



INSTRUCTION MANUAL



BOILER 1-4 K

Range Ø 23 / 108 mm (0,90" — 4,25")

G.B.C. Industrial Tools S.p.A.

Via Sandro Pertini 41/43 – 25046 Cazzago San Martino (Bs) – Italia – Tel. + 39 030 7451154 – Fax. + 39 030 73 56 629



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PRESENTATION OF THE COMPANY AND INTRODUCTION TO THE INSTRUCTION MANUAL

G.B.C. Industrial Tools S.p.A. is known worldwide for the quality of the machines and accessories for pipe cutting and beveling procedures of any sort and plate beveling machines..

The Headquarters are located in Cazzago San Martino (BS) where are currently operating the General Management, the sales department, as well as the main workshop and the shipping department.

QUALITY STANDARD—All our machines are assembled according to the highest quality standard. Since 1996 **G.B.C. Industrial Tool S.p.a.** has implemented management procedures in compliance with the quality system regulations UNI EN ISO 9001 (SGS ITALIA S.R.L. N° IT 96.088 / 1996).

This Manual is supplied together with the machine it makes reference to. The customer may apply for further copies to **G.B.C. Industrial Tools S.p.a.** Our company owns the copyright of this document and any partial or complete copy or distribution to natural persons or to corporate bodies is strictly forbidden unless our prior approval to do so is obtained. **G.B.C. Industrial Tools S.p.a.**

informs its customers that any operation carried out on the machines which is not prescribed in this manual entails the automatic invalidation of the warranty. **G.B.C. Industrial Tools S.p.a.** recommends to contact the Maintenance Service in Cazzago San Martino – Italy prior to proceed with any modification on the machine.

You are invited to scrupulously adhere to the information written on the identification tag.

For any further information you are invited to contact us at these numbers:

Tel. +39 - 030 -7451154
Info: sales@gbcspa.com

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WARRANTY GENERAL CLAUSES

G.B.C. Industrial Tools S.p.a. guarantees the reliability of the machine and its conformity to the specifications herewith reported. The warranty covers the machine in its whole for a time period of one year from the shipment date (ref. Delivery Note) for any flaw not imputable to the user. The parts subject to wear are excluded from the warranty at sole discretion of **G.B.C. Industrial Tools S.p.a.**

In case of any operational malfunction arising during the warranty period, **G.B.C. Industrial Tools S.p.a.**

And its Maintenance Service, hereinafter called MSS, will remedy this inconvenient free of charge, both for handwork and for eventual replaced parts, except when the malfunction is directly or indirectly imputable to misuse or alteration. In any case the machine must not be disassembled or altered before the shipment. The warranty is valid only when the warranty document is duly signed by **G.B.C. Industrial Tools S.p.a.** and by a G.B.C. official distributor connected with the MSS maintenance service.

The shipment of the defective material must be performed within 8 (eight) days from the notification of the defect and/or the claim and/or the request of technical assistance. On the contrary the warranty will be void. **G.B.C. Industrial Tools S.p.A.** and MSS obligations will cover the defect resolution, the general maintenance and the inspection of the parts subject of the claim only. The component replacement is at **G.B.C. Industrial Tools S.p.A.** discretion only. The shipment to costs from and to the MSS as well as the direct and indirect costs rising from repair of the product are at user's charge. Any warranty repair or extraordinary repair must be executed by **G.B.C. Industrial Tools S.p.A.** and MSS, otherwise the warranty will be void.

Any ordinary maintenance performed by the customer/user or by any service centre non recognized or approved by **G.B.C. Industrial Tools S.p.A.** will not be refunded and will make the warranty void. The warranty is not valid for cases not listed in this certificate or for damage caused by a misuse of materials, power supply, negligence, unauthorized modifications, atmospheric events, acts of vandalism, incautious handling and/or transport, use of non original **G.B.C. Industrial Tools S.p.A.** parts and damage for causes not specified by **G.B.C. Industrial Tools S.p.A.** and for which **G.B.C. Industrial Tools S.p.A.** declines any responsibility. **G.B.C. Industrial Tools S.p.A.** reserves the right to modify and to improve its products without any obligation to modify equipment and components already supplied. Nobody is authorized to modify the conditions herewith contained or to issue any on behalf of **G.B.C. Industrial Tools S.p.A.** The claim terms for defects and/or damages in the material or of the ordered quantities, are those pre-scribed by the Civil Code; the goods acceptance entails the buyer to automatically accept the above mentioned warranty clauses.

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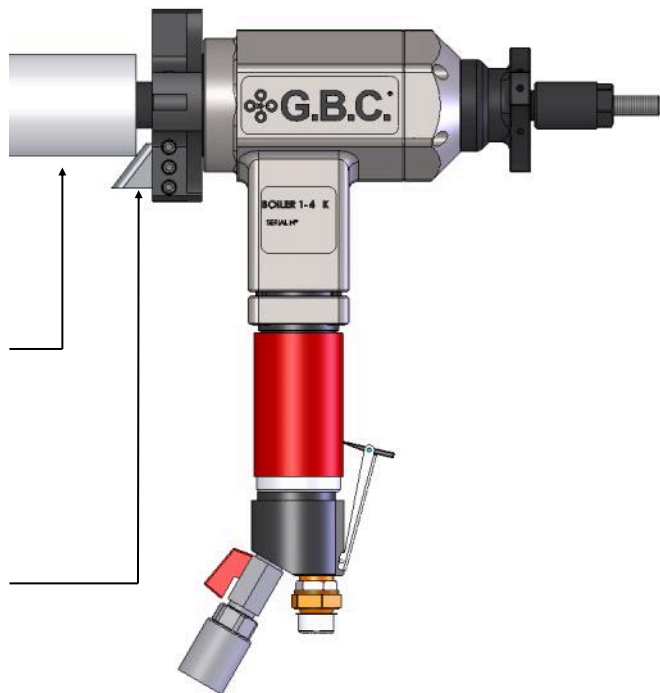


INTENDED USE OF THE MACHINE

The machine shown in the drawing is conceived for beveling pipe ends and to prep the for the subsequent welding process.

It works gripped into the ID of the pipe.

The bevel is obtained by bevelling tools of various shape and materials, depending by the nature of the material to be beveled.



THE MACHINE SHOULD BE OPERATED ONLY BY SPECIALIZED OPERATORS WHO HAVE BEEN DULY TRAINED ON THE UNIT.

FOLLOWING TO A SPECIFIC FORMATION WE DO NOT ENVISAGE ANY REASONABLY PREDICTALBE MISUSE OF THE UNIT

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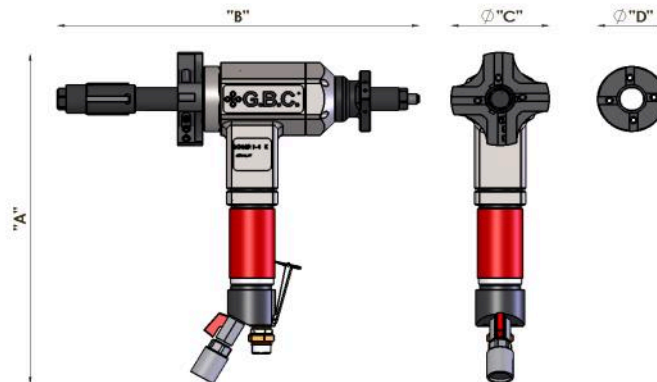
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TECHNICAL DATA

		PNEUMATIC	ELECTRIC	BATTERY
ID Locking Range	mm (inches)	23 - 108 (0.9-4.25)	23 - 108 (0.9-4.25)	23 - 108 (0.9-4.25)
Idle Speed	gg/min (Rpm)	87	74	44
Chuck Max Torque	Nm	27 (6 bar) 82 (8 bar)	124	116
Stroke	mm (inches)	40 (1.57)	40 (1.57)	40 (1.57)
Pneumatic Motor Power	Hp (W)	1.07 (800)	-	
Air Consumption	NI/min (cfm)	1000 (35.31)	-	
Air Pressure	Bar (psi)	6 ÷ 8 (87 ÷ 116)	-	
Air Hose Connection	Pollici (inches)	1/2" (1/2")	-	
Electric Motor Power	W	-	1300	720
Tension	Volt	-	110 / 230	18V 4.0 Ah
Frequency	Hz	-	50	
Max Acoustic Emission	Db	75	75	75
Machine Weight	Kg	9	10	10



MACHINE DIMENSIONS

		PNEUMATIC	PN. + LOCK	ELECTRIC	BATTERY
A	mm (inches)	420 (16.14)	430 (15.53)	450 (17.71)	450 (17.71)
B	mm (inches)	425 (16.73)	575 (22.63)	425 (16.73)	425 (16.73)
Ø C (opt)	mm (inches)	115 (4.52)	115 (4.52)	115 (4.52)	115 (4.52)
Ø D (opt)	mm (inches)	80 (2.03)	80 (2.03)	80 (2.03)	80 (2.03)

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MACHINE CONFIGURATION MODELS

BOILER 1"-4" K



BOILER 1"-4" K "E"



BOILER 1"-4" K "With Autolock"



BOILER 1"-4" K Ratchet



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MACHINE STANDARD EQUIPMENT

The machine is supplied with:

- Locking jaws complete kit from 23 to 108 mm one measure of which is already mounted on the unit
- 4 mm Allen Key
- 24 mm Double Ended Hexagon Tubular Socket Wrench
- 14-17 mm wrench
- Storage Case
- Instruction Manual And Exploded Drawings

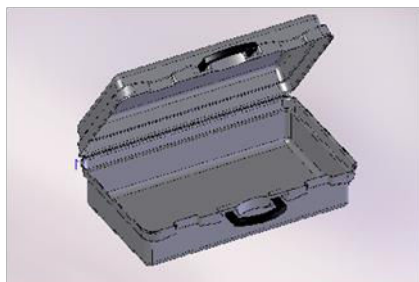
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Service Tools



Case



Instruction Manual And Exploded Drawings



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OPTIONAL EQUIPMENT

***INTERCHANGEABLE ELBOW SHAFTS FOR CURVED ID PIPES FROM
46mm to 103mm.***



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SAFETY PRESCRIPTIONS

G.B.C. Industrial Tools S.p.A. designs and assembles its machines in strict compliance with the safety regulations provided by the applicable EC directives and by the Italian laws regulating this matter.

G.B.C. Industrial Tools S.p.A. declines any responsibility for misuse of its machines and their use when in contrast with the regulation listed here in after and with the use and maintenance instructions hereto.

- Carefully read ALL the following regulations and the instructions here with attached before starting any operation.
- Carefully ensure that the operator and the foreman using the machine are fully aware of all the regulations and all the instructions and that they are qualified to operate the unit.
- Strictly attain to the indications given by the international symbols applies on the machine and/or on its case.
- Do not perform any maintenance operation when the machine is plugged to the power supply.
- Before every use, ensure the power supply connections to be conform to the specifics given by our manual.

- The authorized operator in any case will not have to disregard the basic safety rules such as:
 - Using gloves and goggles (safety gear supplied by the company responsible for the site or for the building)
 - To properly illuminate the working area
 - Ensure you are operating in an area which grants free movements (at least 1,5 metres around the operator)
 - Do not replace the control system and do not replace parts with not original spare parts, and do not project violent water squirts on the machine
 - Keep the hands away from hot and sharpened parts.
- **G.B.C. Industrial Tools S.p.A.** remarks that for any not specified circumstances it is necessary to obtain the authorization of the manufacturer.

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Using properly the PPE entails the only risks to be generated by the user's system and not by in born defects of our machines.

- 1 *Always wear protective gloves and eyewear.*
- 2 *Always disconnect the machine from the power source during the setup.*
- 3 *Always use both hands while operating the machine, one on the security lever and one on the feeding hand wheel.*
- 4 *The Instruction Manual and the drawings will supply quick and easy explanations.*



TRANSPORT RECOMMENDATIONS

Weight of the Machine	kg	13	
Shipping Dimensions	mm	670x480x240	
Shipping Weight	kg	35	

Under 25 Kgs no lifting machines are required.

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MACHINE STABILITY

Considering the mass of the machine no particular problem has been detected in regard to the operator safety.

WORKPLACE

By always using both hands for operating the machine, the operator is unable to reach the bevelling tools as the unit would suddenly stop – motor brake –

EMERGENCY STOP INSTALLATION **EXEMPTION**

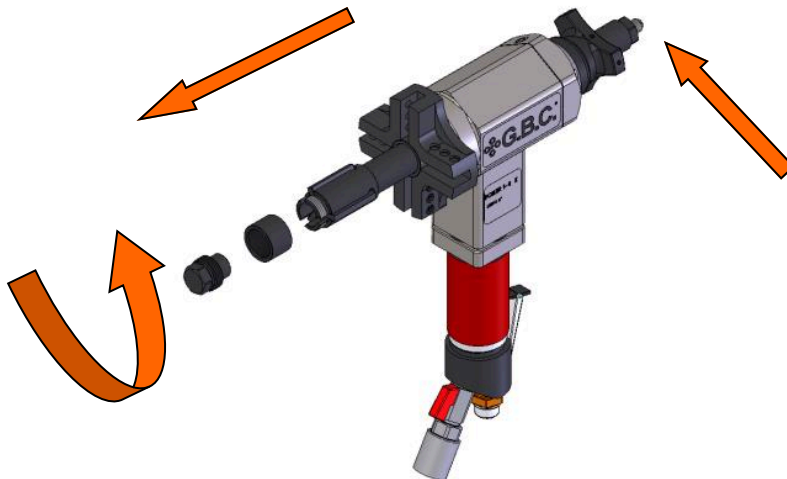
As provided for the paragraph 1.2.4.3. of the attachment 1 of the Machinery Directive, portable machines are exempt to have this feature.

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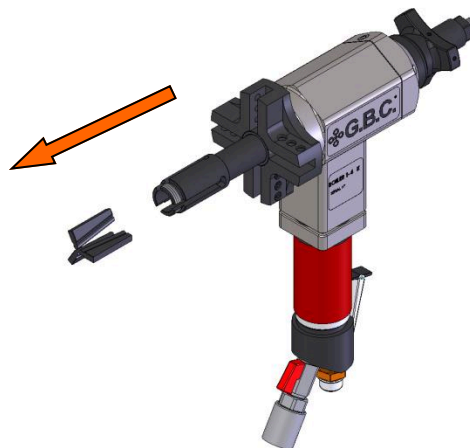
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MACHINE SETUP



Ensure the vane expansion nut is not abutted, then unscrew the vane abutment cap, and the vane abutment bush.



