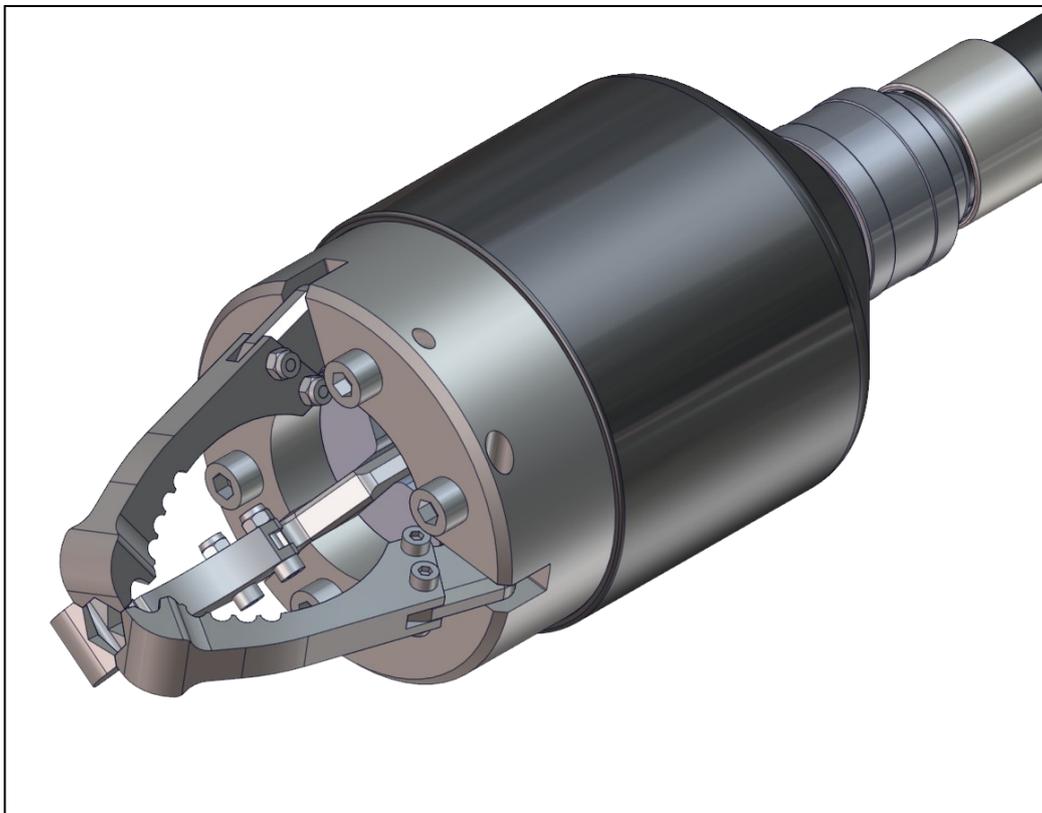




Operating & Safety Manual

Picote Original Grabber & Picote Large Grabber



WARNING

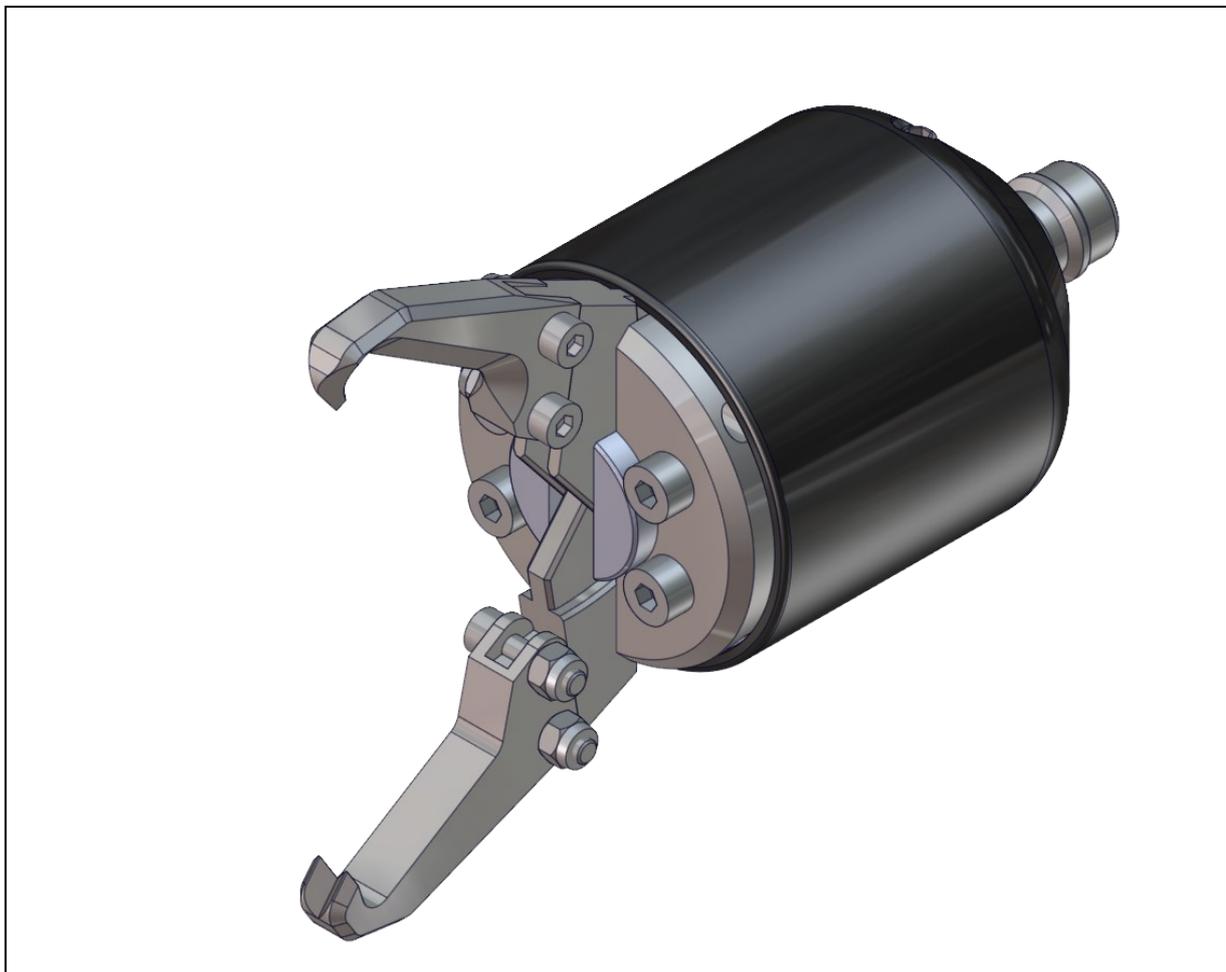
These instructions are for your personal safety. Always ensure that you have read and understood these instructions before using any of the Grabber range.



Locate your reseller at picotesolutions.com

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To watch practical demonstration videos, or to download an electronic copy of these Instructions, please visit www.picotesolutions.com. Please note that videos are not intended as a replacement or alternative to this operating and safety manual, but only as an additional learning tool.

SAFETY INFORMATION

WARNING

This section contains important safety information. Failure to comply could result in serious injury or death.

Safety Symbols

Safety symbols are used throughout this manual to draw attention to potential hazards.



Danger risk of serious injury, follow instructions.



Danger risk of serious injury from rotating parts, follow instructions.

Personal Protective Equipment (PPE)

Always use Personal Protective Equipment when using the Grabber, including suitable overalls / protective clothing & footwear and the following:



Always wear suitable eye protection when using the Grabber to prevent dust from irritating your eyes.



Always wear suitable ear protection when using the Grabber to prevent any hearing loss.



Always wear suitable cut-resistant gloves when using the Grabber to prevent any hand injuries. Any open injuries or skin irritations should be covered at all times to avoid contact with dirt.



Always wear a suitable ventilation mask when using the Grabber to prevent any dirt from pipes being inhaled or consumed, which can cause diseases.

Always remember



Dust produced can be dangerous to your health, inflammable or explosive.

Make sure the pipe has been **opened** and **ventilated** to stop any gases forming in the lateral drain where the work takes place.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

⚠ WARNING *This section contains important safety information. Failure to comply could result in serious injury or death.*

ENVIRONMENTAL

Operational Ambient Temperature Range: -10...50 °C (14...122 °F) frost and condensation free

Storage Ambient Temperature Range: -20...60 °C (-4...140 °F) frost and condensation free

TRANSPORT

Picote tools should be transported in car or other vehicle properly secured to prevent any sudden movements caused by hard braking or accident. Using lidded boxes which are fastened and stored on the bottom of a van is recommended.

If using pick-up or trailer to transport Picote machine or tools, cover the products to protect them from raining water and dust.

STORAGE

It is recommended that tools are stored indoors protected from rain and sunlight and in constant ambient temperature.

If products have been stored for long periods of time (over 2-3 months), it should be checked and tested prior to use in field.

Do not over lubricate as the oil may jam the Grabber jaws.

DISPOSAL

Picote Grabber shaft and tool head can be recycled in metal waste collection points. Outer casing of the shaft can be disposed of as plastic waste. Other components are general waste which can be separated further in recycling plants.

Always follow the local waste handling rules and regulation.

AVAILABLE SIZES & POWER SOURCES

The Grabber is used to pick up and retrieve various forms of debris or items inside a pipe.

Choosing the correct Grabber for the job

Select your Grabber according to the size of the original host pipe.

The Grabber is operated using compressed air.



Be careful when operating the Grabber outside of the pipe!



Grabber	Shaft size mm/inches	Min. Pipe Size mm/inches	BEND 90°	BEND 45°	Max. Lifting Force
Original Grabber	8 (1/3")	DN100 (4")	YES	YES	35kg (80lb)
Large Grabber	12 (1/2")	DN150 (6")	YES	YES	70kg (150lb)

CHOOSING YOUR POWER SOURCE

The Grabber can be attached to a **compressed air pressure source**.

The machine should be connected to **max. 10 bar (145 psi)** pressure. The power source has to be grounded. Large Grabber needs **min. 7 bar (101 psi)** pressure to operate.

