

BS 18 LTX BL Impuls BS 18 LTX BL Quick

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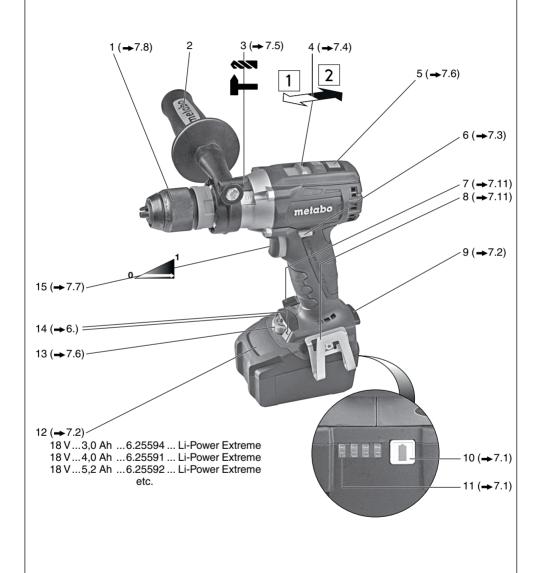


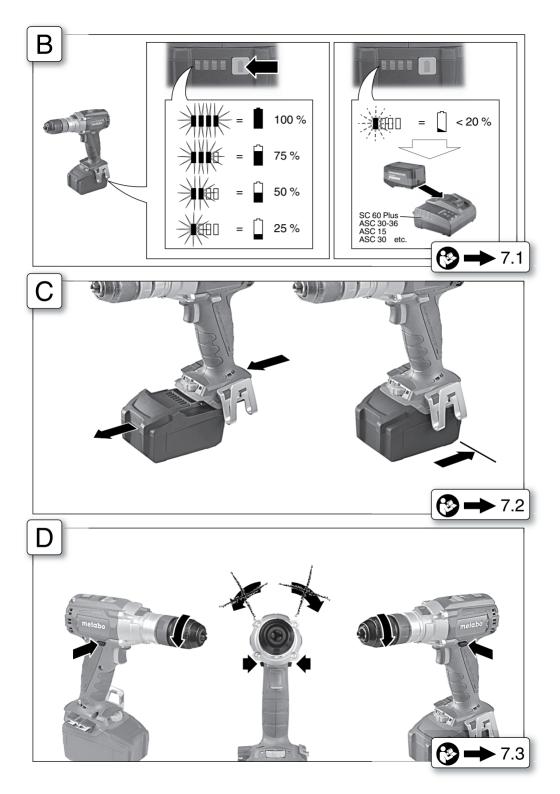


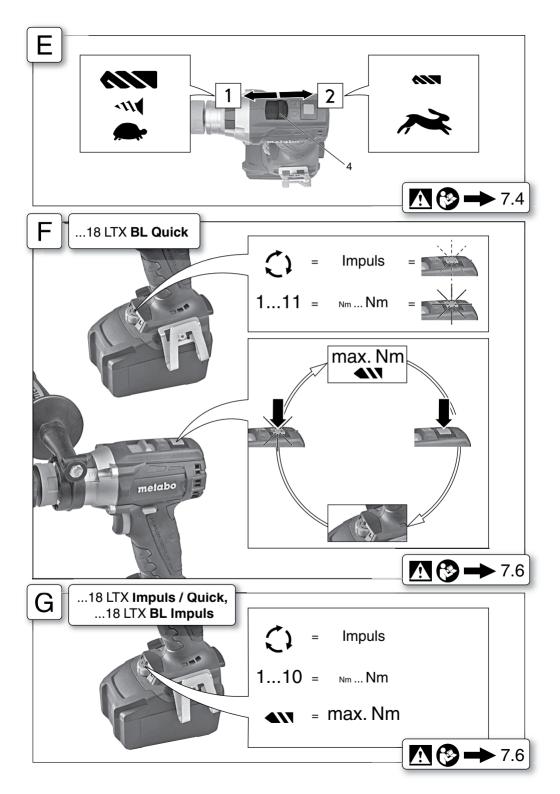
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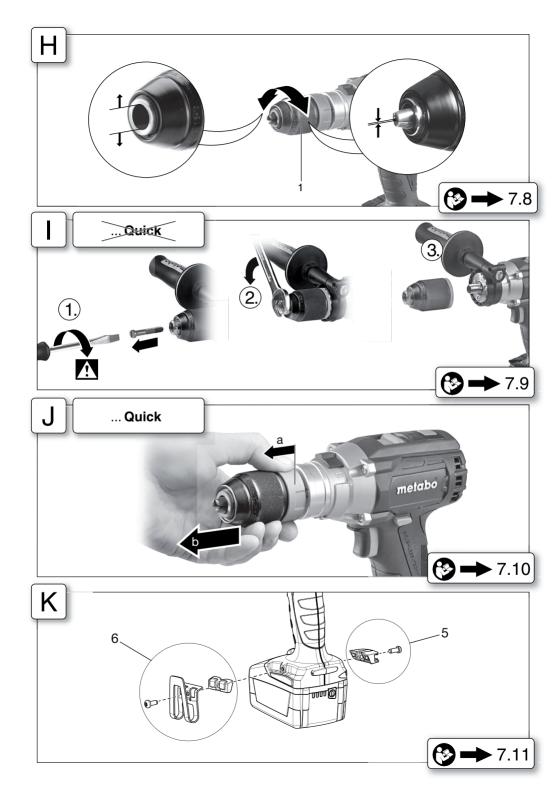
Mode d'emploi 12

Instrucciones de manejo 17









1 12.			BS 18 LTX BL Impuls *1) Serial Number: 02241	BS 18 LTX BL Quick *1) Serial Number: 02197	BS 18 LTX Impuls *1) Serial Number: 02191	BS 18 LTX Quick *1) Serial Number: 02193	SB 18 LTX BL Impuls *1) Serial Number: 02240	SB 18 LTX BL Quick *1) Serial Number: 02199	SB 18 LTX Impuls *1) Serial Number: 02192	SB 18 LTX Quick *1) Serial Number: 02200
U	V		18							
n ₀	/min, rpm	1	0 - 600		0 - 500		0 - 600		0 - 500	
		2	0 - 2050		0 - 1700		0 - 2050		0 - 1700	
M ₁	Nm (in-lbs)		44 (390)		55 (487)		44 (390)		55 (487)	
M ₂	Nm (in-lbs)		49 (434)		60 (531)		49 (434)		60 (531)	
