



BV400 Series

Actuated Ball Valve MP

Instruction Manual

⚠ WARNING

Failure to follow these instructions or to properly install and maintain this equipment could result in gas leakage, fire or explosion causing property damage and personal injury or death.

Oasis products must be installed, operated and maintained by trained and competent personnel in accordance with all applicable local codes, rules and regulations in addition to the Oasis Instructions.

Oasis Engineering Ltd. will not be held liable in such circumstances where installation, operation and maintenance procedures were performed by incompetent personnel resulting in improper assembly, unsafe operation, equipment damage or personal injury.

Oasis recommends that all service technicians should watch the Product Servicing Video before attempting to service this part.

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Warning!

High pressure gas and gas equipment can cause serious harm to both infrastructure and personnel if safety precautions are not followed.

Oasis recommends considering the use of the following PPE when working with high pressure along with any other site specific health and safety requirements:



Foot Protection



Hearing Protection



Safety Helmets



Hand Protection



Safety Glasses

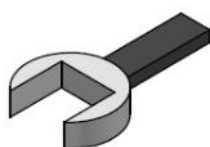


Ensure the system is clean of debris, vented and isolated before any installation or servicing work is carried out.

Attention!

Oasis 400 series ball valves are intended for use with gaseous Hydrogen, CNG, Helium, Biogas or Nitrogen.

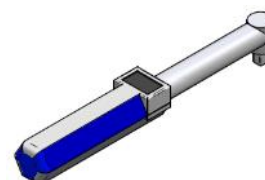
Tools Required



**Spanner
(Wrenches)**



**Spray bottle
(Snoop or suitable
equivalent)**



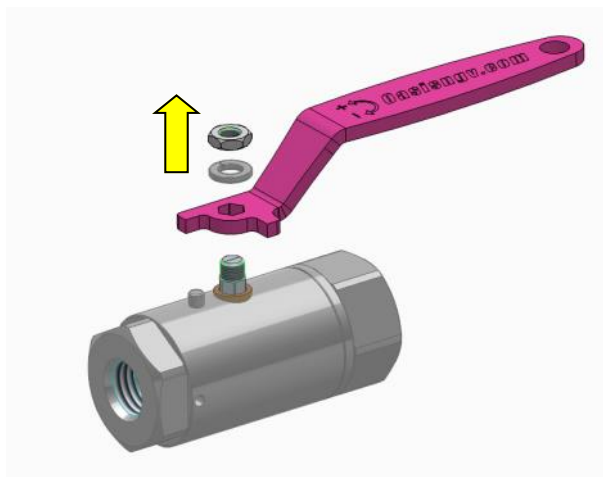
Torque Wrench



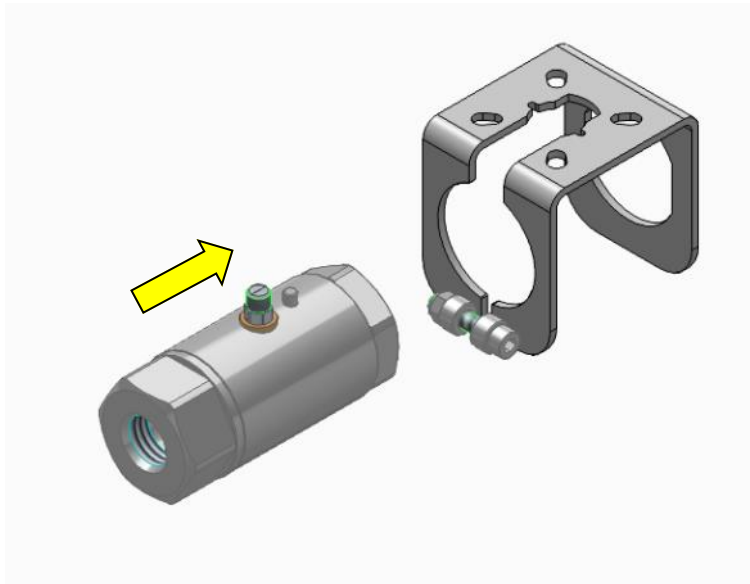
**Krytox GPL-205
Anti-seize for threads and
cone sealing face**

Important: Actuate valve before removing handle to vent trapped pressure.

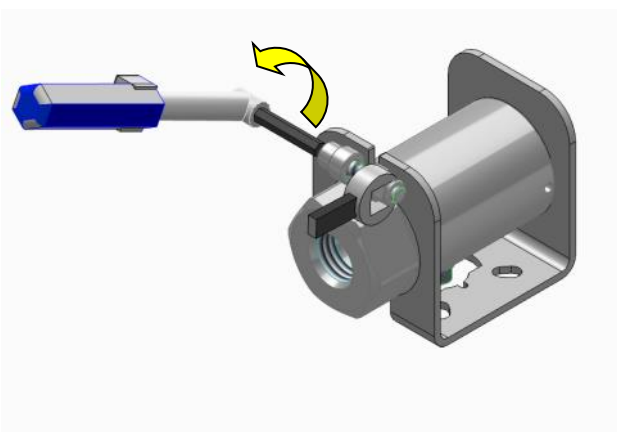
1. If fitting an existing valve with an actuator remove existing handle.



2. Insert the ball valve into the actuator mount so that the stop pin goes in first.

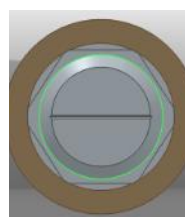
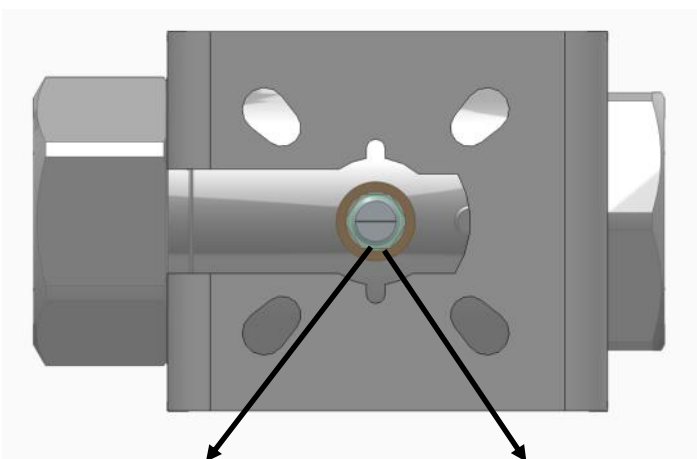


