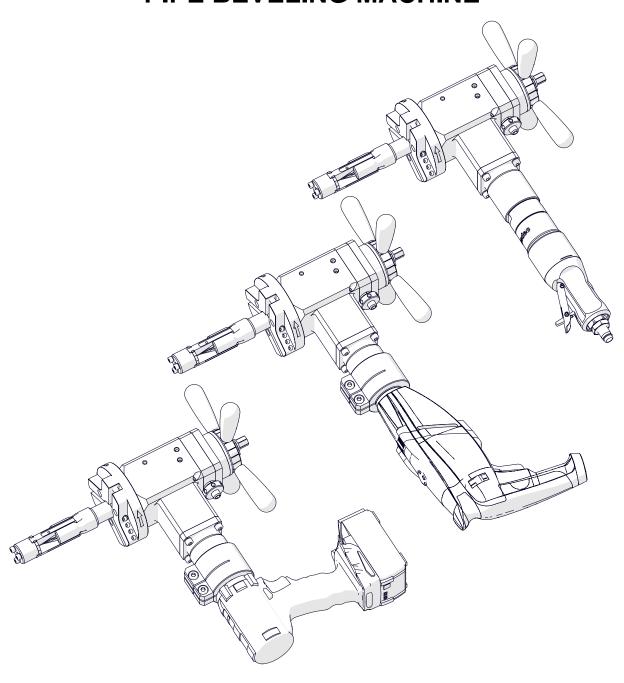


The tools of innovation.

OPERATOR'S MANUAL PB-5 / PBE-5 / PBC-5 PIPE BEVELING MACHINE



15335 E. Fremont Drive, Centennial, CO 80112 1–87STEELMAX, FAX 303–690–9172

 $\underline{www.steelmax.com} \ sales@steelmax.com$

Contents

1.	GENERAL INFORMATION	. 3
	1.1. Application	. 3
	1.2. Technical data	. 3
	1.3. Equipment included	. 4
	1.4. Dimensions	. 5
	1.5. Design	. 7
2.	SAFETY PRECAUTIONS	. 8
3.	STARTUP AND OPERATION	10
	3.1. Installing the jaw blocks and tool bits	10
	3.2. Installing (removing) the mandrel and adjusting the clearance	11
	3.3. Installing the motor	12
	3.4. Clamping the machine into the pipe	13
	3.5. Preparing the air (for machine with air motor)	14
	3.6. Operating	14
	3.7. Troubleshooting the electric motor	16
	3.8. Troubleshooting the battery motor	16
	3.9. Replacing the spindle disk	17
	3.10. Facing and beveling at the same time	18
4.	ACCESSORIES	19
	4.1. Tool bits for carbon steel	19
	4.2. Tool bits for stainless steel	21
	4.3. Air motor	22
	4.4. Electric motor	22
	4.5. Battery motor	22
	4.6. Air preparation unit	23
	4.7. 5.2 Ah battery	23
	4.8. Battery charger	23
	4.9. 75 mm spindle disk	24
	4.10. 140 mm spindle disk set	24
	4.11. Ratchet wrench	25
	4.12. Small expanding mandrel	26
	4.13. Coolant	26
5.	EXPLODED DRAWINGS AND PARTS LIST	27
6.	DECLARATIONS OF CONFORMITY	30
7	MADDANTY CADD	22



1. GENERAL INFORMATION

1.1. Application

The PB-5 / PBE-5 / PBC-5 is a pipe beveling machine designed to mill pipes made of carbon and stainless steel, aluminum alloys, and copper-nickels. Depending on the tool bit used, the machine allows external beveling, internal beveling, J-beveling, internal calibration, and facing pipes from inner diameters of 32 mm (1.26") to outer diameters of 114 mm (4.49"). You can install up to three tool bits at the same time.

An optional 140 mm spindle disk set allows the machine to bevel pipes with outer diameters up to 140 mm. Using an optional 75 mm spindle disk, ratchet wrench, or both, helps working in places hard to reach. An optional small expanding mandrel allows machining pipes with inner diameters from 25 mm to 33 mm (0.98–1.30").