M ₃	Nm (in-lbs)		90 (797)		110 (974)		90 (797)		110 (974)	
M ₄	Nm (in-lbs)	1	0,8 - 20 (7 - 177)		6,5 - 24 (58 - 212)		0,8 - 20 (7 - 177)		6,5 - 24 (58 - 212)	
		2	0,8 - 8 (7 - 71)		1,7 - 11 (15 - 97)		0,8 - 8 (7 - 71)		1,7 - 11 (15 - 97)	
D _{1 max} T	mm (in) 13 (¹ / ₂)									
D _{2 max}	mm (in)		50 (2)		65 (2 ⁹ / ₁₆)		50 (2)		65 (2 ⁹ / ₁₆)	
D _{3 max}	mm (in) 2		=				16 ((5/8)	
s	/min, bpm		-		-	-	38950	38950	32300	32300
m	kg (lbs)		1,9 (4.2)		2,0		(4.4)		2,1 (4.6)	
G	UNF(in)		1/2" - 20 UNF	-	1/2" - 20 UNF	-	1/2" - 20 UNF	-	1/2" - 20 UNF	-



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 \mathbf{D}_{\max}

mm (in)

13 (¹/₂)

Operating Instructions

Specified Use

The drills and impact drills are suitable for drilling in metal, wood, plastic and similar materials, and also for screwdriving and thread tapping.

The impact drills are also suited for drilling in masonry, brickwork and stone.

