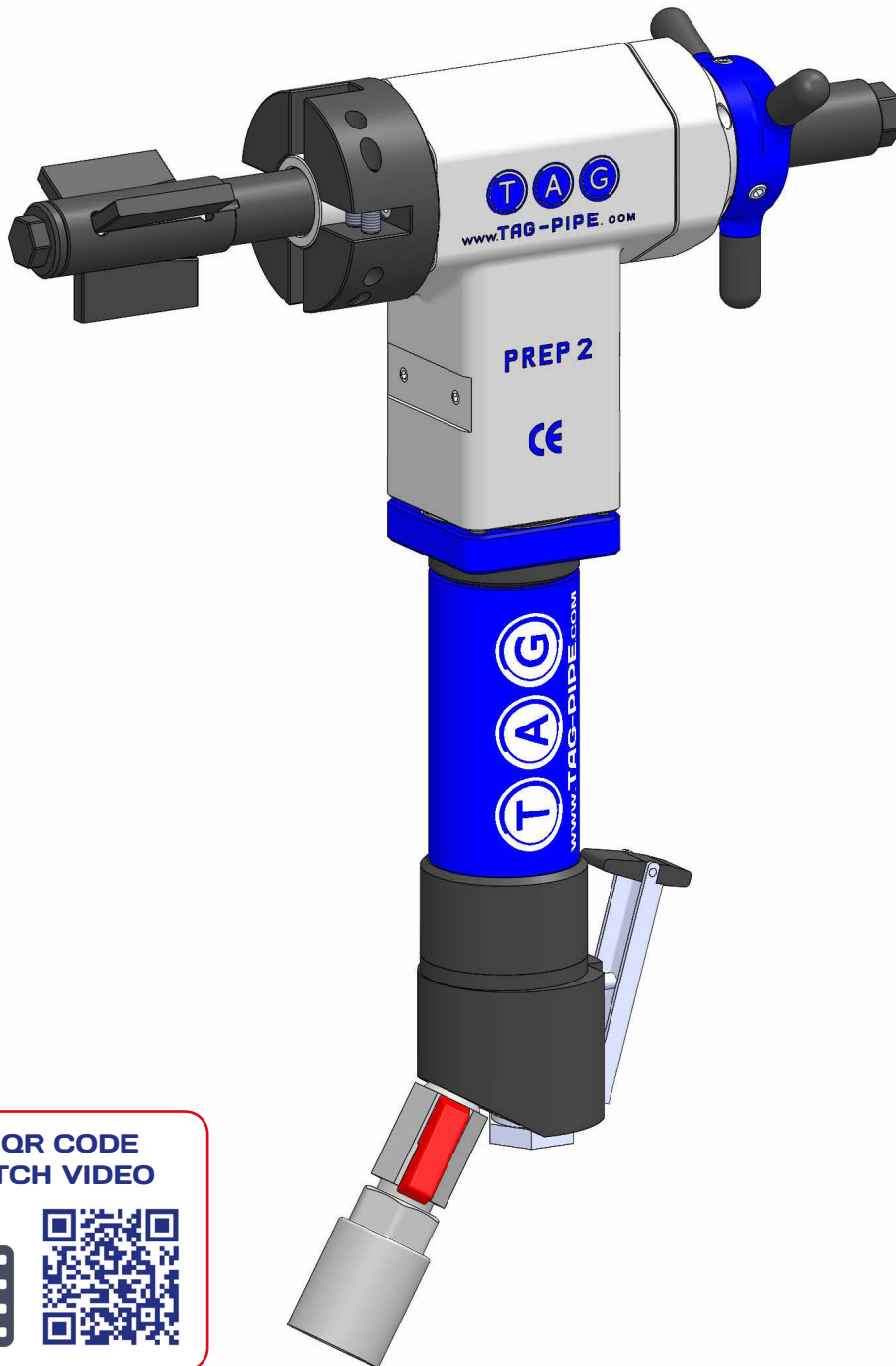




OCTOBER 2022

## PIPE EQUIPMENT SPECIALISTS

### PREP 2 PIPE BEVELLING 1/2" to 1 1/2" MANUAL



SCAN QR CODE  
TO WATCH VIDEO





## SPECIALIZED FABRICATION EQUIPMENT GROUP

### S.F.E. GROUP - INTERNATIONAL TERMS AND CONDITIONS

#### S.F.E. GROUP - INTERNATIONAL HEREINAFTER REFERRED TO AS S.F.E. GROUP CONDITIONS OF SALE (MARCH 2022)

These conditions of sale override any clauses in buyers' purchase orders and in any other communications if in conflict therewith.

**PRICES** - All prices are quoted ex-works, **S.F.E. Group** reserves the right to alter the prices of the terms offered to any buyer without notice. Prices and terms shall be those ruling at the date of despatch. All prices quoted are ex-works S.F.E. Group **UK** (unless stated otherwise).

**MINIMUM ORDER CHARGE** - There is a minimum order charge of **£250.00 / €275.00 / \$300.00**

**CARRIAGE & PACKING** - The Company reserves the right as part of this contract to impose such surcharge or carriage charge as shall be laid down by the Company policy at any time. The Company has sole choice of method of delivery and of carrier employed unless specifically agreed in writing to the contrary.

**PAYMENT TERMS** - The Company's standard terms of payment are nett cash 30 days. New customers will be subject to proforma payment. Overdue invoices may be subject to interest charge at 5% above Barclays Bank plc base lending rate.

**DELIVERY** - Time for delivery is given as accurately as possible. The customer shall have no right to damages or to cancel the order for failure for any cause to meet any delivery time stated. All dispatch times quoted are subject to prior sales.

**DAMAGE/LOSS IN TRANSIT** - (1) The Company accepts no liability for any damage to goods in transit unless notified to the Company and the carrier concerned within five days after delivery. (2) In the case of non-delivery the Company accepts no liability of any sort unless written notice of non-delivery is given to the Company within twelve days after the date of the advice of despatch. (3) The Company's liability for damage in transit or non-delivery of goods duly notified to it in accordance with the above, shall in any event be limited solely to replacement of the goods within a reasonable time, whether non-delivery or damage is due to the Company's negligence or otherwise.

**RETENTION OF TITLE** - (1) Until **S.F.E. Group** has been paid in full for the goods comprised in this or any other contract between them, the goods comprised in the contract remain the property of **S.F.E. Group** although the risk passes to the buyer at the point of delivery in the contract. (2) If the buyer fails to pay for the goods on the due date or commits any act of bankruptcy or if any resolution of petition to wind-up the buyer's business shall be passed (other than for the purposes of amalgamation or reconstruction) or if a receiver of the buyer's undertakings is appointed **S.F.E. Group** may recover possession of the goods at any time from the buyer and for that purpose **S.F.E. Group**, our servants or agents may enter upon any land or building upon which the goods are situated. (3) The buyer has a right to dispose of the goods in the course of his business for the account of **S.F.E. Group** and to pass good title to the goods to his customer being a bona fide purchaser for value without notice of **S.F.E. Group** rights. In the event of such disposal the buyer has the fiduciary duty to **S.F.E. Group** to account to **S.F.E. Group** for the proceeds (which shall be kept separate and identifiable from the buyer's own monies) but may retain therefrom an excess of such proceeds over the amount outstanding under this or any sale contract between them.

**GUARANTEE** - **S.F.E. Group** agrees to replace or repair at its option goods or parts manufactured by **S.F.E. Group** and proved to be defective due to faulty workmanship within a period of 12 months from the date of invoice (fair wear and tear or damage due to misuse of faulty operation excepted). The Warranty contained in the previous paragraph does not extend to any equipment not manufactured by **S.F.E. Group**, although supplied by **S.F.E. Group**, nor does it extend to any second hand or reconditioned goods. Equipment not manufactured by **S.F.E. Group** carry only the Warranty (if any) of their makers and the purchaser is entitled to the benefit thereof only so far as **S.F.E. Group** have the power to transfer it.

**LIABILITY** - (1) The Buyer agrees that apart from the express terms contained herein or in the quotation or in any document expressly stipulated therein to form part of the contract and to be outside the provisions of this clause no statement or representation has been made by **S.F.E. Group** relating to the goods supplied, or if any such statement of representation has been made the buyer warrants that he understood it to be a statement of opinion only, and did not rely on. (2) No liability is accepted for any direct or indirect costs, damages or expenses relating to damage to property or injury or loss of any person, firm or company or for any loss of profits or production arising out of or occasioned by any defect in or failure of goods or materials or parts thereof supplied by **S.F.E. Group**. (3) **S.F.E. Group's** liability, whether in respect of one claim or in the aggregate, arising out of any contract shall not exceed the purchase price payable under contract.

**DATA** - Illustrations, weights, measures, specifications and performance schedules set out in the sales literature of **S.F.E. Group** are statements of opinion and are provided for information only and form no part of the contract.

**CANCELLATION** - Cancellation of an order will not normally be accepted by **S.F.E. Group**. However **S.F.E. Group** may at its discretion agree to cancellation on the strict condition that all costs and expenses incurred by **S.F.E. Group** up to the time of cancellation and all loss of profits and other loss or damage resulting to **S.F.E. Group** by reason of such cancellation will be reimbursed by the customer to **S.F.E. Group** forthwith.

**RETURN OF GOODS** - Goods supplied in accordance with the buyer's order may later be returned to **S.F.E. Group** only with **S.F.E. Group's** permission in writing. For standard stock items the buyer will be required to pay to **S.F.E. Group** a handling charge of 15% of the list price of such returned goods. In the case of special items the handling charge will depend on the value to **S.F.E. Group** of the returned goods.

**HIRE** - For hire terms see hire agreement

**CONTRACT LAW** - This contract will be deemed to be the subject of the law of England.

# TABLE OF CONTENTS

1.	Preface.....	4
2.	Safety Instructions.....	4
3.	General Safety Instructions .....	5
4.	Specific Instructions .....	5
5.	Machine Working Principle.....	6
6.	Machine Technical Data.....	8
7.	Machine Standard Equipment .....	9
8.	Machine Setup and Operation.....	10
8.1	PREP Locking Jaws .....	10
8.2	Tools Setup .....	12
8.3	Operation.....	13
8.4	Reduced Shaft Assembly Kit .....	15
8.5	Standard Shaft Assembly Kit.....	19
8.6	Elbow Shaft Assembly Kit .....	23
8.7	Driver Kit Replacement .....	29
8.8	Automatic Locking Device Kit .....	30
8.9	Automatic Locking Device Kit with Reduced Shaft .....	33
9.	Periodic Maintenance and Repair .....	39



**SPECIALIZED FABRICATION EQUIPMENT**  
GROUP

*Our group policy is one of continuous improvements and acquisitions.  
Products and data tables are subject to change or vary from those illustrated.*

**OUR BRANDS**



## 1 - PREFACE

This manual provides the essential information and step-by-step guidance to the principle, configuration, installation and usage of the TAG PIPE EQUIPMENT SPECIALISTS LTD's PREP models machine (in short: TAG Pipe and PREP).

The TAG PREP models are a high-tech portable inside diameter locking cold pipe bevelling machine. The basic functions of the PREP models are the facing, external bevelling, internal bevelling and counterboring of pipes within the selected model's working range (inside diameter). The PREP models can be used on any type of steel and exotic alloys.

The PREP models are available with the following motorisations: pneumatic, hydraulic and servo electric motor. The PREP models configuration are flexible due to its modular character: components (e.g. toolbox, striker block, etc.) and motors can be (within their limitations) exchanged, upgraded and replaced. The PREP models accept a wide range of accessories and bevelling tooling to increase their performance and expand their machining capacity.

Please read the instruction manual carefully before using the equipment.


### NOTE

In the event of queries on installation, commissioning, operation or special conditions at the operation's site, or on usage, please contact your nearest TAG Pipe partner or our customer service department on **+44 (0)1869 324 144**, or via e-mail: **sales@tag-pipe.com**.

### DISCLAIMER

TAG Pipe's liability related to the operation of the PREP models is restricted solely to the function of the equipment. No other form of liability, regardless of type, shall be accepted. This exclusion of liability shall be deemed accepted by the user on commissioning of the equipment. TAG Pipe is unable to monitor whether or not the instructions in this manual or the conditions and methods are observed during installation, operation, usage and maintenance of the PREP. An incorrectly installation can result in material damage and personal injury. For this reason, TAG Pipe does not accept any responsibility or liability for losses, damages or costs arising from incorrect installation, improper operation or incorrect usage and maintenance or any actions connected to this in any way possible.

## 2 - SAFETY INSTRUCTIONS

 **WARNING** - TAG Pipe takes great pride in manufacturing safe, quality products with user safety as key priority. TAG Pipe recommends that all users comply with the following safety rules and instructions when operating the PREP models.

For your safety and the safety of others, read and understand these safety recommendations before installing and operating the PREP models. Keep this manual clean, stored safely and accessible for the operator's reference at all times.

The TAG PREP is a high-tech portable inside diameter locking cold pipe bevelling machine. The basic functions of the PREP are the facing, external bevelling, internal bevelling and counterboring of pipes within the selected model's working range (inside diameter). The PREP can be used on any type of steel and exotic alloys. The PREP can be used on site or in a workshop environment. At all time it is the operator's responsibility to be aware of and adhere to the local applicable rules and legislation related to the operation of the equipment.

Wrong use or abuse of the PREP can lead to lethal accident and/or material damage (not limited to the equipment itself) and the environment.

The PREP should be operated at all times by a qualified operator who has received adequate training on the equipment. Throughout the operation the operator must be familiar with:

- The controls of the equipment.
- The operation of the equipment.
- General and local safety regulations.
- The technical, physical and practical limitations of the equipment.

### 3 - GENERAL SAFETY INSTRUCTIONS

- Keep working space clean.
- Assess the working conditions properly prior to using the equipment.
- The operator should wear appropriate personal protective equipment when operating the equipment.
- When operating any heavy equipment, it is imperative that the operator is careful and observant of all moving components.
- Keep away from rotating parts during operation of the equipment.
- The operator should be physically and mentally capable of operating the equipment. In case of illness, tiredness or any medical or mental condition limiting the correct and safe operation of the equipment, the operator should be prohibited to conduct any work with the equipment.
- Make sure the grounding is connected properly and electrical cabinets are closed.
- Do not operate the electric switch, or button, or cables with wet hands, for fear of electrical shock. Protect the body from injury due to electric shock by avoiding touching any electrical parts when under power.
- Use only the foreseen earth connection. Do not ground to this equipment as it is possible to short-circuit the motor and/or control box when grounding to this equipment. Improper grounding poses a risk of electrical shock.
- Make sure the power supply is disconnected when executing maintenance on the equipment and when it is not in use.
- Do not make any modifications to existing or original electrical circuits, cabinets, safety stops and other related original components.
- Make sure all covers are closed before operating the equipment. Great danger exists in naked terminals of the power supply.
- Make sure all power cables are in good condition. In case of wear or damage, replace immediately.
- Do not pull the equipment by its cable(s) and do not disconnect the power cable from the equipment to cut off power. The cable(s) should be kept away from heat, power, oil, dirt, sharp-pointed tools and debris. Check the cable(s) before, during and after every operation.
- Protect yourself from toxic fumes that may be produced during welding operations. Make sure there is appropriate ventilation and/or fume extraction in the working area.
- Wear impact resistant eye and ear protection while operating the equipment. If there is a lot of dust or fumes, wear a dust-proof respirator or mask.
- Make sure that all of the equipment's safety measures, covers and other devices are checked and in good condition.

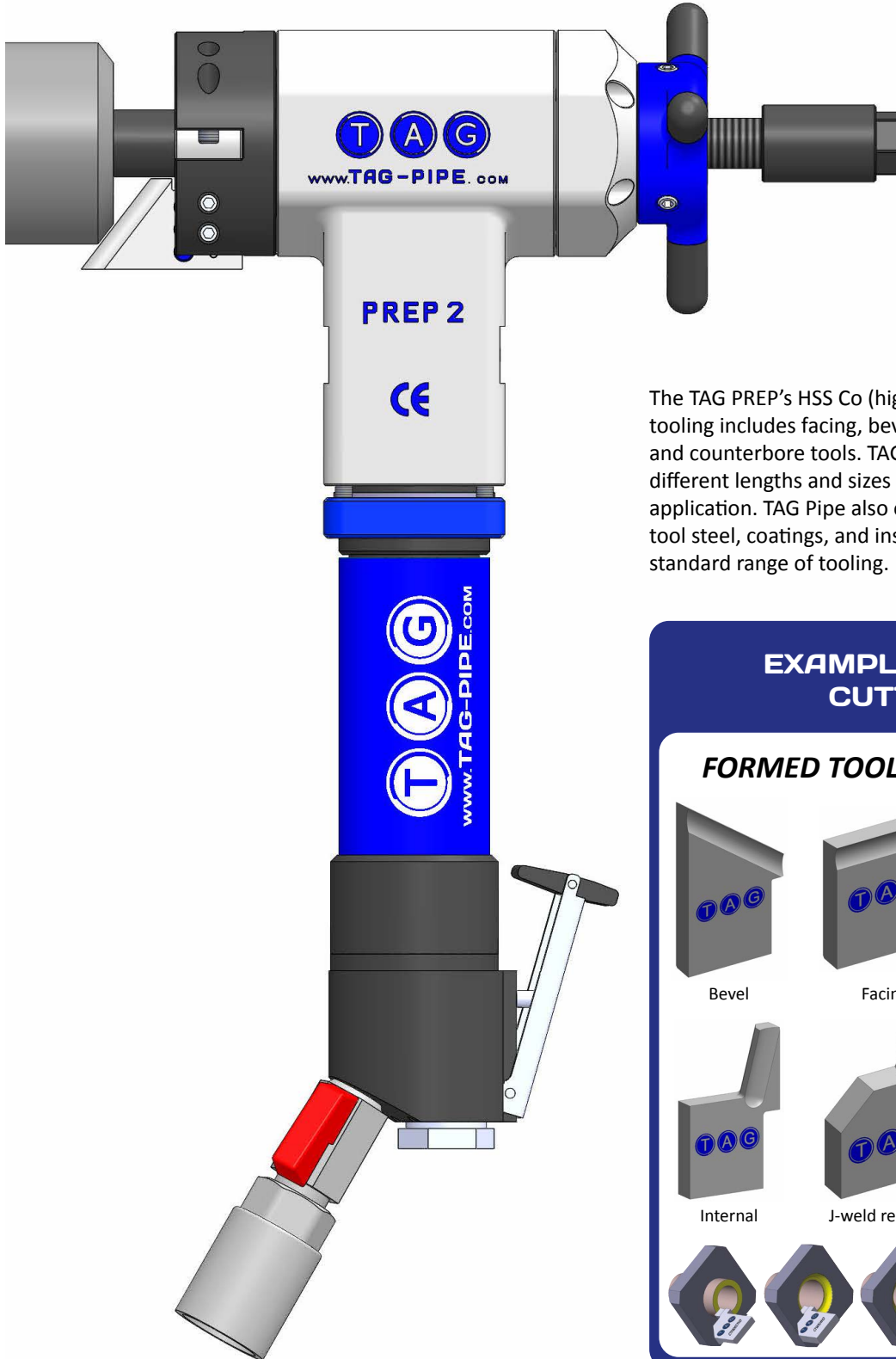
### 4 - SPECIFIC INSTRUCTIONS

- Use solely original TAG Pipe components, accessories, tooling and (spare) parts.
- The equipment should only be used for its intended purpose.
- Considering the working environment of operation, do not get the equipment unnecessarily wet and do not use the equipment in overly humid conditions. Ensure the machine has the best possible conditions for operation.
- Do not remove or modify any component or part from the original PREP.
- Maintain the equipment regularly. In order to maintain the performance of the machine, keep it clean at all times and add oil lubricant and replace (spare) parts as per the periodic recommendations.
- Prior to conducting any maintenance or change of accessories, (spare) parts or tooling, ensure that the power plug or air supply has been disconnected. The machine should not be 'powered' or in 'running mode'.
- When the power supply is connected, consider the machine in 'running mode'. Do not put your hands on or near the switch.
- Before using the PREP make sure to inspect the machine on its completeness of all components, proper installation and general condition. In case of any sign of damage, wear or tear replace the affected components or parts prior to using the machine.
- Store and transport the equipment in the designated boxes in order to protect it from damage or deterioration due to environmental conditions.
- The PREP machines shall only be serviced and repaired by TAG Pipe or an authorised TAG Pipe partner.
- Follow carefully the instructions and technical specification related to the motorisation of the PREP (voltage input, air pressure, quality of compressed air supply etc.).
- Check the handle and safety pedal regularly (applies only to pneumatic motorised machines).

## 5 - MACHINE WORKING PRINCIPLE

The TAG PREP is a high-tech portable inside diameter locking cold pipe bevelling machine. The basic functions of the PREP are the cutting, facing, external bevelling, internal bevelling and counterboring of pipes within the selected model's working range (inside diameter). The PREP can be used on any type of steel and exotic alloys. The PREP can be used on site or in a workshop environment.

The PREP models are available with the following motorisations: pneumatic, electric and battery motor. The PREP configuration is flexible due to its modular character: motors can be (within their limitations) exchanged, upgraded and replaced. The PREP models accept a wide range of accessories and cutting and bevelling tooling to increase their performance and expand their machining capacity.



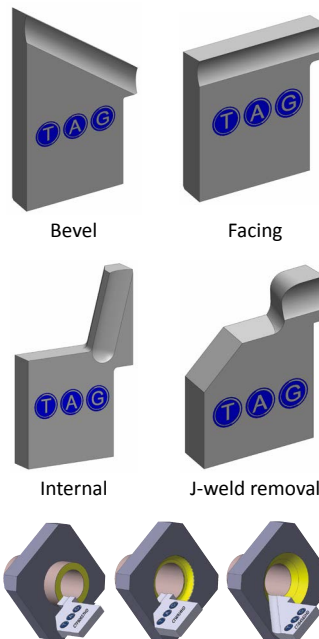
It works while inserted and locked into the ID of the pipe.

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

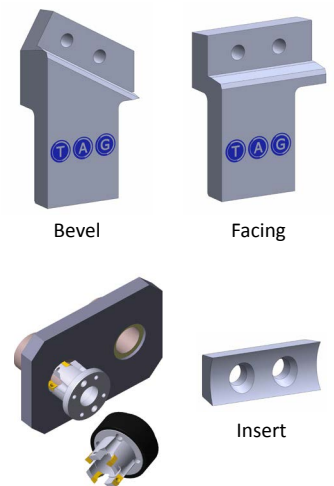
The TAG PREP's HSS Co (high speed steel with cobalt) range of tooling includes facing, bevel, double-bevel, compound bevel and counterbore tools. TAG tooling is available in a range of different lengths and sizes in order to match precisely the required application. TAG Pipe also offers custom designed tooling, special tool steel, coatings, and inserts for applications not covered by the standard range of tooling.

### EXAMPLES OF COMMON CUTTING TOOLS

#### FORMED TOOLS



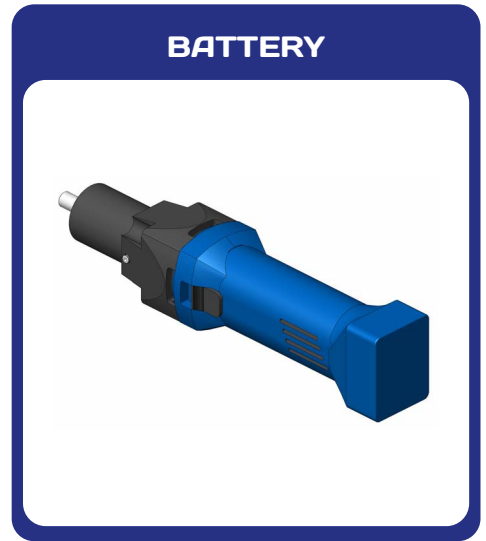
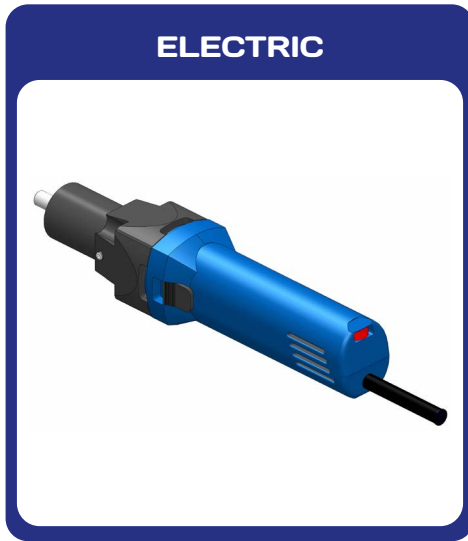
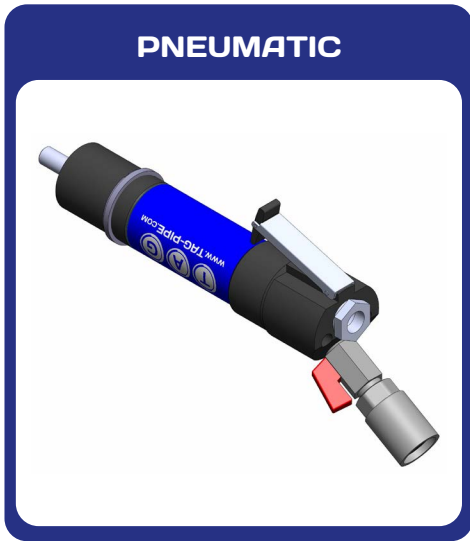
#### HOLDER / INSERT



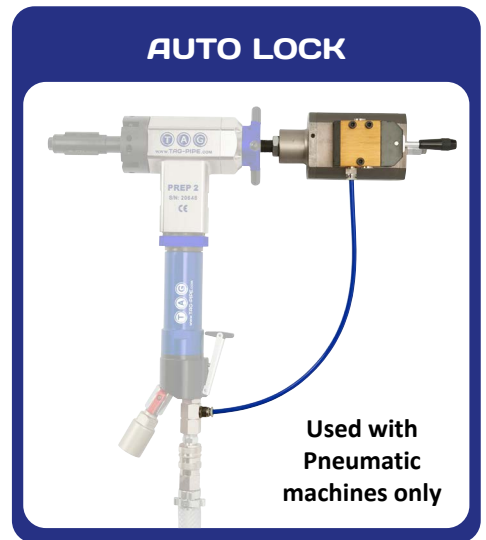
**All shapes, sizes and angles available**

The TAG PREP models are modular in the sense that any of the following motor types can be mounted. This increases the overall user friendliness and flexibility. The motors can be installed and/or exchanged rapidly on the same motor mounting.

