



TH900 Series Actuated Cylinder Valve 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.

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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

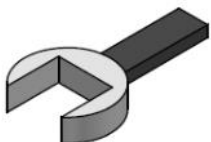


Ensure the system is clean of debris, vented and isolated before any installation or servicing work is carried out.

Attention!

Oasis 900 series cylinder valves are intended for use with gaseous Hydrogen, CNG, Helium, Biogas or Nitrogen.

Tools Required



**Spanner
(Wrenches)**



Anti Seize Grease
- Swagelok Silver Goop
- Omega 99
- or similar

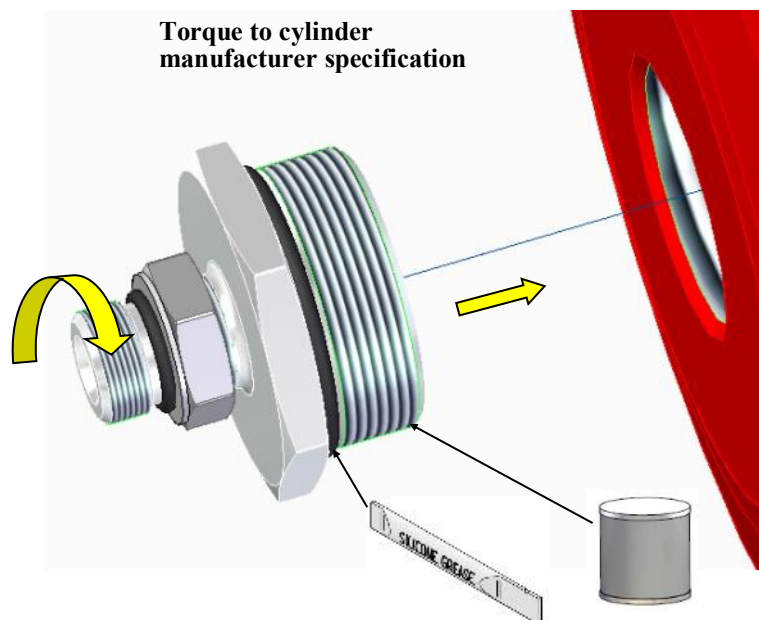


Spray bottle
(Snoop or soapy water)

