±3	104.7±3	3.87±1.5	3.82±1.5
8892060	94.7±3	105.7±3	8.17±1.5	7.31±1.5
8792060	95.6 ±3	106.6±3	9.12±1.5	7.84±1.5
403114	90.7±3	101.7±3	4.64±1.5	3.31±1.5
403127	95.3±3	106.3±3	11.85±1.5	7.99±1.5

- The declared aggregate vibration value and the declared noise emission level were measured by standard testing methodology and may be used for the comparison of one tool with another. The declared aggregate vibration value and the declared noise emission level may also be used for determining preliminary exposure.

WARNING

- Vibration and noise emissions during actual use of the power tool may differ from the declared values depending on the method in which the equipment is used, particularly the type of workpiece that is being worked on.
- It is necessary to determine the safety measurement for the protection of the user, which is based on the assessment of exposure under real operating conditions (to include all the parts of the work cycle such as the time for which the power tool is turned off and when running idle outside the time that it is in operation).

WARNING
Grinding thin sheet metal or other structures with extensive surfaces, which vibrate easily, may cause the overall

noise emissions to be substantially higher (by up to 15 dB), than the declared noise emission values. On such work-pieces, the emission of noise should be prevented as soon as possible using suitable means such as the application of heavy flexible noise-dampening underlays. Increased noise emission must also be taken into consideration when assessing noise exposure risks as well as when determining corresponding hearing protection measures.

TECHNICAL SPECIFICATIONS THAT ARE COMMON FOR ALL ANGLE GRINDER MODELS

- Supply voltage/ frequency 220-240 V~50 Hz
- For discs with an inner clamping diameter of 22.2 mm
- The spindle thread of the angle grinder M14
- Ingress protection IP20
- Protection class II (double insulation)

Parts and control elements

- Fig.1 describes the typical parts and control elements of a standard design of an angle grinder (typical angle grinder design for a diameter of 115 and 125 mm) with a quick coupling system on the disc guard, speed control, carbon brush housing cover for the replacement of the carbon brushes by the user and the trigger switch that can be locked in the „on“position. Depending on the specific angle grinder model, the angle grinder may differ slightly in its design, may not necessarily be equipped with speed control, carbon brush housing cover for the replacement of carbon brushes by the user, the disc guard may not necessarily have a quick coupling system or the trigger switch may not necessarily be lockable in the „on“ position.
- Certain angle grinder models have the option of a screw-on handle at the top part of the angle grinder unit for a more comfortable hold of the angle grinder for planar sanding/grinding (see fig. 2), i.e. the respective angle grinder model must be equipped with a hole in the top part which the handle can be screwed into.
- Fig. 3 shows the method for clamping the disc guard in the standard manner without the quick coupling system.
- Fig. 4 shows the parts and control elements of the standard design of an angle grinder for larger-diameter discs. These models may have, depending on the specific model, rotating main handles and have a safety mechanism on the trigger switch against accidental start-up, whilst the trigger switch cannot be locked in the pulled-down position. The disc guard may have a quick coupling or standard coupling system. On certain models, the auxiliary handle can also be installed on the top part of the angle grinder to enable a more comfortable hold during planar sanding/grinding (see fig. 4).

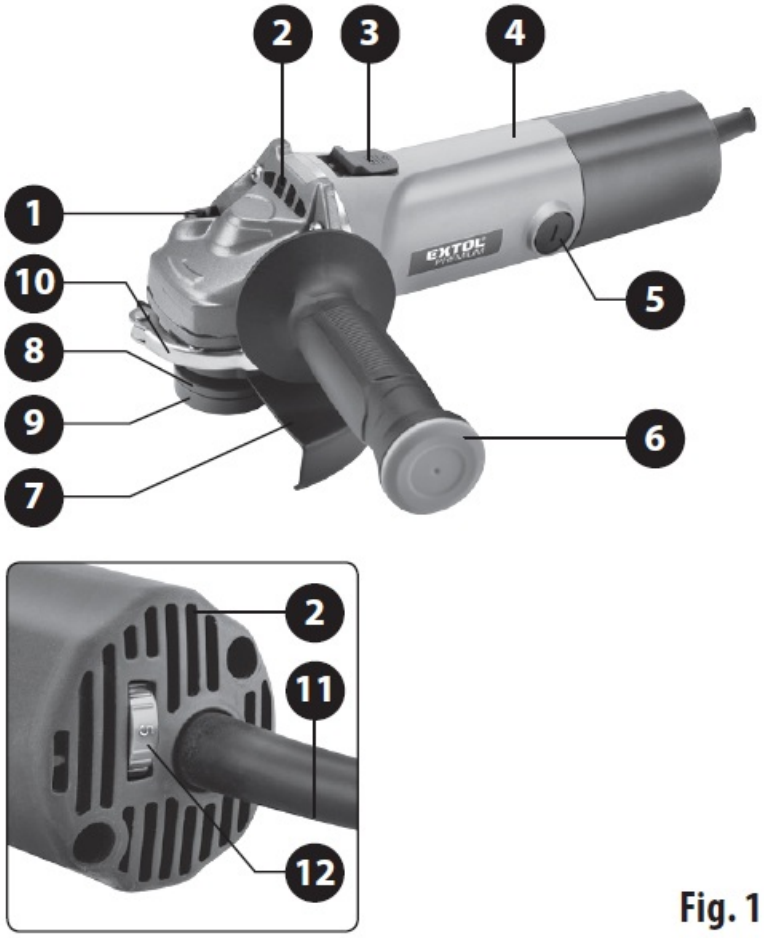


Fig. 1

Fig. 1, Position-description

1. Spindle lock button for tool installation/exchange
2. Motor vents
3. Trigger switch
4. Main handle
5. Carbon brush housing cover for replacement of the carbon brushes by the user (only on certain angle grinder models)
6. Auxiliary front handle
7. Disc guard
8. Disc mounting washer
9. Disc clamping nut
10. Quick coupling system lever for the disc guard (only on certain angle grinder models)
11. Power cord
12. Speed control (only on certain angle grinder models)

