



SUPERBOILER T5

Versione 04.2018



INDEX

UPERBOILER T5

- In compliance with the step 1.7.4 of the Machinery Direc-tive 2006/42/CE

℅G.B.C. Տ

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<u>PRESENTATION OF THE COMPANY AND</u> INTRODUCTION TO THE INSTRUCTION MANUAL

G.B.C. Industrial Tools S.p.A. is known worldwide for the quality of its 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 operanting the General Management, the sales de-department, as well as the main workshop and the shipping de-partment.

QUALITY STANDARD—All our machines are assembled acording to the highest quality standard. Since 1996 G.B.C. In-dustrial 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 forbid-den 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 modi-fication 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 Fax +39 - 030 - 7356629

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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. Indus**trial 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 di-rectly or indirectly imputable to misuse or alteration. In any case the machine must not be disas-sembled 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 con-nected with the **MSS** maintenance service.

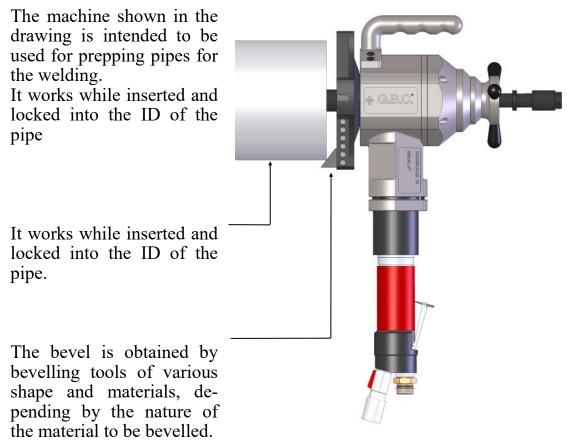
The shipment of the defective material must be performed within 8 (eight) days from the notification of the defect and/or the claim and/or the request of technical assistance. On the contrary the warranty will be void. **G.B.C. Industrial Tools S.p.A.** and **MSS** obligations will cover the defect resolution, 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 shipmen 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, atmos-pheric 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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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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TECHNICAL DATA

UPERBOILER T5

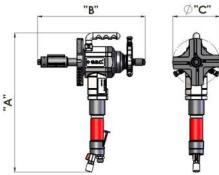
- In compliance with the step 1.7.4 of the Machinery Direc-tive 2006/42/CE

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		PNEUMATIC	ELECTRIC	HYDRULIC	
Locking Range	mm	49-207	49-207	49-207	
Idle Speed	RPM	44	32	26	
Chuck Maximum Torque	Nm	70 (6 bar) 210 (8 bar)	467	395	
Stroke	mm	40	40	40	
Pneumatic Motor Power	Hp (W)	1.74(1300)			
Air Consumption	NI/min	1300			
Air Pressure	Bar (psi)	6 ÷ 8 (87 ÷ 116)			
Air Hose Connection	Inches	3/4"			
Electric Motor Power	Hp (W)		2.58 (1900)		
Tension	Volt		110/230		
Frequency	Hz		50/60		
Hydraulic Motor Power	Hp (W)			1.36 (1000)	
Hydrsulic Power Pack Max Pressure	Bar			80	
Oil Flow	l/min			30	
Max Acoustic Emission	Db	75	75	75	
Machine Weight	Kg	24	25	25	



MACHINE DIMENSIONS					
		PNEUMATIC	ELECTRIC	PN.+LOCK	HYDRAULIC
Α	mm	650	645	670	513
В	mm	502	502	660	502
ØC	mm	220	220	220	220





MACHINE CONFIGURATION MODELS

SUPERBOILER T5

SUPER BOILER T5" E"

SUPERBOILER T5 "Auto-Lock"

<u>SUPERBOILER T5 F</u>





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MACHINE STANDARD EQUIPMENT

The machine is supplied with :

- Locking jaws complete kit from 49 to 207 mm one measure of which is already mounted on the unit;
- 5mm Allen Key

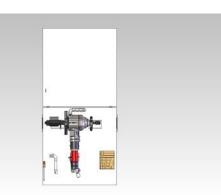
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- 24mm Double Ended Hexagon Tubular Socket Wrench
- Case
- Instruction Manual And Exploded Drawings.









Service Tools

Instruction Manual And Exploded Drawings



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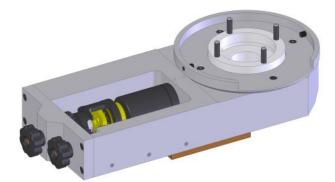


- In compliance with the step 1.7.4 of the Machinery Direc-tive 2006/42/CE

OPTIONAL EQUIPMENT



INTERCHANGEABLE ELBOW SHAFT KIT FROM 98mm TO 207mm ID.



FLANGE KIT 60-400mm



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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 hereinafter and with the use and maintenance instructions hereto.

- Carefully read ALL the following regulations and the instructions herewith 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 specs 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 non original spare parts, and do not project violent water squirts on the machine
- Keep the hands away from hot and sharpened parts.
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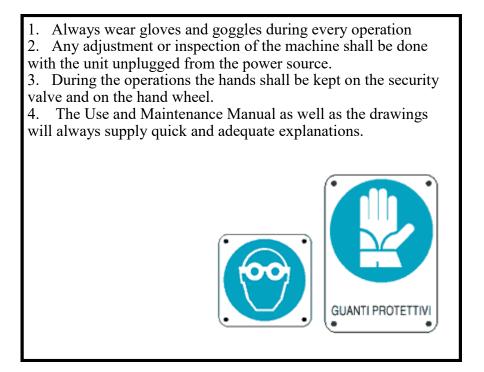
• **G.B.C. Industrial Tools S.p.A.** remarks that for any non specified circumstances it is necessary to obtain the authorization of the manufacturer.

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Using properly the safety gear entails the only risks to be generated by the user's system and not by inborn defects of our machines.



TRANSPORT RECOMMENDATIONS

Weight of the Machine	kg	24	
Shipping Dimensions	mm	830x830x54	
Shipping Weight	kg	65	

Under 25 Kgs no lifting machines are required.

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

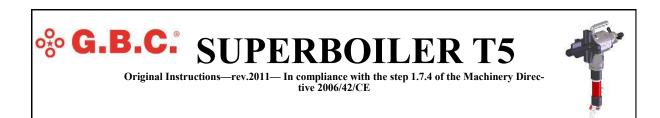


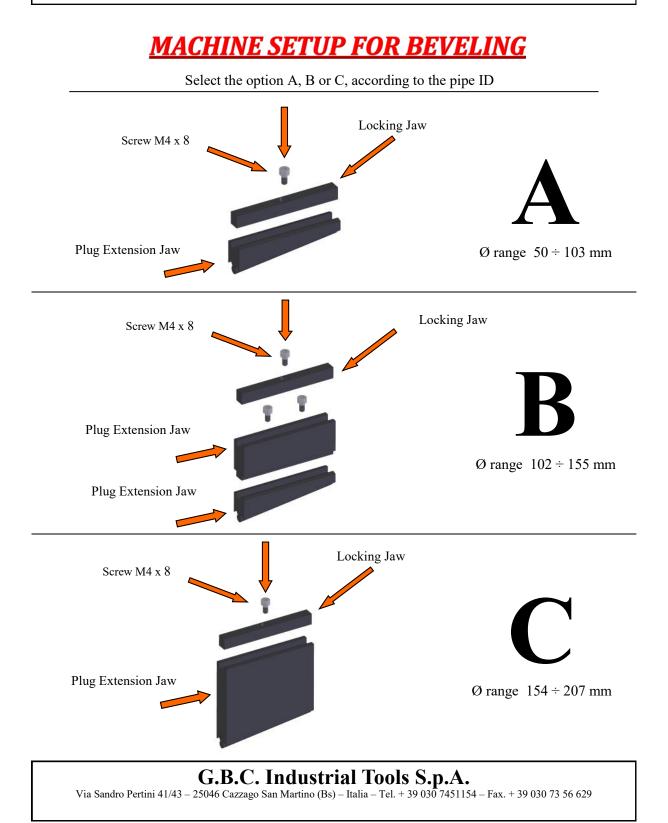
By always using both hands for operating the machine, the operator is unable to reach the bevelling tools as the unit would suddenly stop - motor brake -

