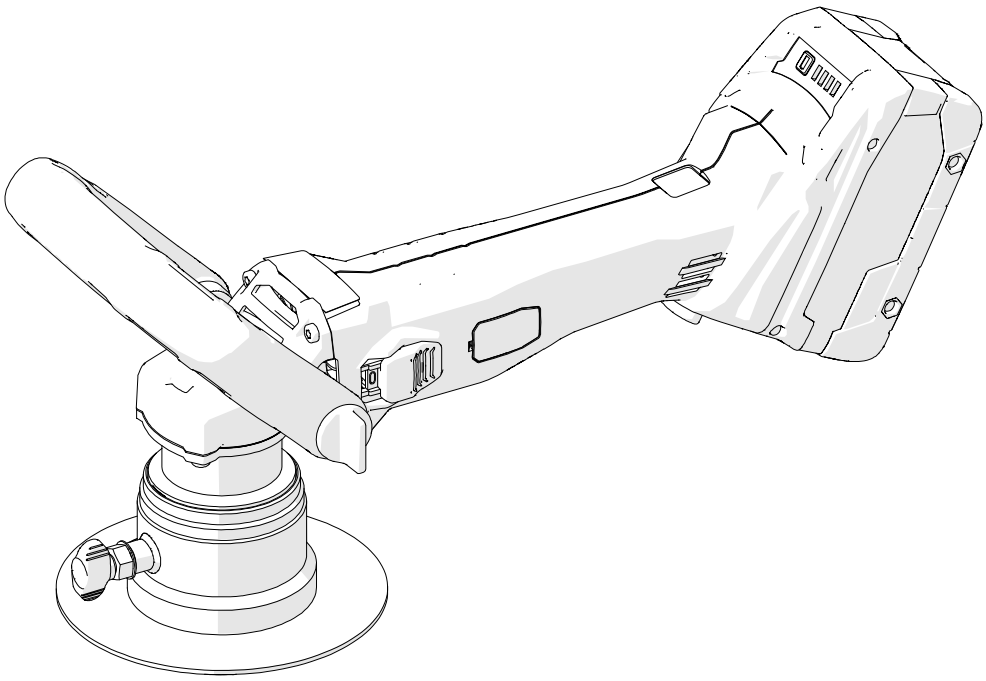
STEELBEAST®

BM-6C

CORDLESS BEVELLING MACHINE



EASY-RAD™ SYSTEM™

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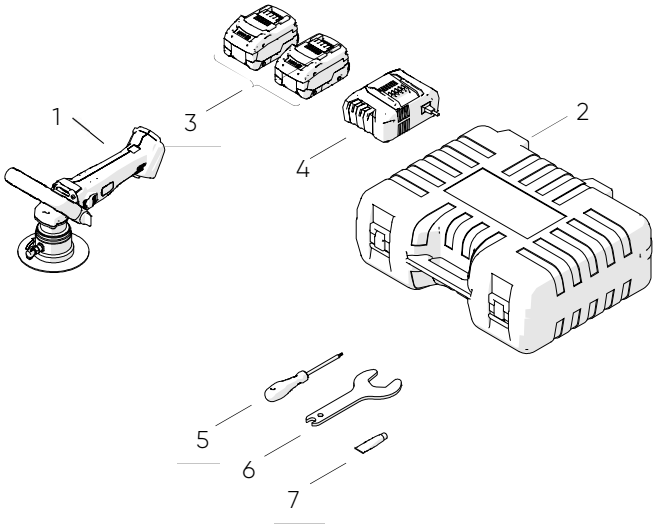
APPLICATION

The BM-6C is a cordless bevelling machine designed to bevel plates and pipes made of steel or aluminum alloys.
Depending on used milling head, the machine allows you to bevel at the angle of 30° or 45°. The minimum workpiece thickness is 2 mm (5/64"). The maximum bevel width is 6 mm (15/64"). The included milling head allows you to bevel at the angle of 45°. The curving inserts allow you to bevel with a radius of 2, 3, 4, or 5 mm (0.08, 0.12, 0.16, or 0.20"). The minimum diameter of a hole to be machined is 22.5 mm (7/8").
The sticker protects aluminium workpieces from scratches.
The machine is designed for use by a professional operator only.

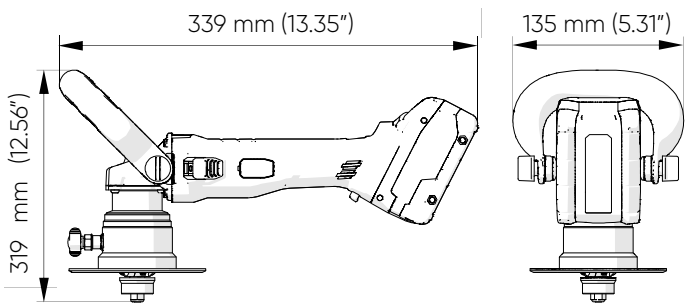
EQUIPMENT INCLUDED



1	Bevelling machine (includes 45° milling head with Ø35 mm roller, without cutting inserts)	1 unit
2	Plastic box	1 unit
3	Batteries 18 V LiHD 5.5 Ah *	1 unit
4	Battery charger ASC 145 *	1 unit
5	T15 torx screwdriver	1 unit
6	Special wrench	1 unit
7	Grease for mounting screws (5 g, 0.17 oz)	1 unit
-	Operator's Manual	1 unit

