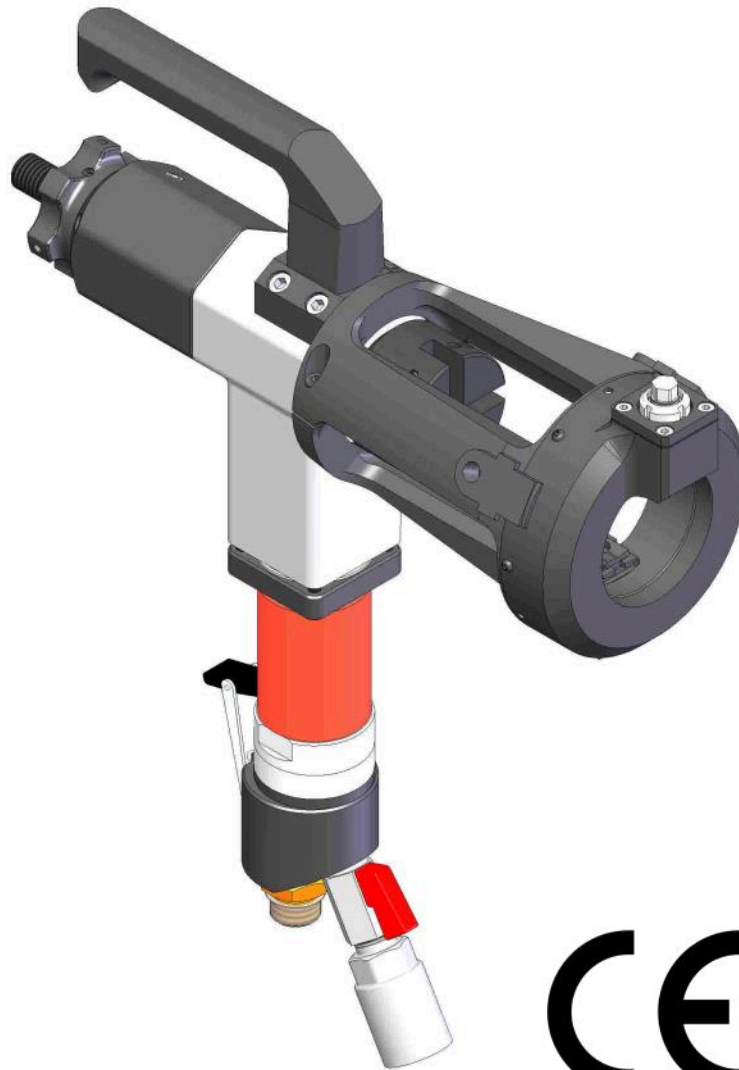




INSTRUCTION MANUAL



MINI K OD

Versione 00 - 2018

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. **MINI K OD**

Original Instructions—rev.2011—In compliance with the § 1.7.4 of the Machine Directive 2006/42/CE



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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.

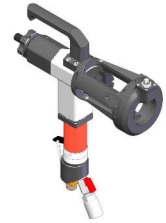
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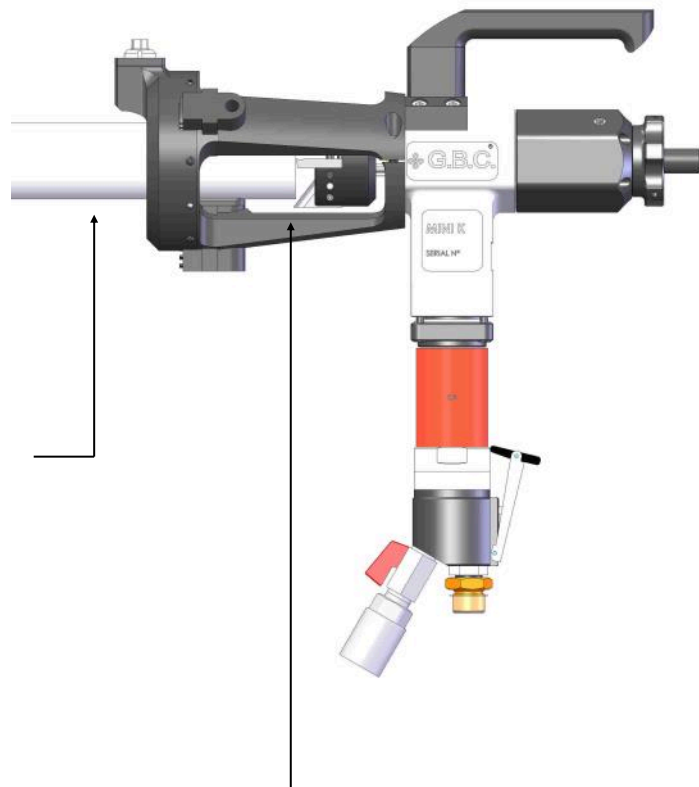


INTENDED USE OF THE MACHINE

The Mini K OD is conceived for beveling pipes and prep them for the subsequent welding process.