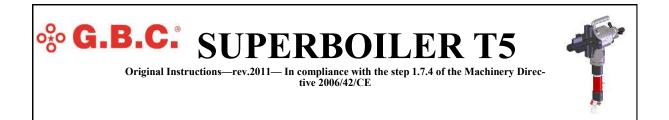
<u>EMERGENCY STOP INSTALLATION</u> <u>EXEMPTION</u>

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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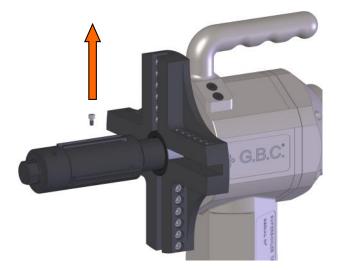






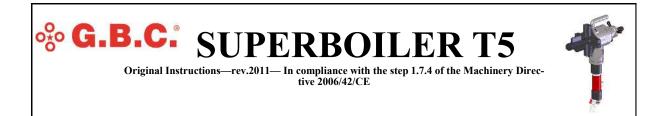
OPTION "A" Ø 50mm ÷ 103mm

Remove the 3 screws fixed on the expansion unit of the machine.



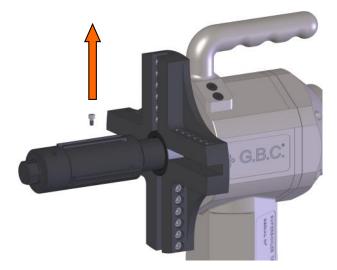
Insert the 3 locking jaws you have selected in function of the ID of the pipe you need to prep and fix them with their screws.



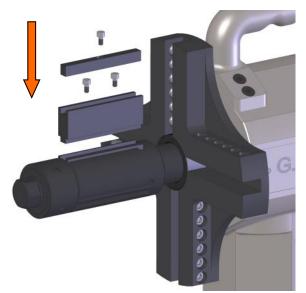


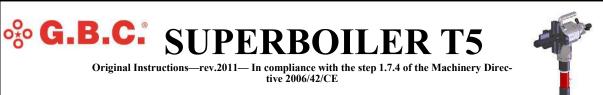
OPTION "B" Ø 102mm ÷ 155mm

Remove the 3 screws fixed on the expansion unit of the machine.

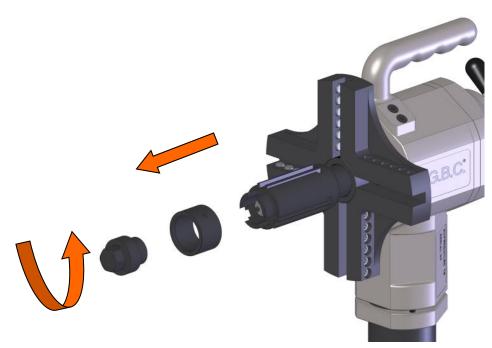


Insert the plug extension jaw and subsequently insert the le 3 locking jaws you have selected in function of the ID of the pipe you need to prep and fix them with their screws.

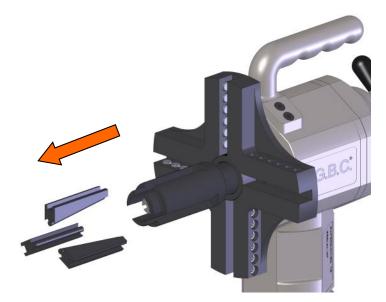




OPTION "C" Ø 154mm ÷ 203mm

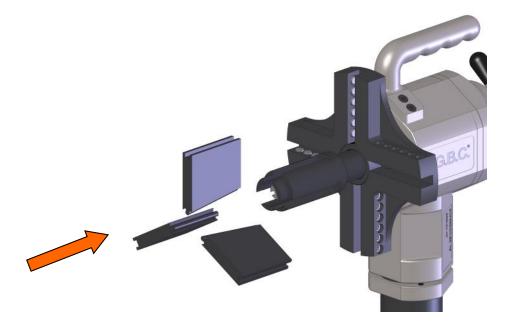


Remove the vane abutment nut and the vane abutment bush with a counter-clockwise movement.

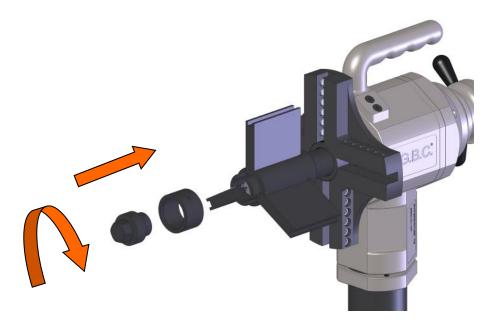


Take out the 3 extension jaws one by one as shown in the picture.



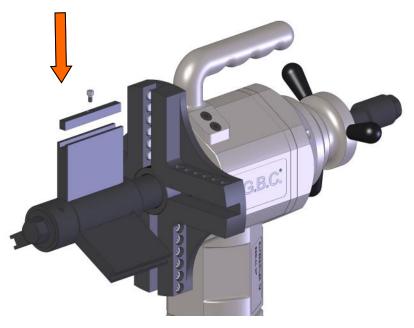


Get the widest extension jaws from the case and insert them one by one in the slots where from you have previously removed the smaller extension jaws.

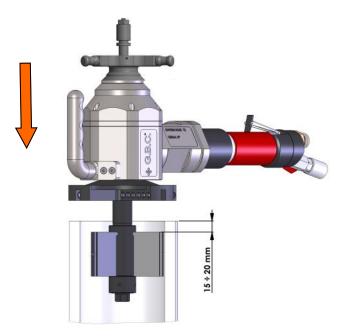


Assemble back on the vane abutment nut and the vane abutment ring with a clockwise rotation.