3. Tighten the lock bolt to the recommended torque.

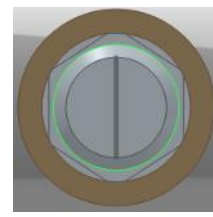


Actuator mount bolt tightening
torque for BV404 = 1 Nm

4. Set the valve to the required fail open/fail close position as required.

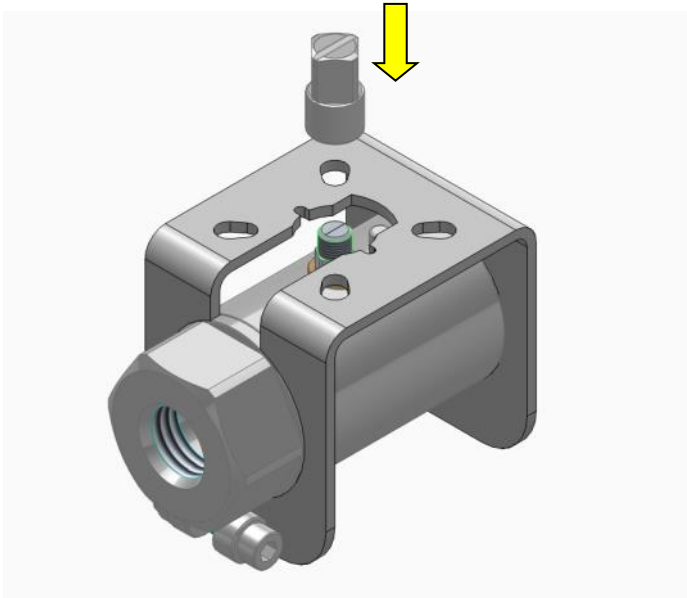


Valve in open position
Stem along the body
Fail Open

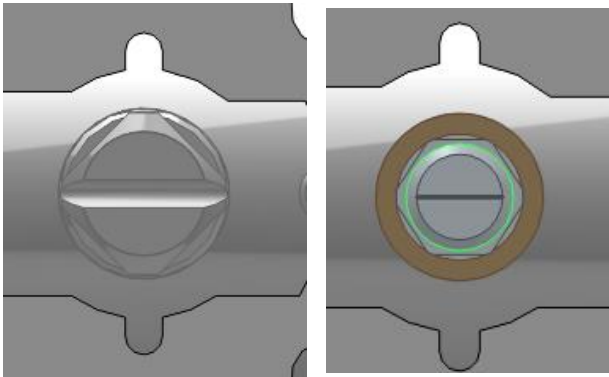


Valve in closed position
Stem across the body
Fail Closed

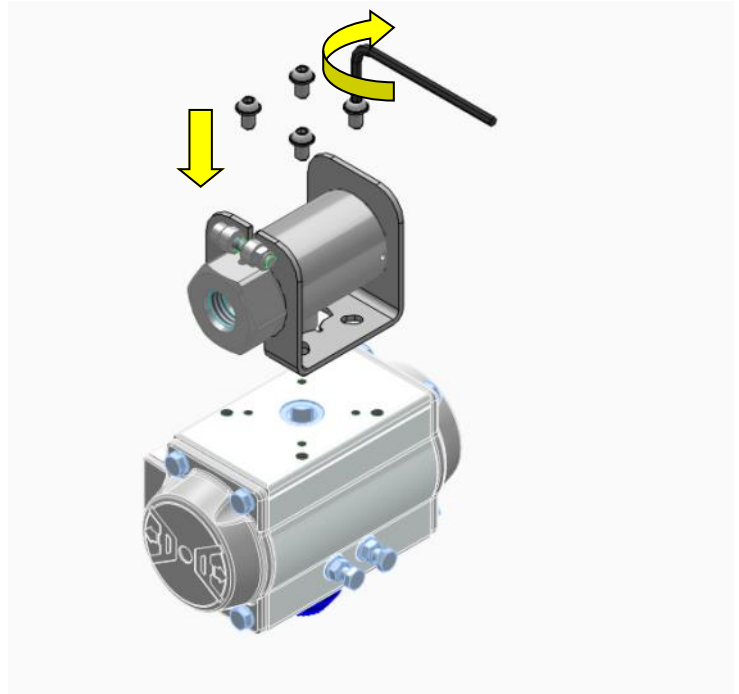
5. Install the drive dog over the stem.



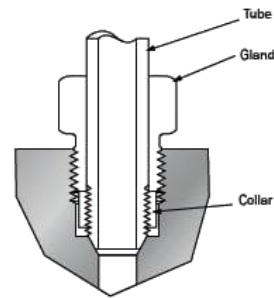
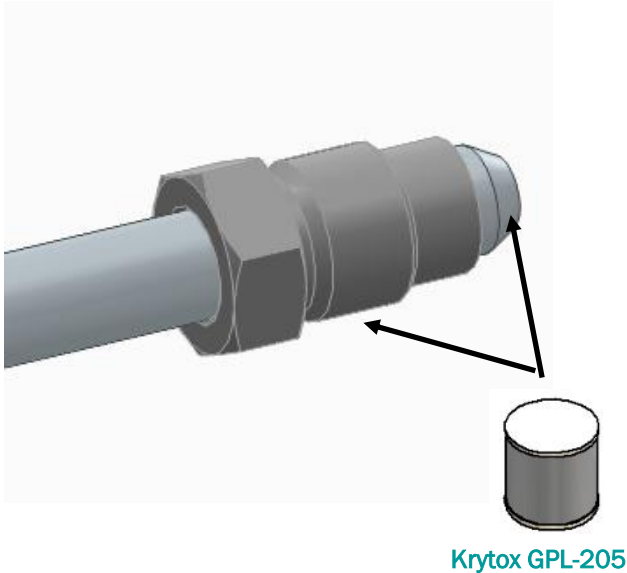
The line on the top of the drive dog lines up with the line on the top of the stem.



