

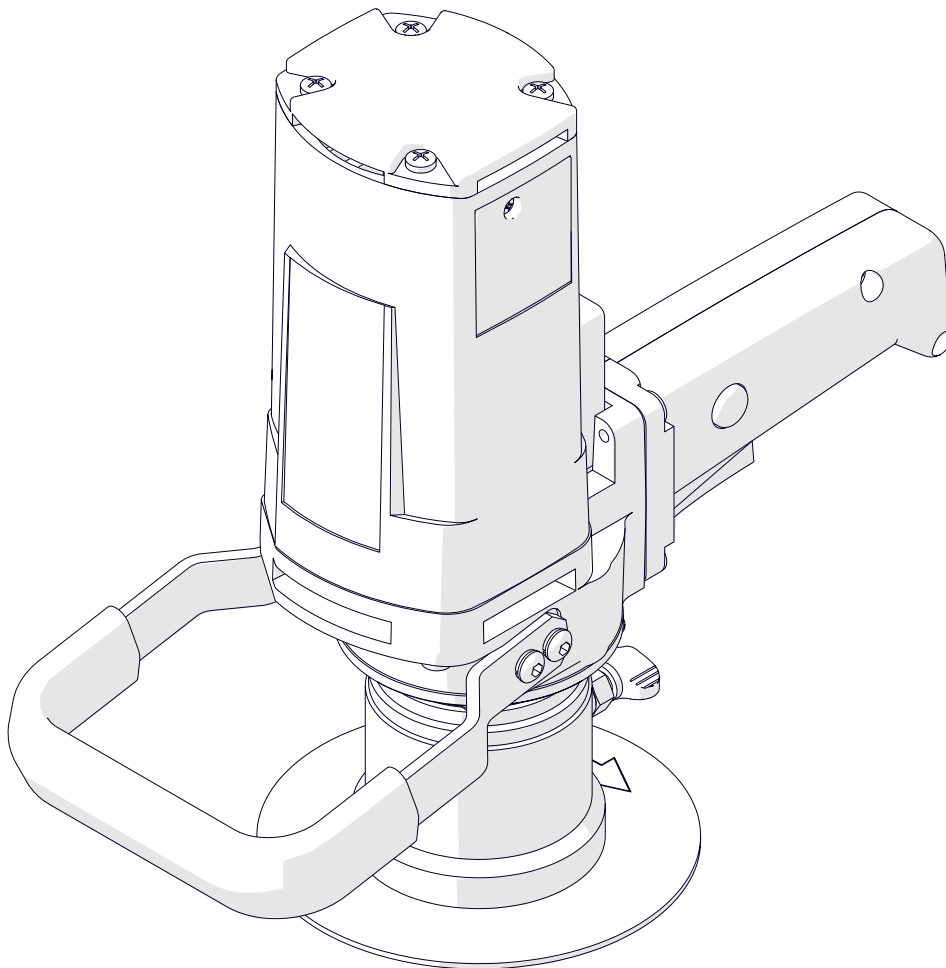


The tools of innovation.

OPERATOR'S MANUAL

BM-7

BEVELING MACHINE



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1. GENERAL INFORMATION

1.1. Application

The BM-7 is a beveling machine designed to bevel plates and pipes made of steel or aluminum alloys.

Depending on the milling head, the machine allows you to bevel at the angle of 30° or 45°. The minimum workpieces thickness is 1.5 mm (1/16"). The maximum bevel width is 7 mm (9/32"). The included milling head allows you to bevel at the angle of 45°. Radius inserts allow you to bevel with a radius of 2, 3, 4, or 5 mm. The minimum diameter of a hole to be machined is 35 mm (1-3/8").

An optional milling heads allow you to machine holes with diameters of at least 22.5 mm (7/8"). A sticker protects aluminum workpieces from scratches.

1.2. Technical data

Voltage	1~ 110–120 V, 50–60 Hz 1~ 220–240 V, 50–60 Hz
Power	1080 W
Rotational speed without load	6200 rpm
Rotational speed with load	3200 rpm
Protection level	IP 20
Protection class	I
Maximum bevel width (<i>b</i>)	7 mm (9/32", Fig. 1)
Bevel angle (β , depends on the milling head)	30° (option), 45° (Fig. 1)
Minimum workpiece thickness	1.5 mm (1/16")
Minimum hole diameter	22.5 mm (7/8", option), 35 mm (1-3/8")
Edge radius	2 mm, 3 mm, 4 mm, 5 mm (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	6.1 kg (13 lbs)

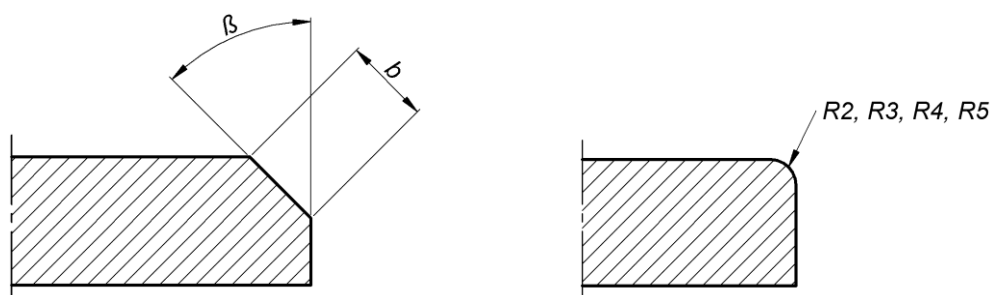
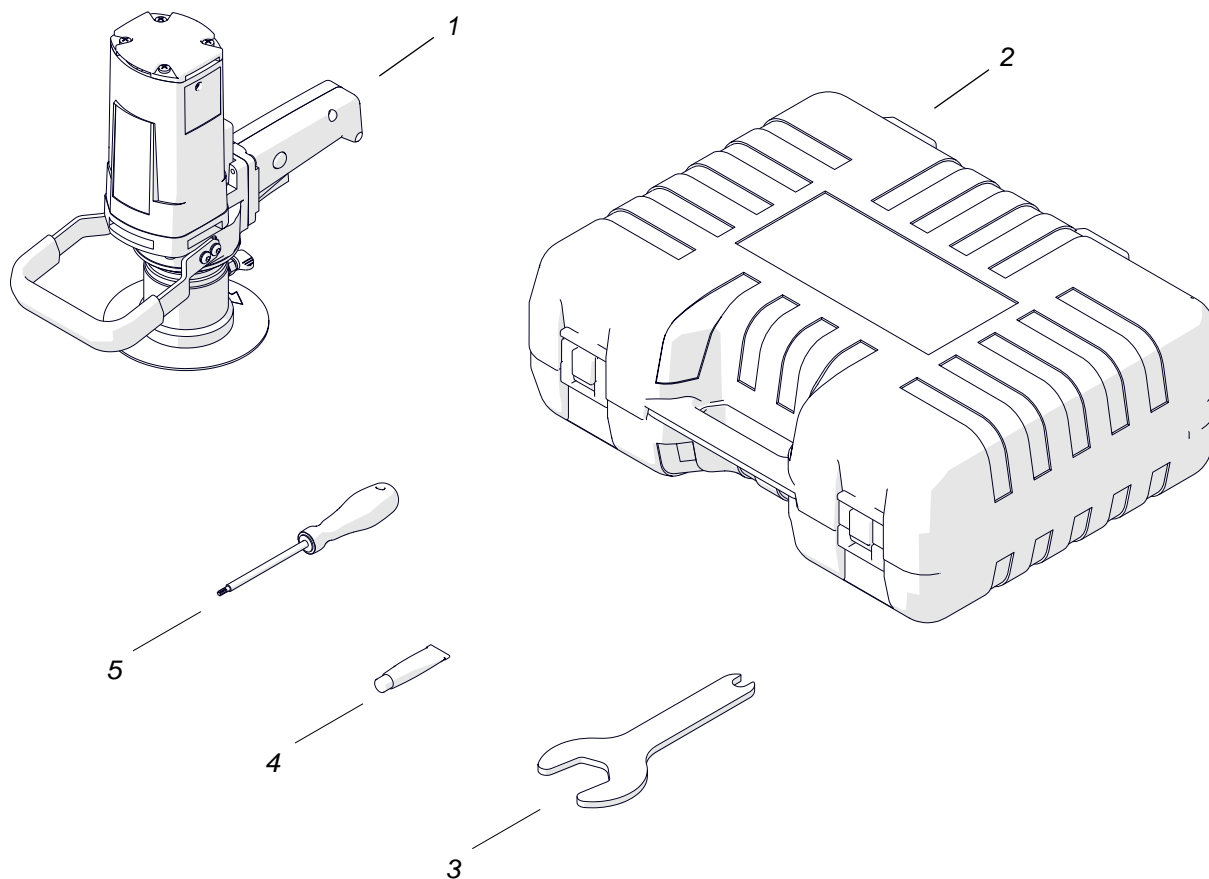


