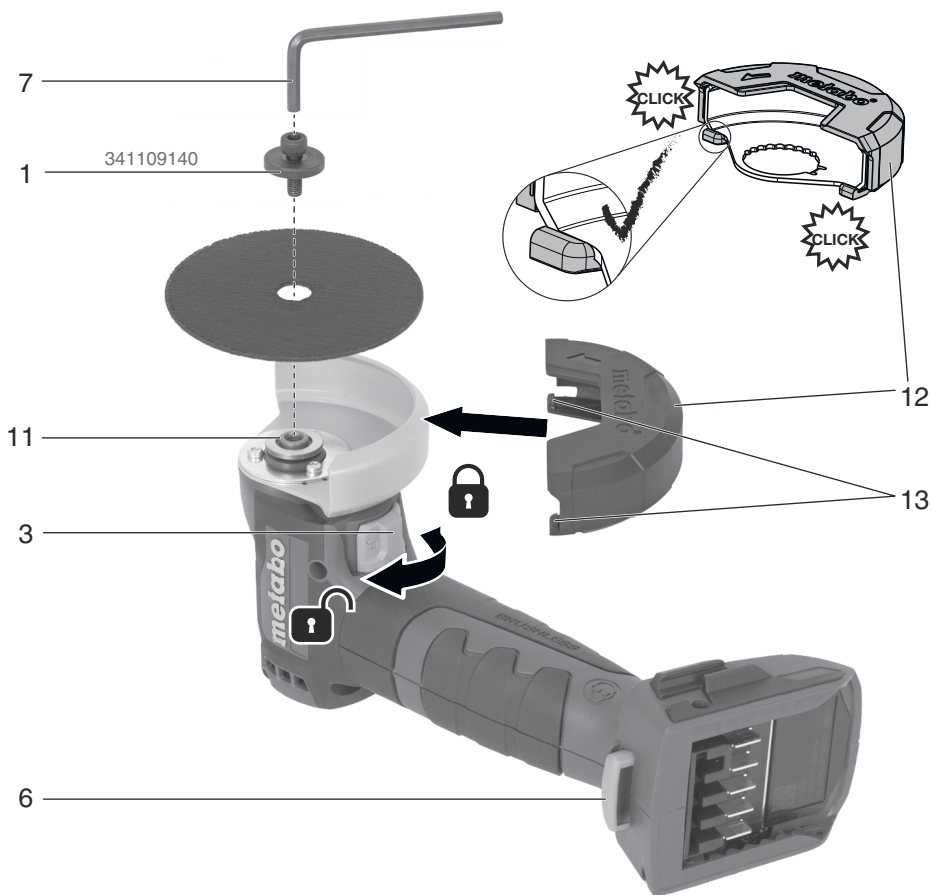
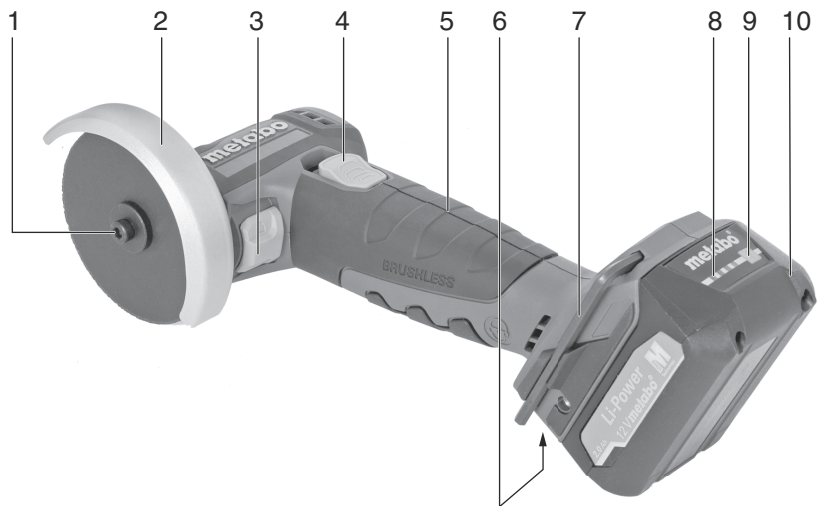



