

**GVB 18 LTX BL 11-28**  
**GVB 18 LTX BL 11-28 Compact**  
**GVB 18 LTX BL 11-7 HT**

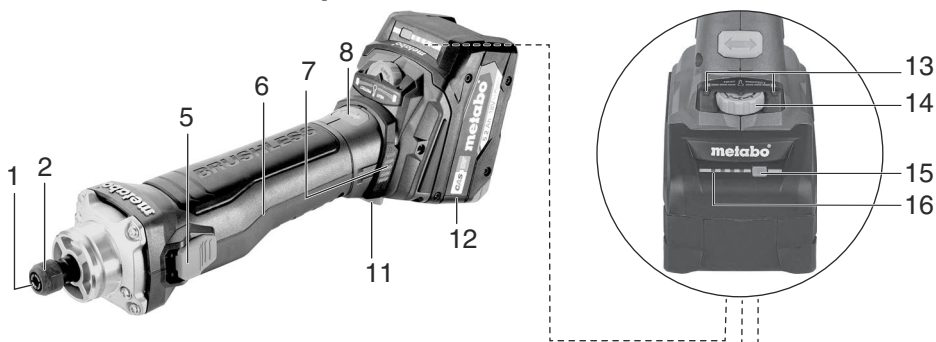
**GVPB 18 LTX BL 11-28**



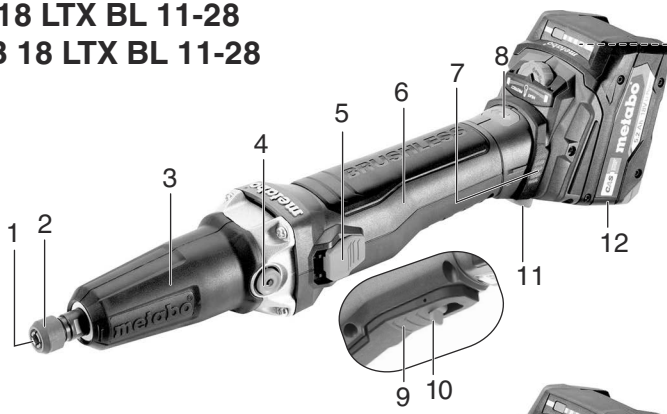
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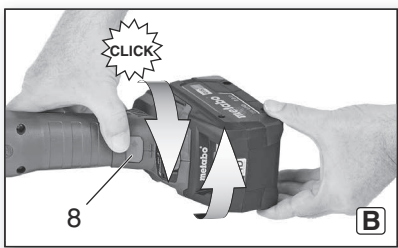
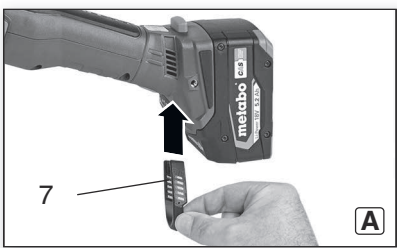
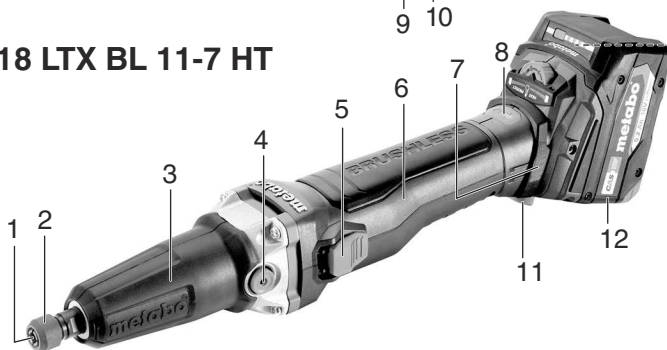
**GVB 18 LTX BL 11-28 Compact**

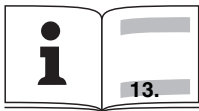


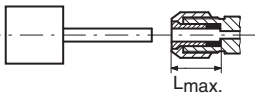
**GVB 18 LTX BL 11-28  
GVPB 18 LTX BL 11-28**