6. Tighten on the actuator ensuring the drive dog is correctly located.



1. Prepare the tube connection.

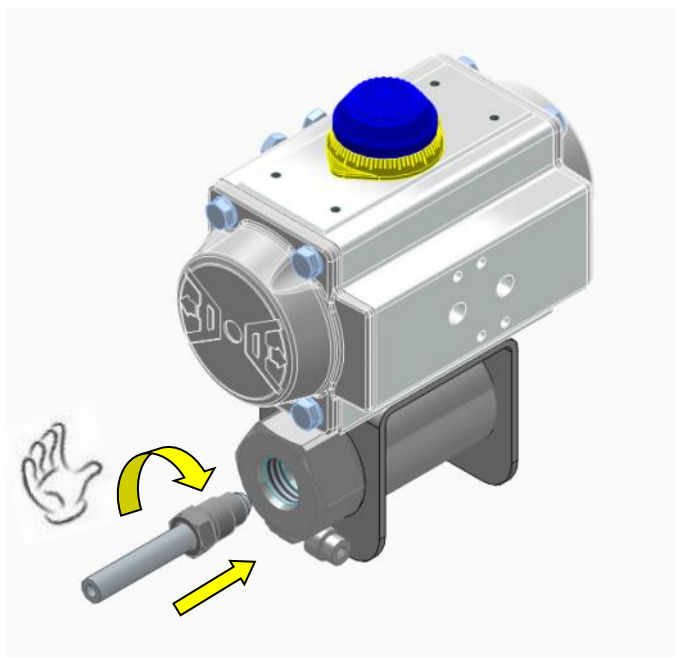


Medium Pressure Connections

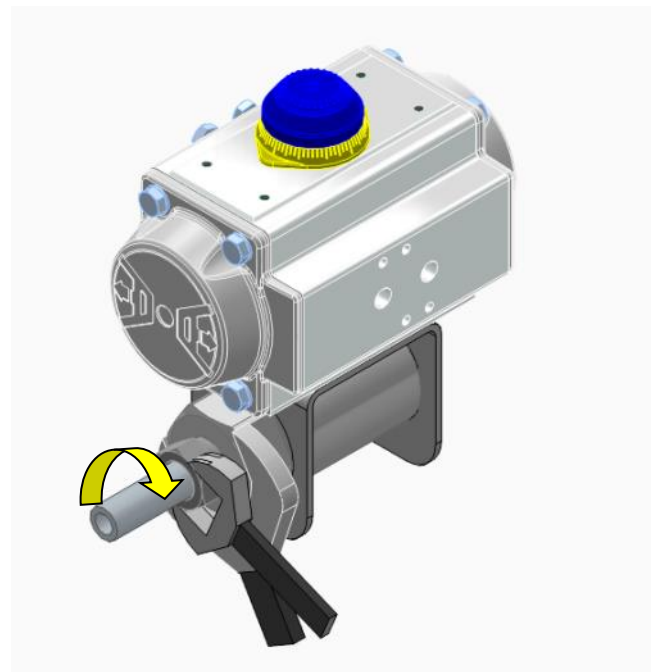
Ensure a gap of two to three threads between the collar and the start of the sealing surface.

FOLLOW MEDIUM PRESSURE FITTING RECOMMENDATIONS

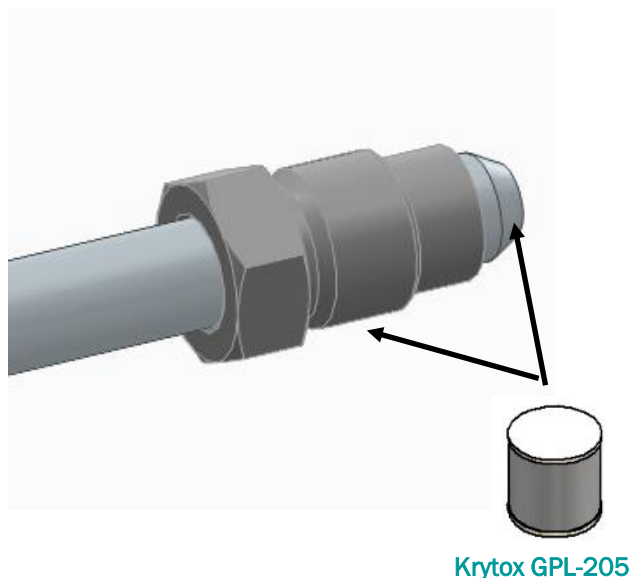
2. Tighten by hand.



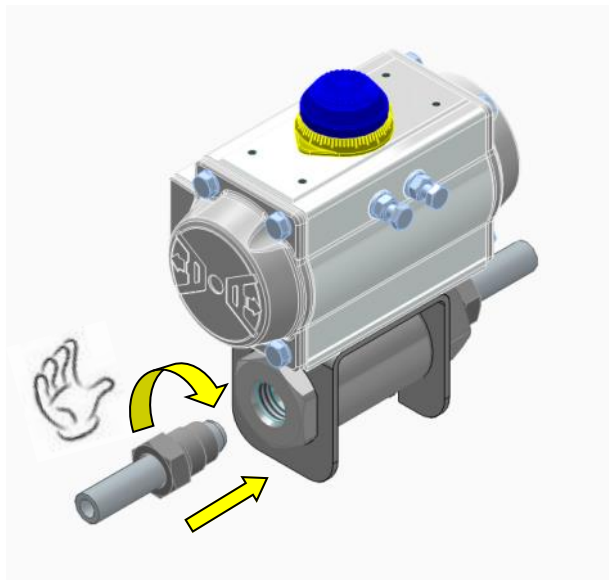
3. Tighten connection to manufacturer's specification.



3. Prepare the tube connection for the other side.



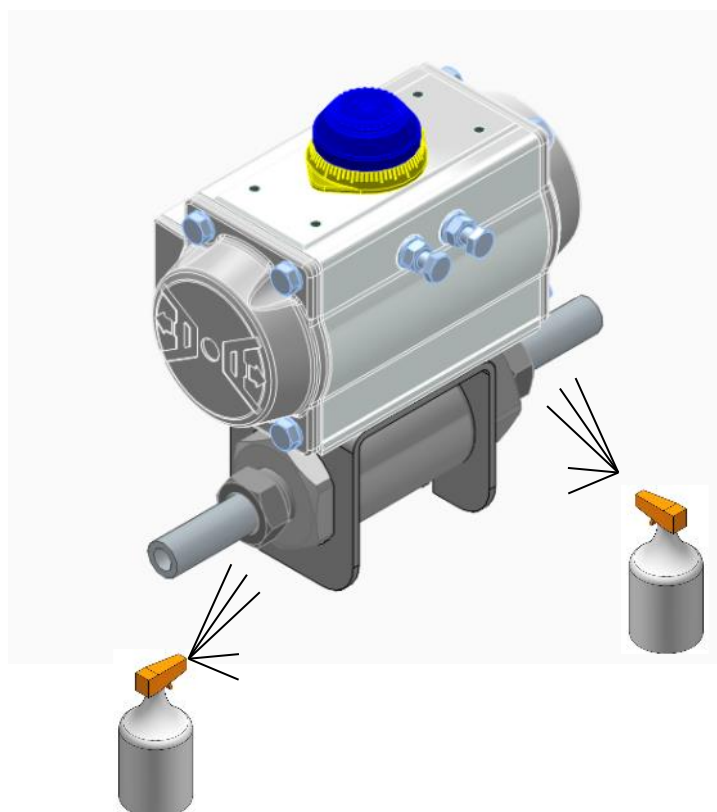
4. Tighten by hand.