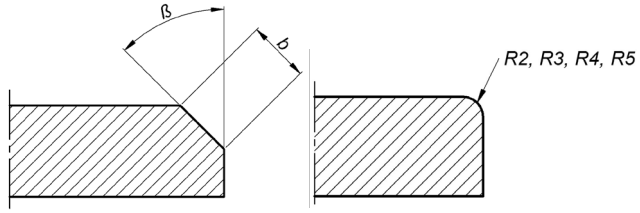
(*) optional elements

DIMENSIONS

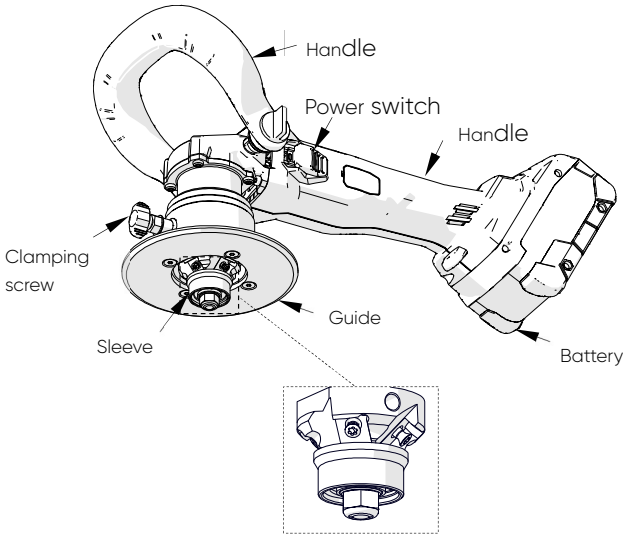


TECHNICAL DATA

Voltage	18 V DC
Power	900 W
Rotational speed without load	7800 rpm
Protection level	IP 20
Protection class	I
Maximum bevel width (b)	6 mm (15/64", Fig. 1)
Bevel angle (ß, depends on the milling head)	30° (option), 45° (Fig. 1)
Minimum workpiece thickness	2 mm (5/64")
Minimum hole diameter	22.5 mm (7/8", option), 35 mm (1-3/8")
Edge radius	2 mm, 3 mm, 4 mm, 5 mm (0.08, 0.12, 0.16, 0.20") (Fig. 1)
Noise level	More than 70 dB
Vibration level	Machine harmful for health. Take periodic breaks during work.
Required ambient temperature	0-40°C (34-104°F)
Weight	4.7 kg (10.36 lbs)



DESIGN



45° milling head with Ø35 mm roller

SAFETY PRECAUTIONS

- Before use, read this Operator's Manual and complete training in occupational health and safety.

- Use only in applications specified in this Operator's Manual
- Make sure that the machine has all parts and they are genuine and not damaged.
- Make sure that the specifications of the power source are the same as those specified on the rating plate.
- Keep untrained persons away from the machine.
- Before each use, ensure the correct condition of the machine, battery, control parts, and tools.
- Before each use, make sure that no part is cracked or loose. Make sure to maintain correct conditions that can have an effect on the operation of the machine.
- Keep the machine dry.
- Do not expose the machine to rain, snow, or frost.
- Keep the work area well-lit, clean, and free of obstacles.
- Do not use near flammable materials, or in explosive environments.
- Use only tools specified in this Operator's Manual.
- Do not use tools that are dull or damaged.
- Make sure that the cutting inserts and the milling head are installed correctly. Remove wrenches from the work area before you connect the machine to the power source.
- Do not use the machine with the milling head pointing up.
- If the cutting edge of an insert is worn, turn all inserts by 90°. If all cutting edges are worn, replace all inserts with new ones specified in this Operator's Manual.
- Use eye and ear protection, non-slip footwear, and protective clothing. The clothing must not be loose.
- Do not touch chips or moving parts.
- Do not let anything catch in moving parts.
- After use, clean the machine and the milling head with a dry cotton cloth and no chemical agents.
- Do not remove chips with bare hands.
- Remove the battery before you do maintenance or install/remove parts.
- Repair only in a service center appointed by the seller.
- If the machine falls, is wet, or has any damage, stop the work and immediately send the machine to the service center for check and repair.
- If you are not going to use the machine, remove it from the work area and keep it in a safe and dry place.
- If you are not going to use the machine for an extended period, put anti-corrosion material on the steel parts.
- Use only genuine batteries and chargers from Promotech or CAS (Cordless Alliance System) of the following parameters:
- Batteries: 18 V LiHD 4.0 Ah, 18 V LiHD 5.5 Ah, 18 V LiHD 10.0 Ah Chargers: ASC 145.
- Do not open the battery and do not short-circuit its contacts.
- Do not allow the battery to be fully discharged.
- Do not leave the battery in the machine.
- Store the machine and the battery in a safe and dry place.
- Do not store the battery in discharged state.
- The acid flammable liquid may leak from the battery. If the liquid comes in contact with your skin or eyes, rinse them immediately with clean water and seek medical attention.
- When you transport the battery, familiarise yourself with hazardous goods carriage regulations (UN 3480 and UN 3481).