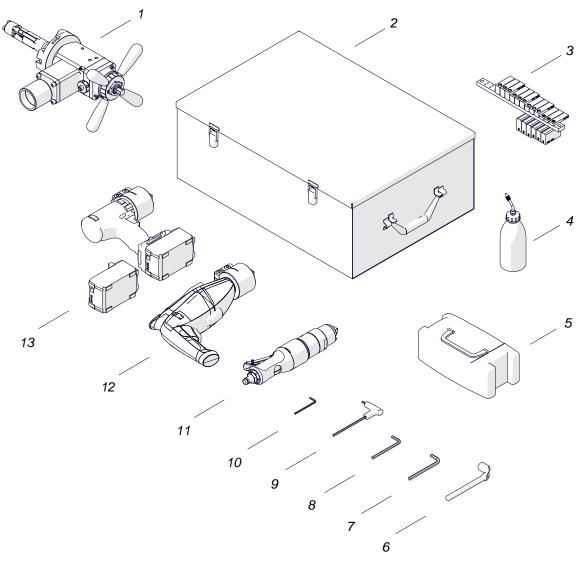
1.2. Technical data

		PB-5	PBE-5	PBC-5
Pressure		0.6 MPa (87 psi)	-	-
Voltage		_	1~ 110–120 V, 50–60 Hz 1~ 220–240 V, 50–60 Hz	18 V DC, 5.2 Ah
Air motor		Modec NT10RT0851FCA1F-CO	_	_
Electric motor		_	Metabo SBEV 1100-2 S	Metabo BS 18 LTX Impuls
Connection		CEJN 410 DN 10.4 R 1/2" BSPT fitting for quick-coupling	Electrical plug	Battery connection
Air consumption		1400 l/min (50 CFM)	_	_
Power		800 W	1100 W	-
Pipe diameter		32 mm ID to 114 mm OD (1.26–4.49")	32 mm ID to 114 mm OD (1.26–4.49")	32 mm ID to 114 mm OD (1.26–4.49")
NA - 1 1	up to 114 mm	12 mm (0.47")	12 mm (0.47")	12 mm (0.47")
Maximum pipe wall thickness for	114–124 mm*	10 mm (0.39")	10 mm (0.39")	10 mm (0.39")
outer diameter	124-132 mm*	8 mm (0.31")	8 mm (0.31")	8 mm (0.31")
outer diameter	132-140 mm*	6 mm (0.24")	6 mm (0.24")	6 mm (0.24")
Rotational speed without load		180 rpm	_	0-50 rpm (gear 1) 0-180 rpm (gear 2)
Nominal rotational speed		90 rpm	0-113 rpm (gear 1) 0-318 rpm (gear 2)	_
Protection class		_	II	_
Required ambient temperature		0-40°C (34-104°F)	0-40°C (34-104°F)	0-40°C (34-104°F)
Weight with motor		10 kg (22 lbs)	11 kg (24 lbs)	10 kg (22 lbs), includes battery

^{*} Available with the optional 140 mm spindle disk set.



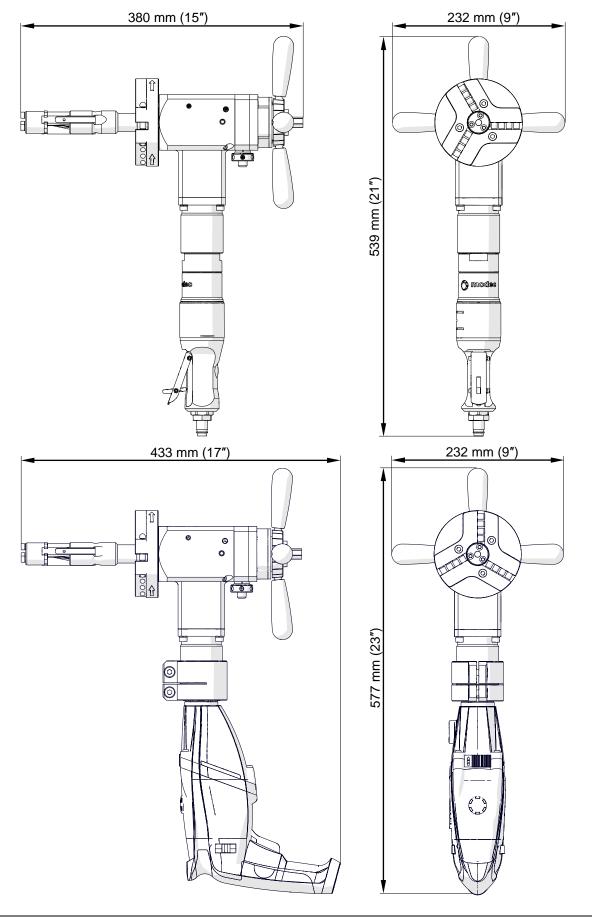
1.3. Equipment included



1	Beveling machine (without tool bits)	1 unit
2	Metal box	1 unit
3	Jaw blocks (number 1, 2, 3, 4, 5, 6)	3 sets
4	Coolant container	1 unit
5	Tool container	1 unit
6	13 mm socket wrench	1 unit
7	6 mm hex wrench	1 unit
8	5 mm hex wrench 1 un	
9	4 mm hex wrench with handle 1 un	
10	3 mm hex wrench with ball end	1 unit
11	Air motor	Option
12	Electric motor	Option
13	Battery motor	Option
_	Operator's Manual	1 unit