Now insert the locking jaws you have selected in function of the ID of the pipe you have to prep, and fix them with their screws

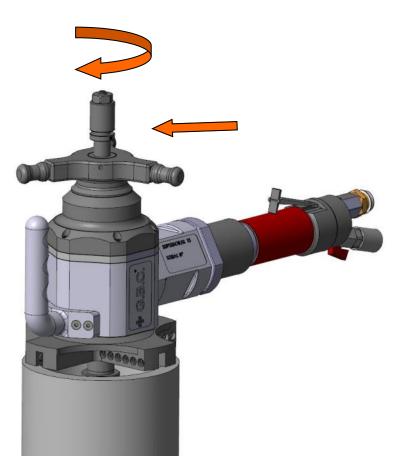


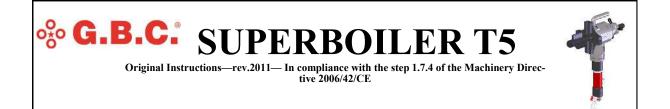


WARNING: In order to achieve the perfect positioning and locking, the jaws will have to be inserted in the ID for at least $15 \div 20$ mm as shown in the picture.

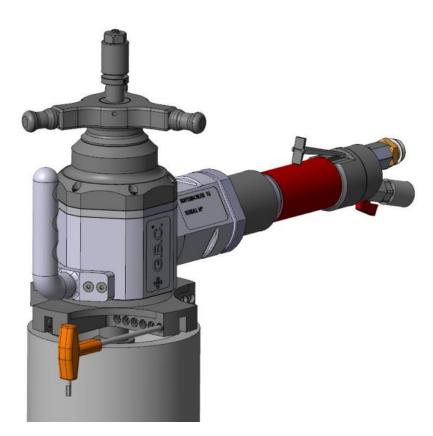


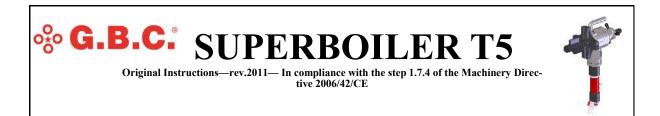
Keep the machine aligned with the axis of the pipe and fasten tightly the vane expansion nut with a wrench turning it clockwise.

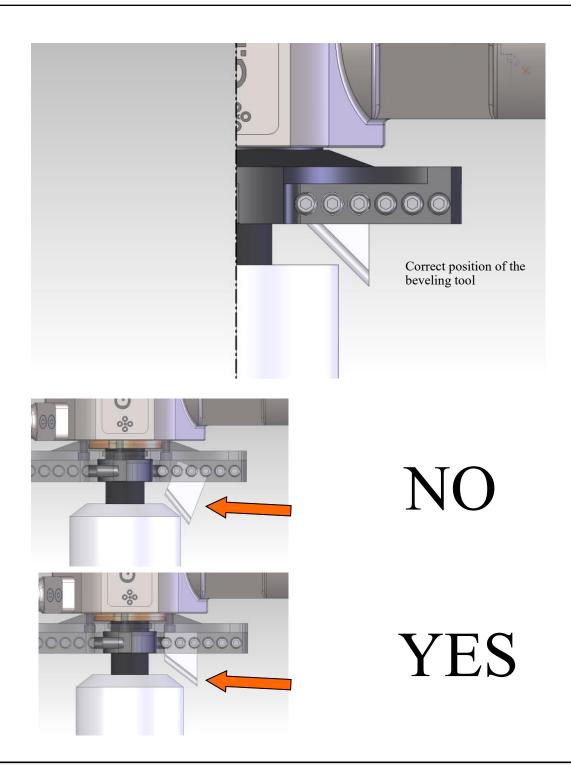


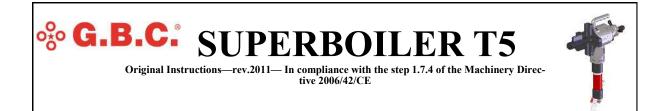


Now select the beveling tool according to the operation you need to do, insert it in the appropriate seat in the chuck and lock it tight with the grub screws using the Allen key supplied with the machine.

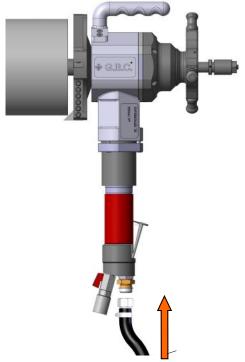






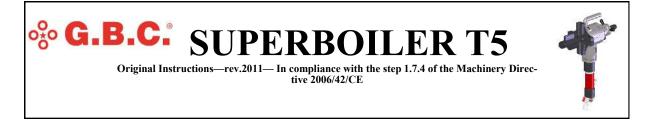


Connect the air hose to the machine and the to the air system

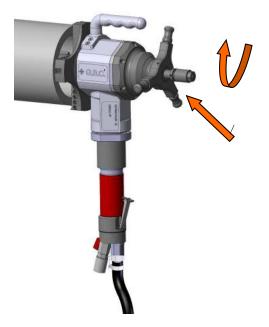


Actuate the machine by pressing the lever as shown by the arrow in the picture.

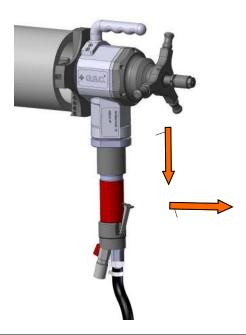




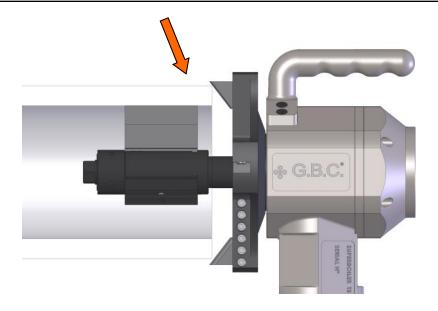
The machine feeding is achieved by acting on the hand wheel as shown in the picture. For a perfect result it is important you to maintain a constant feeding rate.



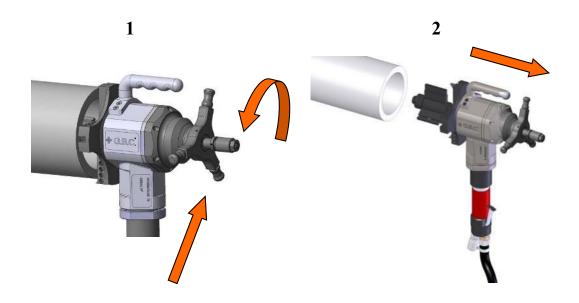
When the job is finished release the security lever and the machine will automatically stop.







WARNING! DURING THE OPERATION, THE BEVELING TOOL SHOULD NEVER COME IN CON-TACT WITH THE LOCKING JAWS <u>AS THESE MAY BE DAMAGED</u>



To remove the machine from the pipe:

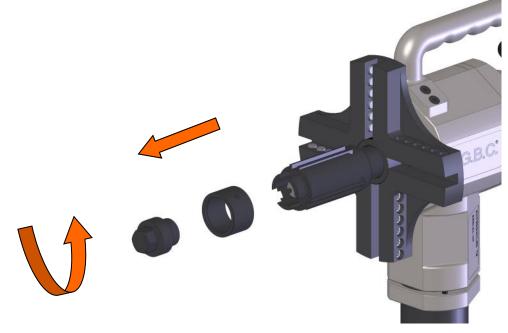
- 1. Unscrew the vane expansion nut using the wrench supplied with the machine.
- 2. Remove the machine from the pipe.