It works while inserted and locked into the OD of the pipe.

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



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

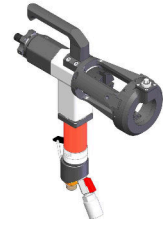
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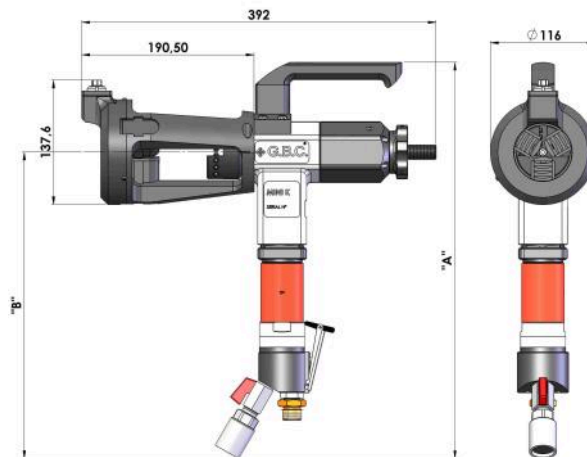


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TECHNICAL DATA				
		PNEUMATIC	ELECTRIC	BATTERY
OD Locking Range	mm (inches)	10 - 60 (0.39-2.37)	10 - 60 (0.39-2.37)	10 - 60 (0.39-2.37)
Idle Speed	gg/min (Rpm)	180	305	151
Chuck Max Torque	Nm (Nm)	6 (6 bar) 18 (8 bar)	17	30
Stroke	mm (inches)	23 (0.90)	23 (0.90)	23 (0.90)
Pneumatic Motor Power	Hp (W)	0.59 (435)		
Air Consumption	NI/min (cfm)	615 (21.7)		
Air Pressure	Bar (psi)	6 ÷ 8 (87 ÷ 116)		
Air Hose Connection	Pollici (inches)	1/2" (1/2")		
Electric Motor Power	W		720	720
Tension	Volt		110 / 230	18V 4.0 Ah
Frequency	Hz		50 / 60	
Max Acoustic Emission	Db	75	75	75
Machine Weight	Kg	8.7	9.4	9.6



MACHINE DIMENSIONS				
		PNEUMATIC	ELECTRIC	BATTERY
A	mm (inches)	438 (17.24)	523 (20.59)	583 (22.95)
B	mm (inches)	339 (13.34)	424 (16.69)	484 (19.05)

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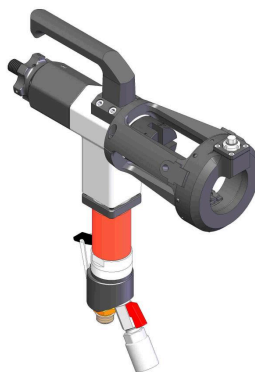
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AVAILABLE MODELS

MINI K OD



MINI K OD "E"



MINI K OD Battery



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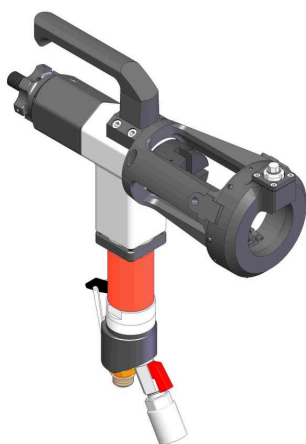


MACHINE STANDARD EQUIPMENT

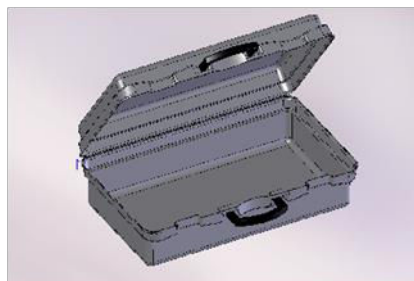
The machine is supplied with :

- Service Tools
- Storage Case
- Instruction Manual and Drawings

Mini K OD



Storage Case



Tool Box



Instruction Manual



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SAFETY PRESCRIPTIONS

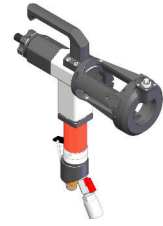
G.B.C. Industrial Tools S.p.A. designs and assembles its machines in strict compliance with the safety regulations provided by the applicable EC directives and by the Italian laws regulating this matter.