The TAG PREP 2 can be equipped with the following motor types:

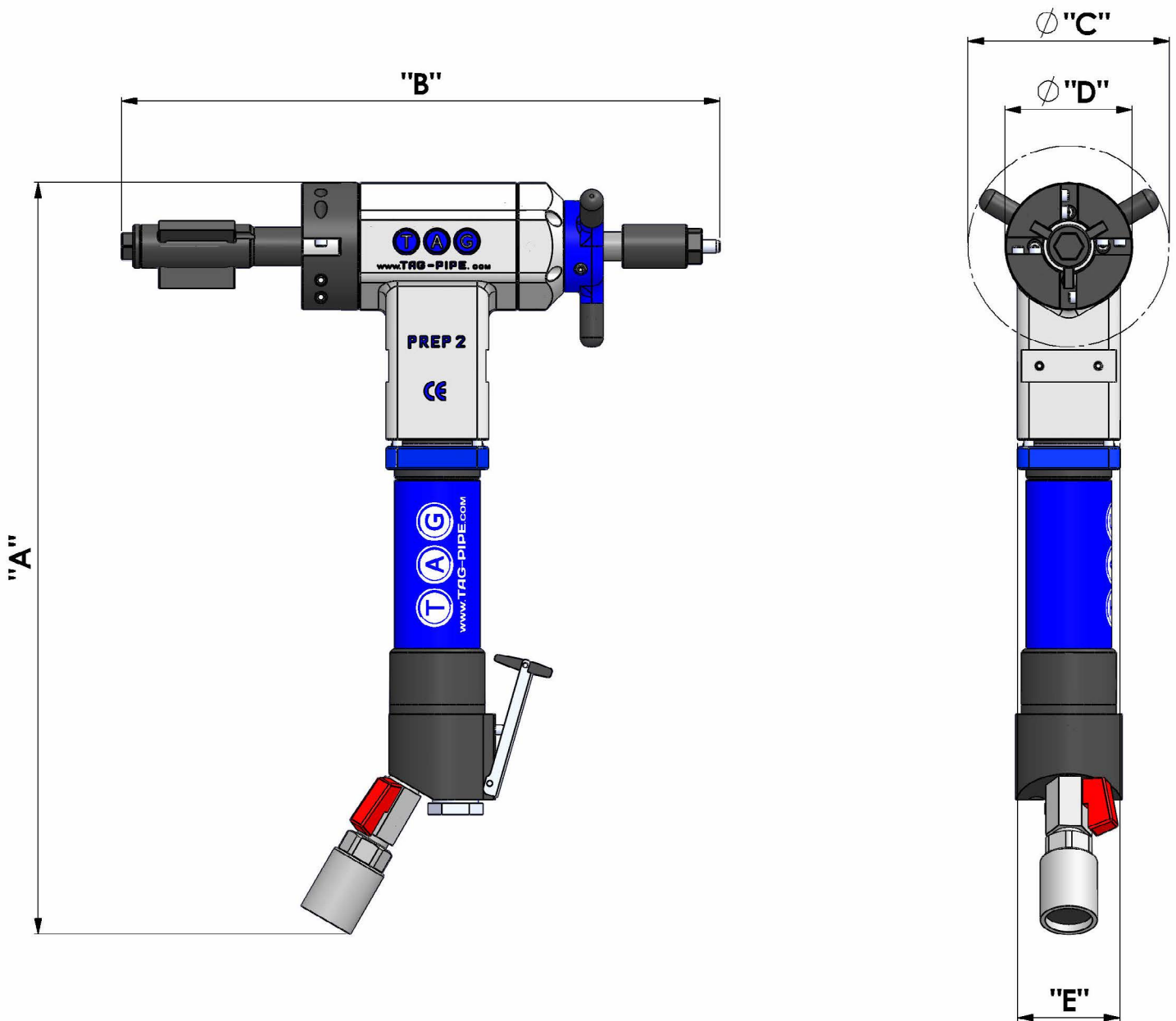


The TAG PREP 2 can be equipped with optionals:



## 6 - MACHINE TECHNICAL DATA

The TAG PREP 2 dimensional specifications.



DIM	PNEUMATIC	ELECTRIC	BATTERY
A	400 mm	430 mm	470 mm
B	316 mm	316 mm	316 mm
Ø C	106 mm	106 mm	106 mm
Ø D	67 mm	67 mm	67 mm
E	54 mm	72 mm	72 mm



## PREP 2 TECHNICAL FEATURES

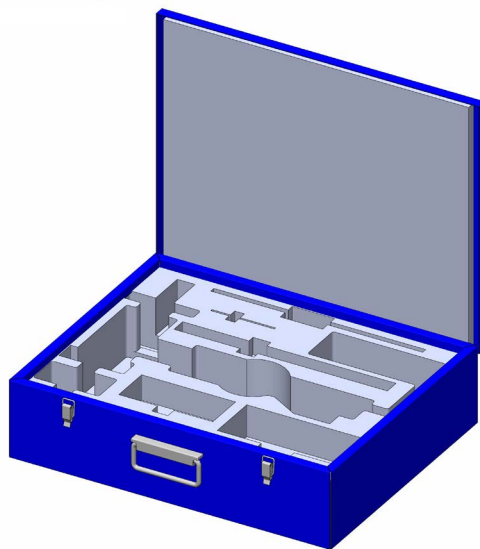
DESCRIPTION	MEASUREMENT	PNEUMATIC	ELECTRIC	BATTERY
Part Number	n/a	TP2P / TP2PALL	TP2E110 / TP2E220	TP2B110 / TP2B220
Locking tube range	mm (i/d)	23 - 42 optional from 12.5	23 - 42 optional from 12.5	23 - 42 optional from 12.5
Locking tube range	inch (i/d)	0.9 - 1.5" optional from 0.5"	0.9 - 1.5" optional from 0.5"	0.9 - 1.5" optional from 0.5"
Idle speed	rpm	5 - 215	5 - 250	80 / 120 / 160
Torque	N m	56	50	60
Length of axial feed	mm	24	24	24
Maximum operating temperature	°C	55	55	55
Maximum acoustic radiation	dB	75	75	75
Pneumatic motor power	hp	0.7	n/a	n/a
Air consumption	cfm / l/min.	28 / 800	n/a	n/a
Air working pressure	psi / bar	90 / 6.5	n/a	n/a
Air hose connection	inches	½"	n/a	n/a
Electric motor power	watt	n/a	720	800
Voltage	volt	n/a	110 or 220	charger 110 or 220
Frequency	Hz	n/a	50 / 60	charger 50 / 60
Unit weight	kg / lbs	4.8 / 10.6	5.5 / 12	5.7 / 12.5
Packing dimensions	mm	545 x 400 x 120	545 x 400 x 120	560 x 570 x 120
Packing weight	kg / lbs	13.5 / 30	14.5 / 32	15.5 / 34

*Our group policy is one of continuous improvement. Products and Data Tables are subject to change or vary from those illustrated.*

## 7 - MACHINE STANDARD EQUIPMENT



**Service Tools**



**Metal Case**

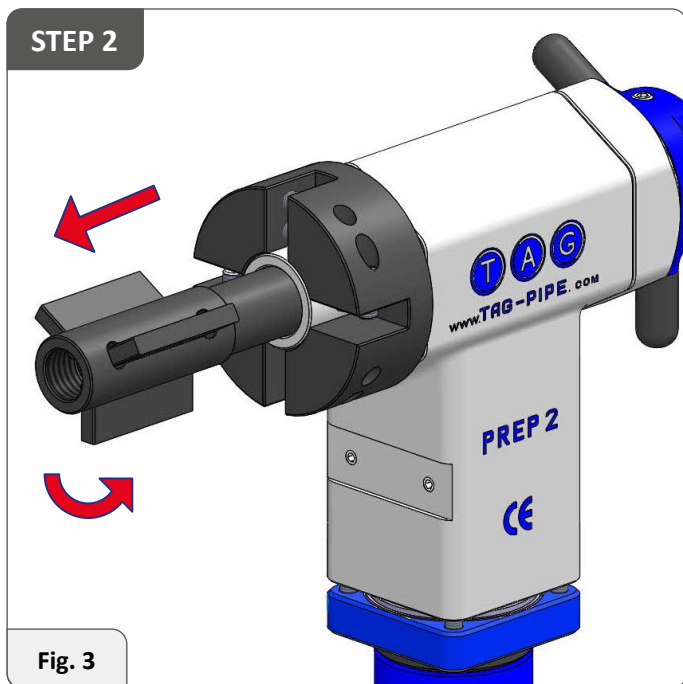
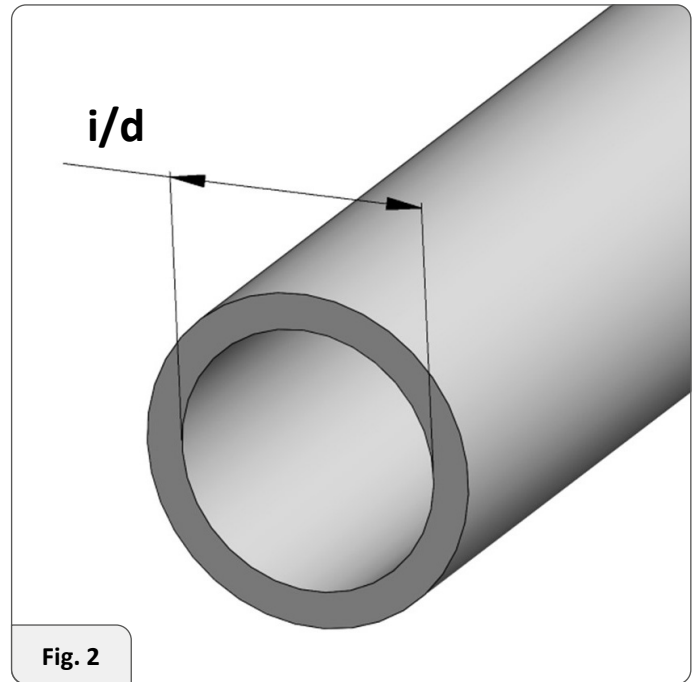


**User Manual**

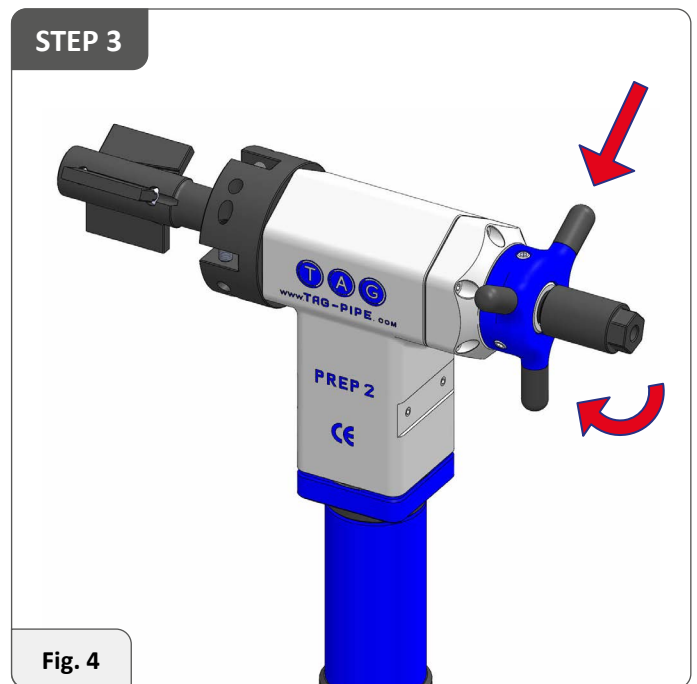
## 8 - MACHINE SETUP AND OPERATION

### 8.1 - PREP LOCKING JAWS

Prior to mounting the PREP it is important to measure the inside diameter (in short: i/d) of the workpiece.

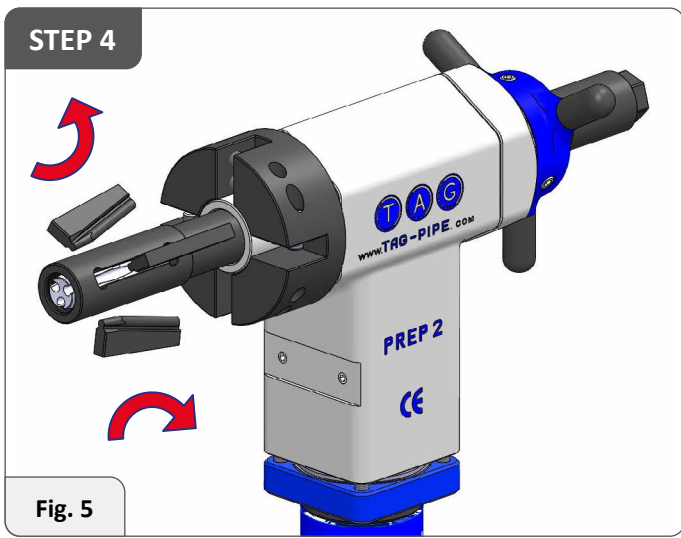


Unscrew the shaft end nut anti-clockwise.

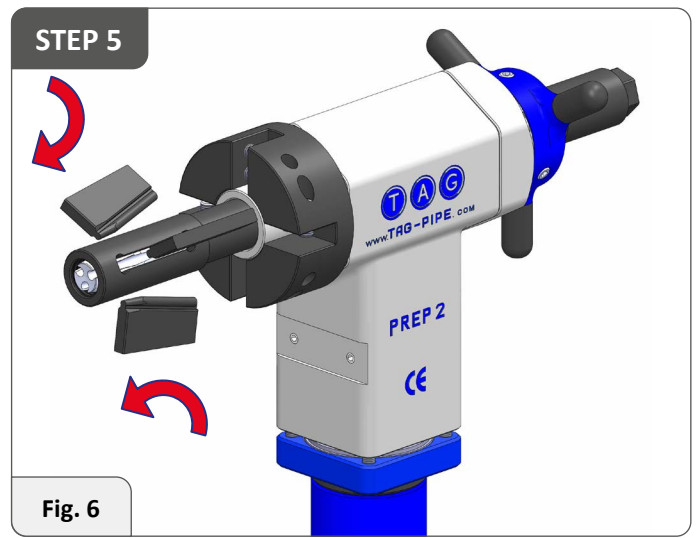


Turn the lock/unlock nut clockwise to the maximum expansion.

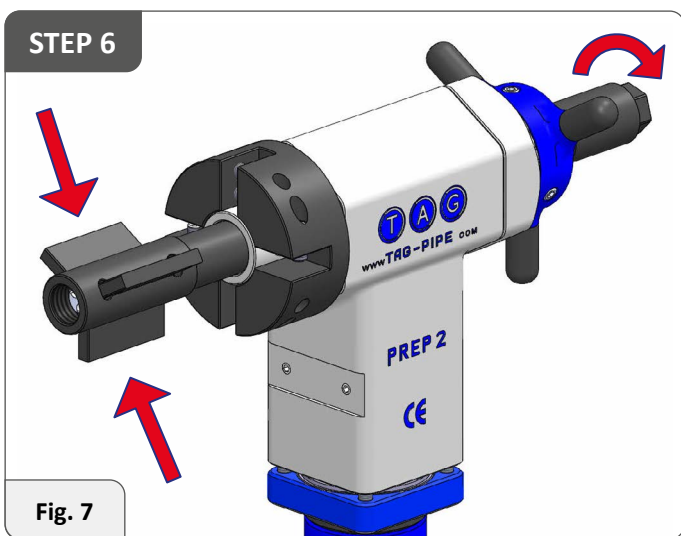
**⚠ WARNING - DO NOT MOVE THE INSIDE SHAFT** The inside shaft can be moved by the vane expansion nut after having replaced the locking jaws.



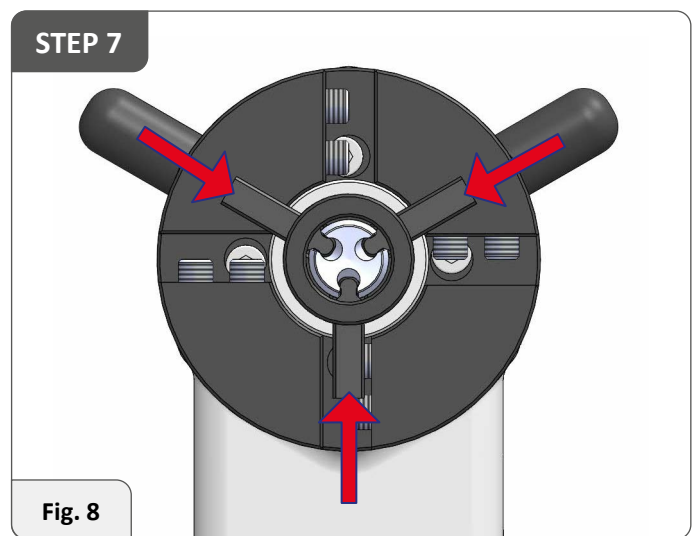
Remove the locking jaws.



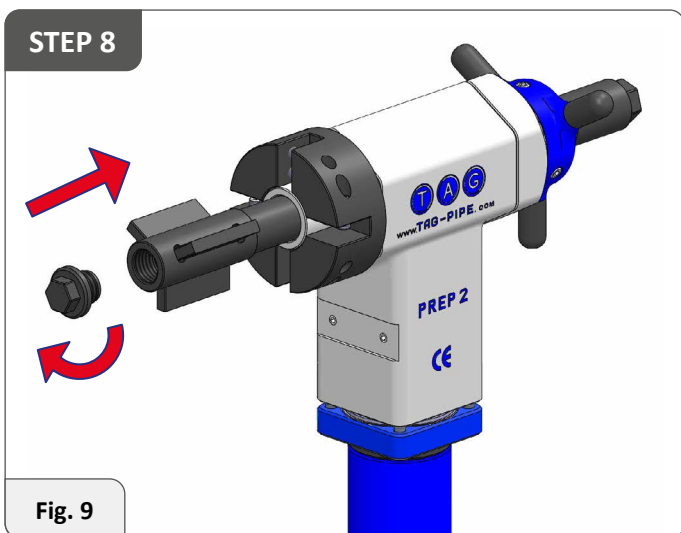
Select the locking jaws according to the diameter of the pipe and install them on the inside shaft as shown (Fig. 6).



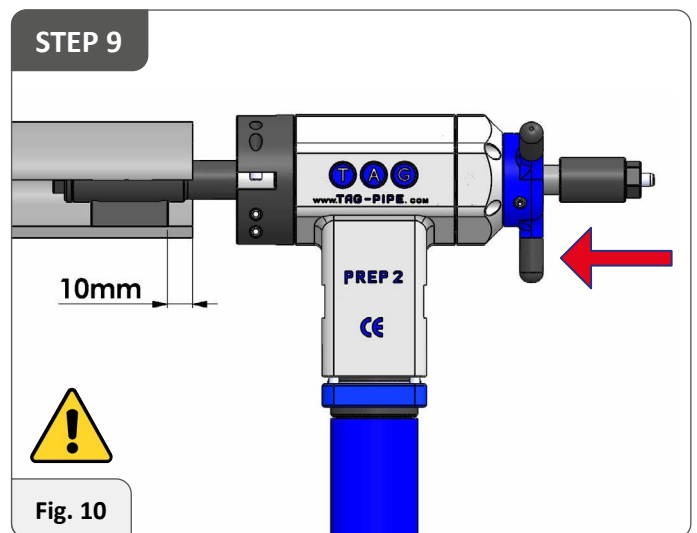
While holding the three locking jaws you have just mounted, unscrew the jaw lock/unlock nut in order to let them enter their seat.



If the procedure is correctly made, the locking jaws should have a bit of play/movement.



Screw on the shaft end nut in a clockwise direction.



**WARNING** - In order to achieve the perfect positioning and locking, the jaws have to be inserted 10mm minimum, into the i/d of the pipe as shown (Fig.10).

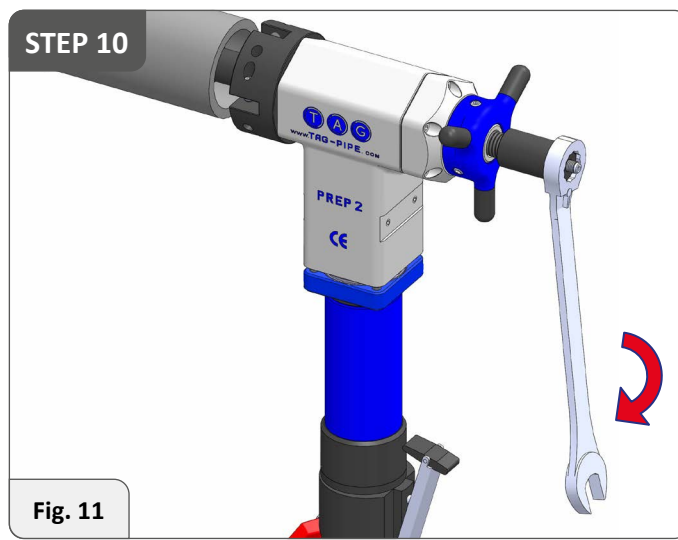


Fig. 11

Keep the machine aligned with the axis of the pipe and fasten the jaw lock/unlock nut tightly by turning it clockwise using the 17 mm wrench.

## 8.2 - TOOLS SETUP

Select the beveling tool in regard to the bevel you need to perform, and insert it on the chuck, locking it with the grub screws by using the Allen key. You will need to use paired cutting tools and one facing tool when required.

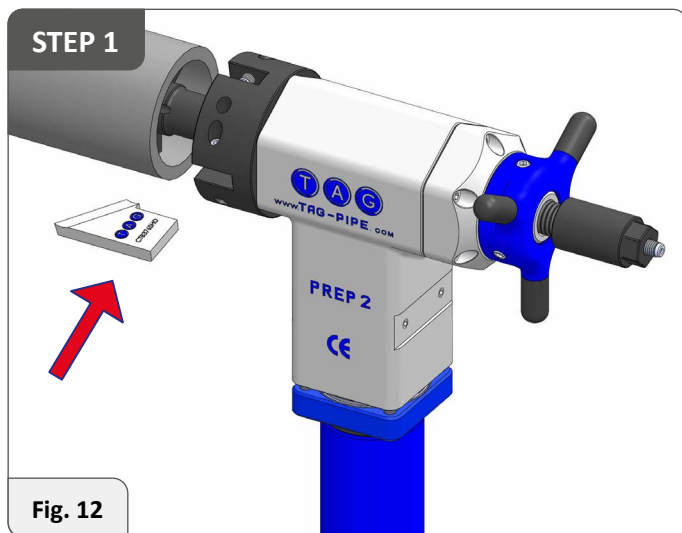


Fig. 12

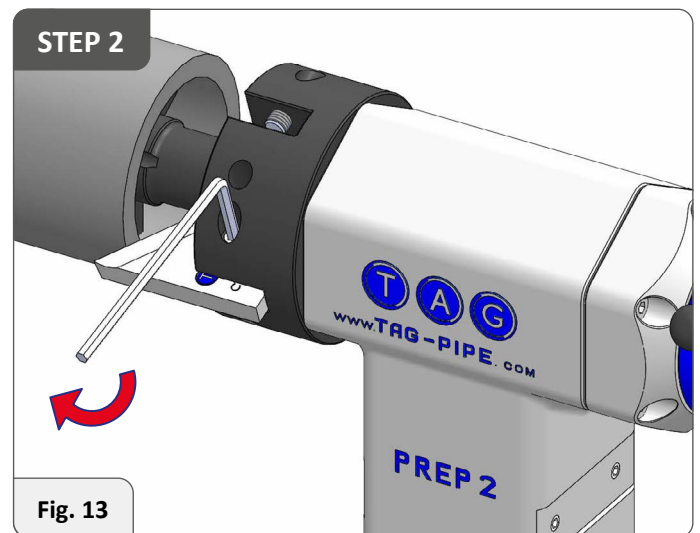


Fig. 13

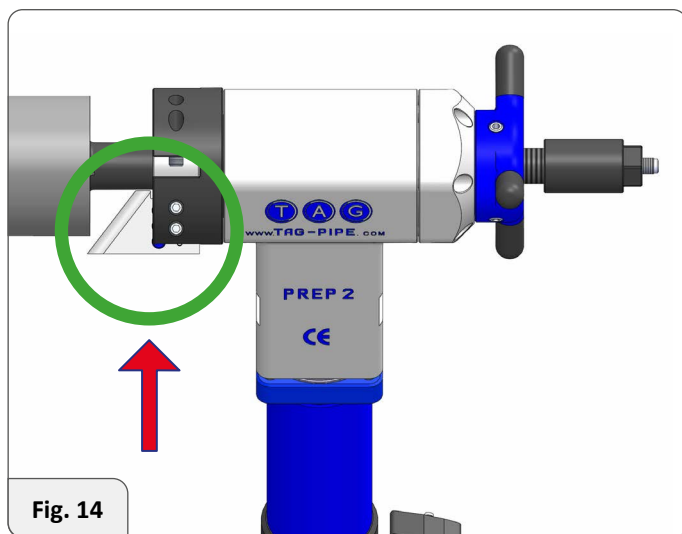


Fig. 14

YES

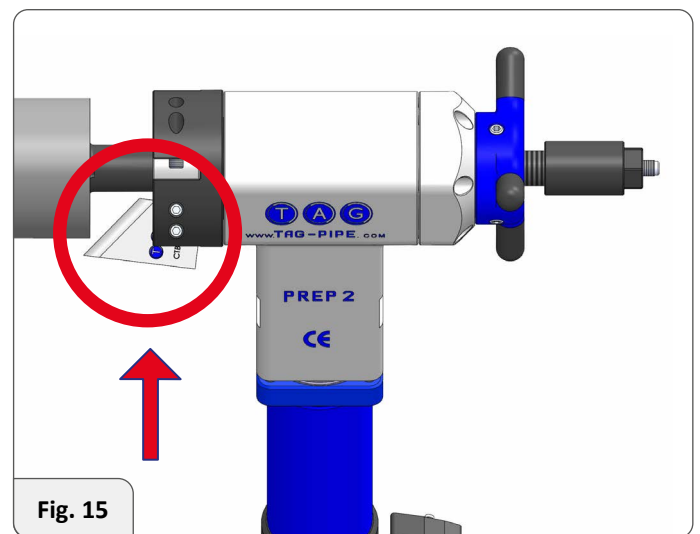
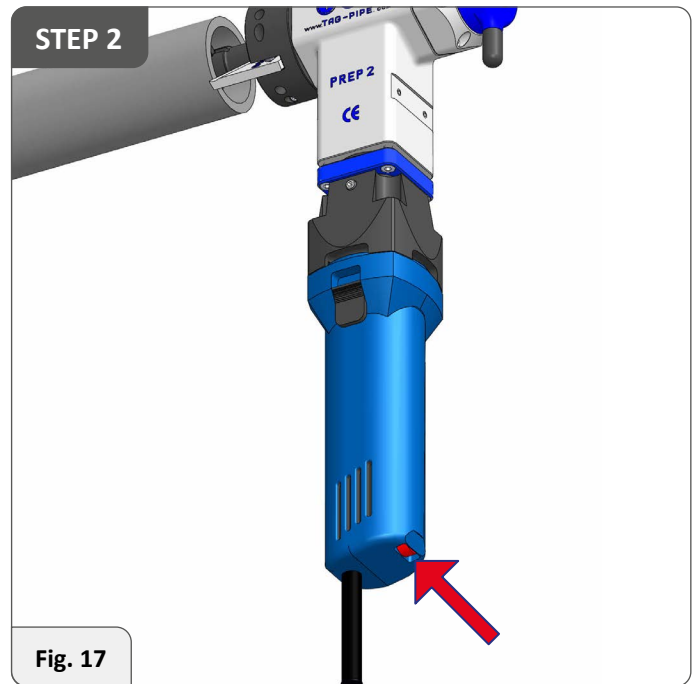
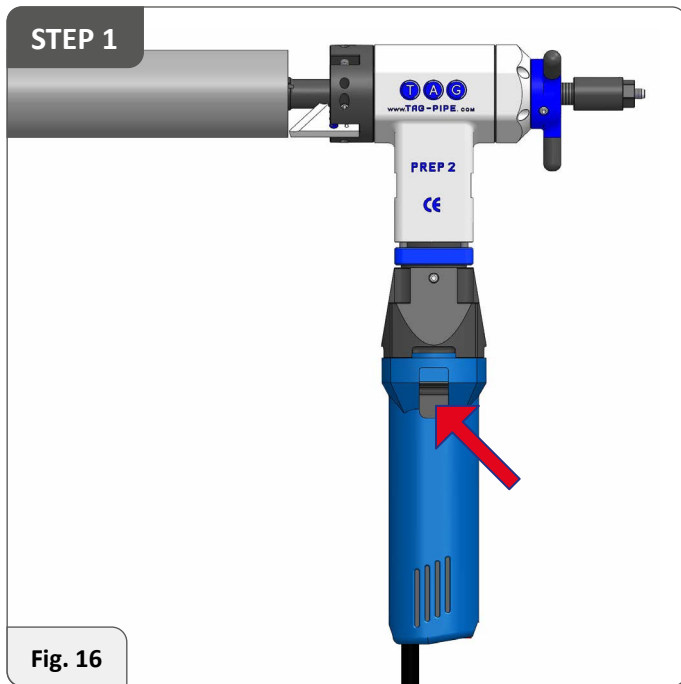