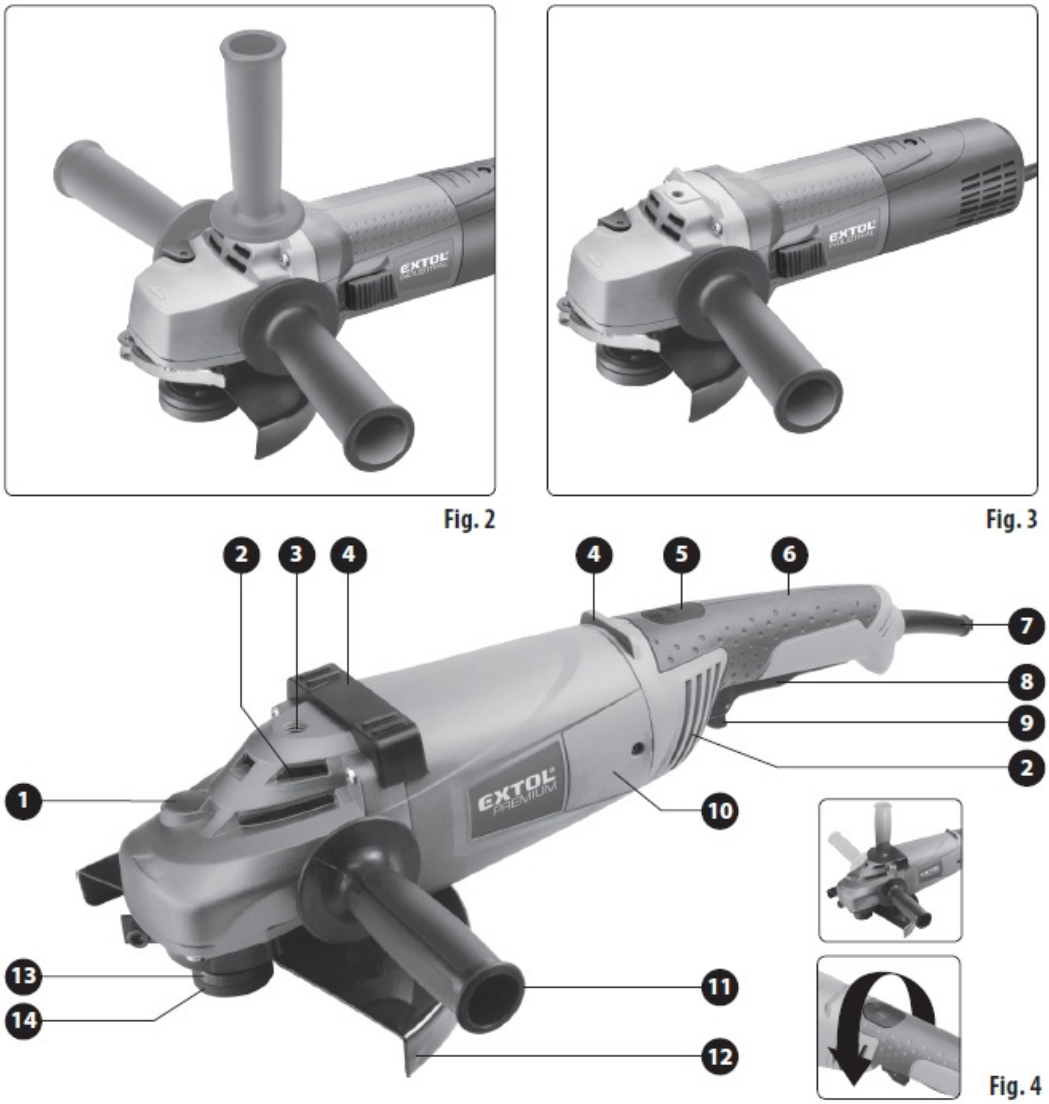


Fig. 4, position-description

1. Spindle lock button for tool installation/exchange
2. Motor vents
3. Auxiliary handle screw-in hole (only on certain angle grinder models)
4. Stabilization tabs for the safe putting down of the angle grinder„ on the back“ (only on certain angle grinder models)
5. Main handle rotation button (only on certain angle grinder models)
6. Main handle
7. Power cord
8. Trigger switch
9. Trigger switch safety mechanism against accidental start up of the angle grinder (on certain models concurrently also for locking the trigger switch in place for continuous operation).
10. Carbon brush housing cover for replacement of the carbon brushes by the user (only on certain angle grinder models)
11. Auxiliary handle
12. Disc guard
13. Disc mounting washer
14. Disc clamping nut

Before putting into operation

WARNING
Prior to putting the power tool into operation, carefully read the entire user‘s manual before first use and keep it with the power tool so that the user can become acquainted with it. If you lend or sell the product to somebody, include this user‘s manual with it. Prevent this user‘s manual from being damaged. The manu-facturer takes no responsibility for damages or injuries arising from use that is in contradiction to this user‘s manual. Before using this power tool, first acquaint yourself with all the control elements and parts as well as how to turn it off immediately in the event of a dangerous situation arising. Before using, first check that all parts are firmly attached and check that no part of the power tool, such as for example safety protecti-ve elements, is damaged or incorrectly installed, or missing. Damage is, likewise, considered to constitute damaged or degraded insulation on the power cord or a damaged power plug. Do not use a power tool with damaged or missing parts and have it repaired or repla-ced at an authorised service centre for the Extol® brand – see chapter Servicing and maintenance, or the website address at the introduction to this user‘s manual.

WARNING
Perform the installation of the disc guard, disc, auxiliary handle, any service and maintenance tasks with the power supply disconnected.

INSTALLING THE DISC GUARD

WARNING

- Never use the angle grinder without the disc guard installed. Only install the original disc guard supplied for the given angle grinder model on the angle grinder. The fact that it is possible to install a disc guard on to the angle grinder does no necessarily mean that it is sufficiently secured for providing a sufficient level of protection to the user.
- The disc guard helps to protect the user against flying fragments of the ground away material, possibly disc fragments, flying sparks, which may cause burns and it provides protection against clothing of the user becoming caught on the rotating disc. Thus, this presents an injury hazard resulting from an object being deflected or a flying disc fragment. Only remove the disc guard in the case where the angle grinder with speed control is used for polishing using a disc on which there would be a risk of it becoming caught on the disc guard. If
  a polish disc carry pad (lambswool) is used for polishing and there is no risk of the edges of the polishing disc or carry pad hitting the edge of the disc guard, then it is not necessary to remove the angle grinder disk guard.
- Depending on which part of the disc is exposed, the disc guard must be installed in such a way that the smallest possible part of the disc facing the user is exposed in order to provide the maximum level of protection to the users, see fig. 5. The grey fields shown in fig. 5 indicate the protection zone of the user relative to the orientation of the disc guard respective to the exposed parts of the disc (work zone). In the event that the work zone of the disc is changed, it is necessary to adequately change the position of the disc guard in order to provide the maximum level of protection to the user.

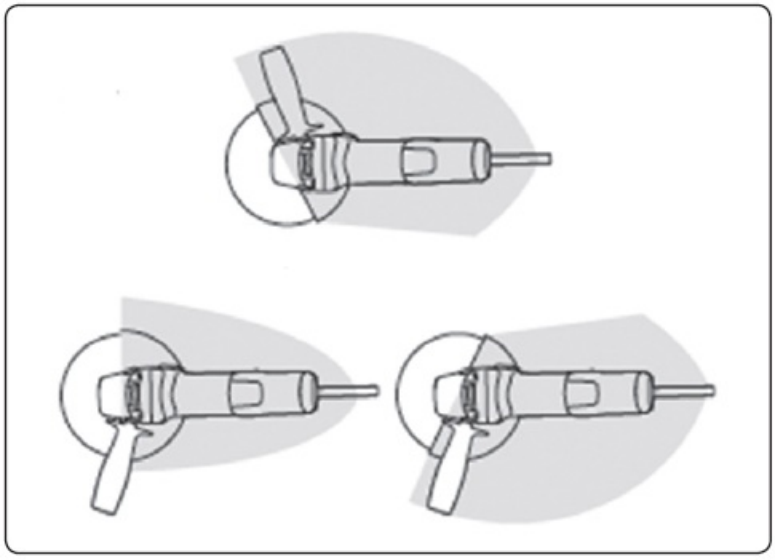


Fig. 5

INSTALLING THE DISC GUARD
If the clamp of the disc guard does not have a sufficiently large diameter to enable it to be seated on the neck of the angle grinder and the clamping nut is screwed on the shaft then it is necessary to first screw out the nut and take out the spacer.

INSTALLING THE DISC GUARD WITH THE QUICK COUPLING SYSTEM
Tilt open the lever of the quick coupling system on the disc guard and seat the clamp of the disc guard over the notch on the neck of the angle grinder so that the tab on the clamp of the disc guard is inside the groove on the neck of the angle grinder, with the clamp of the disc guard seated as low as possible on the neck of the angle grinder. Then turn the disc guard so that the maximum level of protection is provided to the user with respect to the stance of the user and the exposed part of the disc that will be used to make the cut (see fig. 5). Prior to tilting down the lever of the quick coupling system, ensure that the disc guard is correctly seated and then fully fold down the lever of the quick coupling system. Subsequently, using an appropriate assembly tool, fir-mly tighten the clamp of the disc guard by turning the nut on the bolt of the disc guard so that the disc guard is firmly secured in place for the operation of the angle grinder and simultaneously so that it is possible to tilt open the lever of the quick coupling system in the event that it is necessary to adjust the position of the disc guard. Use your hand to pull on the disc guard to check that the disc guard is firmly secured in place.

INSTALLING THE DISC GUARD WITHOUT THE QUICK COUPLING SYSTEM

- The firm clamping of the disc guard without the quick coupling system is conditional upon the correct seating of the clamp of the disc guard on the neck of the angle grinder as described in the instructions for the installation of the disc guard for the quick coupling system above and firmly tighte-ning the clamp of the disc guard by tightening the bolt.
- Certain angle grinder models may have vertical grooves on the neck of the angle grinder an the disc guard, which reinforce the firm clamping of the disc guard after the clamp is firmly tightened on the disc guard by pulling the bolts tight. For firm clamping of the disc guard, it is necessary for the disc guard to be correctly seated on the neck of the angle grinder and for the grooves on the clamp of the disc guard to be flush with the grooves on the neck of the angle grinder relative to the required orientation of the disc guard for ensuring maximum protection for the user.

WARNING

- Prior to putting the angle grinder into operation, use your hand to check that the disc guard is firmly clamped in

place. An angle grinder that does not have the disc guard firmly clamped in place must not be used.

INSTALLING THE AUXILIARY HANDLE

ATTENTION

- For safety reasons, always use the front auxiliary handle when working with an angle grinder. The auxiliary front han-dle provides improved control over guiding the angle grinder, reduces the risk of kickback resulting from the disc jamming and enables one to better handle the effects of kickback.
- Screw the auxiliary handle into the hole on the side of the angle grinder based on whether one is left-handed or right-handed to ensure better control and holding of the angle grinder.
- In the event that the angle grinder is used for planar sanding/ grinding with the use of appropriate flap discs with abrasive on the pad, carry pads of abrasive segments or brushes intended for angle grinders, then install the auxiliary handle into the hole on the top side of the head (applies only in the case where the angle grinder is equipped with this hole).