5. Tighten connection to manufacturer's specification.



6. Leak test on first use using snoop.



7. Connect air line and check connections for leaks.

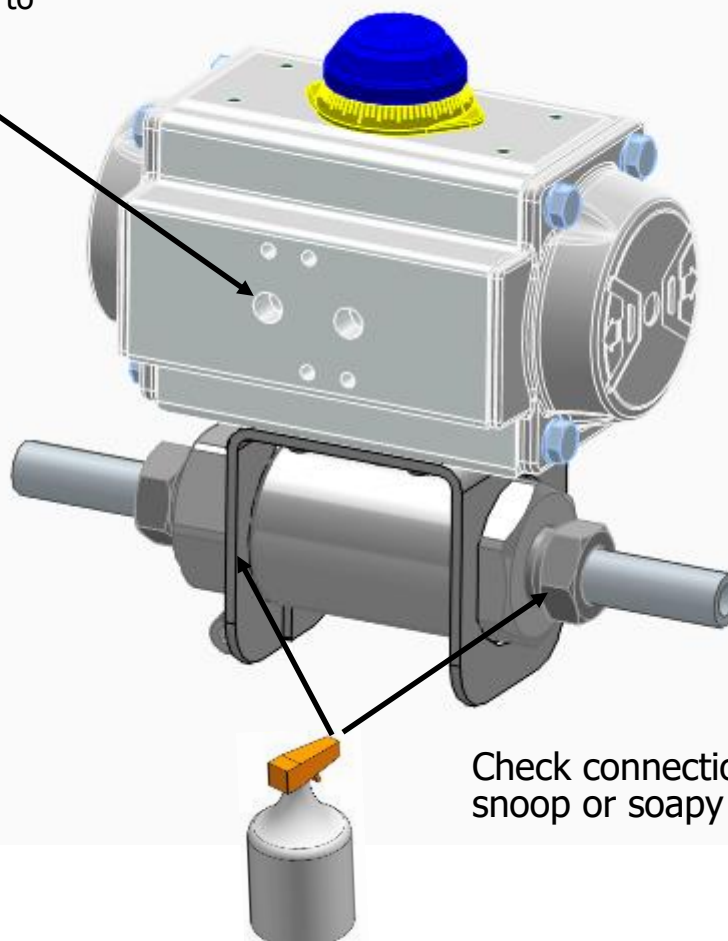
Important: Actuate valve 4 times before use to ensure initial sealing.

For oasis standard actuators the left port is the inlet port used to activate the actuator.



MAX 8 Bar

Do not operate the actuator with supply pressure greater than 8 Bar (116 psi). Doing so may damage the actuator and void the warranty.

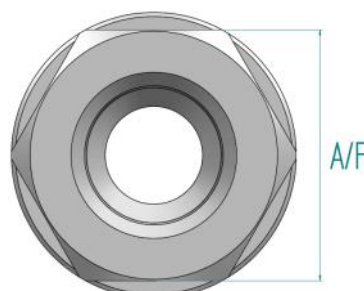


Check connections for leaks using snoop or soapy water.

Recommended Spanners for End Caps:

BV404
3/8" MP = 34mm (1-5/16")

BV404
9/16 and 3/4 = 41mm



Service Kit Parts (All port variations)

2 x Seats



1 x Stem



1 x Ball



1 x Gland



1 x Krytox GPL 103



1 x Cap O-ring



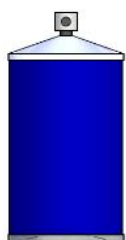
1 x Cap
Back-up Ring



The Complete Oasis Seal Kit must be used

It is recommended to work in a clean environment to successfully service the valve.

Tools Required



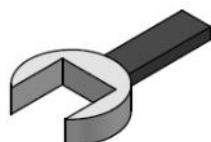
Cleaner (Warm Soapy
Water or Similar)



Pick Tool
Part Number:
TOOL-PICK
(Sold separately)



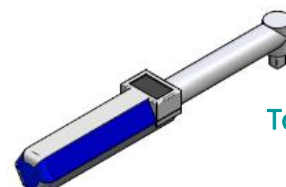
Anti Seize Grease
(Krytox GPL-205)
For All Threads



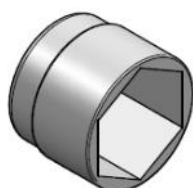
Spanners
(Wrenches)



Stem Tool
Part Number:
TOOL-STEM BV
(Sold separately)