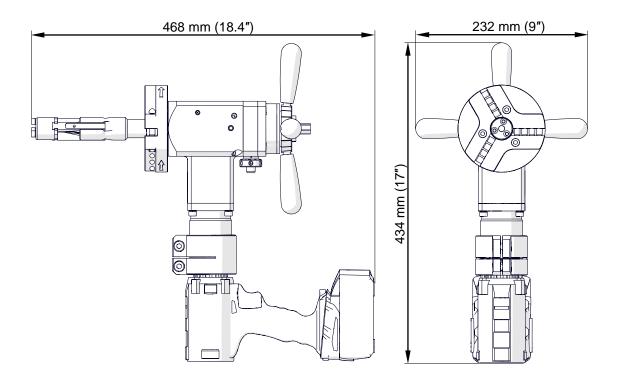


1.4. Dimensions



PB-5 / PBE-5 / PBC-5 Operator's Manual







1.5. Design

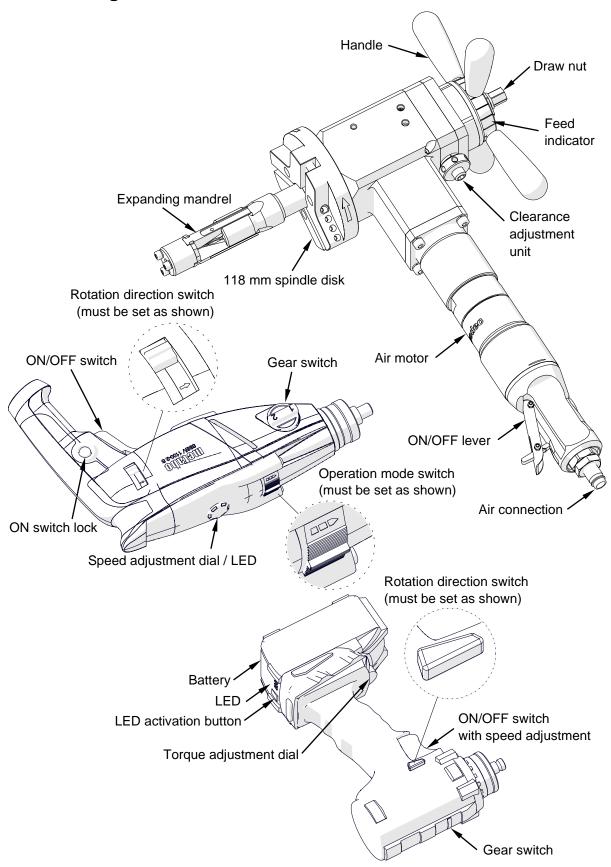


Fig. 1. View of PB-5 and of PBE-5 electric motor and PBC-5 battery motor



2. SAFETY PRECAUTIONS

- 1. Before use, read this Operator's Manual and complete a training in occupational safety and health.
- 2. Use only motors specified in the technical data.
- 3. Use only in applications specified in this Operator's Manual.
- 4. Make sure that the machine has all parts and they are genuine and not damaged.
- 5. Make sure that the specifications of the air (power) source are the same as those specified on the rating plate.
- 6. Supply the machine with air motor only with clean and lubricated air. Make sure that the air source has an air preparation unit that contains a filter, regulator, and lubricator.
- 7. Do not pull the hose (cord). This can cause damage and serious injury.
- 8. Keep untrained bystanders away from the machine.
- 9. Before each use, ensure the correct condition of the machine, air (power) source, supply hose (power cord, battery), quick coupling (plug), control parts, and tool bits.
- 10. 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.
- 11. Avoid accidental starts. Do not put the machine so that the motor will start. Do not carry the machine with air motor by holding the ON/OFF lever.
- 12. Keep the machine dry. Do not expose the machine to rain, snow, or frost.
- 13. Keep the work area well-lit, clean, and free of obstacles.
- 14. Do not use near flammable materials, or in explosive environments.
- 15. Attach the pipe so that it will not fall or roll.
- 16. Use only tool bits specified in this Operator's Manual.
- 17. Do not use tool bits that are dull or damaged.
- 18. Attach the tool bits with two screws. Remove wrenches from the work area before you connect the machine to the air (power) source.
- 19. Use eye and ear protection, protective footwear, and protective clothing. Do not use loose clothing.
- 20. Use an electric/battery motor only after you set the rotation direction switch and the operation mode switch as shown in Fig. 1. Using left rotation or impulse mode (the switches set to the opposite positions) can damage the machine.



- 21. Do not touch chips or moving parts. Do not let anything catch in moving parts.
- 22. After each use, clean the machine with a dry cotton cloth and no chemical agents. Do not remove chips with bare hands.
- 23. Maintain the machine and install/remove parts and tool bits only after you unplug the machine from the air (power) source or remove the battery.
- 24. Repair only in a service center appointed by the seller.
- 25. 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.
- 26. Do not leave the machine when it operates.
- 27. If you are not going to use the machine, remove the tool bits from the sockets. Then, remove the machine from the work area and keep it in a safe and dry place.
- 28. 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 the jaw blocks and tool bits

Use the table that follows to select the correct jaw blocks for the diameter of the pipe.

Pipe inner diameter		Jaw blocks
[mm]	[inch]	number
32-43.5	1.26-1.71	ı
43–55	1.69-2.17	1
54–66.2	2.13-2.61	2
64.7–76.9	2.55-3.03	3
74.9–87.1	2.95-3.43	4
85.2–97.4	3.35-3.83	5
94.8–107	3.73-4.21	6

Use the 3 mm hex wrench to attach the jaw blocks to the expanding mandrel (1, Fig. 2). Then, select up to three tool bits suitable to planned use, and put them in the sockets. Point the blades in the rotation direction (2). Next, use the 4 mm hex wrench and two of the screws (3) to attach each tool bit. Make sure that the pressing surfaces of the screws are in full contact with the tool bits.

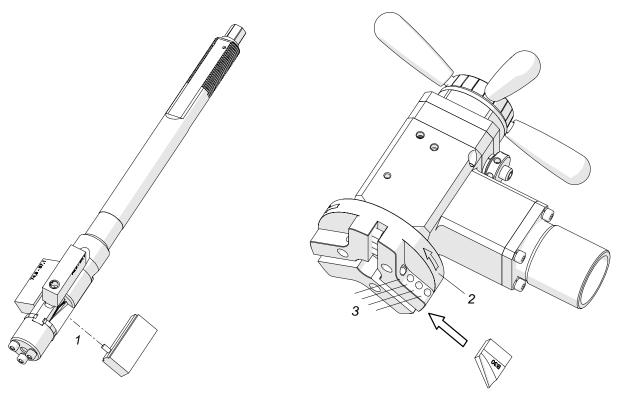


Fig. 2. Installing the jaw blocks and tool bits



3.2. Installing (removing) the mandrel and adjusting the clearance

Loosen the nut and use the 6 mm hex wrench to loosen the set screw (1, Fig. 3), and put the mandrel into the machine (2). Make sure that tool bits installed are not in contact with the mandrel. Next, rotate the handles to the right (3) by at least 10 turns until the mandrel engages with the machine fully. Tighten the set screw (4) and check if you can easily rotate the handles in both directions. If the screw is too tight, loosen it lightly. Finally, tighten the lock nut (5).

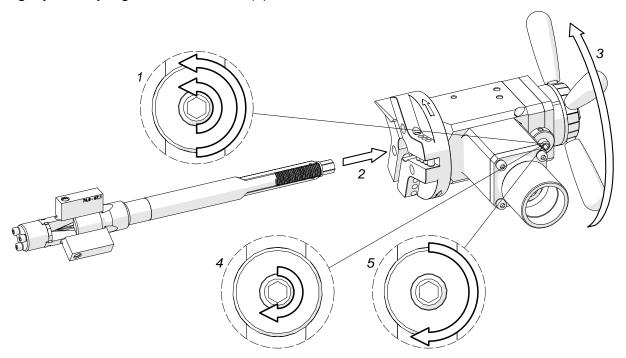


Fig. 3. Installing the mandrel into the machine

If the mandrel becomes loose causing vibrations of the tool bits during machining, do the above actions without removing the mandrel from the machine.

To remove the mandrel, loosen the nut and use the 6 mm hex wrench to loosen the set screw (1, Fig. 3) by at least one turn. Then, rotate the handles to the left to remove the mandrel.