SYMBOLS

Before using the machine, familiarise yourself with the following symbols.

Wear eye protection

Wear ear protection

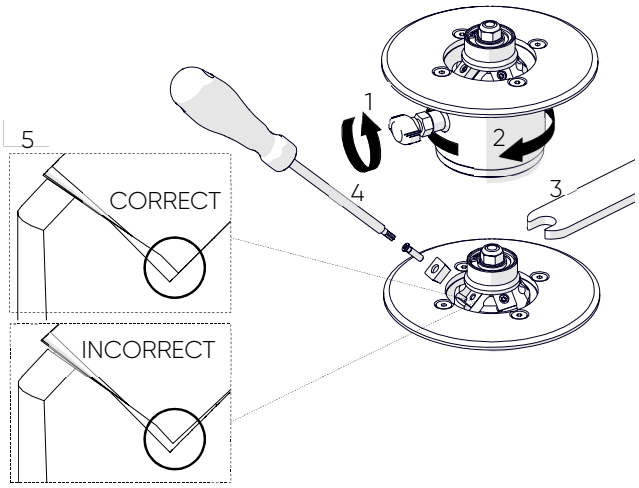
Use protective gloves

Read the Operator's Manual

STARTUP AND OPERATION

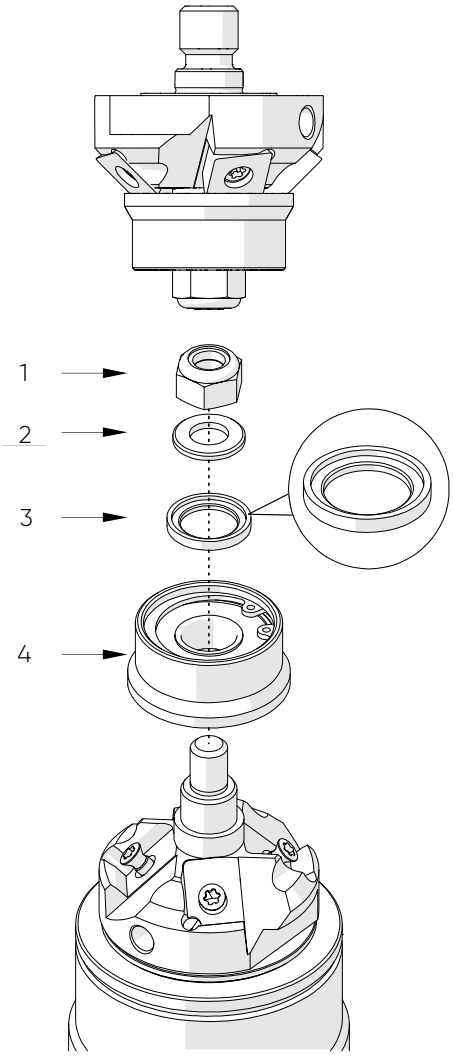
Installing and removing the cutting inserts

Disconnect the battery. Loosen the screw (1) and turn the sleeve (2) to lower it as far as possible and get access to the milling head. Use the special wrench (3) to loosen the roller and use the screwdriver (4) to remove the inserts. Clean the sockets. To change the cutting edge, remove the inserts and turn them by 90°. Press the inserts towards the sockets and tighten them. If all cutting edges are worn, replace all inserts with new ones. Make sure that the whole bottom of the insert touches the socket (5).



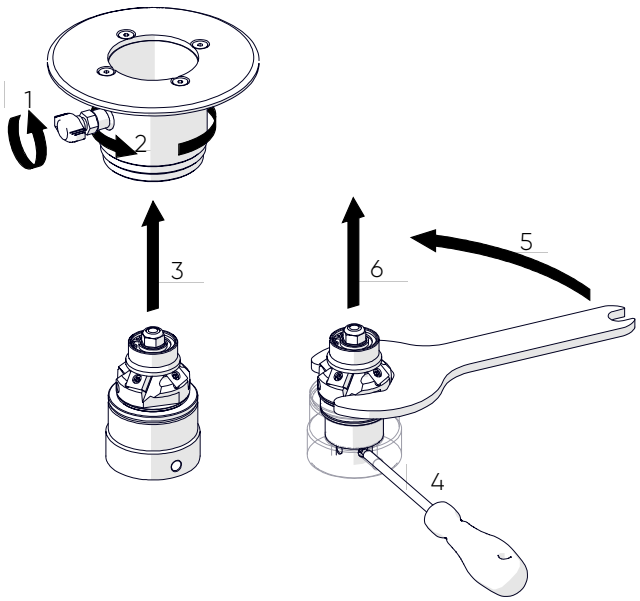
Clean the threads of the mounting screws for inserts every week and put the supplied grease on the threads.