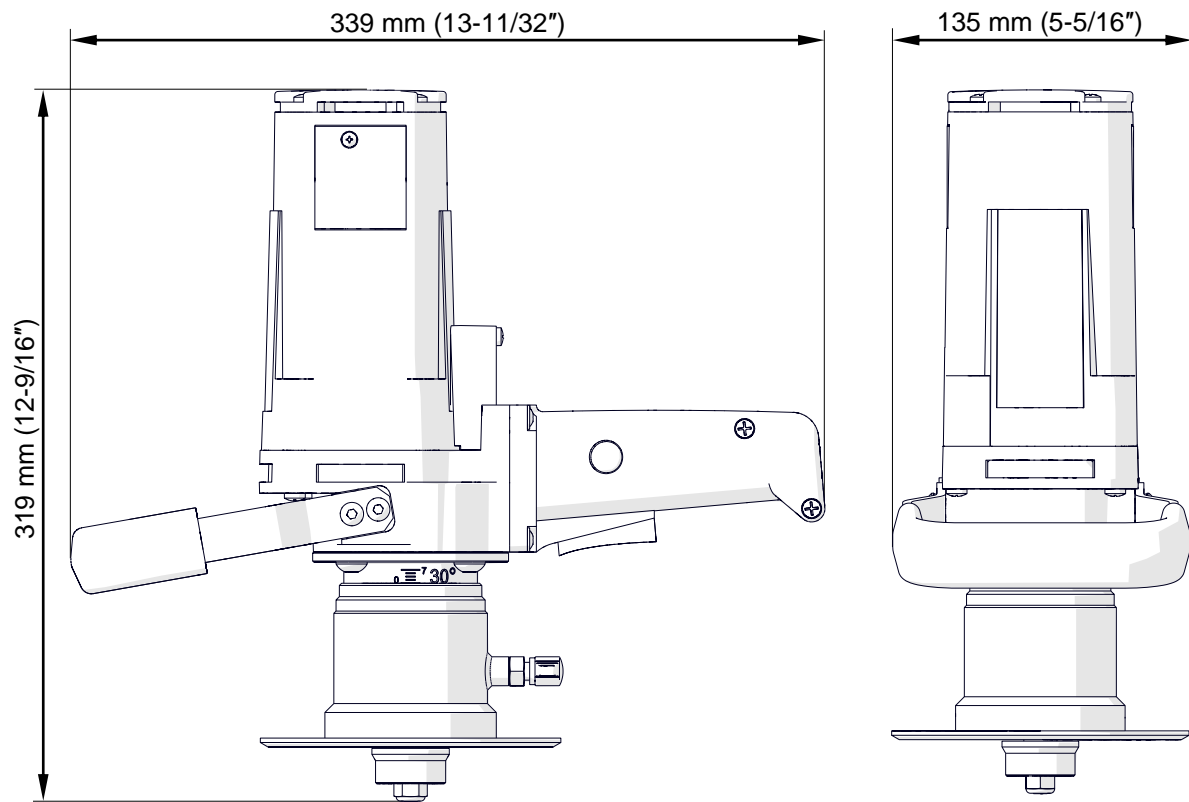
Fig. 1. Bevel dimensions

1.3. Equipment included

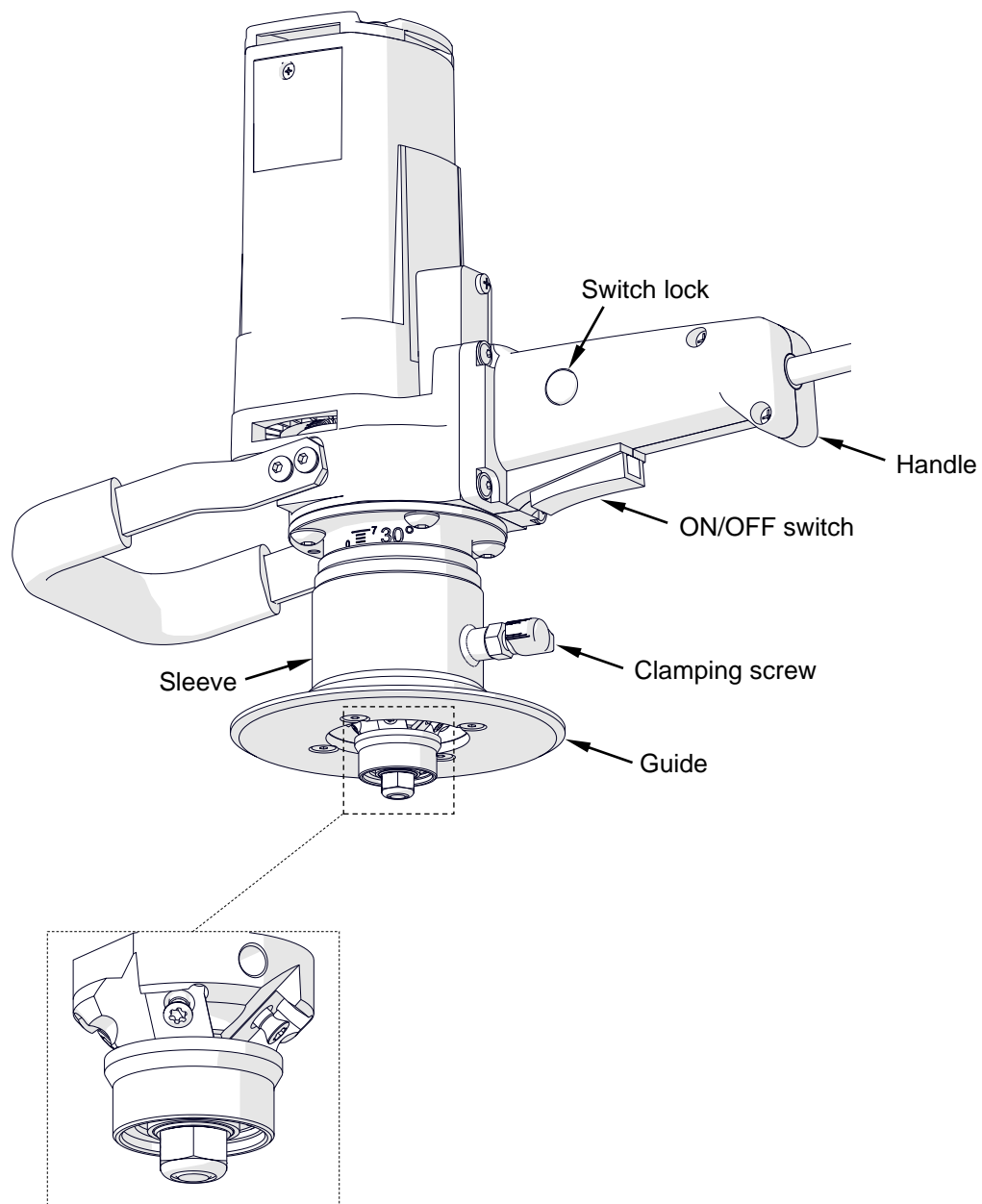


1	Beveling machine (includes 45° milling head with Ø35 mm roller, without cutting inserts)	1 unit
2	Plastic box	1 unit
3	Special flat wrench	1 unit
4	Grease for screws 5 g (0.2 oz)	1 unit
5	Torx T15 screwdriver	1 unit
–	Operator's Manual	1 unit