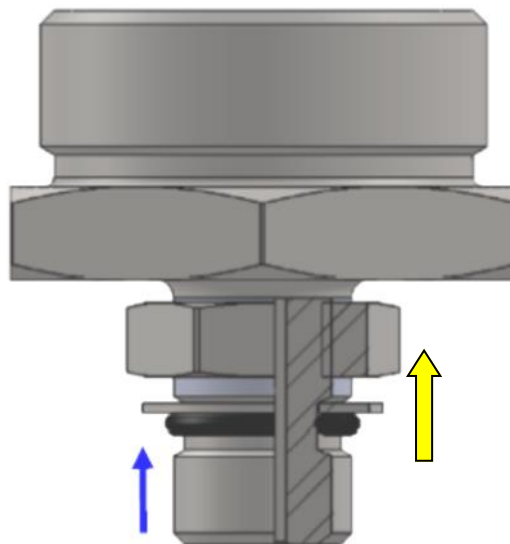


Silicone Grease
-Rocol MX22
- Or similar
For all O-rings

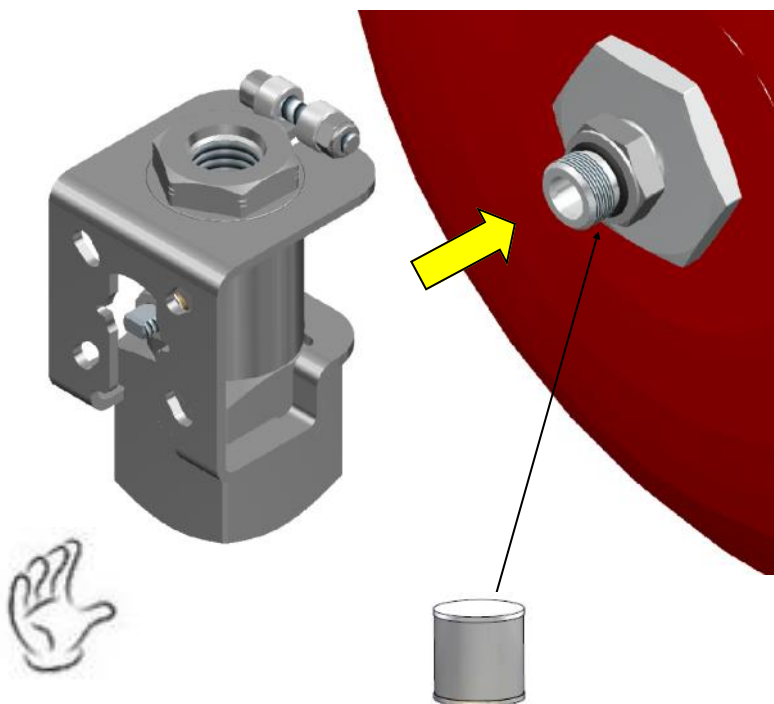
1. Attach adaptor to tank, applying anti-seize to large thread, silicone grease to large O-ring and torque to cylinder manufacturer specification.



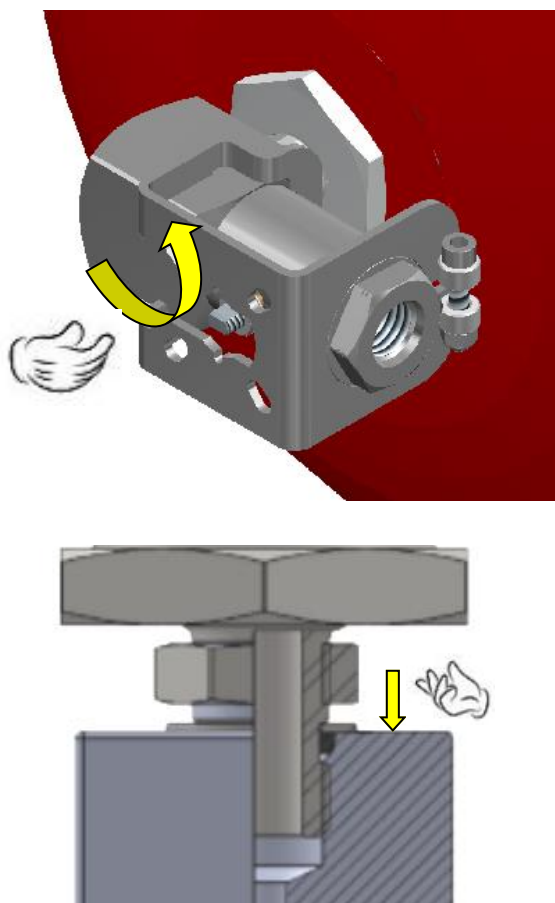
2. Back off lock nut as far as possible. Push back up washer and O-ring down as far as possible.