Pay attention during the installation of the cutting inserts for bevelling that the head is assembled as shown below: nut (1), round washer (2), special washer (3), roller with bearing and Seeger ring (4). Special washer (3) must be positioned according to the drawing.

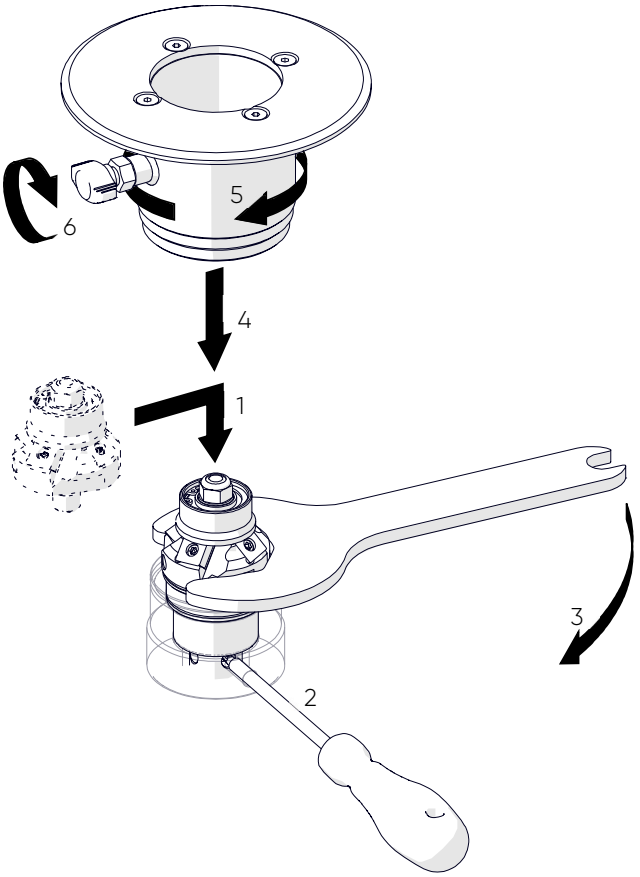


Installing and removing the milling head

Disconnect the battery. To remove the milling head, continue in the sequence that follows.



To install the milling head, continue in the sequence that follows.

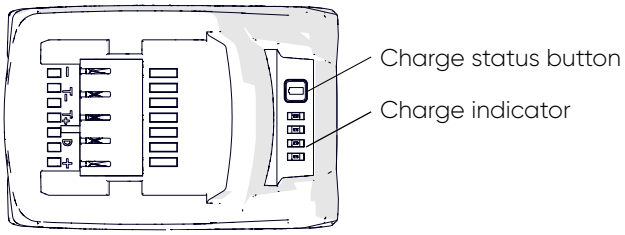


Checking the battery charge level

Charge the battery before the first use. To check the charge level, press the charge status button. If only one LED flashes green, charge the battery.
Do not charge fully charged battery.

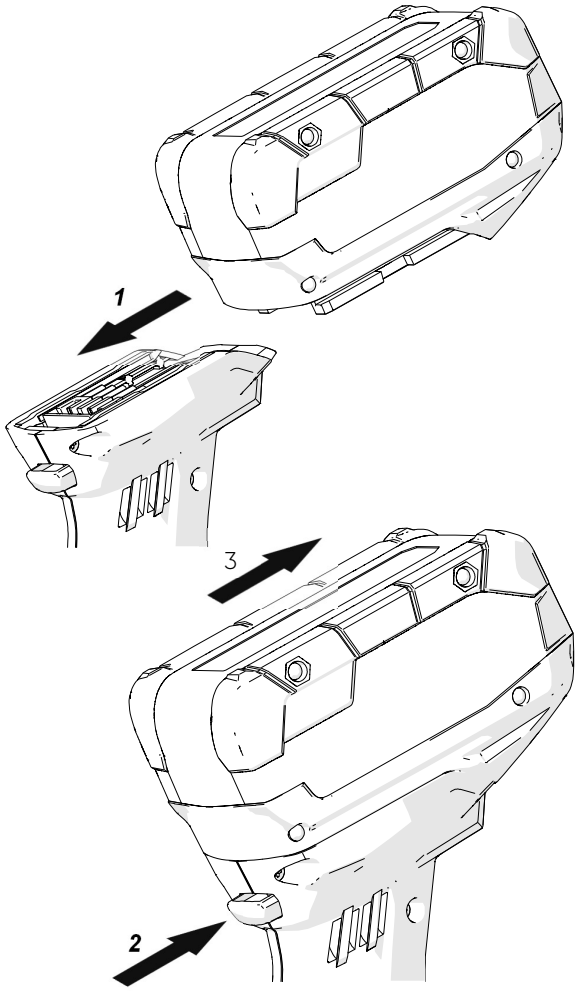
Before charging the battery, read the charger manual.