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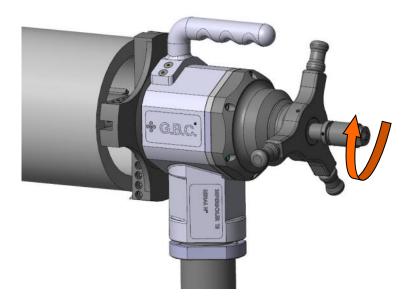




ELBOW SHAFT KIT ASSEMBLY



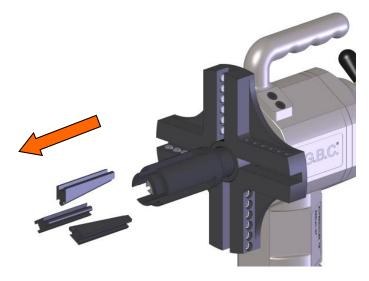
Remove the vane abutment nut and the vane abutment bush with a counter-clockwise movement



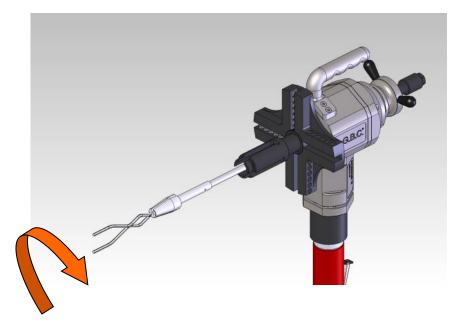
Screw all the way down the vane expansion nut





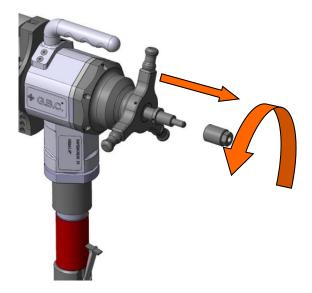


Remove the 3 extension jaws one by one as shown in the picture

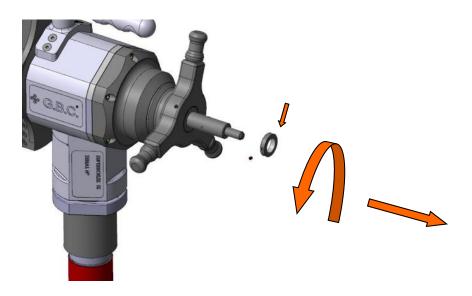


Using a long nose pliers rotate the expansion shaft counter-clockwise until you can take it out.

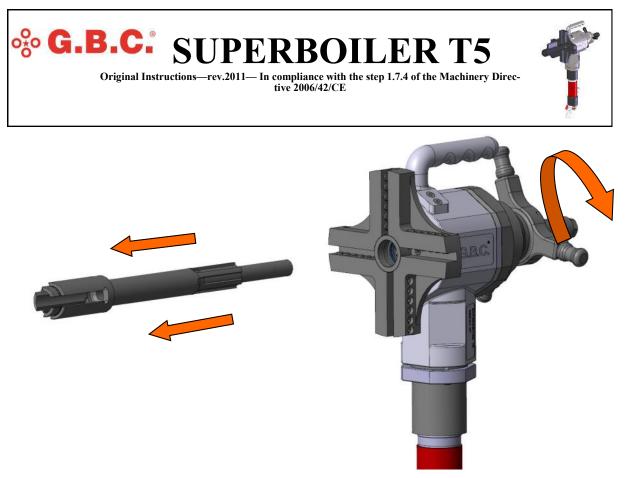




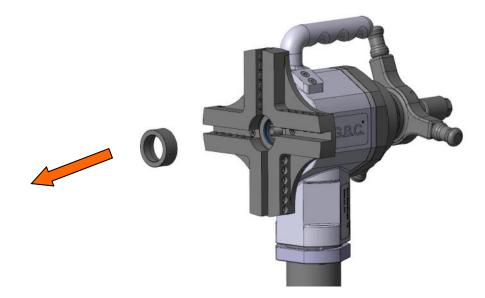
Remove the vane expansion nut.



Loose the grub screw of the stop run bush, but do not unscrew it completely , then unscrew the stop run bush.



Take off the guiding shaft by rotating the hand wheel counter.-clockwise as shown int the picture.



Take off the vane abutment bush with the extractor and the special pliers. (Not supplied as STD optionals)



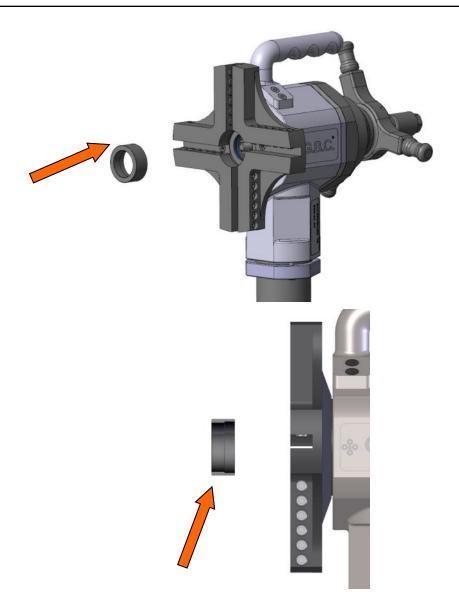
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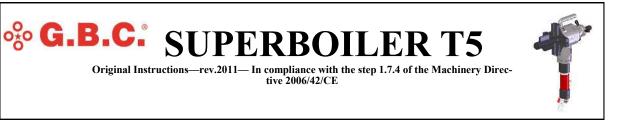
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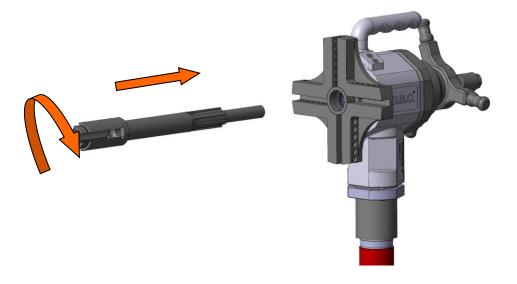
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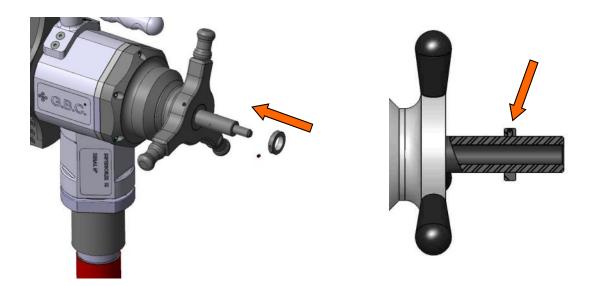


Insert the tool abutment bush supplied with the elbow shaft kit. The bush must be placed into position as per the above picture, where the minor diameter faces outwards.

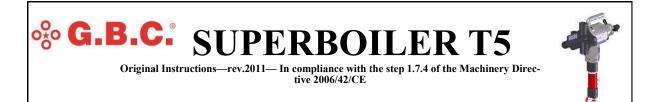


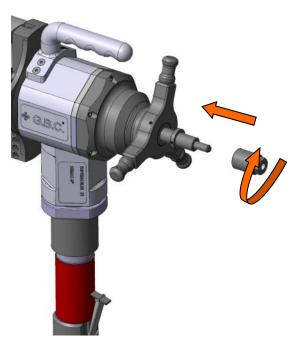


Insert the guiding shaft in the machine until it marche the internal groove; Rotate the shaft until it is centered with the groove, rotate the hand wheel clockwise and insert the guiding shaft.