3. Apply anti-seize to adaptor thread then screw body fully onto adaptor by hand.

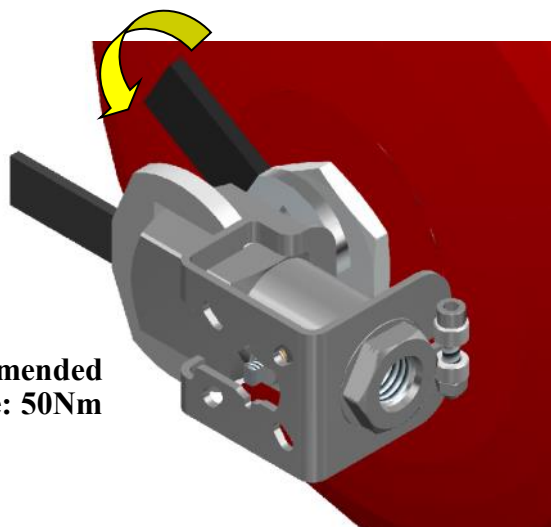


4. Align valve by unwinding no more than one turn. Screw adjustable nut out until it contacts washer.

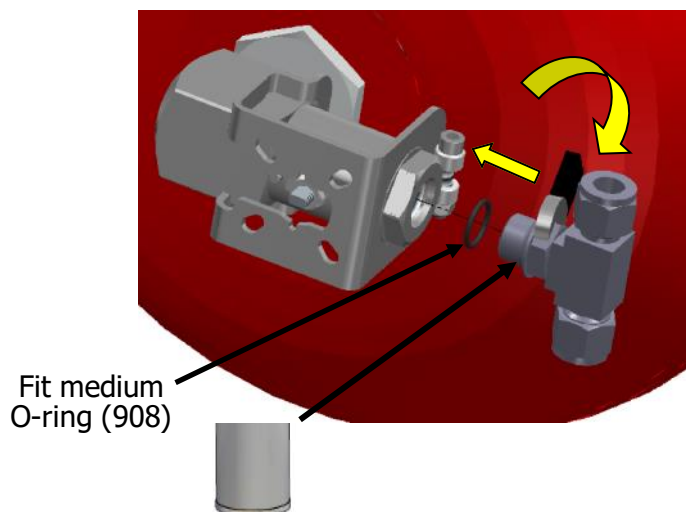


5. Using 2 wrenches, tighten lock nut to 50Nm.

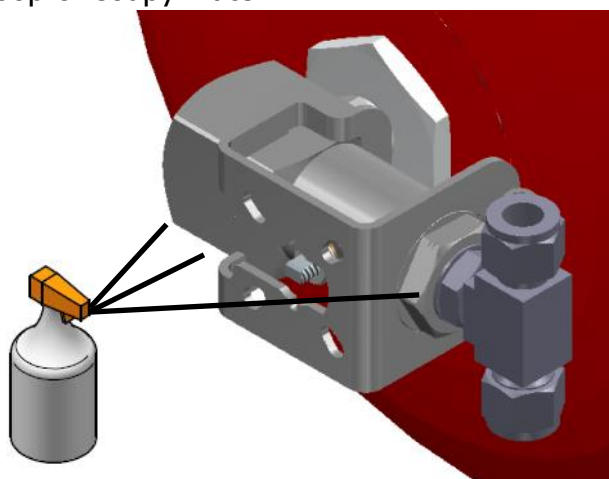
**Recommended
Torque: 50Nm**



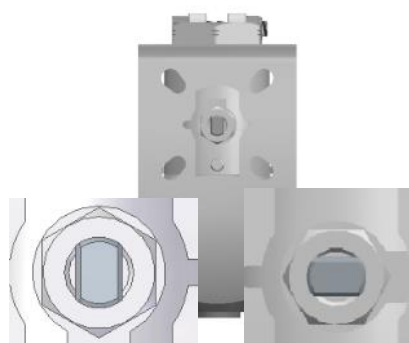
6. Apply anti-seize to fitting thread and attach fitting to outlet.



7. Test all joints for leakage during first use with Snoop or soapy water.



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



1. Open

2. Closed

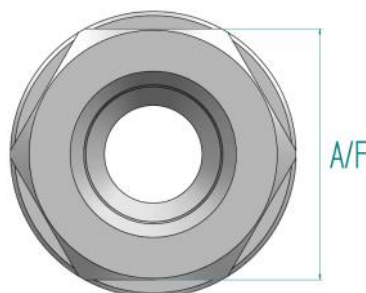
Recommended Spanners for:

Hex End Cap (A/F) = 34mm

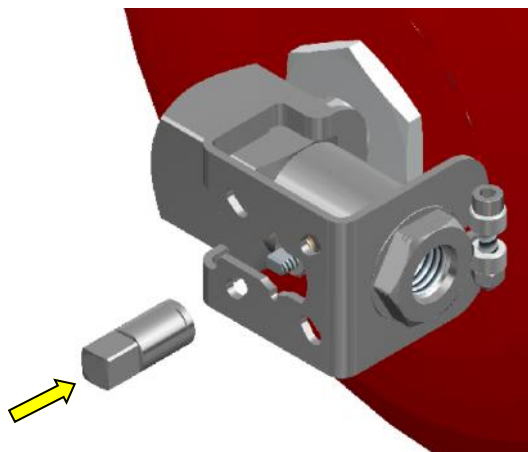
Stem Nut (A/F) = 13mm

Adaptor (A/F) = 42mm

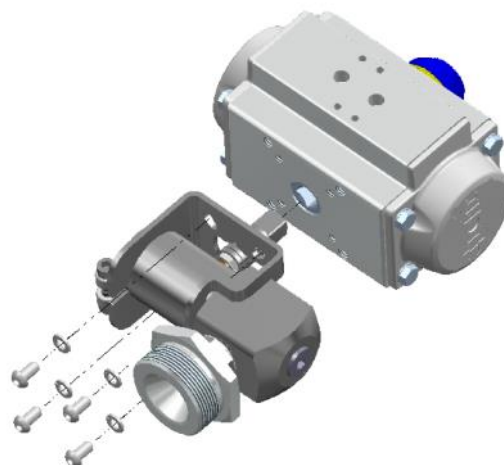
Adaptor Positional Hex Nut (A/F) = 26mm



7. Install the dive dog

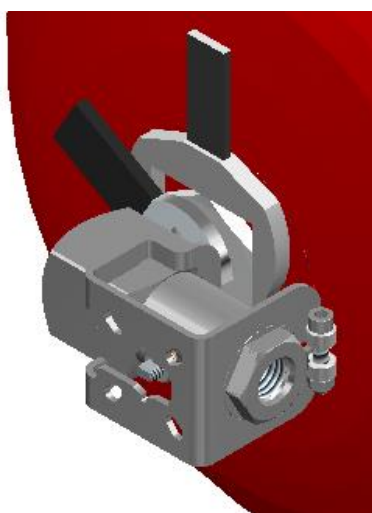


8 Install the actuator and tighten the screws securely.

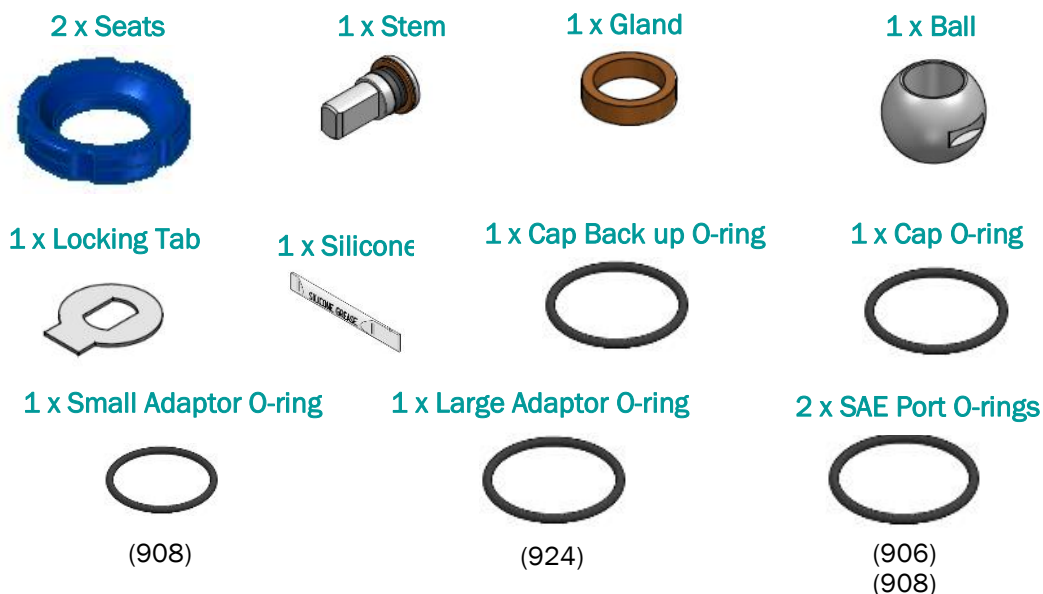


Note:

If not using an Oasis supplied actuator
install as per the system designers
specification.