SELECTING A DISC

- Always use only discs that are intended for angle grinders and which are marked with the technical specifications including disc diameter and maximum permitted speed (RPM), which are not lower than the speed of the angle grinder without load as specified for the given angle grinder model in the technical specifications and for which it is possible to determine the materials for which they are intended.
- On angle grinders intended for discs with a smaller diameter it is forbidden to install discs with originally larger dimensions (discs, as a result of circumferential cutting or grinding a smaller diameter), which are intended for angle grinders with larger diameter discs because these discs are intended for large angle grinders with lower speeds and could disintegrate into smaller pieces at higher rotation speeds.
- Prior to using a disc, check that it is not damaged, that it does not have any cracks, is not warped or damaged in any other way. Do not use damaged discs. Damaged discs must not be repaired for use on angle grinders. Only discs in perfect condition may be used.
- Never use discs of different dimensions than those specified in the technical specifications for the given angle grinder model, discs without specified technical specifications, and discs that require liquid cooling. The angle grinder is intended to be used under dry conditions!

For cutting metals, use cutting discs made from bonded abrasive. It is necessary to choose a disc intended for the given type of material. Only grinding discs made from bonded abrasives of a max. diameter of 6 mm is intended for circumferential grinding. Prior to using, check the use-by date marked on the disc. The bonding material of the disc has a limited lifetime and an old disc may disintegrate.

Fig. 6, Discs from bonded abrasives from the **Extol® Industrial** and **Extol® Premium** range

For cutting stone, tiles, glass, roof tiles, etc. use diamond cutting discs for dry cutting

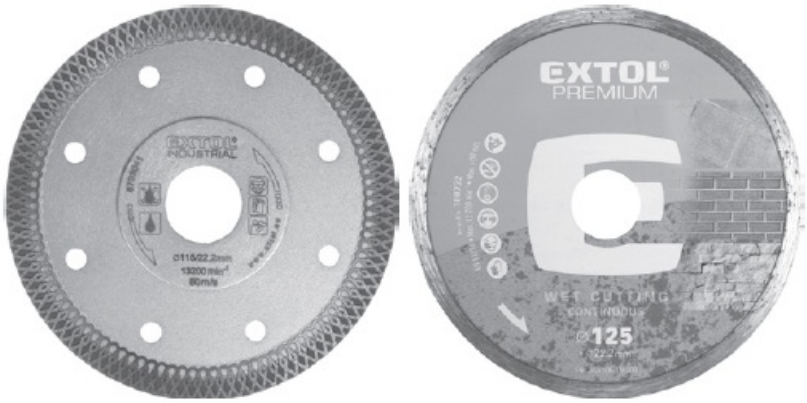


Fig. 7, Diamond discs from the **Extol® Industrial** and **Extol® Premium** range

For planar sanding/grinding of granite, marble, glass-concrete, concrete, etc. use the diamond cutting disc for dry planar sanding/grinding

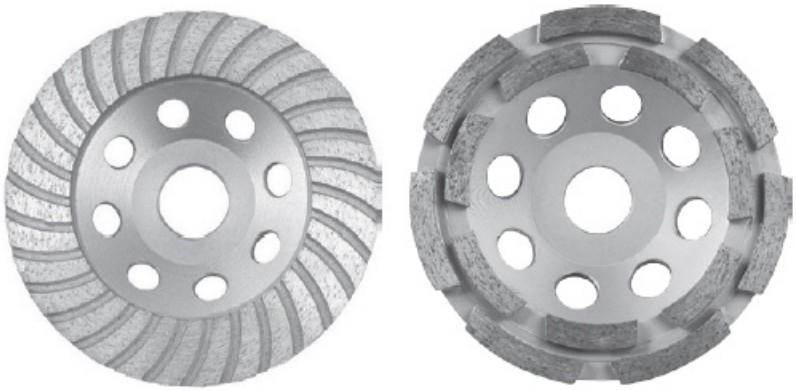


Fig. 8, Diamond disc from the **Extol® Premium** range for planar sanding/grinding

For planar sanding/grinding of profiles, grinding down welds and edges, removing paint coats, caulk, etc. use a flap disc with abrasive on a carry pad.

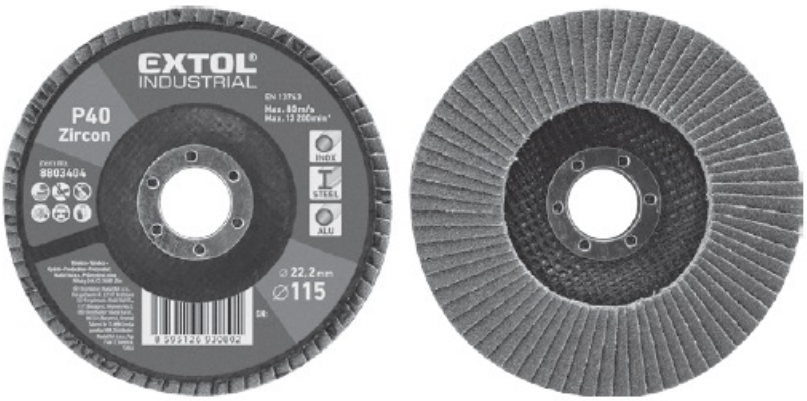


Fig.9, Flap disc from the **Extol Premium**® range

For rasping soft and hardwood, laminates, plastics, soft non-ferrous metals, etc. use the rotary rasping disc intended for angle grinders.

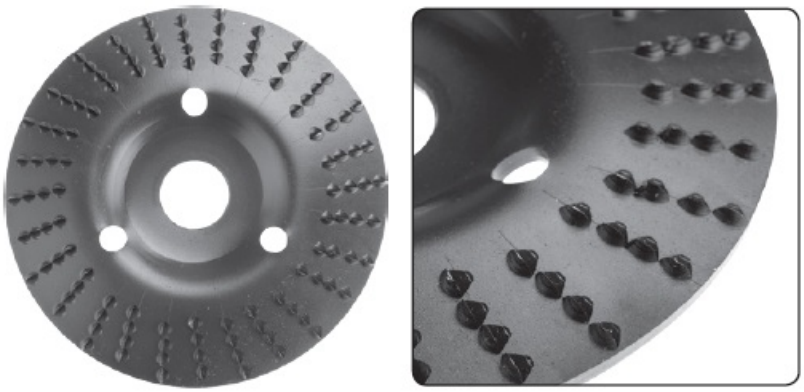


Fig.10, Rasping discs

For sanding/grinding away rust, patinas, surface coats, etc. possible to use wire brushes with an M14 thread. The maximum rotation speed value marked on the brush must not be lower than the rotation speed of the angle grinder, otherwise bristles would fly off the brush and this could lead to injury of the user or people in the vicinity!

Fig.11, Braided cup and radial brush

Fig.12, Polishing lambswool 125 mm from synthetic wool with Velcro zip fastening for angle grinders with speed control