3.3. Installing the motor

When you use the air motor, put it into the machine (1, Fig. 4) so that the arbor is in the socket (2). Then, rotate the motor to the left (3) to tighten.

To attach the electric/battery motor, put the clamping ring (4) onto the machine. Attach the correct driver (5) to the motor. Put the motor into the machine (6) so that the arbor is in the socket (2). Then, use the 6 mm hex wrench to tighten the clamping ring (7).

In the electric motor, set the rotation direction switch as shown in Fig. 1. In the battery motor, set the rotation direction switch and the operation mode switch as shown in Fig. 1.

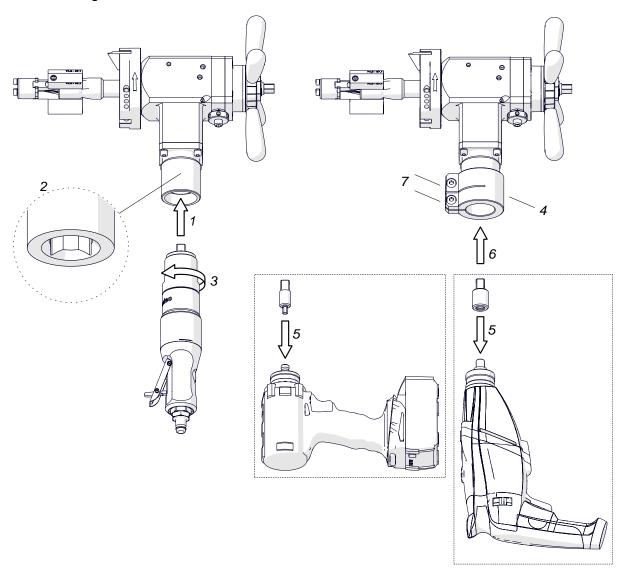


Fig. 4. Installing the air, electric, and battery motor



3.4. Clamping the machine into the pipe

Put the machine into the pipe (1, Fig. 5) to set the tool bits at least 3 mm (0.12") from the pipe end. Then, use the 13 mm socket wrench to rotate the draw nut (2) to the right to expand the jaw blocks and clamp the machine into the pipe. Make sure that the jaw blocks are put further than the surface after machining (3).

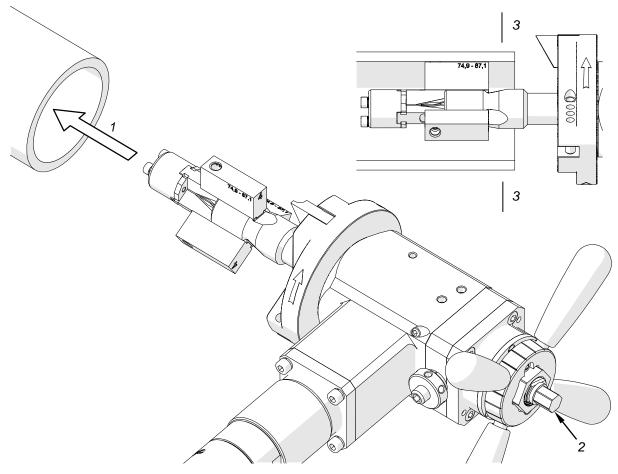


Fig. 5. Clamping the machine into the pipe



3.5. Preparing the air (for machine with air motor)

Connect the machine to a correctly prepared air source of sufficient purity. Make sure that all inner diameters of the air source (including the supply hose and fittings) are of at least 10 mm (0.4"). Make sure that the air source has an air preparation unit that contains a filter, regulator, and lubricator (FRL).

Maintain the FRL unit as required. Keep the water trap drained, filter cleaned, and the lubricator oil reservoir filled so that there is a drop of oil every 2–5 seconds. Use oil whose ignition temperature is more than 260°C (500°F). If you are not going to use the machine for at least 24 hours, increase the supply of oil and let the motor operate for 2–3 seconds. This will prevent rusting and degrading of the rotor vanes.

3.6. Operating

After you connect the machine to the correct supply, press the ON/OFF lever to start.

In the electric motor, set the gear 1. In the battery motor, set the gear 1 and the maximum torque. Then, press and hold the ON/OFF switch. To lock the switch in the position ON (not available in the battery motor), press the ON switch lock before you release the ON/OFF switch. To adjust the speed, use the dial or, in the battery motor, change the force that you apply on the ON/OFF switch.

Apply the coolant on the working edge. Then, rotate the handles to the right to bring the tool bits close to the pipe. If the pipe end is not perpendicular to the pipe axis, the tool bit will cut only a small part of the pipe during initial rotations. Thus, use a low feed rate until the tool bit is in continuous contact with the pipe during at least one rotation. The feed is 0.11 mm (0.004") per graduation (Fig. 6) or 2 mm (0.08") per one full turn of the handles.

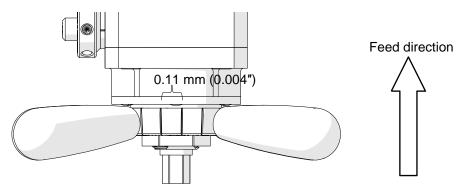


Fig. 6. View of the feed indicator

Rotate the handles to the right to continue machining. Use such a feed rate so that the chip is continuous. If the feed rate is too low, only small chips are removed.



If the feed rate is too high, machining is difficult and the chips are rough or torn. Do not allow the tool bit to burnish the surface. If chatter problems occur, decrease the feed rate and the speed. Then, make sure that the tool bits that you use are sharp and are of correct type for the material. Stainless steel can harden during work. Thus, cut stainless steel with a high enough feed, 0.08–0.15 mm (0.003–0.006") per rotation, to cut under the hardened surface.

If the electric motor becomes overloaded, the motor shuts off. However, do not let the motor overload. If possible, cut hard materials with a low feed rate and speed.