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	8.7	9.4	9.6
Shipping Dimensions	mm	370x430x120	370x480x120	370x430x120
Shipping Weight	kg	18	18.7	18.9

Al di sotto dei 25 Kg non sono richiesti mezzi di sollevamento diversi dalla forza umana di un unico operatore

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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

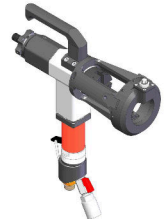
By always using both hands for operating the machine, the operator is unable to reach the bevelling tools as the unit would suddenly stop – motor brake –

EMERGENCY STOP INSTALLATION

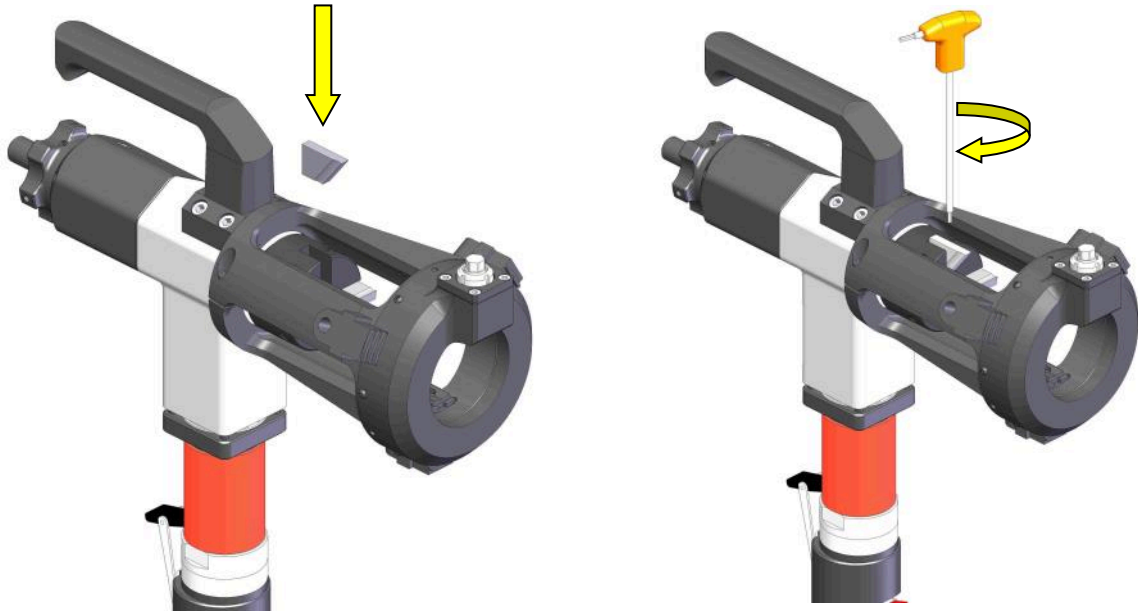
As provided for the paragraph 1.2.4.3. of the attachment 1 of the Machinery Directive, portable machines are exempt to have this feature.

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USE INSTRUCTIONS

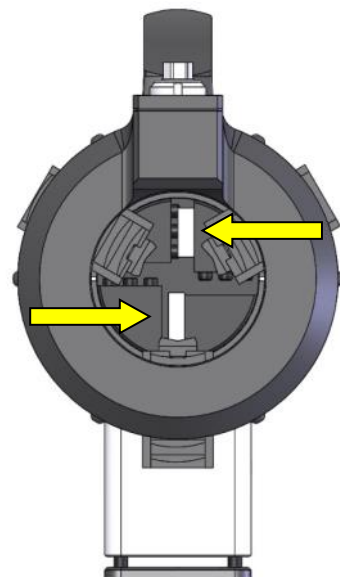


Select the tools for the specific preparation required and place them in the chuck one at a time. Make sure that all the tools are installed so that they are not protruding from the chuck outside diameter.