Torque Wrench

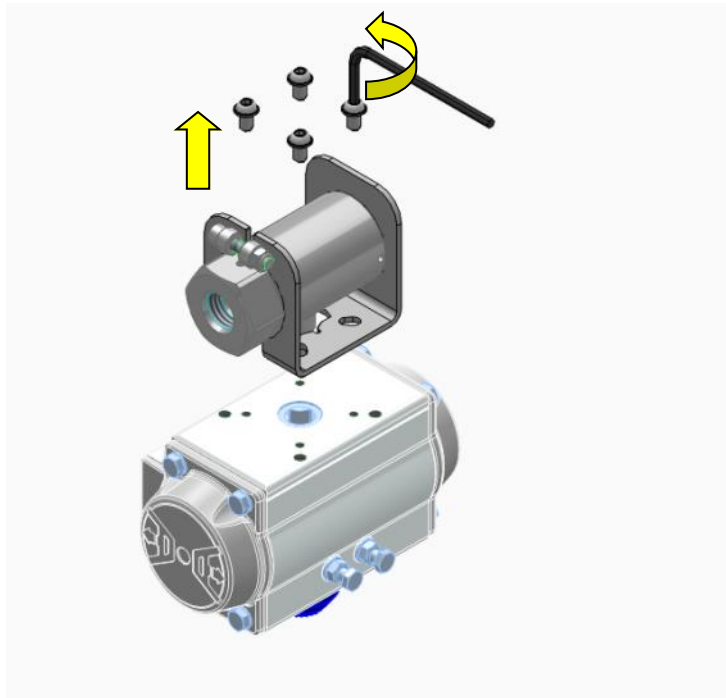


Sockets

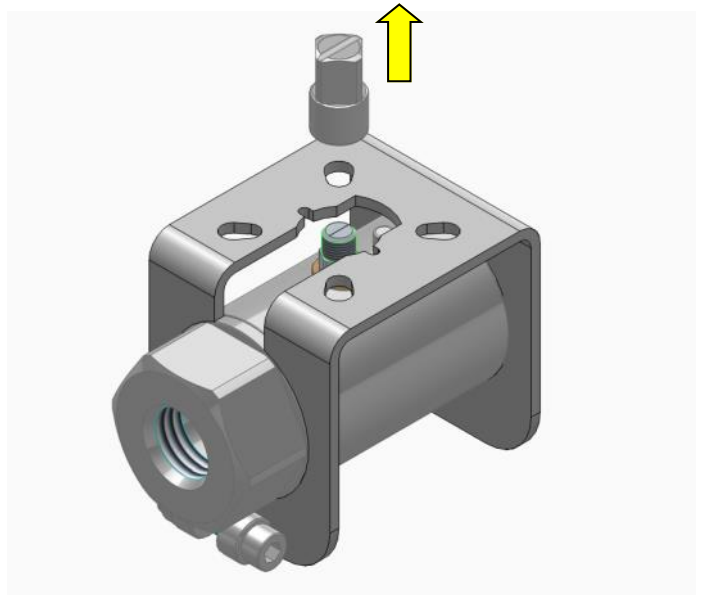


Spray bottle
(Snoop or suitable
equivalent)

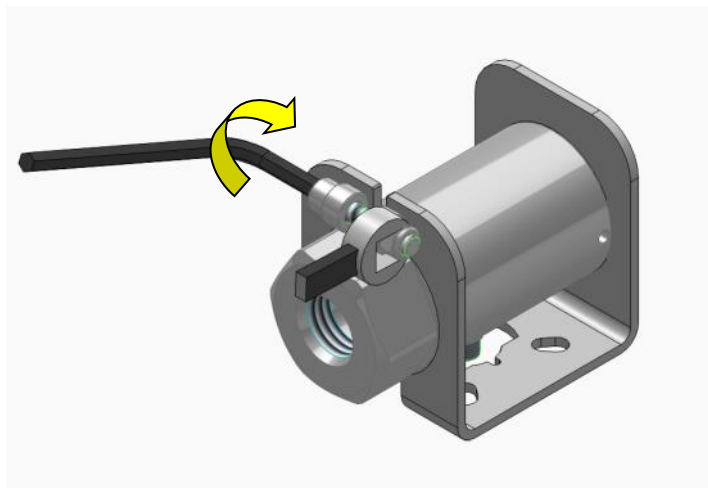
1. Remove actuator from valve.



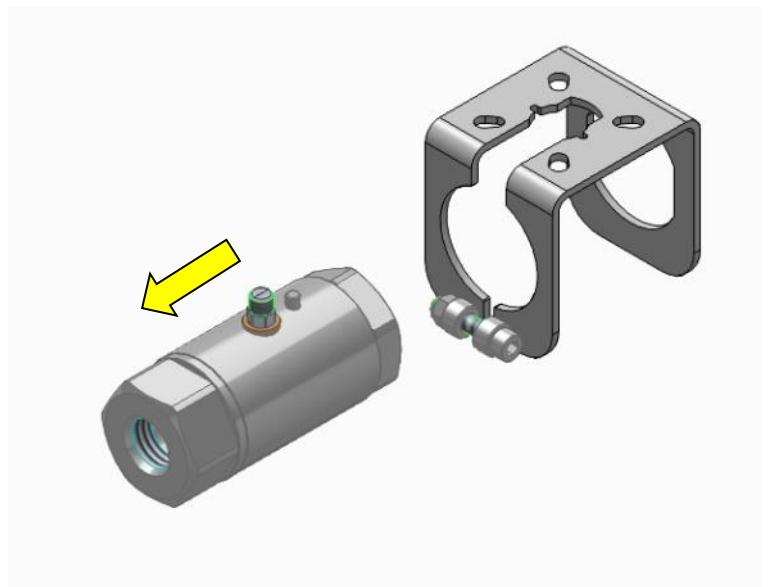
2. Remove drive dog.



3. Undo the clamp.

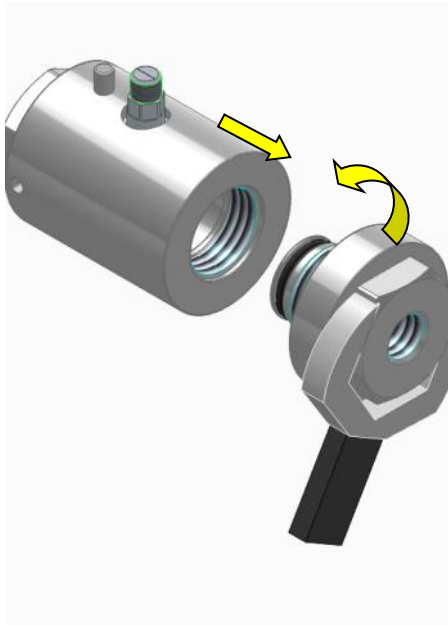


3. Remove the valve.

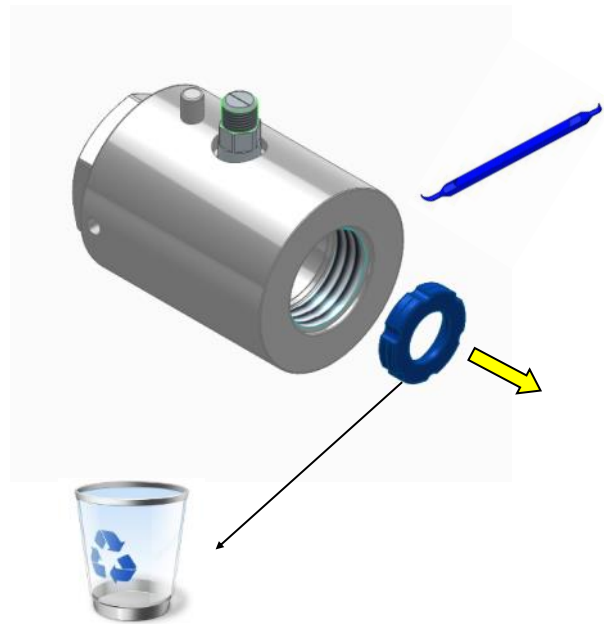


Important: Actuate valve after removing handle to vent trapped pressure.