Remove the locking jaws you want to replace

WARNING : DO NOT MOVE THE EXPANSION SHAFT!

The expansion shaft can be moved by the vane expansion nut after having replaced the locking jaws.



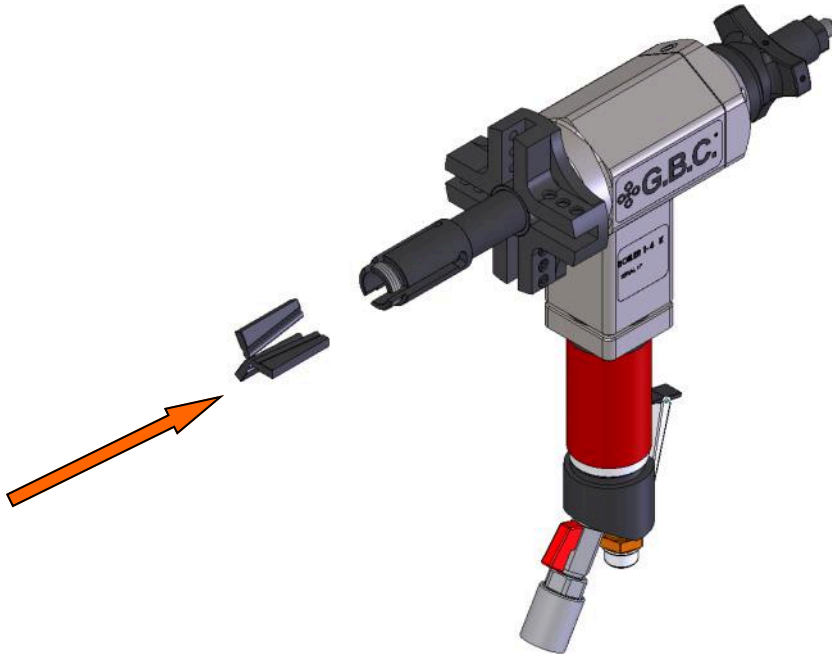
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Select the **LOCKING JAWS** according to the diameter of the pipe and install them on the expansion shaft as shown in the picture.



While holding the three **LOCKING JAWS** you have just mounted, unscrew the **VANE EXPANSION NUT** in order to let them enter their seat. If the procedure is correctly made the locking jaws should have a little play.

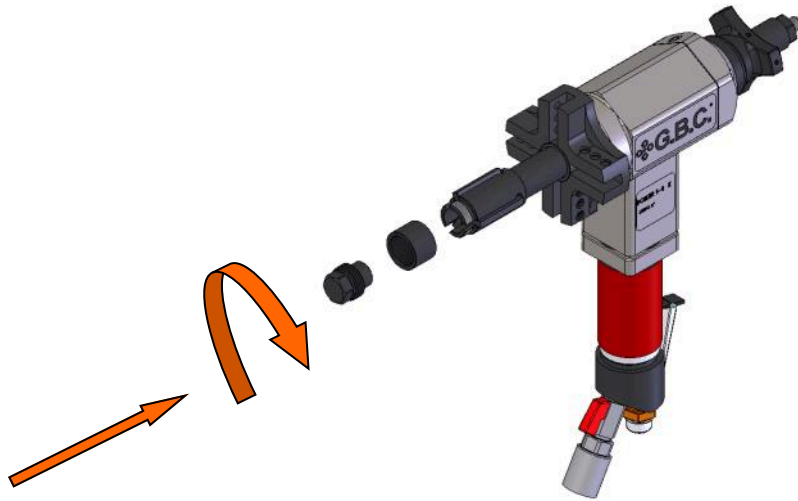
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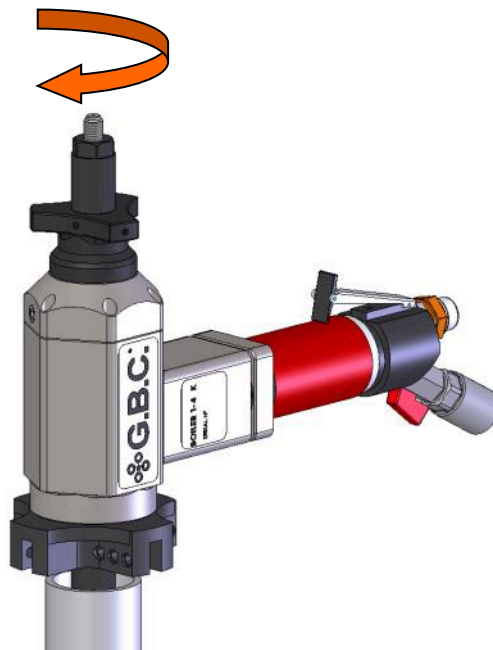


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Screw back on clockwise the vane expansion bush all way down and then the vane expansion nut.



While keeping the machine in axis with the pipe, insert the **SHAFT in the pipe** (about 15-20mm)
Firmly screw clockwise the **VANE EXPANSION NUT**.

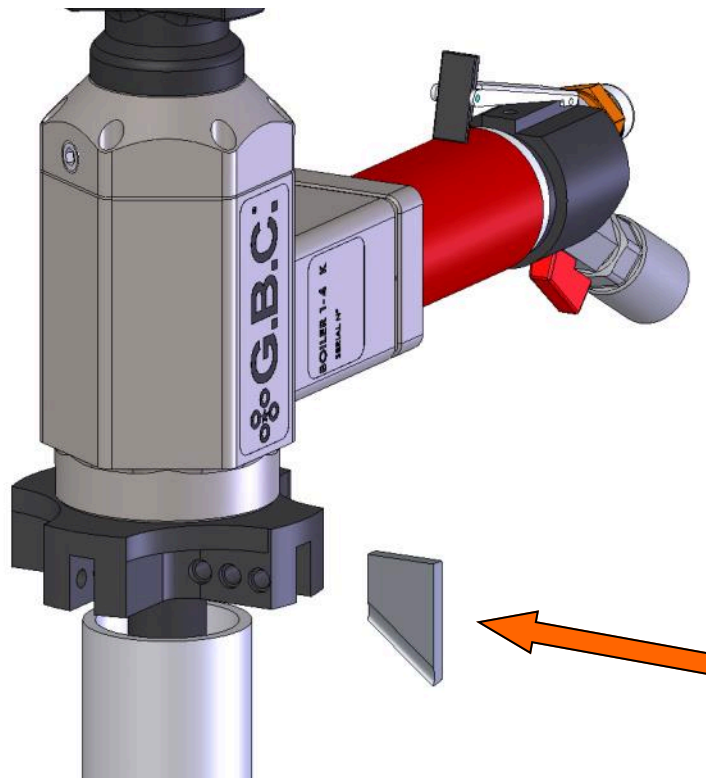
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Select the BEVELLING TOOL in regard to the bevel you need to perform and insert it on the **CHUCK** locking it with the two grub screws by using the Allen key .
You will want to use two paired cutting tools and one facing tools when required.

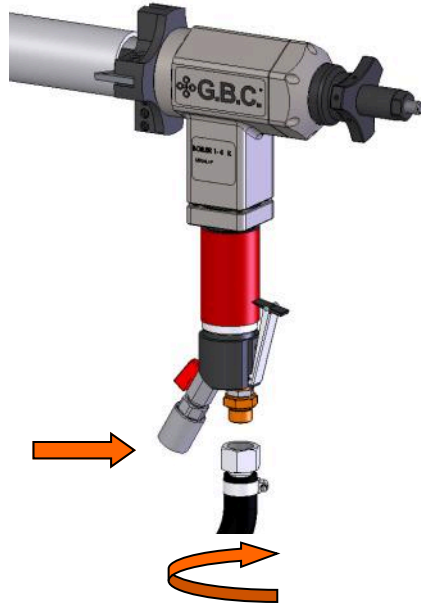
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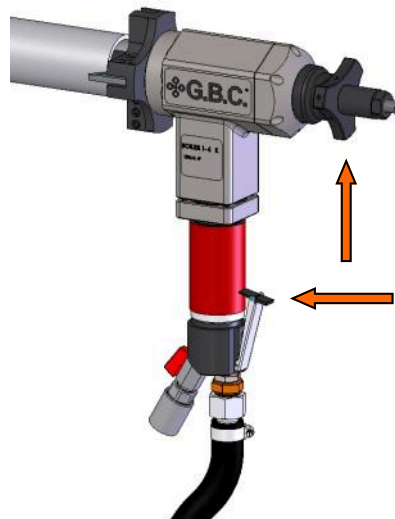


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Connect the machine to the air hose.



Press the button lever upwards to actuate the machine.

WARNING!

You will need to apply a constant pressure on the lever.

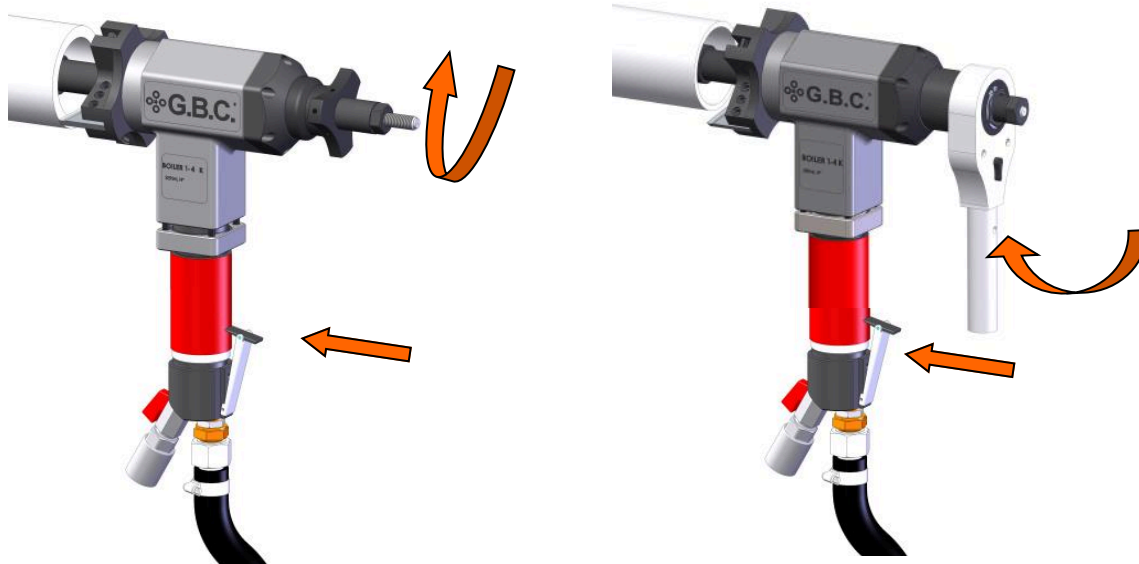
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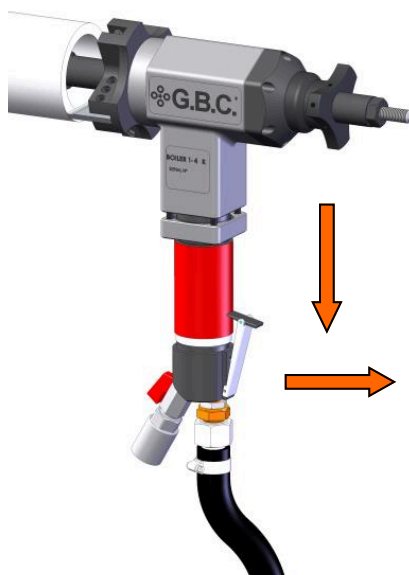
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The machine feeding is actuated by turning the hand wheel clockwise as shown in the picture.
Maintain a constant and continuous action to obtain a uniform feeding.



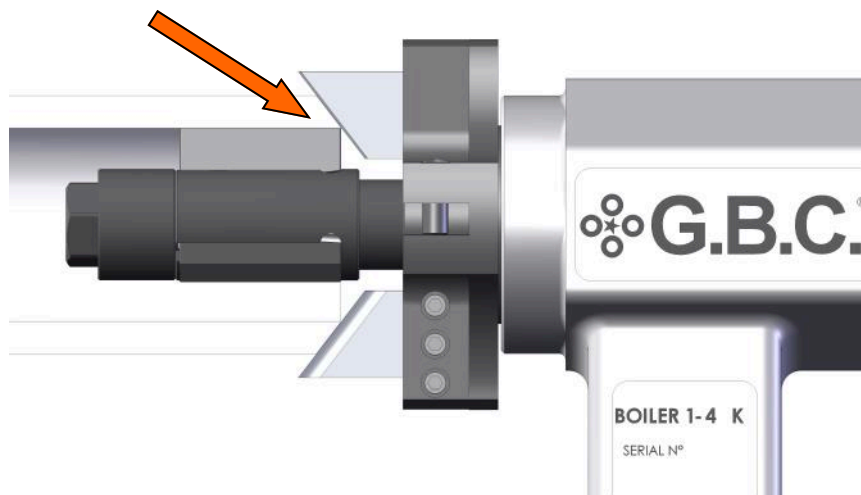
The motor will automatically stop by releasing the lever.

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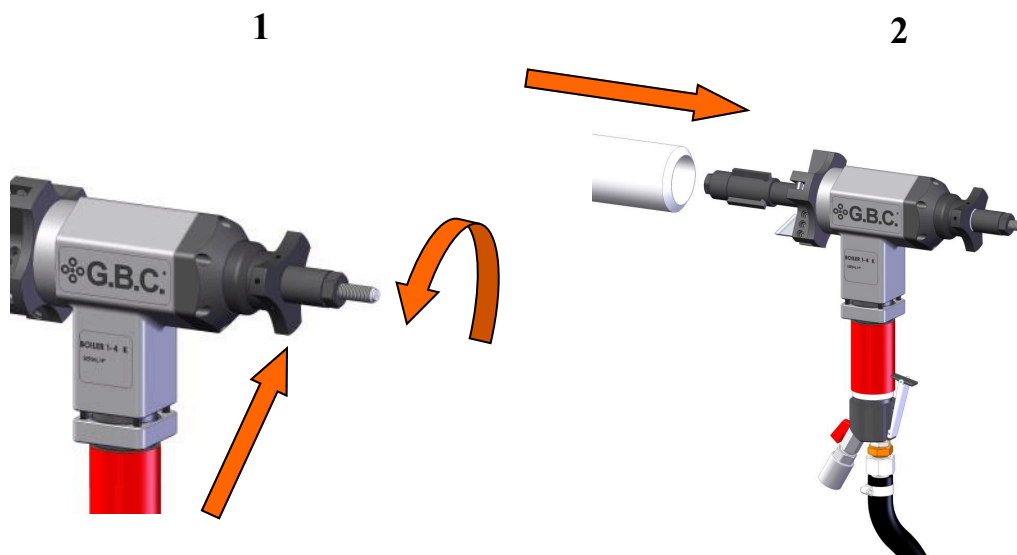
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WARNING! DURING THE OPERATIONS PAY ATTENTION NOT TO TOUCH THE LOCKING JAWS WITH THE TOOLS AS THESE MAY GET DAMAGED.