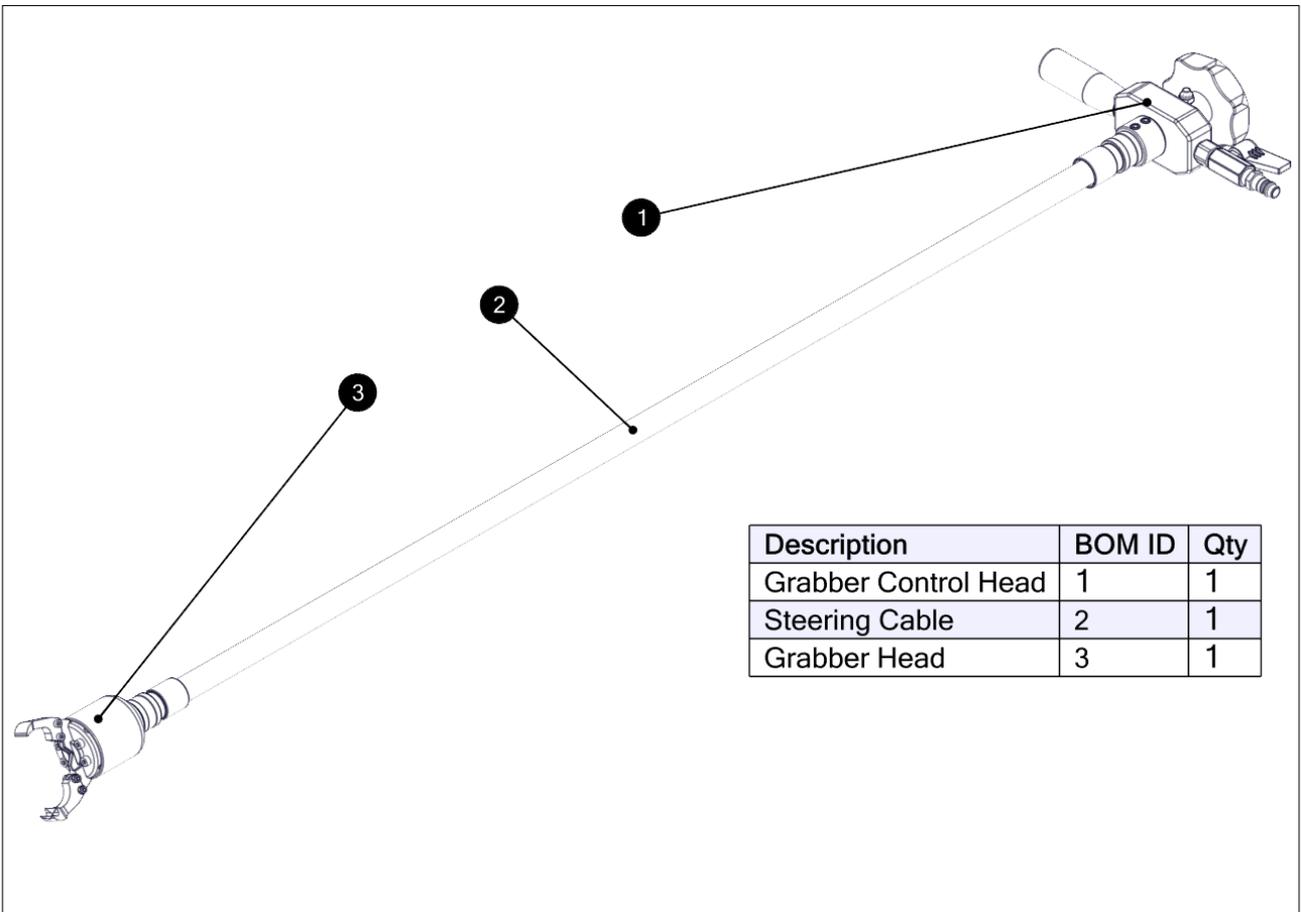
CHOOSING YOUR GRABBER

Always select the largest Grabber available which fits inside the pipe. Switch the Jaw pieces according to the items to be removed from the pipe. **The length of the Grabber set is 10m.**

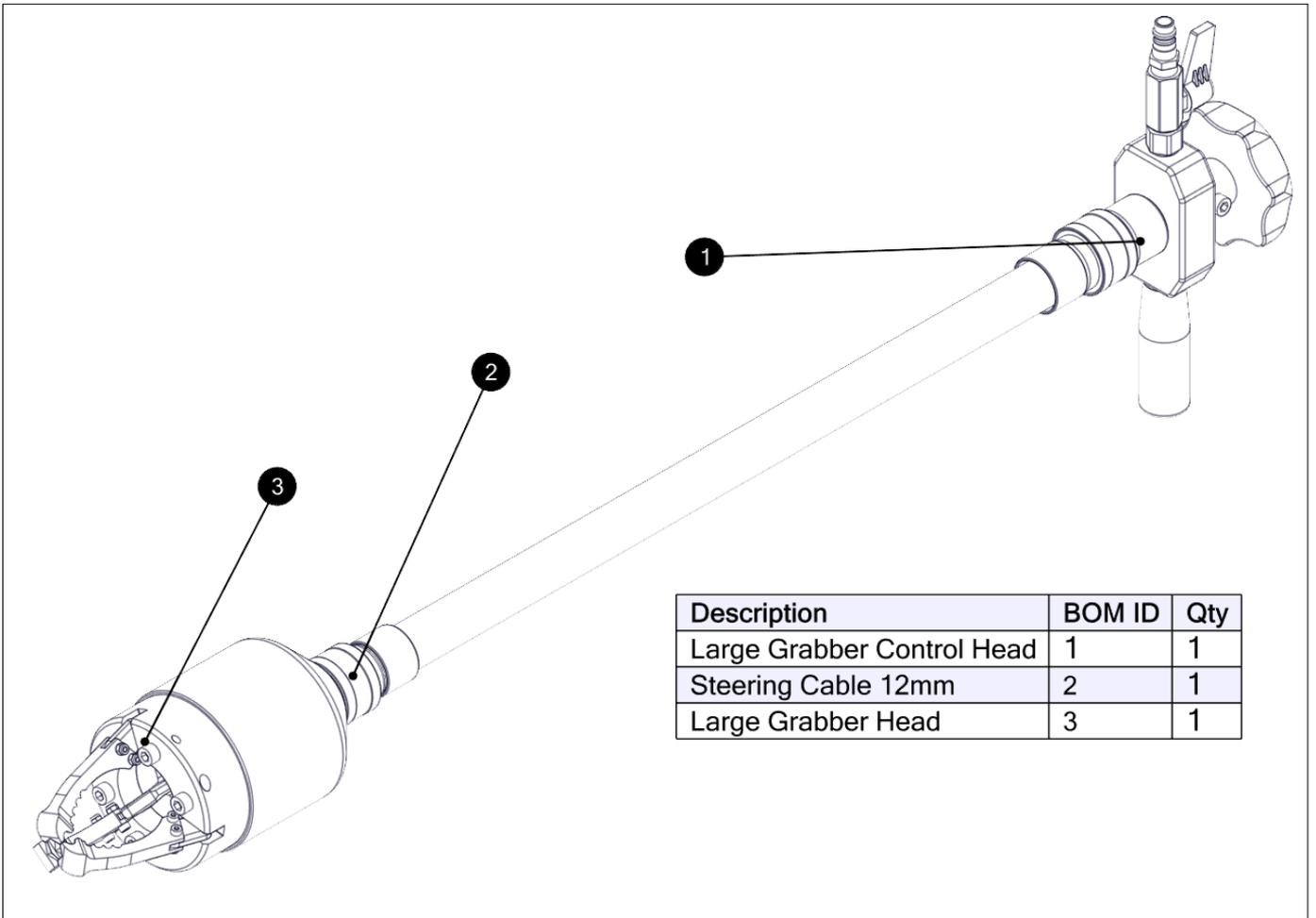
Original Grabber jaws can open to **max. 80mm (3 1/8")**.

Large Grabber jaws can open to **max. 130mm (5 1/8")**.

PARTS: ORIGINAL GRABBER



PARTS: LARGE GRABBER



Description	BOM ID	Qty
Large Grabber Control Head	1	1
Steering Cable 12mm	2	1
Large Grabber Head	3	1

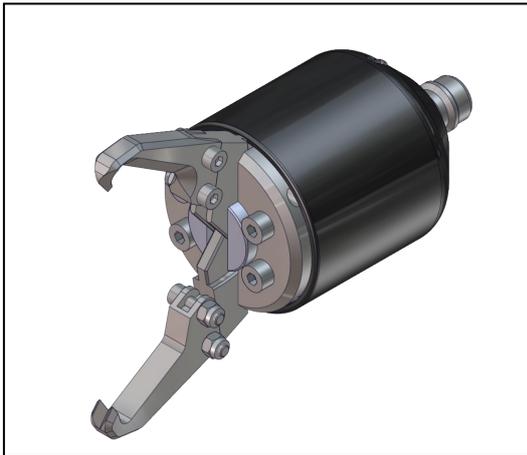
ORIGINAL GRABBER AND LARGE GRABBER ASSEMBLY & USE

First, make sure you have all the required parts. Please see the photo parts' lists on page 5-8.

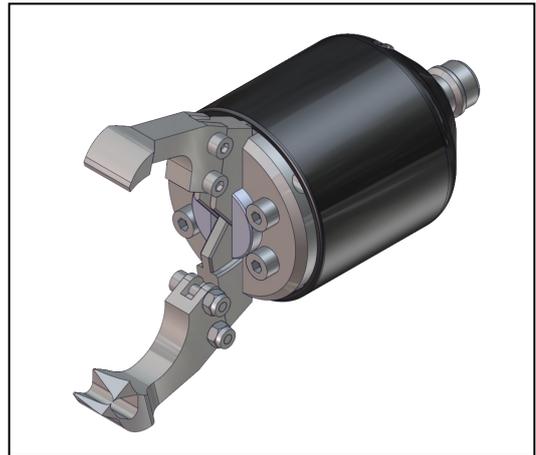


Please read safety information on page 3 before assembly and use.