After the pipe end is machined fully, stop rotating the handles and allow several more turns of the spindle to improve the finish of the surface. Then, use the ON/OFF lever/switch to turn off the motor, and wait until the rotation stops. Rotate the handles to the left to move the tool bits away from the pipe end to at least 3 mm (0.12"). Then, rotate the 13 mm socket wrench to the left to loosen the draw nut and release the clamping, and remove the machine from the pipe.

Clean the pipe with petroleum ether.

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



3.7. Troubleshooting the electric motor

If the LED is on, the motor power has been decreased. This prevents overheating of the motor as a result of frequent overload. To decrease the temperature of the motor, let the motor operate with no load at the maximum speed.

If the LED flashes fast, the automatic restart has been prevented after a power failure. Then, to start the motor, turn it off and on.

If the LED flashes slow, the carbon brushes are almost worn and the motor has been shut off. Replace the brushes with new ones specified by the manufacturer of the motor.

3.8. Troubleshooting the battery motor

If the motor is frequently overloaded for extended periods, it will be shut off. To stop the beeping signal, release the ON/OFF switch. If you feel that the motor or the battery is warm, before use wait until its temperature decreases. To decrease the temperature more quickly, let the motor operate with no load at the maximum speed.

The motor can also shut off if the machine jams in the workpiece. To continue work, release the ON/OFF switch and press it again. Do not let the machine jam in the workpiece.

If the LED flashes, the battery is almost discharged. To check the charge level, press the LED activation button. If the battery is discharged fully, charge the battery or replace to a fully charged.



3.9. Replacing the spindle disk

Loosen the nut and use the 6 mm hex wrench to loosen the set screw (1, Fig. 7) by at least one turn. Then, rotate the handles to the left (2) to remove the mandrel (3).

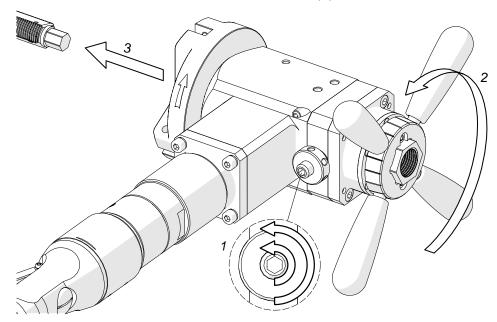


Fig. 7. Removing the mandrel from the machine

Use the 5 mm hex wrench (1, Fig. 8) and remove the spindle disk (2). Then, install the new disk (3) onto the pin (4) and tighten with the same screws.

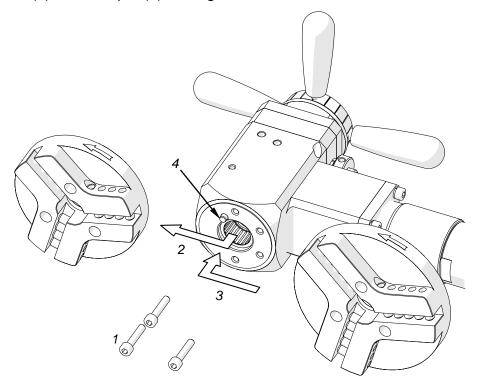


Fig. 8. Replacing the spindle disk



3.10. Facing and beveling at the same time

When you face and bevel at the same time, use short or long beveling tool bit depending on the pipe diameter (Fig. 9).

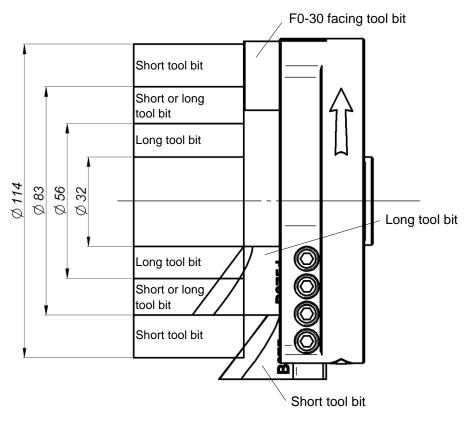
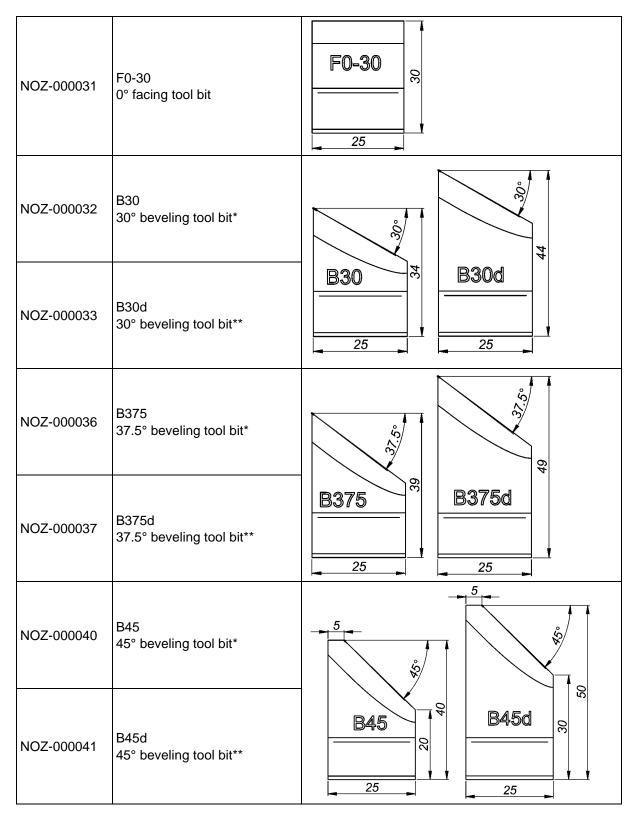


Fig. 9. Positioning the facing tool bit and a short or long beveling tool bit



4. ACCESSORIES

4.1. Tool bits for carbon steel



^{*} For diameters over 56 mm, if works together with 0° facing tool bit.

^{**} For diameters under 83 mm, if works together with 0° facing tool bit.