**GVB 18 LTX BL 11-7 HT**



			<b>GVB 18 LTX BL 11-28</b> *1) Serial Number 00826...	<b>GVB 18 LTX BL 11-28 Compact</b> *1) Serial Number 00828...	<b>GVB 18 LTX BL 11-7 HT</b> *1) Serial Number 00829...	<b>GVPB 18 LTX BL 11-28</b> *1) Serial Number 00827..
S	-		✓	-	✓	✓
U	V		18	18	18	18
n	/min		28000	28000	7000	28000
n <sub>V</sub>	/min		8000 - 28000	8000 - 28000	1500 - 7000	8000 - 28000
D <sub>max</sub> , grinding	mm (in)		50 (2)	50 (2)	50 (2)	50 (2)
D <sub>max</sub> , polishing	mm (in)		-	-	80 (3 <sup>5</sup> / <sub>32</sub> )	-
T <sub>max</sub>	mm (in)		6 (1/4)	6 (1/4)	6 (1/4)	6 (1/4)
d	mm (in)		6 (1/4)	6 (1/4)	6 (1/4)	6 (1/4)
m	kg (lbs)		2,1 (4.6)	1,8 (4.0)	2,2 (4.9)	2,1 (4.6)
L <sub>max</sub>	mm (in)		25 (1)	25 (1)	25 (1)	25 (1)
a <sub>h</sub> ,SG/ K <sub>h</sub> ,SG	Ø 25 mm; U <sub>M</sub> =3,6 gmm;*	m/s <sup>2</sup>	9,9 / 1,5	6,9 / 1,5	< 2,5 / 1,5	11,1 / 1,5
a <sub>h</sub> ,SG/ K <sub>h</sub> ,SG	Ø 50 mm; U <sub>M</sub> =14,4 gmm;*	m/s <sup>2</sup>	19,9 / 1,5	16,2 / 1,5	< 2,5 / 1,5	20,2 / 1,5
a <sub>h</sub> ,S/K <sub>h</sub> ,S	m/s <sup>2</sup>		4,6 / 1,5	3,2 / 1,5	3,0 / 1,5	4,8 / 1,5
a <sub>h</sub> ,F/K <sub>h</sub> ,F	m/s <sup>2</sup>		4,9 / 1,5	4,9 / 1,5	4,8 / 1,5	4,7 / 1,5
L <sub>pA</sub> /K <sub>pA</sub>	dB (A)		79 / 3	77 / 3	85 / 3	79 / 3
L <sub>WA</sub> /K <sub>WA</sub>	dB (A)		90 / 3	88 / 3	96 / 3	90 / 3



\* EN 60745

	n <sub>V</sub> (/min)			
	GVB 18 LTX BL 11-28	GVB 18 LTX BL 11-28 Compact	GVB 18 LTX BL 11-7 HT	GVPB 18 LTX BL 11-28
1	8000	8000	1500	8000
2	12000	12000	2600	12000
3	16000	16000	3700	16000
4	20000	20000	4800	20000
5	24000	24000	5900	24000
6	28000	28000	7000	28000



\*2) 2014/30/EU, 2006/42/EC, 2011/65/EU

\*3) EN 60745-1:2009+A11:2010, EN 60745-2-23:2013, EN IEC 63000:2018

2023-07-25, Bernd Fleischmann

ppa. B.F.

Direktor Produktentstehung & Qualität (Vice President Product Engineering & Quality)

\*4) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

# Original instructions

## 1. Declaration of Conformity

Under our sole responsibility, we hereby declare that these straight grinders, identified by type and serial number \*1), comply with all relevant requirements of the 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 straight 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 see \*3) on page 3.

## 2. Specified Conditions of Use

The straight grinders are designed...

- ... for fine grinding work with abrasive points on metal.
- ... for fine cutting work with small cutting discs on metal.
- ... for routing with end mill cutters on non-ferrous metals, plastics, hardwood, etc.
- ...for working with paint and round wire brushes
- ...for working with polishing bobs
- ...for working with felt polishing tools
- ...for working with lamellar grinding wheels

The machine is not suitable for working with polishing bells.