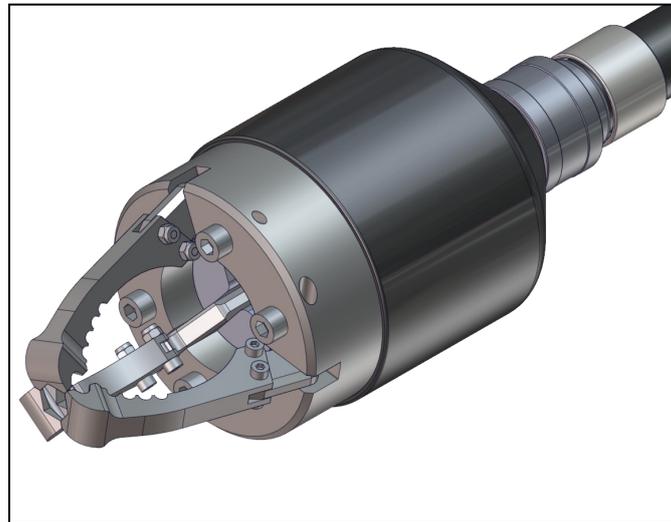
Original Grabber Jaw Set 1



Original Grabber Jaw Set 2



Large Grabber

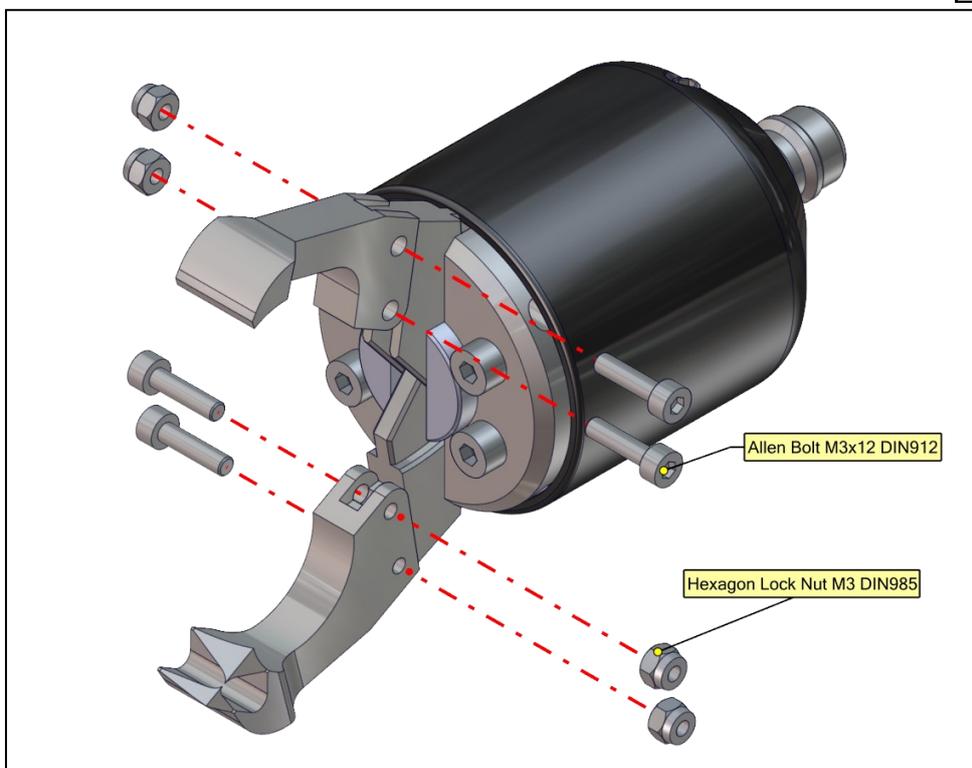


237000001	Original Grabber 10m
237000010	Large Grabber 10m

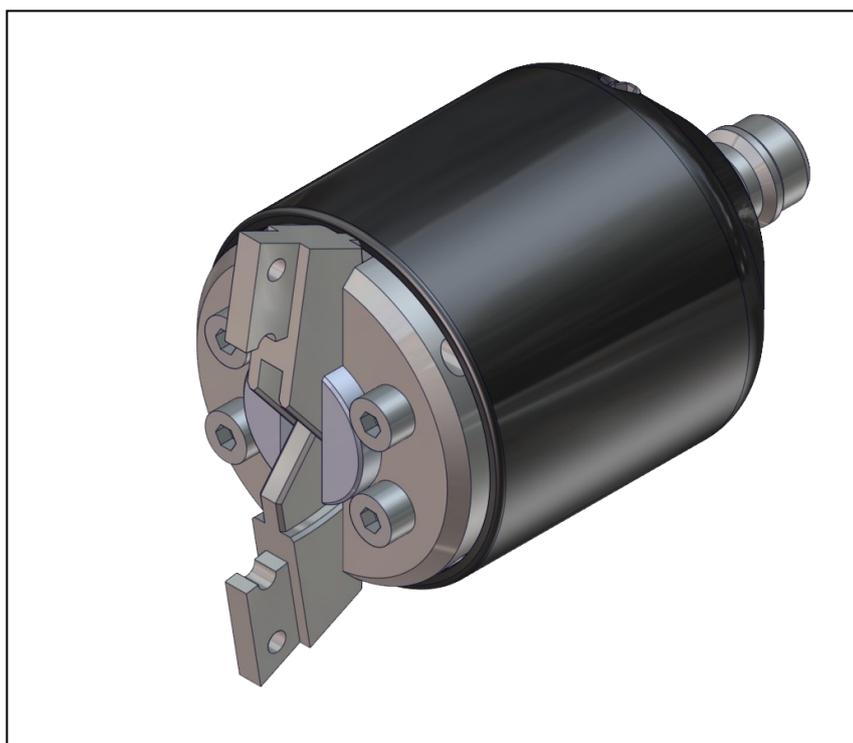
Assembly Instructions—Changing the Jaw Set.



Step 1. Detach the four Allen Bolts and Lock Nuts. Remove the Jaw Set.

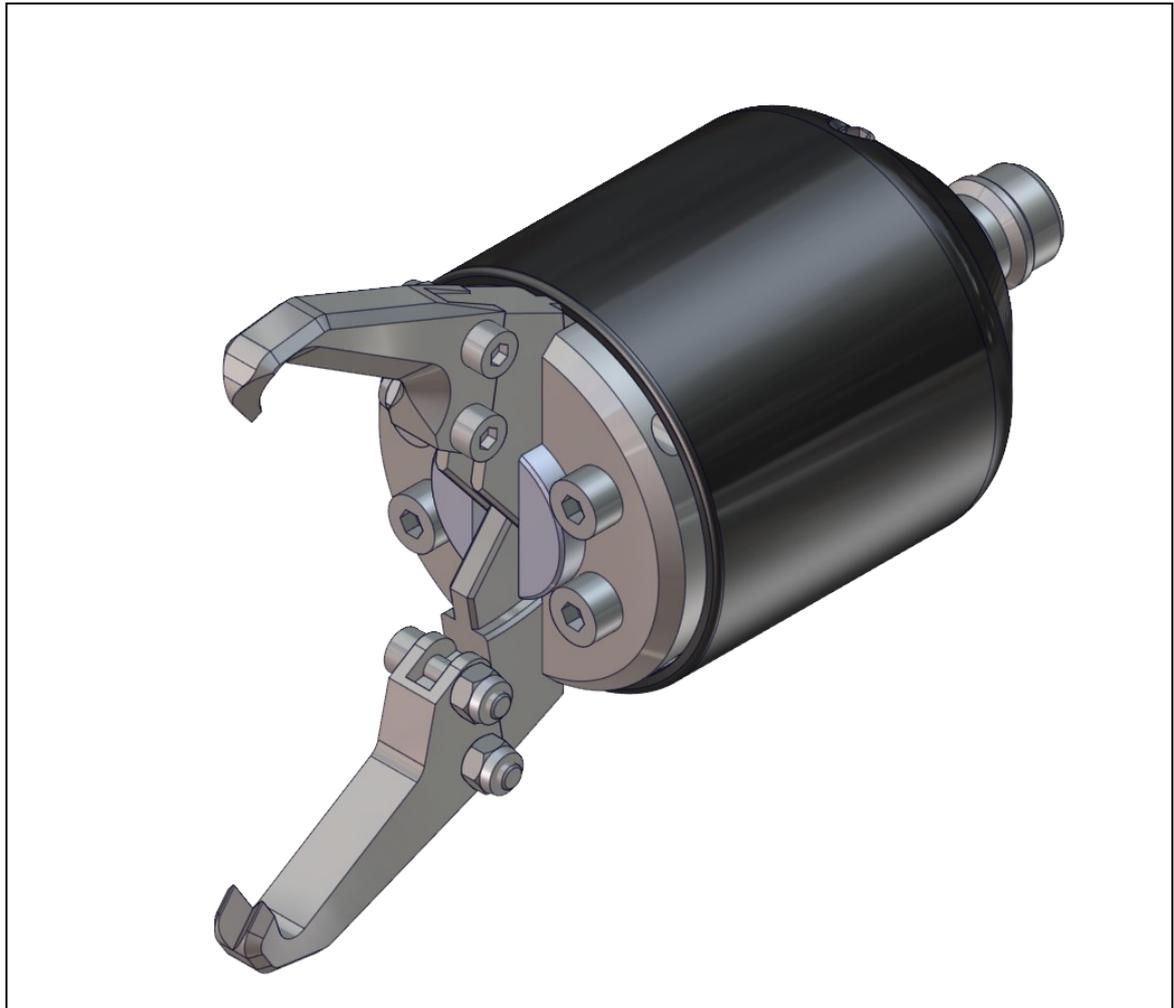
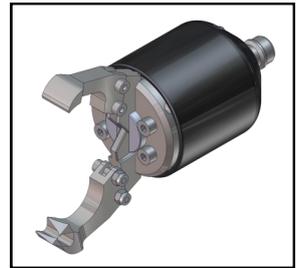


Step 2. Grabber body without Jaws.