		
NOZ-000052	IC15-40 – on the left 15° internal calibration tool bit	5 15° 15° 14 04 04
NOZ-000053	IC15-40 – on the right (for diameters over 56 mm) 15° internal calibration tool bit	25 25 25
NOZ-000087	IB12-60 12° internal beveling tool bit	12° 1B12-60
NOZ-000058	J10-R6 10° J-beveling tool bit	J10-R6 \(\times \) J15-R2 \(\times \)
NOZ-000057	J15-R2 15° J-beveling tool bit	25 25
NOZ-000059	J20-R8 20° J-beveling tool bit	J20-R8 8 120-R1 8
NOZ-000088	J20-R1 20° J-beveling tool bit	J20-R8 J20-R1 S 25



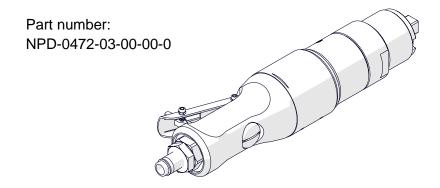
4.2. Tool bits for stainless steel

NOZ-000067	F0-30 0° facing tool bit (TiAIN coated)	F0-30 00 00 00 00 00 00 00 00 00 00 00 00 0
NOZ-000034	NB30 30° beveling tool bit* (TiAIN coated)	30°
NOZ-000035	NB30d 30° beveling tool bit** (TiAIN coated)	NB30 8 NB30d 25 25
NOZ-000038	NB375 37.5° beveling tool bit* (TiAIN coated)	49
NOZ-000039	NB375d 37.5° beveling tool bit** (TiAIN coated)	NB375 NB375d NB375d

^{*} For diameters over 56 mm, if works together with 0° facing tool bit.
** For diameters under 83 mm, if works together with 0° facing tool bit.

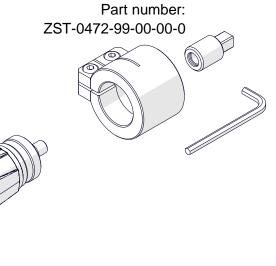


4.3. Air motor

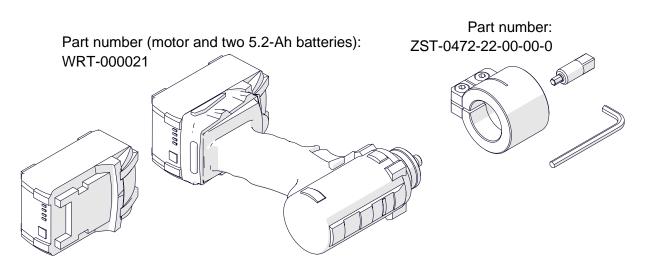


4.4. Electric motor

Part number: SLN-000238 (230 V)



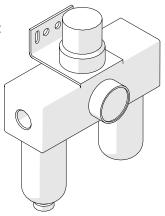
4.5. Battery motor





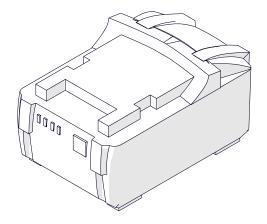
4.6. Air preparation unit

Part number (filter, regulator, lubricator): ZST-000021

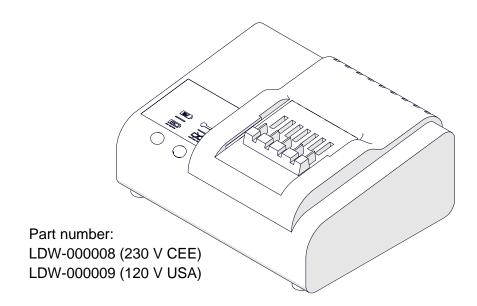


4.7. 5.2 Ah battery

Part number: AKM-000088



4.8. Battery charger

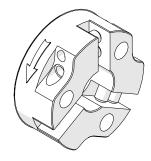




4.9. 75 mm spindle disk

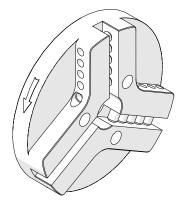
Helps working in places hard to reach.

Part number: TRC-0472-12-00-00-0

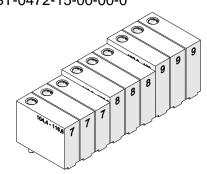


4.10. 140 mm spindle disk set

Allows machining pipes from inner diameters of 105 mm (4.13") to outer diameters of 140 mm (5.51").



Part number: ZST-0472-15-00-00-0



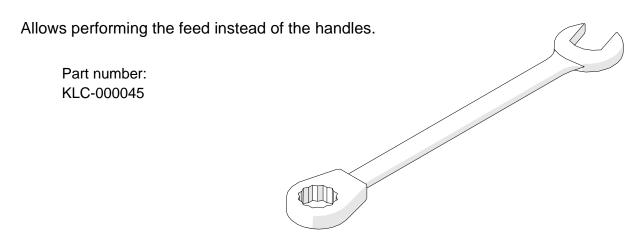
140 mm spindle disk	1 unit
Jaw blocks (number 7, 8, 9)	3 sets

To install the spindle disk, remove the installed existing spindle disk (Fig. 7, Fig. 8). Then, use the table that follows to select the correct jaw blocks of the set for the inner diameter of the pipe to be machined. Use the 3 mm hex wrench to tighten the blocks to the expanding mandrel (1, Fig. 2). Use the 4 mm hex wrench to tighten the tool bits in the sockets with the screws (3, Fig. 2).