INSTALLATION/REPLACEMENT OF A DISC

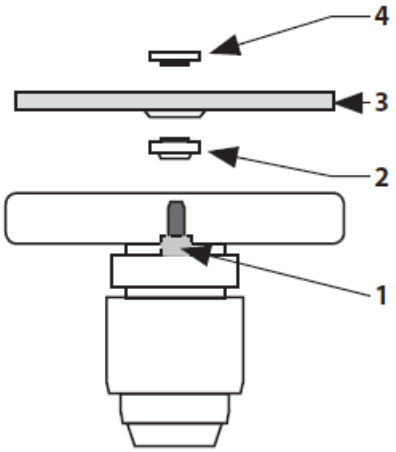


Fig. 13A

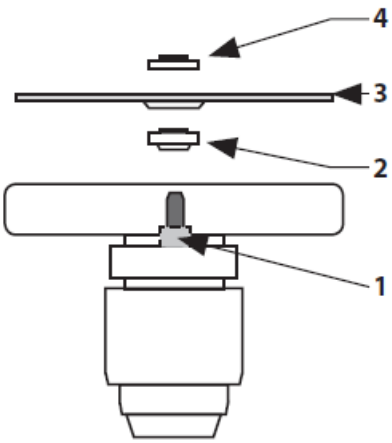


Fig. 13B

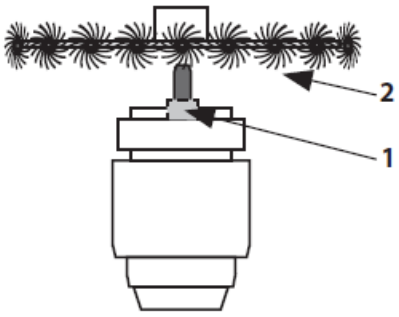


Fig. 13C

1. Place the disc mounting washer (fig. 13A and fig. 13B, position 2) onto the spindle of the angle grinder so that it is seated in the ingress of the spindle and turns with it.
2. Press the spindle lock button and turn the spindle until it locks into place.
3. Place a disc onto the spindle of the angle grinder in the orientation as shown in Fig. 13A and fig. 13B, position 3 and place it on the washer (see fig. 13A and fig. 13. B, position 2).
4. Subsequently screw the outer clamping nut onto the spindle (fig. 13A or 13B, position 4).
   To clamp a thicker grinding disc (max. thickness of 6 mm), screw on the clamping nut with the side of the raised ring towards the disc (fig. 13A, position 4). To clamp a thin disc, screw in the clamping nut facing the disc with the side without the raised ring (fig. 13B, position 4).
5. With the rotation of the spindle firmly locked, pull the nut tight using the included key.
6. With the rotation of the spindle firmly locked, use your hand to check that the disc is properly attached to prevent it from coming loose when the angle grinder is started.
7. Release the spindle lock button.

ATTENTION
Angle grinders intended for disc diameters of 115 mm or 125 mm can be used for wire cup brushes with a diameter of 65 mm. Wire cup brushes with a larger diameter are too heavy for these angle grinders, which manifests itself by means of high vibrations, which will damage the angle grinder. Wire cup brushes with a diameter of 75 or 80 mm are intended for angle grinders intended for a disc diameter of 150 mm, and wire cup brushes with a diameter of 100 mm are intended for angle grinders with a disc diameter of 230 mm. The maximum permitted diameter of a radial braided brush for angle grinders intended for 115 mm discs is 100 mm. For 125 mm angle grinders it is 115 mm and for larger angle grinders it is 125 mm. A radial brush is installed onto the angle grinder as shown in Fig. 13C ensuring that it is firmly tightened using a wrench while the spindle rotation is locked. Rotary brushes are screwed onto the spindle of the angle grinder without washers.

ATTENTION
Accessories with the thread specified for angle grinders are screwed directly onto the spindle without a washer and the clamping nut on the spindle.

REMOVING THE DISC

1. Block the rotation of the spindle by pressing the spindle lock button.
2. Release the disc by loosening the outer clamping nut using the included wrench and then remove the outer clamping nut with the disc.

Starting/spindle lock/speed control/turning off

- Before connecting the power cord of the angle grinder to a live power socket, check that the voltage in the power socket corresponds to the voltage range and frequency of 220-240 V ~ 50 Hz. The power tool can be used in this specified voltage range and at this specified frequency.

TURNING ON/LOCKING THE TRIGGER/TURNING OFF

- If the angle grinder is equipped with speed control, set the speed to a minimum prior to pressing the trigger switch.
- Prior to starting the angle grinder, ensure you have a stable stance and firmly grasp the angle grinder by the main and auxiliary handles.
- The majority of the smaller angle grinder models have the trigger switch on the side of the body or on the top part of the body, and to start the angle grinder it is necessary to slide the trigger switch forward with the thumb, see fig. 14, step 1. To turn off the grinder, simply release the trigger switch.
- On these angle grinder models, it is usually possible to lock the trigger switch in the „on“ position to enable longer-term operation of the angle grinder by pressing down the front part of the trigger switch towards the body of the angle grinder as shown in fig. 14, step 2. To unlock the trigger switch from the „on“ position, it is necessary to press the bottom part and then release it, which will turn off the angle grinder. Before starting the angle grinder, test the locking and unlocking function with the el. power supply turned off to be able to immediately turn off the angle grinder in the event of a dangerous situation arising.

Fig. 14, starting (step 1); locking the trigger switch in the "on" position (step 2)

ATTENTION

- If the power supply is interrupted while the trigger switch is locked in the „on“ position, for safety reasons the angle grinder will not restart when the power supply is restored. In such a case, it is necessary to release the trigger switch from the „on“ position and allow it to slide to the „off“ position and then subsequently set it to the „on“ position. This only applies to angle grinders equipped with a trigger switch that can be locked in the „on“ position.
- The angle grinder may have a trigger switch on the the underside of the main handle, where pressing the trigger switch must be preceded by unlocking the trigger switch as shown in fig. 15, steps 1 and 2. This trigger switch design is namely present on larger and large angle grinders, and for safety reasons, it is not possible to lock the trigger switch in the „on“ position.

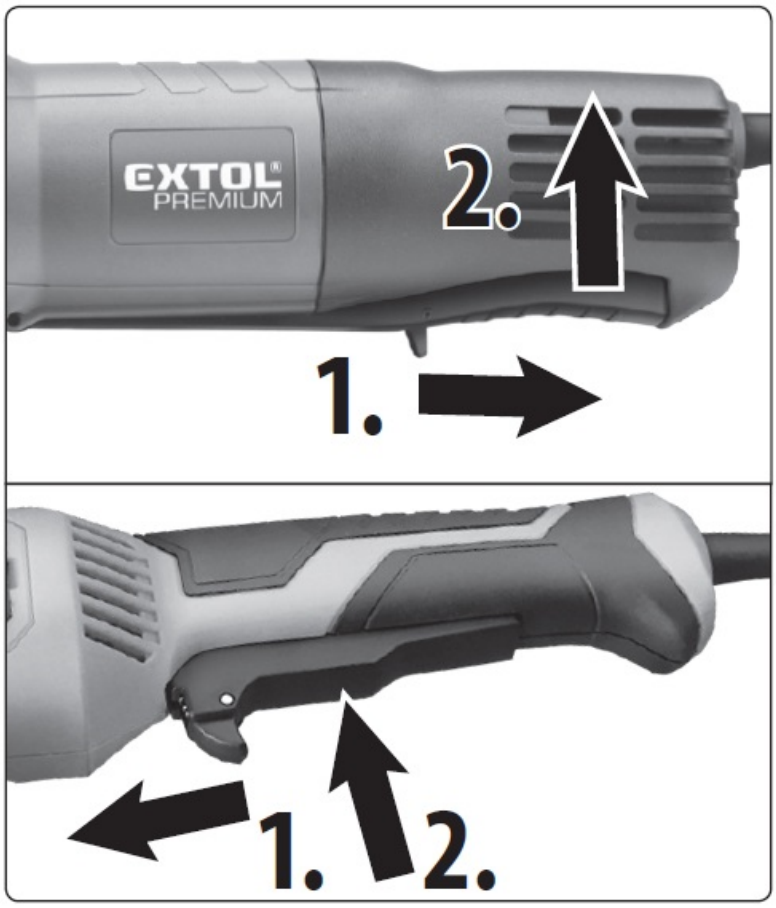


Fig.15; step 1. unlocking, step 2. starting

WARNING
In the event that there is an unusual noise, vibrations, or operation while the power tool is running, immediately turn off the power tool, and disconnect it from the el. power supply and identify and rectify the cause of this unusual operation. If the unusual operation is caused by a fault inside the power tool, arrange its repair through the vendor, where you purchased the product or contact an authorized service center for the Extol® brand (service locations are listed at the website address at the start of this manual). Original spare parts of the manufacturer must be used for the repair.

SPEED CONTROL (ONLY ON ANGLE GRINDER MODELS EQUIPPED WITH SPEED CONTROL)

MEANING OF THE SPEED CONTROL FUNCTION

- Speed control enables the speed to be adjusted concerning the character of the material being worked on, in particular when performing planar grinding using flap discs with various grit sizes or abrasive segments on fibrous segment carrier pads. For grinding away surface coats or for grinding away damaged surfaces, it is suitable to select a lower speed with the use of larger grit sizes because when using larger grit sizes the material take-off tends to be higher. For the final surface treatment, e.g. for grinding down grinding marks that remain after grinding with a coarser grit before painting or varnishing, it is necessary to select a fine grit size at higher or higher rotation speeds, because the finer grit has a lower material take-off. Higher or higher rotation speeds are not appropriate for certain types of surface treatment because as a result of friction undesirable heating up of the surface results and the surface treatment thus acquires a gooey consistency (e.g. when grinding away oil paints). It generally applies that higher speeds are used on harder materials and lower speeds on softer materials.
- The selection of lower rotation speeds has merit even when performing transversal cuts into metal or stone. To

start the cut, it is appropriate to select a lower speed to enable the disc to make a shallow incision cut into the material to accurately define the line−of-cut and to prevent the disc from jumping around on the surface of the material being cut or the undesirable cutting of material edges along the line-of-cut and undesirable vibrations, which worsen the smoothness and accuracy of the cut. To continue making the cut, it is possible to select a higher speed and then a lower speed to complete the cut to enable catching the cutoff part at the end of the cut. It is appropriate to select a lower rotation speed for cutting thin metal materials, e.g. plates or sheets, because at high rotation speeds the cut is too fast, and due to the weight of the cutoff part it may tear away, which leads to the creation of frayed edges if this is an important factor. Lower rotation speeds reduce fraying on the edges of the line of cut.

