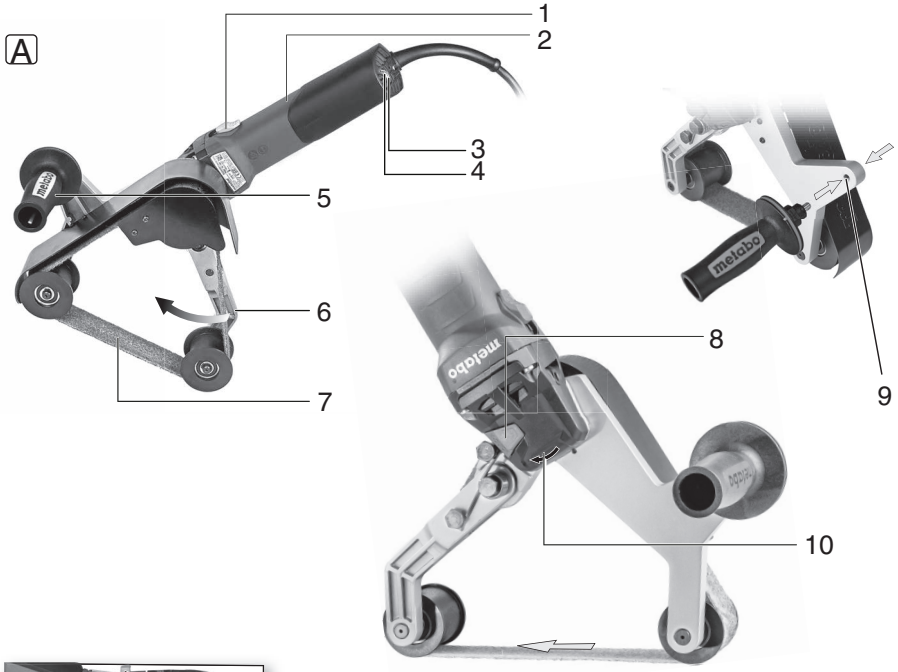
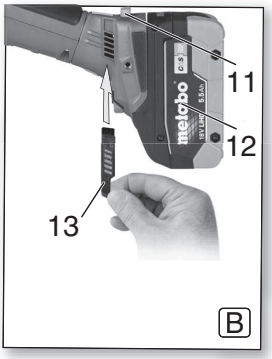
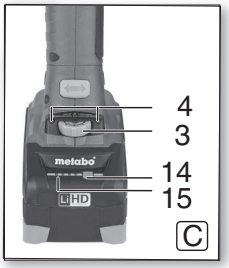
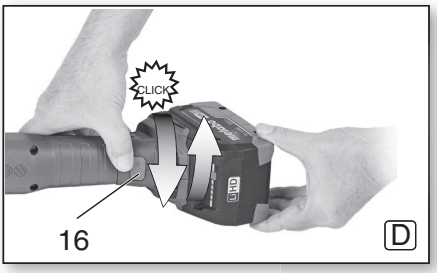
metabo®

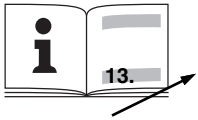
RBE 15-180
RBVB 18 LTX BL 180


A
1
2
3
4
5
6
7
8
9
10


11
12
13
B


4
3
14
15
C


CLICK
16
D

 13.		**RBE 15-180** *1) Serial-Number: 02243...	**RBVB 18 LTX BL 180** *1) Serial-Number: 01768...
U	V	-	18
$\mathbf{B_B}$	mm (in)	40 ($1\,^{9}/_{16}$)	40 ($1\,^{9}/_{16}$)
$\mathbf{B_L}$	mm (in)	760 ($29\,^{15}/_{16}$)	760 ($29\,^{15}/_{16}$)
$\mathbf{D_{max}}$	mm (in)	180 ($7\,^{3}/_{32}$)	180 ($7\,^{3}/_{32}$)
$\mathbf{U_{max}}$	°	270	270
$\mathbf{v_0}$	m/s	8,4 - 28	5 - 18
$\mathbf{P_1}$	W	1550	-
$\mathbf{P_2}$	W	940	-
m	kg (lbs)	3,4 (7.5)	3,84 (8.5)
$\mathbf{a_h/K_h}$	m/s^2	< 2,5/ 1,5	< 2,5/ 1,5
$\mathbf{L_{pA}/K_{pA}}$	dB(A)	94 / 3	94 / 3
$\mathbf{L_{WA}/K_{WA}}$	dB(A)	105 / 3	105 / 3

CE *2) 2014/30/EU, 2006/42/EC, 2011/65/EU
*3) EN 62841-1:2015, EN 62841-2-4:2014, EN IEC 63000:2018

ppa. B. F

2024-09-17, Bernd Fleischmann
Chief Technology Officer Koki Holdings Co., Ltd.
*4) Metabowerke GmbH - Metabo-Allee 1 - 72622 Nuertingen, Germany

Original instructions

1. Declaration of Conformity

We, being solely responsible: Hereby declare that these tube belt sanders, 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 CA We as manufacturer and authorized person to compile the technical file, see *4) on page 3, hereby declare under sole responsibility that these tube belt sanders, 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 62841-1:2015, EN 62841-2-4:2014, EN IEC 63000:2018 .