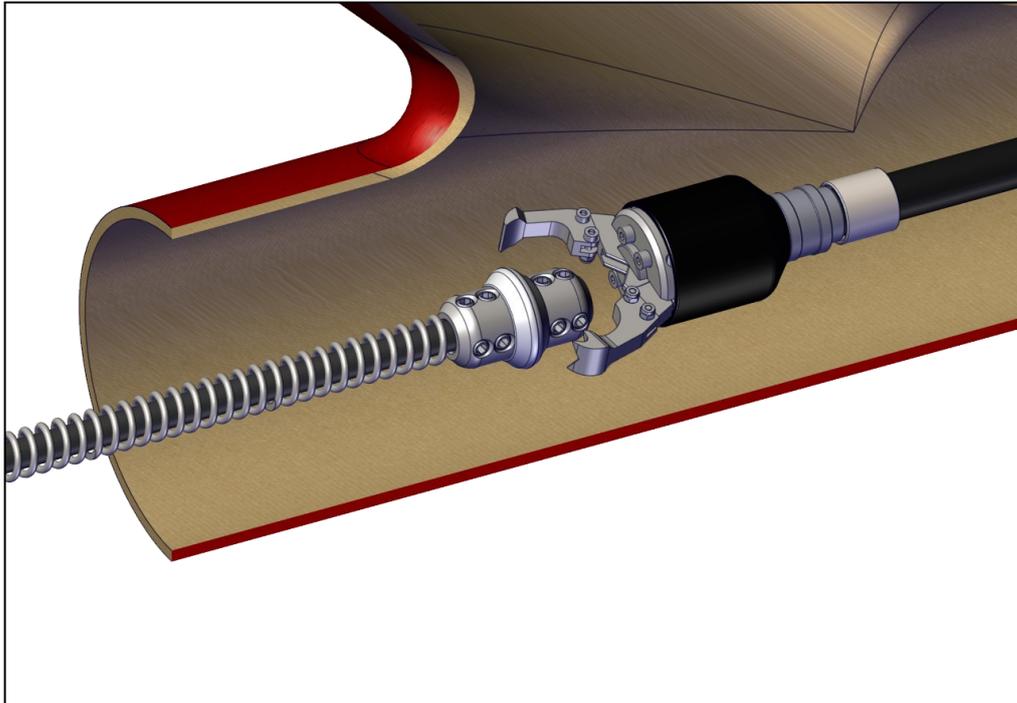
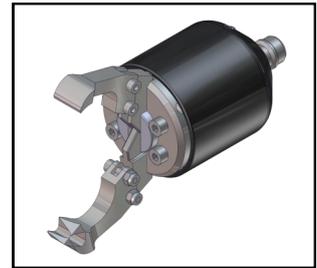
Changing the Jaw Set.

Step 3. Repeat the step 1 in reverse order to attach a different Jaw Set. **Recommended:** use Loctite 542 Thread Sealant.

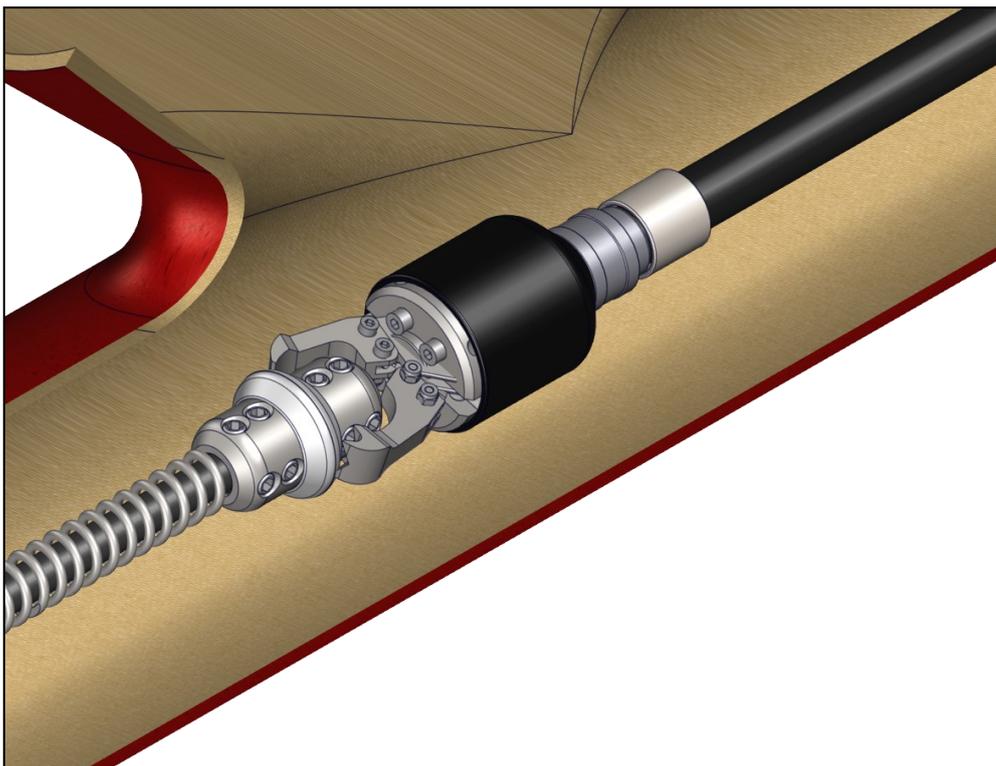


Picking up Items or Debris

Select Jaw Set 2. Correctly position the Grabber Jaws. Use the knob handle for rotating the Grabber Head. Use a CCTV-camera to verify correct positioning.



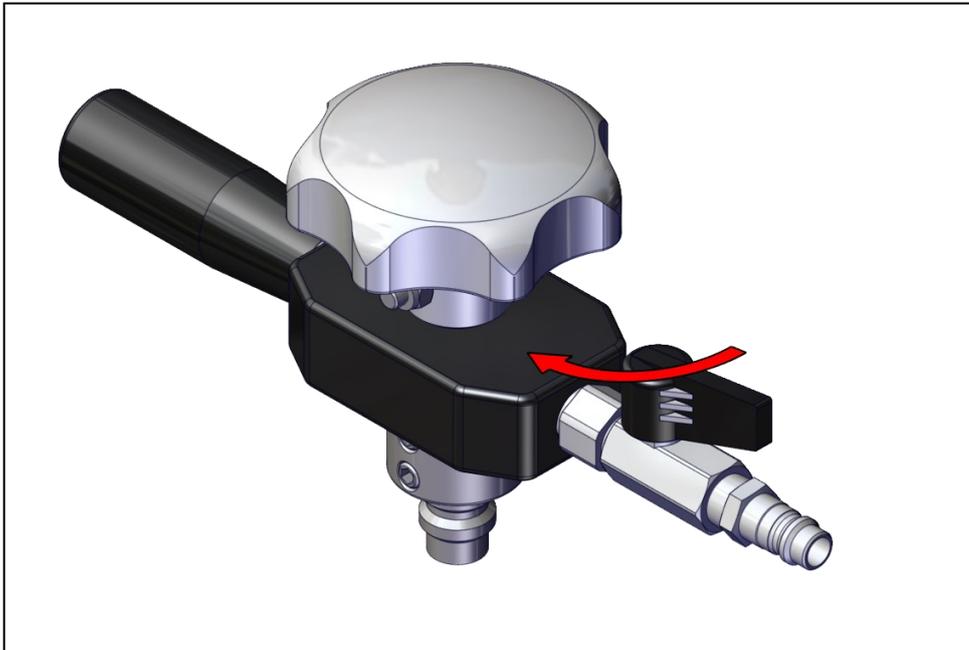
Release the air pressure valve to close the Jaws. Pull the Grabber out of the pipe.



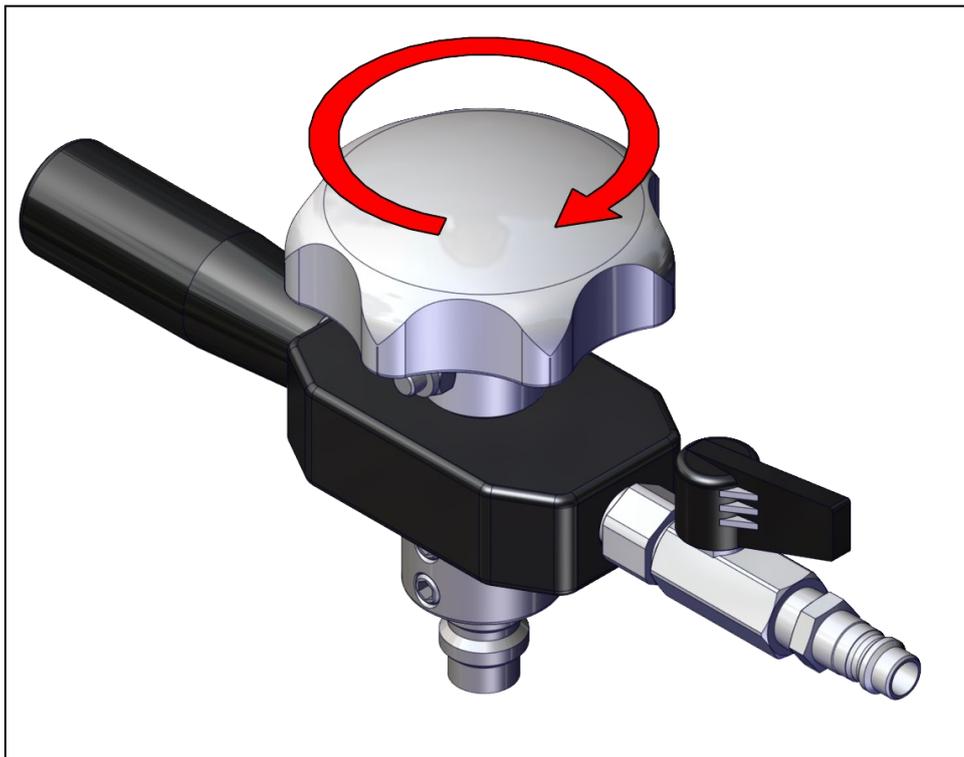
Operating the Control Head

Close the Jaws by opening the air pressure valve.

The Grabber Jaws open again when the pressure valve is opened and the air pressure hose is removed.