## PowerMaxx CC 12 BL CC 18 LTX BL



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		<b>PowerMaxx CC 12 BL</b> *1) Serial Number 00348..	<b>CC 18 LTX BL</b> *1) Serial Number 00349..
<b>D<sub>max</sub></b>	mm (in)	76 (3)	76 (3)
<b>d</b>	mm (in)	10 ( <sup>3</sup> / <sub>8</sub> )	10 ( <sup>3</sup> / <sub>8</sub> )
<b>U</b>	V	12	18
<b>t<sub>max1</sub>; t<sub>max3</sub></b>	mm (in)	6; 5,8 ( <sup>1</sup> / <sub>4</sub> ; <sup>7</sup> / <sub>32</sub> )	6; 5,8 ( <sup>1</sup> / <sub>4</sub> ; <sup>7</sup> / <sub>32</sub> )
<b>M</b>	- / mm (in)	M5	M5
<b>n</b>	min <sup>-1</sup> (rpm)	20000	20000
<b>m</b>	kg (lbs)	0,8 (1.9)	1,0 (2.2)
<b>a<sub>h,SG</sub>/K<sub>h,SG</sub></b>	m/s <sup>2</sup>	4,0 / 1,5	4,5 / 1,5
<b>a<sub>h,TS</sub>/K<sub>h,TS</sub></b>	m/s <sup>2</sup>	3,0 / 1,5	3,5 / 1,5
<b>L<sub>pA</sub>/K<sub>pA</sub></b>	dB(A)	80 / 3	77 / 1,5
<b>L<sub>WA</sub>/K<sub>WA</sub></b>	dB(A)	91 / 3	88 / 1,5

**CE** \*2) 2014/30/EU, 2006/42/EC, 2011/65/EU  
\*3) EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015, EN IEC 63000:2018

ppa. *B.F.*

2021-07-14, Bernd Fleischmann  
Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)  
\*4) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

# Original instructions

## 1. Declaration of Conformity

We, being solely responsible: Hereby declare that these angle grinders, identified by type and serial number \*1), meet the requirements of all relevant directives \*2) and standards \*3). Technical documents for \*4) - see page 3.

### For UK only:

**UK** We as manufacturer and authorized person to **CA** compile the technical file, see \*4) on page 3, hereby declare under sole responsibility that these angle grinders, identified by type and serial number \*1) on page 3, fulfill all relevant provisions of following UK Regulations S.I. 2016/1091, S.I. 2008/1597, S.I. 2012/3032 and Designated Standards EN 60745-1:2009+A11:2010, EN 60745-2-3:2011+A2:2013+A11:2014+A12:2014+A13:2015, EN IEC 63000:2018.

## 2. Specified Conditions of Use

The cordless angle grinders, when fitted with original Metabo accessories, are suitable for grinding, sanding, separating and wire brushing metal, concrete, stone, tiles, wood, plastics and similar materials without the use of water.

The user bears sole responsibility for any damage caused by inappropriate use.

Generally accepted accident prevention regulations and the enclosed safety information must be observed.

## 3. General Safety Information



For your own protection and for the protection of your power tool, pay attention to all parts of the text that are marked with this symbol!



**WARNING** – Read the operating instructions to reduce the risk of injury.



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

**Keep all safety instructions and information for future reference.**

Always include these documents when passing on your power tool.

## 4. Special Safety Instructions

### 4.1 General Safety Recommendations for Grinding, Sanding, Wire Brushing or Cut-Off Grinding:

a) **This power tool is intended to function as a grinder, sander, wire brush or cut-off tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool.** Failure to follow all instructions listed below

may result in electric shock, fire and/or serious injury.

b) **Operations such as polishing are not recommended to be performed with this power tool.** Operations for which the power tool was not designed may create a hazard and cause personal injury.

c) **Do not use accessories which are not specifically designed and recommended by the tool manufacturer.** Even if an accessory can be attached to your power tool, this does not ensure safe operation.

d) **The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.** Accessories running faster than their rated speed can break and fly apart.

e) **The external diameter and thickness of your accessory must be within the capacity rating of your power tool.** Incorrectly sized accessories cannot be adequately guarded or controlled.

f) **The threaded mounting of accessories must match the grinder spindle thread. For accessories mounted by flanges, the arbour hole of the accessory must fit the locating diameter of the flange.** Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may result in a loss of control.

g) **Do not use damaged accessories. Inspect accessories such as grinding discs before each use for chips and cracks and inspect backing pads for cracks, tear or excess wear and wire brushes for loose or cracked wires.** If a power tool or accessory is dropped, inspect for damage or install an undamaged accessory. **After inspecting and installing the accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute.** Damaged accessories will normally break apart during this test time.