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

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

2. General safety instructions



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



WARNING – Reading the operating instructions will reduce the risk of injury.

Pass on your electrical tool only together with these documents.

General Power Tool Safety Warnings

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

Save all warnings and instructions for future reference! The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

2.3 Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment, Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does **not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

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- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control
- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Battery tool use and care

- a) Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b) Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- d) Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

2.6 Service

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Special Safety Instructions

Wear ear protectors when impact drilling (machines with the designation SB). Exposure to noise can cause hearing loss.

Use auxiliary handle(s), if supplied with the **tool.** Loss of control can cause personal injury.

Hold power tool by insulated gripping surfaces, when performing an operation where

the cutting accessory/fastener may contact hidden wiring. Cutting accessory/fasteners contacting a "live" wire, may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Ensure that the spot where you wish to work is free of power cables, gas lines or water pipes (e.g. by using a metal detector).



Protect battery packs from water and moisture!



Do not expose battery packs to naked flame!

Do not use faulty or deformed battery packs! Do not open battery packs!



Do not touch or short-circuit battery packs! 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 imme-

diately. Remove the battery pack from the machine before any adjustments, conversions or servicing are

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

Secure the workpiece against slipping, e.g. with the help of clamping devices.

LED lights (14): Do not observe the LED radiation directly with optical instruments.

Additional Warnings:

▲ 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 chemicallytreated 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.

4. Symbols

V volts === direct current

n_{0....} rated speed ../min revolutions per minute rpm revolutions per minute

Figures

Illustrations are provided at the beginning of the operating instructions.

Symbol explanation:

Movement direction

Slow

Fast

First gear

2

Second gear

111 Screws Drill bit

4/1

Without torque limitation

Nm

Impact drilling Torque

Overview

Fig. A

- 1 Keyless chuck
- 2 Additional handle
- 3 Slide switch (normal drilling, impact drilling) *
- 4 Slide switch (1st/2nd gear)
- 5 Button (switch between 'max. torque' and function set at setting wheel (13)) *
- 6 Rotation selector switch (rotation setting, transport lock) - both sides of the machine
- 7 Bit depot *
- 8 Belt hook *
- 9 Battery pack release button
- 10 Capacity indicator button
- 11 Capacity and signal indicator
- 12 Battery pack
- 13 Setting wheel (pulse function, torque control, where applicable 'max. torque') *
- 14 LED lights
- 15 Trigger switch

*equipment-specific

7. Use

Battery pack, capacity and signal display 7.1 Fig. B

Charge the battery pack before use.

If performance diminishes, recharge the battery pack.

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

7.2 Removing, replacing battery pack \Rightarrow Fig. Č

7.3 Setting direction of rotation, transporting safety device (switch-on lock) - Fig. D

7.4 Selecting gear stage - Fig. E

Only actuate slide switch (4) with the motor at a standstill!

7.5 Setting for normal drilling, impact drilling Fig. A

Press the slide switch (3).

7.6 Setting torque control, maximum torque. pulse function

Do not work for long periods with pulse function switched on! (The motor can overheat.)

Machines with designation ...18 LTX BL Quick...: Fig. F

Turn the setting wheel (13) to switch on the pulse function (button (5) flashes) or to switch on the torque control (button (5) lights up continuously)

For **maximum torque** (drilling position), press the button (5) (the button (5) is not illuminated). To activate the settings of setting wheel again; press the button (5) again or turn the setting wheel.

Machines with designation ... 18 LTX Impuls/

Quick, ... 18 LTX BL Impuls: -> Fig. G

Set the desired operating mode at the setting wheel (13):

1...10 = torque control Drill bit = maximum torque Impuls = pulse function

Switching on/off, setting speed Fig. A

Switching on, speed: Press the trigger (15). The speed can be changed by pressing in the trigger.

Switching off: release the trigger switch (15), Note: The noise that the machine makes when it switches off is due to the design (quick stop) and has no influence on the function or the service life of the machine.

Keyless chuck → Fig. H 7.8

With a soft tool shank, retightening may be required after a short period of operation.