Fig. 15

NO

## 8.3 - OPERATION

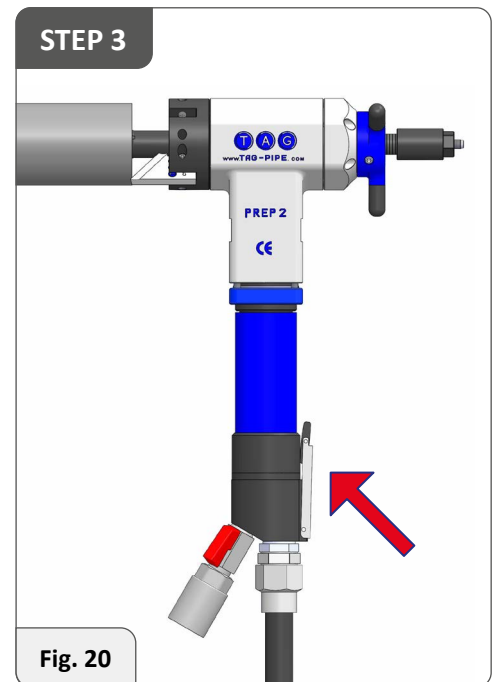
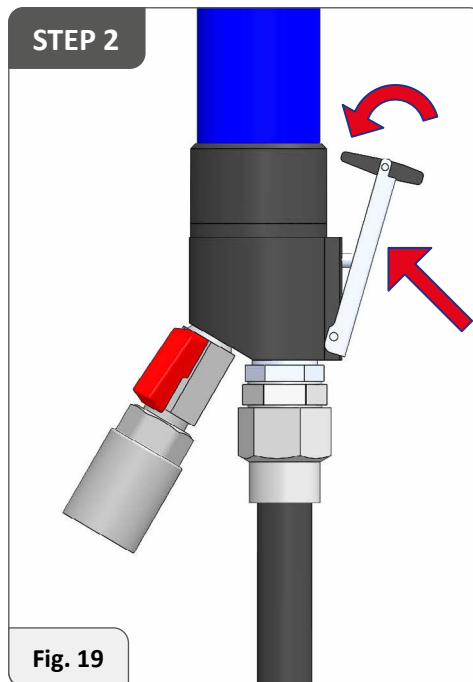
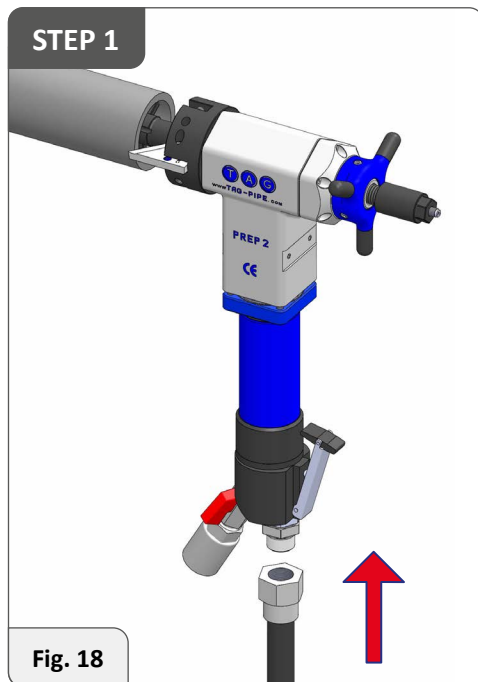
### ELECTRIC MODEL



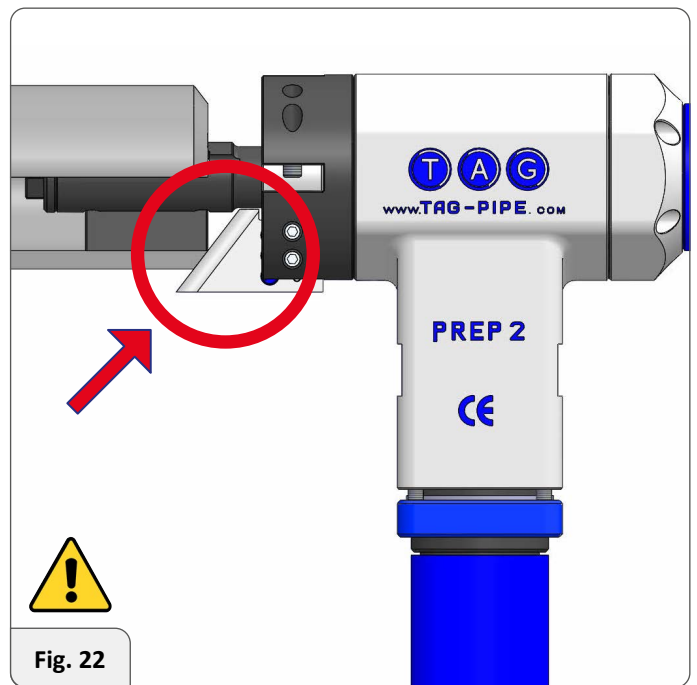
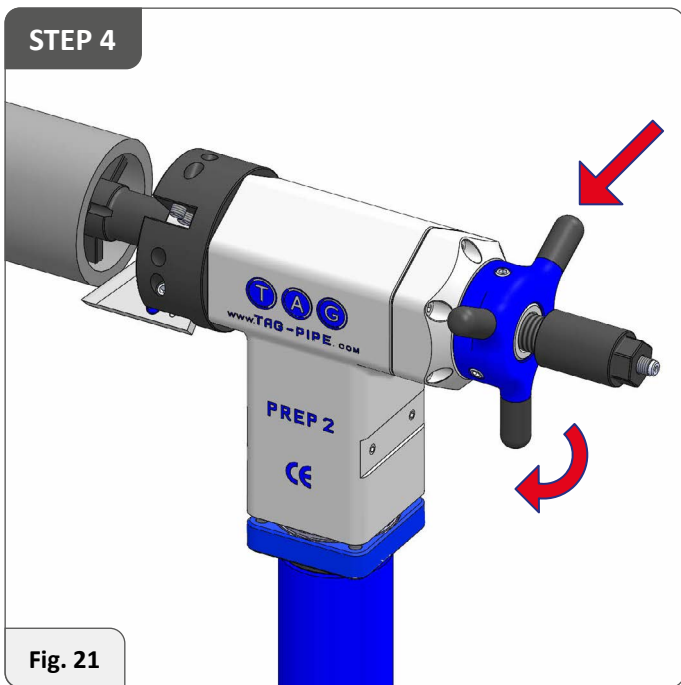
Connect the 220V/110V plug into the correct mains supply and actuate the machine by pressing the switch shown by the arrow (Fig. 16). On the bottom of the electric motor (Fig. 17) there is the speed control to regulate the rpm on the chuck.

**PNEUMATIC MODEL** - Connect the air hose to the machine and to the air system.

**⚠ WARNING** - Size of air hole ½" and air consumption 28 cfm or 800 l/min. air working pressure 90 PSI or 6,5 BAR.



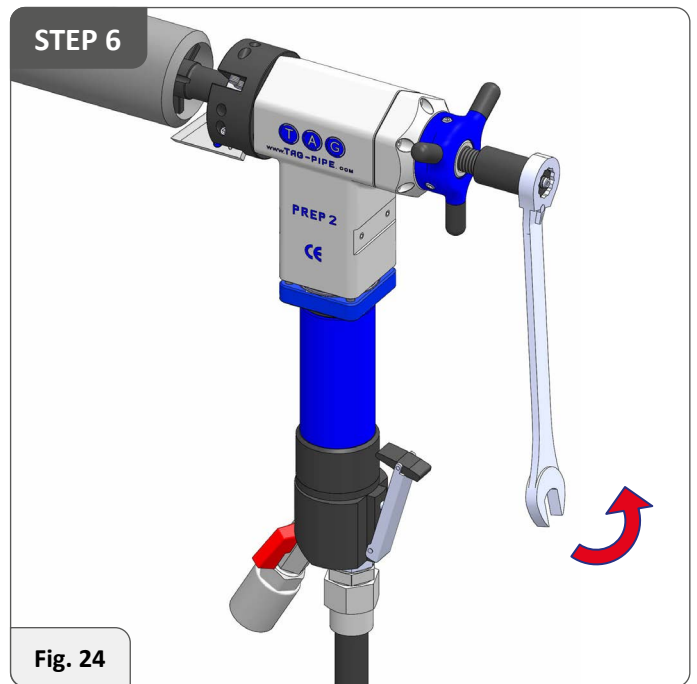
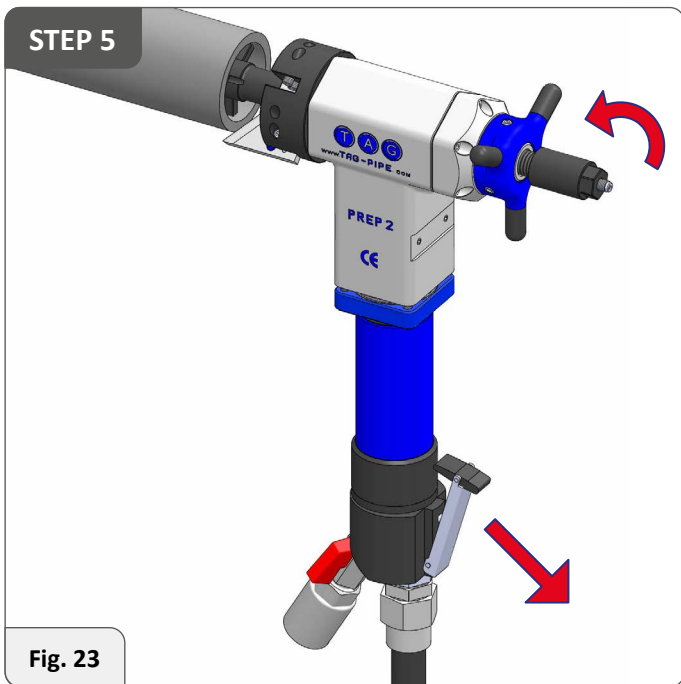
Actuate the machine by pressing the lever as shown by the arrows (Fig. 19).



**Fig. 21**  
The machine feeding is achieved by rotating the hand wheel (Fig. 21) in a clockwise direction. For a perfect result it is important to maintain a constant feeding rate.

**Fig. 22**

**WARNING** - During operation, the beveling tool should never come in contact with the locking jaws as they may be damaged.



**Fig. 23**

When the job is finished, rotate the hand wheel anti-clockwise enough so that the cutting tool is away from the pipe. Then release the lever and the machine will automatically stop.

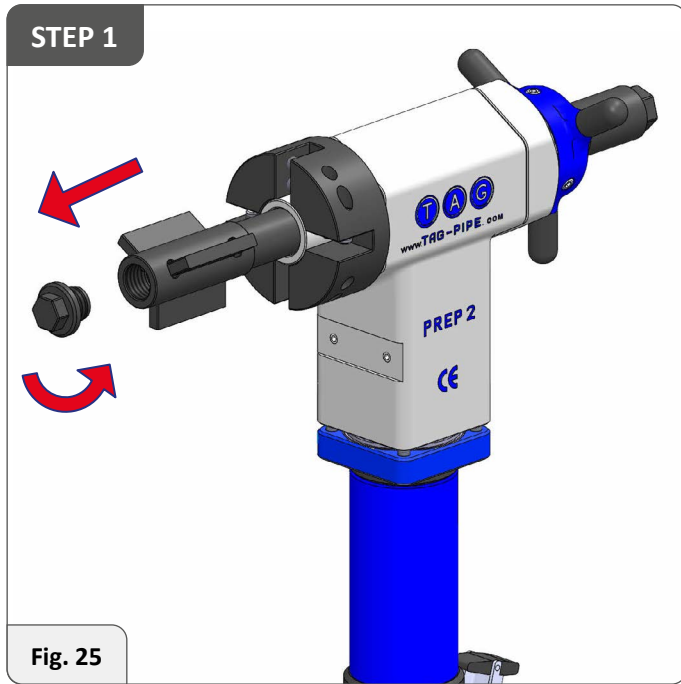
**Fig. 24**

To remove the machine from the pipe, unscrew the jaw lock/unlock nut anti-clockwise using the wrench supplied with the machine.

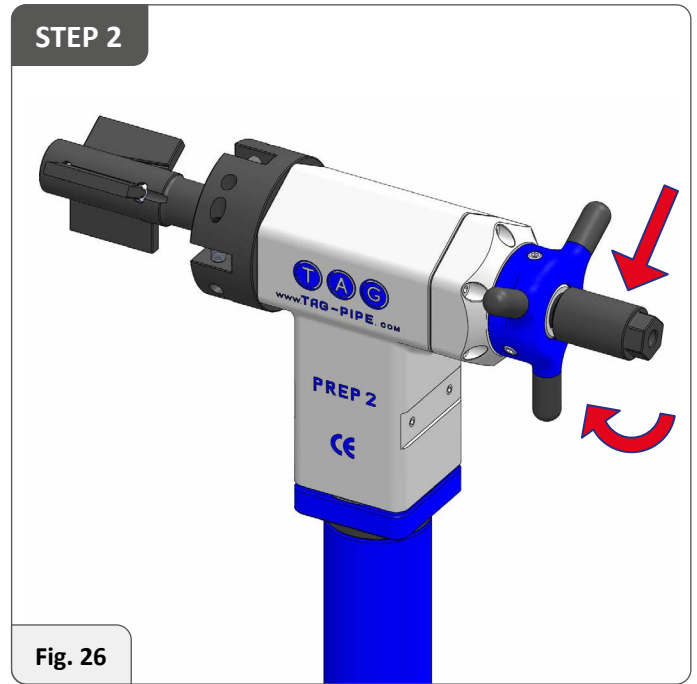
## 8.4 - REDUCED SHAFT ASSEMBLY KIT

**⚠ WARNING - DO NOT MOVE THE INSIDE SHAFT**

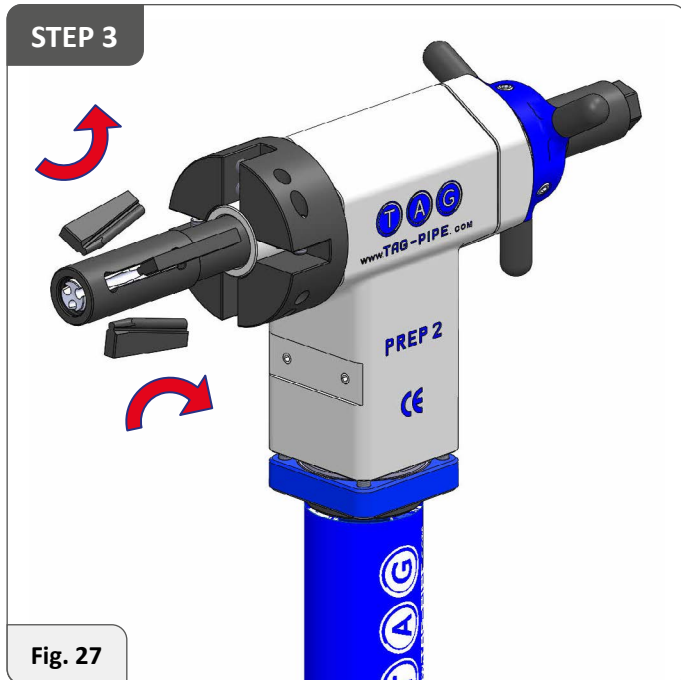
Beware - The inside shaft position can be lost when turning the unlock/lock nut without locking jaws in the shaft.



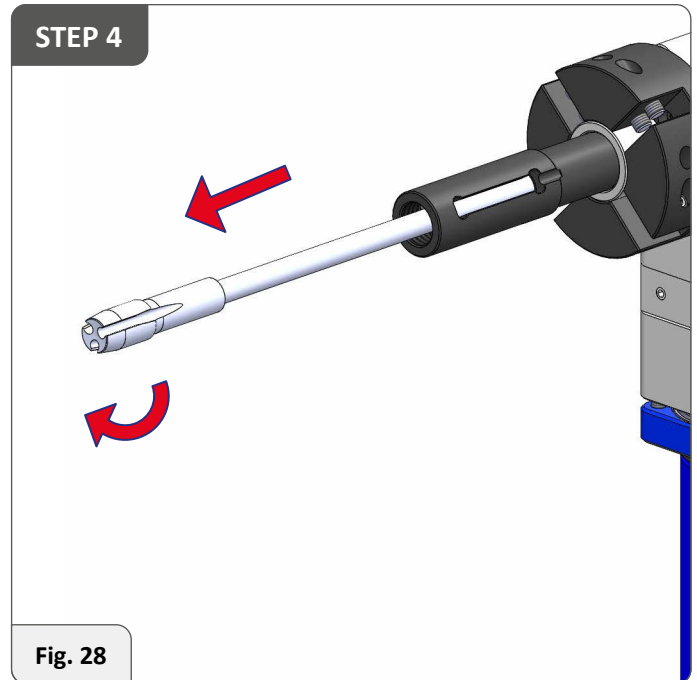
Unscrew the shaft end nut anti-clockwise.



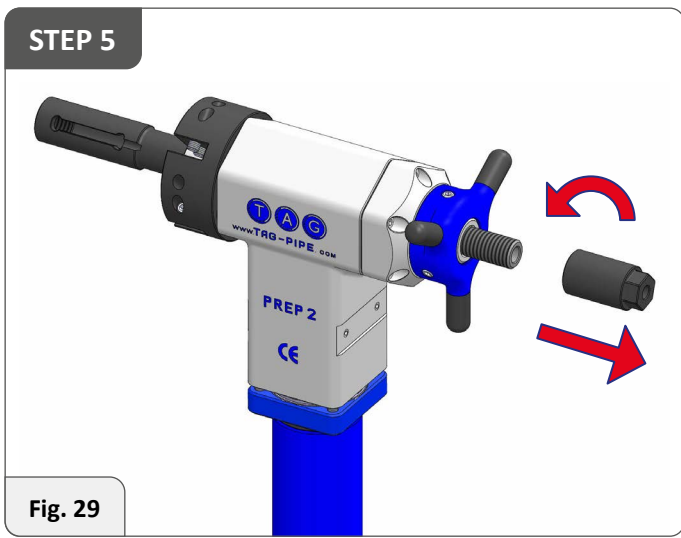
Turn the jaw lock/unlock nut in a clockwise direction to achieve the maximum expansion.



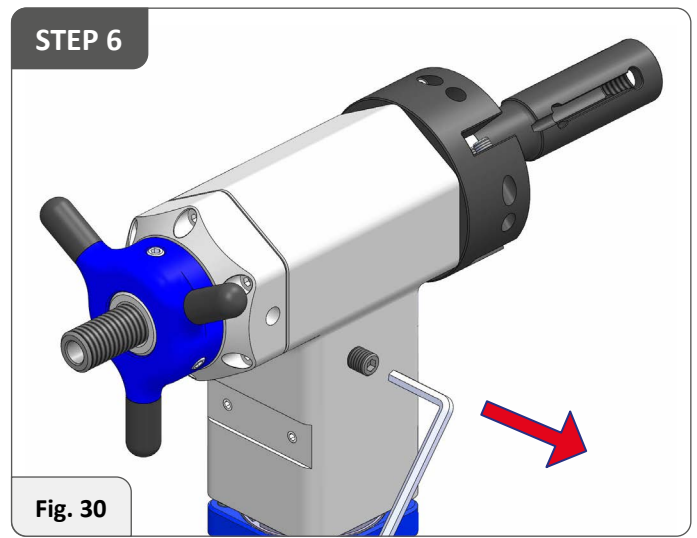
Remove the locking jaws.



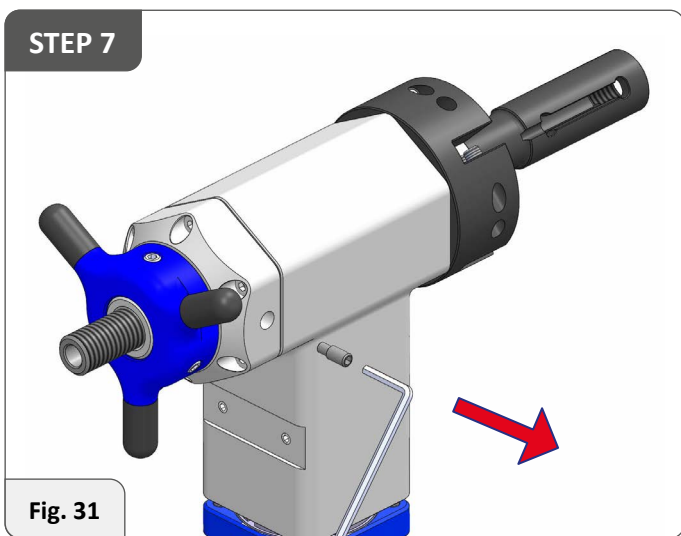
By using some long nose pliers, rotate the inside shaft in a clockwise direction, until its fully unthreaded and can be removed.



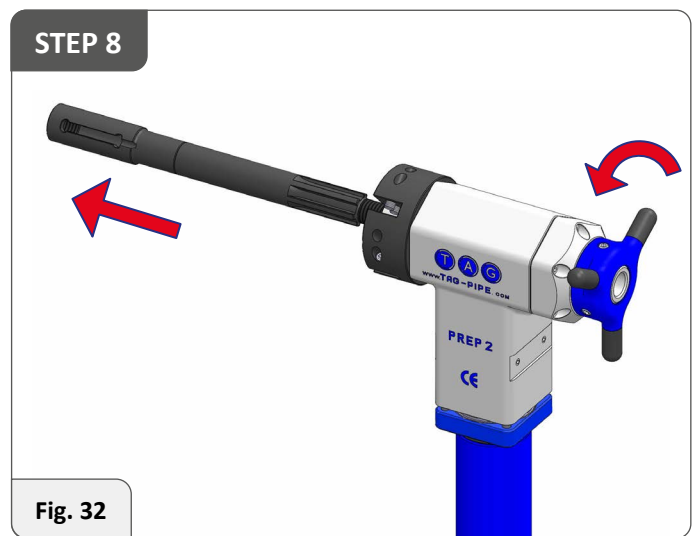
Rotate the jaw lock/unlock nut anti-clockwise and remove.



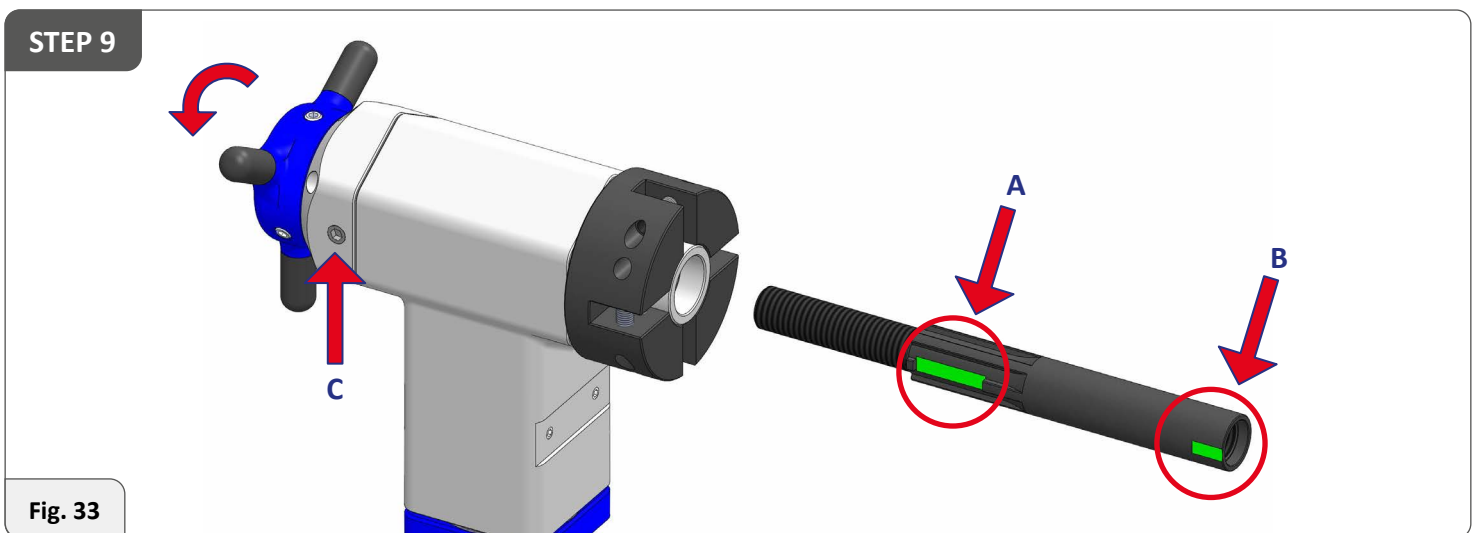
Remove the first outside grub screw.



Then the second stop grub screw.

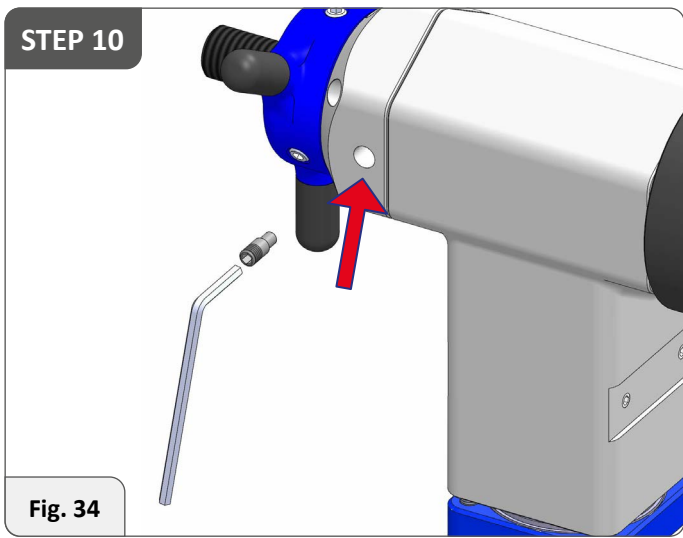


Remove the outside shaft by rotating the feeding wheel anti-clockwise.

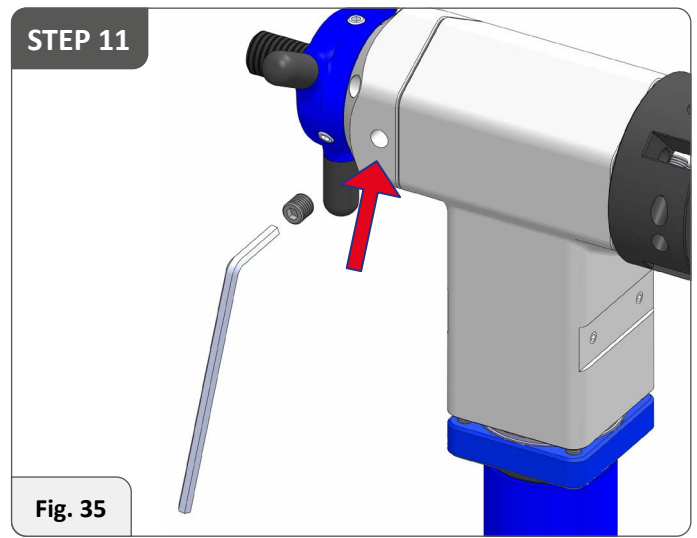


Take the outside shaft from the reduced shaft kit and mark the groove of the lap joint (arrow A) as well as the far end of the shaft (arrow B) as shown in Fig. 33. Insert the outside shaft and align the lap joint mark (arrow A) with arrow C, and using feed wheel rotate anti-clockwise to screw in the shaft.