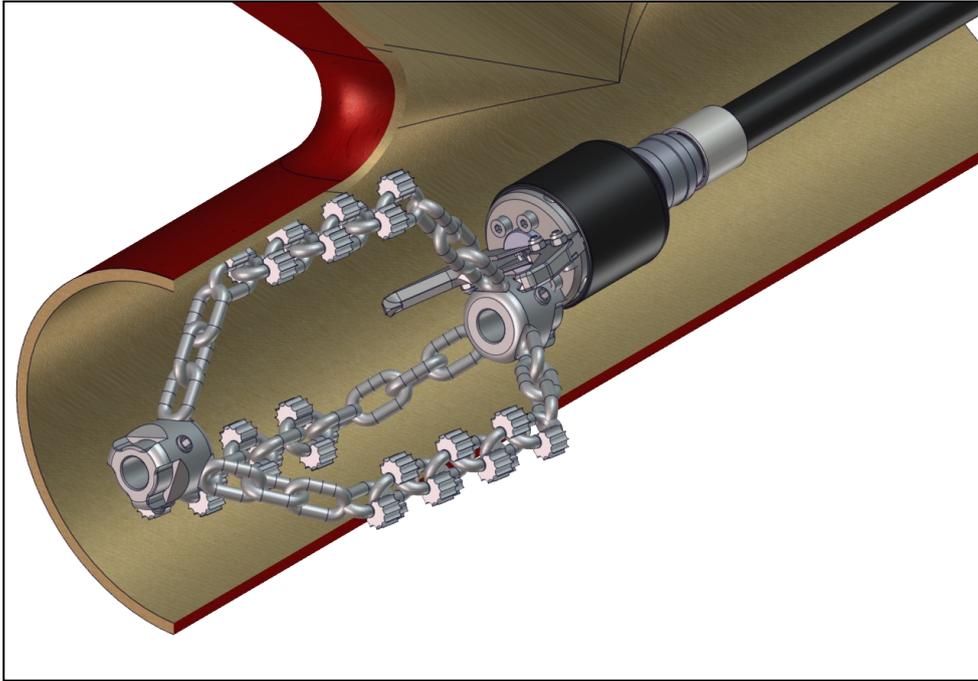
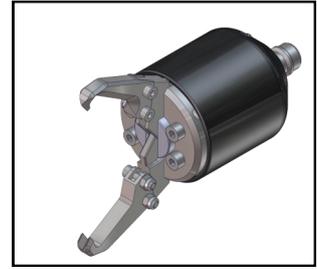


The Grabber can be rotated in the pipe by turning the knob handle which enables the user to turn the jaws to the correct position to grip the desired item. Rotate the knob handle only **clockwise**.

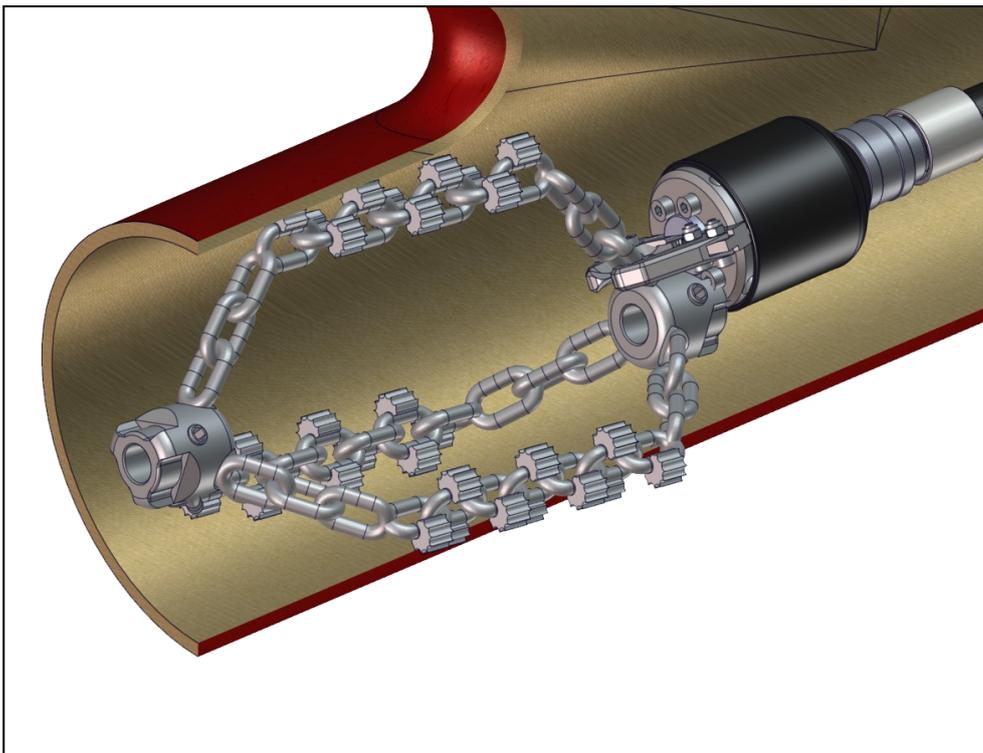


Picking up Chains

Select Jaw Set 1. Correctly position the Grabber Jaws. Use the knob handle to rotate the Grabber head. Use a CCTV-camera to verify correct positioning.

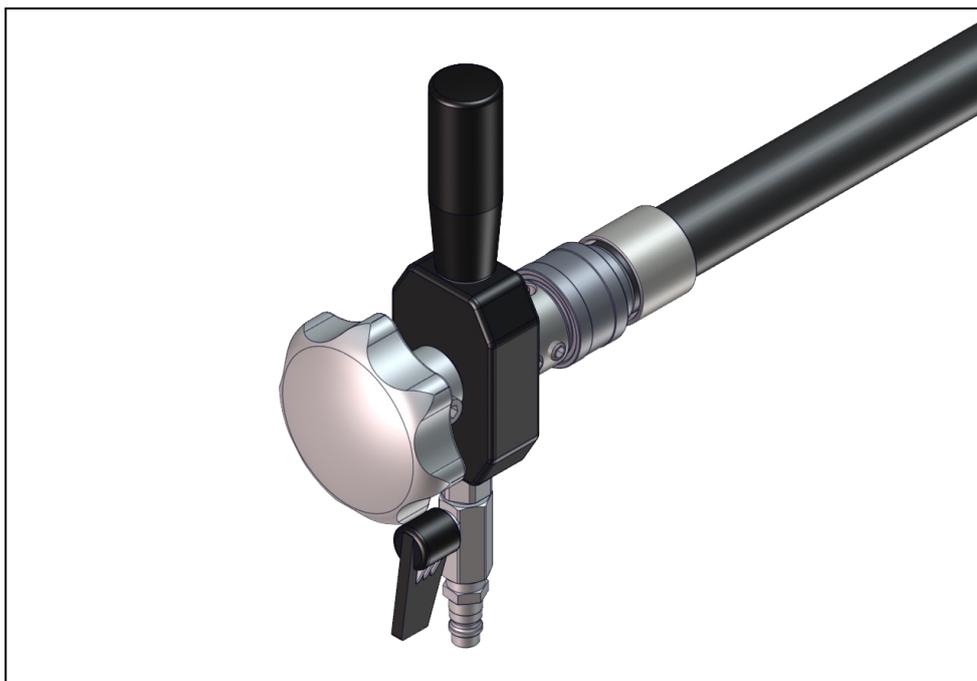
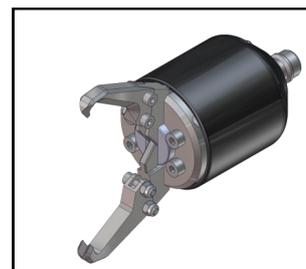


Release the air pressure valve to close the Jaws. Pull the Grabber out of the pipe.

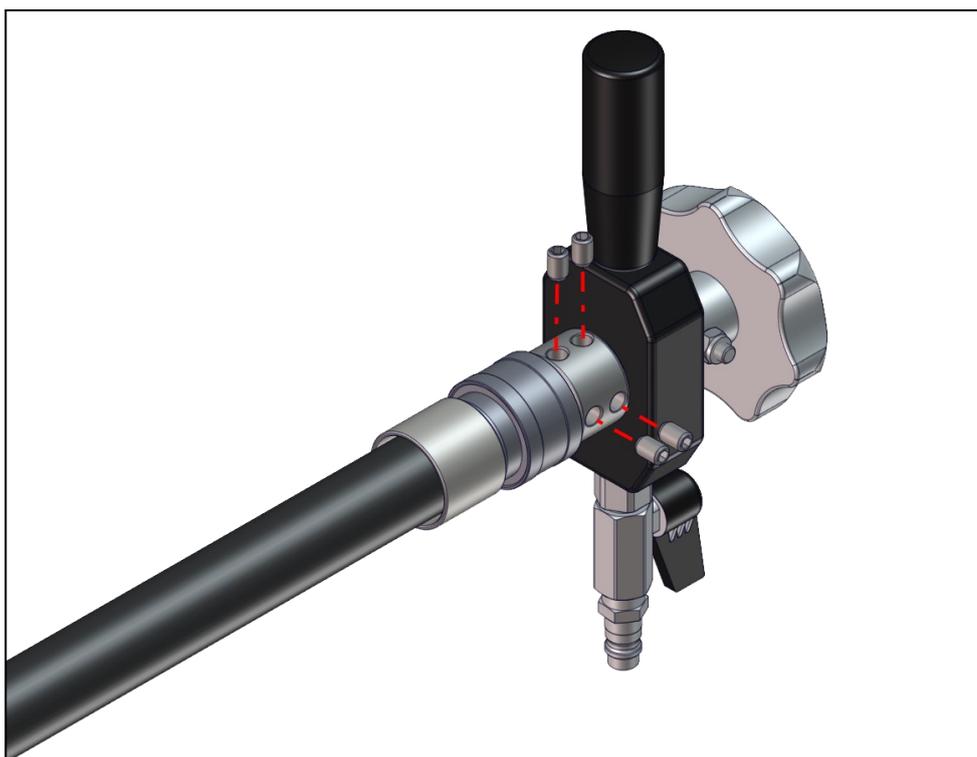


Adding Extensions

Step 1. Begin to de-assemble the Grabber from the control head. The procedure is similar for both Picote Grabber and Large Grabber.