2. Specified Conditions of Use

The tube belt sander is for glazing, tarnishing, texturing, polishing and smoothing metal pipes 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, 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.*

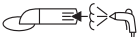
Save all warnings and instructions for future reference.
Always include these documents when passing on your power tool.

4. Special Safety Instructions

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!

Hold the power tool by insulated gripping surfaces, because the sanding surface may contact its own cord. Cutting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Flying sparks are created when sanding metal. Ensure that no persons are in danger. Due to the risk of fire, all combustible materials must be removed from the work area (area affected by flying sparks).



During machining, of metals in particular, conductive dust can form deposits inside the machine. This can lead to the transfer of electrical energy onto the machine housing. This can mean a temporary danger of electric shocks. This is why it is necessary when the machine is running to blow compressed air through the rear ventilation slots of the machine regularly, frequently and thoroughly. Here, the machine must be held firmly.

It is recommended to use a stationary extraction system and to place a ground fault circuit interrupter (GFCI) downstream. When the machine is shut down via the GFCI, it must be checked and cleaned. See the 8. Cleaning chapter for more information on cleaning the motor.

Wear ear protectors. Exposure to noise can cause hearing loss.

Wear tight-fitting protective gloves and clothing. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

WARNING – Always wear protective goggles.

Wear a suitable dust protection mask (filter class 3).

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

Never place your hand near rotating parts of the device or near the rotating sanding belt.

Remove sanding dust and similar material only when the machine is not in operation.

Pull the plug out of the socket before making any adjustments, changing tools, carrying out maintenance or cleaning.

The rated speed of the sanding belt must be at least equal to the belt speed in idling marked on the power tool. A sanding belt running faster than its rated speed can break and fly apart.

Check prior to each use that the sanding belt is correctly attached and is completely on the rollers. Carry out a trial run: Allow the machine to run at idling speed for 30 seconds in a safe location. Stop immediately if significant vibrations occur or if other defects are noted. If such a situation occurs, check the machine to determine the cause.

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.

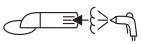
Reduce dust exposure with the following measures:
- do not direct the escaping particles and the exhaust air stream towards yourself or nearby persons or towards dust deposits,
- use an extraction unit and/or an air purifier,
- ensure good ventilation of the workplace and keep it clean using a vacuum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

4.1 Special safety instructions for mains powered machines:

Hold the power tool by insulated gripping surfaces, because the sanding surface may contact its own cord. Cutting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Pull the plug out of the socket before making any adjustments, changing tools, carrying out maintenance or cleaning.

Before connecting the mains plug, make sure that the machine is switched off.


During machining, of metals in particular, conductive dust can form deposits inside the machine. This can lead to the transfer of electrical energy onto the machine housing. This can mean a temporary danger of electric shocks. This is why it is necessary when the machine is running to blow compressed air through the rear ventilation slots of the machine regularly, frequently and thoroughly. Here, the machine must be held firmly.

It is recommended to use a stationary extraction system and to place a ground fault circuit interrupter (GFCI) downstream. When the machine is shut down via the GFCI, it must be checked and cleaned. See the 8. Cleaning chapter for more information on cleaning the motor.

4.2 Special safety instructions for cordless machines:

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.


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 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).

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

5. Overview

See page 2

1 Slide switch
2 Handle
3 Adjusting wheel for setting belt speed
4 Electronic signal indicator
5 Additional handle
6 Tensioner arm for replacing the sanding belt
7 Sanding belt
8 Press in the spindle locking button only when the spindle is stationary!
9 Thread for securing the additional handle
10 Arrow (direction of rotation of drive shaft)
11 Battery pack release button
12 Battery pack *
13 Dust filter*
14 Button of capacity display*
15 Capacity and signal display*

16 Locking button*

*equipment-specific

6. Initial Operation

6.1 For mains powered machines only

Connection to Power Mains

Before commissioning, check that the rated mains voltage and mains frequency stated on the type plate match your power supply.

Always install an RCD with a maximum trip current of 30 mA upstream.

6.2 For cordless machines only

Dust filter (p. 3, fig. B)

Always fit the dust filter (13) if the surroundings are heavily polluted.

The machine heats up faster when the dust filter (13) is fitted. It is protected by the electronics system from overheating.

Attaching:
Fit the dust filter (13) as shown.

Removal:
Holding the dust filter (13) at the edges, raise it slightly and then pull it downwards and remove.

Rotating battery pack

See illustration D on page 3.

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 (), 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”.

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.

"Li-Power" Li-Ion battery packs have a capacity and signal indicator (15):
- Press the button (14); the LEDs indicate the charge level.
- The battery pack is almost empty and must be recharged if one LED is flashing.

Removing and inserting the battery pack

To remove: Press the battery pack release button (11) and pull the battery pack (12) downwards and out.

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

Attaching the additional handle

Always work with the additional handle (5) attached! Secure the additional handle by screwing it tightly to the left or right.