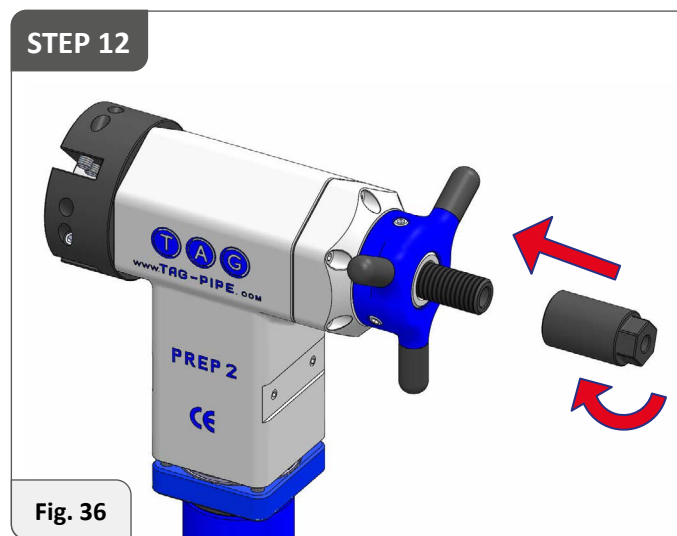




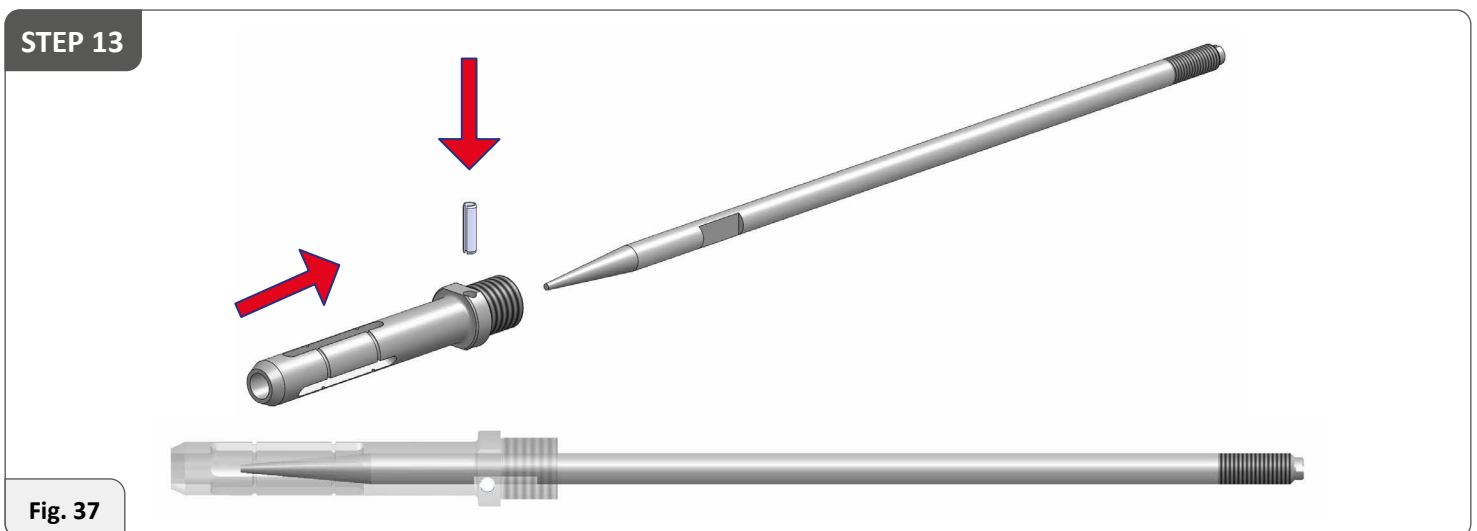
Re-assemble the stop grub screw.



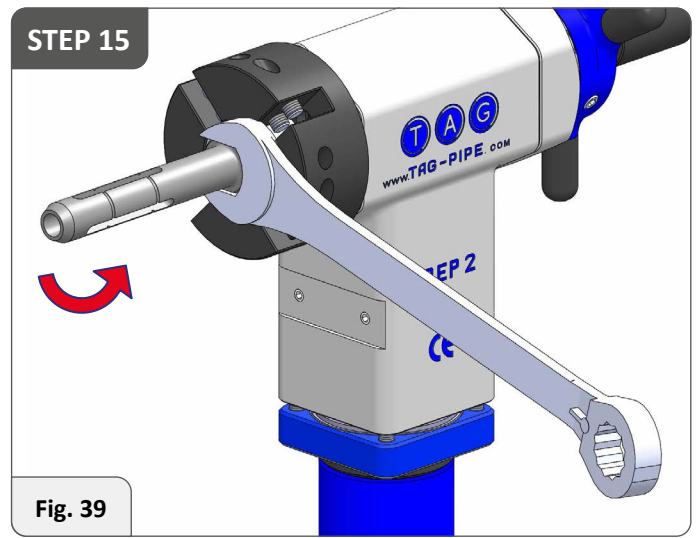
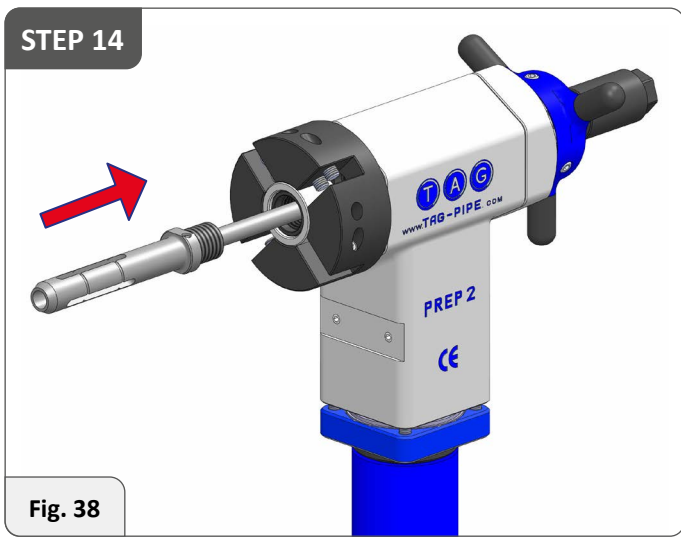
Then the outside grub screw. Then lock.



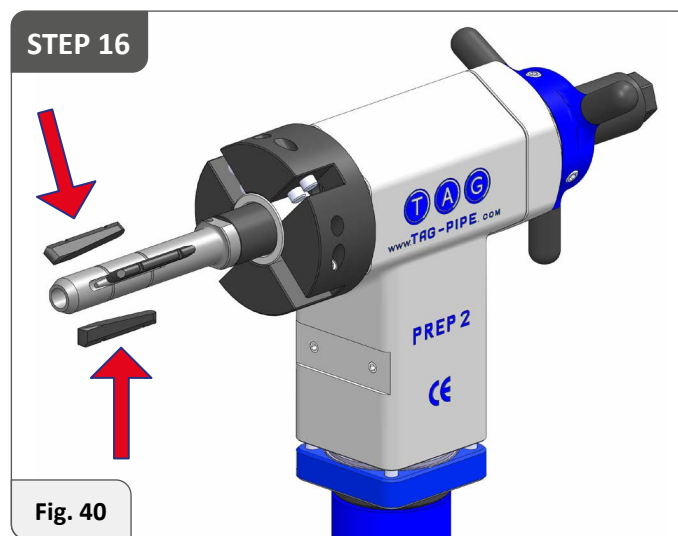
Screw the jaw lock/unlock nut all the way down in a clockwise direction.



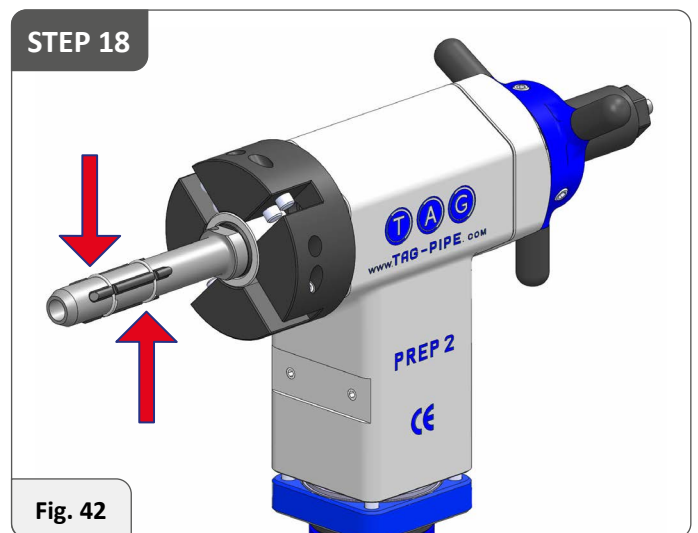
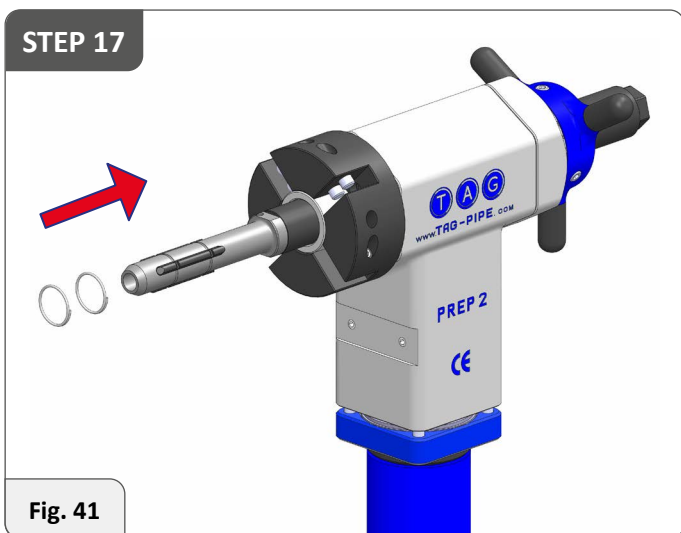
According to the pipe diameter use one of the heads on the kit, assemble it with the inside shaft and elastic dowel pin.



By using the 17 mm wrench tighten the head anti-clockwise (left thread).

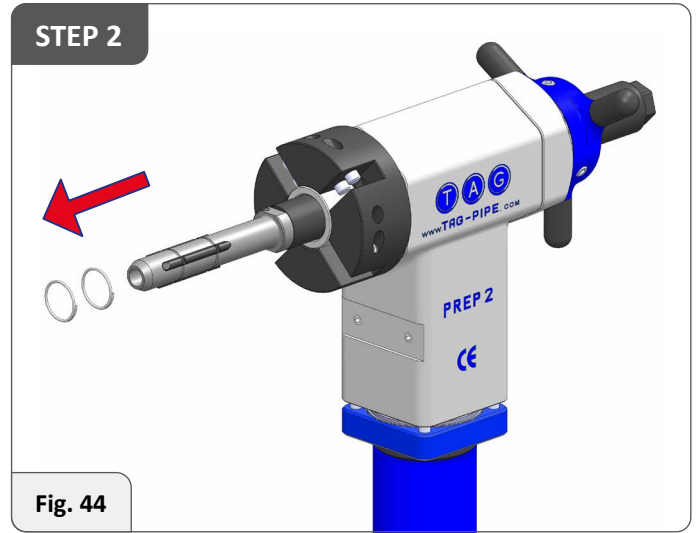
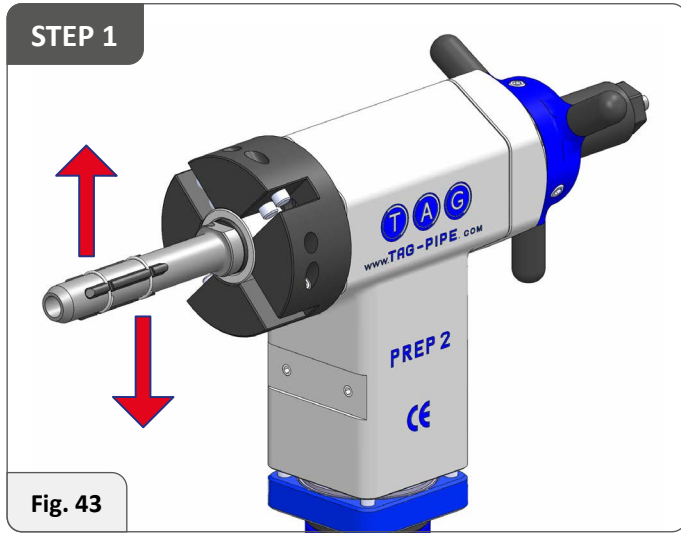


According to the pipe inside diameter, insert the three locking jaws as shown (Fig. 40).

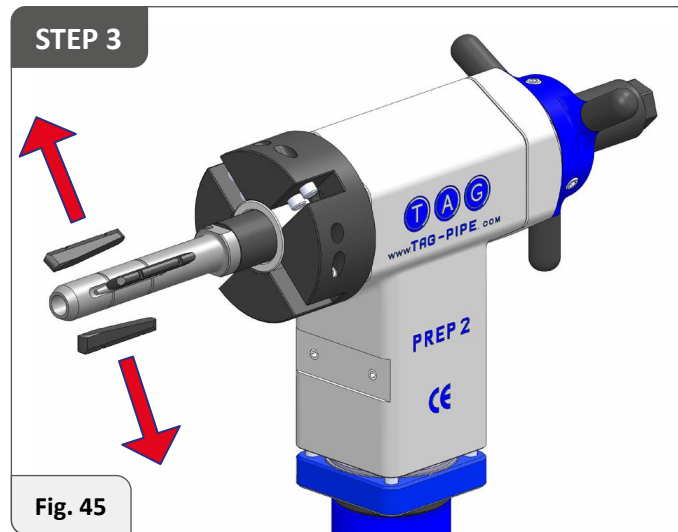


By using a screwdriver or a similar tool, slide the springs to find the right position.

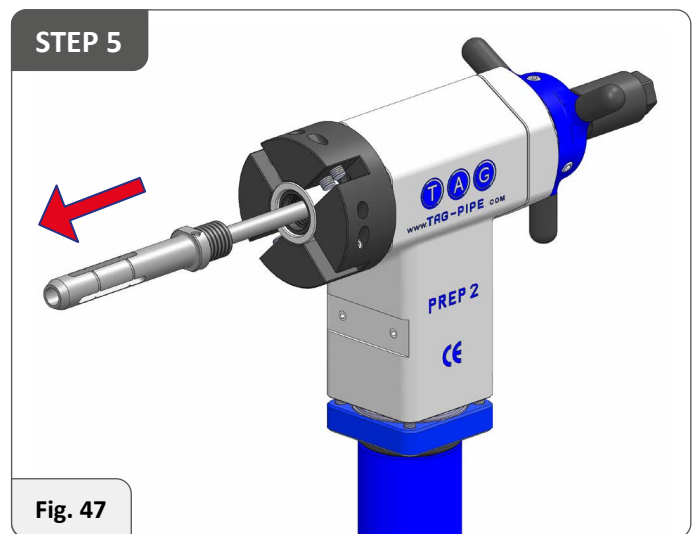
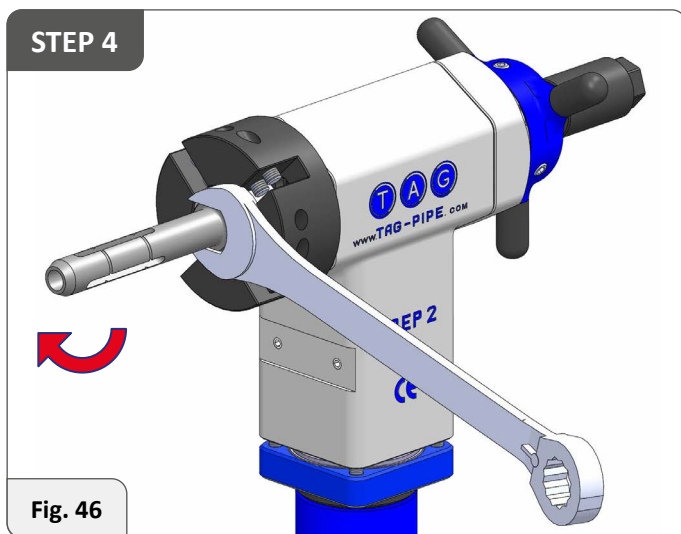
## 8.5 - STANDARD SHAFT ASSEMBLY KIT



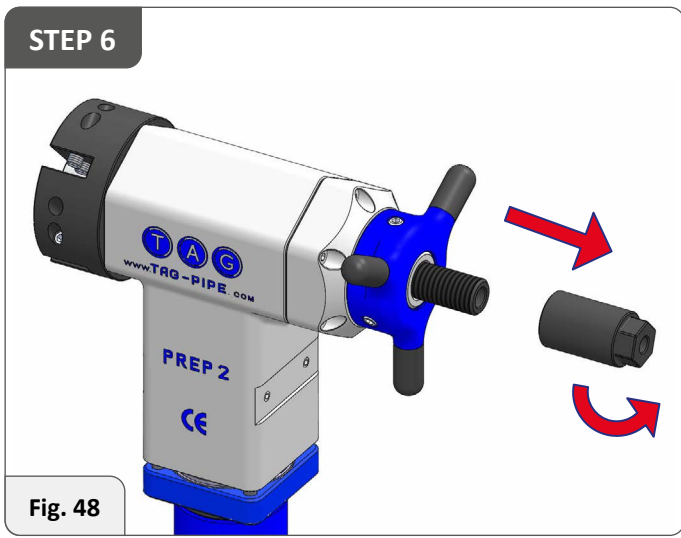
By using a screwdriver or a similar tool, slide the springs out and remove.



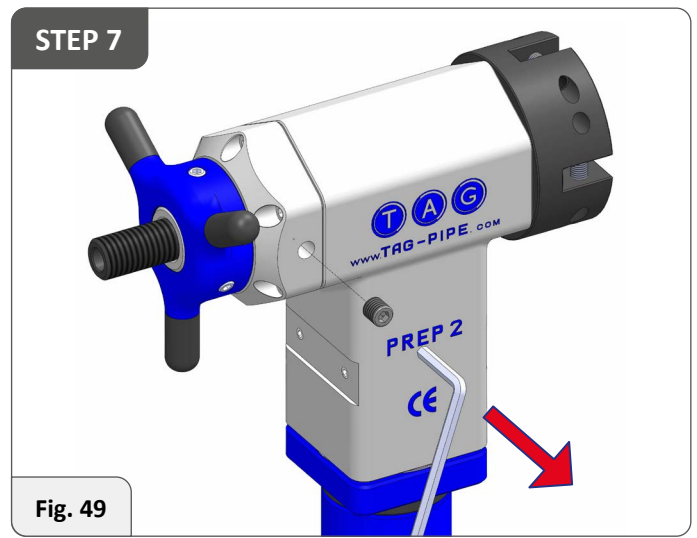
Remove the locking jaws.



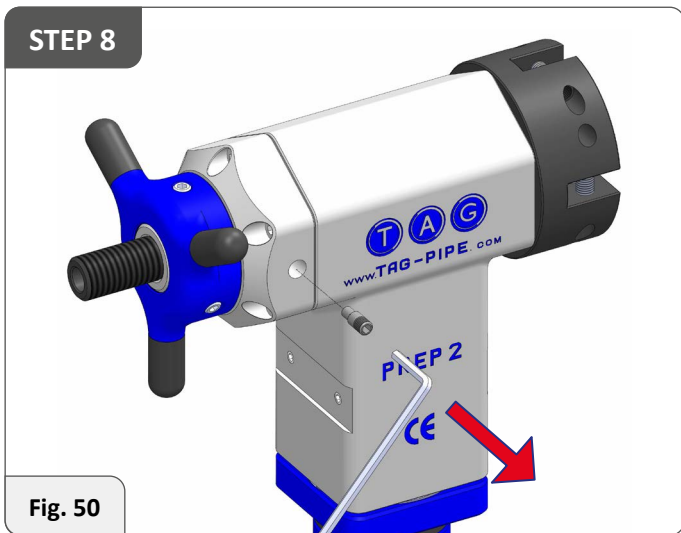
By using the 17 mm wrench unscrew the head clockwise (left thread).



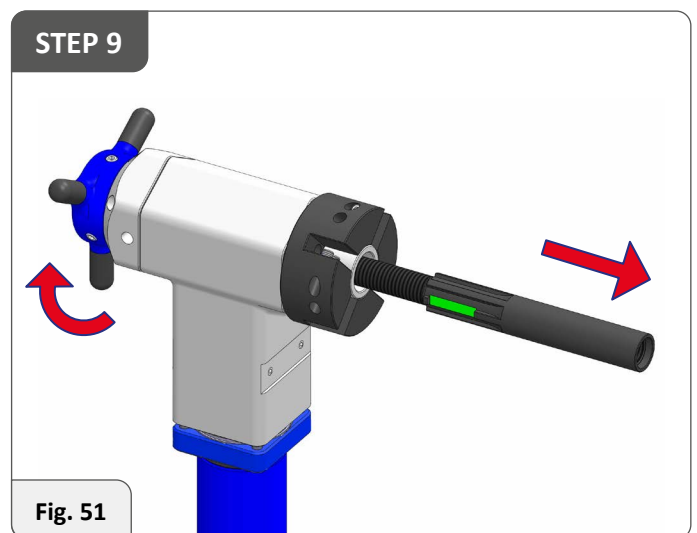
Rotate the jaw lock/unlock nut in an anti-clockwise direction.



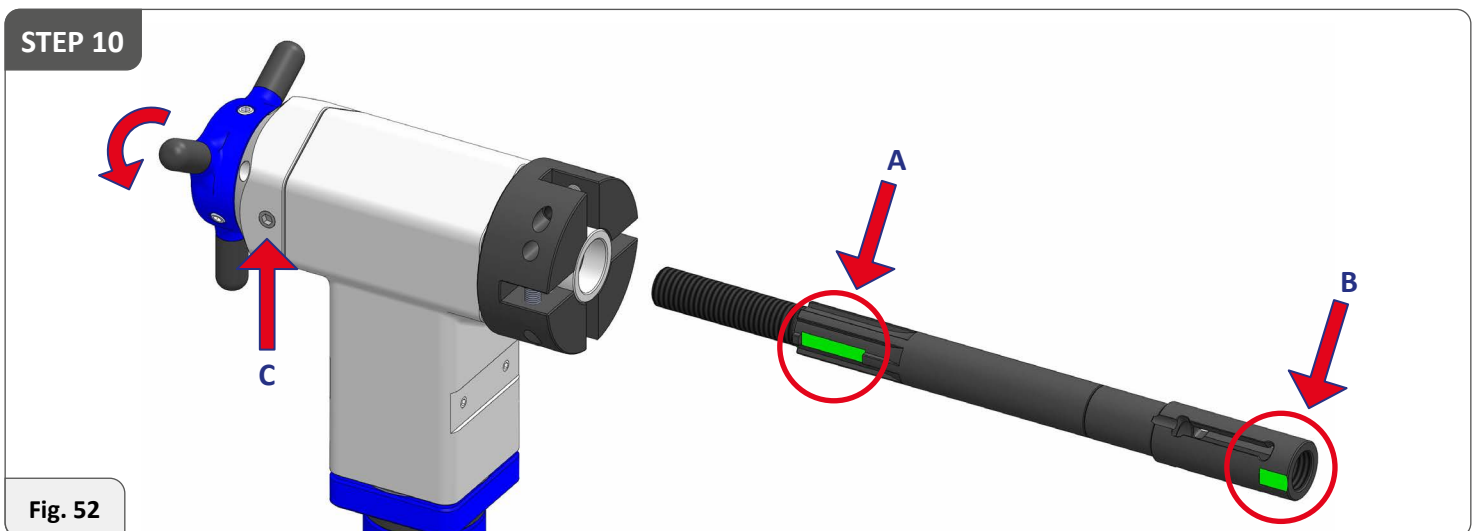
Remove the first outside grub screw.



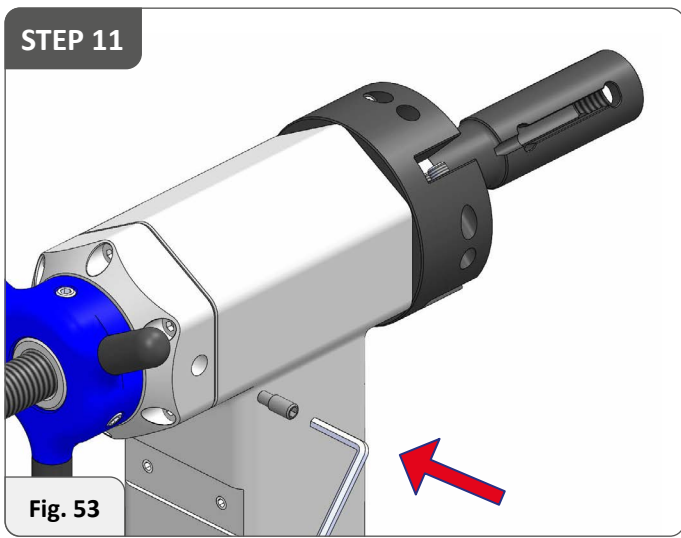
Then the second stop grub screw.



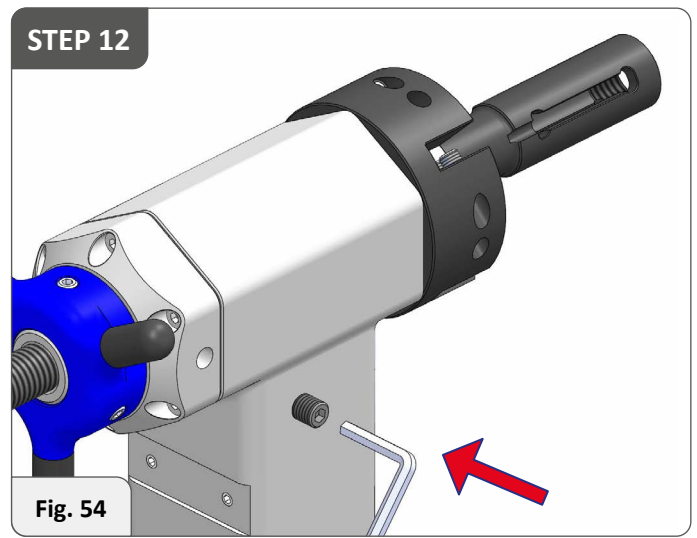
Remove the outside shaft by rotating the feeding wheel anti-clockwise.



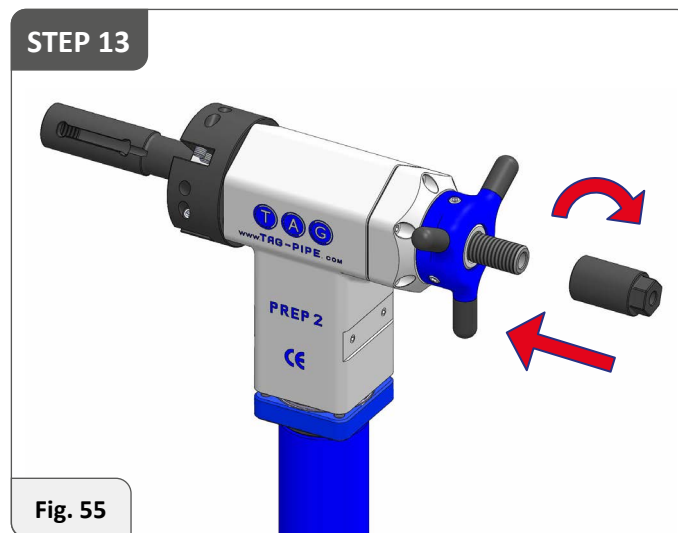
Take the standard outside shaft and mark the groove of the lap joint (arrow A) as well as the far end of the shaft (arrow B) as shown in Fig. 50. Insert the outside shaft and align the lap joint mark (arrow A) with arrow C, and using feed wheel rotate anti-clockwise to screw in the shaft.