4 LEDs light up green	≤ 100%
3 LEDs light up green	≤ 75%
2 LEDs light up green	≤ 50%
1 LED lights up green	≤ 25%
1 LED flashes green	charging required



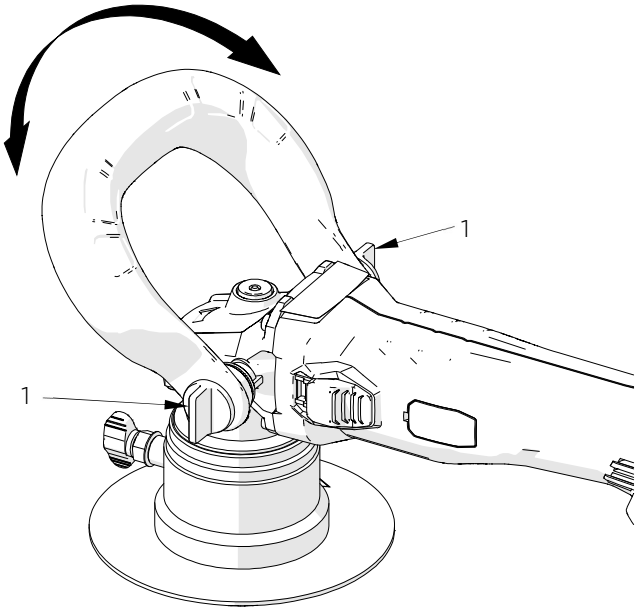
Installing and removing the battery

Slide the battery (1) in until it locks into place. Press and hold the battery lock (2) to remove the battery (3).



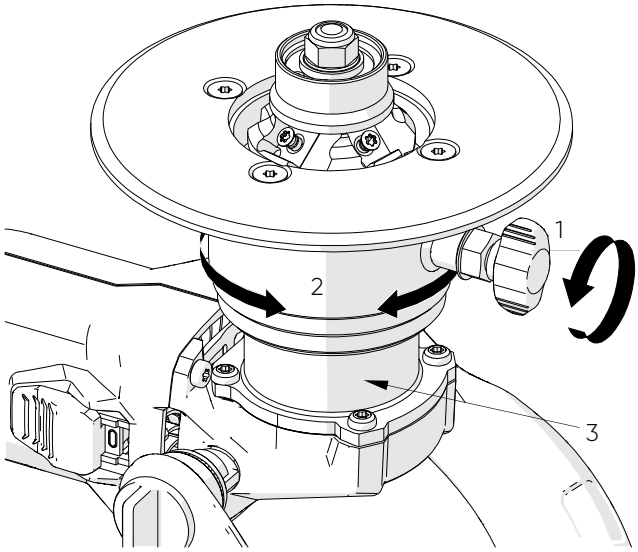
Handle adjustment

The bevelling machine handle may be adjusted so the operator may adapt it to their needs. To adjust, loosen the nuts (1) on both on both sides of the machine. Perform adjustment and tighten the loosened elements.



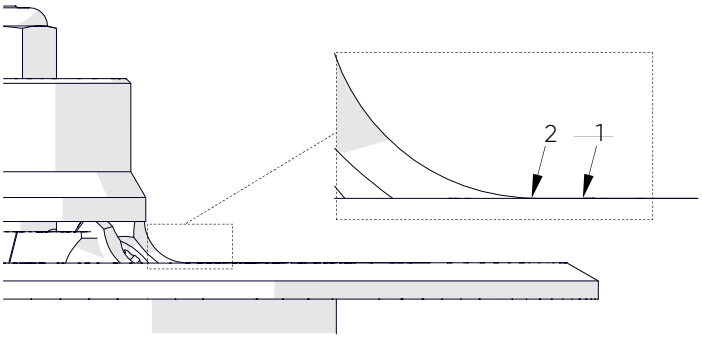
Adjusting the bevel width

Loosen the screw (1) and rotate the sleeve (2) so that the scale (3) shows the required bevel width. Tighten the screw.



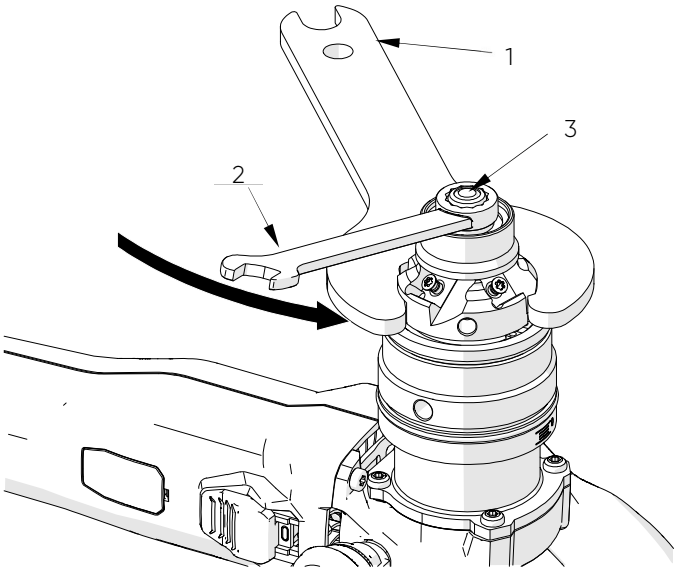
Adjusting the guide for edge curving

Loosen the clamping screw and turn the sleeve to align the surface (1) with the end of the cutting edge (2). You can also use an optional radius insertpositioner to set the guide correctly. Tighten the screw. Bevel a test edge and if necessary adjust the position of the guide again.