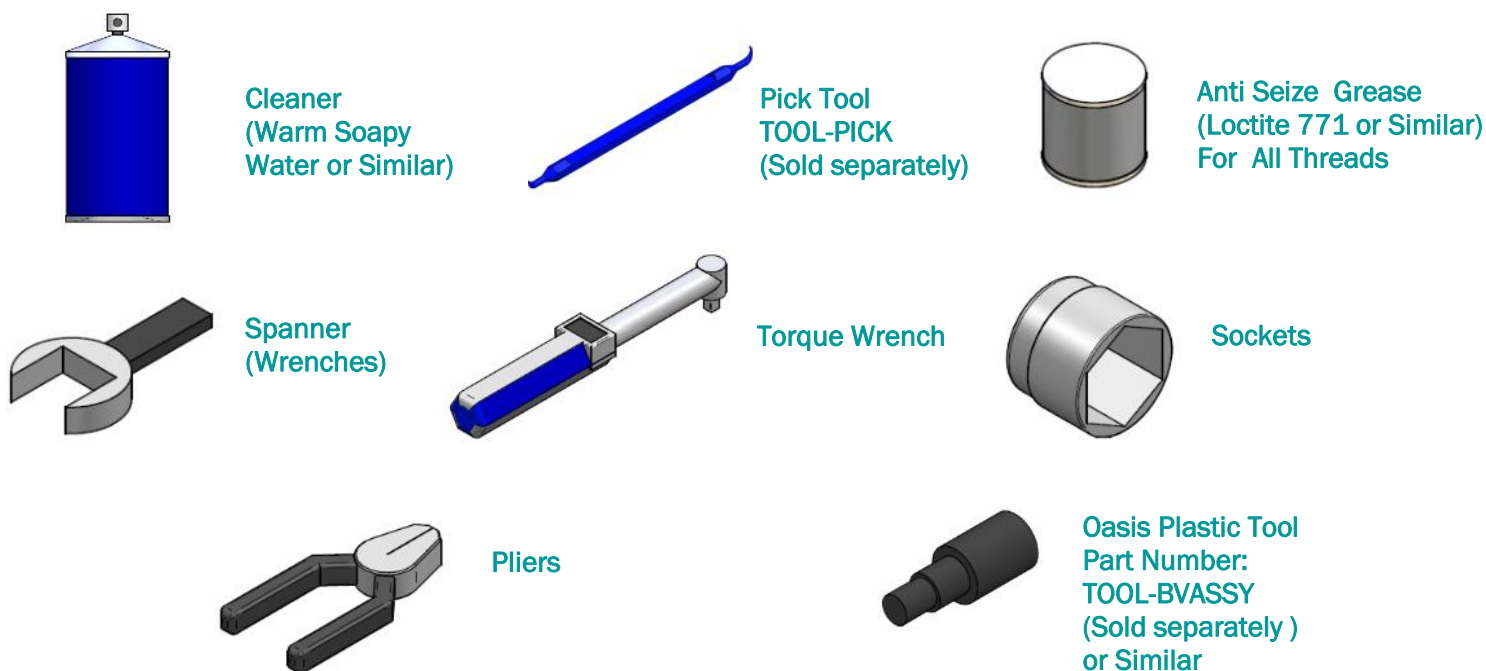


Service Kit Parts

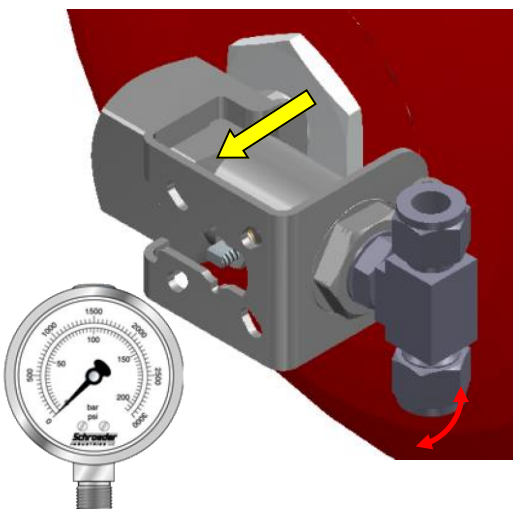


The Complete Oasis Seal Kit must be used

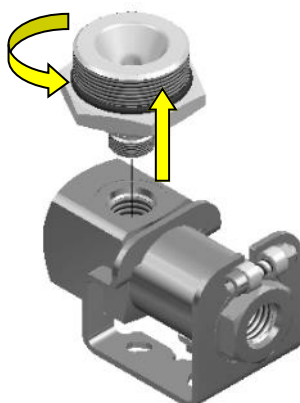
Tools Required



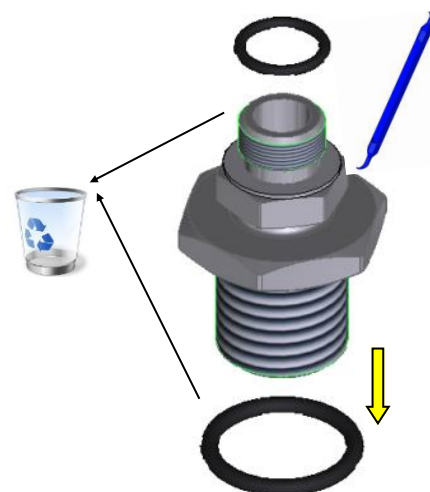