IMPORTANT NOTICE

1. The Mini K OD should always work with 2 tools mounted opposite to each other on the chuck. This will balance the workload helping the machine to maintain a stable position during the beveling operation.

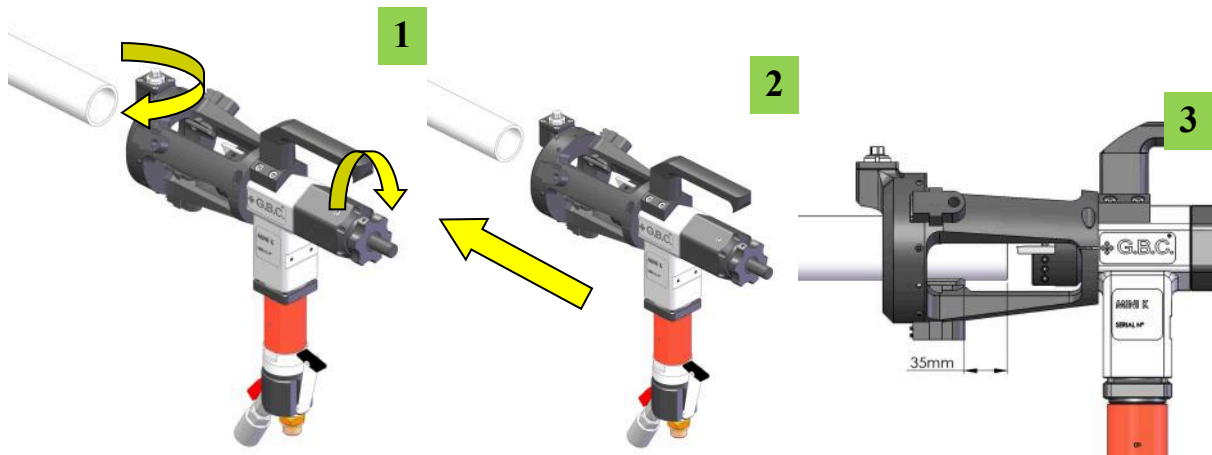
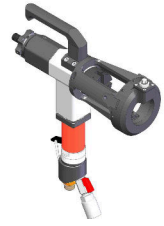
2. The feeding hand wheel should be operated with a moderate force as an excessive feeding may destabilize the machine position.



Once the tool is in the correct position, fix it in place by securing the set screw with the Allen key.

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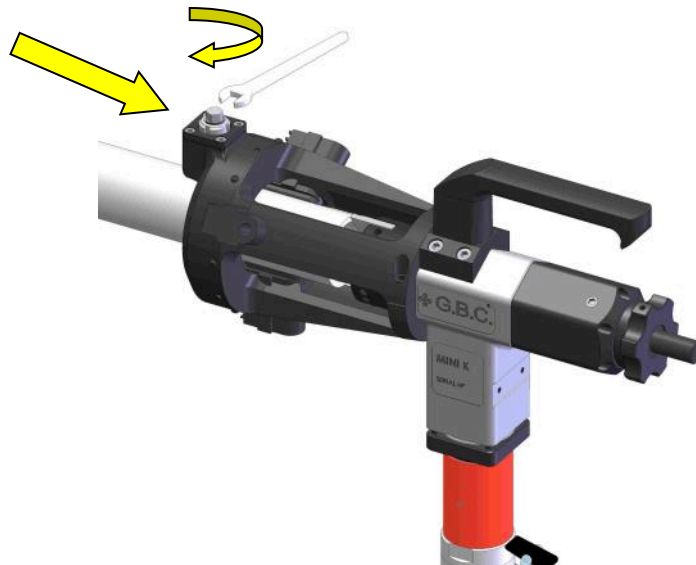
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Open the self-centring locking device by turning the locking nut clockwise to accommodate the pipe size-wise and bring the chuck all the way back its stroke (Pic.#1) by turning the hand wheel counter-clockwise.

Slide the machine on the pipe (Pic.#2)

The 35mm distance is approximate and can be changed depending by the preparation required (Pic. #3).



Turn the locking nut clockwise to secure the Mini K OD onto the pipe OD.