- Thanks to the minimal rotation speed at level 1, it is possible to use angle grinder models that have speed control also as polishers for water-free polishing under the conditions specified hereafter.
- Select the rotation speed based on the type of activity being performed; the general information about the significance of speed control is described above. The table provided below contains the recommended work activity concerning the rotation speed. The lower number of the rotation speed corresponds to a lower rotation speed. The optimal rotation speed for the given type of work activity, depending on the type and character of the material and the quality of the used work tool, needs to be checked with a practical test.

The approximate ro− tation speed without loa d for the selected speed level*)	**Work activity**
1. 2850	Polishing
2. 4200	Grinding away surface coats using a larger grit size, for soft er materials.
3. 5600	Grinding away surface coats using a larger grit size, for hard materials.
4. 7000	Final surface grinding with the use of a fine grit size, for har der materials; for cutting thinner sheet metal
5. 8400	Cutting of metals
6. 9800	Cutting tiles, stone

Table 3

*) The number of adjustable speed levels may differ based on the angle grinder model and likewise, the number of speeds may to a certain degree differ between the specified values. The here specified speeds are for illustration purposes for the recommended work activity.

WARNING
When using an angle grinder for various work activities, adhere to the safety instructions provided in the instructions provided hereafter. The following pictures show the correct and incorrect methods of work for the various work activities according to the used work tool.

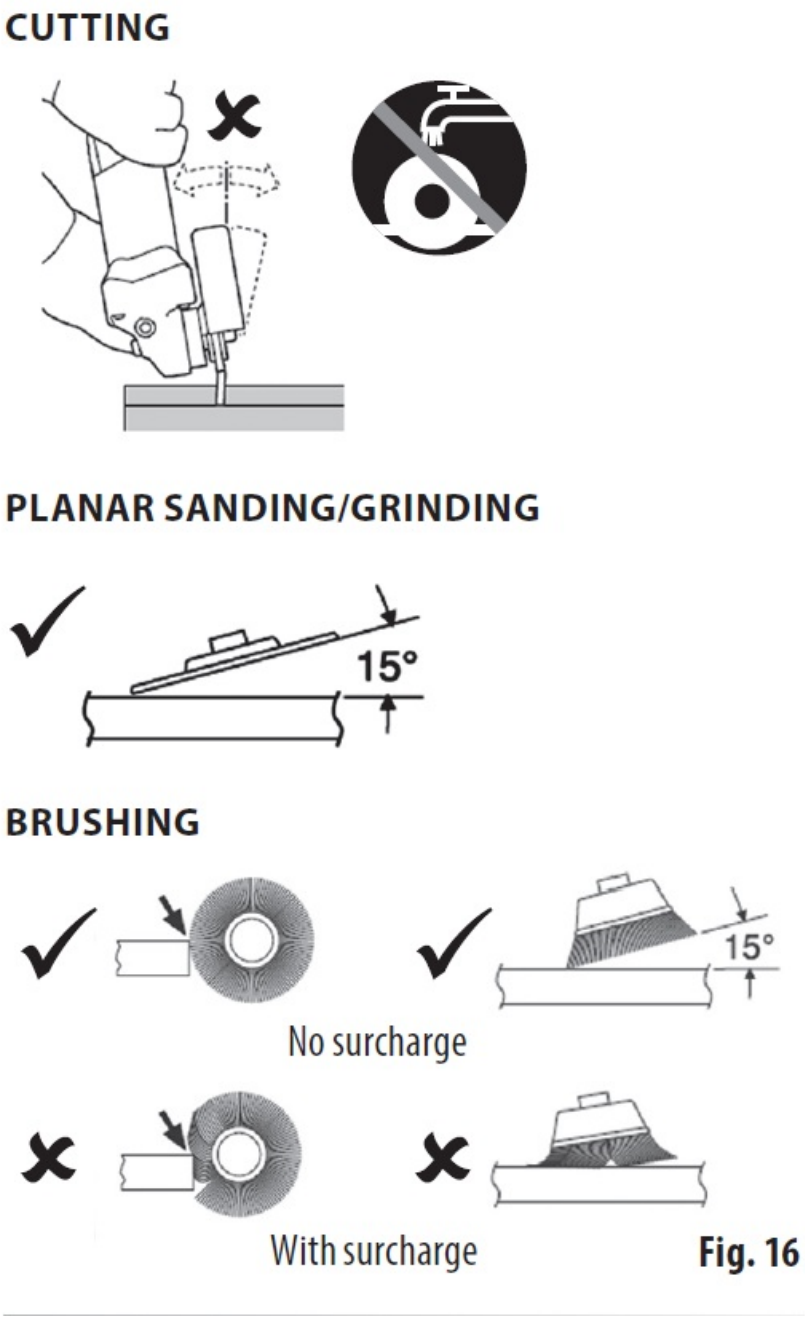


Fig. 16

USING THE ANGLE GRINDER AS A POLISHER

For polishing, it is only possible to use angle grinders with a speed control option, and the lowest speed level 1 must be selected for polishing. An angle grinder with speed control can be used for final polishing to a high gloss (e.g. floors) and is not intended for applying wax and likewise is not intended for polishing vehicles due to the possible risk of damaging the surface varnish. Polishing must be performed without the use of water because the angle grinders are not intended for use with water. Water could enter into the electrical part of the motor and could lead to injury by electrical shock.

ATTENTION

- For the polishing of certain surfaces, it is possible that even the lowest speed on a given angle grinder may be too high and for polishing it may be necessary to select a polisher, which has a lower speed.
- Depending on the design of the carry pad disc with an M14 thread for attaching a polishing disc („lambswool “) and screwing on to the spindle of the angle grinder, it may be necessary to first remove the disc guard from the angle grinder in order to prevent undesirable contact between the carry pad disc or the polishing disc with the disc guard of the angle grinder while it is running. Before screwing the carry pad disc onto the spindle of the

angle grinder, it is necessary to first screw the clamping nut off the spindle and remove the washer used for clamping grinding discs. The maximum rotation speed of the carry pad disc must not be lower than the rotation speed without load specified on the angle grinder.

- The polishing disc („lambswool“) made from synthetic wool must be seated on the carry pad disc so that they mutually align, i.e. that the center of the lambswool is not seated off-center on the carry pad disk. This would result in undesirable vibrations on the angle grinder as a result of not being centered.
  Prior to starting the grinder, always first set the rotation speed to speed level 1.
- If the polishing disc has fastening strings then these must be secured and hidden or cut off before the angle grinder is started to prevent protruding strings from becoming caught on the disc guard of the angle grinder.

Safety Instructions

General safety instructions

WARNING!
It is necessary to read all the safety instructions, the user‘s manual, images, and regulations supplied with this power tool. Not adhering to any of the following instructions may lead to injury by electrical shock, a fire, and/or a serious injury to persons.

All the instructions and the user‘s manual must be kept for possible future reference.
The term „power tool“ in all hereafter provided warnings is defined as a tool powered from the power grid (via a power cord) or a tool powered from a battery (without a power cord / cordless).

1. **SAFETY IN THE WORK AREA**
   - The work area needs to be kept clean, tidy, and well-lit. Untidiness and dark areas in the work area are sources of accidents.
   - The power tool must not be used in environ-ments where there is an explosion hazard, or where there are flammable liquids, gases, or dust. The power tool generates sparks which could ignite dust or vapours.
   - When using the power tool, it is necessary to prevent children and other persons’ access. If the user becomes distracted, they may lose control over the activity being performed.
2. **ELECTRICAL SAFETY**
   - The plug on the power cord must correspond to the power socket outlet. The power plug must never be modified in any way. Socket adapters must not be used with power tools that have a safety earth grounding connection. Power plugs that are not damaged by modifications and that correspond to the power socket will limit the danger of injury by electrical shock.
   - The user‘s body must not come into contact with grounded objects, such as pipes, central heating radiators, stoves, and refrigerators. The risk of injury by electrical shock is greater when your body is in contact with the ground.
   - Power tools must never be exposed to rain, moisture, or wetness. The entry of water into the power tool increases the danger of injury by electrical shock.
   - The flexible power cord must not be used for any other purposes. Power tools must not be carried or pulled by the power cord, nor may the power plug be disconnected by pulling on the power cord. The power cord must be protected against heat, grease, sharp edges, or moving parts. Damaged or tangled power cords increase the danger of injury by electrical shock.
   - If the power tool is used outdoors, an exten-sion cord suitable for outdoor use must be used. Using extension cords designed for outdoor use limits the risk of injury by electrical shock.