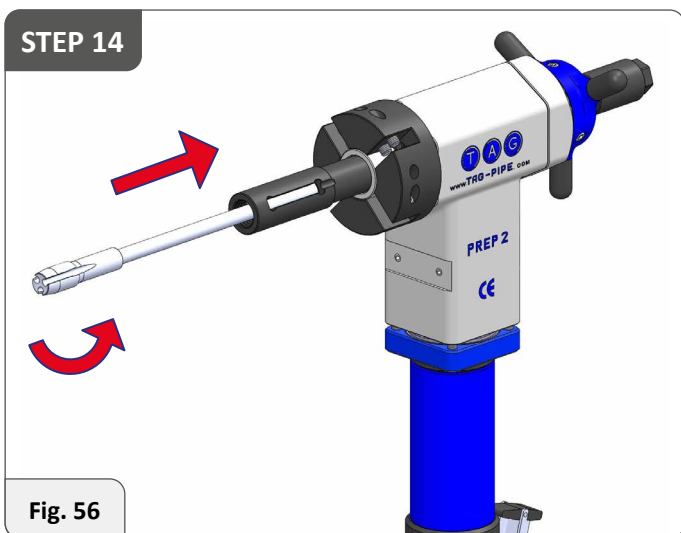
Re-assemble the stop grub screw.



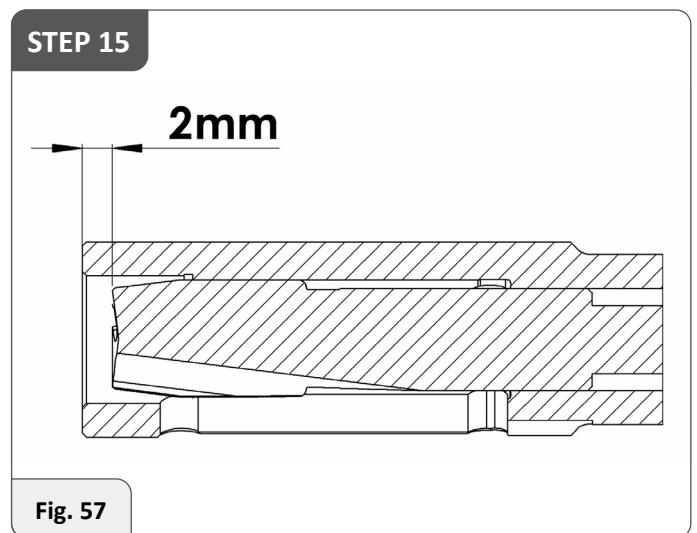
Then the outside grub screw. Then lock.



Screw the jaw lock/unlock nut all the way down in a clockwise direction.



By using long nose pliers, rotate the inside shaft anti-clockwise until there is a 2 mm gap between the shaft as shown in the picture (Fig. 57).

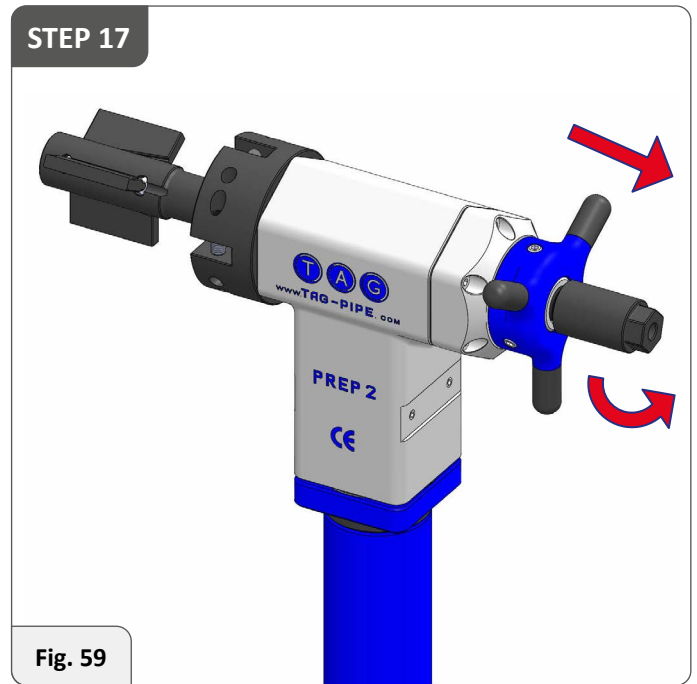


**⚠ WARNING - DO NOT MOVE THE INSIDE SHAFT**

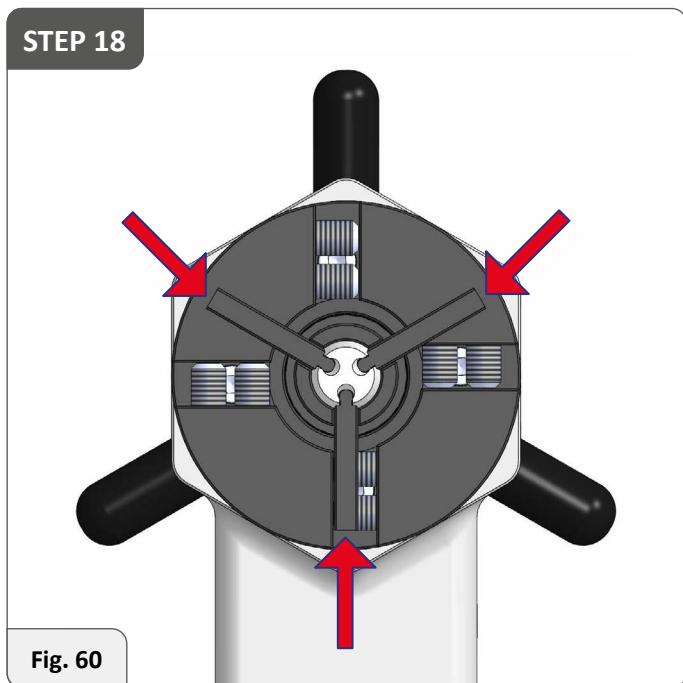
Beware - The inside shaft position can be lost when turning the jaw lock/unlock nut without locking jaws in the shaft.



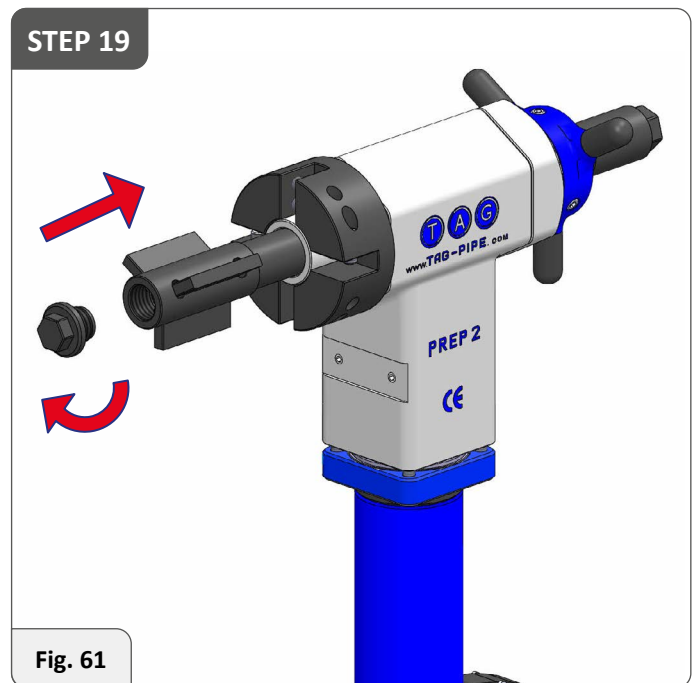
Select the locking jaws according to the diameter of the pipe and install them on the inside shaft as shown in Fig. 58.



While holding the three locking jaws you just mounted, unscrew the jaw lock/unlock nut in order to let them enter their seat.



If the procedure is correctly made, the locking jaws should have a bit of play/movement.

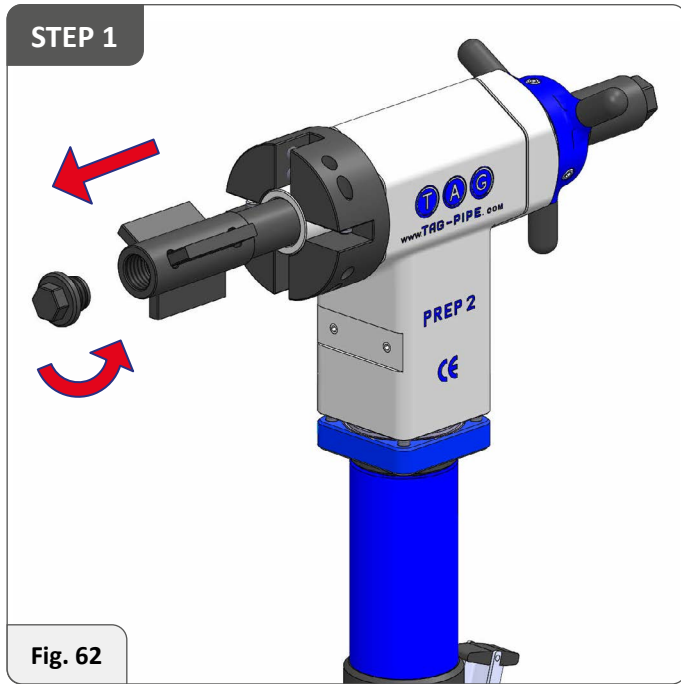


Screw on the shaft end nut in a clockwise direction.

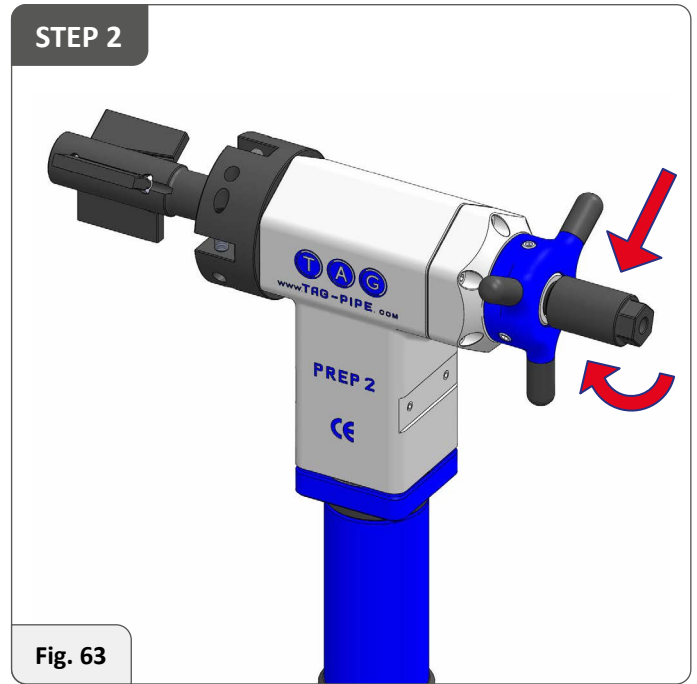
## 8.6 - ELBOW SHAFT ASSEMBLY KIT

**⚠ WARNING - DO NOT MOVE THE INSIDE SHAFT**

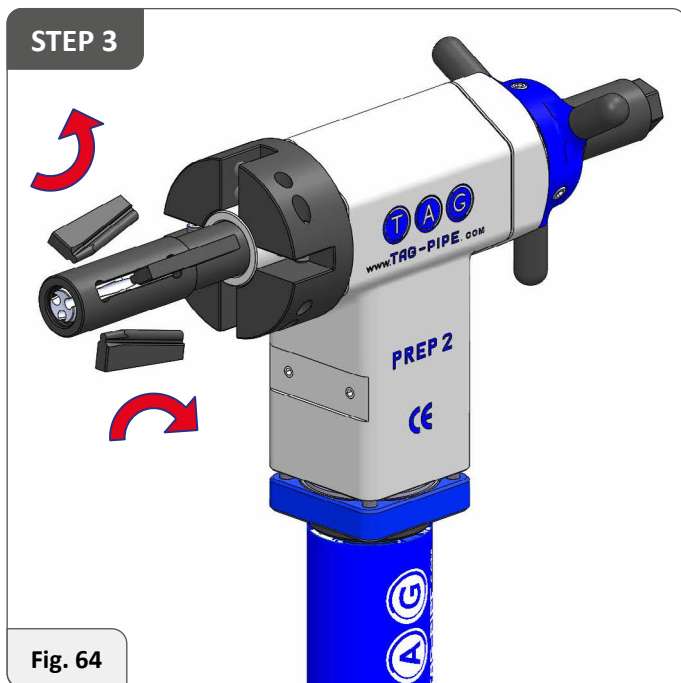
Beware - The inside shaft position can be lost when turning the jaw lock/unlock nut without locking jaws in the shaft.



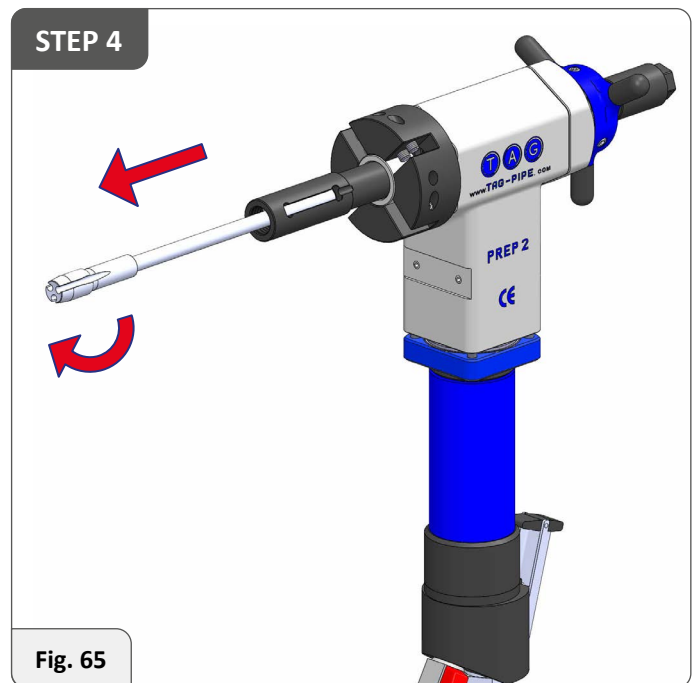
Unscrew the shaft end nut anticlockwise.



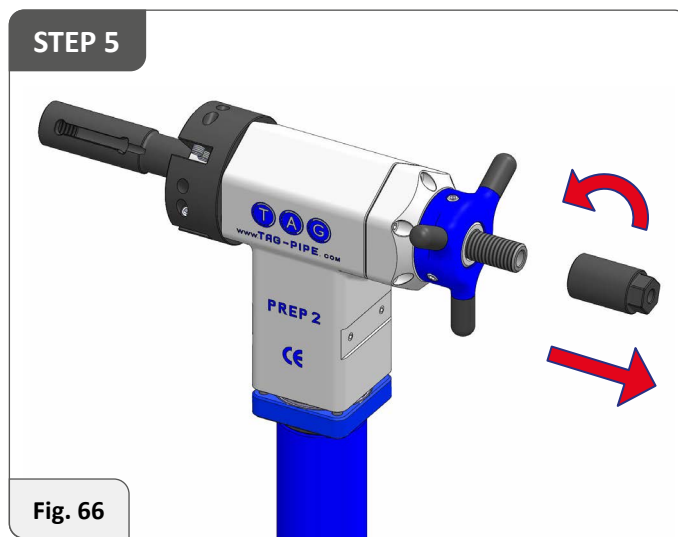
Turn the jaw lock/unlock nut clockwise to the maximum expansion.



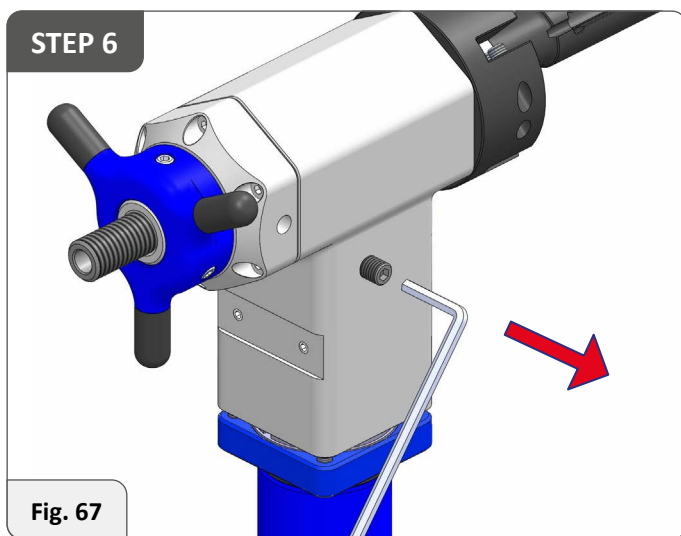
Remove the locking jaws.



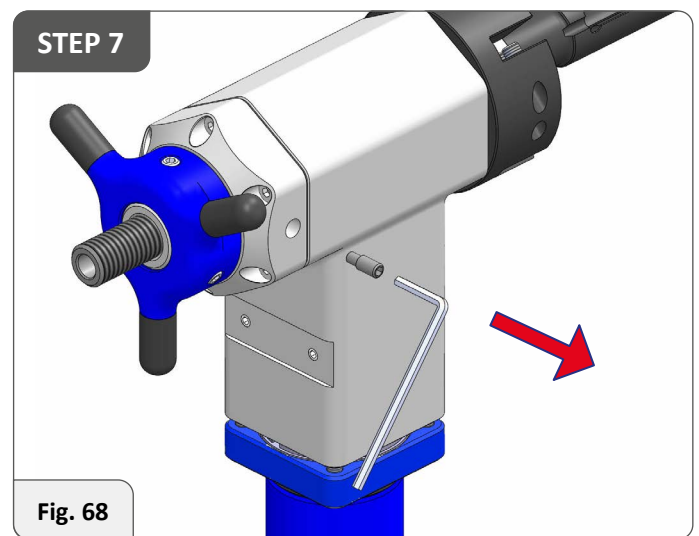
By using some long nose pliers, rotate the inside shaft in a clockwise direction, until its fully unthreaded and can be removed.



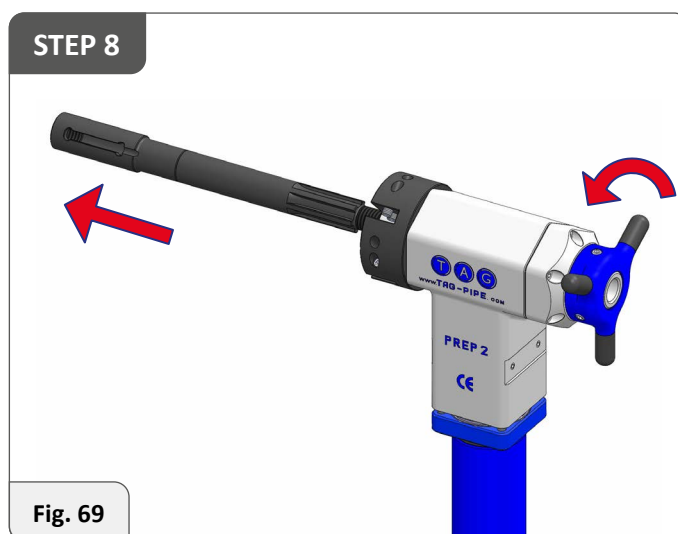
Rotate the jaw lock/unlock nut anti-clockwise and remove.



Remove the first grub screw from the cover.

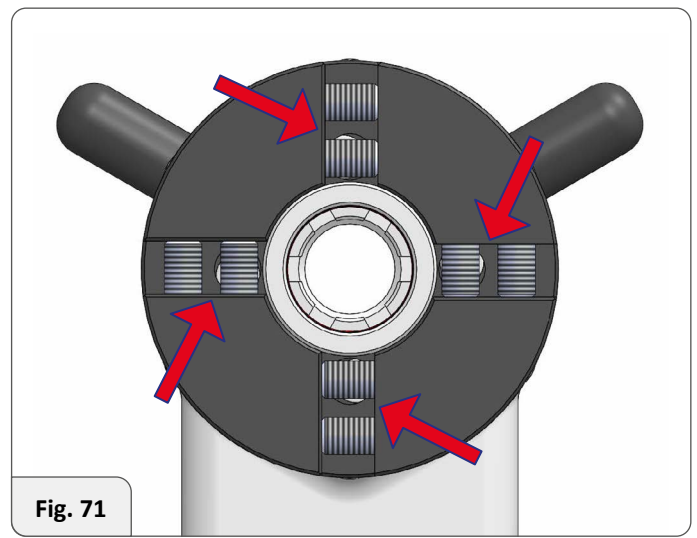
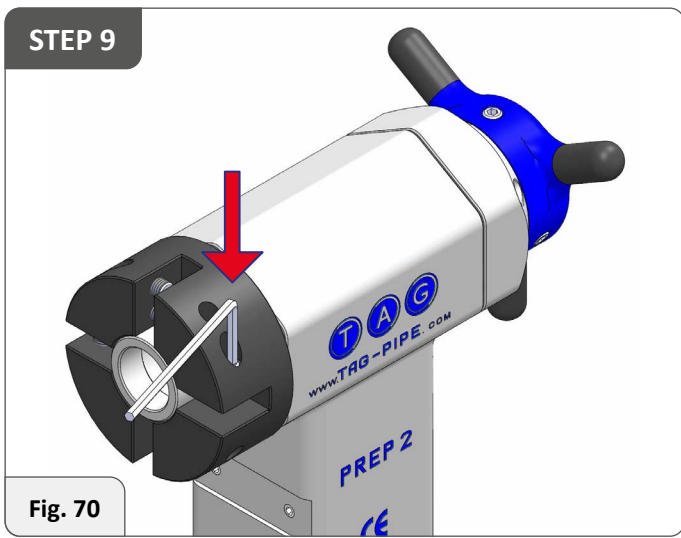


Then the second stop grub screw.

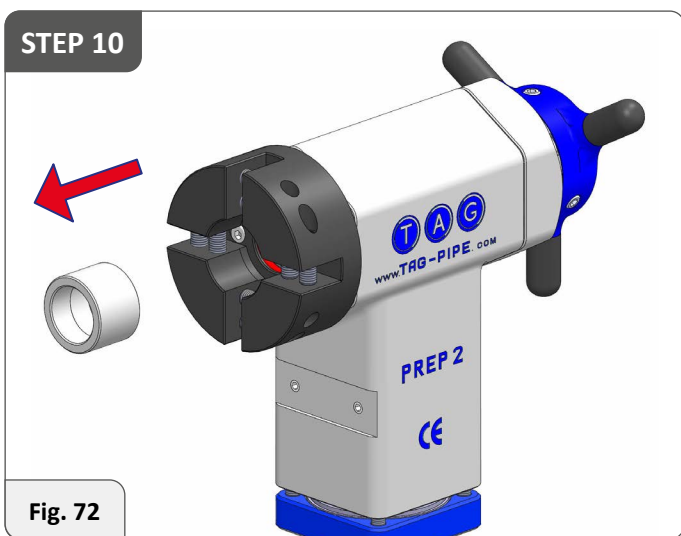


Remove the outside shaft by rotating the feeding wheel anti-clockwise.

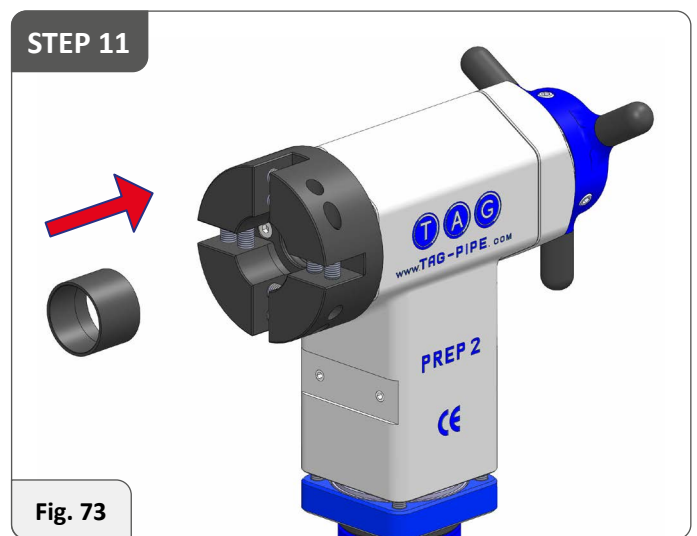




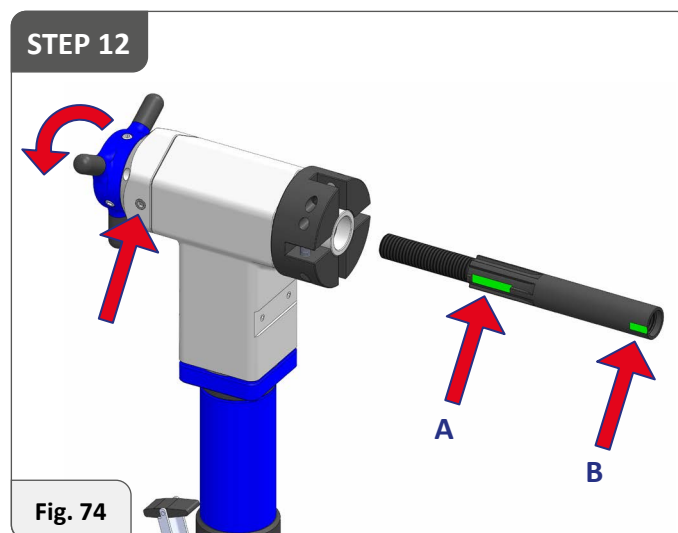
Screw all grub screws in tight to be able to take out the bush.



Remove the bush.



Replace with the new bush from elbow kit.



Take the elbow outside shaft from the elbow shaft kit and mark the groove of the lap joint (arrow A) as well as the far end of the shaft (arrow B) as shown in Fig. 74.

STEP 13

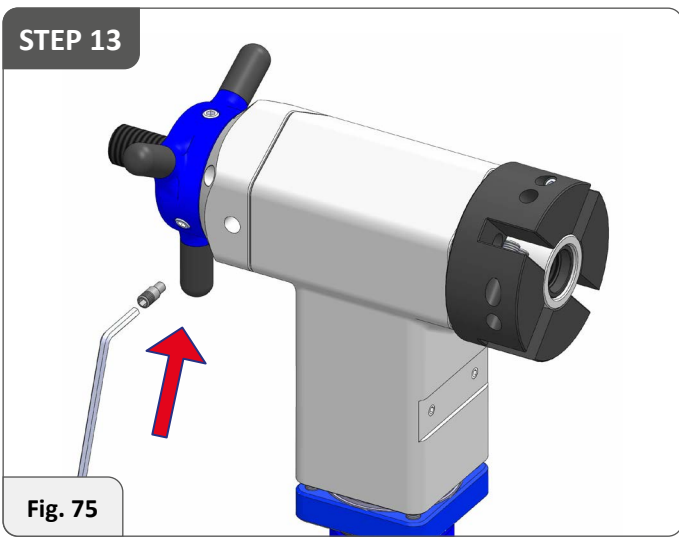


Fig. 75

Re-assemble the stop grub screw.