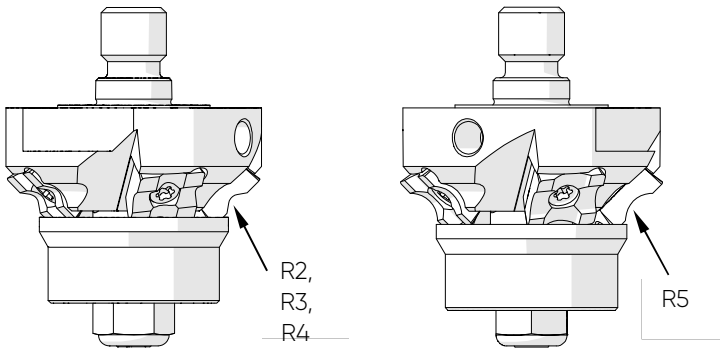


Adjusting the head roller

During operation with inserts for edge curving R5 check the inserts do not rub against the head roller after installation. If so, move the roller as described below. Moving the roller consists in changing the position of the special washer. Position the machine with the head up. Remove the sleeve and guide. Use special flat wrench (1) to lock the head rotation. Use flat wrench 13 mm (2) to unscrew the nut (3).

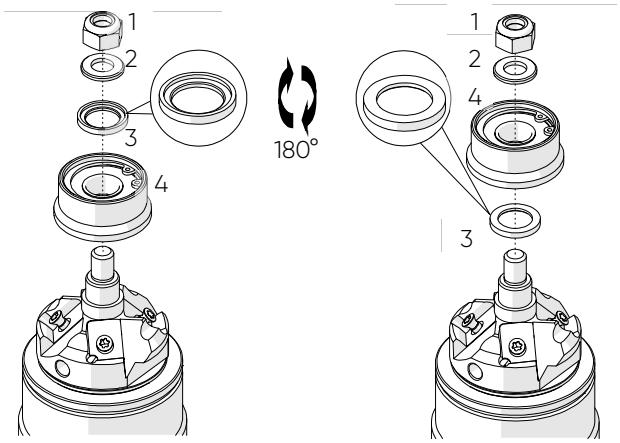


The drawing below shows the roller position for inserts R2-R4 and R5.



INSTALLATION OF ROLLER WITH INSERTS FOR CURVING R2, R3, R4

INSTALLATION OF ROLLER WITH INSERTS FOR CURVING R5

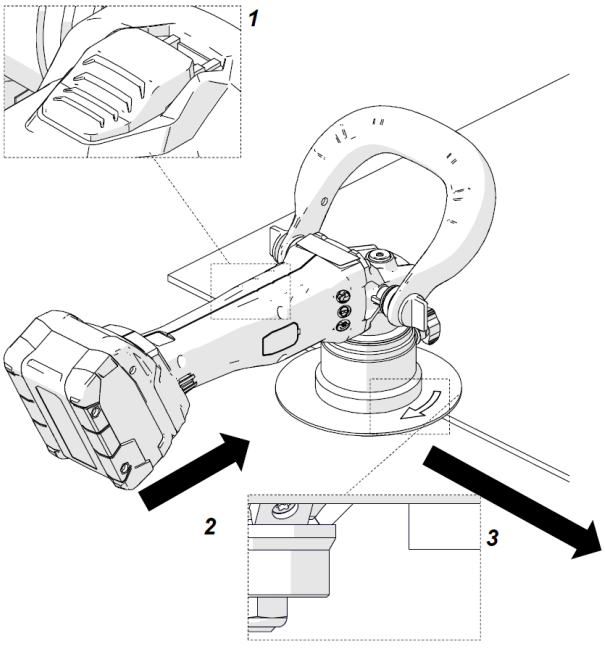


After unscrewing the nut (1), remove parts in the following sequence: round washer (2), special washer (3), roller with bearing and Seeger ring (4). Rotate the special washer (3) so it's shoulder is positioned downwards, towards the machine.
Reinstall parts in the following sequence: special washer (3), roller with bearing and Seeger ring (4), round washer (2), nut (1).

After reinstallation check if the roller rotates freely, without rubbing against the inserts.

Operation

Install the correct milling head with cutting inserts, and set the required bevel width. Put the machine on the left as shown in the figure. Make sure that the workpiece is stable.



To start the motor, move the slide switch (1) forward. Wait a few seconds until the machine reaches the maximum speed. Use both hands press to press the machine to the workpiece. Then slowly move the machine to the edge (2) until the tool starts cutting. Move the machine from left to right (3).
Bevel in two passes. Set the bevel width to a value that will allow the feed of 1 m/min (3 ft/min) without using too much force. Remove maximum 4 mm (5/32") of material during one milling operation. Bigger bevels should be made in several milling operations. Do not exceed the maximum allowed bevel height (see technical data).
Perform test milling.