- If the power tool is used in damp areas, it is necessary to use a power supply protected by a residual current device (RCD). The use of an RCD limits the danger of injury by electrical shock. The term „residual current device (RCD)“ may be substituted for by the term „ground fault circuit interrupter (GFCI)“ or „earth leakage circuit breaker (ELCB)“.

3. **SAFETY OF PEOPLE**
   - When using the power tool, the user must be attentive and pay attention to what they are currently doing and must concentrate and use common sense. The power tool must not be used when the user is tired or under the influence of drugs, alcohol, or medication. Momentary inattentiveness when using the power tool may result in serious injury to persons.
   - Use personal protective aids. Always wear eye protection. Use protective aids, such as a respirator, safety footwear with anti-slip soles, hard head cover, or hearing protection appropriate to the work conditions; they reduce the risk of injury to persons.
   - It is essential to avoid accidentally starting the power tool. It is necessary to check that the trigger is in the Off position before plugging the power plug into a power socket and/or when connecting the battery pack, lifting or carrying the power tool. Carrying the power tool with a finger on the trigger or connecting the power tool‘s plug with the switch engaged may cause an accident.
   - It is necessary to remove all adjustment tools and spanners before turning on the power tool. An adjustment tool or spanner left attached to a rotating part of the power tool may result in injury to persons.
   - The user may only work in locations that they can reach safely. The user must always maintain a stable stance and balance. This will provide better control over the power tool in unforeseeable situations.
   - Dress in an appropriate manner. Do not wear loose clothing or jewelry. The user must ensure that they have hair and clothing at a sufficient distance from moving parts. Loose clothing, jewelry, and long hair may become caught in the moving parts.
   - If there is equipment available for the extraction and collection of dust, it is necessary that such equipment is connected and used correctly. The use of such equipment may limit the danger posed by the created dust.
   - The user must not become complacent and start ignoring the fundamentals of power tool safety due to the routine arising from frequent use of the power tool. Careless activity may cause serious injury within a fraction of a second.

4. **OPERATING AND MAINTAINING POWER TOOLS**
   - Power tools must not be overloaded. It is necessary to use power tools that are designed for the work being performed. Appropriate power tools for a given task will do the job better and with greater safety.
   - Power tools that cannot be turned on and off with a trigger/switch must not be used. Any power tools that cannot be controlled using a trigger/switch are dangerous and must be repaired.
   - Before making any adjustments, replacing accessories, or storing the power tool, it is necessary to pull the power plug out of the power socket and/or remove the battery pack out of the power tool if it is removable. These preventative safety measures limit the danger of accidentally starting the power tool.
   - When not used, the power tool must be stored out of children‘s reach, and persons not acquainted with the power tool or these instructions must not be permitted to use the power tool. A power tool in the hands of inexperienced users is dangerous.
   - Power tools and accessories need to be maintained. It is necessary to check the adjustment of moving parts and their movement; focus on cracks, broken parts, or any other circumstances that may threaten

the proper operation of the power tool. If the power tool is damaged, it is necessary to have it repaired before using it again. Many accidents are caused by insufficiently maintained power tools.

- It is necessary to keep cutting power tools clean and sharp. Correctly maintained and sharpened cutting power tools are less likely to get stuck on material or to jam and they are also easier to control.
- It is necessary to use power tools, accessories, working tools, etc. by these instructions and in such a manner as prescribed for the specific power tool concerning the given work conditions and the type of work being performed. Using power tools for tasks other than for which they are designed may lead to dangerous situations.
- Handles and grip surfaces must be kept dry, clean, and free of grease. Slippery handles and grip surfaces do not ensure a safe grip and control over the power tool in unexpected situations.

5. **SERVICE**
    - The power tool must be repaired by a qualified person who will use identical spare parts. This will ensure that the same level of safety will be achieved as before the repair of the power tool.

Safety instructions for angle grinders

SAFETY INSTRUCTIONS FOR ALL WORK ACTIVITY
SAFETY WARNINGS ARE COMMON FOR THE WORK ACTIVITIES OF SANDING, PLANAR GRINDING, AND GRINDING WITH WIRE BRUSH OR CUTTING.

- This power tool is intended for use as a sander, planar grinder, wire brush grinder, or cutting tool. It is necessary to read all the safety instruc-tions, the user‘s manual, images, and regulations supplied with this power tool. Not adhering to any of the following instructions may lead to injury by electri-cal shock, a fire, and/or a serious injury to persons.
- Work activities such as polishing (except for models with speed control), hole cutting, or cutting are not performed using this power tool. Performing work tasks for which this pneumatic tool is not intended may be hazardous and lead to injury of persons.
- This power tool must not be rebuilt in a way that it would work in a manner for which it is not explicitly designed and intended by the manu-facturer of the power tool. Such a rebuild could lead to the loss of control and cause serious injury to persons.
- Accessories that are not expressly designed and determined by the manufacturer of the power tool must not be used. The simple fact that an accessory can be attached to a given power tool does not guarantee its safe operation.
- The nominal speed of accessories must be at least equal to the maximum speed marked on the power tool. Accessories that operate at higher speeds than their nominal speed may break and disintegrate.
- The outer diameter and thickness of the accessory must be within the limits of the nominal range for the given power tool. Accessories of incorrect size cannot be sufficiently screened or controlled.
- The dimensions of the fastening elements of the accessories must correspond to the dimensions of the clamping parts of the power tool. Accessories that do not correspond to the fastening elements of the power tool will be unbalanced, will vibrate excessively, and may result in loss of control.
- Damaged accessories must not be used. Before every use, it is necessary to check the accessories: on abrasive discs, check for chipped-off parts and cracks; on carry pad discs check for cracks, tears, or excessive wear and tear; on wire brushes check for loose and cracked wires. If the accessory or power tools are dropped, check them for damage or install undamaged accessories. After checking and installing an accessory, the user and bystanders must stand away from the plane of the rotating accessory, and allow the power tool to run at the

highest speed without load for one minute. Damaged accessories will usually break during this test period.

- Personal protective aids must be used. Depending on the level of use, it is necessary to use a face shield, shielded protective glasses or safety goggles. A respirator, hearing protection, gloves, and work apron capable of stopping small fragments of the abrasive or workpiece must be worn to the corresponding extent. Eye protection must be able to stop flying fragments that are generated during various problematic situations. A dust mask or respirator must be able to filter out particles generated during specific use. Long-term exposure to high-intensity noise may result in hearing loss.
- Bystanders must maintain a safe distance from the work area. Everybody who enters the work area must use personal protective work aids. Fragments from the workpiece or damaged accessories may fly out and cause injury also outside the direct vicinity of the work area.
- When performing activities, where the accessory may come into contact with hidden conduits or its power cord, the power tool must be held only by the insulated holding surfaces. If the accessory comes into contact with a „live“ conduit, the uninsulated metal parts of the power tool will become life and may result in the user suffering injury by electrical shock.
- The flexible power cord must be located out of the range of rotating accessories. If the user loses control, the power cord could be cut or jammed by the accessory, and a hand or arm of the user may be pulled into the rotating accessory.
- The power tool must never be put down until the work tool comes to a complete stop. The rotating accessory may catch the surface and rip the power tool out of the user‘s control.
- The power tool must never be started at the side of the user while being carried. In the event of accidental contact, the rotating work tool may become entangled in the user‘s clothing and pull itself towards the body.
- The vents on power tools must be cleaned regularly. The motor fan pulls dust into the case and excessive accumulation of metal dust may create an electrical hazard.
- The power tool must not be used in the vicinity of flammable materials. This material could catch fire from emitted sparks.
- Accessories that require cooling with a liquid must not be used. Using water or other cooling liquids may cause injury or death by electrical shock.