The machine is not suitable for working with mounted points or conical mounted points with a thread insert.

Suitable for driving an appropriate Metabo flexible shaft.

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, 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. Save all warnings and instructions for future reference.

Always include these documents when passing on your power tool.

## 4. Special Safety Instructions

### 4.1 Safety warnings common for grinding, sanding, wire brushing, polishing, carving or abrasive cutting-off operations:

- a) **This power tool is intended to function as a grinder, sander, wire brush, polisher, carving 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) **Do not use accessories which are not specifically designed and recommended by the tool manufacturer.** Just because the accessory can be attached to your power tool, it does not assure safe operation.
- c) **The rated speed of the grinding accessories must be at least equal to the maximum speed marked on the power tool.** Grinding accessories running faster than their rated speed can break and fly apart.
- d) **The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool.** Incorrectly sized accessories cannot be adequately controlled.
- e) **The arbour size of wheels, sanding drums or any other accessory must properly fit the spindle or collet of the power tool.** Accessories that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- f) **Mandrel mounted wheels, sanding drums, cutters or other accessories must be fully inserted into the collet or chuck. The "overhang" or free section of the mandrel between the grinding tool and collet or chuck must be as small as possible.** If the mandrel is insufficiently held and/or the overhang of the wheel is too long, the mounted wheel may become loose and be ejected at high velocity.
- g) **Do not use a damaged accessory. Before each use inspect the accessory such as abrasive wheels for chips and cracks, sanding drum for cracks, tear or excess wear, wire brush for loose or cracked wires. If power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an 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. Depending on application, use face shield, safety goggles or safety glasses. As**

**appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or workpiece fragments.** The eye protection must be capable of stopping flying debris generated by various operations. The 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 work area. Anyone entering the work area must wear personal protective equipment.** Fragments of workpiece or of a broken accessory may fly away and cause injury beyond immediate area of operation.

j) **Hold power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring.** 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) **Always hold the tool firmly in your hand(s) during the start-up.** The reaction torque of the motor, as it accelerates to full speed, can cause the tool to twist.

l) **Use clamps to support workpiece whenever practical. Never hold a small workpiece in one hand and the tool in the other hand while in use.** Clamping a small workpiece allows you to use your hand(s) to control the tool. Round material such as dowel rods, pipes or tubing have a tendency to roll while being cut, and may cause the bit to bind or jump toward you.

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

n) **After changing the bits or making any adjustments, make sure the collet nut, chuck or any other adjustment devices are securely tightened.** Loose adjustment devices can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.

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

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

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

r) **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 rotating wheel, sanding band, brush or any other accessory. Pinching or snagging causes rapid

stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel's movement at the point of pinching. 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 by taking proper precautions as given below.

a) **Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces.** The operator can control kickback forces, if proper precautions are taken.

b) **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.

c) **Do not attach a toothed saw blade.** Such blades create frequent kickback and loss of control.

d) **Always feed the bit into the material in the same direction as the cutting edge is exiting from the material (which is the same direction as the chips are thrown).** Feeding the tool in the wrong direction causes the cutting edge of the bit to climb out of the work and pull the tool in the direction of this feed.

e) **When using rotary files, cut-off wheels, high-speed cutters or tungsten carbide cutters, always have the work securely clamped.** These wheels will grab if they become slightly canted in the groove, and can kickback. When a cut-off wheel grabs, the wheel itself usually breaks. When a rotary file, high-speed cutter or tungsten carbide cutter grabs, it may jump from the groove and you could lose control of the tool.