REMOVING THE MACHINE FROM THE PIPE:

1. Unscrew the vane expansion nut using the wrench supplied with the machine.
2. Remove the machine.

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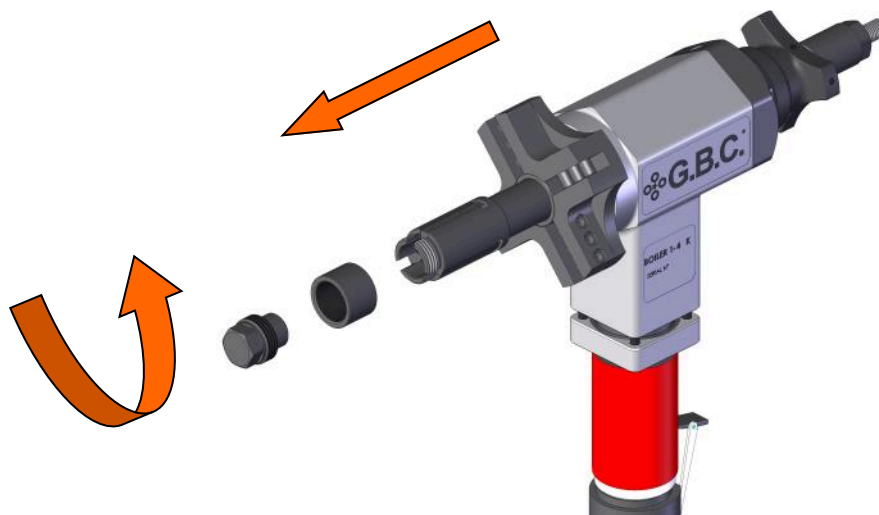
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REDUCED SHAFT KIT ASSEMBLY



Unscrew the vane abutment cap and the vane abutment bush counter clockwise.



Remove the locking jaws.

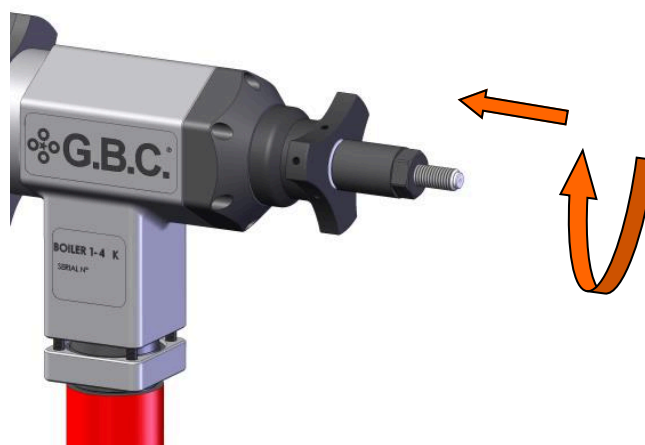
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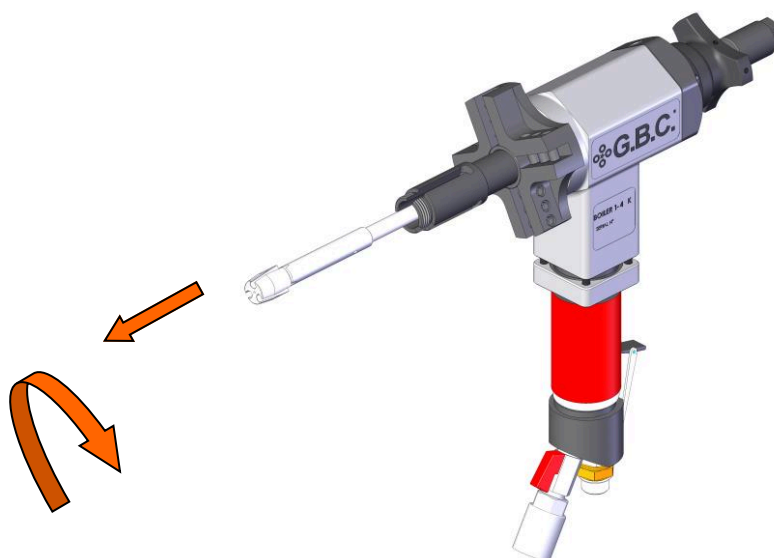


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Screw the vane expansion nut until it 's butted to the machine.



By using long nose pliers rotate clockwise the expansion shaft until it comes out.

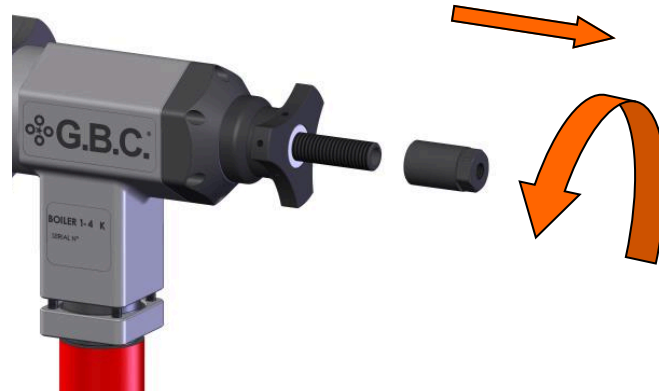
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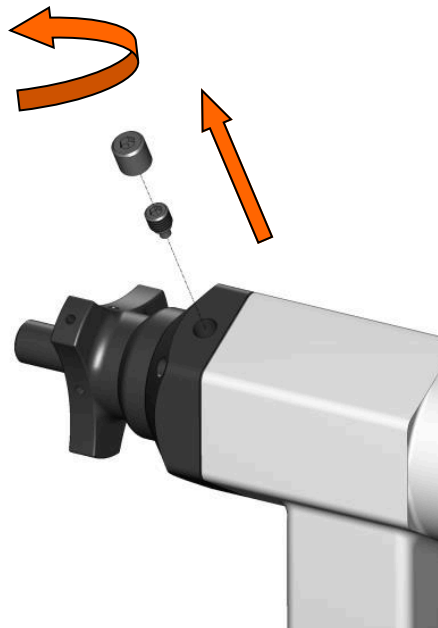


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Remove the vane expansion nut.



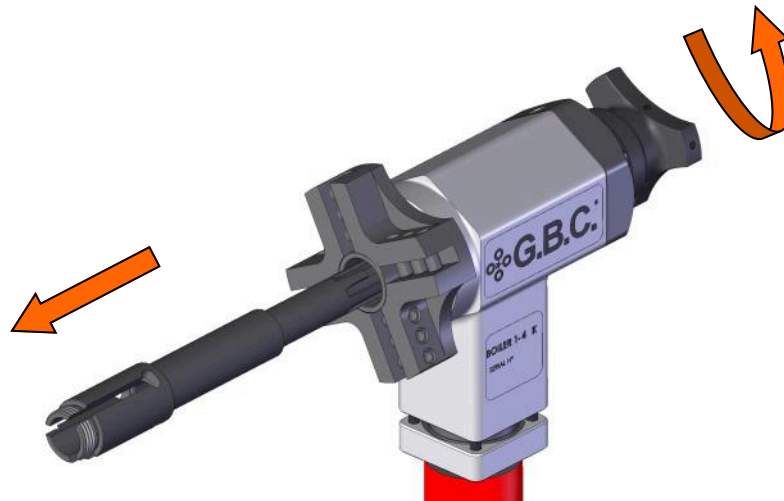
Remove the grub screw cap and the grub screw from the cover case in order to release the guiding shaft.

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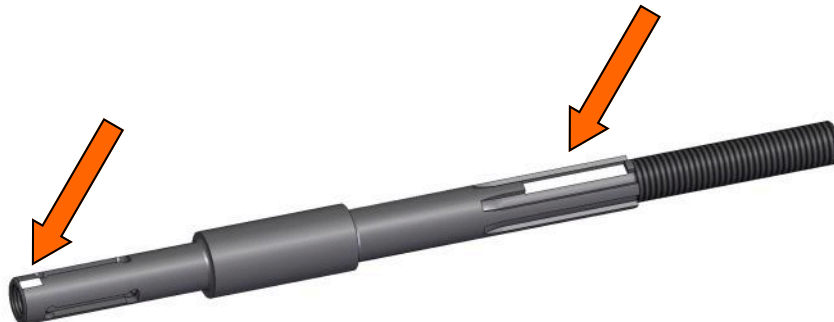
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Remove the shaft by rotating the hand wheel clockwise.



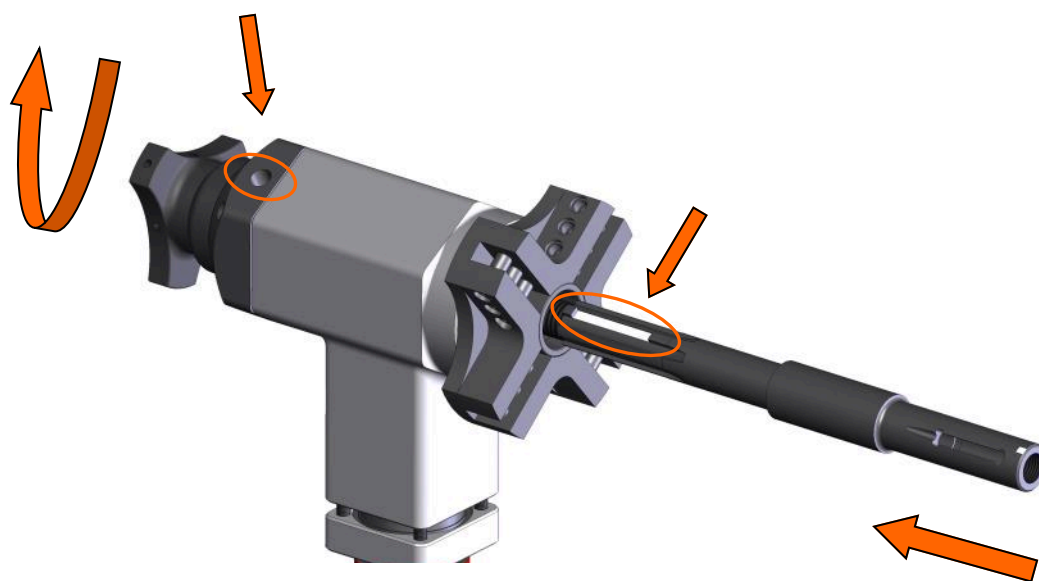
Take the guiding shaft from the reduced shaft kit and mark the groove of the lap joint as well as the far end of the shaft as shown in the picture.

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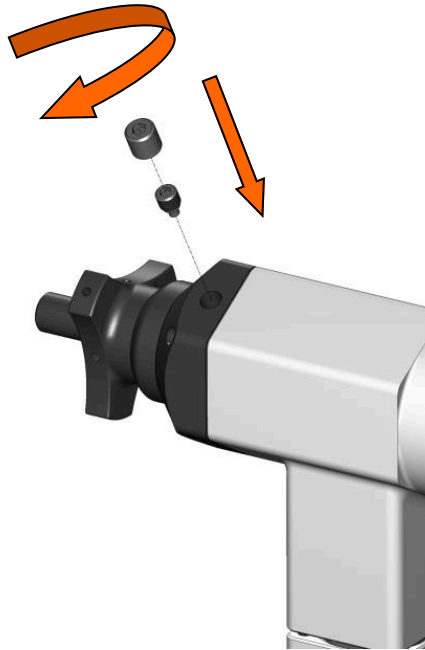
Insert the expansion shaft in the machine and align it's lap joint with the hole of the cover case where you will want to insert the two grub screws previously removed.
Rotate the hand wheel to get the shaft in the machine.

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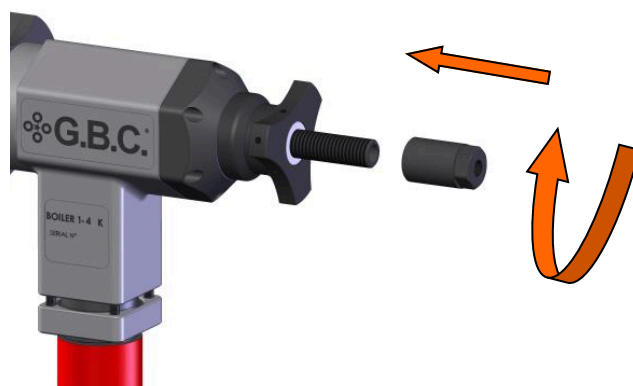
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Reassemble the grub screw and the grub screw cover locking them tight.



Screw in all way down the vane expansion nut.

G.B.C. Industrial Tools S.p.A.