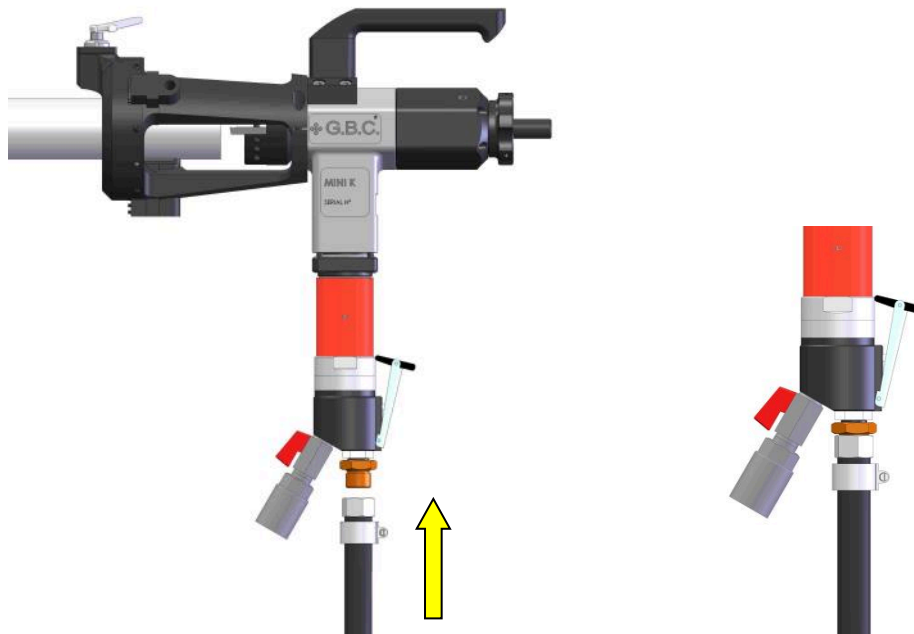
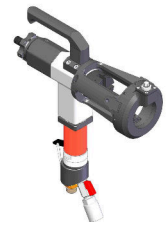
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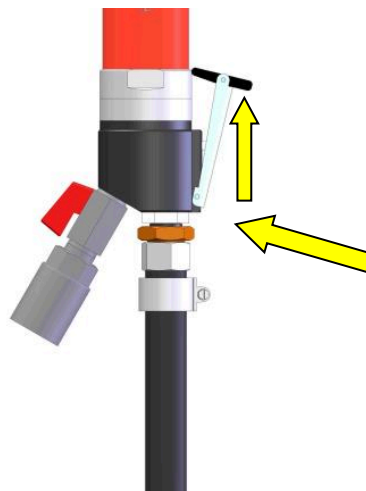


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Connect the air hose to the motor fitting.



Push the black security lever forward with your thumb and press the silver lever down to start the machine.

WARNING! This mechanism is a dead man switch therefore it requires a constant pressure of the hand to keep working.

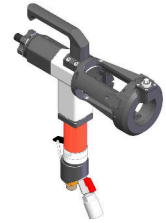
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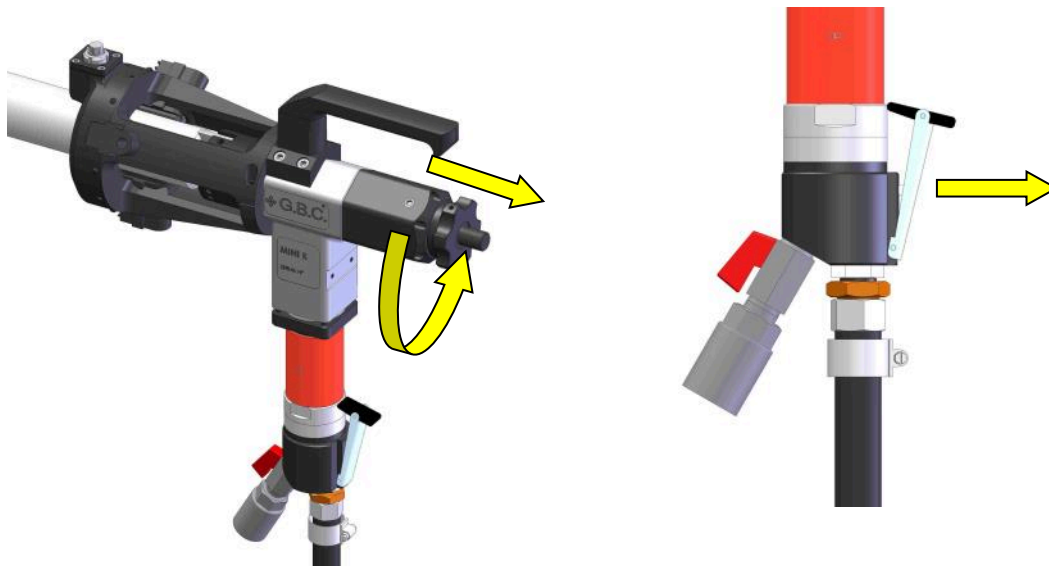
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Turn the feeding hand wheel clockwise to move the chuck towards the pipe and as soon as the tools begin to work, reduce the feeding rate to a comfortable feeling, trying to maintain a constant feeding ratio.