1. Vent pressure from system and remove valve.



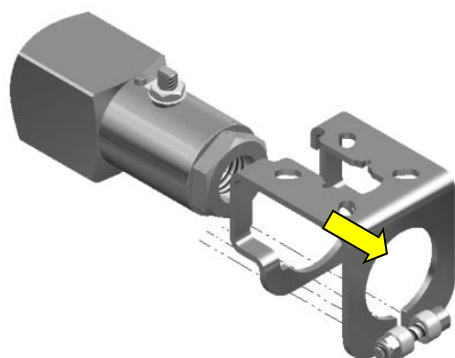
2. Remove adaptor.



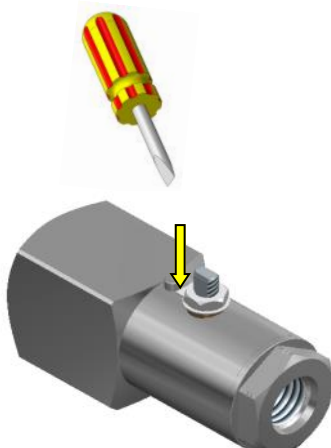
3. Discard adaptor O-rings.



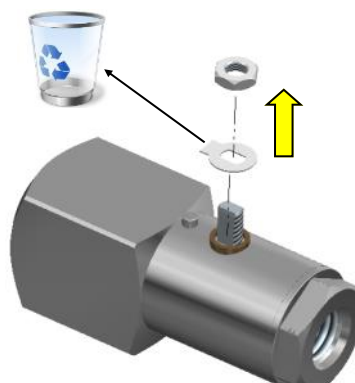
4. Loosen the bracket clamp nuts and remove the bracket