## 4.3 Safety warnings specific for grinding and abrasive cutting-off operations:

a) **Use only wheel types that are recommended for your power tool and only for recommended applications. For example: do not grind with the side of a cut-off wheel.** Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.

b) **For threaded abrasive cones and plugs use only undamaged wheel mandrels with an unrelieved shoulder flange that are of correct size and length.** Proper mandrels will reduce the possibility of breakage.

c) **Do not "jam" a cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut.** Overstressing the wheel increases the loading and susceptibility to twisting or snagging of the wheel in the cut and the possibility of kickback or wheel breakage.

d) **Do not position your hand in line with and behind the rotating wheel.** When the wheel, at the point of operation, is moving away from your hand, the possible kickback may propel the spinning wheel and the power tool directly at you.

e) **When wheel is pinched, snagged or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the cut while the wheel is in motion otherwise kickback may occur.** Investigate and take corrective action to eliminate the cause of wheel pinching or snagging.

f) **Do not restart the cutting operation in the workpiece. Let the wheel 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.

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

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

#### 4.4 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.** The wire bristles can easily penetrate light clothing and/or skin.

b) **Allow brushes to run at operating speed for at least one minute before using them. During this time no one is to stand in front or in line with the brush.** Loose bristles or wires will be discharged during the run-in time.

c) **Direct the discharge of the spinning wire brush away from you.** Small particles and tiny wire fragments may be discharged at high velocity during the use of these brushes and may become imbedded in your skin.

#### 4.5 Additional Safety Instructions:



**WARNING** – Always wear protective goggles.



Wear ear protectors.



**WARNING** – Always operate the power tool with two hands.

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 the discs from grease or impact!

Accessories 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.

Engage the spindle lock button (4) (depending on the model) only when the motor is at a standstill.

Keep your hands away from the rotating tool! Remove debris and similar material only when the machine is at a standstill.

Prior to use, ensure that the abrasive media is properly fitted and secured. Run the tool in idle for 60 seconds in a safe position and stop it immediately in the event of significant vibrations or other faults are discovered. If such a situation occurs, check the machine to determine the cause.

Ensure that sparks produced during work do not constitute a risk to the user or others and are not able to ignite flammable substances. Areas at risk must be protected with flame-resistant covers. Always keep a fire extinguisher on hand when working in areas prone to fire risk.

Damaged, eccentric or vibrating tools must not be used.

For safety reasons, always ensure the rubber sleeve is fitted while you work (3).

A damaged rubber adapter (3) must be replaced. Never operate a machine with a defective rubber sleeve (3).

Always hold the machine with both hands on the designated handles, take a secure stance and concentrate on the work.

Do not touch rotating parts.

The sanding paper grinding accessories must not exceed the maximum diameter of 80 mm.

Composite grinding tools must not exceed the maximum diameter of 55 mm. If the maximum grinding accessory diameter (grinding) from chapter "Technical data" however is smaller, the smaller value must be adhered to.

#### 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 an air purifier,
- 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.

#### 4.6 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!

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

Before fitting the battery pack, make sure that the machine is switched off.

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.

#### Transport of Li-Ion battery packs:

The shipping of Li-Ion battery packs 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 Collet chuck
- 2 Collet chuck nut
- 3 Rubber sleeve \*
- 4 Spindle locking button\*
- 5 Slide switch \*
- 6 Handle
- 7 Dust filter \*
- 8 Lock button (rotating battery pack)
- 9 Trigger\*
- 10 Switch-on lock\*
- 11 Battery pack release button
- 12 Battery pack \*
- 13 Electronic signal indicator
- 14 Setting wheel for speed adjustment
- 15 Capacity indicator button \*
- 16 Capacity and signal indicator \*

\*equipment-specific

## 6. Initial Operation

### 6.1 Dust filter

See page 2, fig. A.



Always fit the dust filter (7) if the surroundings are heavily polluted.



The machine heats up faster when the dust filter (7) is fitted. It is protected by the electronics system from overheating.

#### Attaching:

Fit the dust filter (7) as shown.

#### Removal:

Holding the dust filter (7) at the edges, raise it slightly and then pull it downwards and remove.

### 6.2 Rotating battery pack

See page 2, fig. B.

The rear section of the machine can be rotated 270° in 3 stages, thus allowing the machine's shape to be adapted to the working conditions. Only operate the machine when it is in an engaged position.