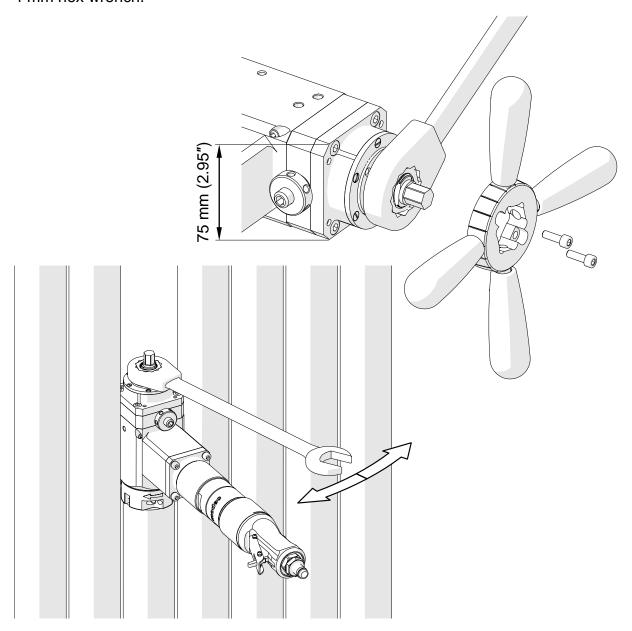
Pipe inner diameter with 140 mm spindle disk set		Jaw block	
[mm]	[inch]	number	
104.4–116.6	4.11–4.59	7	
113.6–125.8	4.47-4.95	8	
122.8–133	4.83-5.24	9	



4.11. Ratchet wrench



To remove the feed disk and use the ratchet wrench, remove two screws with the 4 mm hex wrench.

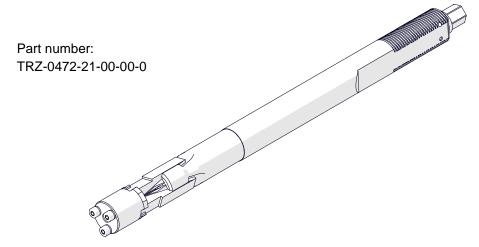


PB-5 / PBE-5 / PBC-5 Operator's Manual



4.12. Small expanding mandrel

Allows machining pipes with inner diameters from 25 mm to 33 mm (0.98–1.30").



To remove the installed expanding mandrel, loosen the nut and use the 6 mm hex wrench to loosen the set screw (1, Fig. 3) by at least one turn. Then, rotate the handles to the left to remove the mandrel. Next, install the new mandrel into the machine (2, 3, 4, 5, Fig. 3).

4.13. Coolant

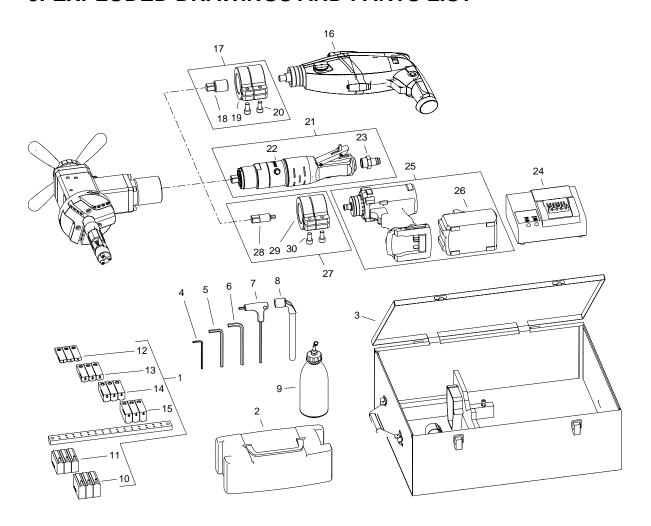
Part number:

OLJ-0505-09-00-00-0 (0.5 kg, 1.1 lbs) OLJ-0505-10-00-00-0 (1 kg, 2.2 lbs) OLJ-0505-11-00-00-0 (5 kg, 11 lbs)





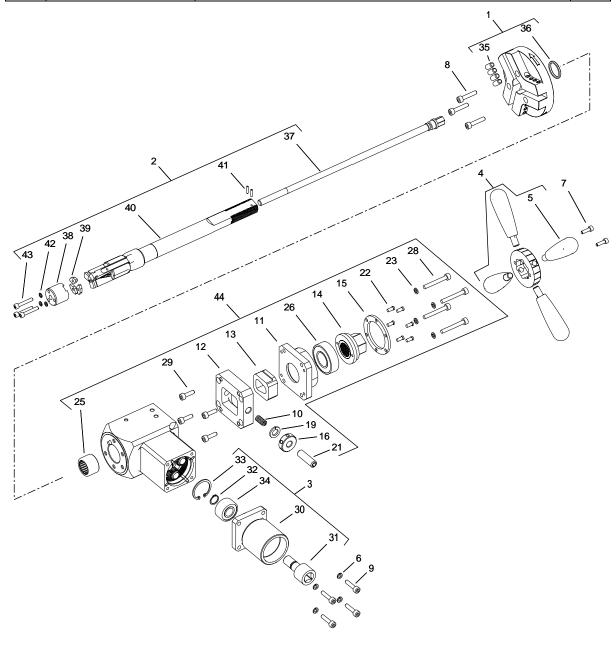
5. EXPLODED DRAWINGS AND PARTS LIST



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	ZST-0472-05-00-00-0	JAW BLOCKS SET	1
2	PJM-000010	TOOL CONTAINER	1
3	SKR-0472-20-00-00-0	METAL BOX	1
4	KLC-000055	3 MM HEX WRENCH WITH BALL END	1
5	KLC-000008	5 MM HEX WRENCH	1
6	KLC-000009	6 MM HEX WRENCH	1
7	KLC-000036	4 MM HEX WRENCH WITH HANDLE	1
8	KLC-000041	13 MM SOCKET WRENCH	1
9	PJM-000003	COOLANT CONTAINER	1
10	KPL-0472-05-01-00-0	BLOCK SET L=7.4	1
11	KPL-0472-05-02-00-0	BLOCK SET L=13	1
12	KPL-0472-05-03-00-0	BLOCK SET L=18.4	1
13	KPL-0472-05-04-00-0	BLOCK SET L=23.5	1
14	KPL-0472-05-05-00-0	BLOCK SET L=28.6	1
15	KPL-0472-05-06-00-0	BLOCK SET L=33.4	1
16	SLN-000238	MOTOR – 230V	1
17	ZST-0472-99-00-00-0	ELECTRIC MOTOR ATTACHMENT SET	1
18	ZBI-0472-11-02-00-1	DRIVER	1
19	OBJ-0472-11-01-00-1	CLAMPING RING	1