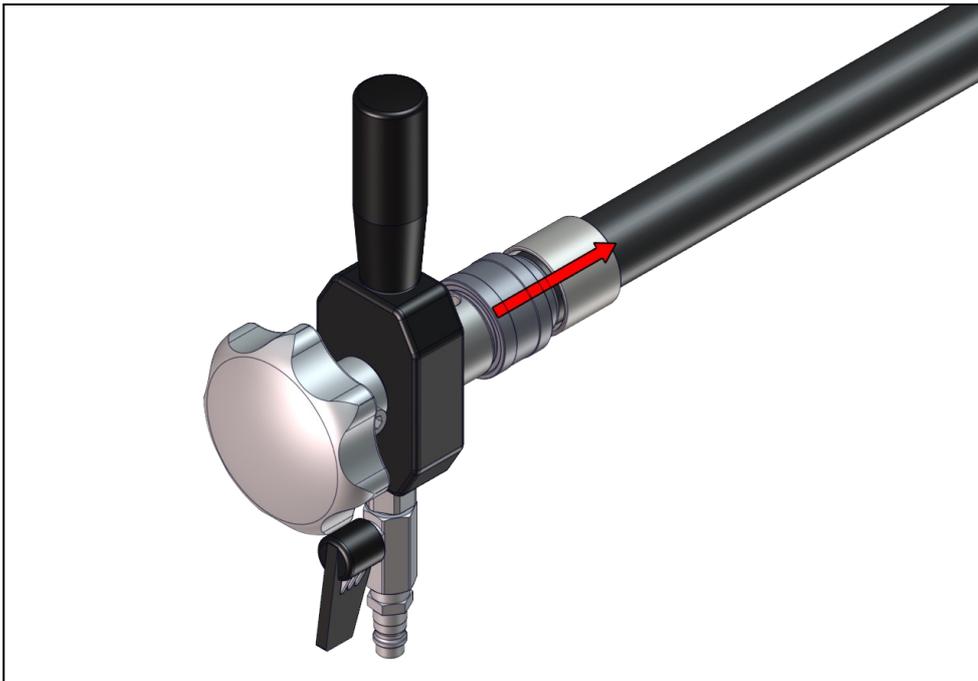
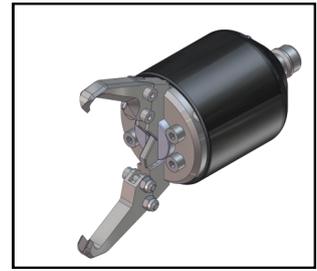


Step 2. Open the Set Screws as shown below.

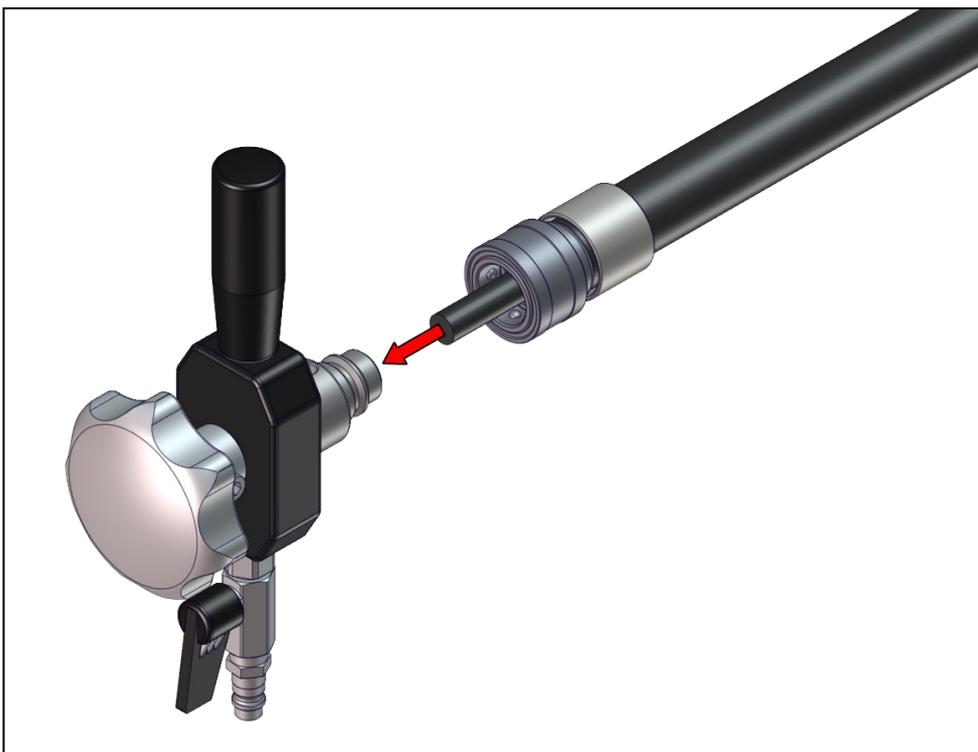


Adding Extensions

Step 3. Pull the collar down to remove the Control Head.

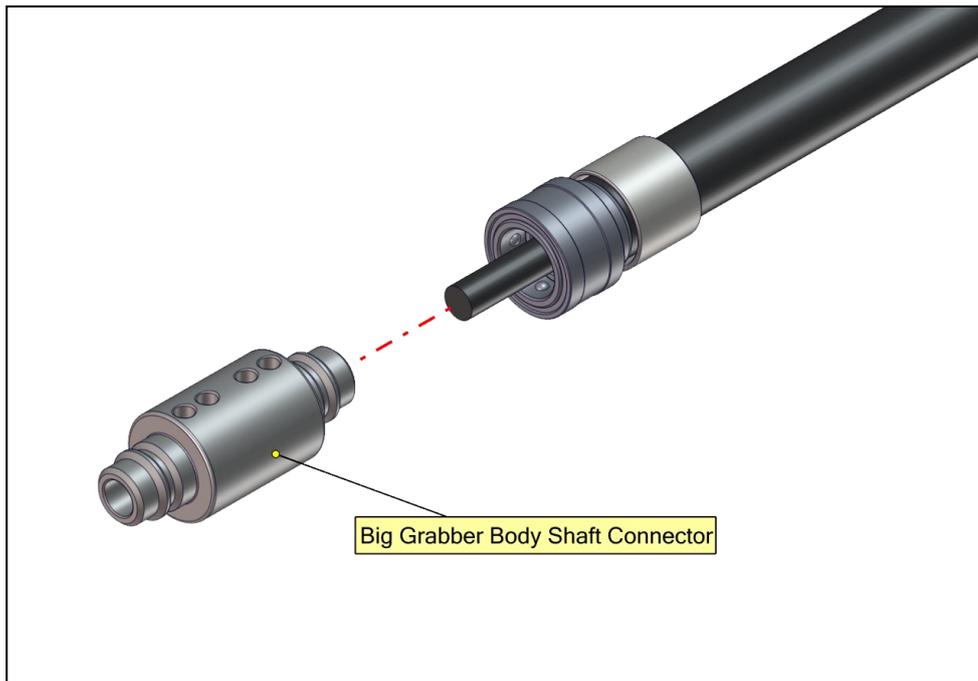
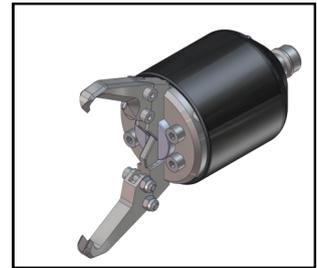


Step 4. Remove Control Head.

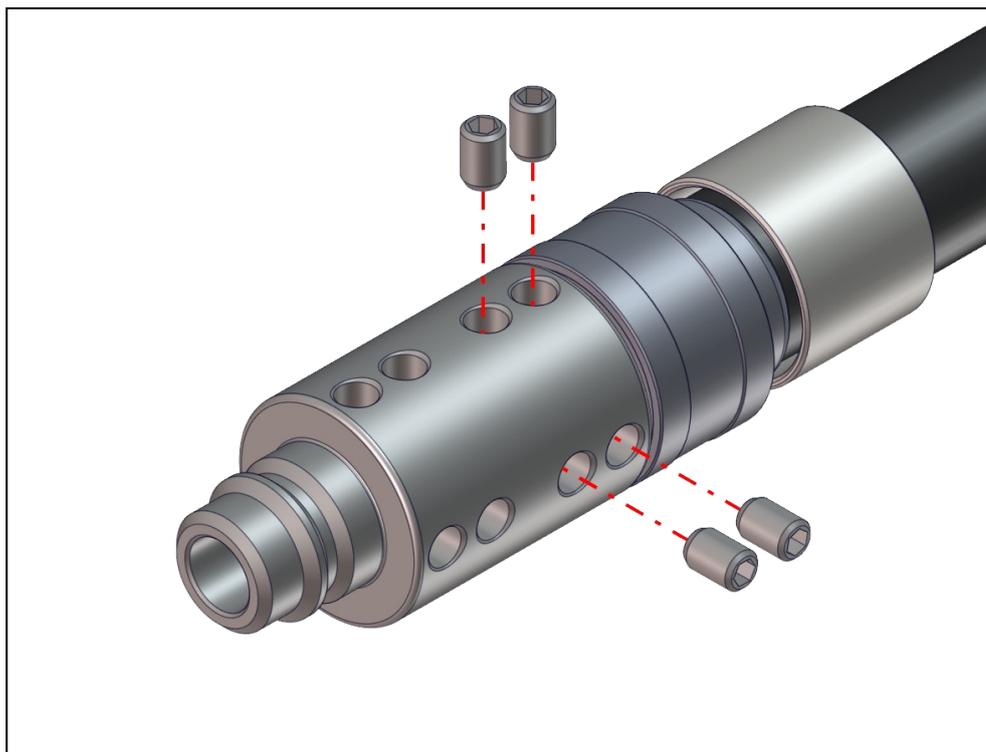


Adding Extensions

Step 5. Add The Grabber Shaft Connector.

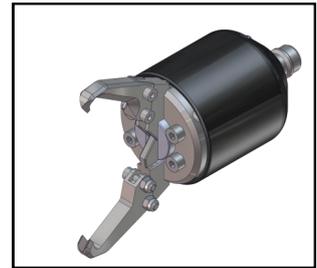


Step 6. Insert Set Screws and tighten them.