STEP 14

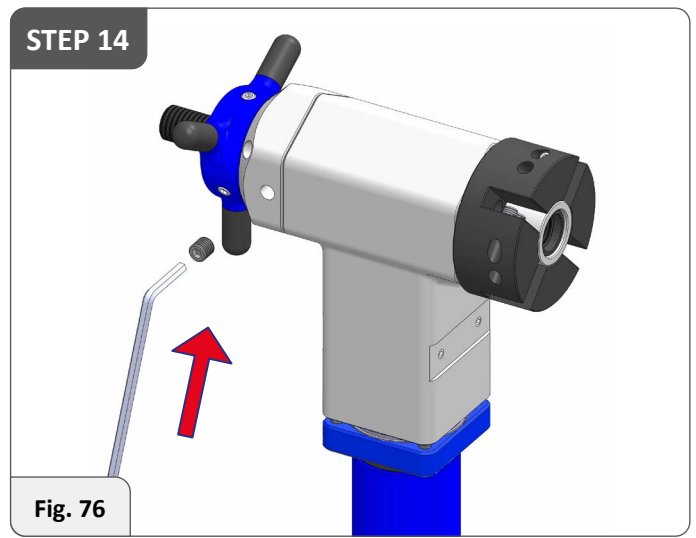


Fig. 76

Then the outside grub screw to the cover.

STEP 15

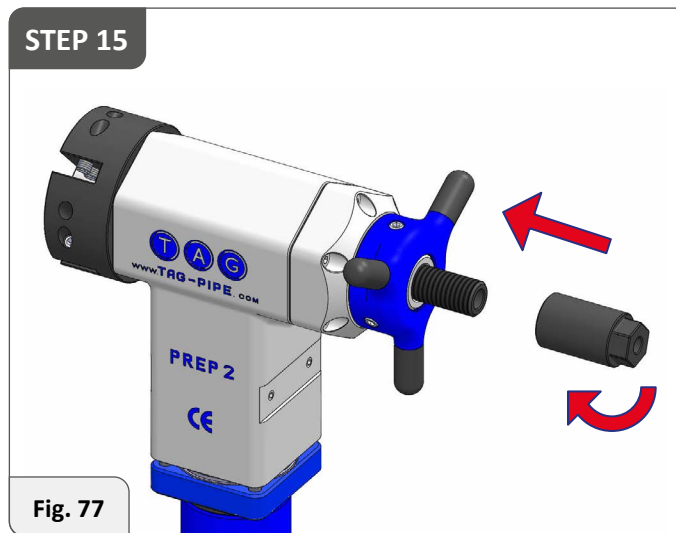


Fig. 77

Screw the jaw lock/unlock nut all the way down in a clockwise direction.

STEP 16

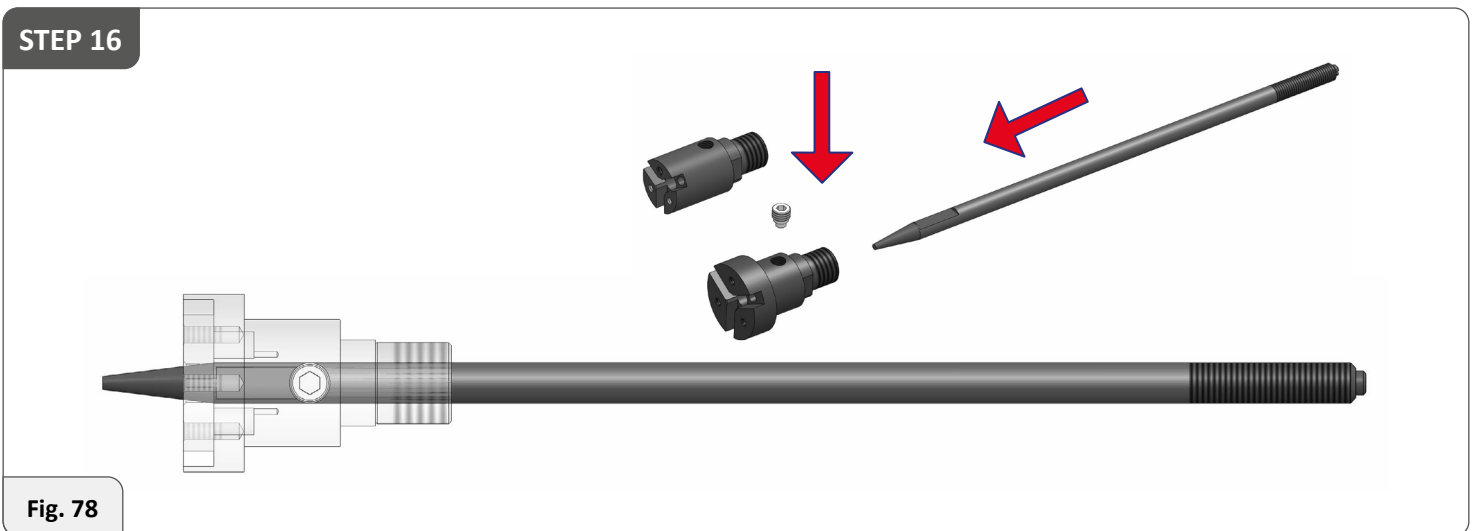
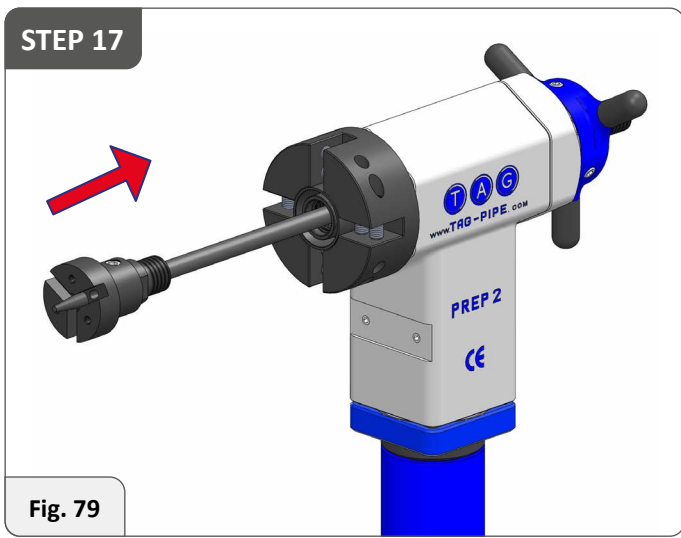
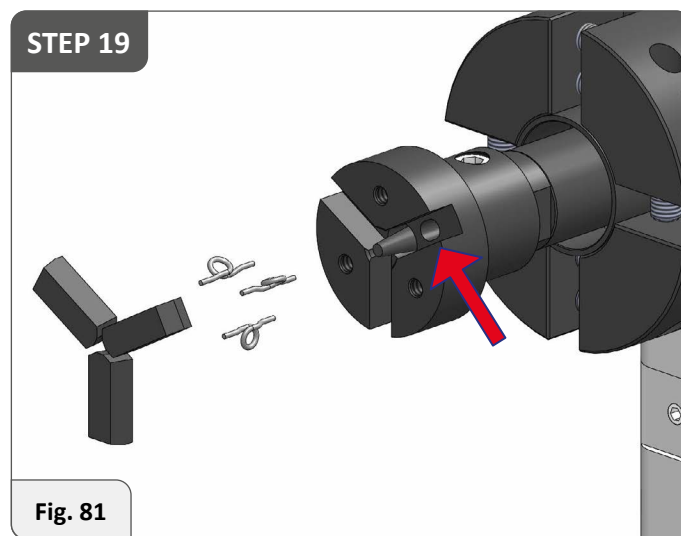


Fig. 78

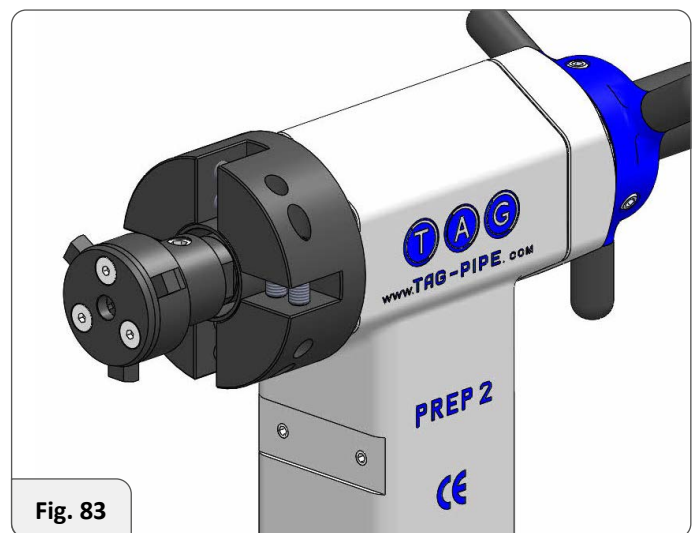
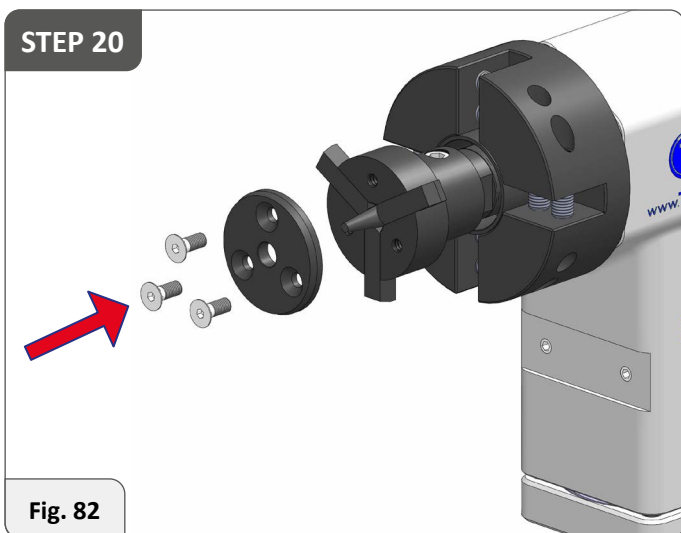
According to the pipe diameter use one of the heads on the kit, assemble it with inside shaft and Allen screw.



By using the 17 mm wrench tighten the head anti-clockwise (left thread).



Insert the springs and locking jaws at the required size.  
Slot jaws into groove on outside shaft.



Place the locking jaws securing cap on and tighten the 3 screws (Fig. 82).

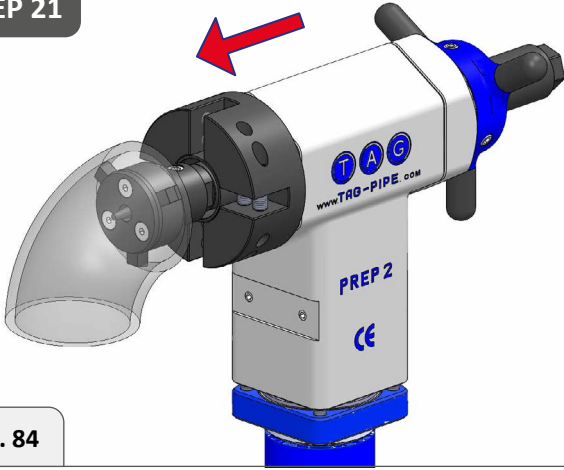
**STEP 21**

Fig. 84

Place machine into elbow.

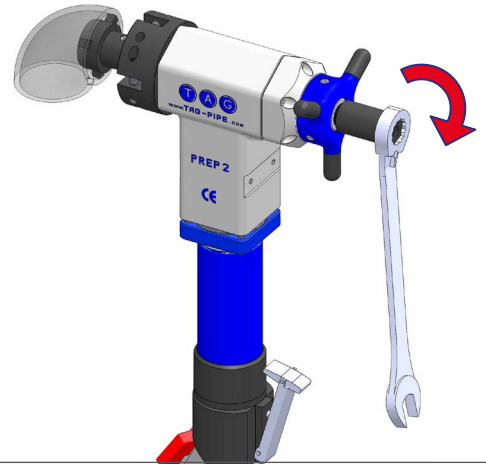
**STEP 22**

Fig. 85

Loosely lock clockwise.

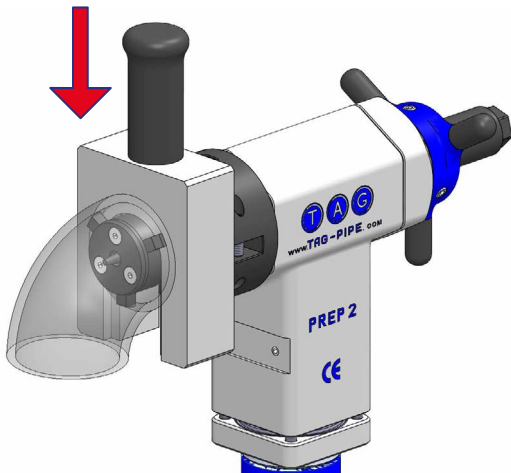
**STEP 23**

Fig. 86

Insert the elbow positioner between the elbow and the chuck.

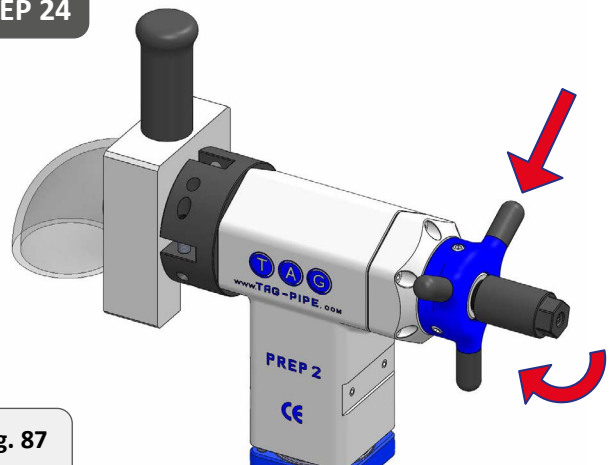
**STEP 24**

Fig. 87

Turn the feed wheel clockwise to tighten the elbow positioner in between the elbow and the chuck, and then lock the locking jaws in the elbow.

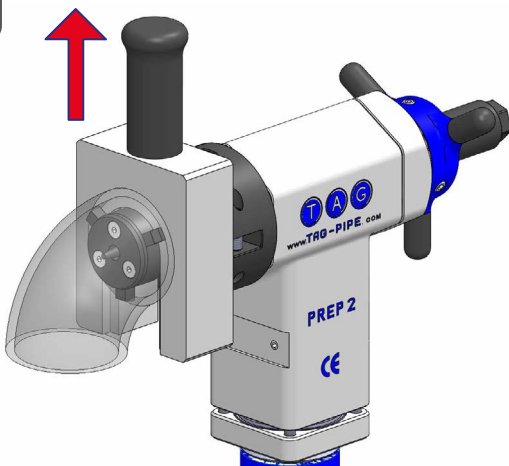
**STEP 25**

Fig. 88

Turn the feed wheel anti-clockwise and remove elbow positioner.

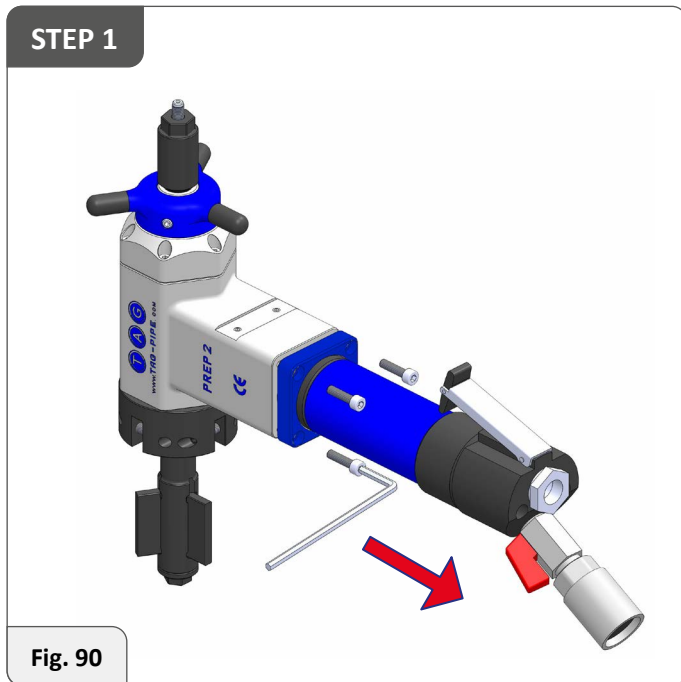


Fig. 89

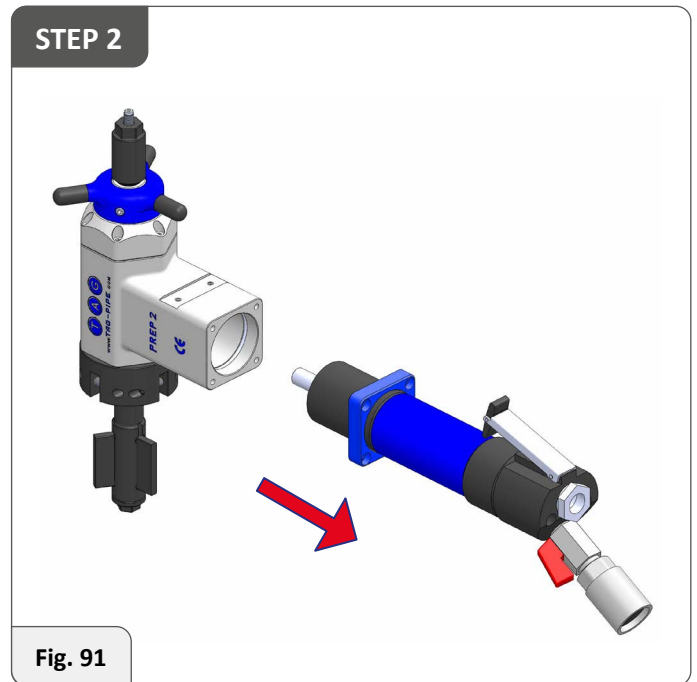
**⚠ WARNING** - Now you can set up the cutting tools as shown in Fig. 12.

## 8.7 - DRIVER KIT REPLACEMENT

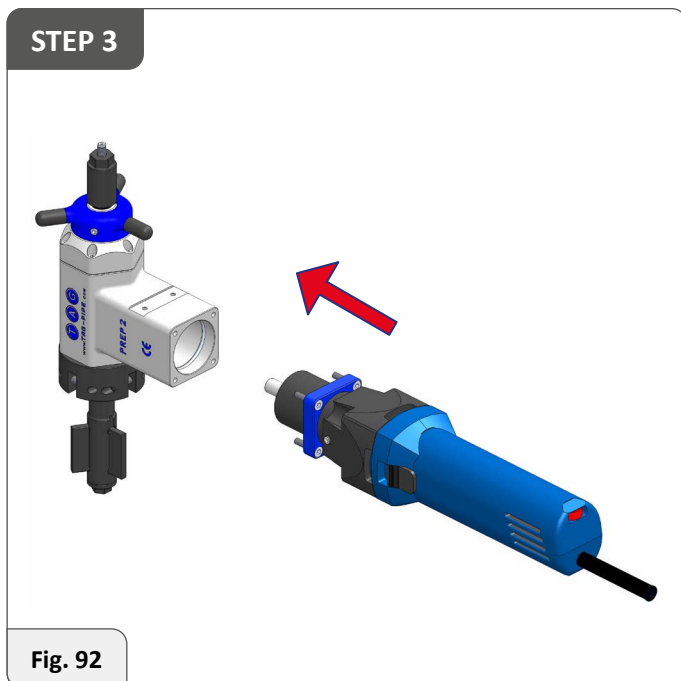
**⚠ WARNING** - Before replacing the transmission kits, make sure that you have eliminated any connections that may accidentally activate the machine.



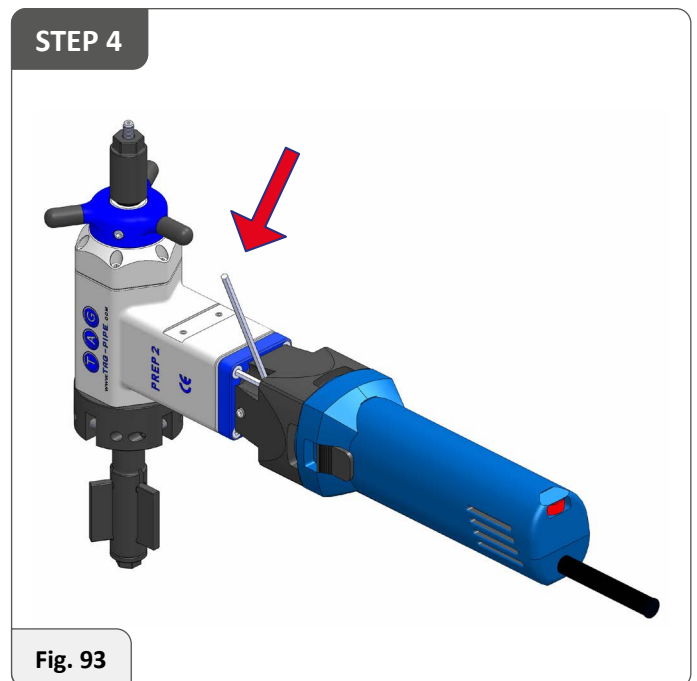
Remove the 4 screws as shown.



Remove the pneumatic conversion kit.



Insert the electric conversion kit.

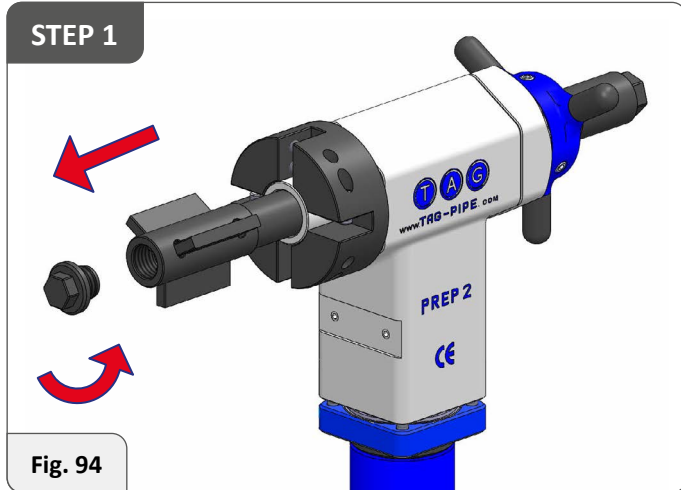


Screw in the 4 screws.

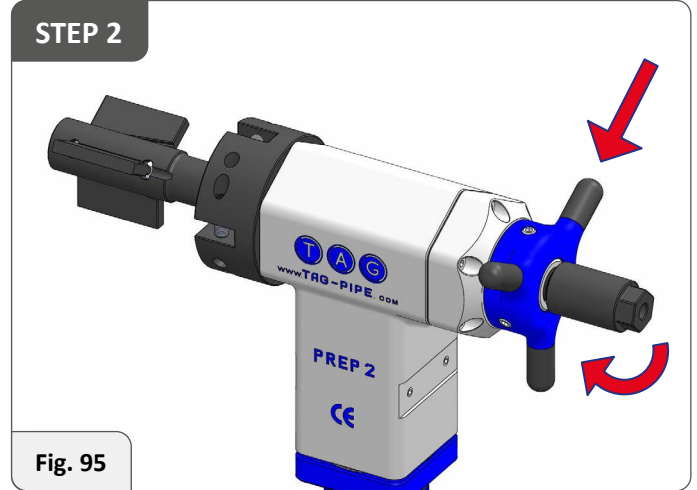
## 8.8 - AUTOMATIC LOCKING DEVICE KIT

**⚠ WARNING - DO NOT MOVE THE INSIDE SHAFT**

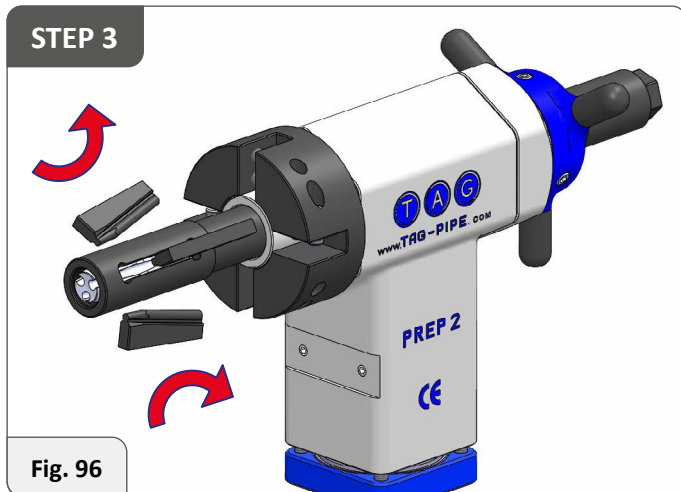
Beware - The inside shaft position can be lost when turning the jaw lock/unlock nut without locking jaws in the shaft.



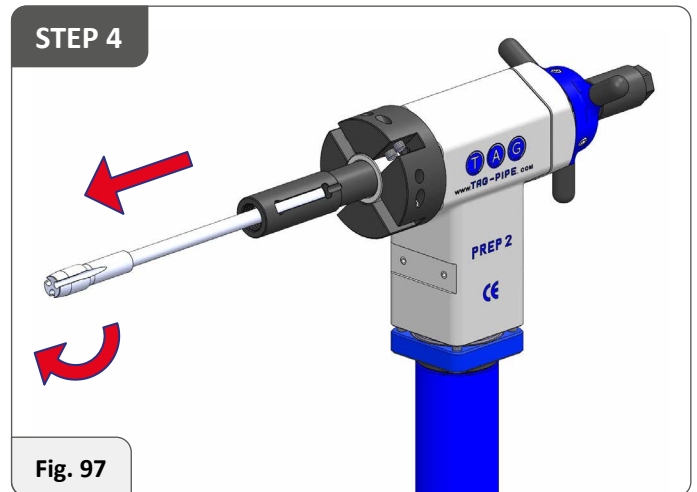
Unscrew the shaft end nut anti-clockwise.



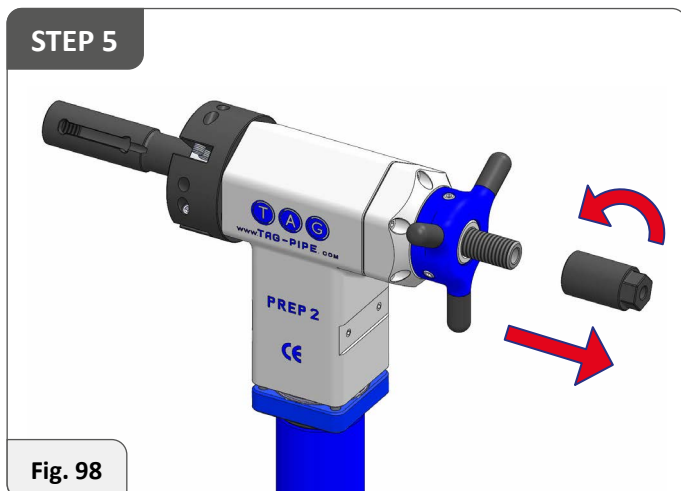
Turn the jaw lock/unlock nut clockwise to the maximum expansion.



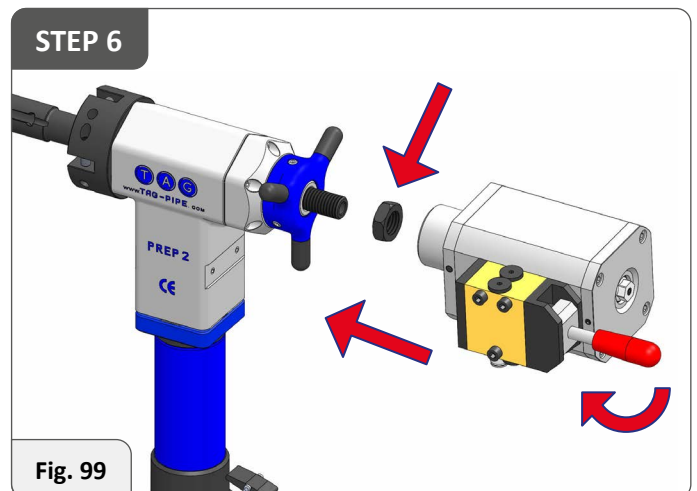
Remove the locking jaws.