First press the locking button (8), rotate the rear part of the machine while keeping it pressed. Release the button while rotating the machine. The locking mechanism must engage with an audible "click".

### 6.3 Battery pack

Charge the battery pack (12) before use.


Recharge the battery pack if performance diminishes.

Instructions on charging the battery pack can be found in the operating instructions of the Metabo charger.

In case of Li-Ion battery packs with capacity and signal display (16) (equipment-specific):

- Press the button (15), the LEDs indicate the charge level.
- The battery pack is almost empty and must be recharged if one LED is flashing.

#### 6.4 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.

##### Removing:


Press the battery pack release (11) button and remove the battery pack (12).

##### Inserting:

Slide in the battery pack (12) until it engages.


## 7. Use


#### 7.1 Collet chucks


 The tool's shank diameter must correspond exactly to the collet bore of the collet chuck (1)!


Various collet chucks are available for different shank diameters. See the Accessories chapter.

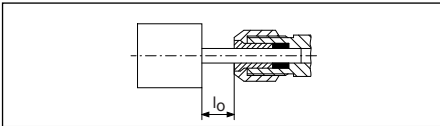
#### 7.2 Fitting the tools

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

 Only use tools that are suited to the no-load speed of your machine. See the Technical Specifications.

 The tool's shank diameter must correspond exactly to the collet bore of the collet chuck (1)!

 For abrasive points, you may never exceed the maximum open shank length specified by the manufacturer  $l_0$ .




The maximum permitted shaft length is the sum of  $l_0$  and the maximum insertion depth  $L_{max}$  (see chapter 13.)

Insert the tool (with the full length of the shank) in the collet chuck (1).

Bring the spindle to a standstill. For the GVB 18 LTX BL 11-28, use the 13-mm spanner provided for this purpose. For the GVB 18 LTX BL 11-28, GVB 18 LTX BL 11-7 HT, GVPB 18 LTX BL 11-28, press the spindle locking button (4)).


Using the 17/19-mm spanner, tighten the collet chuck nut (2).


 If there is no tool inserted in the collet chuck, you can tighten the collet chuck manually rather than with the spanner.


#### 7.3 Setting speed


The speed can be preset and modified using the setting wheel (14). For a list of speeds, see the table on page 3.

#### 7.4 Switching on and off

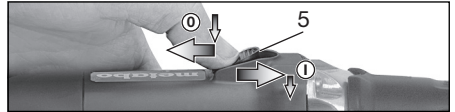
 Always guide the machine with both hands.

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

 In continuous operation, the machine continues running if it is forced out of your hands. Therefore always hold the machine with both hands using the handles provided (3), (6), maintain a steady position and concentrate on your work.

 Avoid the machine swirling up or taking in dust and chips. After switching off the machine, only place it down when the motor has come to a standstill.

##### Machines with a slide switch:



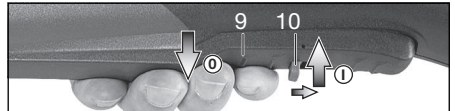
**Switching on:** push the slide switch (5) forwards. For continuous operation, tilt it downwards until it engages.

**Switching off:** press the rear end of the slide switch (5) and release it.

##### Machines with slide switch

(with dead man function):

(Machines with the designation GVPB...)



**Switching on:** Slide the switch-on lock (10) in the direction of the arrow and press the trigger (9).

**Switching off:** Release the trigger switch (9).

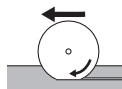
#### 7.5 Working Directions

##### Grinding, sanding, polishing or using wire brushes:

Press gently and evenly on the machine and move it from side to side over the surface.

**Routing:** Press gently and evenly on the machine.

##### 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.



## 8. Cleaning

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

Clean the **dust filter** regularly: remove and clean with a jet of compressed air.

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.

Particles may become deposited inside the power tool during operation. This impairs the cooling of the power tool. Conductive build-up can impair the protective insulation of the power tool and create an electrical hazard.