OTHER SAFETY INSTRUCTIONS FOR ALL WORK ACTIVITY

KICKBACK AND RELATED INSTRUCTIONS:

1. Kickback is a sudden reaction to the clamping or jamming of a rotating disc, carry disc, brush, or other accessories. Clamping or jamming will cause an abrupt stoppage of the rotating work tool, which will subsequently cause the power tool to uncontrollably move in the opposite direction to the rotation direction of the work tool at the point of jamming.
2. For example, if the abrasive disc is clamped or jammed in a workpiece, the edge of the disc that is entering the clamping location may enter the surface of the material and cause the disc to be pushed out upwards or ejected. The disk may jump towards the user or away from the user depending on the rotation direction of the disc at the clam-ping point. In such cases, grinding discs may also crack.
3. Kickback results from the abuse and/or incorrect use of the power tool and/or incorrect work procedures or conditions, and can be prevented by properly adhering to appropriate measures specified below.

- The power tool needs to be held firmly with both hands and a correct body and hand posture must be

maintained to resist kickback forces. The auxiliary handle must always be used if the power tool is equipped with it to ensure maximum control over kickback or reaction torque when the power tool is started. The user can control the reaction torque and kickback forces if they adhere to the correct safety measures.

- A hand must never come close to a rotating tool. The kickback of a power tool may fling away the user‘s hand.
- One must not stand in the location, where the power tool would travel in the event of kickback. Kickback will fling the power tool in the opposite direction to the disc‘s movement direction at the jamming point.
- It is necessary to pay special attention when grinding corners, sharp edges, etc. It is necessary to prevent the accessory from jumping and jamming. Corners, sharp edges, or jumping have a tendency to jam the rotating accessory and cause loss of control or kickback.
- It is forbidden to attach a woodworking saw disc, a segmented diamond disc with segments on which the circumferential gap between the segments is greater than 10 mm or a saw disc with teeth. These saw blades very often cause kickbacks and loss of control.

ADDITIONAL SAFETY INSTRUCTIONS FOR GRINDING AND CUTTING WORK TASKS
SAFETY INSTRUCTIONS SPECIFIC TO GRINDING AND CUTTING WORK TASKS

- a) It is necessary to use only the type of discs that are specified for this power tool and the specific disc guard that is designed for the selected disc. Discs for which the power tool was not designed cannot be covered appropriately and are dangerous.
  b) The grinding surface of discs that are lowered in the middle, must be installed below the level of the disc guard‘s edge. An incorrectly installed disc that extends past the level of the protective guard‘s edge cannot be sufficiently protected.
  c) The disc guard must be safely attached to the power tool and located for maximum safety so that only the smallest part of the disc is uncovered in the direction of the user. The disc guard helps to protect the user against broken-off disc fragments, accidental contact with the disc, and sparks that may ignite clothing.
  d) Discs must only be used for their specified use. For example: it is not permitted to use the side of a cutting disc. Abrasive cutting discs are intended for peripheral grinding, and lateral forces acting on these discs could fracture them.
  e) Undamaged disc flanges must always be used, and they must have the correct size and shape for the selected disc. Correct disc flanges support the disc thereby reducing the risk of the disc cracking. Cutting disc flanges may differ from grinding disc flanges.
  f) It is forbidden to use worn-out discs of originally larger dimensions, that are intended for larger power tools. A disc intended for a larger power tool is not suitable for the faster rotation speed of a smaller power tool and may crack.
  g) When using dual-purpose discs, it is necessary to always use the corrective guard concerning the activity being performed. Using an incorrect guard may not necessarily provide the required level of protection, which may lead to serious injury to persons.

ADDITIONAL SAFETY INSTRUCTIONS FOR CUTTING
ADDITIONAL SAFETY INSTRUCTIONS SPECIFICALLY FOR CUTTING WORK TASKS:

- a) A cutting disc must not jam inside the material, nor may excessive pressure be exerted on it. One must not attempt to achieve an excessive cutting depth. Putting excessive load on the disc increases the load and tendency towards warping or jamming of the disc in the cut and the possibility of kickback or the disc cracking.

b) It is forbidden to stand along the axis of a rotating disc or behind it. The moment that the disc at the work point is moving away from the body of the user, the possible kickback may thrust the rotating disc and the power tool directly at the user.
c) If the disc jams inside a cut or the cutting task is for some reason interrupted, the power tool must be turned off and held fixed until the disc comes to a complete stop. The user must never attempt to pull a cutting disc out of a cut while the disc is moving because kickback could occur. It is necessary to identify the causes of disc jamming and take steps to eliminate these causes.
d) When an accessory is inserted inside a workpiece, the cutting task must not be resumed. The disc is allowed to reach full speed and is then again plunged into the cut. If the power tool is restarted with the disc still plunged inside the workpiece, it may jam, it may be pushed upwards or kickback may result.
e) Panels and other extra-large workpieces need to be supported to reduce the risk of clamping the disc and kickback. Large workpieces tend to buckle under their weight. Supports must be placed underneath the workpiece near the cutting line and the edges on both sides of the disc.
f) It is necessary to pay special attention when „cutting into a cavity“ on existing walls or other blind areas. The penetrating disc may cut gas or water pipes, electrical conduits, or items that may cause kickback.
g) It is forbidden to attempt to perform curved cuts. Putting excessive load on the disc increases the load and tendency towards warping or jamming of the disc in the cut and the possibility of kickback or disc cracking, which may lead to serious injury to persons.

ADDITIONAL SAFETY INSTRUCTIONS FOR PLANAR SANDING/GRINDING WORK TASKS
SAFETY INSTRUCTIONS FOR SPECIFIC PLANAR SANDING/GRINDING WORK TASKS

- a) It is necessary to use sandpaper of the right size. When selecting sandpaper, it is necessary to follow the manufacturer’s recommenda-tions. A large sandpaper that extends too far past the perimeter of the sanding plate risks tearing and may cause jamming, tearing of the disc, or kickback.

ADDITIONAL SAFETY INSTRUCTIONS FOR THE WORK TASK OF POLISHING
(APPLIES ONLY FOR MODELS WITH SPEED CONTROL WITH THE LOWEST SPEED SET)

SAFETY INSTRUCTIONS SPECIFIC TO POLISHING WORK TASKS

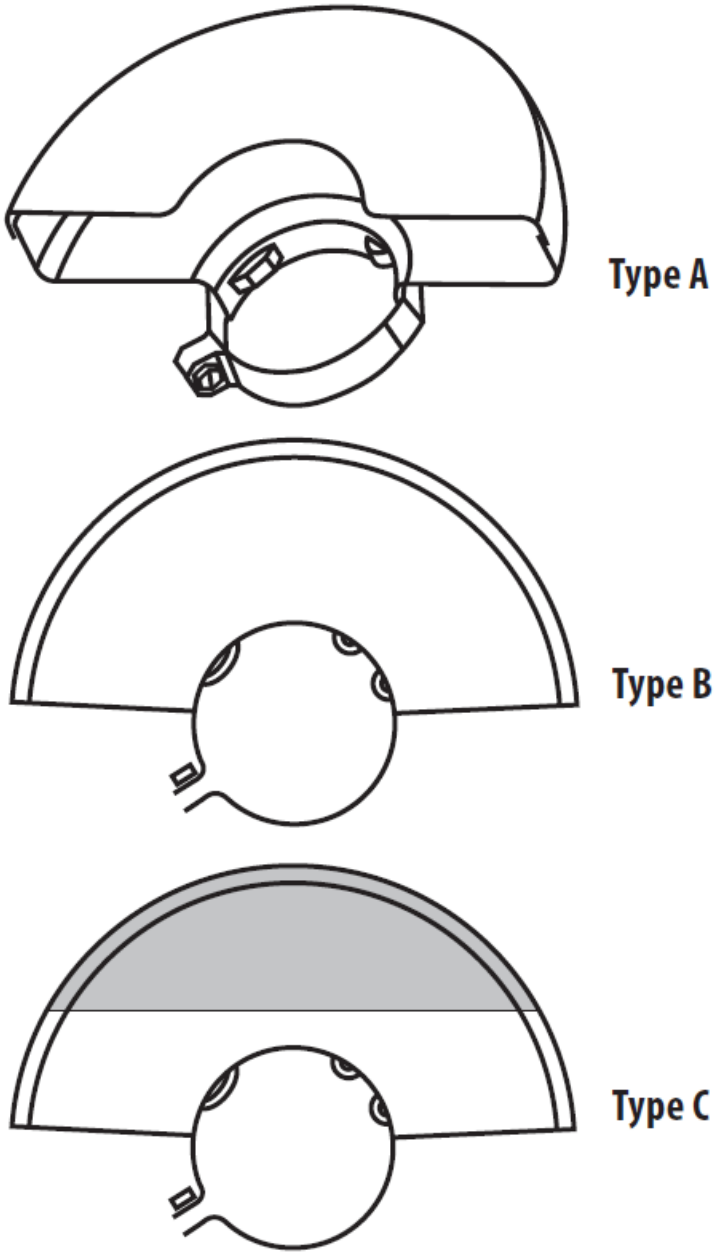
- No loose part of the polishing collar or its fastening lace may be left to rotate freely. All loosened fastening laces are tucked in or cut away. Loose and rotating fastening laces could tangle in with the user‘s fingers or jam into the workpiece.