h) **Wear personal protective equipment. Use a face shield, safety goggles or safety goggles depending on the application. If necessary, wear a dust mask, hearing protectors, gloves and a workshop apron capable of stopping small abrasive or workpiece fragments.** Eye protection must be capable of stopping flying debris generated by various operations. A dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.

i) **Keep bystanders a safe distance away from the work area. Anyone entering the work area must wear personal protective equipment.** Fragments of a workpiece or broken accessory may fly off and result in injury beyond the immediate area of operation.

j) **When carrying out tasks that involve a risk of the mounted tool contacting hidden wiring, make sure you hold the device on the insulated**

**gripping surfaces only.** Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

k) **Position the cord clear of the rotating accessory.** If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the rotating accessory.

l) **Never lay the power tool down until the accessory has come to a complete stop.** The rotating accessory may grab the surface and pull the power tool out of your control.

m) **Do not run the power tool while carrying it at your side.** Accidental contact with a rotating accessory could snag your clothing, pulling the accessory into your body.

n) **Regularly clean the power tool's air vents.** The motor's fan will draw the dust inside the housing and an excessive accumulation of powdered metal may cause electrical hazards.

o) **Do not operate the power tool near flammable materials.** Sparks could ignite these materials.

p) **Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.

#### 4.2 Kickback and Related Warnings

Kickback is a sudden reaction to a pinched or snagged grinding wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory. This in turn causes the uncontrolled power tool to be forced in the opposite direction from which the accessory is rotating at the pinched or snagged point.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel entering the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The abrasive wheel may either jump toward or away from the operator, depending on direction the disc is moving at the pinch point. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided if suitable precautionary measures are taken as described below.

a) **Maintain a firm grip on the power tool and position your body and arm so that you can resist kickback forces. Always use the auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up.** The operator can control torque reactions or kickback forces, if proper precautions are taken.

b) **Never place your hand near a rotating accessory.** The accessory may kickback over your hand.

c) **Do not position your body in the area where the power tool will move if kickback occurs.** Kickback will propel the tool in the direction opposite to the grinding wheel's movement at the pinch or snag point.

d) **Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory.** Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

e) **Do not attach a saw chain, woodcarving blade or toothed saw blade.** Such blades create frequent kickback and can cause you to lose control.

#### 4.3 Safety Warnings Specific for Grinding and Cut-Off Grinding:

a) **Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel.** Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.

b) **The grinding surface of the centre depressed wheels must be mounted below the plane of the guard lip.** An improperly mounted grinding wheel that projects through the plane of the guard lip cannot be adequately guarded.

c) **The guard must be securely attached to the power tool and positioned for maximum safety so that the least amount of wheel is exposed towards the operator.** The guard helps to protect operator from broken wheel fragments and accidental contact with the wheel and sparks which could ignite clothing.

d) **Grinding media must be used only for recommended applications.** For example: **do not grind with the side of the cutting disc.** Cutting discs are intended for grinding using the edge of the disc. Applying force to the sides of these discs may cause them to shatter.

e) **Always use undamaged wheel flanges that are the correct size and shape for your selected grinding wheel.** Proper wheel flanges support the grinding wheel, reducing the possibility of breakage. Flanges for cutting discs may be different from grinding wheel flanges.

f) **Do not use worn down grinding wheels from larger power tools.** Grinding wheels intended for larger power tools are not suitable for the higher speed of a smaller tool and may break.

#### 4.4 Additional Safety Warnings Specific for Cut-Off Grinding:

a) **Do not "jam" the cutting disc or apply excessive pressure. Do not attempt to make an excessively deep cut.** Overstressing the cutting disc increases the load and makes the disc more susceptible to twisting or bending in the cut and more likely to kick back and break.

b) **Do not position your body in line with or behind the rotating cutting disc.** When the cutting disc is moving away from your body at the point of operation, any kickback can propel the spinning disc and the power tool directly towards you.

c) **If the cutting disc is stuck or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless**

until the disc comes to a complete stop. Never attempt to remove the cutting disc from the cut while the disc is in motion; otherwise kickback may occur. Investigate and take corrective action to eliminate the cause if a disc becomes stuck.

d) **Do not restart the cutting operation in the workpiece. Let the cutting disc reach full speed and carefully re-enter the cut.** The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.

e) **Support panels or any oversized workpiece to minimize the risk of cutting disc pinching and kickback.** Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of the cut and near the edge of the workpiece on both sides of the wheel.

f) **Use extra caution when making a "pocket cut" into existing walls or other blind areas.** The protruding cutting disc may cause kickback when cutting gas or water pipes, electrical wiring or other objects.