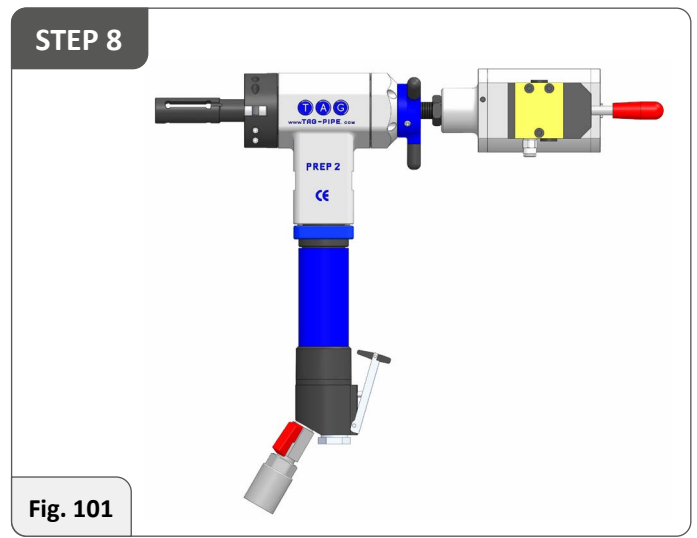
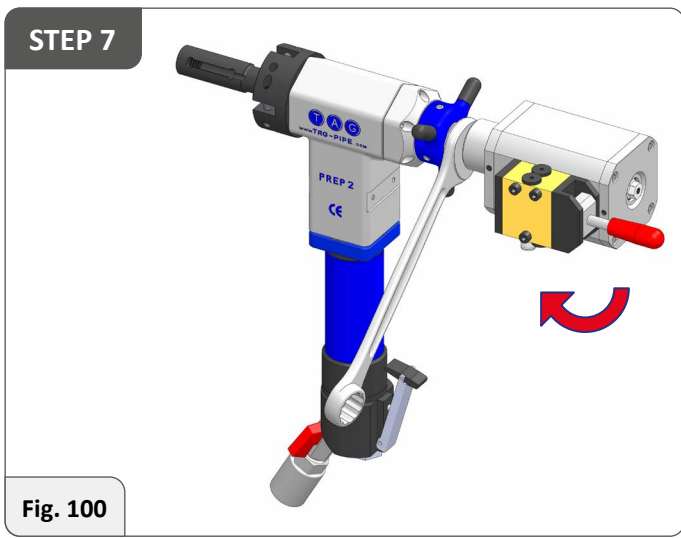
By using some long nose pliers, rotate the inside shaft in a clockwise direction, until its fully unthreaded and can be removed.



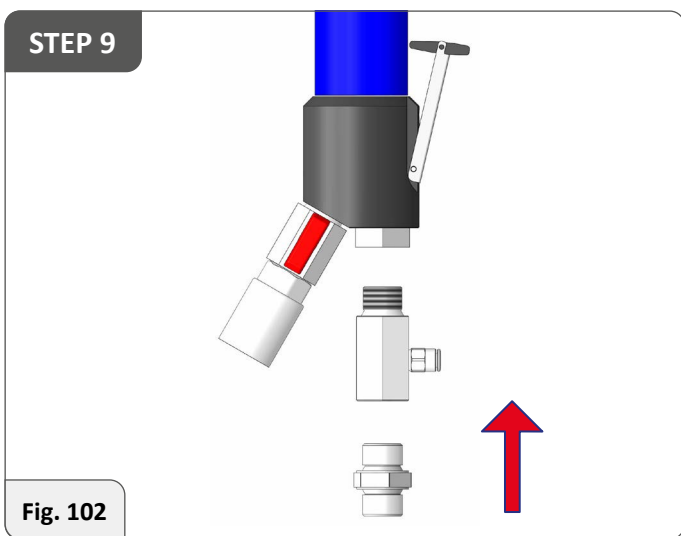
Rotate the jaw lock/unlock nut anti-clockwise and remove.



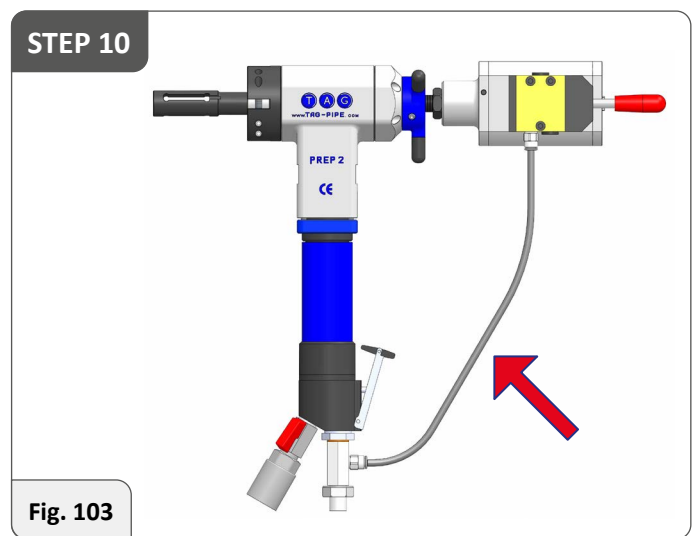
Screw on the locking device nut and the locking device clockwise until it stops.



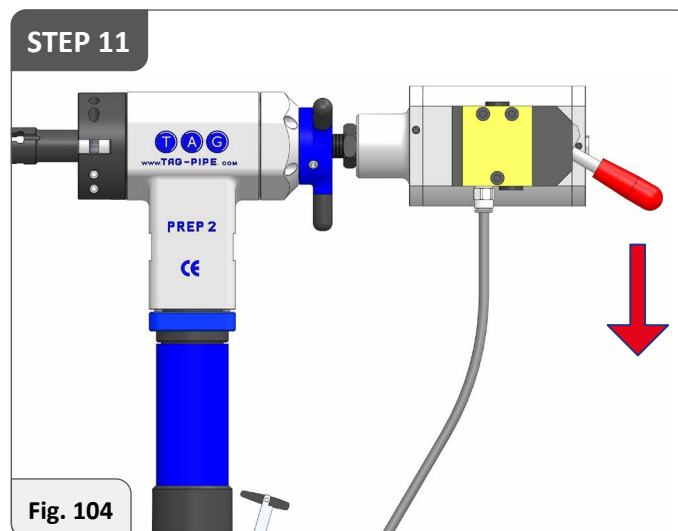
Turn to the right position and lock the nut against the locking device.



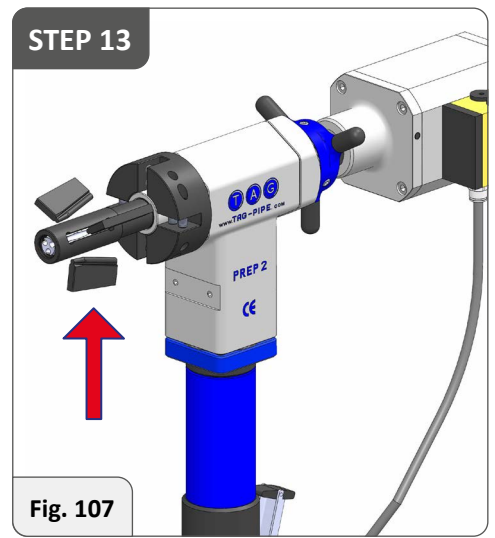
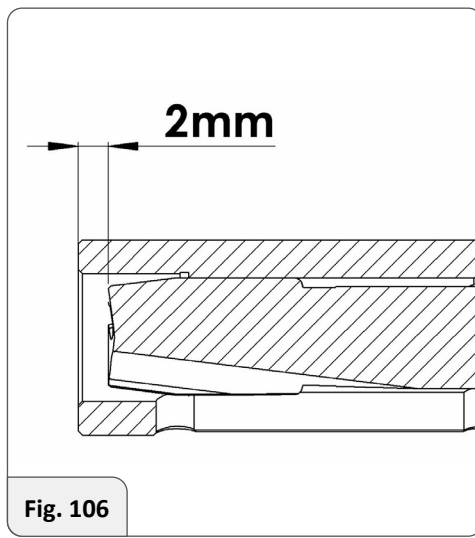
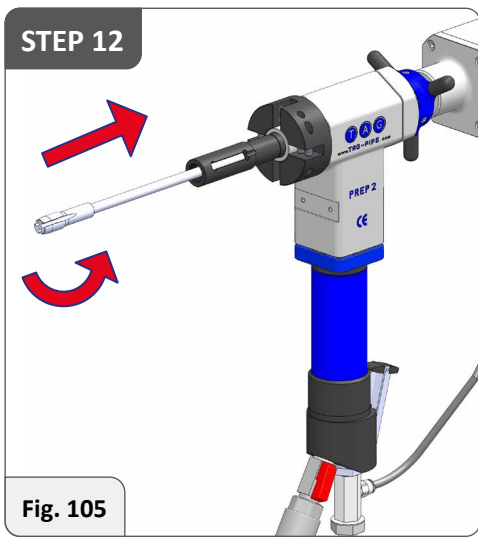
Screw in the special connection as shown (Fig. 102).



Connect the hose from the special connector to the locking device.

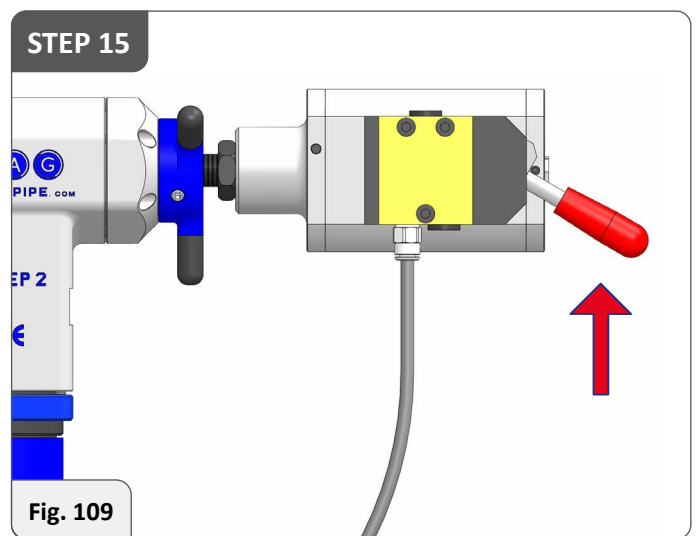
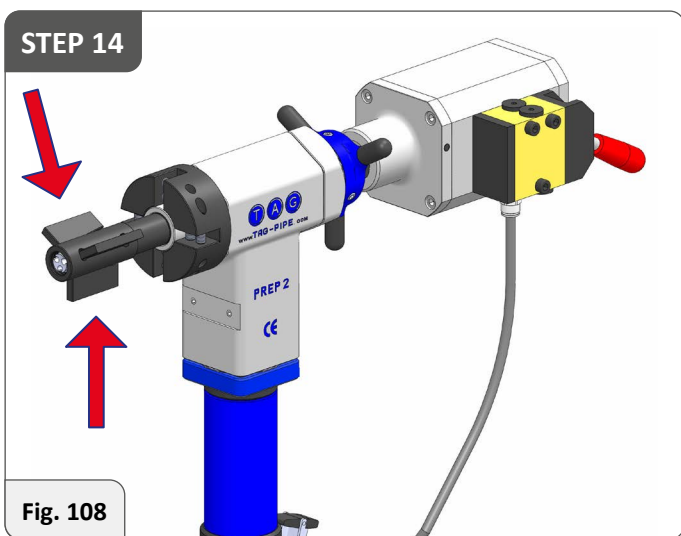


Connect the air and move the lever down, to move the piston to its maximum forward position.

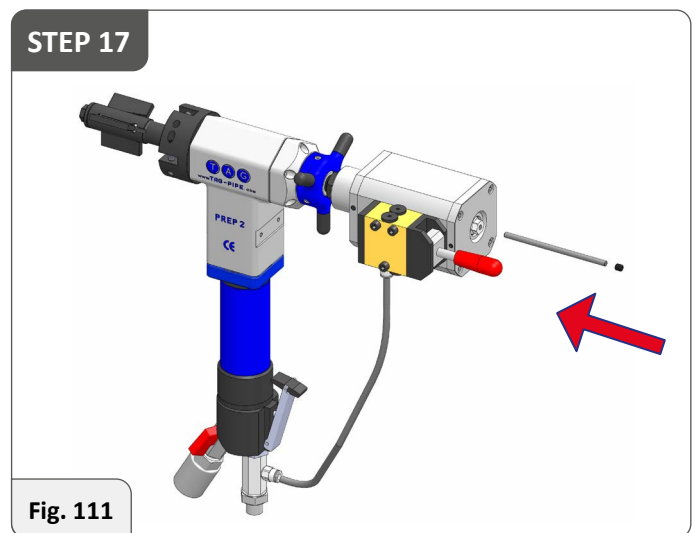
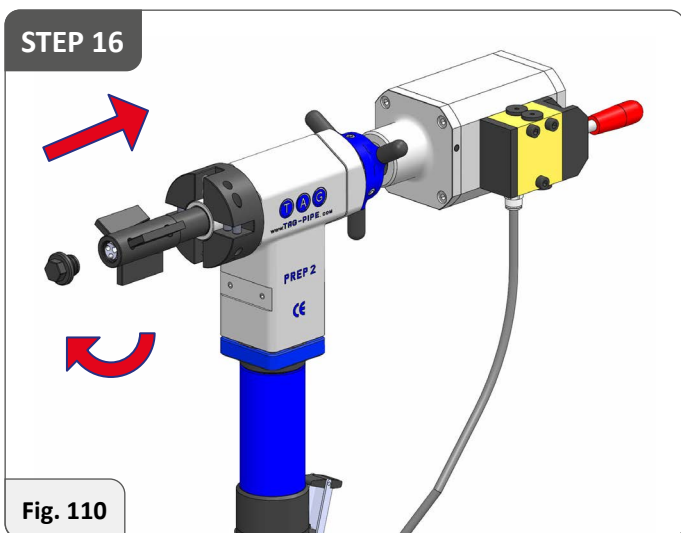


Insert and screw in an anti-clockwise direction until there is a 2 mm gap between the shafts as shown in Fig. 106.

Select the locking jaws according to the diameter of the pipe and install them on the inside shaft as shown in the picture.



Connect the air and with your hand hold the jaws in position. Move the lever up to achieve the backward position of the inside shaft.



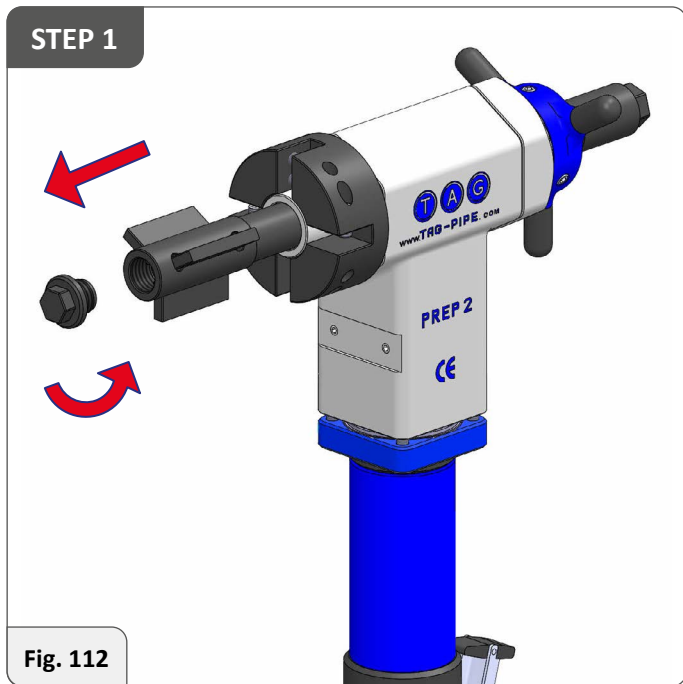
Screw the shaft end nut back on in a clockwise direction.

Insert the pin inside the locking device and lock with the first grub screw shown in the picture and then the second one.

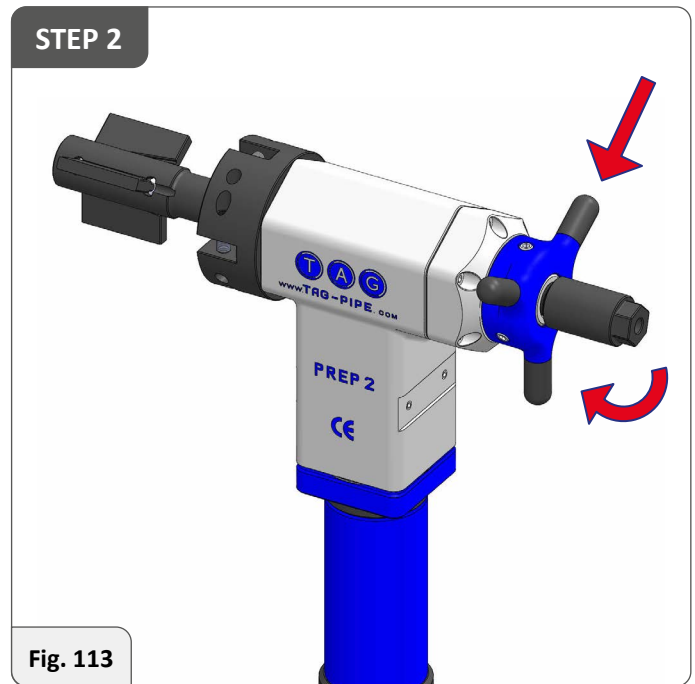


## 8.9 - AUTOMATIC LOCKING DEVICE KIT WITH REDUCED SHAFT

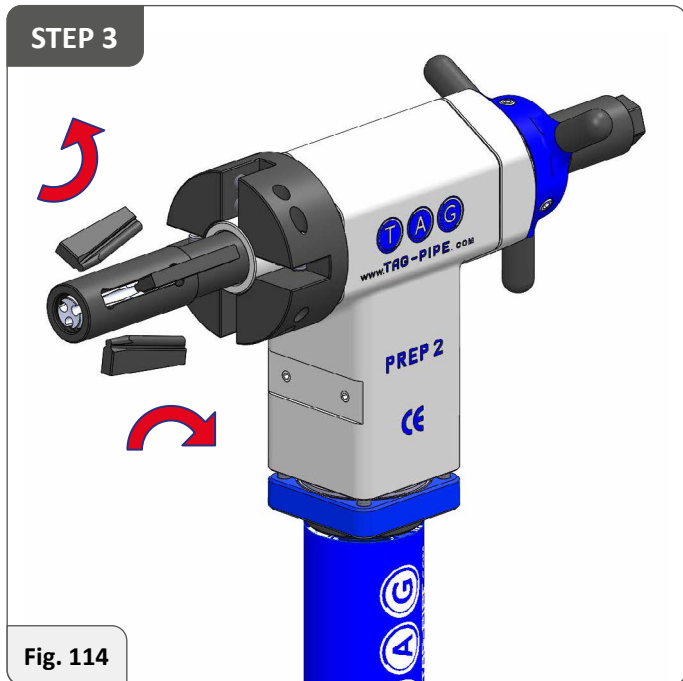
**⚠ WARNING - DO NOT MOVE THE INSIDE SHAFT** The inside shaft can be moved by the vane expansion nut after having replaced the locking jaws.



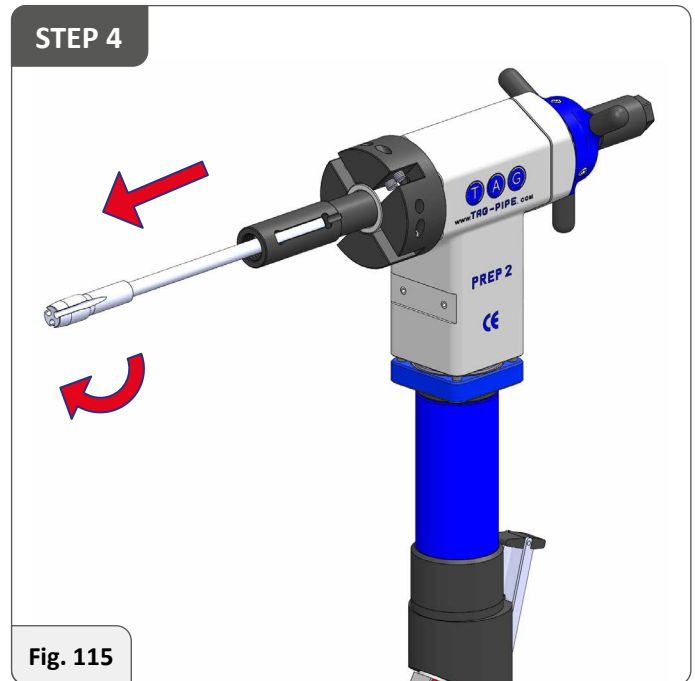
Unscrew the shaft end nut and the shaft ring anti-clockwise.



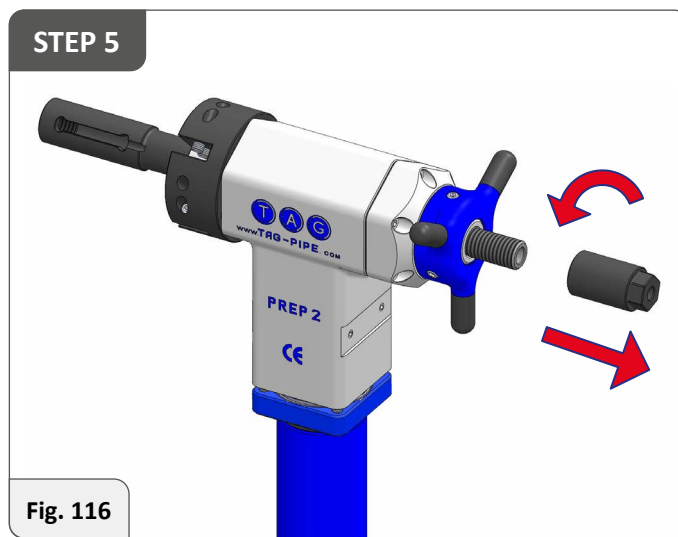
Turn the unlock/lock nut clockwise to the maximum expansion.



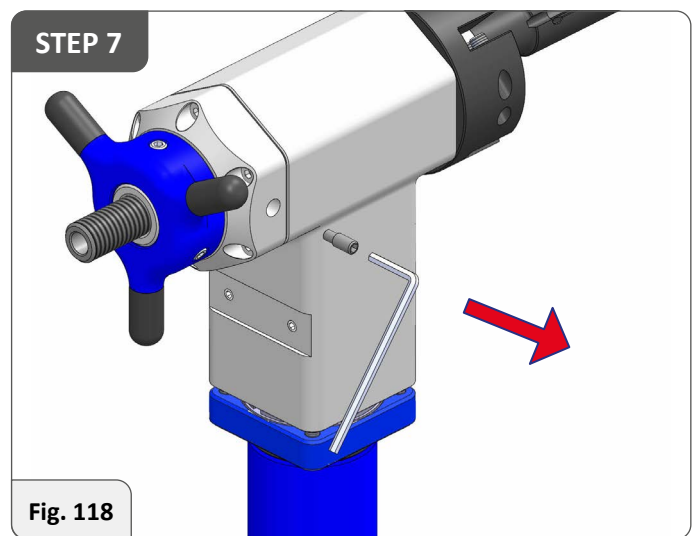
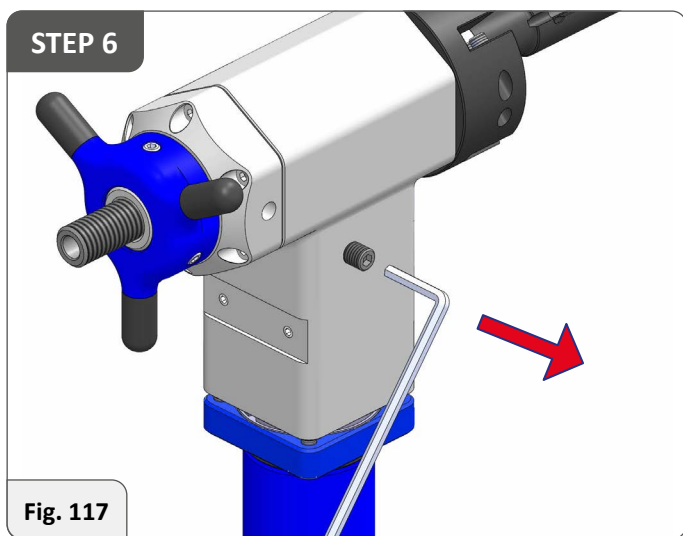
Remove the locking jaws.



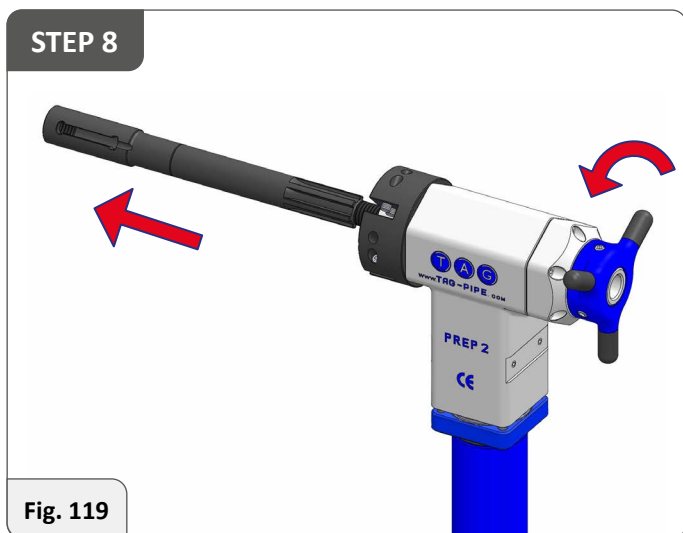
By using long nose pliers rotate the inside shaft clockwise until it comes out.



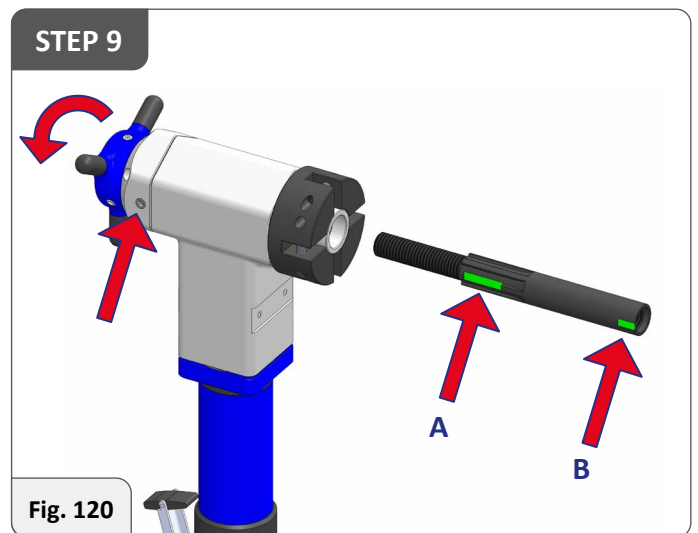
Rotate the lock/unlock nut anti-clockwise.