Screw back on the stop run bush positioninig it on one of the three seats and fix it with the grub screw.

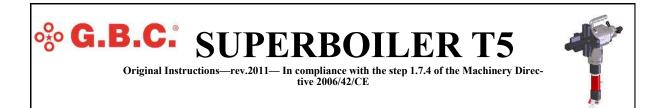


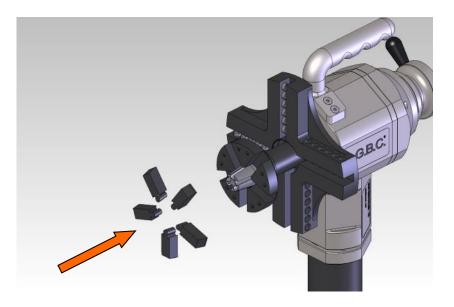


Screw the vane expansion nut all the way down.

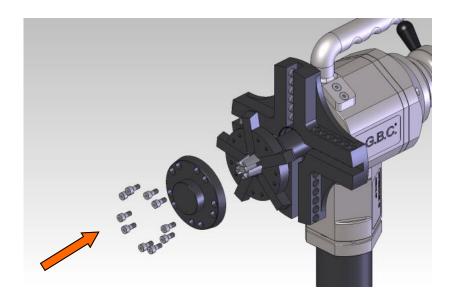


Insert the expansion shaft and screw it counter-clockwise until its tip extends 20mm outside as shown in the picture.

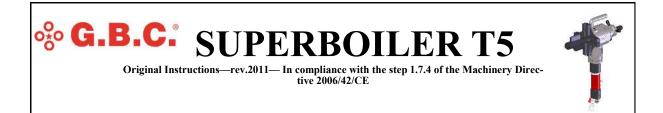


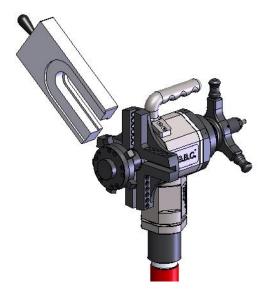


Select the 5 locking jaws in relation to the ID of the elbow you need to work and insert them as shown in the picture.



Mount the cover as shown in the picture and fix it with the 10 screws supplied with the kit.





Bring the Elbow Locking Shaft to the maximum extension and place the positioner over the shaft stem between the chuck and the gripping jaws hub.



Insert the jaws hub in the elbow ID until the positioner adheres to the elbow wall as shown in the picture. Now feed the machine forward until the positioner is packed between the elbow and the chuck. At this stage the machine is squared.

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Act on the Expansion Nut to lock the machine with a stedy grip.



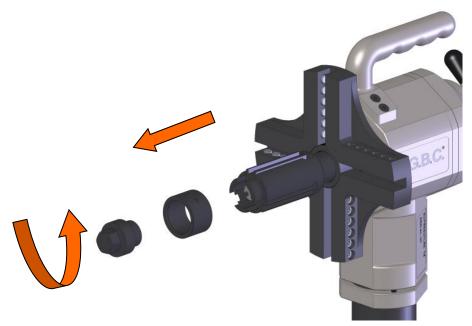


Move back the machine with the hand wheel and remove the positioner. Now you can install the required bevel tools and perform the bevel operation.

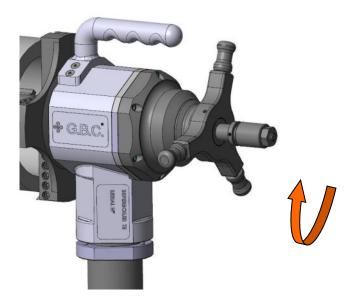


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PNEUMATIC LOCKING DEVICE ASSEMBLY



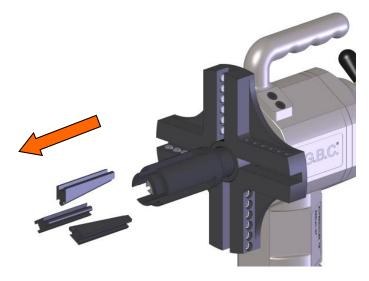
Remove the vane abutment nut and the vane abutment bush with a counter-clockwise movement



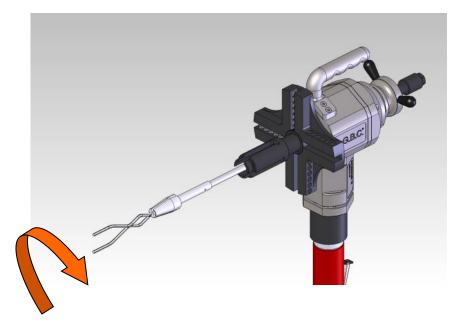
Screw all the way down the vane expansion nut





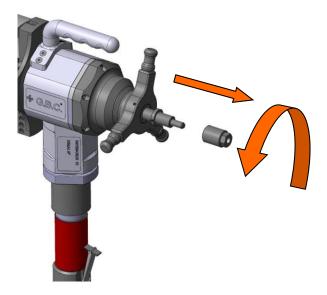


Remove the 3 extension jaws one by one as shown in the picture

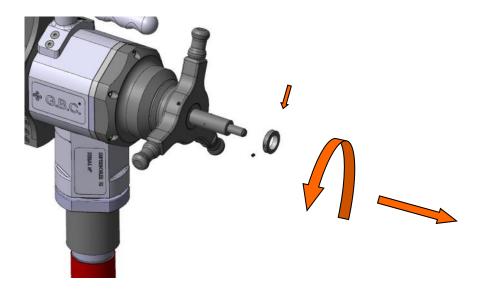


Using a long nose pliers rotate the expansion shaft counter-clockwise until you can take it out.

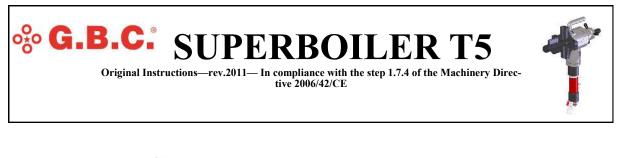


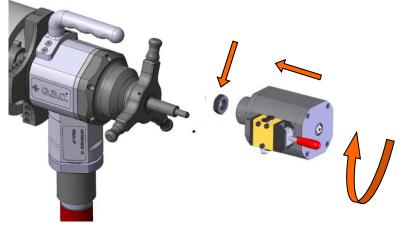


Remove the vane expansion nut.

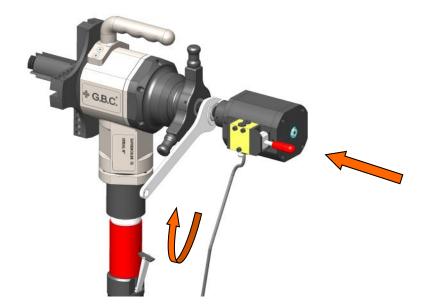


Loose the grub screw of the stop run bush, but do not unscrew it completely , then unscrew the stop run bush.