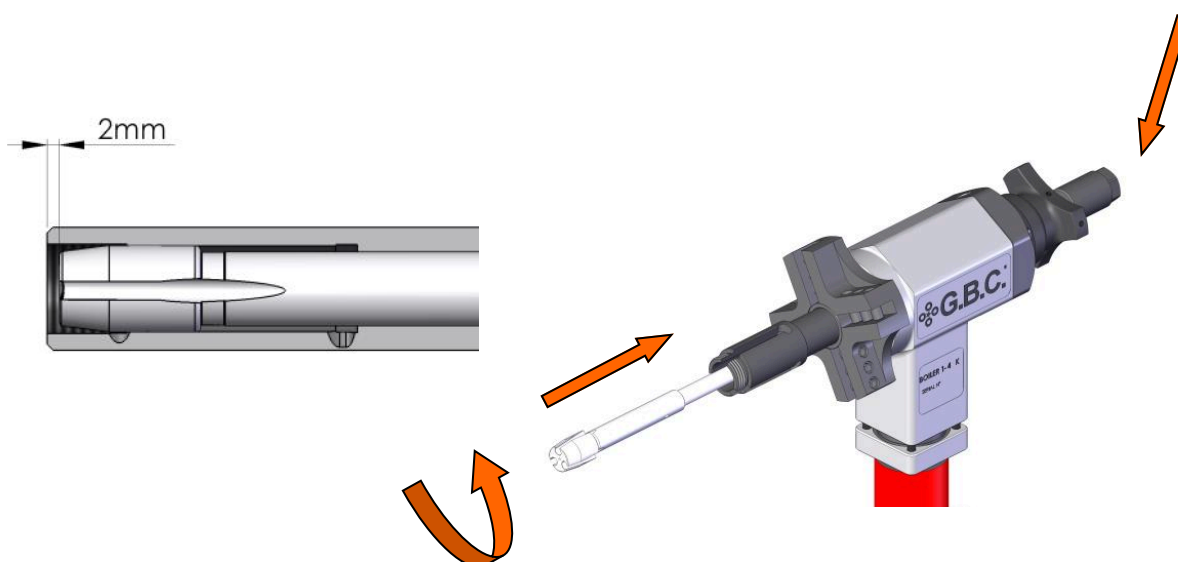
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Insert the reduced expansion shaft.



By using a inserted in the vane expansion nut, screw the vane expansion shaft until it's positioned 2mm inside from the end of the reduced guiding shaft as shown in the picture.

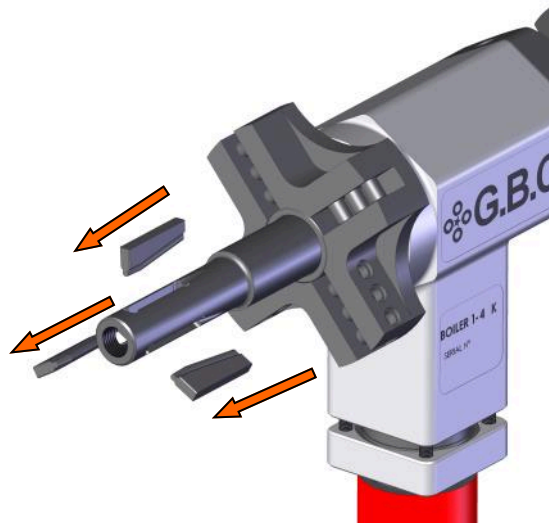
G.B.C. Industrial Tools S.p.A.

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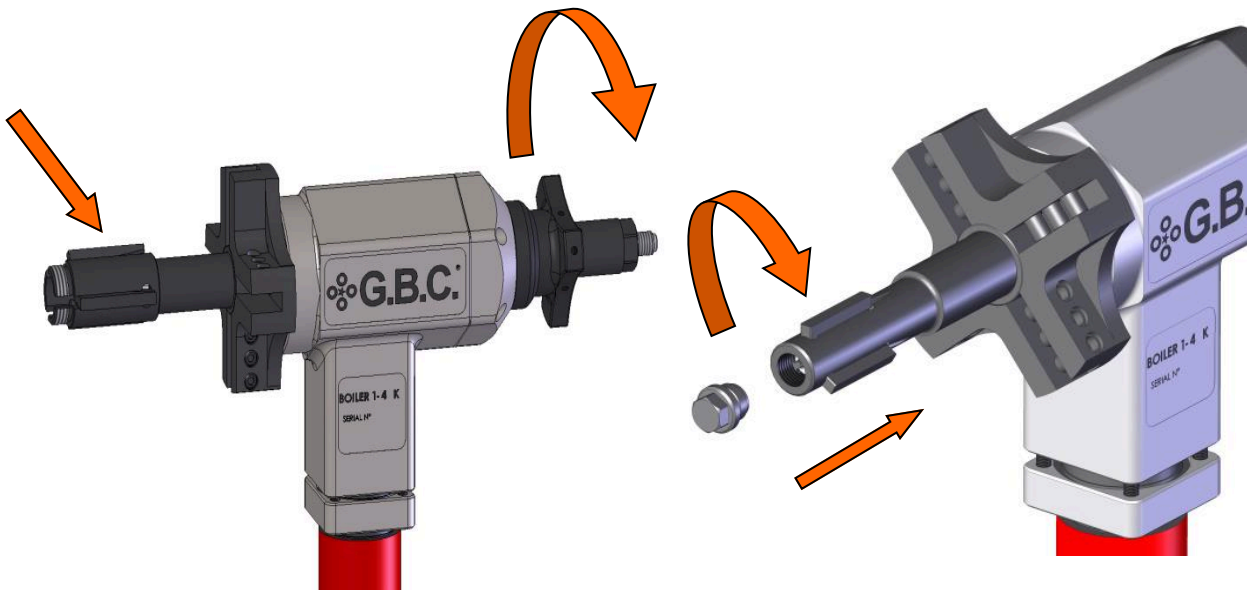


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Select the correct locking jaws according to the ID of the pipe you need to work and place them in the shaft as shown in the picture.



While holding the three **LOCKING JAWS** you have just mounted, unscrew the **VANE EXPANSION NUT** in order to let them enter their seat. If the procedure is correctly made the locking jaws should have a little play.

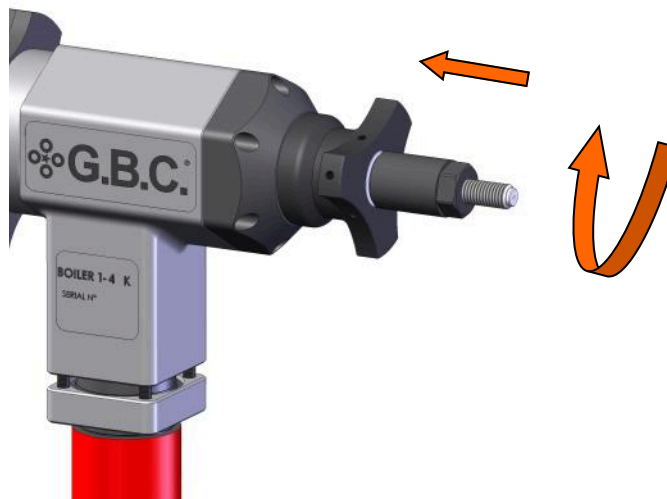
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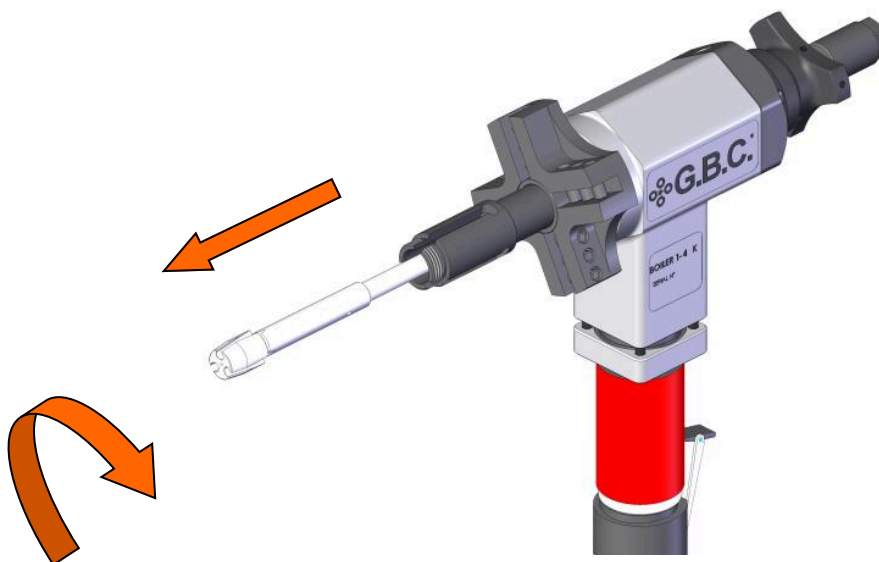


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Screw back on the vane expansion nut all the way.



Rotate the shaft clockwise with long nose pliers and extract it.

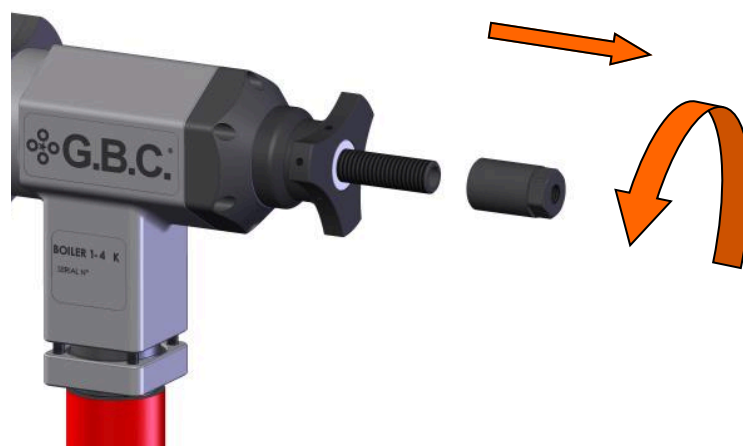
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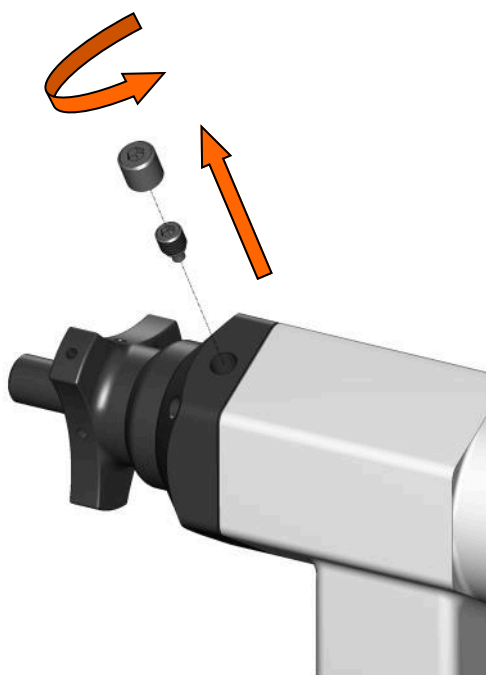


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Remove the vane expansion nut.



Remove the grub screw cap and the grub screw from the cover case in order to release the shaft.

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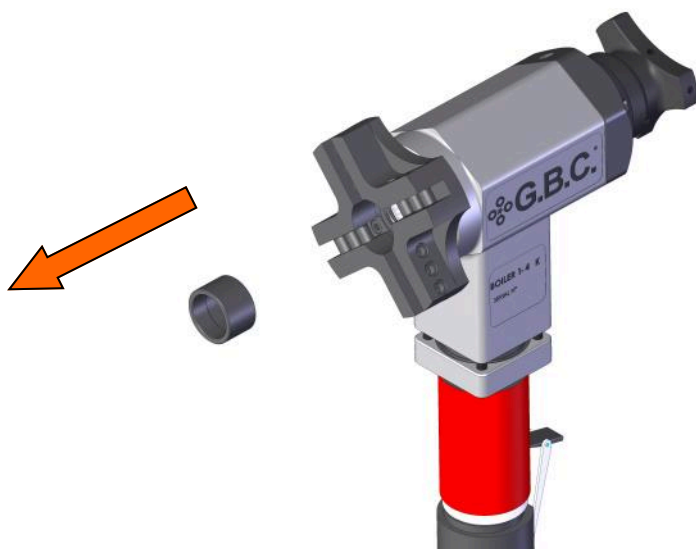


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Remove the shaft by rotating the hand wheel clockwise.



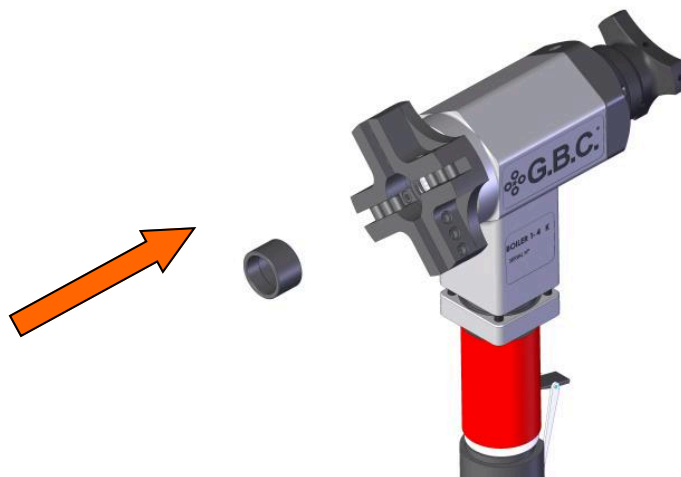
Extract the tool abutment chuck by using the special tool not supplied with the machine.

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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Insert the tool abutment bush supplied with the elbow locking kit.



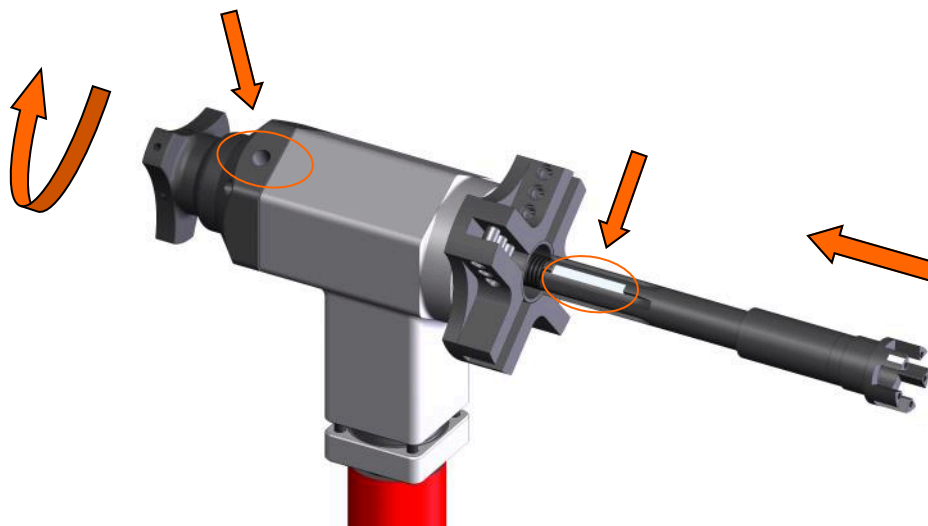
Take the shaft from the reduced shaft kit and use a marker to mark the groove of the lap joint as well as the far end of the shaft as shown in the picture.