WARNING! Always check the position of the tools in relation to the locking feet to prevent them to touch. **THIS MAY DAMAGE THE FEET OR THE TOOLS IRREDEMIABLY.**



DO NOT stop the machine while it is beveling.

When the final result is achieved, turn the feeding hand wheel counter-clockwise until the tools are no longer touching the pipe.

Now you can release the lever to stop the machine.

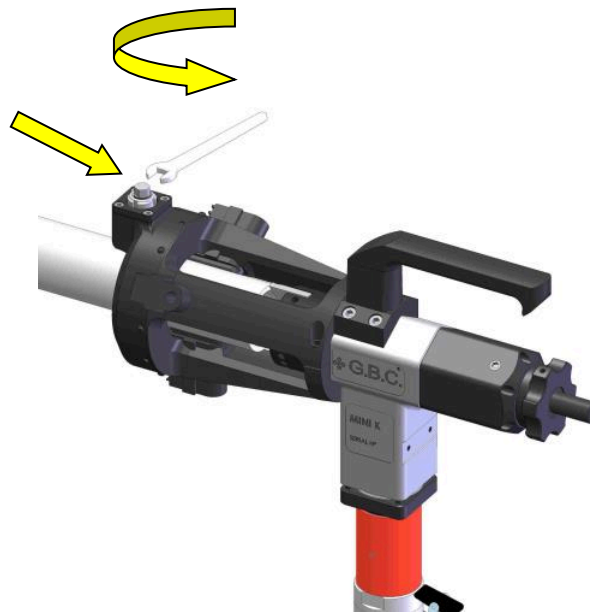
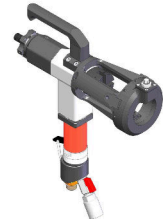
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RELEASE THE MACHINE:

After stopping the machine you can remove it from the pipe by turning the locking nut clockwise and all the 3 locking feet will withdraw simultaneously releasing the machine.

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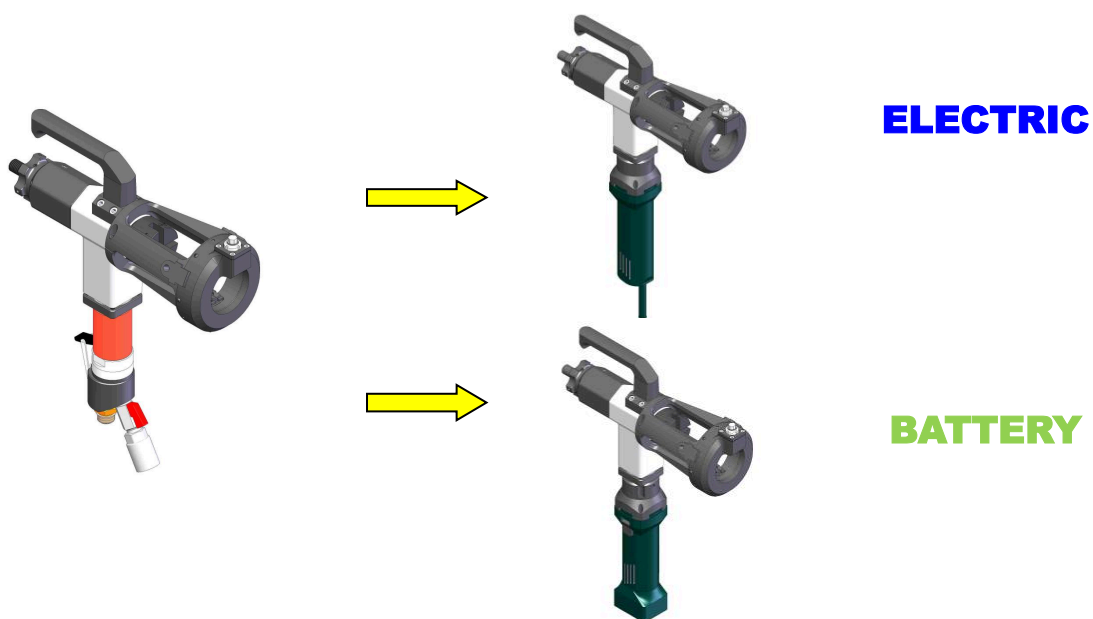