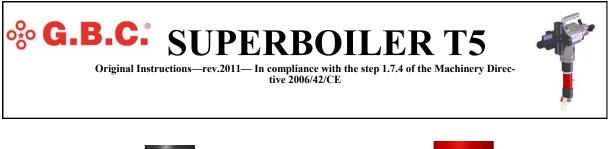


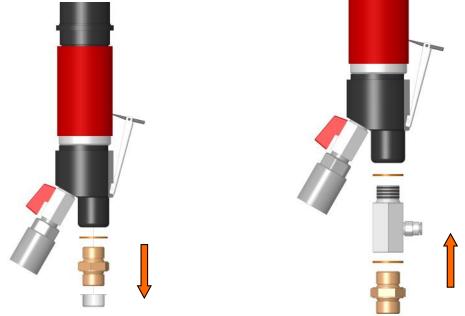


Screw the nut M22x1,5 supplied with the kit and install the pneumatic locking device as shown in the picture.

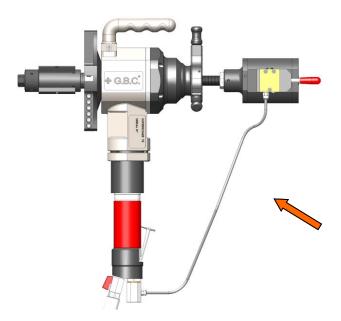


Screw the pneumatic locking device all the way down and fix it in position with the nut as shown in the picture.

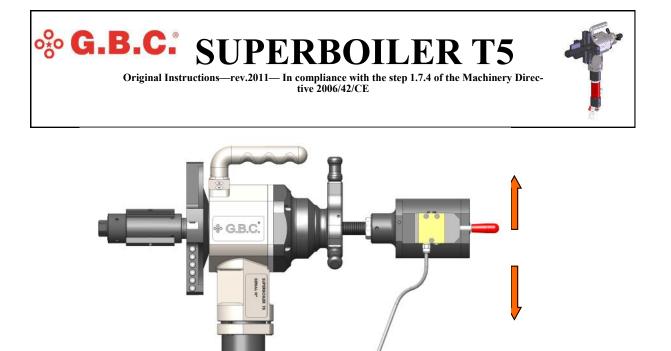




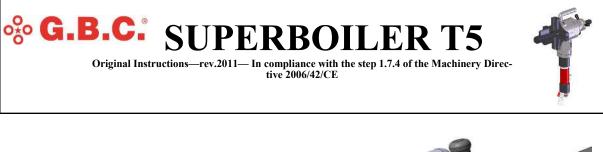
Unscrew and remove the nipple and install the air connector between the nipple and the security switch.

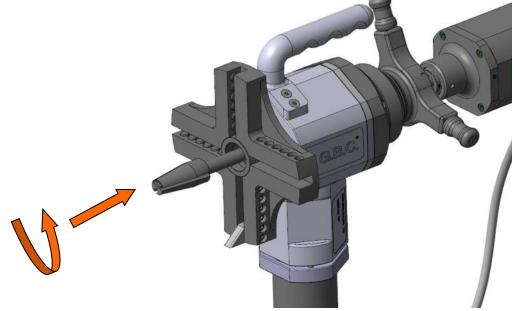


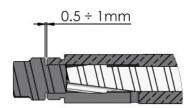
Connect the air tube to the air connector and the pneumatic locking device as shown in the picture.



After having suppkied air to the pneumatic locking device, move the red level upwards or downwards, in order to move the pneumatic piston all the way forward .

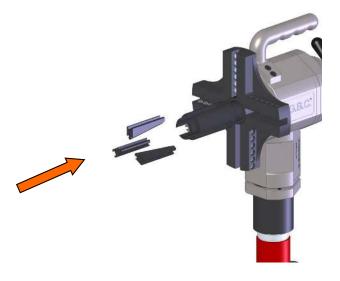




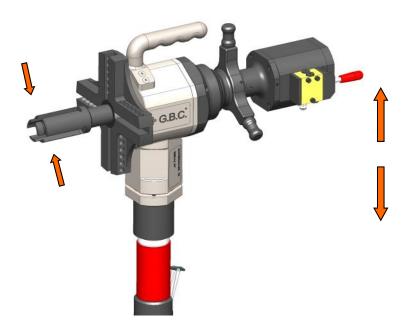


Insert the expansion shaft inside the guiding shaft, screw it counter-clockwise until you will obtain a 0.5 \div 1 mm gap when inserting the vane abutment nut as clearly shown in the above picture .





Select the locking jaws in function of the ID of the pipe you will have to prep and slide them in the shaft..



After having supplied air to the pneumatic locking device, keep the locking jaws firmly pressed with your hand and move the red lever upwards or downwards so that the expansion shaft will withdraw into the machine body.

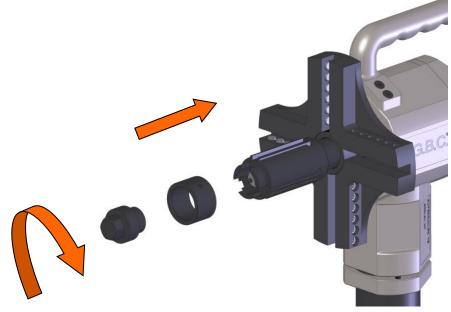
Se il montaggio è corretto le tre alette devono avere un leggere gioco nella propria sede.

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Original Instructions—rev.2011— In compliance with the step 1.7.4 of the Machinery Direc-tive 2006/42/CE



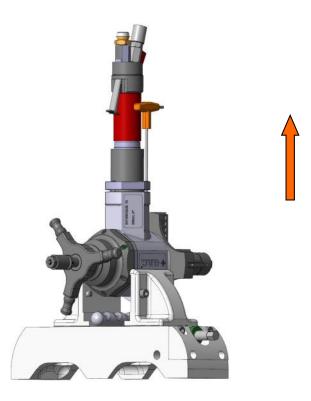
Assemble back on the vane abutment nut and the vane abutment ring with a clockwise rotation.



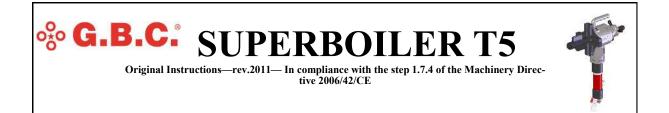
In the rear part of the locking device you shall now insert the stem and the grub screw as shown in the pictur making sure not to move the expansion shaft.

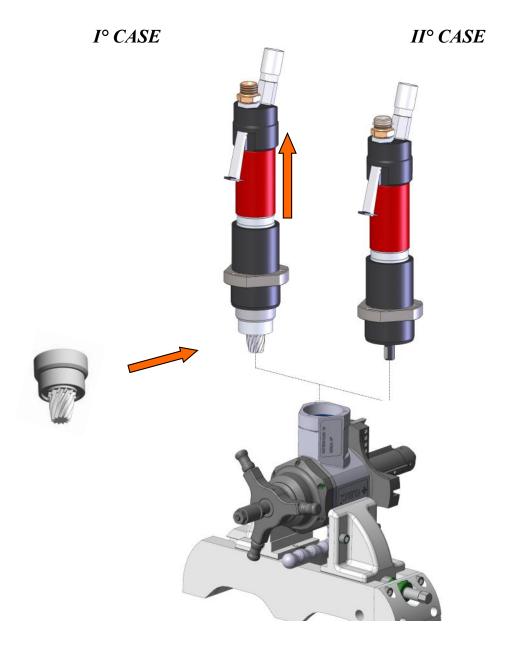


CONVERTING THE MACHINE FROM PNEUMATIC TO ELECTRIC



Lock the machine body into a vice with aluminium jaws as shown in the picture and remove the 3 screws.