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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



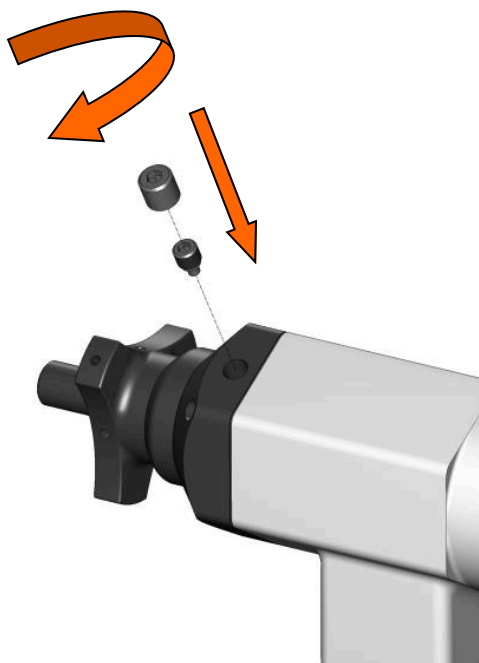
Insert the elbow shaft in the machine and align its lap joint with the hole of the cover case where the two grub screws should then be screwed back in.
Rotate the hand wheel in order to get the shaft inside the machine.

G.B.C. Industrial Tools S.p.A.

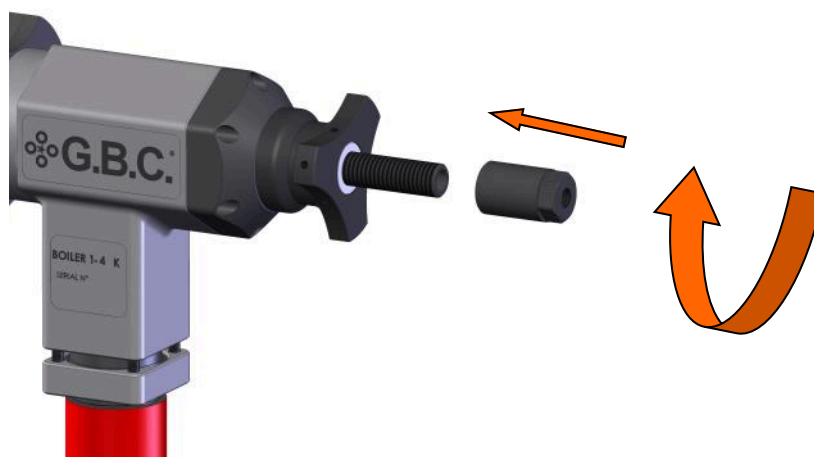
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Screw back in the grub screw and the grub screw cover locking them tight.



Screw back in all way down the vane expansion nut.

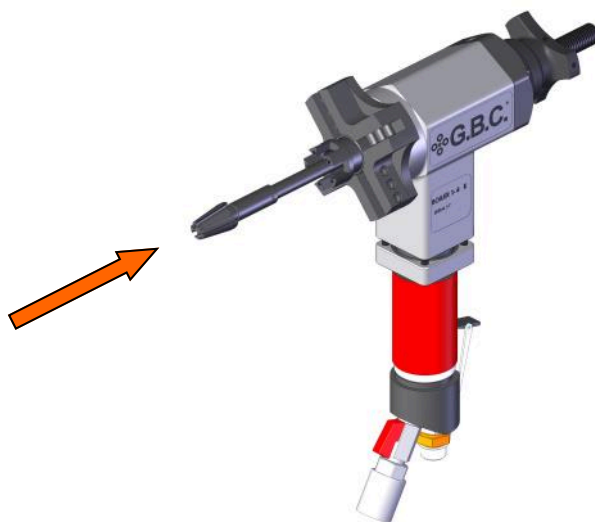
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Via Sandro Pertini 41/43 – 25046 Cazzago San Martino (Bs) – Italia – Tel. + 39 030 7451154 – Fax. + 39 030 73 56 629

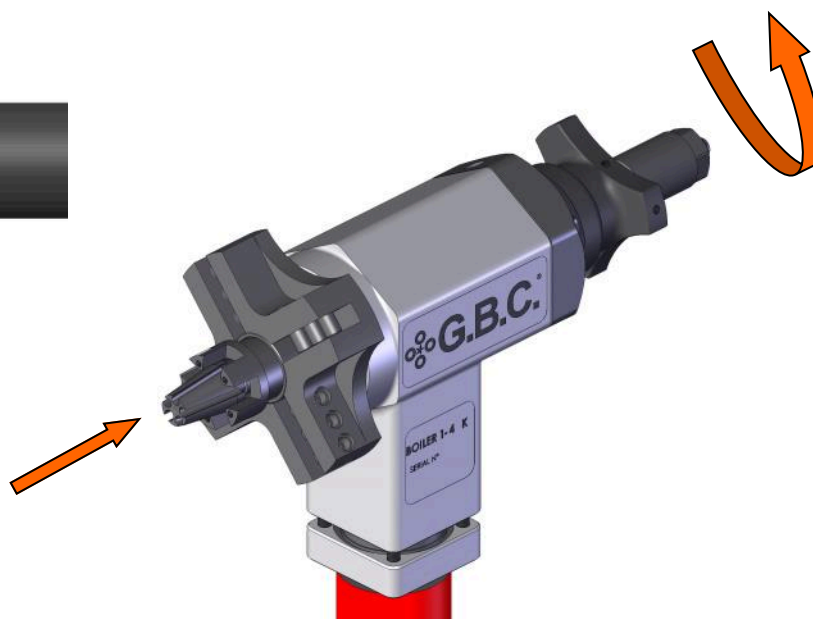
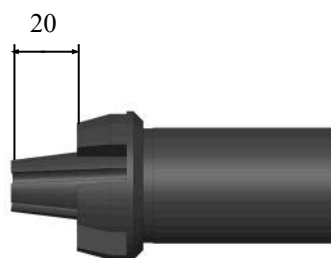


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Slide in the elbow shaft.



Screw by using long nose pliers in the elbow shaft using a screwdriver until it extends 20mm from the head as shown in the picture .

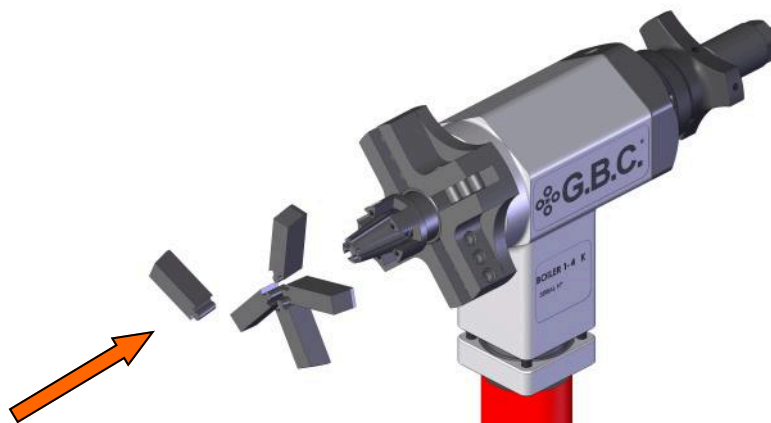
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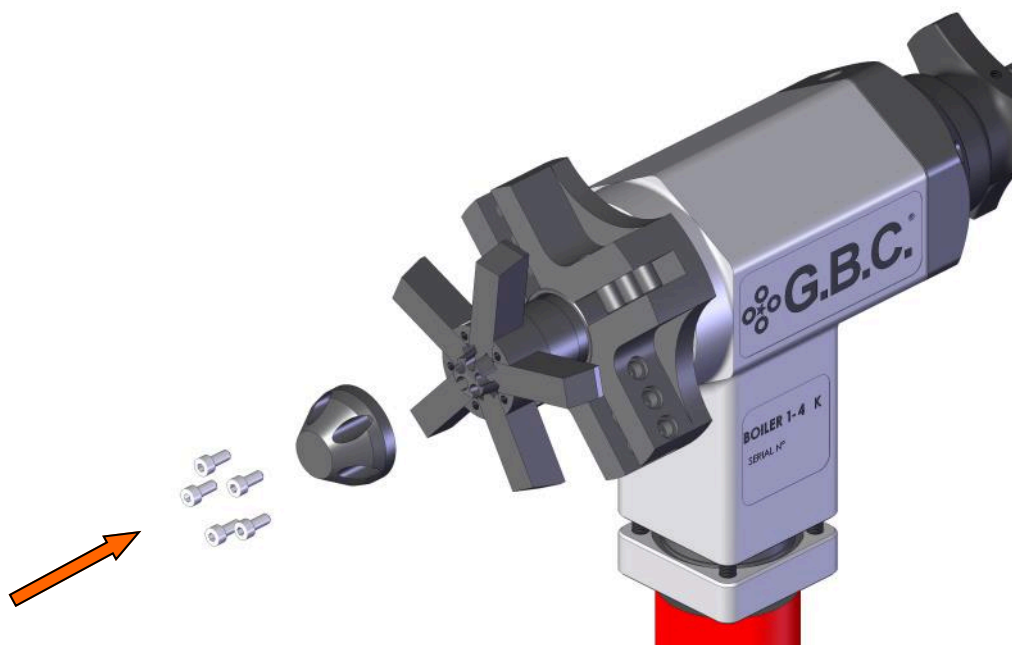


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Slide the selected locking jaws in the expansion shaft.



Fix the cover with the special screws supplied with it. The machine is now ready to be used.

G.B.C. Industrial Tools S.p.A.

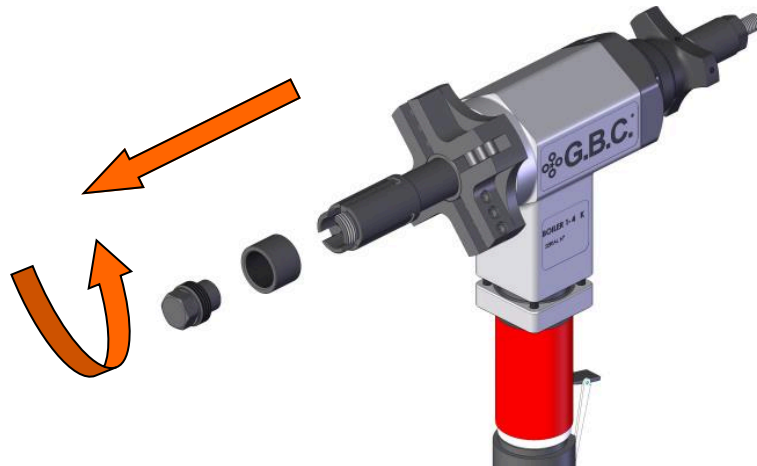
Via Sandro Pertini 41/43 – 25046 Cazzago San Martino (Bs) – Italia – Tel. + 39 030 7451154 – Fax. + 39 030 73 56 629

BOILER 1"-4" K

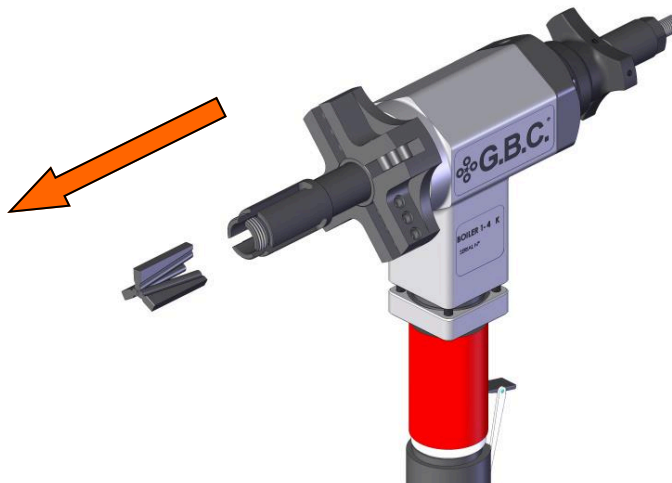
Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



PNEUMATIC LOCKING DEVICE ASSEMBLY



Ensure the vane expansion nut is not abutted, then unscrew the vane abutment cap and the vane abutment bush counter clockwise.



Remove the locking jaws.

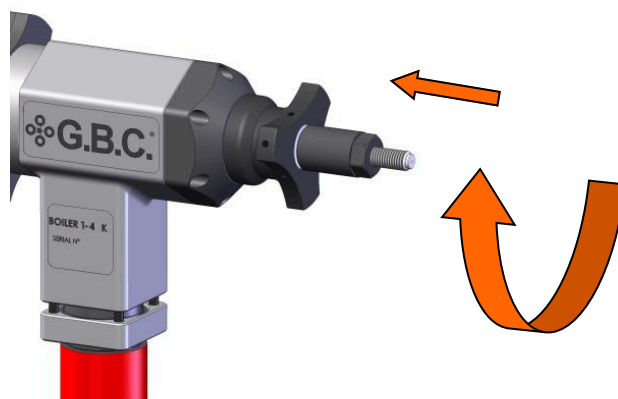
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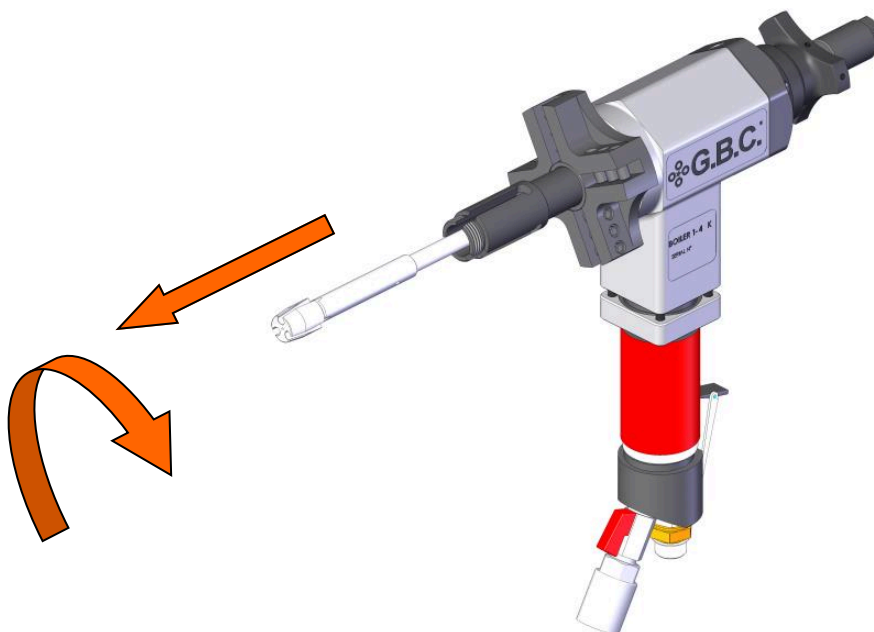


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Screw back on the vane expansion nut all the way.