7. Use

7.1 On/Off switch, continuous activation

Always hold the machine tightly with both hands on the handles provided ((2)) and ((5)). It is mandatory to use both hands when operating the machine. Loss of control can cause personal injury.

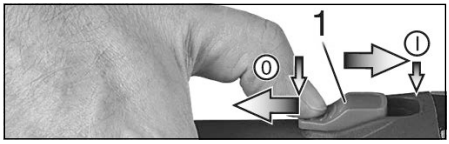
Do not operate on a table or holder.

Switch the machine on first and place it onto the workpiece only once it has reached the full speed.

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 place it down when the motor has come to a standstill.

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.



Switching on/continuous operation: Push the slide switch (1) forward. For continuous operation, tilt it downwards until it engages.

Switching off: press the rear end of the slide switch (1) and release it.

7.2 Setting belt speed

The belt speed can be preset via the setting wheel (3) and is infinitely variable.

Positions 1-6 correspond approximately to the following belt speeds:

RBE 15-180

1 ..... 8.4 m/s	4 ..... 20.6 m/s
2 ..... 12.5 m/s	5 ..... 24.6 m/s
3 ..... 16.5 m/s	6 ..... 28.8 m/s

RBVB 18 LTX BL 180:

1 ..... 5.0 m/s	4 ..... 13.0 m/s
2 ..... 7.0 m/s	5 ..... 15.0 m/s
3 ..... 10.0 m/s	6 ..... 18.0 m/s

7.3 Sanding belt replacement

See illustration on page 3.

- Release the tensioner arm (6) and remove the sanding belt (7).
- Place the new sanding belt on the rollers such that its direction of circulation (arrows on the inside of the sanding belt) matches the arrow (10) on the gearbox.
- Release the tensioner arm (6).
- Ensure that the sanding belt is completely on the rollers.

7.4 Sanding procedure

Place the machine on the material such that the sanding belt is parallel to the surface of the workpiece.

When working, please ensure that the machine is operated at right angles to the pipe so that the belt does not fall off the rollers.

Using the additional handle, the belt can be pressed against the pipe and at same time placed around it. The angle of contact and the cutting output may be changed by the contact pressure.

Keep the machine in constant motion because otherwise recesses could be produced in the material.

8. Cleaning, maintenance

Motor cleaning: blow compressed air through the rear ventilation slots of the machine regularly, frequently and thoroughly. Here, the machine must be held firmly.

9. Troubleshooting

9.1 Mains powered machines

The electronic signal indicator (4) lights up and the load speed decreases. There is too much load on the machine! Run the machine in idling until the electronic signal indicator switches off.

The machine does not start.The electronic signal indicator (4) flashes. Restart protection is active. If the mains plug is inserted with the machine switched on or if the power supply is restored following an interruption, the machine does not start up. Switch the machine off and back on again.

9.2 Cordless machines

The electronic signal display (4) 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.
When using a battery pack that is not part of CAS, the machine will not start.

The electronic signal display (4) is permanently on.
There has been an overload while working, therefore the performance may be reduced temporarily. **Reduce working pressure.**

Electronic safety shutdown: the machine has SHUT DOWN by itself. 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. Switch it on again and continue to work as normal. Try to prevent the machine from seizing.

10. Accessories

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

Use only genuine Metabo accessories.

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

If you need any accessories, check with your dealer.

For the dealer to select the correct accessory, they need to know the exact model designation of your power tool.

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

Order no.: 625368000 5.5 Ah (LiHD)
Order no.: 625369000 8.0 Ah (LiHD)
Order no.: 625549000 10.0 Ah (LiHD)
etc.

Order no.: 625591000 4.0 Ah (LiPOWER)
Order no.: 625028000 5.2 Ah (LiPOWER)
etc.

Chargers: ASC 55, ASC 145, etc.

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

11. Repairs

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

A defective mains cable must be replaced only with a special, original mains cable from Metabo available from the Metabo service.

Contact your local Metabo representative if you have Metabo power tools requiring repairs. For addresses see www.metabo.com.

You can download a list of spare parts from 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.

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

Packaging materials must be disposed of according to their labelling in accordance with municipal guidelines. Further information can be found at www.metabo.com in the “Service” section.

Only for EU countries: never dispose of power tools in your household waste! In accordance with
European Directive 2012/19/EU relating to electrical and electronic waste
and implementation of national law, used electrical tools must be collected separately and disposed of in an environmentally friendly manner at recycling centres.

13. Technical Specifications

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

U = Battery pack voltage
B_B = Sanding belt width
B_L = Sanding belt length
$D_{max.}$ = max. pipe diameter
U_{max} = max. angle of contact
v_0* = Belt speed in idle mode
P_1 = Rated input power
P_2 = Power output
m = Weight with smallest battery pack

Measured values determined in conformity with EN 62841.

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 (cordless machines)

~ Alternating current (mains powered machines)

* Energy-rich, high-frequency interference can cause fluctuations in speed. The fluctuations disappear, however, as soon as the interference fades away.

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 62841:
a_h = Vibration emission value (surface grinding)
K_h = 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!