#### 4.5 Safety Warnings Specific for Sanding Operations:

a) **Do not use excessively large sanding disc paper. Follow the manufacturers recommendations when selecting sandpaper.** Larger sandpaper that extends beyond the sanding pad presents a laceration hazard and may cause snagging or kickback, or may cause the disc to tear off.

#### 4.6 Safety Warnings Specific for Wire Brushing Operations:

a) **Be aware that wire bristles are thrown by the brush even during ordinary operation. Do not overstress the wires by applying excessive load to the brush.** Wire bristles can easily penetrate light clothing and/or skin.

b) **If a guard is recommended for wire brushing, do not allow the wire wheel or brush to come into contact with the guard.** The wire wheel or brush may expand in diameter due to the work load and centrifugal forces.

#### 4.7 Additional Safety Instructions:



**WARNING** – Always wear protective goggles.

**Do not touch the power tool before it has cooled down.** After stopping work, the tool may still be hot.

**Never place your hand and your body near a rotating accessory.** The accessory can cause serious injuries.

**Never hold the workpiece to be machined in your hands or across your leg while cutting. Secure the workpiece to a stable platform.** It is important to support the workpiece properly to minimise body exposure, jamming of the accessory or loss of control.

Use elastic cushioning layers if they have been supplied with the sanding media and if required.

Observe the specifications of the tool or accessory manufacturer! Protect discs from grease or impact!

Grinding wheels must be stored and handled with care in accordance with the manufacturer's instructions.

Never use cut-off wheels for roughing work! Do not apply pressure to the side of cut-off wheels.

The workpiece must lay flat and be secured against slipping, e.g. using clamps. Large workpieces must be sufficiently supported.

Damaged, eccentric or vibrating tools must not be used.

Avoid damage to gas or water pipes, electrical cables and load-bearing walls (static).

Remove the battery pack from the machine before making any adjustments, changing tools, maintaining or cleaning.

Make sure that the tool is switched off before fitting the battery pack.

Hold the machine when removing and inserting the battery pack so that the on/off switch cannot be unintentionally pressed.

If the machine is defective, remove the battery pack from the machine.

A damaged or cracked safety guard must be replaced. Never operate a machine with a defective safety guard.

Secure small workpieces, for example by clamping them in a vice.

When working in dusty conditions, ensure that ventilation openings are not blocked. If it becomes necessary to remove dust, first remove the battery pack (use non-metallic objects) and avoid damaging internal components.

#### Reducing dust exposure:



**WARNING** - Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

This also applies to dust from other materials such as some timber types (like oak or beech dust), metals, asbestos. Other known diseases are e.g. allergic reactions, respiratory diseases. Do not let dust enter the body.

Observe the relevant guidelines and national regulations for your material, staff, application and place of application (e.g. occupational health and safety regulations, disposal).

Collect the particles generated at the source, avoid deposits in the surrounding area.

Use suitable accessories for special work. In this way, fewer particles enter the environment in an uncontrolled manner.

Use a suitable extraction unit.

Reduce dust exposure with the following measures:

- do not direct the escaping particles and the exhaust air stream towards yourself or nearby persons or towards dust deposits,
- use an extraction unit and/or air purifiers,
- ensure good ventilation of the workplace and keep it clean using a vacuum cleaner. Sweeping or blowing stirs up dust.
- Vacuum or wash protective clothing. Do not blow, beat or brush protective gear.

## 4.8 Safety instructions for battery packs:



Protect battery packs from water and moisture!



Do not expose battery packs to fire!

Do not use faulty or deformed battery packs!

Do not open battery packs!

Do not touch or short circuit battery pack contacts!



A slightly acidic, flammable fluid may leak from defective Li-ion battery packs!



If battery fluid leaks out and comes into contact with your skin, rinse immediately with plenty of water. If battery fluid leaks out and comes into contact with your eyes, wash them with clean water and seek medical attention immediately!

## Transport of li-ion battery packs:

The shipping of li-ion battery pack is subject to laws related to the carriage of hazardous goods (UN 3480 and UN 3481). Inform yourself of the currently valid specifications when shipping li-ion battery packs. If necessary, consult your freight forwarder. Certified packaging is available from Metabo.

Only send the battery pack if the housing is intact and no fluid is leaking. Remove the battery pack from the machine for sending. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

## 5. Overview

See page 2.