1.4. Dimensions



1.5. Design



45° milling head with Ø35 mm roller

2. SAFETY PRECAUTIONS

1. Before use, read this Operator's Manual and complete a training in occupational safety and health.
2. Use only in applications specified in this Operator's Manual.
3. Make sure that the machine has all parts and they are genuine and not damaged.
4. Make sure that the specifications of the power source are the same as those specified on the rating plate.
5. Do not carry the machine by the cord and do not pull the cord. This can cause damage and electric shock.
6. Keep untrained bystanders away from the machine.
7. Before each use, ensure the correct condition of the machine, power source, power cord, plug, control parts, and tools.
8. 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.
9. Keep the machine dry. Do not expose the machine to rain, snow, or frost.
10. Keep the work area well lit, clean, and free of obstacles.
11. Do not use near flammable materials, or in explosive environments.
12. Use only tools specified in this Operator's Manual.
13. Do not use tools that are dull or damaged.
14. Make sure that the cutting inserts and the milling head are correctly attached. Remove wrenches from the work area before you connect the machine to the power source.
15. Do not use the machine so that the milling head is up.
16. If the cutting edge of an insert is worn, turn all inserts by 90°. If all cutting edges are worn, install new inserts specified in this Operator's Manual.
17. Use eye and ear protection, non-skid footwear, and protective clothing. Do not use loose clothing.
18. Do not touch chips or moving parts. Do not let anything catch in moving parts.
19. After each use, clean the machine and the milling head with a dry cotton cloth and no chemical agents. Do not remove chips with bare hands.
20. Maintain the machine and install/remove parts and tools only after you unplug the machine from the power source.

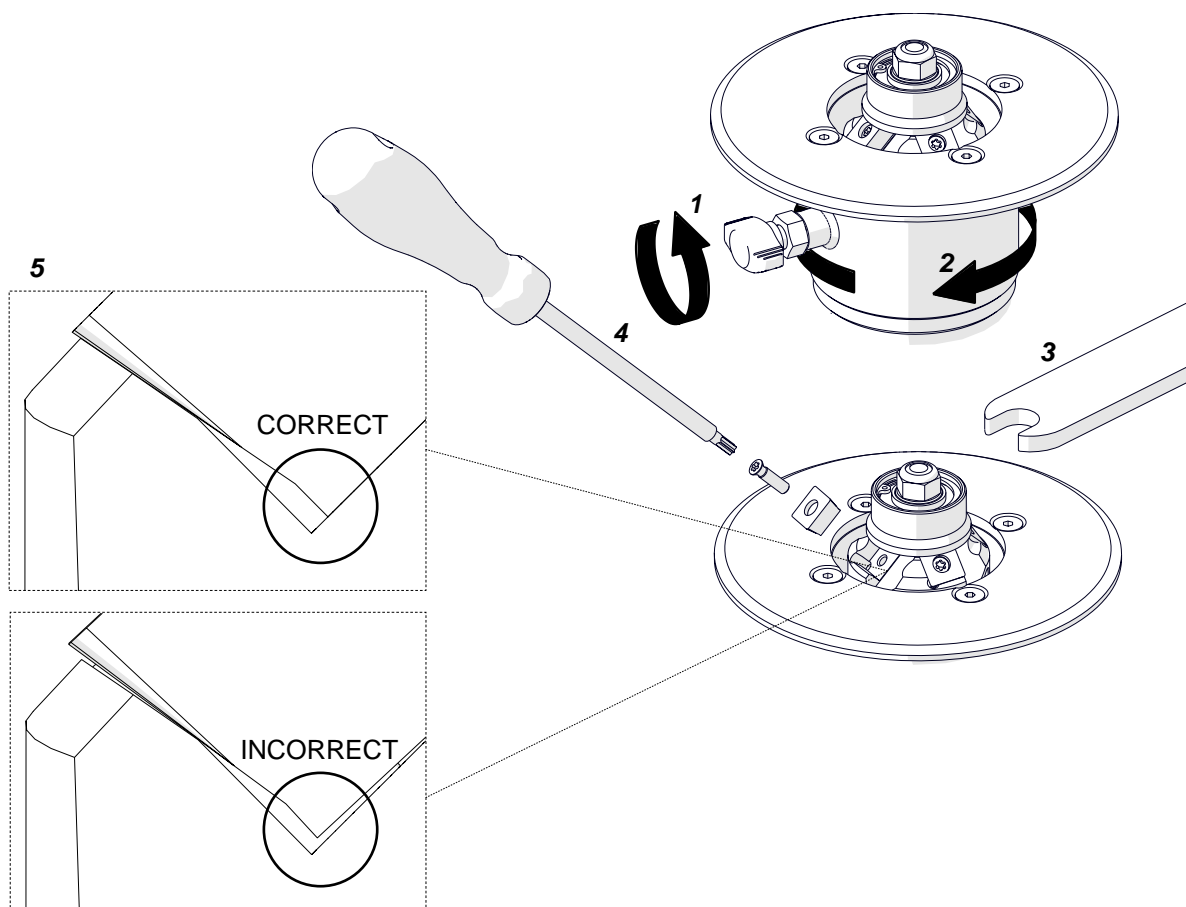
21. Repair only in a service center appointed by the seller.
22. If the machine falls, is wet, or has any damage, stop the work and immediately send the machine to the service center for check and repair.
23. If you are not going to use the machine, remove it from the work area and keep it in a safe and dry place.
24. If you are not going to use the machine for an extended period, put anti-corrosion material on the steel parts.

3. STARTUP AND OPERATION

3.1. Installing and removing the cutting inserts

Unplug the power cord. Loosen the screw (1) and then 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 then use the screwdriver (4) to remove the cutting inserts. Clean the sockets.