Rotate the shaft clockwise with long nose pliers and extract it.

G.B.C. Industrial Tools S.p.A.

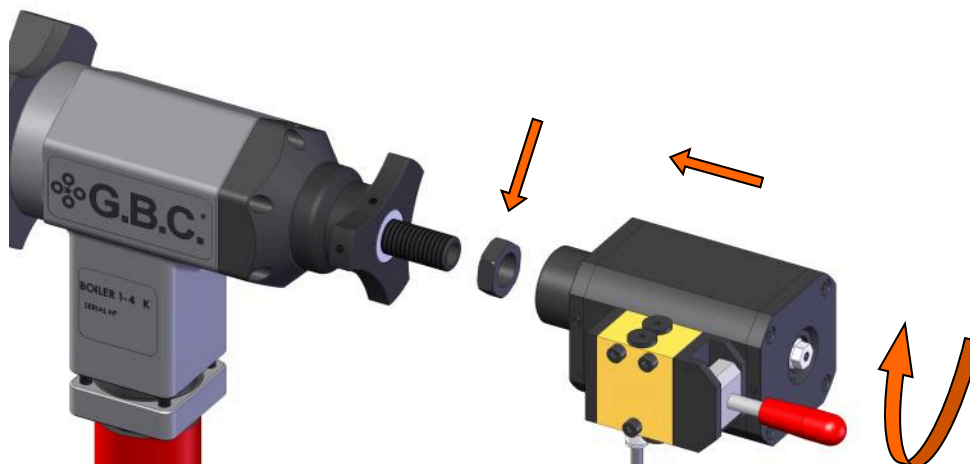
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Unscrew the vane expansion nut.



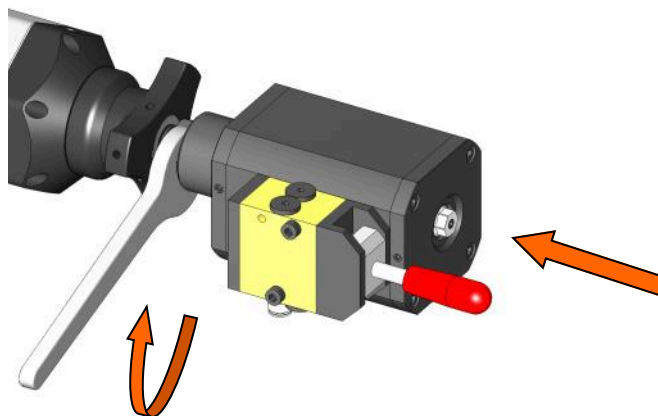
In replacement of the vane expansion nut you will need to screw the counter nut, and then the pneumatic locking device as shown in the picture.

G.B.C. Industrial Tools S.p.A.

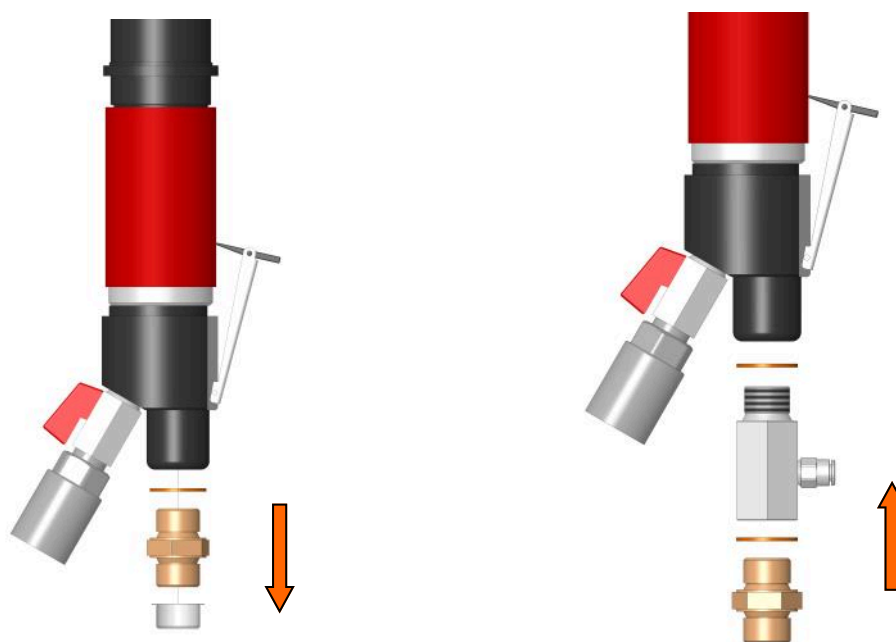
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Screw the locking device and fix it in position with the counter nut. As shown in the picture.



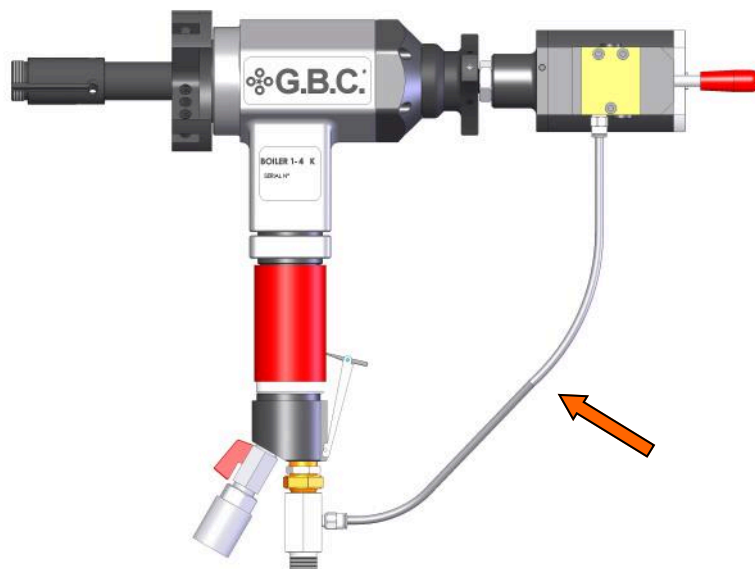
Unscrew the nipple and install the air connector supplied with the kit.

G.B.C. Industrial Tools S.p.A.

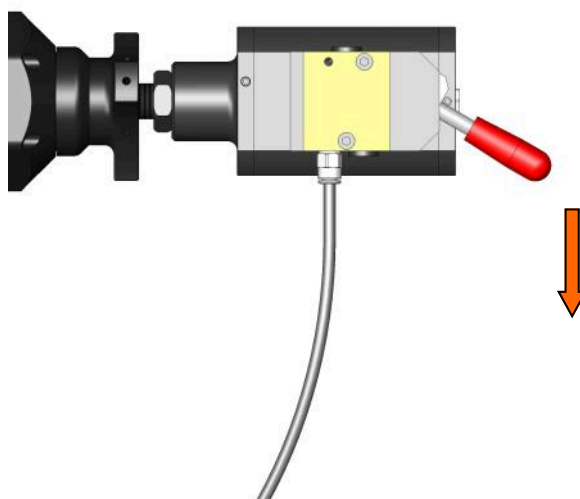
Via Sandro Pertini 41/43 – 25046 Cazzago San Martino (Bs) – Italia – Tel. + 39 030 7451154 – Fax. + 39 030 73 56 629

BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Plug the air supply tube.



After having supplied the pneumatic locking device with air, move the lever downward to move the locking piston forward.

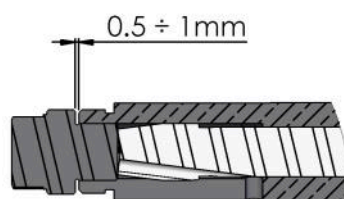
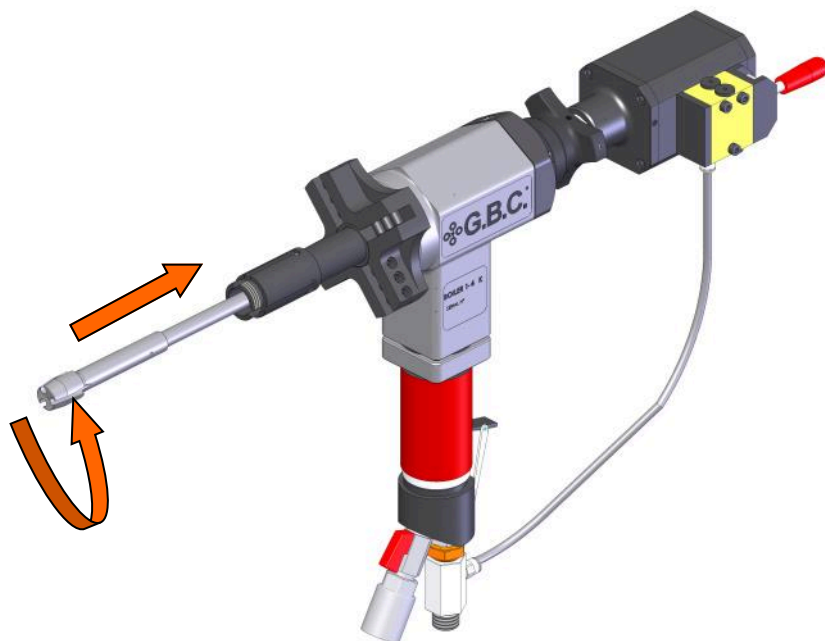
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Slide the vane expansion shaft into the guiding shaft , and screw it counter-clockwise until you will obtain a gap of $0.5 \div 1$ mm by screwing back on the vane abutment cap.

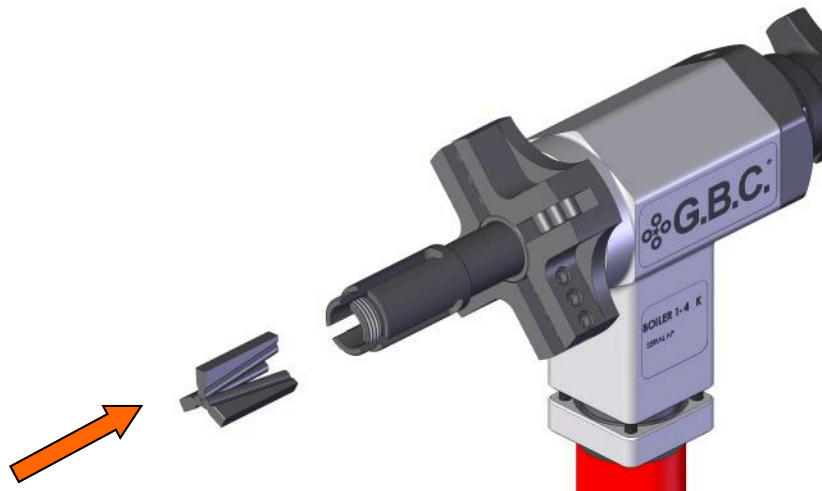
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G.B.C.

BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Select the **LOCKING JAWS** according to the diameter of the pipe and install them on the expansion shaft as shown in the picture.



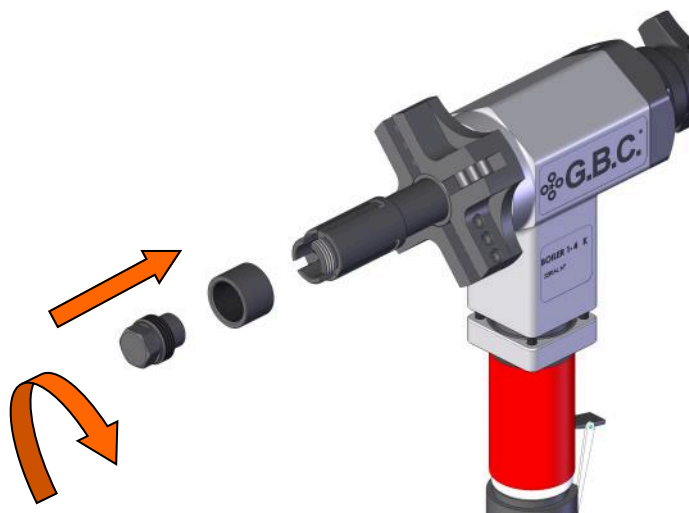
After having supplied the pneumatic locking device with air, keep the locking jaws pressed with your hand and move the lever upward to get the expansion shaft withdrawn in the machine.
If the assembling has been correctly executed the locking jaws should a little play in their seat.

G.B.C. Industrial Tools S.p.A.

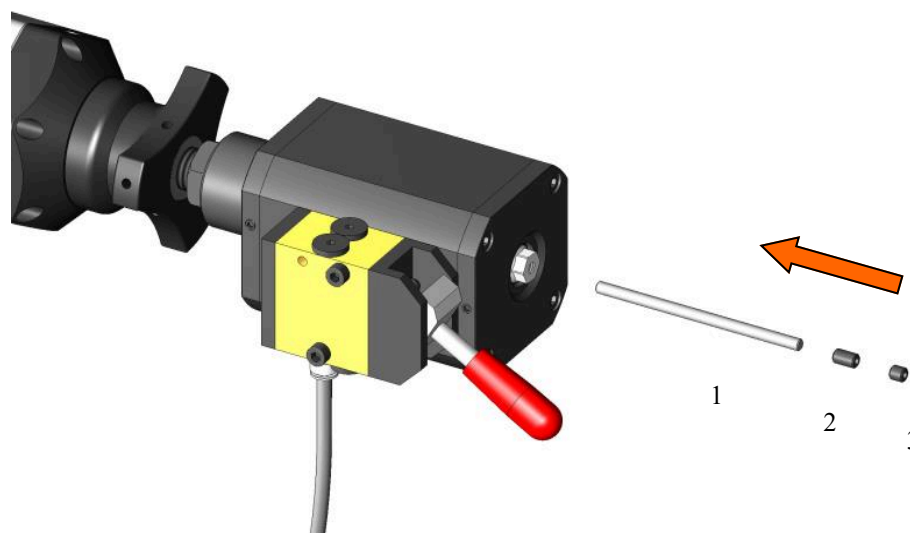
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Screw back on the vane abutment bush and the vane abutment cap counter clockwise.