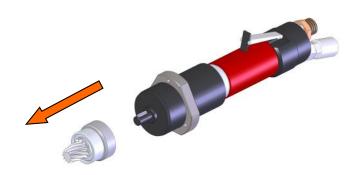


Grab the motor and pull it out with a rotatory motion until it comes off. N.B.: While extracting the drive unit, the pinion assembly might come off together with it. Should this happen you will want to follow this procedure.



I° CASE

The pinion assembly remains attached to the pneumatic motor.

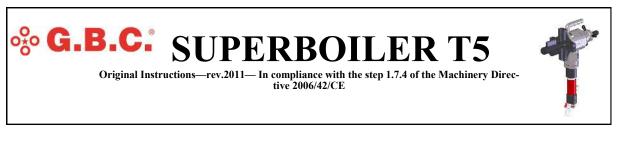


Separate the pinion assembly from the motor.



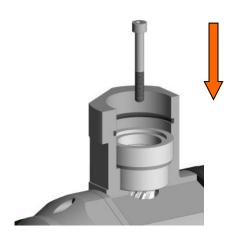
Install the pinion assembly on the electric motor.

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II° CASE

The pinion assembly remains inside the machine body.

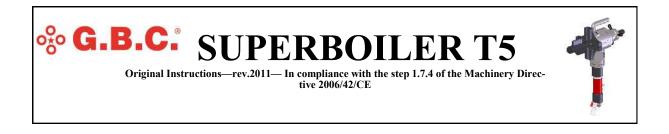


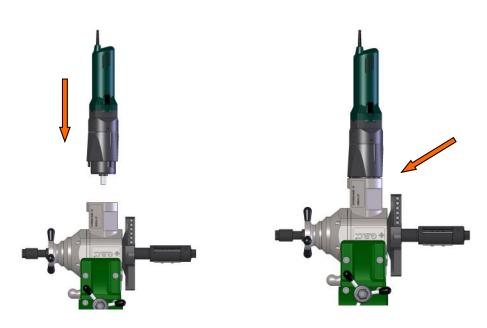
Get an M6x60 screw or a longer one and screw it in the pinion so that it extends out of the machine body as shown it the picture. Now pull in until the pinion assembly comes off.



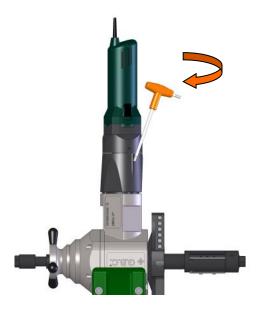
Install the pinion assembly on the electric motor.

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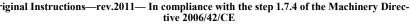


Insert the electric drive device all the way down making sure that the pinion and the crown teeth are matching perfectly ..

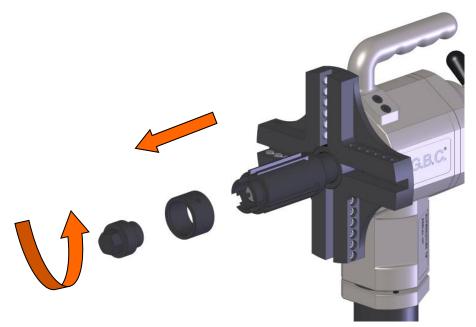


Once the motor is correctly installed screw back on the 3 screws to lock it. The machine is now ready to be used.

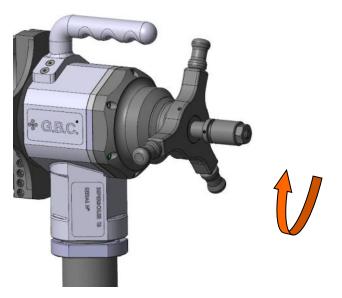




FLANGE KIT ASSEMBLY PROCEDURE



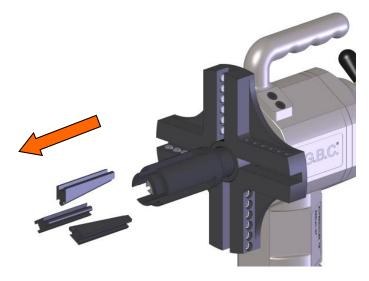
Remove the vane abutment nut and the vane abutment bush with a counter-clockwise movement.



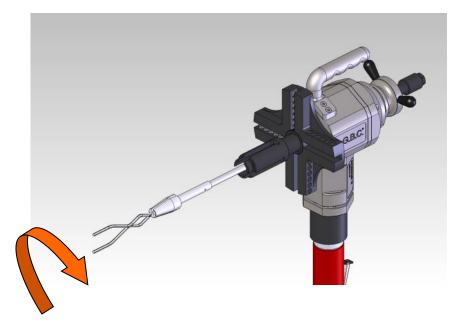
Screw all the way down the vane expansion nut





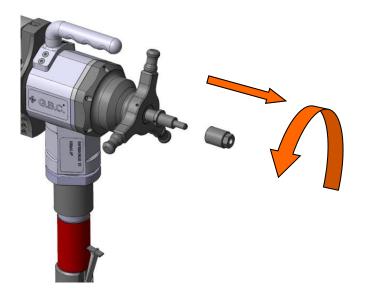


Remove the 3 extension jaws one by one as shown in the picture

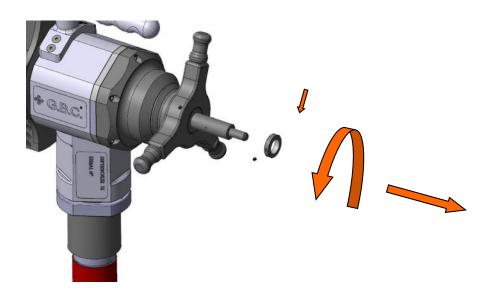


Using a long nose pliers rotate the expansion shaft counter-clockwise until you can take it out.





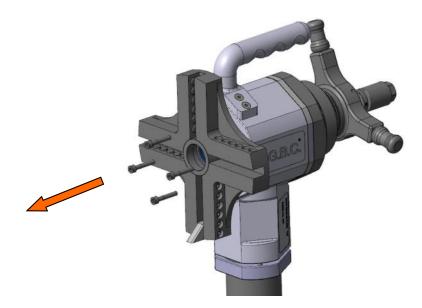
Remove the vane expansion nut.



Loose the grub screw of the stop run bush, but do not unscrew it completely , then unscrew the stop run bush.