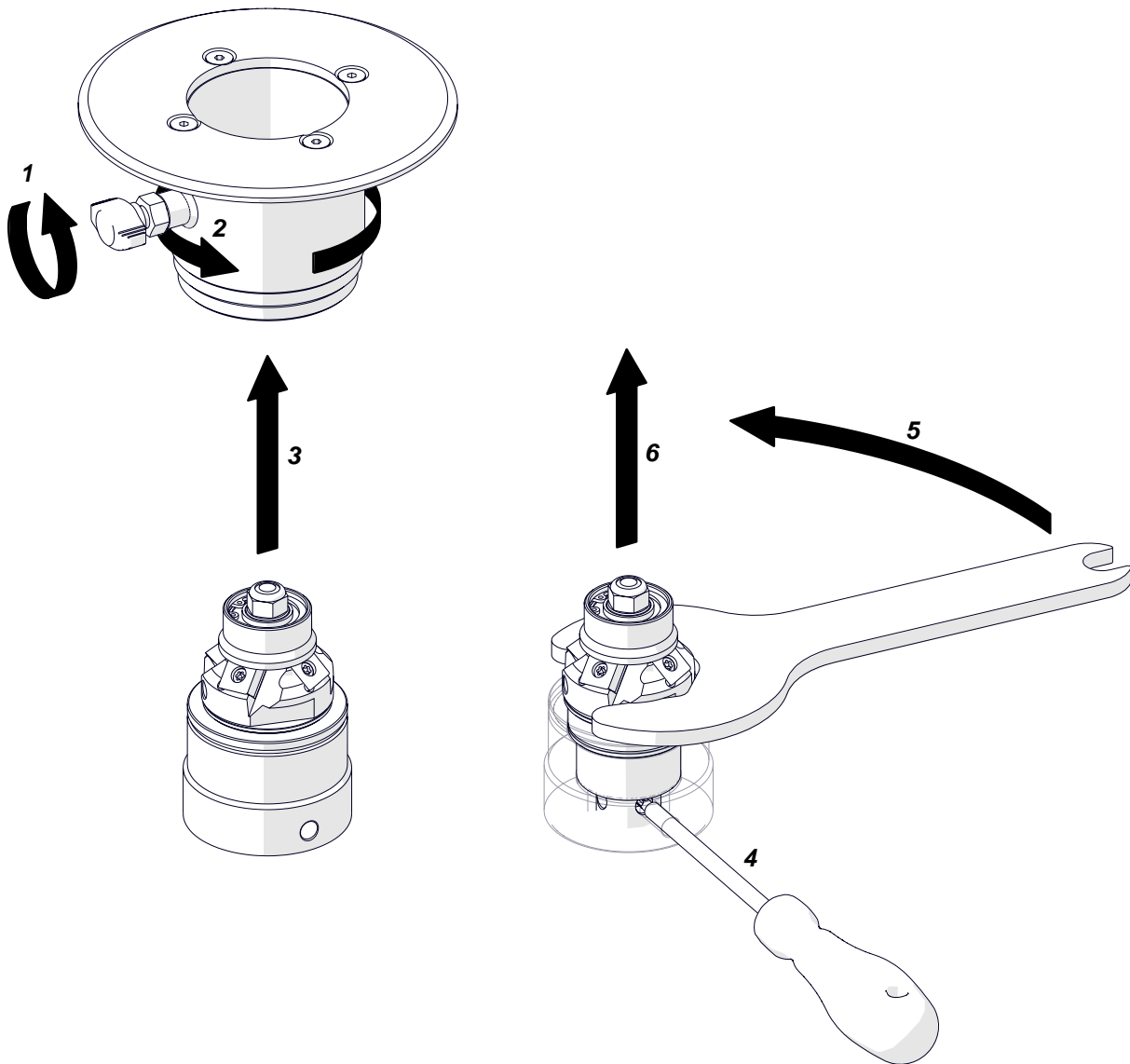
To change the cutting edge, turn the inserts by 90°, push them to the sockets, and tighten the inserts and the roller. If all cutting edges are worn, install new inserts. Make sure that the bottom of each insert is in full contact with the socket (5).



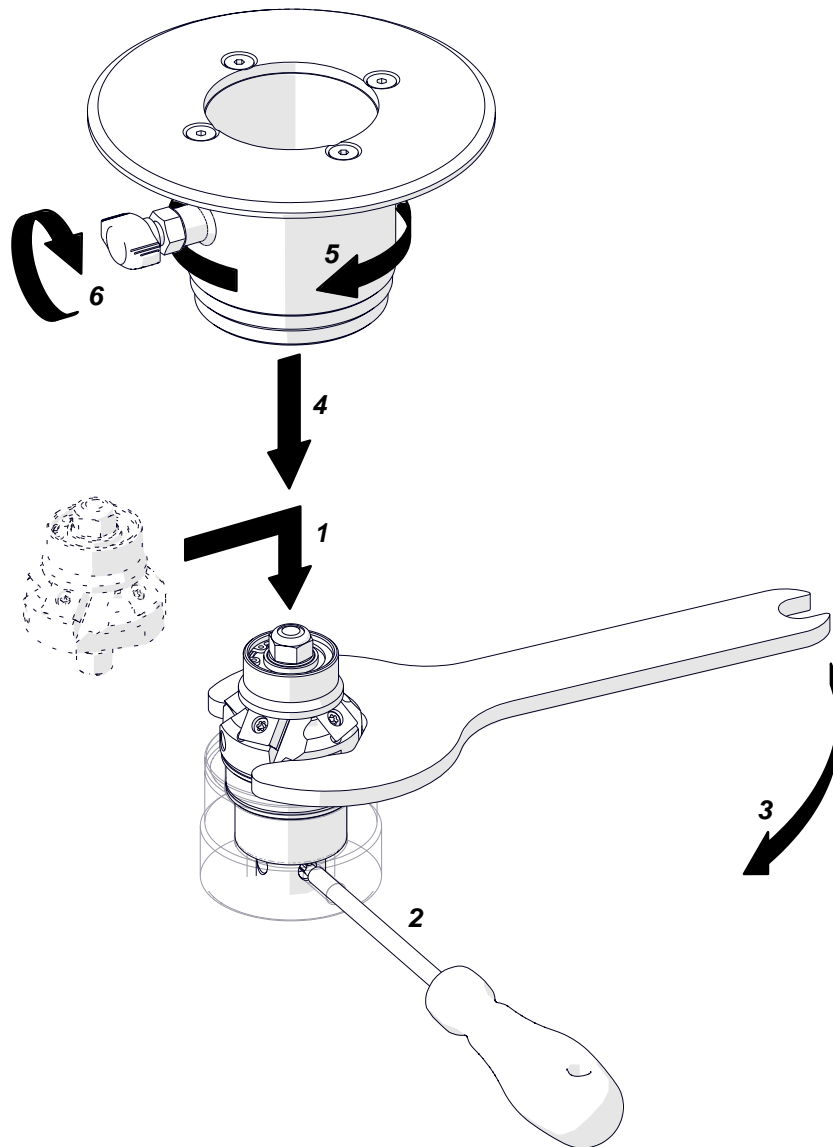
Each week clean the threads of the mounting screws for inserts and put the supplied grease on the threads.

3.2. Installing and removing the milling head

Unplug the power cord. To remove the milling head, continue in the sequence that follows.

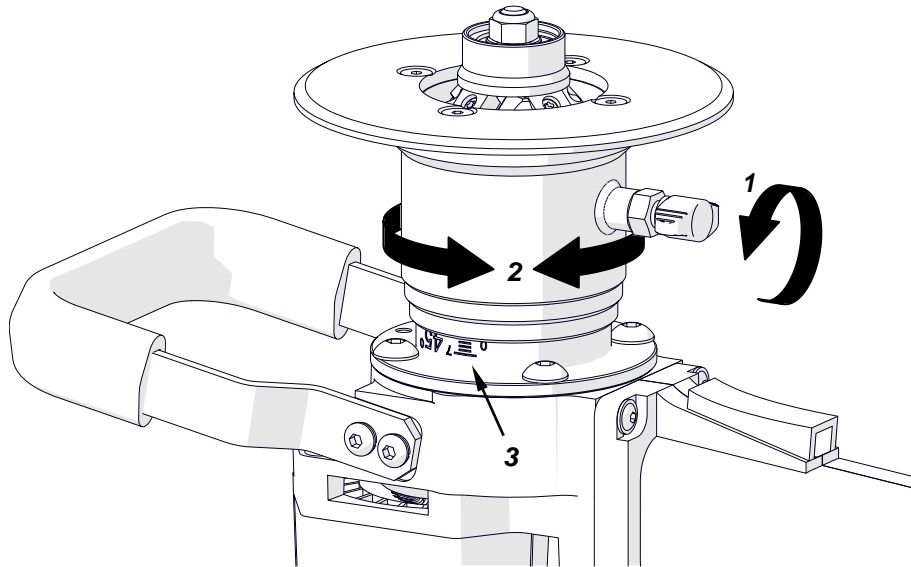


To install the milling head, continue in the sequence that follows.