In the rear part of the locking device you shall now insert the stem and the two grub screws as shown in the picture making sure not to move the expansion shaft.

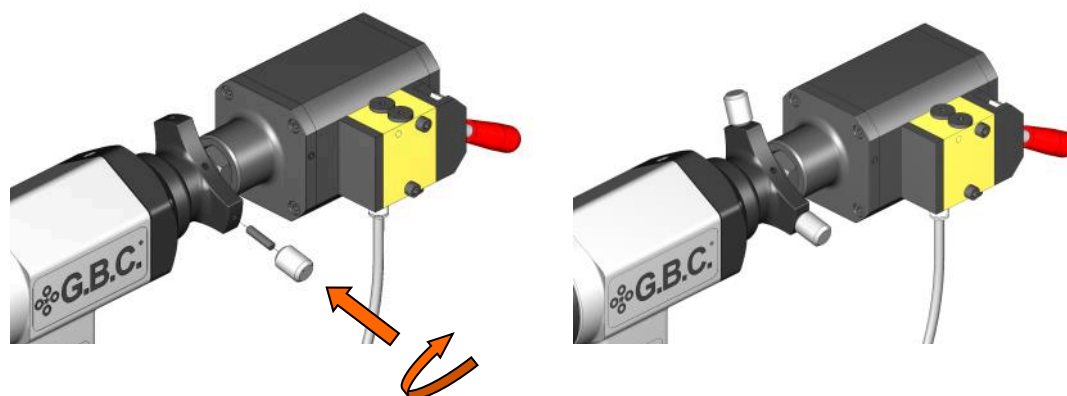
G.B.C. Industrial Tools S.p.A.

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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



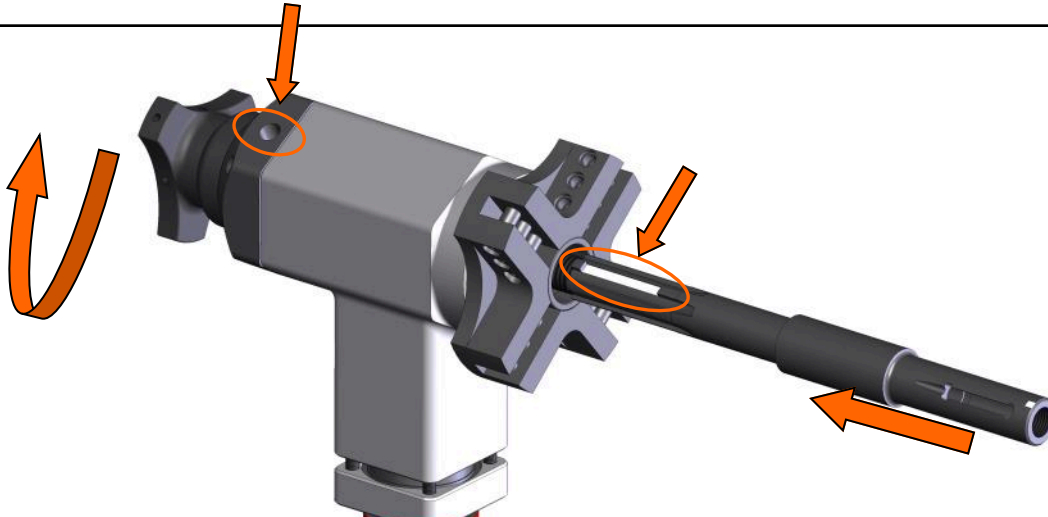
Screw the grub screws and the knobs supplied with the locking device.

G.B.C. Industrial Tools S.p.A.

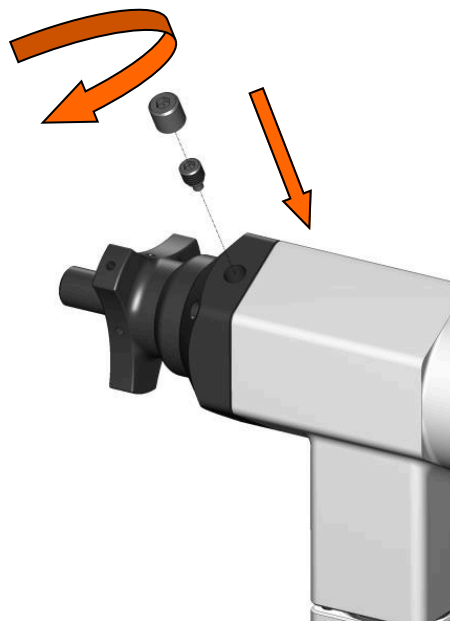
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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Insert the expansion shaft in the machine and align its lap joint with the hole of the cover case where you will want to insert the two grub screws previously removed.
Rotate the hand wheel to get the shaft in the machine.



Reassemble the grub screw and the grub screw cover locking them tight.

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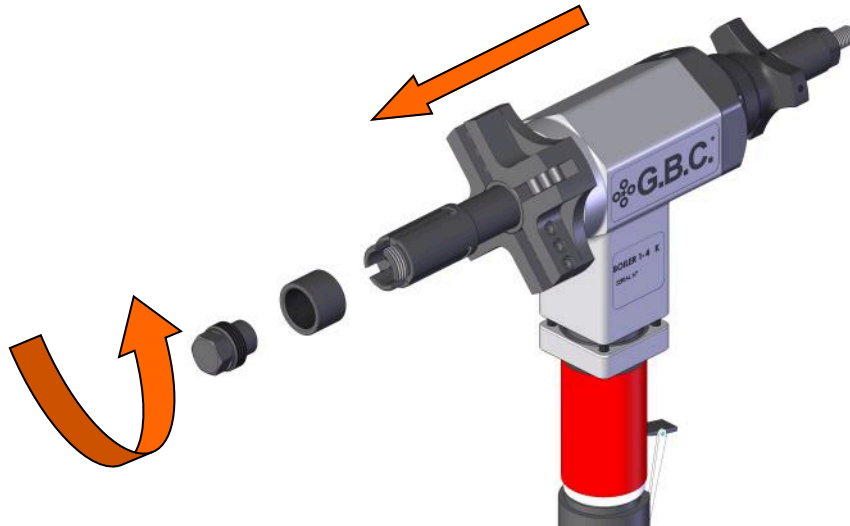


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



REDUCED SHAFT KIT ASSEMBLY WITH PNEUMATIC LOCKING DEVICE



Ensure the vane expansion nut is not abutted, then unscrew the vane abutment cap and the vane abutment bush counter-clockwise.



Remove the locking jaws

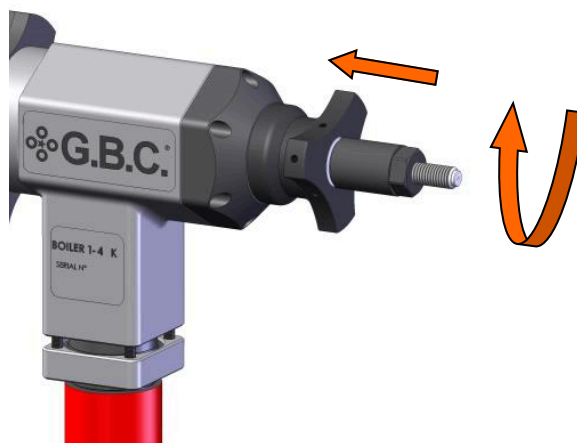
G.B.C. Industrial Tools S.p.A.

Via Sandro Pertini 41/43 – 25046 Cazzago San Martino (Bs) – Italia – Tel. + 39 030 7451154 – Fax. + 39 030 73 56 629

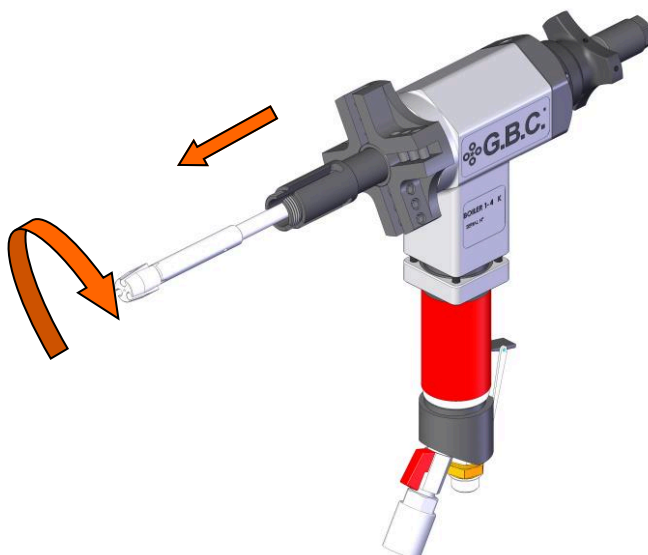
G.B.C.

BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Screw back on the vane expansion nut all the way.



Rotate the shaft clockwise with long nose pliers and extract it.

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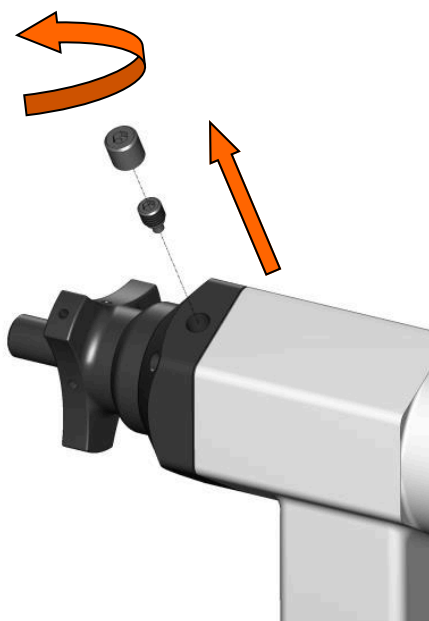


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Remove the vane expansion nut



Remove the grub screw cap and the grub screw from the cover case in order to release the shaft.

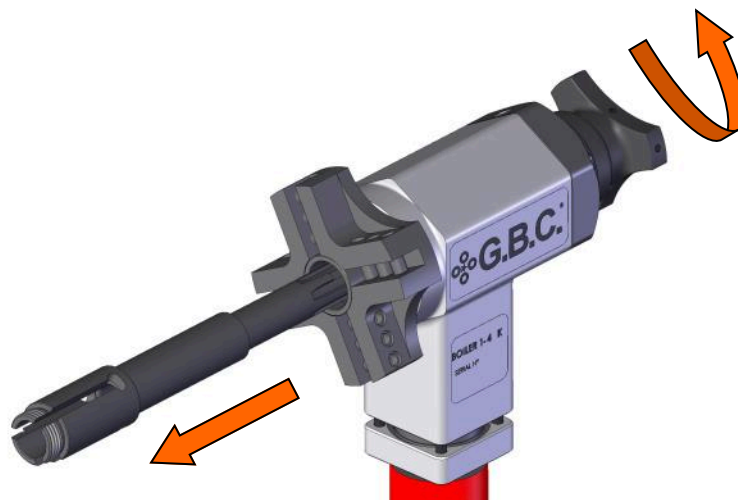
G.B.C. Industrial Tools S.p.A.

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BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Remove the shaft by rotating the hand wheel clockwise.



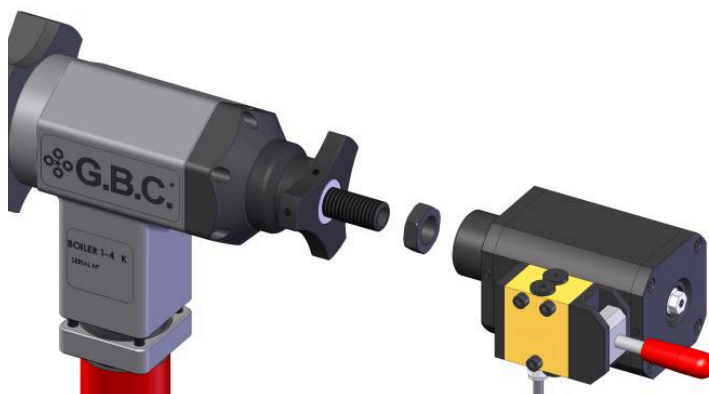
Take the guiding shaft from the reduced shaft kit and mark the groove of the lap joint as well as the far end of the shaft as shown in the picture.

G.B.C. Industrial Tools S.p.A.

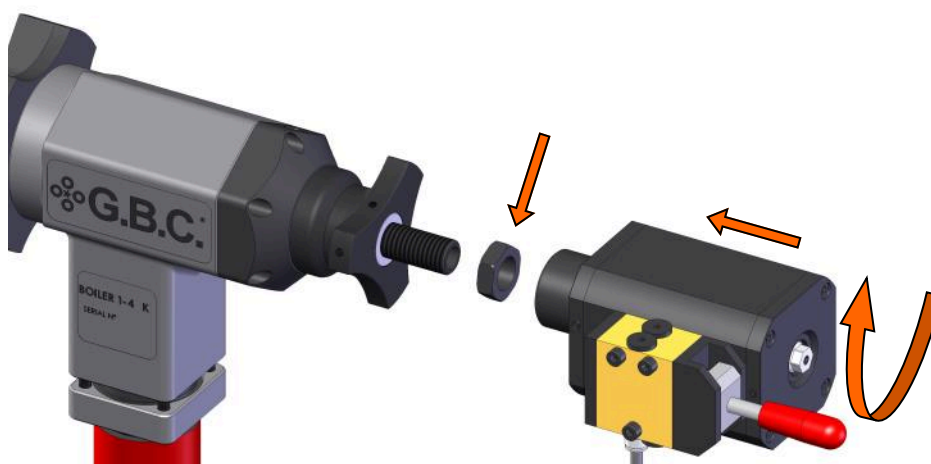
Via Sandro Pertini 41/43 – 25046 Cazzago San Martino (Bs) – Italia – Tel. + 39 030 7451154 – Fax. + 39 030 73 56 629

BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Assemble the reduction inside the locking device like you see here above



In replacement of the vane expansion nut you will need to screw the counter nut, and then the pneumatic locking device as shown in the picture.