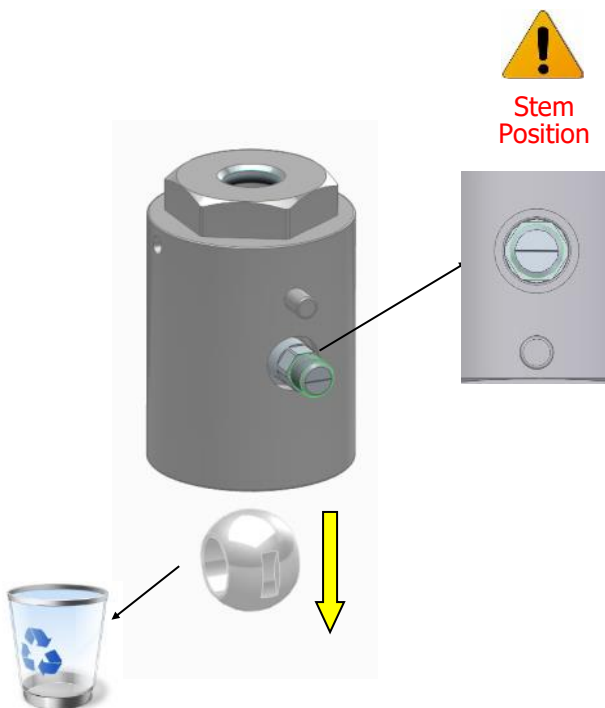
4. Remove the end cap.



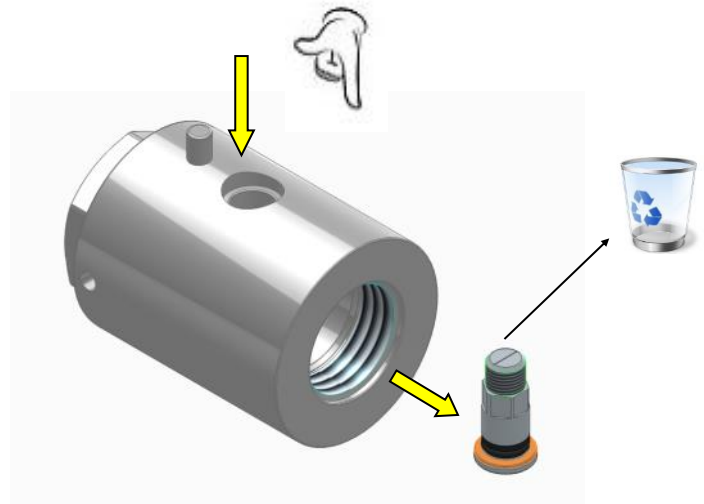
5. Remove and discard the first seat.



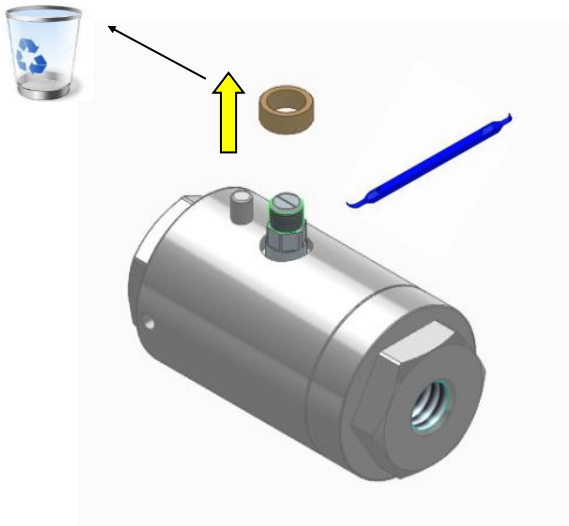
6. Remove and discard the ball.



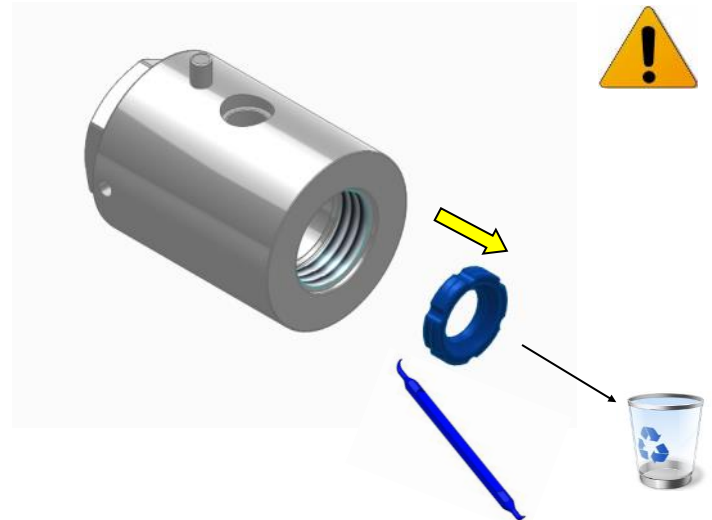
7. Press the stem out and discard.



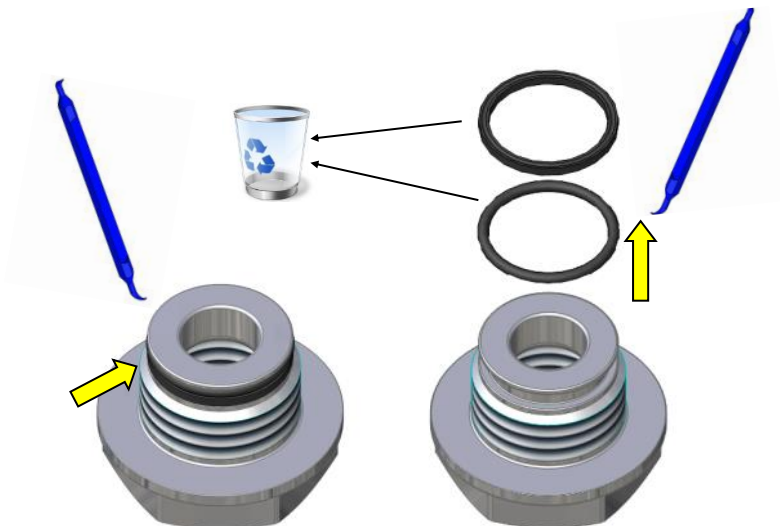
8. Remove and discard the gland.