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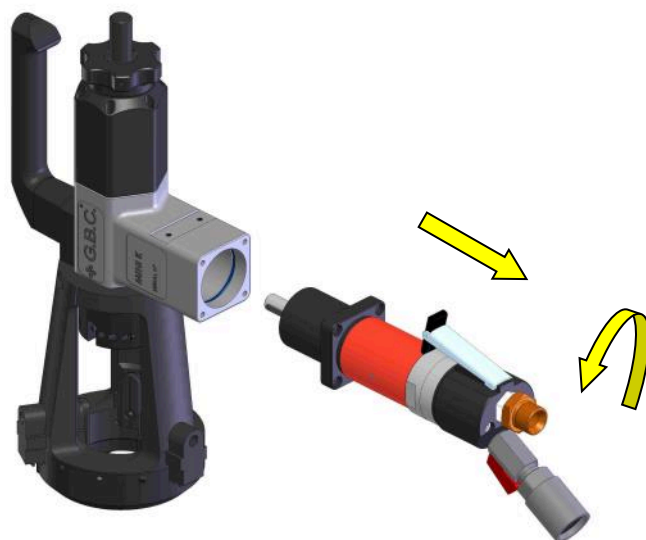
CONVERTING THE MACHINE FROM PNEUMATIC TO ELECTRIC/BATTERY



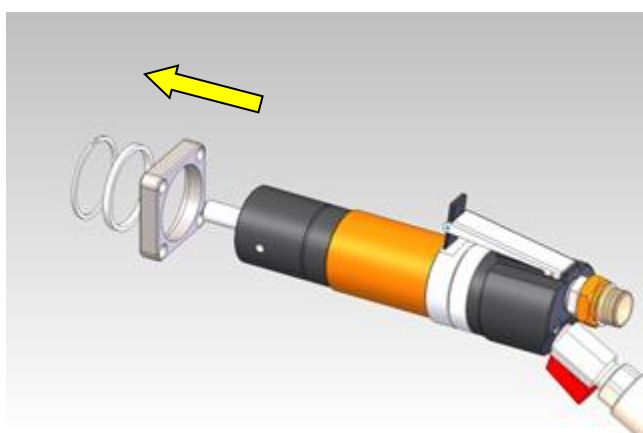
Remove the 4 screws located on each corner of the square flange as shown above.

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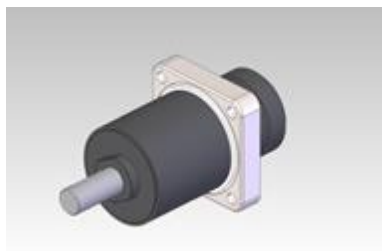
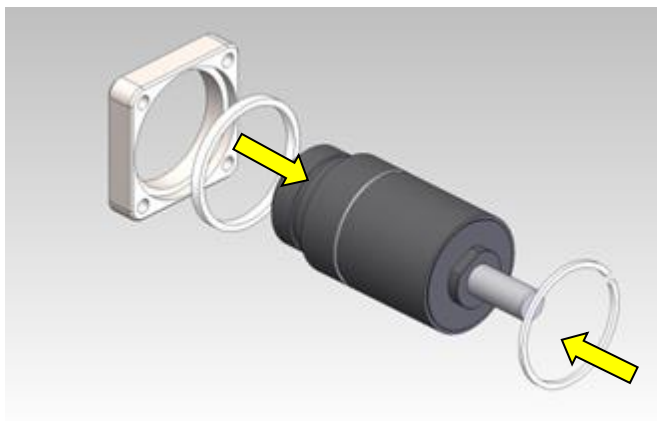
Pull the motor combining the pull with a rotary motion to ease its extraction.