- 1 Fixing screw (with support flange)
- 2 Safety guard
- 3 Spindle locking button
- 4 Sliding on/off switch
- 5 Handle
- 6 Battery pack release button
- 7 Hexagon wrench / Storage for hexagon wrench
- 8 Capacity and signal indicator
- 9 Capacity indicator button
- 10 Battery pack
- 11 Support flange

12 Clip for cut-off grinding guard

13 Locking hook

## 6. Initial Operation

### 6.1 Safety guard



Only use the machine if the safety guard is in place. For safety reasons, always use the safety guard provided for the respective wheel!



Turn the safety guard until the closed section is facing the operator.

See figure, page 2.

### Safety guard for grinding (2)

Designed for work with roughing wheels, flap sanding pads, diamond cutting discs, wire brushes.

### Attach safety guard for separating / cut-off guard clip (12)

Designed for work with cutting discs and diamond cutting discs.



For safety reasons always attach the cut-off guard clip (12) when performing cutting work. Do not use a damaged cut-off guard clip. Before use, check for cracks, deformations or signs of severe wear and tear.

### Fitting

Push the cut-off guard clip (12) onto the safety guard (2) of the angle grinder as shown. The cut-off guard clip must engage on the safety guard with **both** latching hooks (13), until you hear a “click”.

### Removal

Bend one of the two latching hooks (13) a bit and carefully until the latching hook (13) does not protrude anymore from the guard rim. Then pull off the cut-off guard clip and put aside.

### 6.2 Battery pack

Charge the battery pack (10) before use.

Recharge the battery pack if performance diminishes.

The ideal storage temperature is between 10°C and 30°C.

**Li-Ion battery packs “Li-Power, LIHD“** have a capacity and signal indicator (8):

- Press the button (9), the LEDs indicate the charge level.
- The battery pack is almost flat and must be recharged if one LED is flashing.

### 6.3 Removing and inserting the battery pack



Hold the machine when removing and inserting the battery pack so that the on/off switch cannot be unintentionally pressed.


### Removal:

Press the battery pack release (6) button and pull the battery pack (10) **upwards**.


### Inserting:

Slide in the battery pack (10) until it engages.

## 7. Attaching, removing the grinding disc

 Prior to any conversion work: remove battery pack from machine. The machine must be switched off and the spindle at a standstill.





 When working with cutting discs, fit the cut-off guard clip (12) (see chapter 6.1) .



### 7.1 Attaching the grinding wheel

 Move the spindle locking button (3) only when the motor is at a standstill.

See figure, page 2.



- Locking the spindle:** Move the spindle locking button (3) in position  and turn support flange (11) by hand until the spindle locking clearly engages.
- Placing the grinding wheel in position:** Place the grinding wheel on the support flange (11). The grinding wheel must lay flat on the support flange (11) .
- Securing the fixing screw:** Fit the fixing screw (1) and firmly tighten with hexagon wrench (7). Remove the hexagon wrench again and place into the wrench storage (7).
- Release the spindle lock:** Move the spindle lock button (3) in position  .


### 7.2 Removing the grinding disc


- Locking the spindle:** Move the spindle locking button (3) in position  and turn support flange (11) by hand until the spindle locking clearly engages.
- Removing the fixing screw:** Remove the fixing screw (1) with hexagon wrench (7) and remove.
- Removing the grinding disc.
- Release the spindle lock:** Move the spindle lock button (3) in position  .


## 8. Use


### 8.1 Switching on and off

 Check that the spindle lock button (3) is in position  .

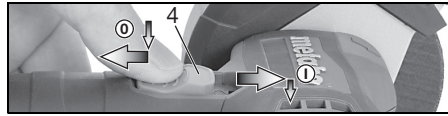
 Switch on first, then guide the accessory towards the workpiece.

 The machine must not be allowed to draw in additional dust and shavings. When switching the machine on and off and keep it away from dust deposits. After switching off the machine, only set it down when the motor has come to a standstill.

 Avoid switching on the machine accidentally: always switch it off when the battery pack is removed from the machine.

 In continuous operation, the machine continues running if it is forced out of your hands. Therefore, always hold the machine using the handles provided, stand in a safe position and concentrate.

### Machines with a slide switch:



**Switching on:** push the slide switch (4) forwards. For continuous operation, tilt it downwards until it engages.


**Switching off:** press the rear end of the slide switch (4) and release it.

### 8.2 Working Directions

#### Grinding:

Press down the machine evenly on the surface and move back and forth so that the surface of the workpiece does not become too hot. Rough grinding: position the machine at an angle of 30° - 40° for the best working results.