The power tool should be cleaned regularly, often and thoroughly through all front and rear air vents using a vacuum cleaner or by blowing in dry air. Prior to this operation, separate the power tool from the power source and wear protective glasses and a suitable dust mask. Ensure appropriate suction is available when blowing out vents.

## 9. Troubleshooting

### The electronic signal display (13) flashes and the machine does not start.

The battery pack is empty; the temperature is too high or the restart protection has triggered. Switch the machine off and back on again. The machine will not start if the battery pack is inserted while the machine is on.

### The electronic signal display (13) is permanently on.

There has been an overload while working, therefore the performance may be reduced temporarily. **Reduce working pressure.**

**Electric safety shutdown: the machine has SHUT DOWN by itself.** If the slow rate of the current is too high (for example, if the machine suddenly seizes or kickback occurs), the machine switches off. 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.

## 10. 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.


Fit accessories securely. If the machine is operated in a holder: secure the machine well. Loss of control can cause personal injury.

- A Collet chucks, including nut (hexagon)
- Ø 3 mm = 631947000
  - Ø 1/8" = 631948000
  - Ø 6 mm = 631945000
  - Ø 1/4" = 631949000
  - Ø 8 mm = 631946000

- B Collet chucks, including nut (double flat)
  - Ø 6 mm = 630820000
  - Ø 1/4" = 630821000
  - Ø 8 mm = 630833000
- C Clamping frame 627354000 for clamping during work with flexible shafts (tighten clamping screw), including:
- D Clamping bracket 627107000 for safe securing to the work bench (tighten clamping screw).
- E Clamping frame: 628329000
- F Flexible shafts
- G Auxiliary handle: 631052000
- H Dust protection filter (as a replacement): 630439000
- I Chargers: ASC 55, ASC 145, etc.
- J Battery packs:
  - Order no.: 625027000 4.0 Ah (Li-Power)
  - Order no.: 625368000 5.5 Ah (LiHD)
  - Order no.: 625369000 8.0 Ah (LiHD)
  - Order no.: 625549000 10.0 Ah (LiHD)
  - etc.

See [www.metabo.com](http://www.metabo.com) or the catalogue for a complete range of accessories.

## 11. 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).

## 12. 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).

### 13. Technical Specifications

Explanatory notes regarding the specifications on page 3. Subject to change in accordance with technical progress.

S = spindle lock for easy tool changes

U = Voltage of battery pack

n = No-load speed (maximum speed)

$n_V^*$  = No-load speed (adjustable)

$D_{\max, \text{grinding}}$  = Maximum accessory diameter (grinding)

$D_{\max, \text{polishing}}$  = Maximum accessory diameter (polishing)

$T_{\max}$  = max. thickness of bonded grinding discs


d = collet bore of the collet chuck

m = Weight with smallest battery pack

$L_{\max}$  = maximum insertion depth

Measured values determined in conformity with EN 60745.

Permitted ambient temperature during operation: -20 °C (-4°F) to 50 °C (120°F) (limited performance with temperatures below 0 °C (32°F)). Permitted ambient temperature for storage: 0 °C to 30 °C.

 Machine in protection class II

=== 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.

Vibration total value (vector sum of three directions) determined in accordance with EN 60745:

$a_{h, SG}$  = Vibration emission value unbalance disc

$a_{h, S}$  = Vibration emission value with mounted point 628330 on steel

$a_{h, F}$  = Vibration emission value with cutter 628377 on aluminium

$K_{h, \dots}$  = Uncertainty (vibration)

$U_M$  = Unbalance

Typical A-effective perceived sound levels:

$L_{pA}$  = Sound pressure level

$L_{WA}$  = Acoustic power level

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

The noise level can exceed 80 dB(A) during operation.



#### Wear ear protectors!

#### Electromagnetic disturbances:

In individual cases, the speed may fluctuate temporarily if the machine is exposed to extreme external electromagnetic disturbances or the electronic restart protection may respond. In this case, switch the machine off and on again.