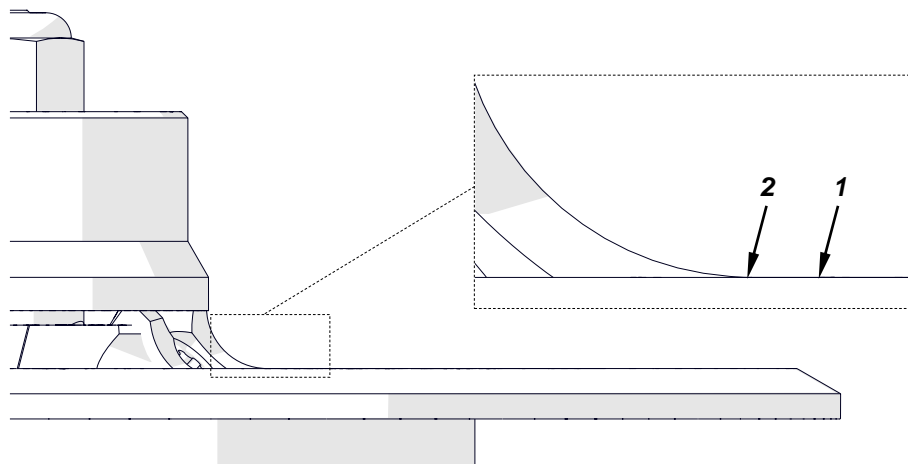
3.3. Adjusting the bevel width

Unplug the power cord. Loosen the clamping screw (1) and turn the sleeve (2) so that the scale (3) shows the required bevel width. Tighten the screw.



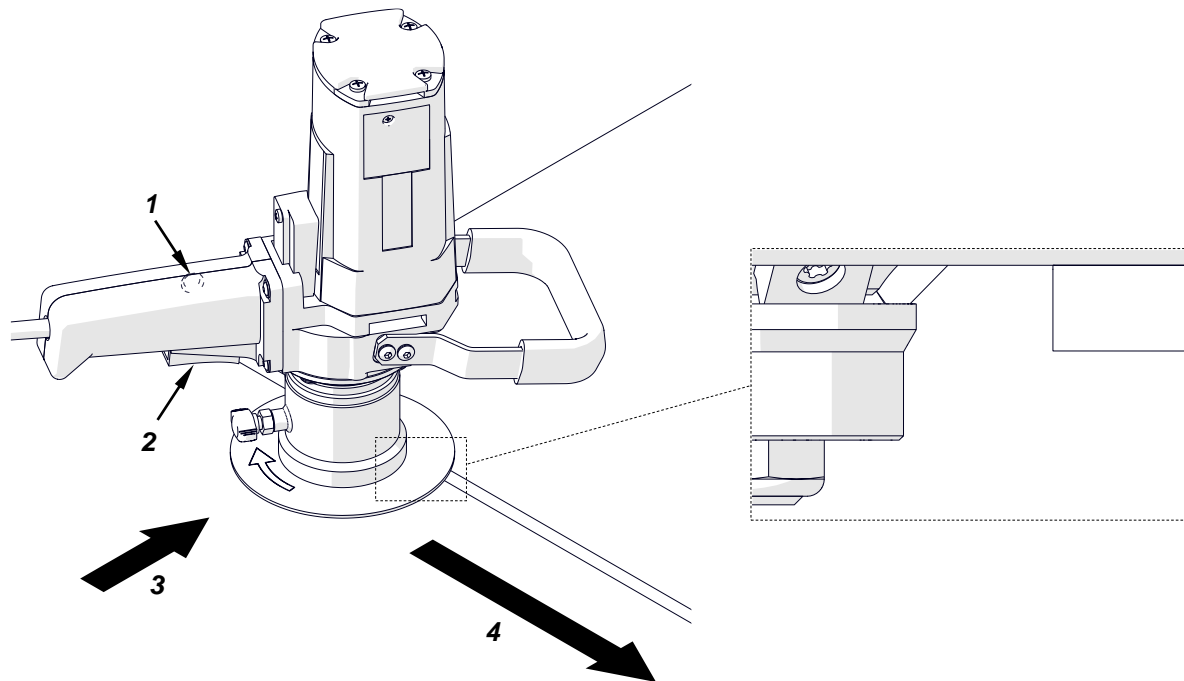
3.4. Adjusting the guide for beveling with radius

Unplug the power cord. Then, loosen the clamping screw and turn the sleeve to set the surface (1) on the height of the end of the cutting edge (2). You can also use an optional radius insert positioner to set the guide correctly. Tighten the screw. Bevel a test edge, and if necessary adjust the position of the guide again.



3.5. Operating

Install the required milling head with cutting inserts, and set the required bevel width. Connect the machine to the power source and put the machine on the left as in the figure. Make sure that the workpiece is stable.



To start the motor, press and hold the switch lock (1) and the ON/OFF switch (2), and then release the lock (1). Next, wait some seconds until the speed is at the maximum. Press the machine to the workpiece with the two hands. Then, slowly slide the machine toward the edge until the tool starts cutting. Move the machine from left to right (4).

Bevel in two passes. Set the bevel width to a value that will allow the feed of 1 m/min without using too much force.

If there is vibration in the machine or if the cutting inserts are dull or damaged, turn off the machine. Then, turn the cutting inserts by 90° to change the cutting edges. If all cutting edges are worn, install new inserts.

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

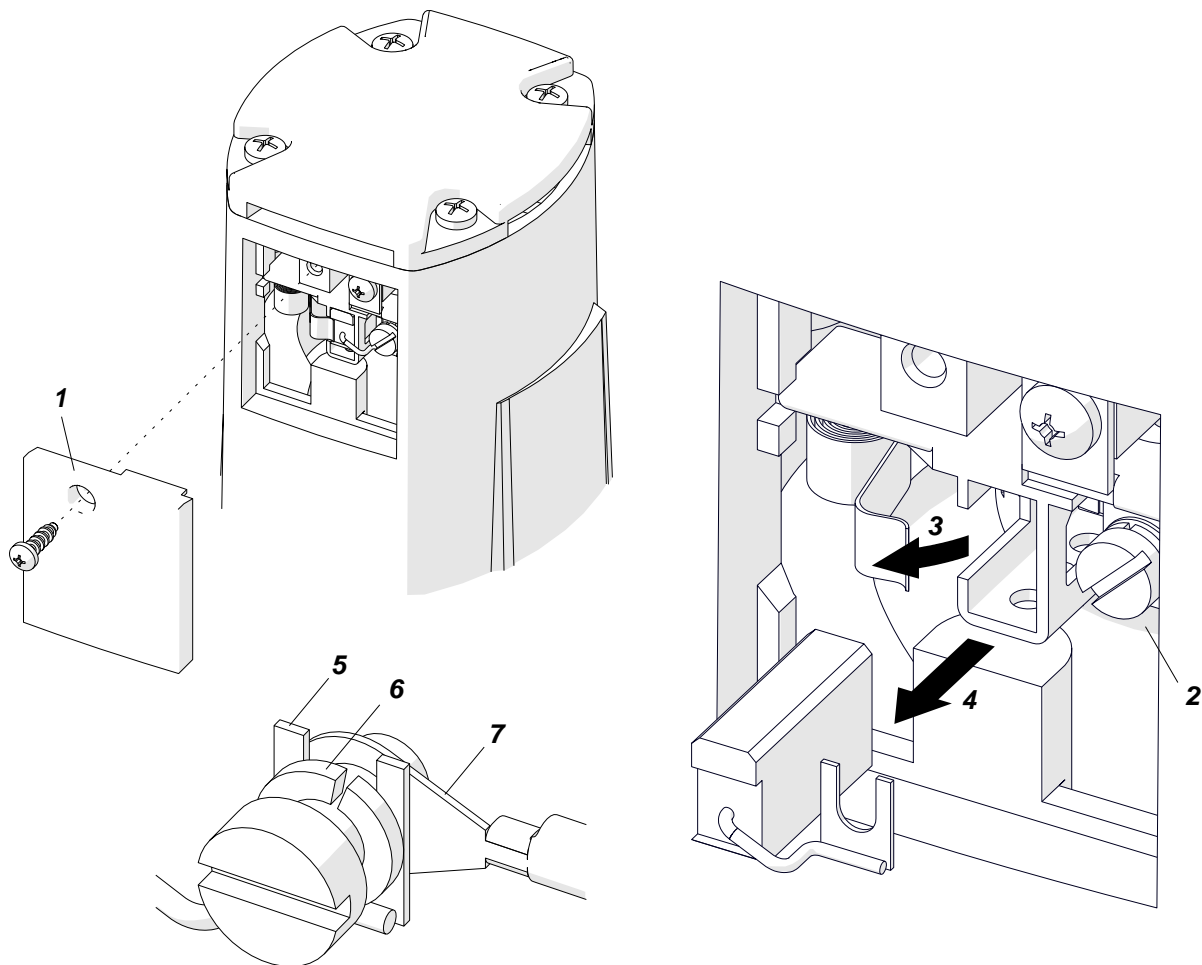
After the work is finished, release the ON/OFF switch to turn off the motor. Then, wait until the rotation stops, and unplug the power cord.