#### Cut-off grinding:

 Always work against the run of the disc (see illustration). Otherwise the machine may kick back from the cut in an out of control manner. Guide the machine evenly at a speed suitable for the material being processed. Do not tilt, apply excessive force or sway from side to side.

#### Sanding:

Press down the machine evenly on the surface and move back and forth so that the surface of the workpiece does not become too hot.

#### Wire brushing:

Press down the machine evenly.


## 9. Cleaning

Remove the battery pack from the machine before making any adjustments, changing tools, maintaining or cleaning.

Remove the **battery pack** periodically and wipe the contact area of the battery pack and machine with a dry cloth and remove deposits. If the battery pack cannot be removed: see the Repairs chapter.

## 10. Troubleshooting

**Electronic safety shutdown: the machine has SHUT DOWN by itself.** In the event of longer blocking, the machine shuts down. Switch off the machine. Switch it on again and continue to work as normal. Try to prevent the machine from seizing. See chapter 4.2.

Check that the spindle lock button (3) is in position  .



## 11. Accessories

Use only original Metabo or CAS (Cordless Alliance System) battery packs and accessories.

Use only accessories that fulfil the requirements and specifications listed in these operating instructions.

**Chargers:** ASC 55, SC 30, etc.

**Battery packs with different capacities.** Buy battery packs only with voltage suitable for your power tool.

12 V, 2.0 Ah, Li-Power ..... 625406000  
12 V, 4.0 Ah, LiHD ..... 625349000

18 V, 2.0 Ah, Li-Power ..... 625596000  
18 V, 4.0 Ah, LiHD ..... 625367000

etc.

For a complete range of accessories, see [www.metabo.com](http://www.metabo.com) or the accessories catalogue.

## 12. Repairs

 Repairs to electrical tools must ONLY be carried out by qualified electricians!

Contact your local Metabo representative if you have Metabo power tools requiring repairs. For addresses see [www.metabo.com](http://www.metabo.com).

You can download a list of spare parts from [www.metabo.com](http://www.metabo.com).

## 13. Environmental Protection


The sanding dust generated may contain hazardous materials: do not dispose of dust with household waste, but at a special collection point for hazardous waste.

Packaging materials must be disposed of according to their labelling in accordance with municipal guidelines. Further information can be found at [www.metabo.com](http://www.metabo.com) in the "Service" section.

Observe national regulations on environmentally compatible disposal and on the recycling of disused machines, packaging and accessories.

Battery packs must not be disposed of with regular waste! Please return faulty or used battery packs to your Metabo dealer!

Do not throw battery packs into water.

 Only for EU countries: never dispose of power tools in your household waste! According to European Directive 2012/19/EU on Waste from Electric and Electronic Equipment and implementation in national law, used power tools must be collected separately and recycled in an environmentally-friendly manner. Discharge the battery pack in the power tool before disposal. Prevent the contacts from short-circuiting (e.g. by protecting them with adhesive tape).

## 14. Technical Data

Explanatory notes on the specifications on page 2. Changes due to technological progress reserved.

U	= voltage (max. voltage = 12 V, nominal voltage = 10.8 V)
$D_{max}$	= max. diameter of accessory
d	= drill diameter of the accessory
$t_{max,1}$	= max. permitted thickness of the clamping shank on accessory when using a two-hole nut (1)
$t_{max,3}$	= roughing disc/cutting disc: max. permitted thickness of accessory
M	= Spindle thread
n	= No-load speed (maximum speed)
$P_1$	= Rated input power
$P_2$	= Power output
m	= Weight (with smallest battery pack)

Measured values determined in conformity with EN 60745.

--- direct current

The technical specifications quoted are subject to tolerances (in compliance with relevant valid standards).

### Emission values

These values make it possible to assess the emissions from the power tool and to compare different power tools. The actual load may be higher or lower depending on operating conditions, the condition of the power tool or the accessories used. Please allow for breaks and periods when the load is lower for assessment purposes. Arrange protective measures for the user, such as organisational measures based on the adjusted estimates.

Total vibration value (vector sum of three directions):

$a_{h,SG}$  = Vibration emission value (surface grinding)

$a_{h,TS}$  = Vibration emission value (cut-off grinding)

$K_{h,SG/TS}$  = Uncertainty (vibration)


Typical A-effective perceived sound levels:

$L_{pa}$  = Sound-pressure level

$L_{WA}$  = Acoustic power level

$K_{pA}, K_{WA}$  = Uncertainty

During operation the noise level can exceed 80 dB(A).

 **Wear ear protectors!**