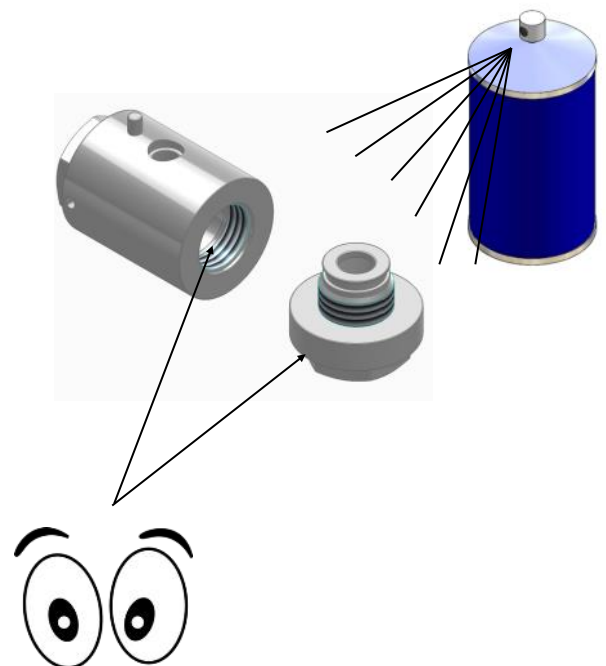
9. Remove and discard the second seat.



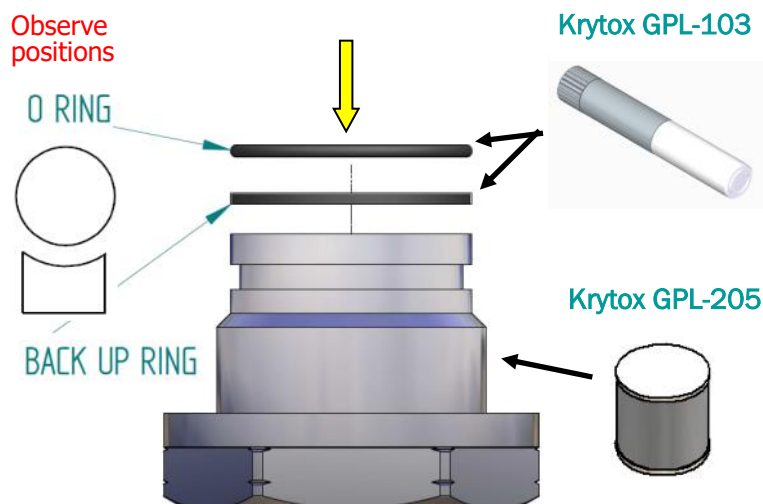
10. Remove the cap O-rings and discard.



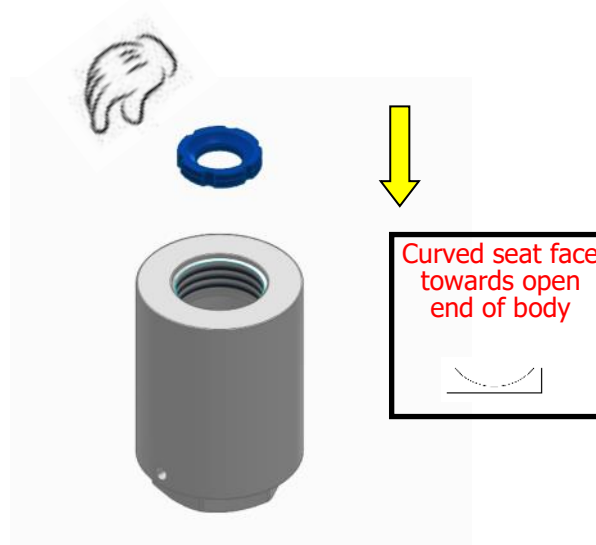
11. Clean the body and end cap.
Visually inspect parts for damage.



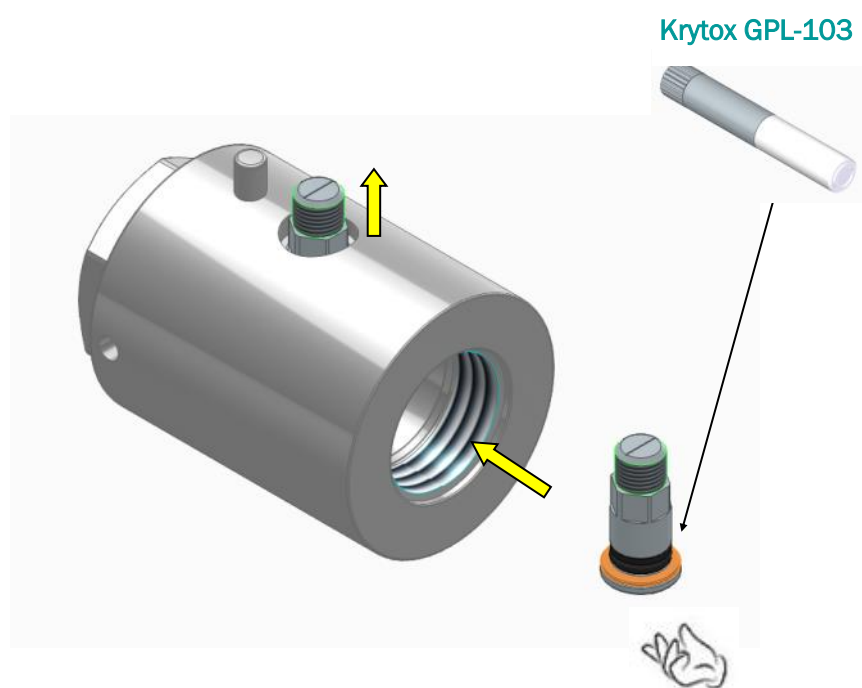
1. Apply Krytox GPL-103 to end cap O-rings and fit to end cap.



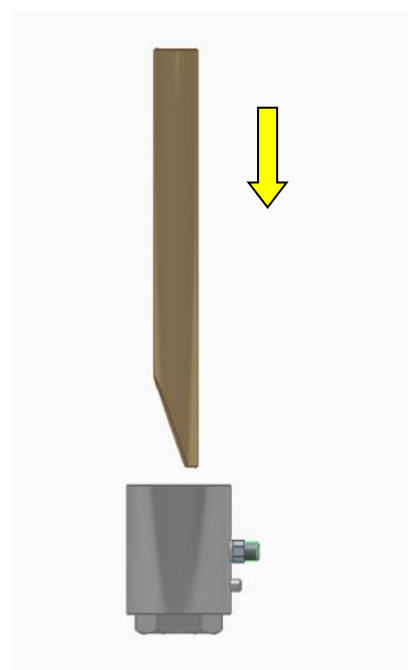
2. Install the first new seat.