Maintain special caution during work. The bevelling machine is susceptible to strong vibrations and kickback.Kickback is a sudden reaction caused by catching or locking of rotating tool. Catching or locking causes the work tool to stop abruptly. As a result, the uncontrolled power tool gains acceleration in the direction opposite to the direction of rotation of the locked work tool. If the milling head becomes jammed or blocked in the workpiece, the blocked edge of the cutting insert, when recessed into the workpiece, may cause it to break off or eject. The machine then moves in the direction of the operator or opposite direction, depending on the direction of rotation of the blocked insert. In such case the insert may also break.

Kickback is a consequence of incorrect or improper use of the power tool. By taking the appropriate precautions described below, one can prevent this from happening.

a) Hold the machine firmly and keep your body and arms in a position to absorb the kickback force. By following the suitable safety measures the operator may control the kickback force.
b) Maintain special caution when working in the area of corners, sharp edges, etc. Avoid situations in which the head jumps off the workpiece or becomes jammed. The rotating head easily becomes jammed in the workpiece in corners, on sharp edges, or in case of impact. It causes loss of control or kickback.
c) Always insert the cutting head into the workpiece in the same direction in which the cutting edge exits the workpiece (the same direction the chips are ejected). Incorrect direction causes the cutting edge to break away from the workpiece, leading to the machine to be pulled in the direction of travel.
d) Avoid locking the head or applying too much pressure. Do not set the bevel height above the maximum allowable value. Overloading the inserts increases their stress and susceptibility to jamming or locking, and thus the possibility of kickback or breaking.
e) Avoid touching the area around the rotating head with your hands.

Rotate or replace dull cutting inserts and those with worn coatings in a timely manner. Dull cutting inserts increase risk of jamming and breaking.

If there are vibrations in the machine or if the cutting inserts are dull or damaged, stop the machine and remove the battery. Then, rotate the inserts by 90° to change the cutting edges. If all cutting edges are worn, replace the inserts with new ones.

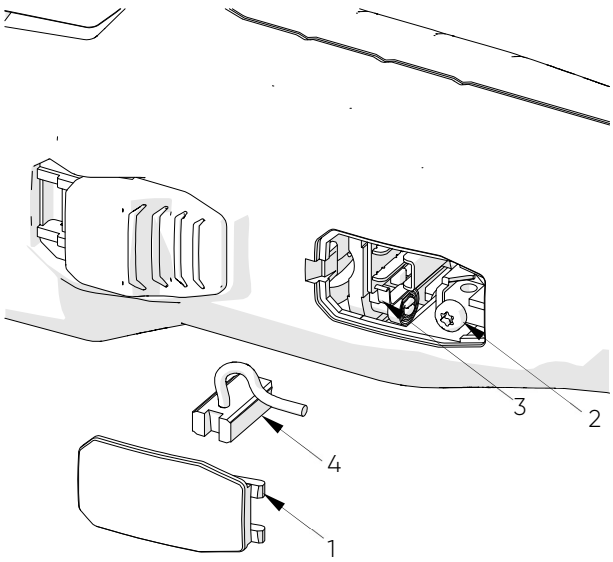
Replace inserts before they become dull to prevent overloading. Take periodic breaks during work. This prevents motor overheating and damage to the windings.

After the work is finished, release the power switch to turn off the motor.

Clean the machine with a dry cotton cloth and no chemical agents.

Replacing the brushes

Check the condition of the brushes every 100 work hours. To do this, remove the cover (1). Then loosen the screw (2), lift the spring (3), and remove the brush (4). If the brush is shorter than 5 mm (0.2"), replace both brushes with new ones. Perform assembly in the opposite sequence. Make sure to put the terminal of the brush wire between the washer and the terminal of the motor wire. Then let the motor operate with no load for 20 minutes.