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

3.6. Replacing the brushes

Check the condition of the carbon brushes every 100 work hours. To do this, unplug the power cord, and remove the cover (1). Next, loosen the screw (2), pry off the spring (3), and remove the brush (4). If the length of the brush is less than 5 mm (0.2"), replace the two brushes with new ones.

To install, continue in reverse order. Make sure to put the terminal of the brush wire (5) between the washer (6) and the terminal of the motor wire (7). Then, let the motor operate with no load for 20 minutes.

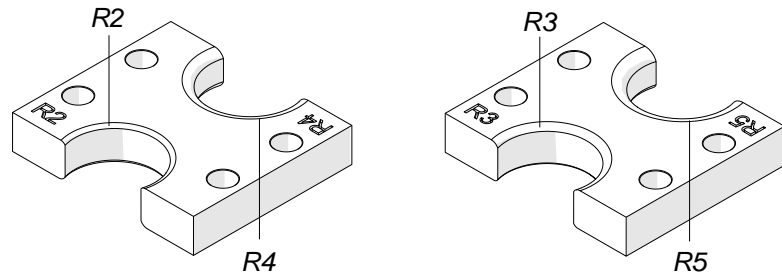


4. ACCESSORIES

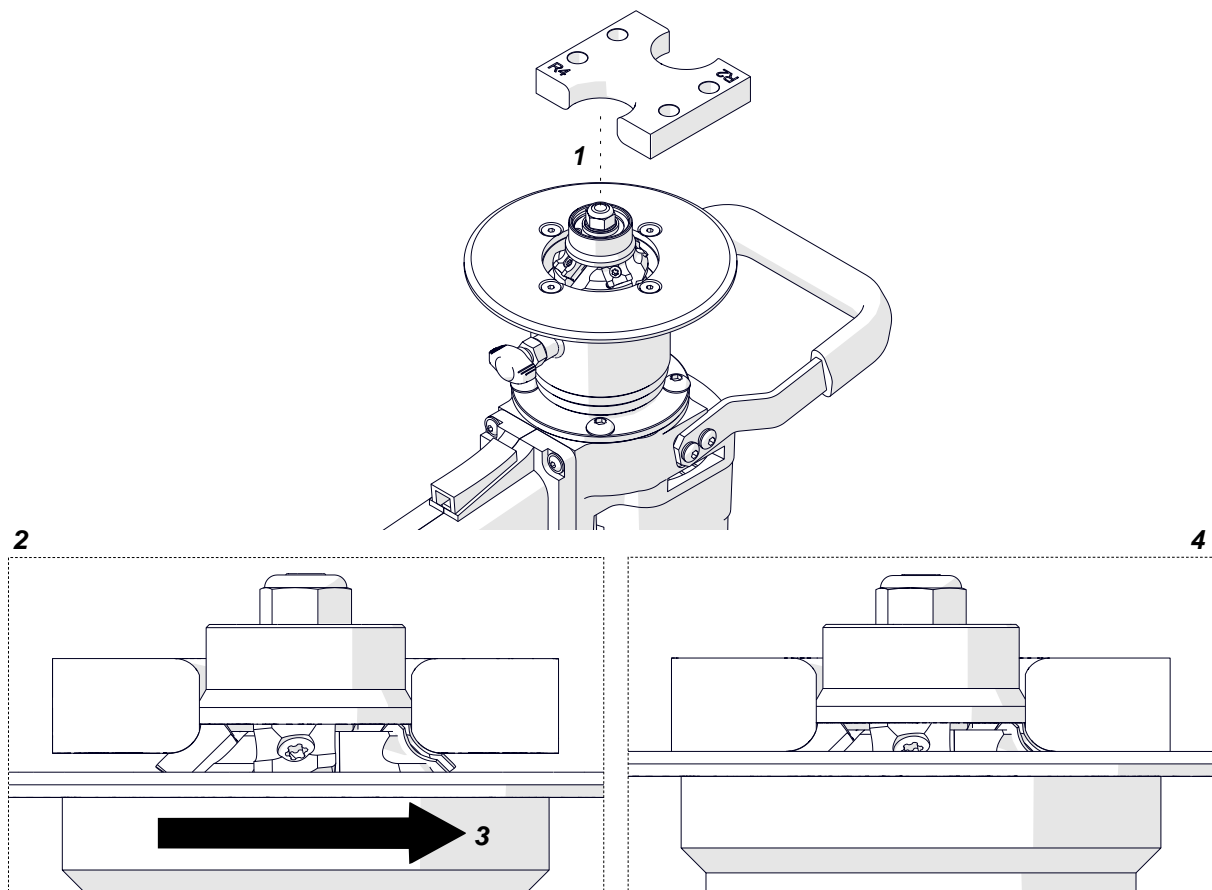
4.1. Radius insert positioner

Allows the guide to be set correctly for beveling with a radius of 2, 3, 4, or 5 mm.

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



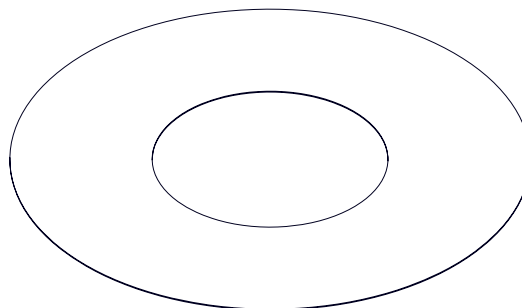
Unplug the power cord. Then, lower the sleeve to get access to the cutting inserts. Next, put the positioner from the top (1) so that the edge marked with a given radius is aligned with the edges of three cutting inserts with the same radius (2). Turn the sleeve (3) until the guide is in contact with the positioner (4).