ADDITIONAL SAFETY INSTRUCTIONS FOR WIRE BRUSH GRINDING WORK TASKS
SAFETY INSTRUCTIONS SPECIFIC TO GRINDING WIRE BRUSH WORK TASKS

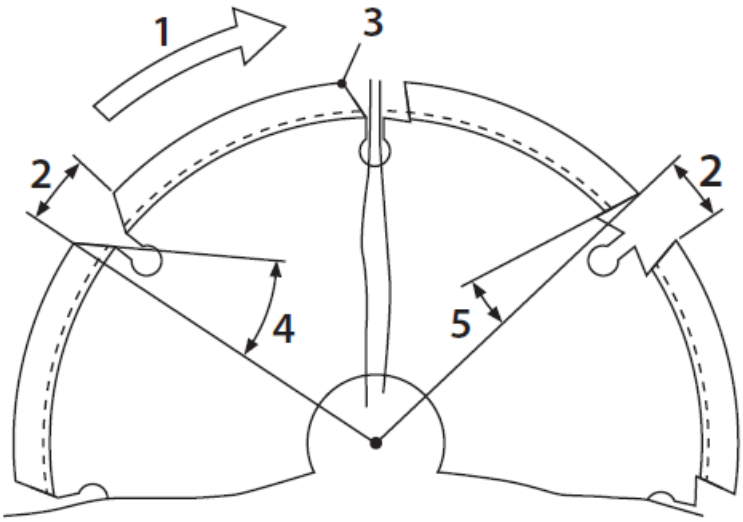
- It is important to understand that wire bristles fly out of the brush even when running without load. The wires must not be overloaded by excessive pressure on the brush. Wire bristles can easily penetrate through light clothing and/or skin.
- If the use of a disc guard is prescribed for use with the wire brush, ensure that there is no contact between the wire disc or brush and the disc guard. The wire disc or brush may, due to the effect of load and centrifugal forces, increase its diameter during work.
- When using dual-purpose (combination of grinding and abrasive cutting) discs with a stem, use only a type

A (cutting) or type C (combination) disc guard:

- Information about risks related to the use of an incorrect disc guard type, including
  - when a type A disc guard type (cutting) is used for frontal grinding the disc guard may collide with the workpiece and thereby lead to insufficient control over the power tool;
  - when a type B disc guard type (grinding) is used for cutting with bonded abrasive discs, there exists an increased risk of the user being exposed to deflected sparks and particles, and likewise exposure to disc fragments if the disc disintegrates;
  - when a type A(cutting), type B (grinding), or type C (combination) disc guard is used for cutting and frontal grinding of concrete or masonry, there exists an increased risk of exposure to dust and loss of control, which leads to kickback;
  - when a type A(cutting), type B (grinding), or type C (combination) disc guard is used with a circular wire brush, which has a diameter greater than the diameter of the disc guard, the wires may become caught in the disc guard, which leads to the breaking of wires;



The permitted structure of cutting discs (diamond or from reinforced bonded abrasive), if diamond segments then the maximum circumferential gap between the segments is 10 mm, only negative angle of the face, see the following figure.



LEGEND

1. rotation direction
2. gap
3. frontal corner of the segment
4. negative angle of the face
5. positive angle of face

The power tool generates an electromagnetic field during operation, which may negatively affect the operation of active or passive medical implants (pacemakers) and threaten the life of the user. Before using this device, ask a doctor or the manufacturer of the implant, whether you may work with this device.

Meanings of markings on the label

	Read the user's manual before using the angle grinder.
	The product meets the respective EU harmonisation legal directives.
	Equipment of protection class II (double insulation).
	During work, the user and persons in the vicinity of the work location must use certified eye, ear and breathing tract protection with a sufficient level of protection.
	The angle grinder must be held in both hands during use by the main handle and the auxiliary handle. Always use the angle grinder with the front handle installed.
	Do not use this guard for cutting tasks, it is only intended for planar sanding/ grinding.
	Electrical equipment at the end of its lifetime must not be thrown out into communal waste- see below.
Production SN / Serial number	The product is marked with the year and month of its manufacture and its series.

Table 4

Cleaning and maintenance

ATTENTION
Before installation, adjustment, maintenance, or servicing tasks, disconnect the power cord from the el. power source.

- Keep the power tool and its vents clean. Clogged vents prevent air circulation, which may cause the motor to overheat and cause a fire.
- For cleaning the surface of the power tool, use a damp cloth, however, prevent water from entering the power tool. Do not use any aggressive cleaning agents and solvents. This would result in damage to the plastic cover of the tool.
- If your angle grinder has stopped working properly, for warranty repairs contact the vendor from whom you purchased the power tool or contact the authorized Extol service center (service locations can be found on the website in the introduction of the manual). For safety reasons, only original parts from the manufacturer may be used for repairs.

INSPECTION/REPLACEMENT OF THE BRUSHES

- This paragraph does not relate to angle grinder models without carbon brushes – brushless.
- If while the power tool is running, sparks are evident inside of it or if it runs irregularly, check the wear on the carbon brushes. If access to the carbon brushes is possible from the side of the angle grinder without requiring access to the internal part of the angle grinder, the user may perform inspection and replacement of the carbon brushes themselves. If the angle grinder is not equipped with these side accesses to the carbon brushes, have the carbon brushes inspected and possibly replaced at an authorized service center for the Extol® brand, because access to the internal parts of the angle grinder is necessary. The carbon brushes must be replaced with original components, both at the same time.
- Replacement original carbon brushes have the part number of the angle grinder with the letter „C“ on the end, e.g. 8792014C.

Storage
Store the cleaned tool in a safe location that is out of reach of children where temperatures do not exceed 45°. Protect the power tool against direct sunlight, radiant heat sources, high humidity, and ingress of water and against rodents.

Waste disposal

- Throw packaging materials into a container for the respective sorted waste.
- According to Directive (EU) 2012/19, unusable electrical appliances must not be thrown out with communal waste since they contain substances that are hazardous to the environment but rather must be handed over for ecological disposal at an electrical equipment waste collection point. You can find information about electrical equipment collection points and collection conditions at your local town council office or at your vendor.

Declaration of Conformity

ES Declaration of Conformity

Subjects of declaration – models, product identification:

- Angle grinders of the Extol® brand with specifications provided in table 1 of this user‘s manual
- Manufacturer Madal Bal a.s. Bartošova 40/3, CZ-760 01 Zlín • Company ID No.: 49433717
- hereby declares that the products described above conform with all relevant stipulations of harmonization legal regulations of the European Union: 2006/42 ES; (EU) 2011/65; (EU) 2014/30;
- This declaration is issued under the exclusive responsibility of the manufacturer.

Harmonization norms (including their amendments, if any exist), which were used in the assessment of conformity and based on which the Declaration of Conformity is issued:

- EN 62841-1:2015; EN IEC 62841-2-3:2021; EN IEC 55014-1:2021; EN IEC 55014-2:2021; EN IEC 61000-3-2:2019;
- EN 61000-3-3:2013; EN IEC 63000:2018

The technical documentation (2006/42 ES) was drawn up by Martin Šenkýř at the business address of Madal Bal a.s., Průmyslová zóna Příluky 244, 760 01 Zlín, Czech Republic. The technical documentation (2006/42 ES) is available at the aforementioned business address of Madal Bal, a.s.

Place and date of issue of ES Declaration of Conformity: Zlín 16.5.2024

On behalf of Madal Bal, a.s.

On behalf of Madal Bal, a.s.

Martin Šenkýř
Member of the Company‘s Board of Directors

Documents / Resources

	EXTOL 8792010 Angle Grinder with Extended Handle [pdf] User Manual 403127, 8792010, 8892023, 8892025, 8892040, 8892060, 8792010 Angle Grinder with Extended Handle, 8792010, Angle Grinder with Extended Handle, Grinder with Extended Handle, Extended Handle

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- EXTOL - náradie pre remeselníkov, domácich majstrov aj profesionálov
- Köszöntjük a Madal Bal cégcsoportnál!
- User Manual