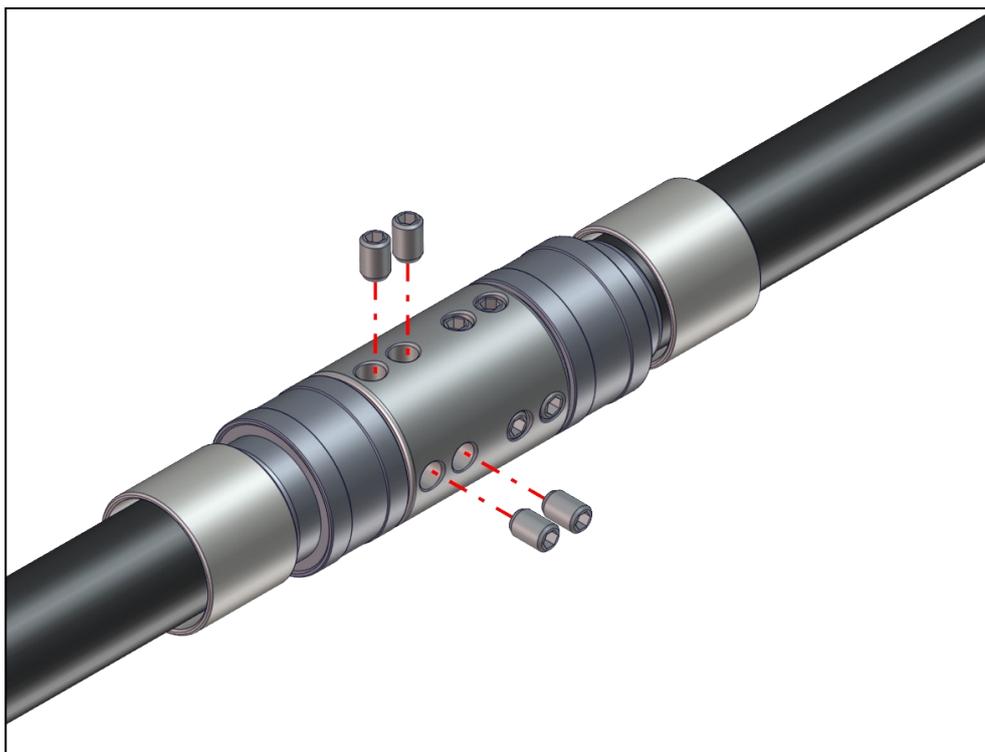


Adding Extensions

Step 7. Add the Grabber Shaft Extension.

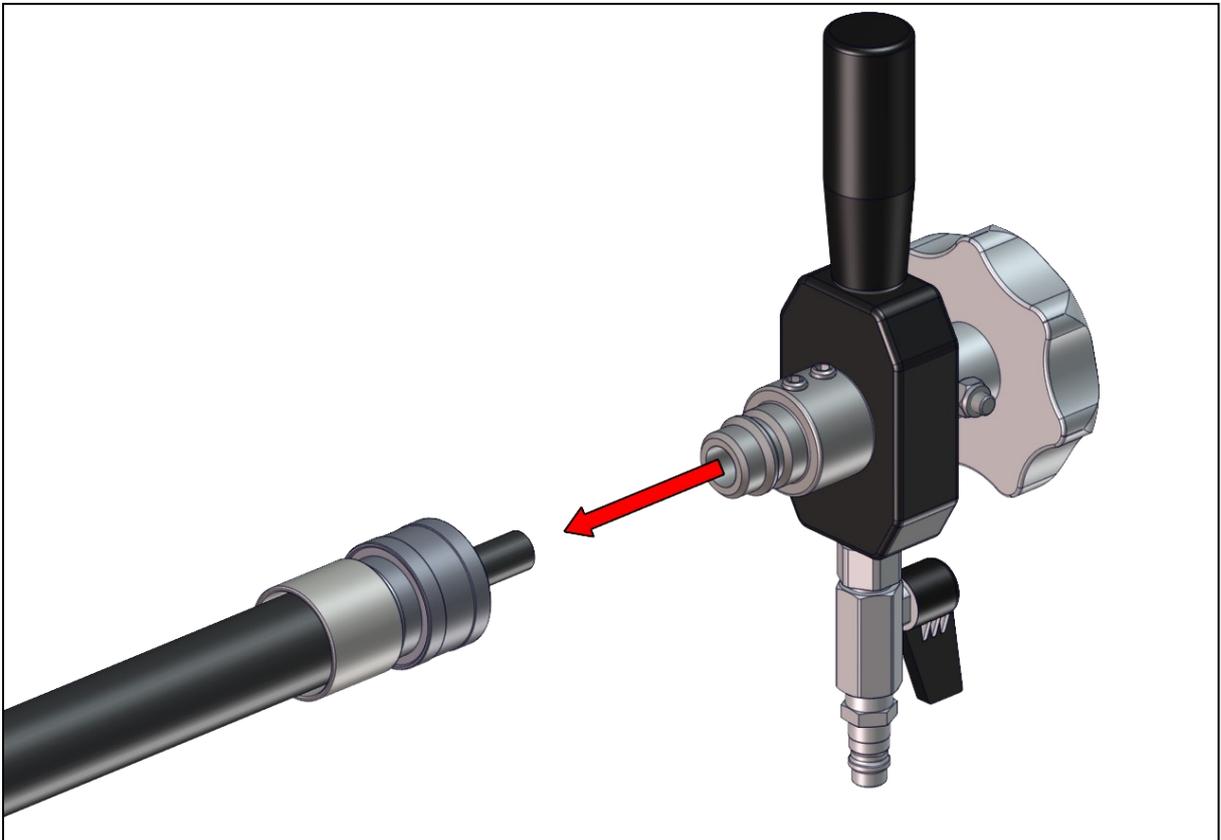
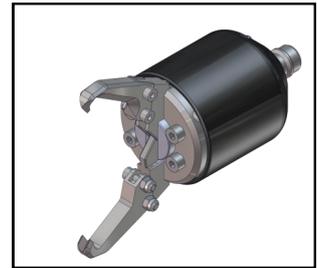


Step 8. Insert Set Screws and tighten them.



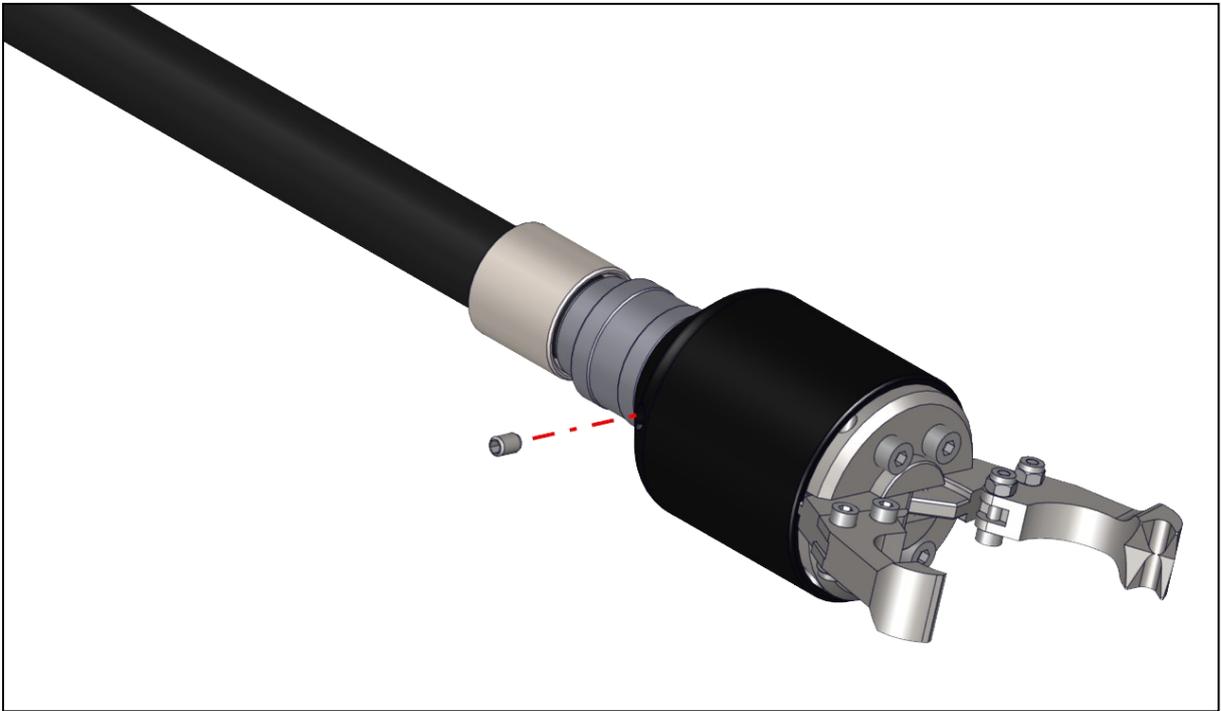
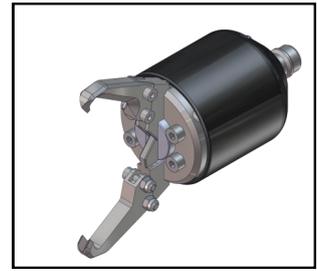
Adding Extensions

Step 9. Add the Control Head to the shaft again.

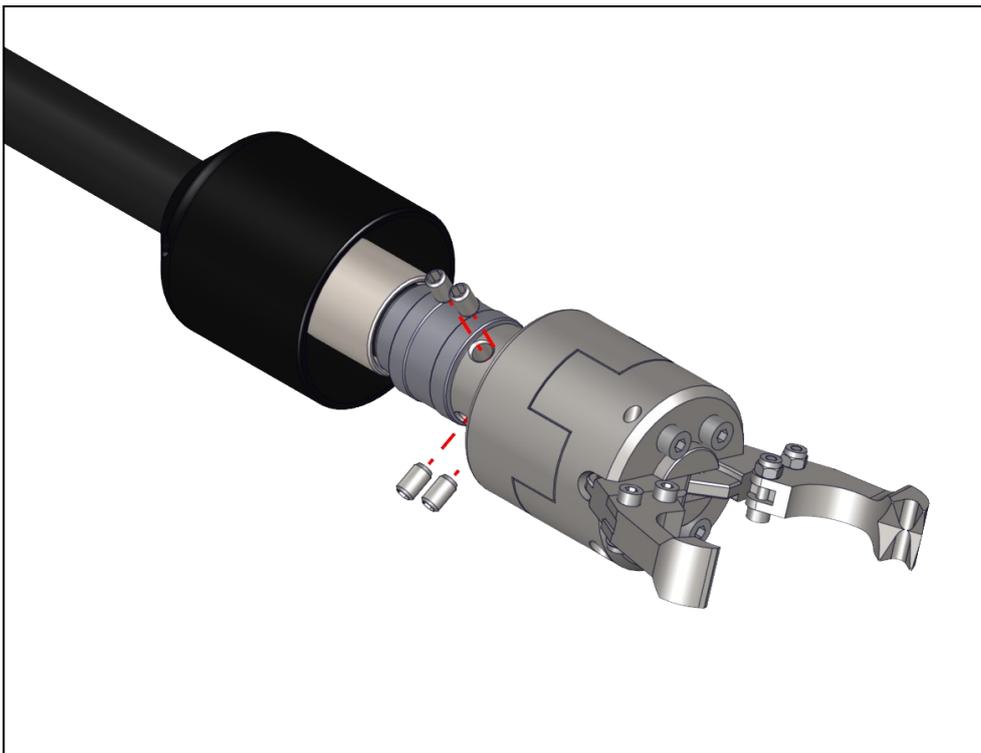


Replacing Grabber Head

Step 1. Open set screw holding the Grabber cover.