4.2. Anti-scratch guide sticker

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



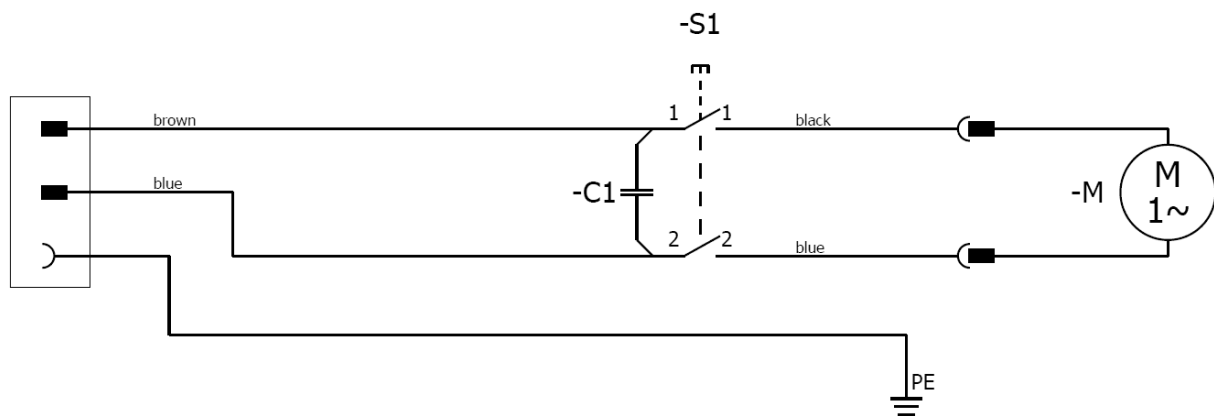
4.3. Milling tools

Part number	Part name
GLW-0540-09-00-00-0	30° milling head (includes: Ø35 mm roller, mounting screws for inserts; 4 cutting inserts required)
PLY-000391	Cutting insert for steel (sold per 10 in a set); for GLW-0540-08-00-00-0 and GLW-0540-09-00-00-0
PLY-000423	Cutting insert for aluminum (sold per 10 in a set); for GLW-0540-08-00-00-0 and GLW-0540-09-00-00-0
PLY-000360	R2 cutting insert (sold per 10 in a set); only for GLW-0540-08-00-00-0
PLY-000159	R3 cutting insert (sold per 10 in a set); only for GLW-0540-08-00-00-0
PLY-000160	R4 cutting insert (sold per 10 in a set); only for GLW-0540-08-00-00-0
PLY-000161	R5 cutting insert (sold per 10 in a set); only for GLW-0540-08-00-00-0
GLW-0540-16-00-00-0	45° milling head (includes: Ø22.5 mm roller, mounting screws for inserts; 3 cutting inserts required)
PLY-000282	Cutting insert (sold per 10 in a set) for GLW-0540-16-00-00-0

5. SPARE AND WEARING PARTS

Part number	Part name
GLW-0540-08-00-00-0	45° milling head (includes: Ø35 mm roller, 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
RLK-0540-16-02-00-0	Ø22.5 mm roller for GLW-0540-16-00-00-0
SRB-000289	Mounting screw for insert for GLW-0540-08-00-00-0 and GLW-0540-09-00-00-0
SRB-000311	Mounting screw for insert for GLW-0540-16-00-00-0
WKT-000005	T15P screwdriver for mounting screws
SMR-000005	Grease for mounting screws (5 g, 0.17 oz)
SCZ-000009	Carbon brush 115 V / 230 V

6. WIRING DIAGRAM



7. DECLARATION OF CONFORMITY

Declaration of Conformity

***PROMOTECH sp. z o.o.
ul. Elewatorska 23/1
15-620 Białystok
Poland***

We declare with full responsibility that:

BM-7 Beveling Machine

is manufactured in accordance with the following standards:

- EN 60745-1
- EN 55014
- EN ISO 12100

and satisfies regulations of the guidelines: 2014/30/EC, 2014/35/EC, 2006/42/EC.

Person authorized to compile the technical file:

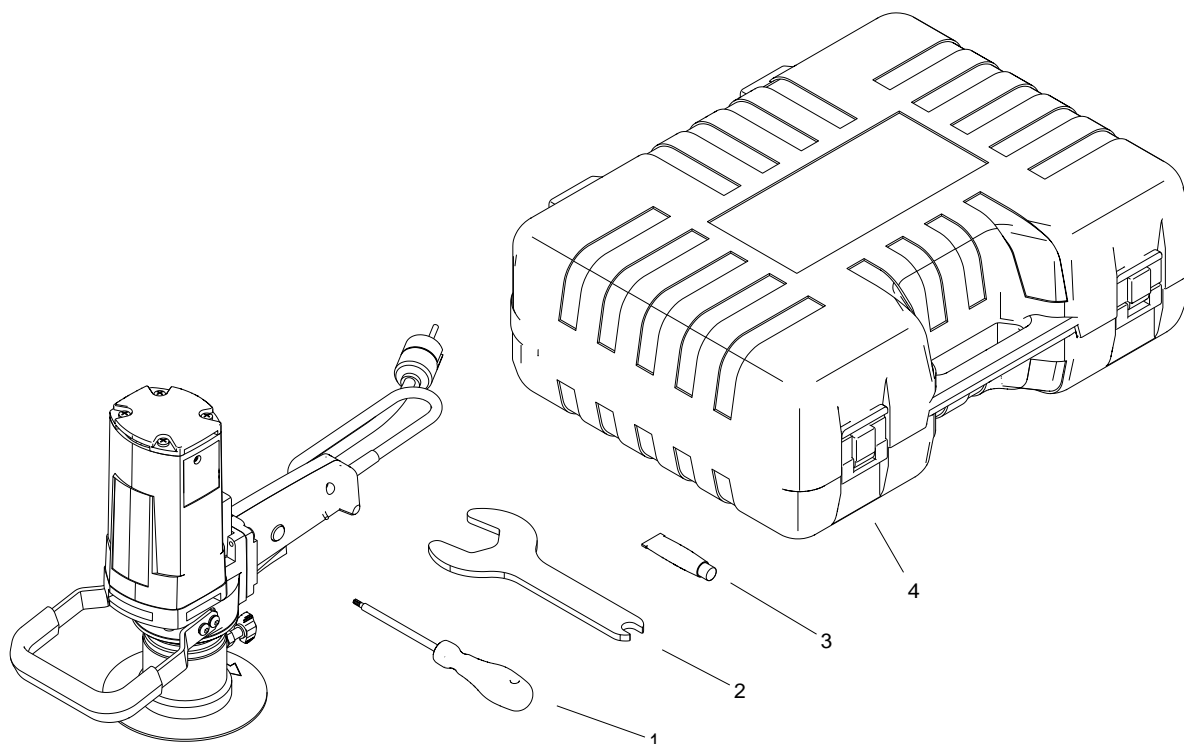
Marek Siergiej, ul. Elewatorska 23/1, 15-620 Białystok, Poland