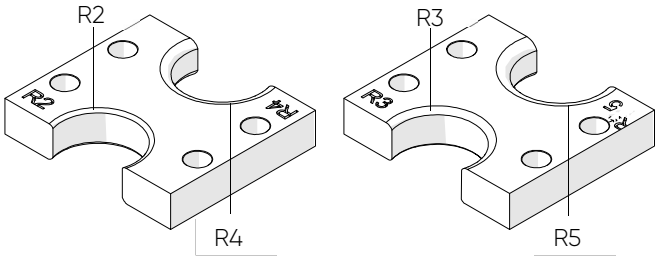


ACCESSORIES

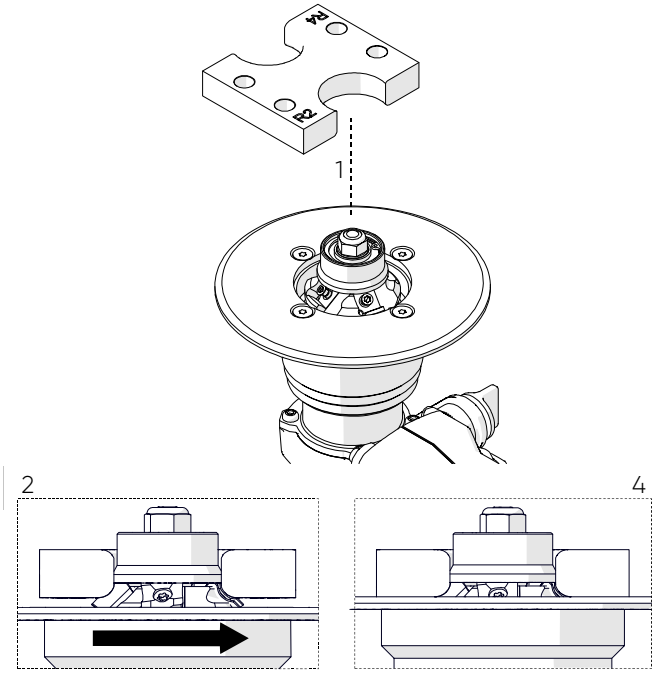
Radius insert positioner

Allows you to set the guide correctly for rounding edges with a radius of 2, 3, 4, or 5 mm (5/64, 7/64, 5/32, or 3/16").

Part number: UST-0509-16-00-00-0

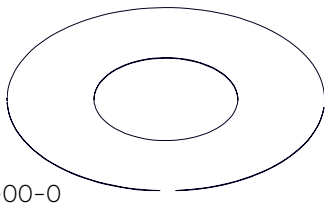


Lower the sleeve to get access to the cutting inserts. Put the positioner from the top (1) so that the edge marked with a given radius aligns with the edges of three cutting inserts of the same radius (2). Turn the sleeve (3) until the guide touches the positioner (4).



Guide sticker

The self-adhesive guide sticker protects aluminum workpieces from scratches. After you remove the sticker, clean the guide with petroleum ether.



Part number: NKL-0540-15-00-00-0

MILLING TOOLS

Part number	Part name
GLW-0540-09-00-00-0	30° milling head (with Ø35 mm roller and mounting screws for inserts; 4 cutting inserts required)
PLY-000391	Cutting insert for steel (sold 10 per set); for GLW-0540-08-00-00-0 and GLW-0540-09-00-00-0
PLY-000423	Cutting insert for aluminium (sold 10 per set); for GLW-0540-08-00-00-0 and GLW-0540-09-00-00-0
PLY-000737	Cutting insert R2 (sold 10 per set); only for GLW-0540-08-00-00-0
PLY-000738	Cutting insert R3 (sold 10 per set); only for GLW-0540-08-00-00-0
PLY-000739	Cutting insert R4 (sold 10 per set); only for GLW-0540-08-00-00-0
PLY-000740	Cutting insert R5 (sold 10 per set); only for GLW-0540-08-00-00-0

SPARE AND WEARING PARTS

Part number	Part name
GLW-0540-08-00-00-0	45° milling head (with Ø35 mm roller and mounting screws for inserts; 4 cutting inserts required)
RLK-0540-08-02-00-0	Ø35 mm roller for GLW-0540-08-00-00-0 and GLW-0540-09-00-00-0
SRB-000289	Mounting screw for insert for GLW-0540-08-00-00-0 and GLW-0540-09-00-00-0
WKT-000005	T15P screwdriver for mounting screws
SMR-000005	Grease for mounting screws (5 g, 0.17 oz)
SCZ-000038	Carbon brush

ENVIRONMENTAL PROTECTION

In accordance with the European Directive 2012/19/EU, this device is marked with the symbol of the crossedout waste bin. This marking means that the equipment must not be disposed of with other household waste after the service life. The user must return the product to a collection point for used electrical and electronic equipment. The collectors of used equipment, including local collection points, shops and municipal units create an appropriate system for returning such equipment. Correct handling of used electrical and electronic equipment helps in avoiding damage to health and the environment, which may result from the presence of dangerous components and incorrect storage and processing of such equipment.

DECLARATION OF CONFORMITY

Declaration of Conformity

JEI Drilling & Cutting Solutions Ltd
Unit 21 Empire Business Park
Enterprise Way
Burnley, Lancashire
BB12 6LT, UK

We declare with full responsibility that:

BM-6C Cordless Bevelling & Radius Machine

is manufactured in accordance with the following standards:

- EN 60204-1
- EN ISO 12100

and satisfies regulations of the guidelines: 2014/35/UE, 2006/42/EC.

Person authorized to compile the technical file:
David McFadden, Managing Director, JEI Drilling & Cutting Solutions Ltd

Burnley.
28 August 2025

David McFadden
Managing Director

WARRANTY CARD

WARRANTY CARD No.....

..... in the name of Manufacturer warrants the BM-6C Cordless Bevelling Machine to be free of defects in material and workmanship under normal use for a period of 12 months from the date of sale.

This warranty does not cover cutting inserts, as well as damage or wear that arise from misuse, accident, tempering, or any other causes not related to defects in workmanship or material.

Serial number .....

Date of sale .....

Signature of seller.....

August 2025

WE RESERVE THE RIGHT TO MAKE CHANGES IN THIS MANUAL WITHOUT NOTICE