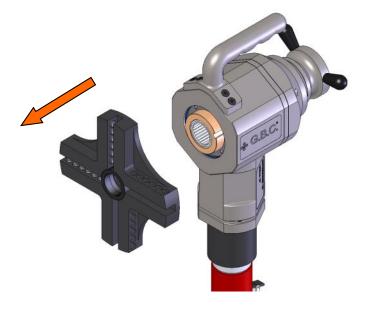
Take off the guiding shaft by rotating the hand wheel counter.-clockwise as shown int the picture.



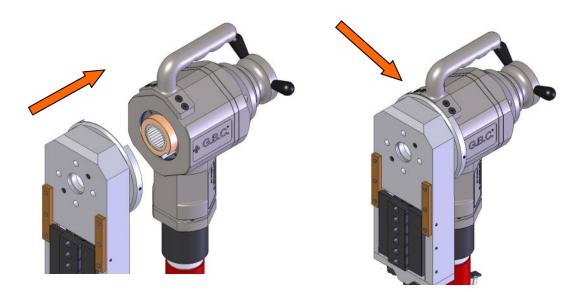
Remove the 4 screws that hold the chuck in position.





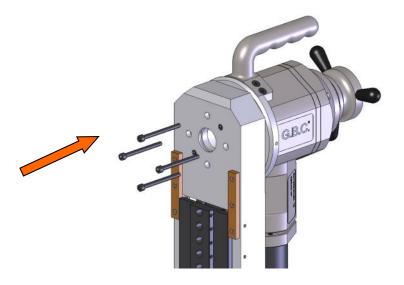


Gently hit the chuck extremities with a rubber hammer to remove it easily .

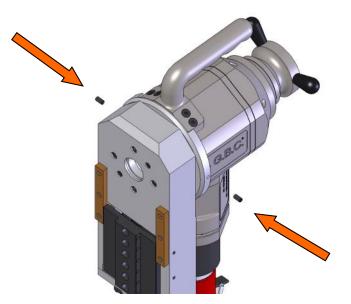


Take the flange kit, match the key notch and install it helping yourself with a rubber hammer. Ensure also that the protection ring is aligned with the attachment of the handle.





Insert and fasten the 4 screws and ensure the kit is able to freely rotate in both ways.

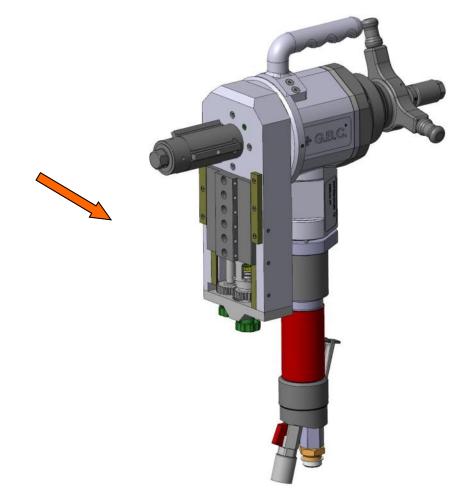


Fix the two grub screws as shown in the picture.





In compliance with the step 1.7.4 of the Machinery Direc-tive 2006/42/CE

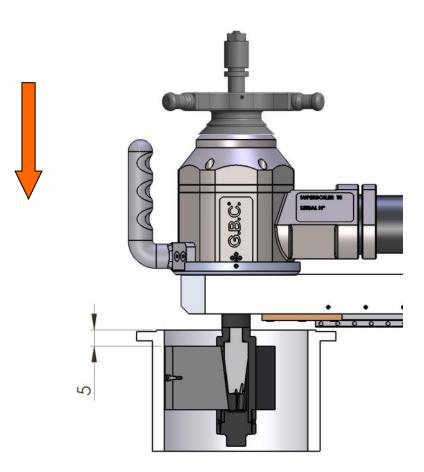


NB Put back together the expansion unit following in reverse all the operations previously described.

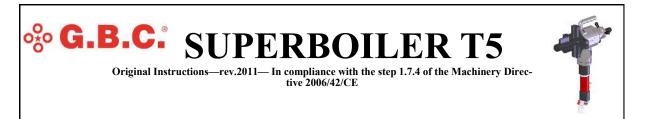


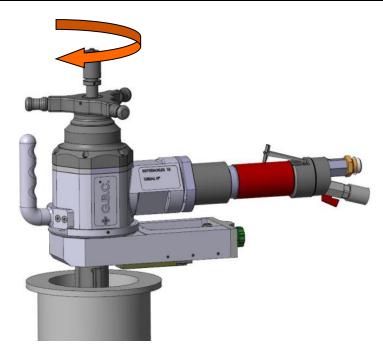


FLANGE KIT INSTRUCTIONS

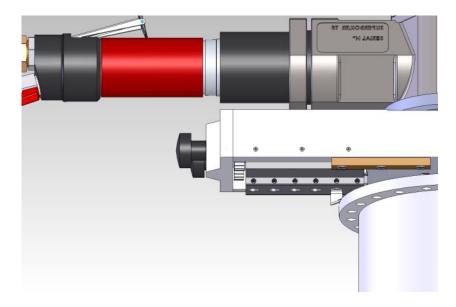


After having selected the locking jaws in function of the ID of the pipe, insert the machine inside the flange until the locking jaws are 5 mm inside the pipe as clearly shown in the above picture.



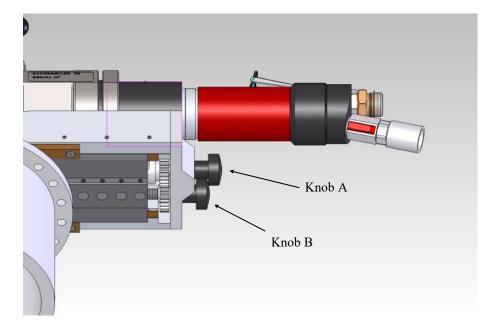


By using the wrench supplied with the machine lock tight the vane expansion nut and fixing the machine to the flange.

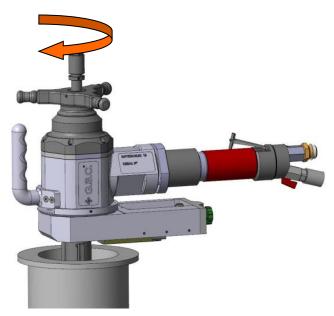


Insert the tool and lock it in position..





Disable the automatic feeding by polling the Knob "A". Rotate the Knob "B" to position the tool in the initial position. Before engaging back again the automatic feeding pushing the Knob "A" forward rotate the flange kit body very slowly to ensure that the tool you have just installed does not touch the surface of the flange.



To increase the pace depth turn the hand weel clockwise. To obtain optimal finishing we suggest to regulate the pace at $1\div1,5$ mm

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ORDINARY MAINTENANCE

tive 2006/42/CE

PERBOILER T5

In compliance with the step 1.7.4 of the Machinery Direc-

We suggest to perform a service c/o G.B.C. Industrial Tools S.p.A. premises every 400 hours working cycles.

PERIODICAL CHECKS

• Verify the general conditions of the machine;

G.B.C.

Original Instructions-rev.2011-

• 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. In-dustrial 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 re-quire about the above mentioned procedures and for any general clarification you may need.

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



tive 2006/42/CE

PERBOILER T5

- In compliance with the step 1.7.4 of the Machinery Direc-

‰ G.B.C.

Original Instructions-rev.2011-

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 com-plete 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.