ITEM	PART NUMBER	DESCRIPTION	Q-TY
20	SRB-000142	HEX SOCKET HEAD CAP SCREW M8x16	2
21	NPD-0472-03-00-00-0	AIR MOTOR ASSY	1
22	SLN-000189	AIR MOTOR	1
23	KRC-000010	MALE PLUG G1/2	1
24	LDW-000008	BATTERY CHARGER – 230V (CEE)	1
24	LDW-000009	BATTERY CHARGER – 120V (USA)	1
24	LDW-000010	BATTERY CHARGER – 120V (UK)	1
24	LDW-000011	BATTERY CHARGER – 230V (AU)	1
25	WRT-000021	CORDLESS ELECTRIC MOTOR	1
26	AKM-000088	5.2Ah BATTERY	2
27	ZST-0472-22-00-00-0	CORDLESS ELECTRIC MOTOR ATTACHMENT SET	1
28	ZBI-0472-22-01-00-0	DRIVER	1
29	OBJ-0472-11-01-00-1	CLAMPING RING	1
30	SRB-000142	HEX SOCKET HEAD CAP SCREW M8x16	2





ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	TRC-0472-02-00-00-1	SPINDLE DISK ASSY	1
2	TRZ-0472-04-00-00-0	EXPANDING MANDREL ASSY	1
3	KRP-0472-07-00-00-0	DRIVER BODY ASSY	1
4	TRC-0472-13-00-00-0	FEED DISK ASSY	1
5	DZW-0472-01-03-00-1	LEVER	4
6	PDK-000046	SPRING WASHER 6.1	4
7	SRB-000083	HEX SOCKET HEAD CAP SCREW M5x16	2
8	SRB-000118	HEX SOCKET HEAD CAP SCREW M6x30	3
9	SRB-000115	HEX SOCKET HEAD CAP SCREW M6x25	4
10	SPR-0167-18-02-00-0	SPRING	1
11*	KRP-0472-01-05-00-1	FEED HOUSING	1
12*	OBJ-0472-01-06-00-0	LOCKING CLASP	1
13*	OBJ-0472-01-07-00-0	DRIVER CLASP	1
14*	NKR-0472-01-08-00-1	DRAW NUT	1
15*	PRS-0472-01-10-00-0	LOCKING RING	1
16	NKR-0472-01-11-00-0	KNURLED NUT	1
17	NKR-000114	BEARING NUT KM-7 M35x1.5	1
18	PRS-000035	INTERNAL RETAINING RING 62w	1
19	PDK-000053	SPRING WASHER 12.2	1
20	PDK-000184	BEARING TOOTHED WASHER MB-7	1
21	WKR-000460	HEX SOCKET SET SCREW WITH FLAT POINT M12x1.25x40	1
22*	WKR-000455	SLOTTED PAN HEAD SCREW WITH SMALL HEAD M5x10	6
23*	PDK-000046	SPRING WASHER 6.1	4
25	LOZ-000010	NEEDLE BEARING 25x32x20	1
26*	LOZ-000066	BALL BEARING 25x52x15	1
27	LOZ-000143	ANGULAR BALL BEARING 35x62x14	1
28*	SRB-000126	HEX SOCKET HEAD CAP SCREW M6x45	4
29*	SRB-000114	HEX SOCKET HEAD CAP SCREW M6x20	4
30	KRP-0472-07-01-00-0	DRIVER BODY	1
31	WLK-0472-07-04-00-0	DRIVER SHAFT	1
32	PRS-000005	EXTERNAL RETAINING RING 15z	1
33	PRS-000150	INTERNAL RETAINING RING 35w	1
34	LOZ-000092	DOUBLE-ROW ANGULAR BALL BEARING 15x35x15.9	1
35	WKR-000030	HEX SOCKET SET SCREW WITH FLAT POINT M8x20	12
36	PRS-000105	SEAL O-RING 25.2x3	1
37	SRB-0472-04-03-00-0	MANDREL SCREW	1
38	NKR-0472-04-04-00-0	NUT	1
39	PLY-0472-04-05-00-0	MANDREL PLATE	3
40	TRZ-0472-04-10-00-0	MANDREL WITH JAWS	1
41	KLK-000103	DOWEL PIN 3n6x14	2
42	PDK-000045	SPRING WASHER 5.1	3
43	SRB-000089	HEX SOCKET HEAD CAP SCREW M5x30	3
44	KRP-0472-01-00-00-1	BODY ASSY	1

^{*} install only when the expanding mandrel (item 2) is already installed



6. DECLARATIONS OF CONFORMITY

Declaration of Conformity

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

We declare with full responsibility that:

PB-5 PIPE BEVELING MACHINE

is manufactured in accordance with the following standard:

EN ISO 12100

and satisfies regulations of the guideline 2006/42/EC.

Białystok, 7 April 2014

Marek Siergiej
CEO



Declaration of Conformity

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

We declare with full responsibility that:

PBE-5 PIPE BEVELING MACHINE

is manufactured in accordance with the following standards:

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

and satisfies regulations of the guidelines: 2004/108/EC, 2006/95/EC, 2006/42/EC.

Białystok, 7 April 2014

Marek Siergiej
CEO



Declaration of Conformity

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

We declare with full responsibility that:

PBC-5 PIPE BEVELING MACHINE

is manufactured in accordance with the following standard:

EN ISO 12100

and satisfies regulations of the guideline 2006/42/EC.

Białystok, 31 May 2016

Marek Siergiej
CEO



7. WARRANTY CARD

WARRANTY CARD No
in the name of Manufacturer warrants the PB-5 / PBE-5 / PBC-5 Pipe 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 tool bits 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

1.09 / 9 December 2019

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