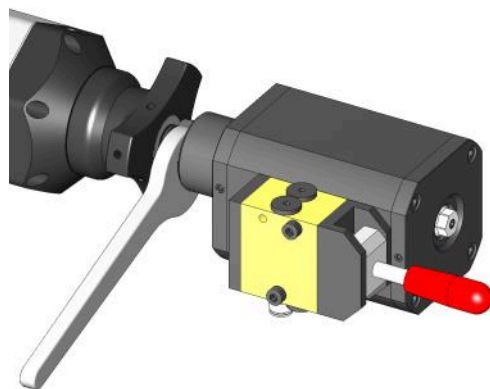
G.B.C. Industrial Tools S.p.A.

Via Sandro Pertini 41/43 – 25046 Cazzago San Martino (Bs) – Italia – Tel. + 39 030 7451154 – Fax. + 39 030 73 56 629

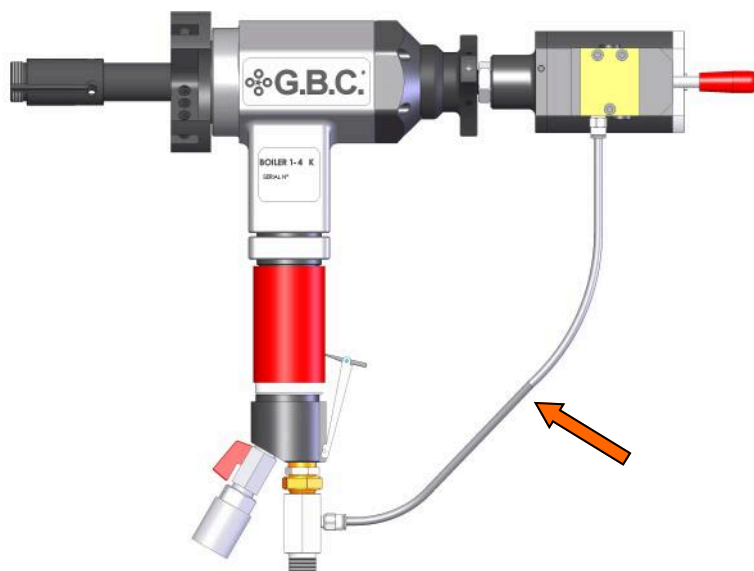


BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



Screw the locking device and fix it in position with the counter nut. As shown in the picture.



Plug the air supply tube.

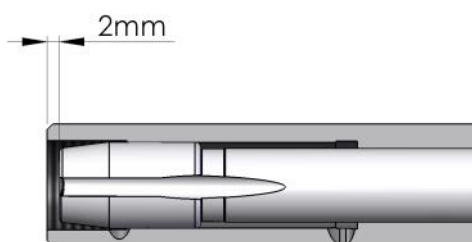
G.B.C. Industrial Tools S.p.A.

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G.B.C.

BOILER 1"-4" K

Istruzioni originali—rev.2011—in accordo al 1.7.4 della direttiva macchine 2006/42/CE



By using a tongs inserted in the vane expansion nut, screw the vane expansion shaft until it is positioned 2mm inside from the end of the reduced guiding shaft as shown in the picture.

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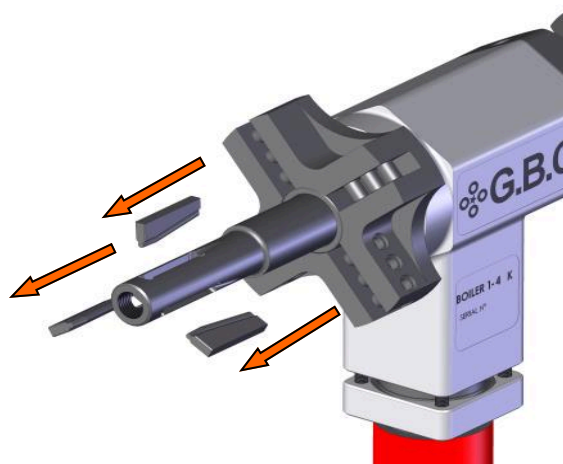
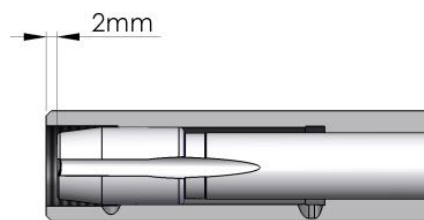
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After having supplied the pneumatic locking device with air, move the lever downward to move the locking piston forward that must be 2mm inside from the end of the reduced guiding shaft as show in the picture here below .



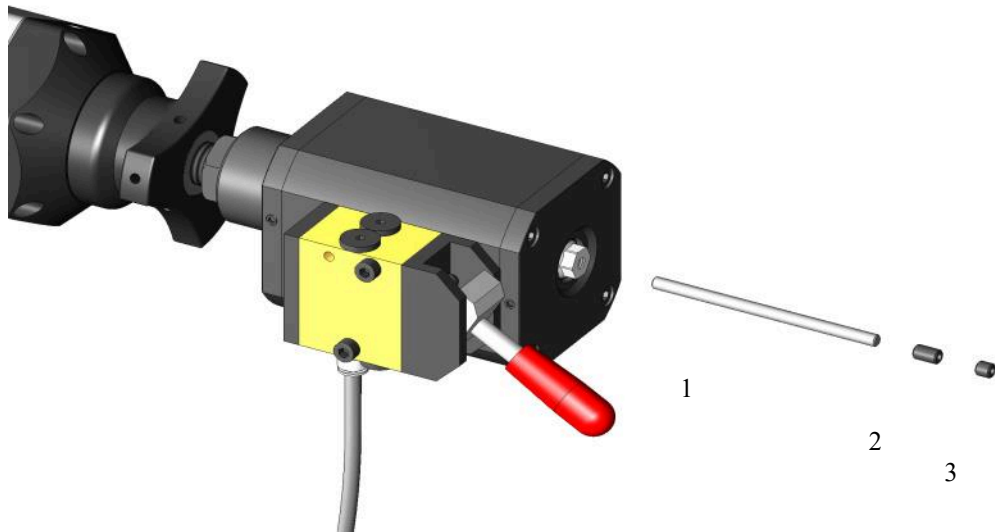
Select the correct locking jaws according to the ID of the pipe you need to work and place them in the shaft as shown in the picture.

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In the rear part of the locking device you shall now insert the stem and the two grub screws as shown in the picture, making sure not to move the expansion shaft by use the key to lock the nut in the back of the locking device



After having supplied the pneumatic locking device with air, keep the locking jaws pressed with your hand and move the lever upward to get the expansion shaft with drawn in the machine.
If the assembling has been correctly executed the locking jaws should a little play in their seat.

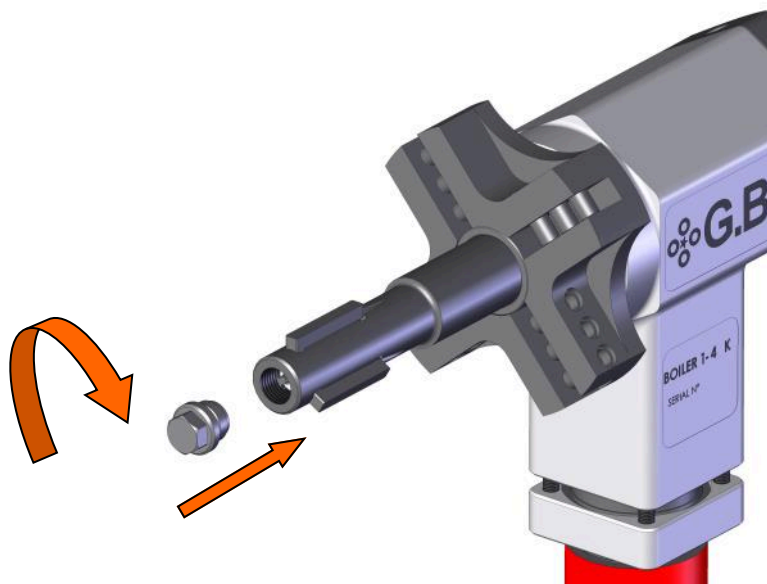
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BOILER 1"-4" K

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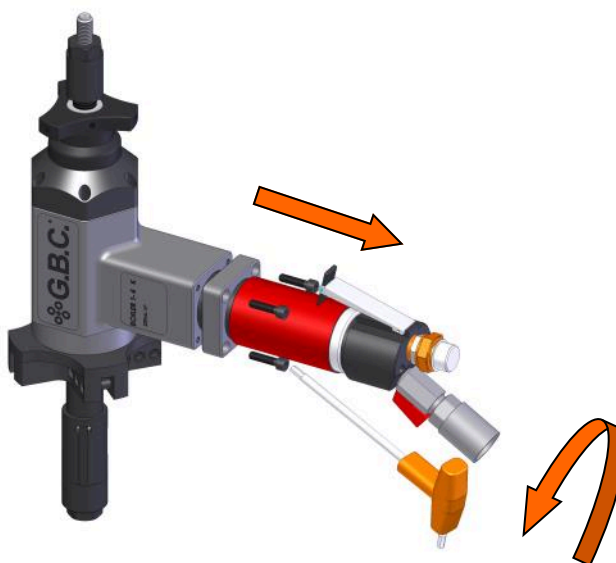
Screw the nut as show in the picture here above

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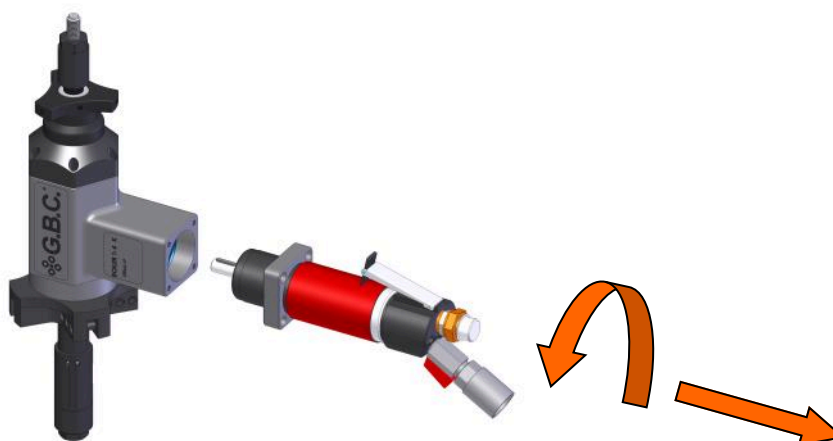
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CONVERTING THE MACHINE FROM PNEUMATIC TO ELECTRIC



Remove the screws from the motor flange.



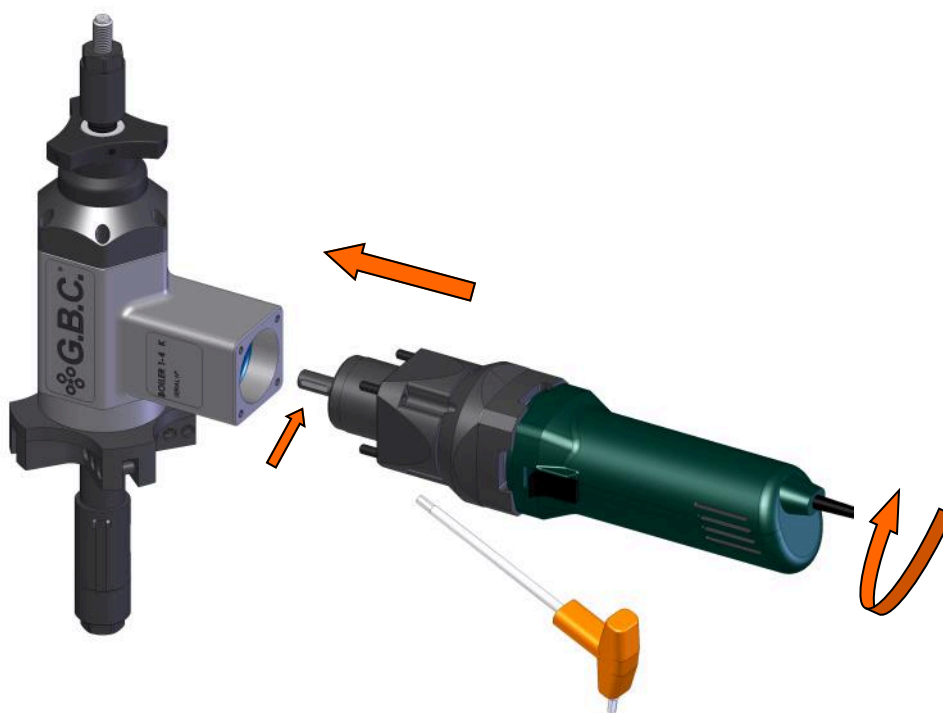
Hold the motor and pull it applying a little rotating movement until it comes off.
N.B.: While performing this operation ensure that the pinion remains in its seat.

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Insert the electric drive device making sure that the key on its shaft fits the seat on the pinion placed into the machine . After a successful positioning fix the flange screws.

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ORDINARY MAINTENANCE

GBC RECOMMEND TO PERFORM A SERVICE CHECK C/O G.B.C. INDUSTRIAL TOOLS S.P.A. OR ITS SPECIALIZED TECHNICIAN EVERY 400 WORKING HOURS

PERIODICAL CHECKS

- Verify the general conditions of the machine;
- Always use the filter + lubricator when using pneumatic machines
- Ensure the filter + lubricator is mounted the nearest possible to the machine and that the lubricant contained is supplied by G.B.C. Industrial Tools S.p.A. only.
- Perform a compressed air periodical cleaning on the threaded part of the guiding shaft and in the rear part of the machine.
- Always ensure that the seats of the tools on the chuck are clean
- Every 20 – 30 hours ensure the security valve has no air leaks
- Ensure no air leaks are present on the air supply system nearby the connection between the machine and the hose.
- Introduce some drops of gasoline or similar oily solvent in the air intake nipple of the pneumatic motor and start the machine in idle.
- Always use well sharpened tools to obtain the maximum result.

G.B.C. Industrial Tools is at your disposal for any information you may require about the above mentioned procedures and for any general clarification you may need.

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TROUBLESHOOTING AND ACOUSTIC EMISSION

The machine does not run : Check the power supply is connected and suitable in regard to the motor power consumption.

The machine does not run properly : Check the condition of the shaft and verify it to perfectly spins around its axis of rotation.

The machine does not bevel : Check the beveling tools condition and ensure that the pipe you are working does not require special bevelling tools due to its composition.
Always ask suggestions to your referent in G.B.C. as we are at your complete disposal.

The acoustic emissions are within the maximum limits provided by the current Machinery Directive.

The tests are performed on every single machine and the results are stored in our archives.

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