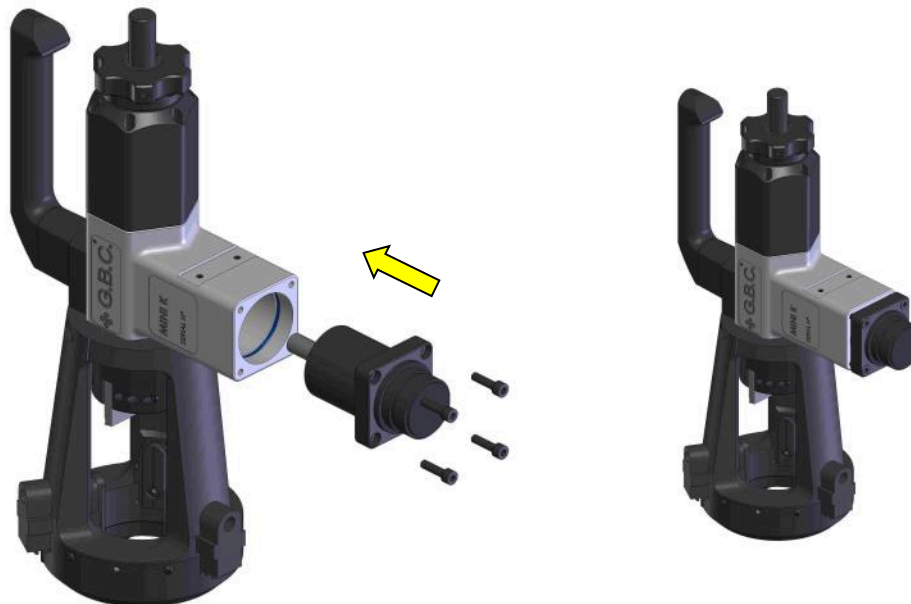
From the motor, you will have to remove the retaining ring, the spacer and the flange.

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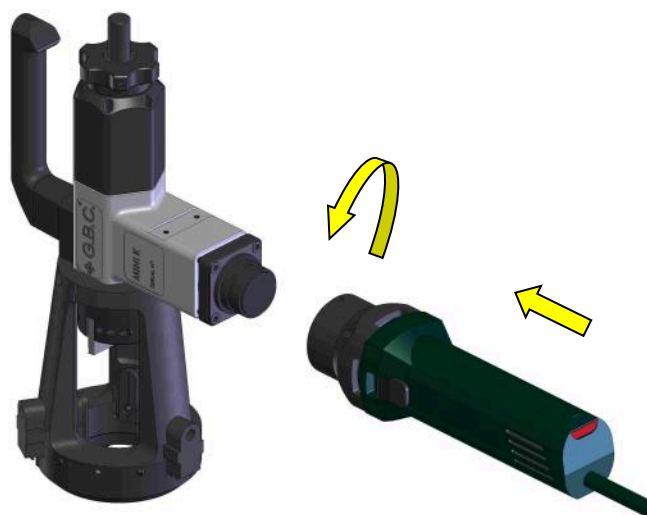
Install the retaining ring on the groove on the reducer of the electric motor, slide on the spacer and the flange you have just removed from the pneumatic motor.



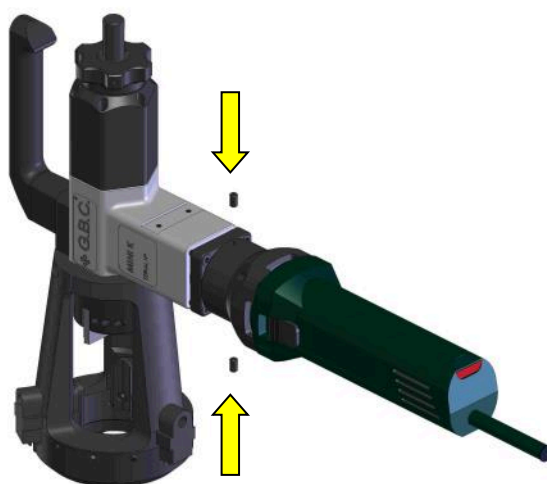
Insert the reducer in the machine body as shown above and fix it in place with the 4 screws removed previously.

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Insert the motor on the portion of the reducer protruding from the machine body and screw it on.
(WARNING!! The motor has a left thread, therefore you will have to screw it with a counter clock-wise rotation.)



Use the 2 set screws to fix the drive assembly to the reducer.

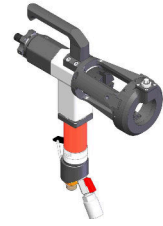
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ORDINARY MAINTENANCE

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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Original Instructions—rev.2011—In compliance with the § 1.7.4 of the Machine Directive 2006/42/CE



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 beveling 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.

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

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