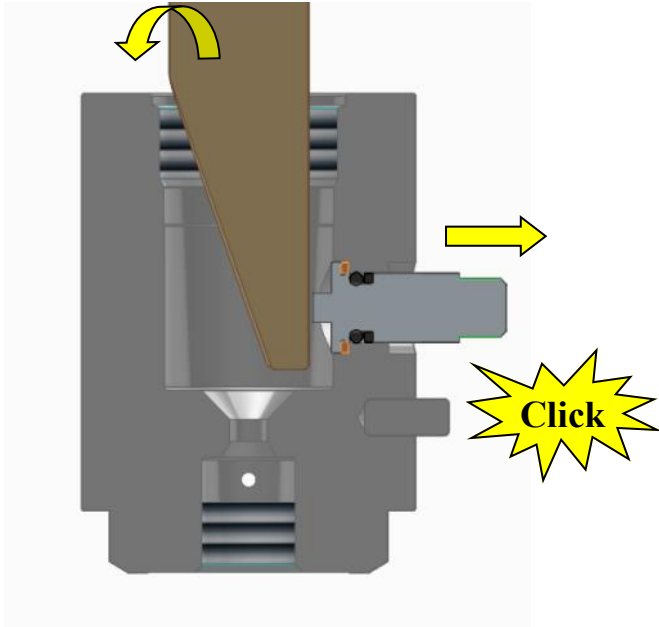
3. Apply grease to stem O-ring and insert stem assembly.



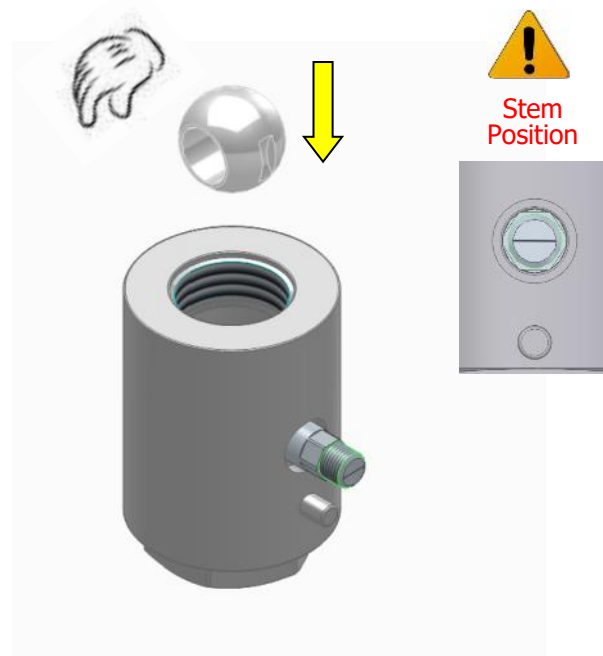
4. Insert the stem tool.



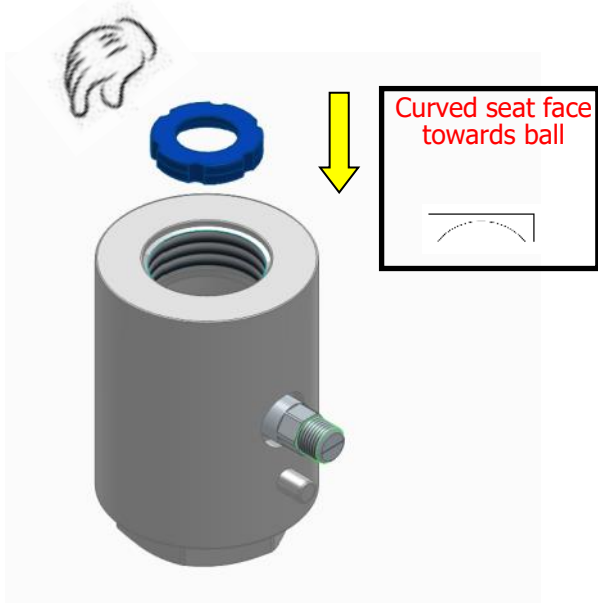
5. Use the tool to push the stem into position.



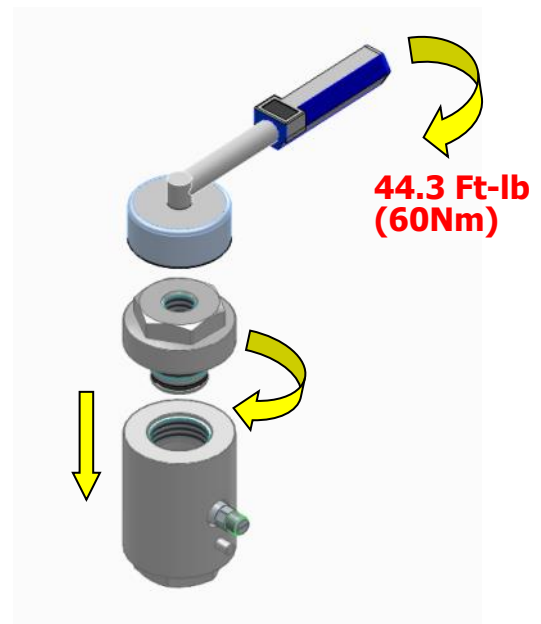
6. Insert the new ball.



7. Install the second new seat.



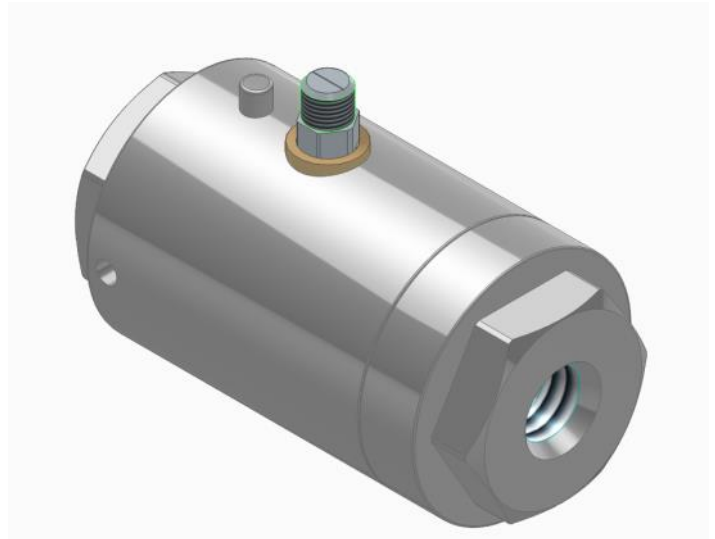
8. Tighten the end cap into the body.



9. Install gland.



10. Finished!



Go to back to step 2 of the assembly instructions for valve mounting in the bracket.