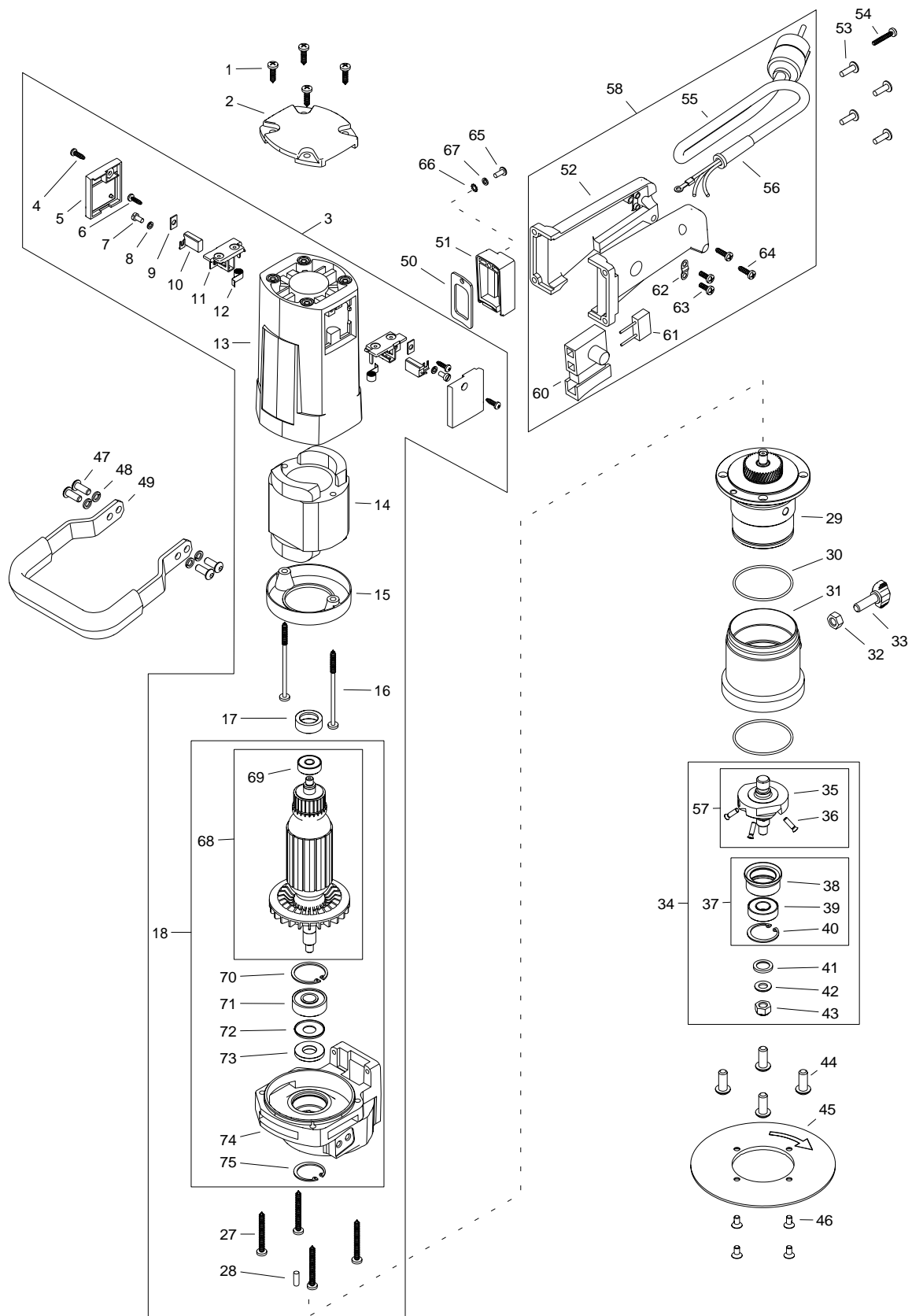
Białystok, 17 October 2018

Marek Siergiej
CEO

8. EXPLODED DRAWINGS AND PARTS LIST



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	WKT-000005	T15P TORX PLUS SCREWDRIVER	1
2	KLC-0540-07-00-00-0	SPECIAL FLAT WRENCH	1
3	SMR-000005	GREASE FOR SCREWS	1
4	SKR-000012	PLASTIC BOX	1



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	WKR-000081	CROSS RECESSED PAN HEAD SELF-TAPPING SCREW 4.8x19	4
2	PKR-0378-11-02-00-0	MOTOR COVER	1
3	SLN-0540-11-00-00-0	MOTOR ASSY – 230V	1
3	SLN-0540-11-00-00-1	MOTOR ASSY – 115V	1
4	WKR-000358	SCREW TW 4x13	2
5	PKR-000015	BRUSH COVER	2
6	WKR-000359	SCREW TW 3.5x13	2
7	WKR-000360	SCREW M4x8	2
8	PDK-000042	SPRING WASHER 4.1	2
9	PLY-000066	PLATE 8x13	2
10	SCZ-000009	BRUSH 6.4x12.5x19	2
11	SCT-000012	BRUSH HOLDER 6.4x12.5 ASSY	2
12	SPR-000032	SPRING 6x0.25	2
13	OBD-0279-02-03-09-3	STATOR HOUSING	1
14	STN-000041	STATOR – 230V	1
14	STN-000042	STATOR – 115V	1
15	PON-000001	STATOR GUARD	1
16	WKR-000357	SCREW GB 4.8x85	2
17	WKL-000008	BEARING INSERT 22x9	1
18	ZSP-0540-99-04-00-0	ROTOR SET ASSY – 230V	1
18	ZSP-0540-99-04-00-1	ROTOR SET ASSY – 115V	1
25	PRS-000336	SEAL RING 12x20x5	1
26	PRS-000344	INTERNAL RETAINING RING 20w	1
27	WKR-000511	SCREW TW 5x45	4
28	KLK-000046	DOWEL PIN 5n6x14	1
29	ZSP-0540-02-00-00-1	SPINDLE ASSY	1
30	PRS-000337	O-RING 52x2	2
31	TLJ-0540-03-00-00-0	SLEEVE ASSY	1
32	NKR-000019	HEX NUT M8	1
33	PKT-000055	KNOB M8x25	1
34	GLW-0540-08-00-00-0	RADIUS MILLING HEAD ASSY	1
35	KRP-0540-08-01-00-0	RADIUS MILLING HEAD BODY	1
36	SRB-000289	MOUNTING SCREW FOR ROUNDING INSERT	4
37	RLK-0540-08-02-00-0	ROLLER ASSY	1
38	RLK-0540-08-02-01-0	ROLLER	1
39	LOZ-000038	BALL BEARING 12x28x8	1
40	PRS-000018	INTERNAL RETAINING RING 28w	1
41	PDK-0540-08-03-00-0	WASHER	1
42	PDK-000202	SMALL ROUND WASHER 8.4	1
43	NKR-000038	HEX NUT M8 WITH POLYAMID INSERT	1
44	WKR-000437	HEX SOCKET BUTTON HEAD SCREW M8x20	4
45	TRC-0540-04-00-00-0	GUIDE	1
46	WKR-000538	TORX COUNTERSUNK HEAD SCREW M5x10	4
47	WKR-000290	HEX SOCKET BUTTON HEAD SCREW M6x12	4
48	PDK-000046	SPRING WASHER 6.1	4
49	UCW-0540-06-00-00-0	HANDLE ASSY	1
50	USZ-0279-02-07-00-0	SEAL	1
51	PSZ-0540-05-00-00-0	WIRE COVER	1
52	RKJ-000066	MOTOR HANDLE	1
53	WKR-000449	HEX SOCKET ROUND HEAD SCREW WITH FLANGE M5x16	4
54	WKR-000421	CROSS RECESSED OVAL PAN HEAD SCREW FOR PLASTIC 4x25	1

ITEM	PART NUMBER	DESCRIPTION	Q-TY
55	PWD-0540-18-00-00-0	POWER CORD 230V – CEE	1
55	PWD-0540-18-00-01-0	POWER CORD 230V – AU	1
55	PWD-0540-18-00-02-0	POWER CORD 230V – INDIA	1
55	PWD-0540-18-00-03-0	POWER CORD 230V – UK TYP G	1
55	PWD-0540-18-00-04-0	POWER CORD 120V – US	1
56	ODG-000003	STRAIN RELIEF	1
57	KRP-0540-99-01-00-0	RADIUS MILLING HEAD BODY ASSY	1
58	RKJ-0540-20-00-00-1	MOTOR HANDLE ASSY – CEE	1
58	RKJ-0540-20-00-01-1	MOTOR HANDLE ASSY – AU	1
58	RKJ-0540-20-00-02-1	MOTOR HANDLE ASSY – INDIA	1
58	RKJ-0540-20-00-03-1	MOTOR HANDLE ASSY – UK TYP G	1
58	RKJ-0540-20-00-04-1	MOTOR HANDLE ASSY – US	1
60	WLC-000046	POWER SWITCH	1
61	KND-000175	CAPACITOR	1
62	BLD-000025	CORD LOCK	1
63	WKR-000517	SCREW 4.2x13	2
64	WKR-000500	SCREW 4.2x16	2
65	WKR-000183	CROSS RECESSED PAN HEAD SCREW M4x10	1
66	PDK-000060	EXTERNAL TOOTH LOCK WASHER 4.3	1
67	PDK-000043	SPRING WASHER 4.1	1
68	WRN-0540-11-01-00-0	ROTOR ASSY 230V	1
68	WRN-0540-11-01-00-1	ROTOR ASSY 120V	1
69	LOZ-000095	BALL BEARING 7x22x7	1
70	PRS-000022	INTERNAL RETAINING RING 32w	1
71	LOZ-000086	BALL BEARING 12x32x10	1
72	USZ-0540-11-03-00-0	BEARING COVER	1
73	PDK-0540-11-02-00-0	WASHER	1
74	KRP-0540-01-01-00-1	BODY ASSY	1
75	PRS-000018	INTERNAL RETAINING RING 28w	1
-	SMR-000003	GREASE	0.05 kg

9. WARRANTY CARD

WARRANTY CARD No.....

..... in the name of Manufacturer warrants the BM-7 Beveling 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.....

2.02 / 21 October 2019

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