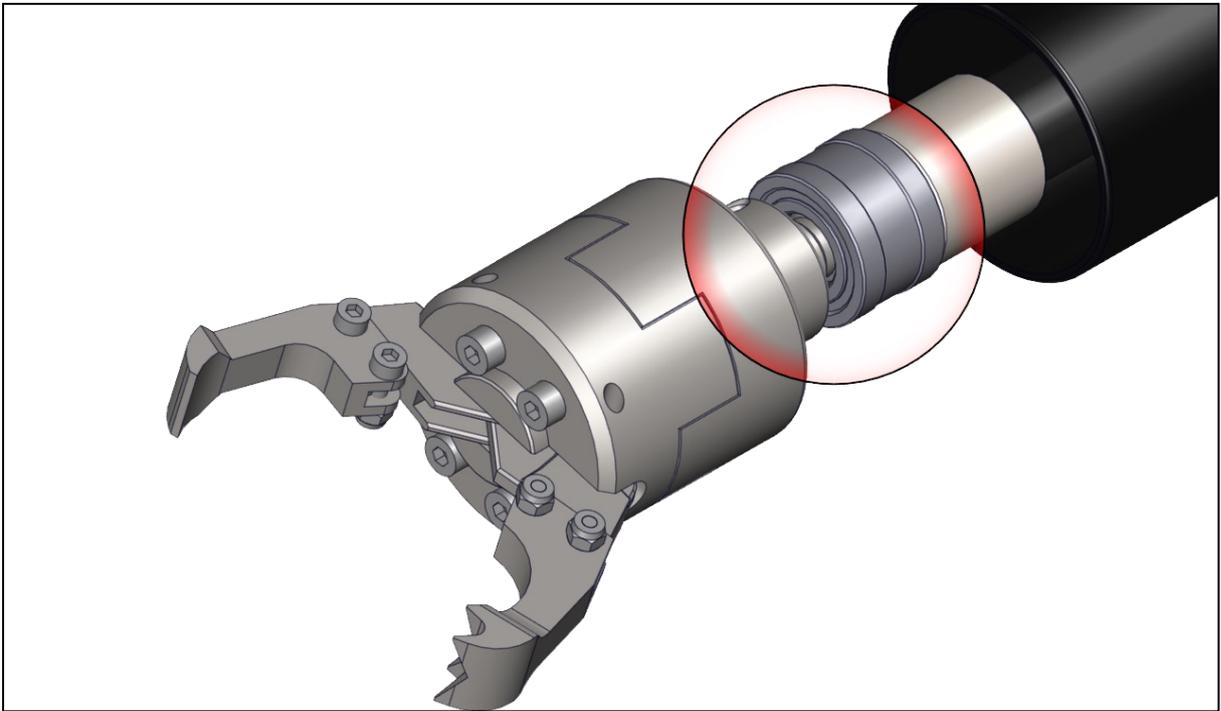
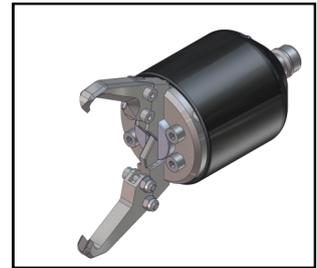


Step 2. Pull Cover aside and loosen four set screws attaching Grabber Head to the flexible shaft.

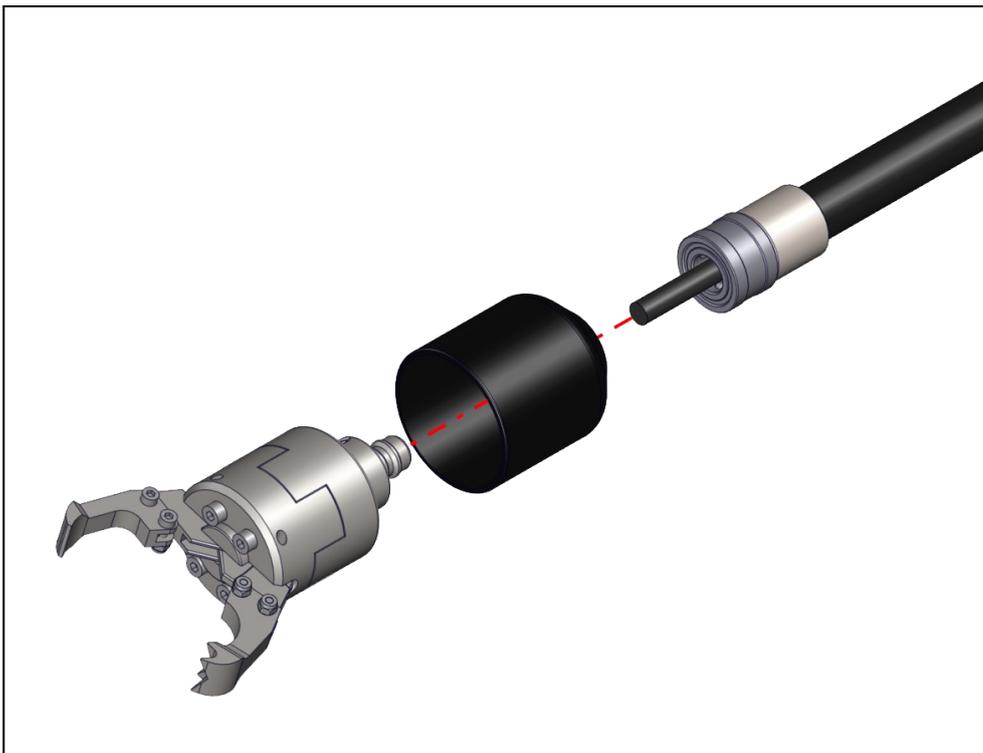


Replacing Grabber Head

Step 3. Pull air pressure lock to down position and pull the Grabber Head apart from the shaft.



Step 4. Take Grabber Head and old Cover away and replace with new one. Re-assemble in opposite order.



Using the Grabber

! WARNING



Before work



Select the correct size Grabber and jaw set for your job. Use a CCTV camera to position the Grabber in the correct spot. Connect the extension if it is needed.

During use

Release the air pressure valve to close the Grabber Jaws. If you fail to pick up the tool, release the pressure and try again. When the Jaws securely grip around the item you are removing, pull the Grabber from the pipe. Repeat the process if needed.

After use

Be careful when the Grabber is outside of the pipe. **Open the air pressure valve and remove the air pressure hose to open the Jaws and release the item. Do not try to manually force the Jaws to open! There is a risk of breakage or injury!**

Check out the condition of the tooling and shaft. Replace worn-out parts.

RECOMMENDATIONS

Be careful when operating the Grabber for testing or releasing an item outside of the pipe!

Always ensure the air pressure hose is disconnected when changing the Jaws.

Always use the CCTV camera when working with the Grabber.

Select Jaw Set 1 to pick up chains and debris with good grabbing points.

Select Jaw Set 2 to pick up items which are harder to grip tightly.

Please read safety information

MAINTENANCE

CARING FOR THE FLEXIBLE SHAFT

The steering shaft should not be oiled.

The shaft needs to be replaced when worn down.

JAW SET

The jaw set should be changed if it is worn or are damaged.

Jaw sets should not be oiled as the **oiling may cause the Jaws to stick!**



SPARE PARTS

Grabber product family

2370000001	Picote Original Grabber 10m
2370000002	Picote Original Grabber extension 10m
2370000003	Grabber jaw set 1
2370000004	Grabber jaw set 2
2370000009	Spare Grabber Head with Jaws
2370000013	SPare Big Grabber Head W Jaws
2370000010	Picote Large Grabber 10m
2370000011	Picote Large Grabber Jaw Set 1
2370000012	Picote Large Grabber extension 10m (33ft)

Please contact your reseller for more information.

PICOTE TRAINING

For information about product training and support contact Picote Solutions or your authorized Picote reseller.

WARRANTY POLICY AND PROCEDURE

Limited Warranty:

Picote warrants to the original End User that the Product purchased by such End User will operate in accordance with and substantially conform to their published specifications when shipped or otherwise delivered to the End User and for a period of one (1) year, except electric motors for which the warranty period shall be six (6) months, provided, however, that Picote does not warrant any claim or damage under this

Warranty if such claim or damage results from:

1. Consumable parts or normal wear and tear resulting from use of the Products,
2. Product overload or overheated motor,
3. Regular periodic maintenance of Products,
4. Misuse, neglect, or improper installation or maintenance of the Products, or use of Products not for their intended purpose,
5. Products that have been altered, modified, repaired, opened or tampered with by anyone other than Picote or an authorized Picote Service Centre, or unsuitable or unauthorized spare parts, accessories or third party products when using the Products or;
6. the use of the Products not in compliance with their respective Documentation, user manuals, safety and maintenance instructions, and any usage restrictions contained therein, or
7. accident, fire, power failure, power surge, or other hazard.

Otherwise, the Products are sold AS IS. End User is responsible for using the Products within their specifications and instructions as contained in the Documentation.

EXCEPT AS SPECIFIED IN THIS WARRANTY, ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, SATISFACTORY QUALITY OR ARISING FROM A COURSE OF DEALING, LAW, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. TO THE EXTENT AN IMPLIED WARRANTY CANNOT BE EXCLUDED, SUCH WARRANTY IS LIMITED IN DURATION TO THE WARRANTY PERIOD. BECAUSE SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, THE ABOVE LIMITATION MAY NOT APPLY. This disclaimer and exclusion shall apply even if the express warranty set forth above fails of its essential purpose.

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