Notes on machines with the designation SB...:

- 1. The ratchet sound which can possibly be heard after opening the drill chuck is functional and is switched off by a reverse rotation of the sleeve.
- Clamping tool:

Turn sleeve (1) in direction "GRIP, ZU" until the noticeable mechanical resistance has been overcome.

Caution! The chuck is not yet fully tightened! Keep turning the sleeve (it must "click" when turning)) until it cannot be turned any further - only now is the tool safely clamped.

Cleaning: From time to time, hold the machine vertically with the keyless chuck facing downwards and turn the sleeve fully in direction "GRIP, ZU" and then turn fully in direction

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"AUF, RELEASE". The dust collected falls from the keyless chuck.

7.9 Unscrewing chuck - Fig. I

Employ the same procedure when attaching the chuck, except in reverse order.

7.10 Chuck with quick bit change system (for BS 14.4 LT Quick, BS 18 LT Quick) Fig. J

To remove: Push the interlock ring forward (a), advance and pull off the chuck (b).

To mount: Push the interlock ring forward and move the chuck as far as the limit stop on the drill spindle.

Attach the belt hook to the left (8), as shown. Attach the bit depot to the right (7), as shown.

8. Troubleshooting

8.1 The machine's multifunctional monitoring system

If the machine switches off automatically, the machine electronics have activated automatic protection mode. A warning signal sounds (continuous beeping). The beeping stops after a maximum of 30 seconds or when the trigger (15) is released.

In spite of this protective function, overloading is still possible with certain applications and can result in damage to the machine.

Causes and remedies:

- Battery pack almost empty → Fig. A, B (The electronics protect the battery pack against damage through total discharge).
 If one LED is flashing (11), the battery pack is almost flat. If necessary, press the (10) button and check the LEDs (11) to see the charge level. If the battery pack is almost flat, it must be recharged.
- Long continuous overloading of the machine will activate the temperature cut-out. Leave the machine or battery pack to cool.

Note: If the battery pack feels very warm, the pack will cool more quickly in an "AIR COOLED" charger.

Note: The machine will cool more quickly if you operate it at idling speed.

 Metabo safety shutdown: The machine was SWITCHED OFF automatically. If the slew 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 at the trigger (15). Switch it on again and continue to work as normal. Try to prevent the machine from seizing.

Switch off the machine at the trigger (15). Then continue working as normal. Try to prevent the machine from seizing.

8.2 Note:

The LED lamp (14) switches off automatically after a specific time.

To activate the electronic functions: press the trigger (15).

9. Accessories

Use only genuine Metabo accessories.

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

Fit accessories securely. Secure the machine if it is operated in a bracket. Loss of control can cause personal injury.

For a complete range of accessories, see www.metabo.com or the main catalogue.

10. Repairs

A

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

If you have Metabo electrical tools that require repairs, please contact your Metabo service centre. For addresses see www.metabo.com.

You can download spare parts lists from www.metabo.com.

11. Environmental Protection

Do not allow battery packs to come into contact with water!

To protect the environment, do not dispose of power tools or battery packs in household waste. Observe national regulations on separated collection and recycling of disused machines, packaging and accessories.

Before disposal, discharge the battery pack in the power tool. Prevent the contacts from short-circuiting (e. g. by protecting them with adhesive tape).

12. Technical specifications

Fig. L. We reserve the right to make technical improvements.

U = Voltage of battery pack

 $n_0 = No-load speed$

Tightening torque for screwing:

M₁ = Soft screwing application (wood)

 M_2 = Pulse torque

M₃ = Hard screwing application (metal)

 M_{Δ} = Adjustable torque

Max. drill diameter:

 $D_{1 \text{ max}} = \text{in steel}$

 $D_{2 \text{ max}} = \text{in softwood}$

 $D_{3 \text{ max}}^2 = \text{in concrete}$

s = Max. impact rate

m = Weight (with smallest battery pack)

G = Spindle thread

D_{max} = Chuck clamping range

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



■ Wear ear protectors!