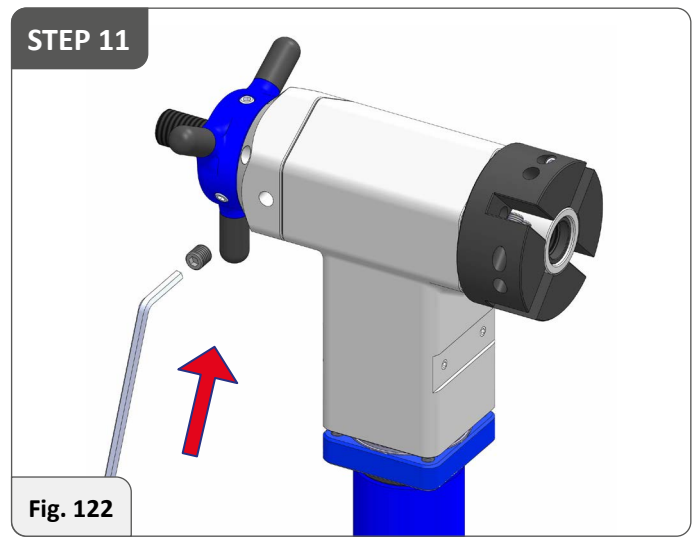
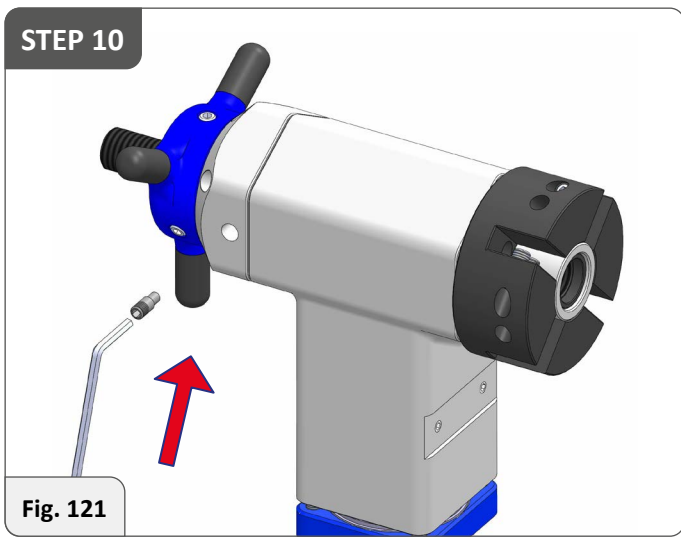
Remove the grub screw and then stop grub screw from the cover.



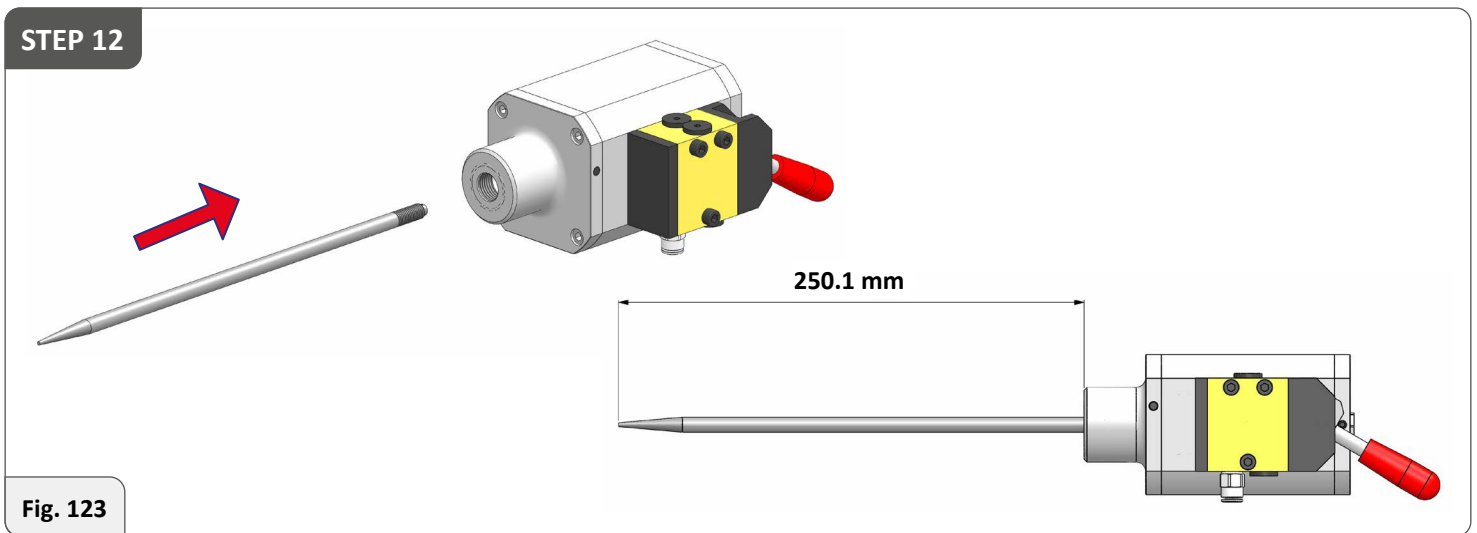
Remove the outside shaft by rotating the feeding wheel anti-clockwise.



Take the outside shaft from the reduced shaft kit and mark the groove of the lap joint (arrow A) as well as the far end of the shaft (arrow B) as shown in Fig. 120.

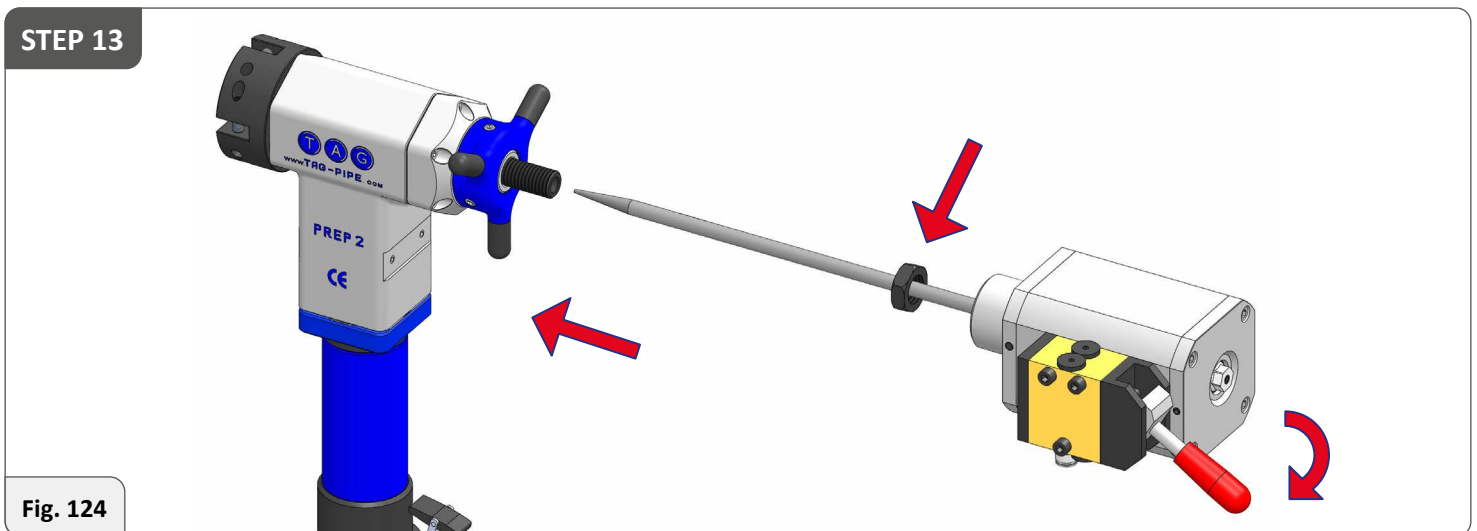


Re-assemble screw stop cover and grub screw and lock.



Insert reduced inside shaft and screw anti-clockwise up to 250.1 mm dimension in Fig. 123 (left thread).

**⚠ WARNING** - The piston of locking device it must be maximum position



Screw the locking device nut and the locking device until it stops.

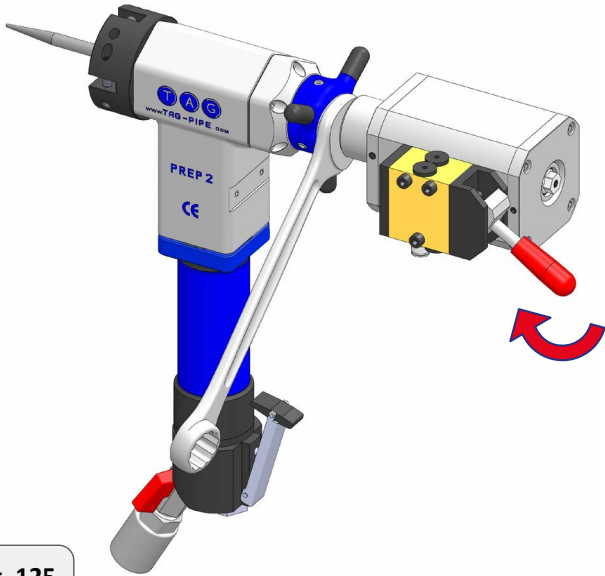
**STEP 14**

Fig. 125

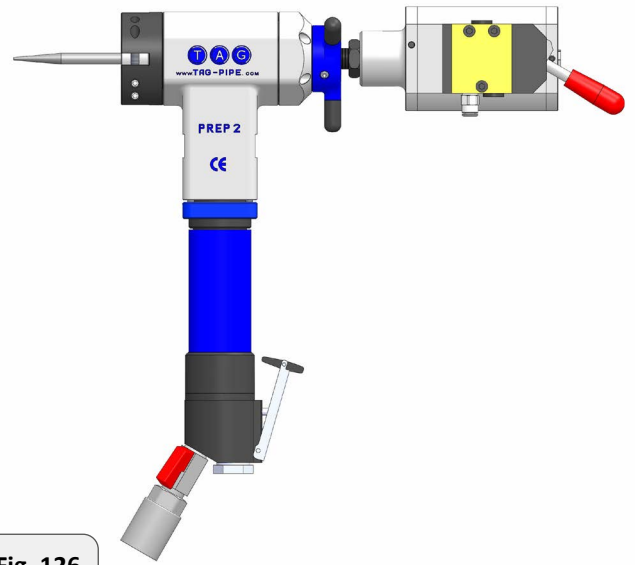
**STEP 15**

Fig. 126

Turn in the right position and lock the nut against the locking device.

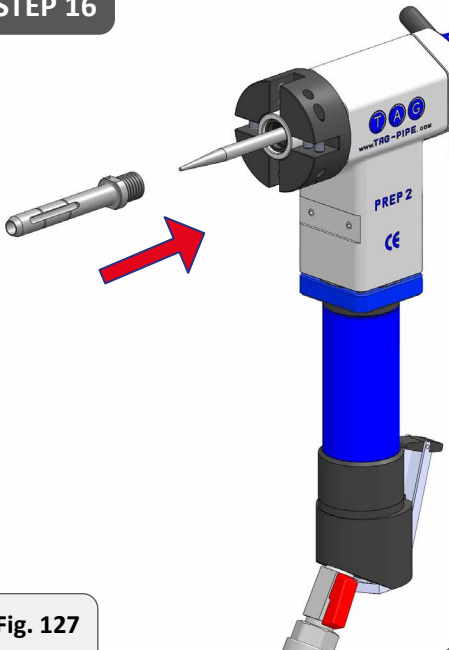
**STEP 16**

Fig. 127

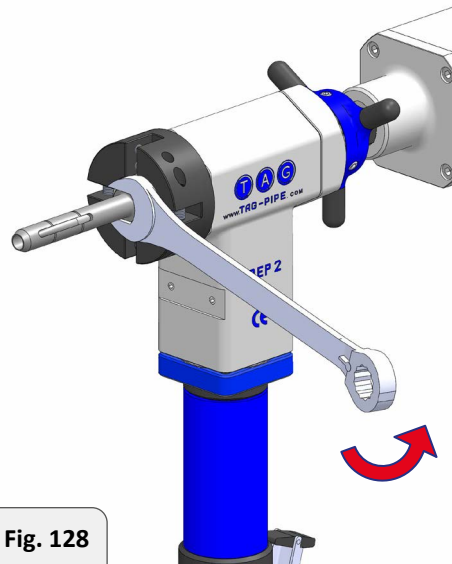
**STEP 17**

Fig. 128

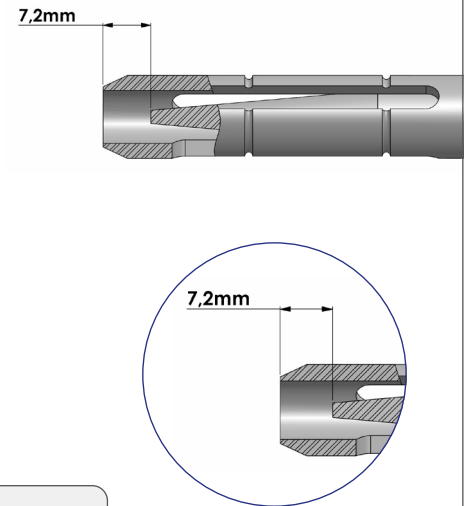
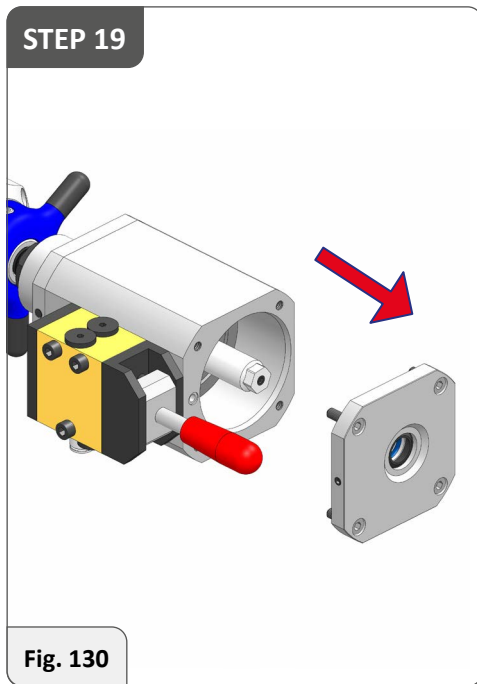
**STEP 18**

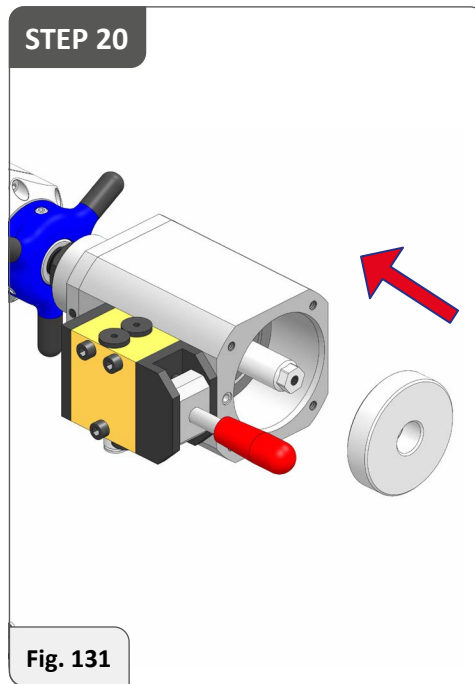
Fig. 129

By using the 17 wrench tighten the head anti-clockwise (left thread).  
At the maximum expansion double check the measurement shown in the picture (Fig. 129).

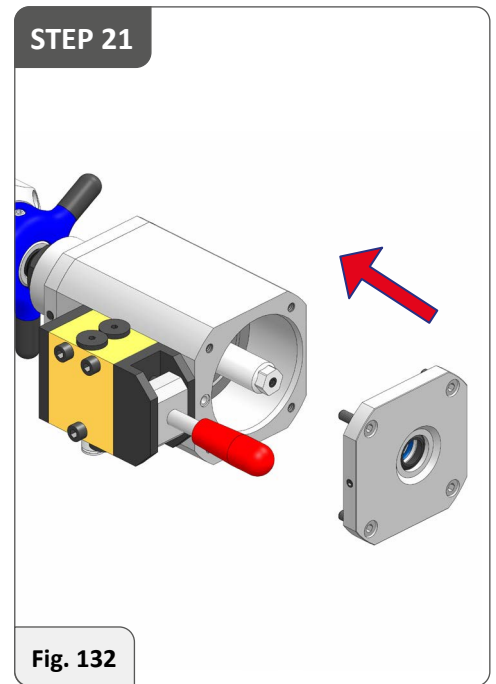
**!** **WARNING** - Verify that the reduced inside shaft is positioned as in the picture



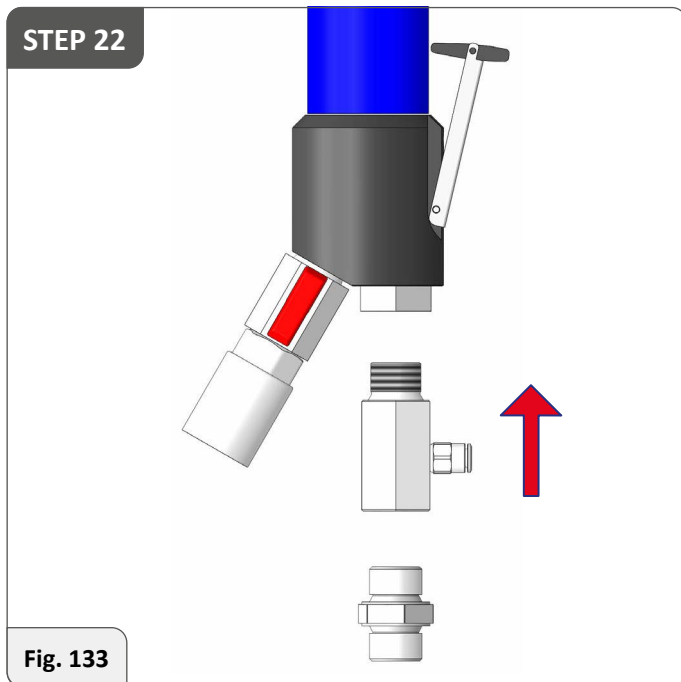
Remove locking device back cover.



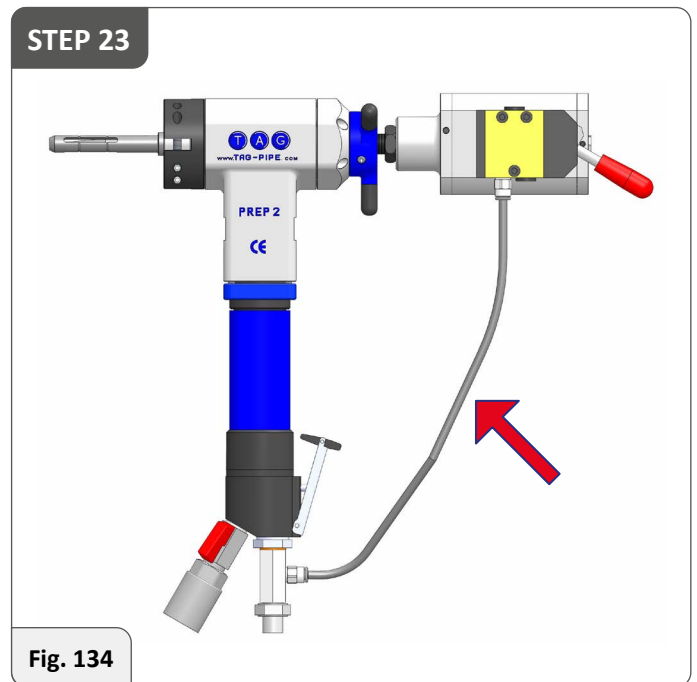
Insert the spacer.



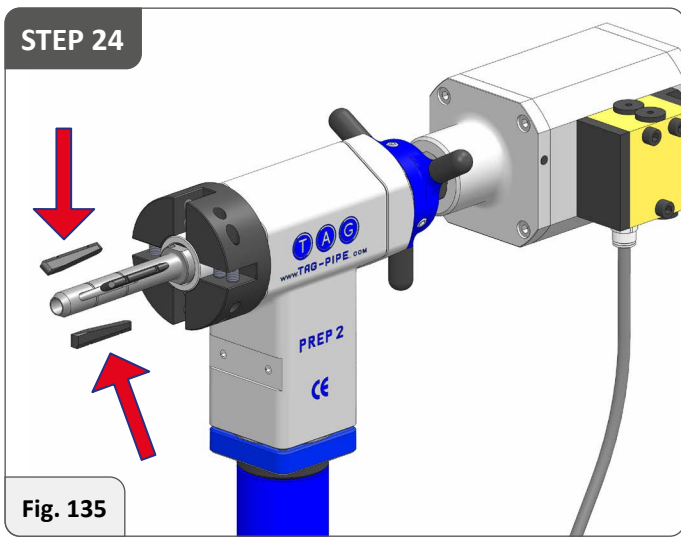
Re-assemble the locking device back cover.



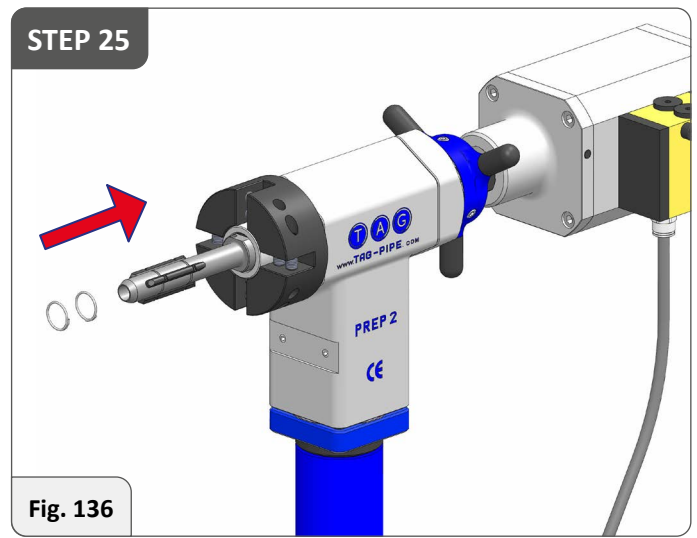
Screw in the special connection as shown in the picture.



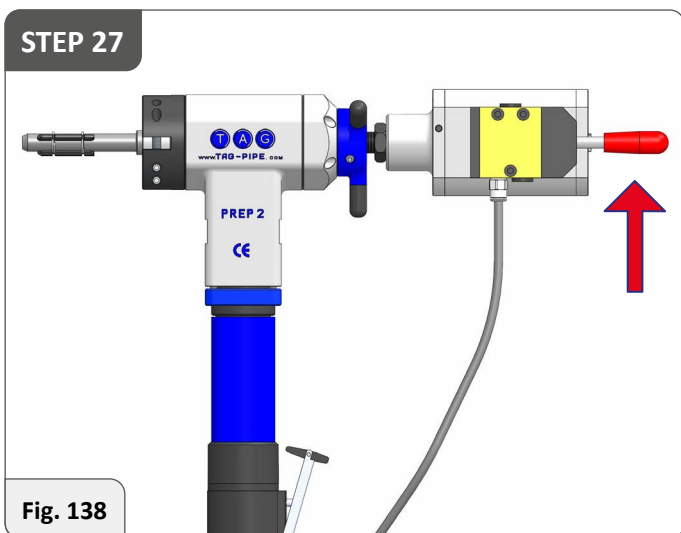
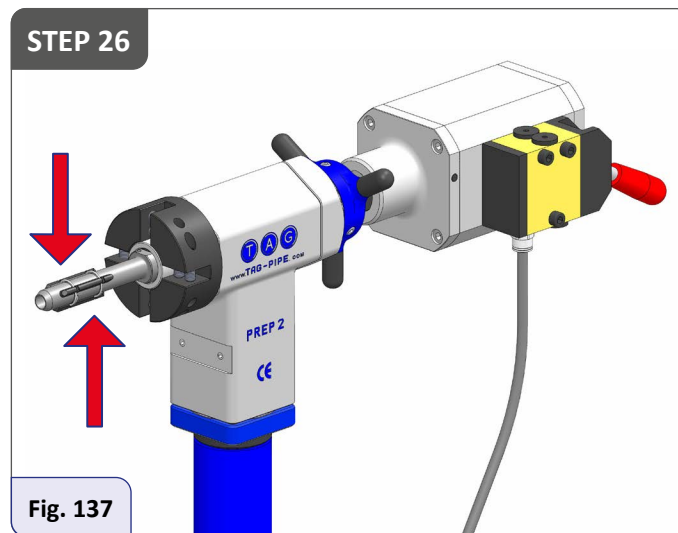
Connect the hose from the special connector to the locking device.



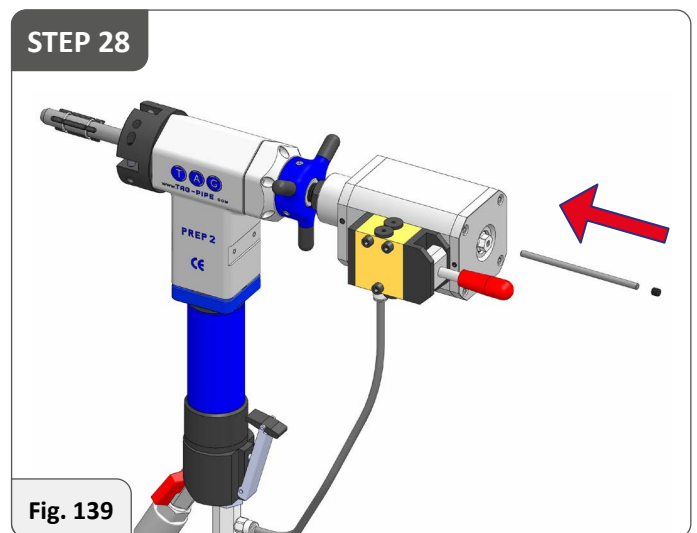
According to the pipe inside diameter insert the three locking jaws as shown in the picture.



By using a screwdriver or something similar, slide the springs to find the right position.



Move the lever up to achieve the backward position of inside shaft.



Insert the pin inside the locking device and lock with the first grub screw shown in the picture and then the second one.

## 9 - PERIODIC MAINTENANCE AND REPAIR

Continued safe operation of the equipment depends on regular maintenance and testing of its operating and protective controls. The equipment should only be inspected, tested and maintained by qualified trained personnel.

Should any test indicate that the equipment being tested or observed is not in good operating condition, it should be repaired immediately. Record and maintain records of repairs or changes so that a complete record will be available for review at any time.

It is advisable to regularly check the machine for any deficiencies; in case of non-conformities, do not use the equipment and initiate repair activities. Any repair should be conducted by TAG Pipe or by a TAG Pipe authorised machine repair partner. All spare parts used during repair activities should be genuine TAG Pipe original spare parts. The warranty on the equipment voids in case any form of repair is conducted by any unauthorised individual or service provider and/or in case non-genuine spare parts are used during any form of repair activity.

### PERIODIC MAINTENANCE

- Prior to conducting any form of maintenance, make sure the equipment is not powered.
- When not using the equipment, keep the equipment safe and clean in the storage boxes.
- Do not store the equipment in humid storage area.
- Keep the equipment clean at all times in order to allow for optimal working conditions and performance.
- After use, the equipment should be thoroughly cleaned by brush and anti-rust spray or grease should be applied.
- Do not clean the equipment by using compressed air.
- Make sure no metal particles or swarf is remaining on any parts of the equipment.
- Before and after usage check all components, especially the power cords, and connecting hoses for pneumatic and hydraulic motors.
- Check the tension and accuracy of the toolboxes.  
The high precision feed and tolerance (0.1 mm feed per revolution) is of critical performance of the equipment.
- It is advised to conduct an annual inspection and formal maintenance check-up by TAG Pipe or any of its authorised service partners.



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