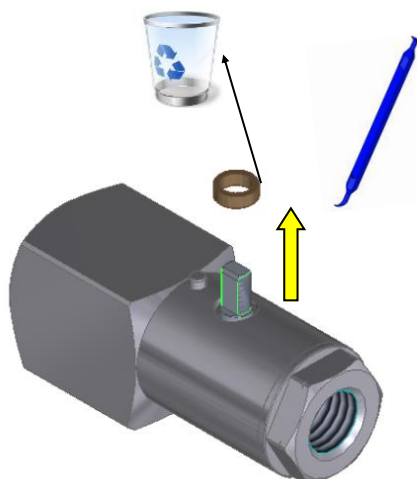
5. Bend the locking tab down



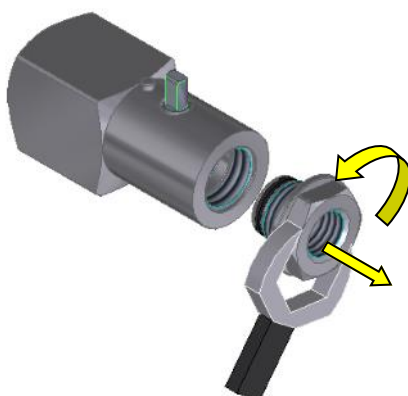
6. Remove the locking tab and half nut. Discard the locking tab



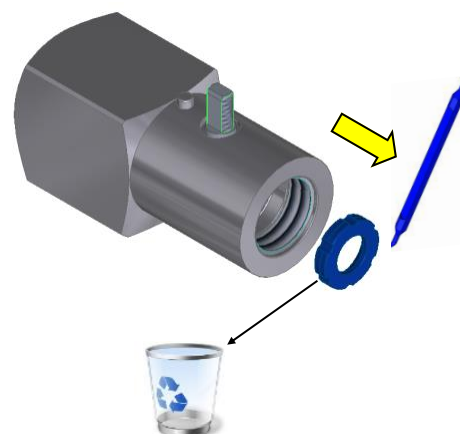
5. Remove and discard gland.



6. Remove end cap.



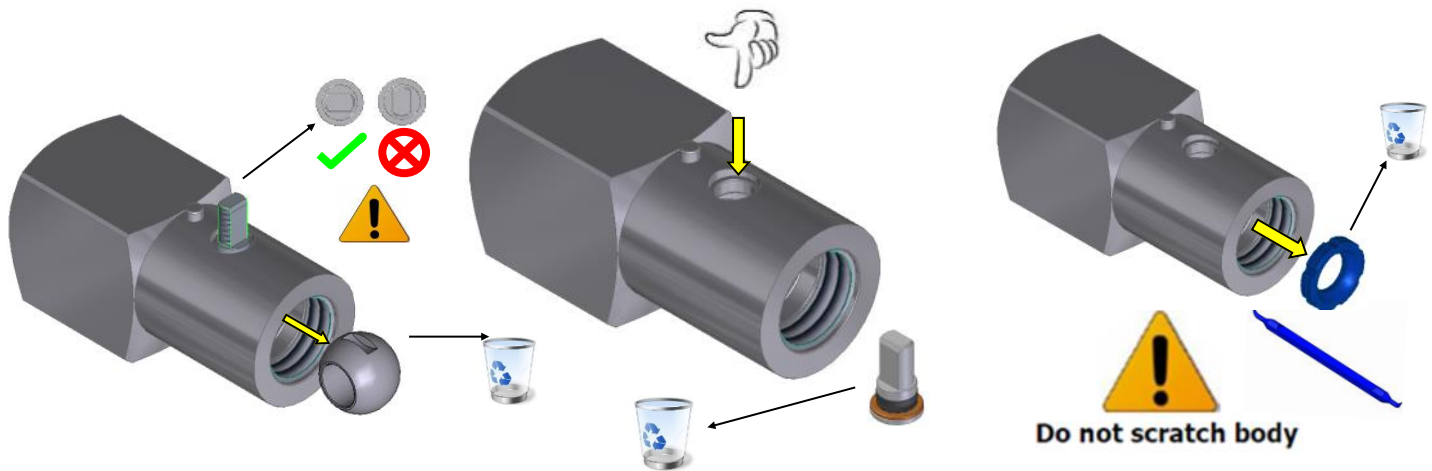
7. Remove and discard the seat.



8. Discard the ball.

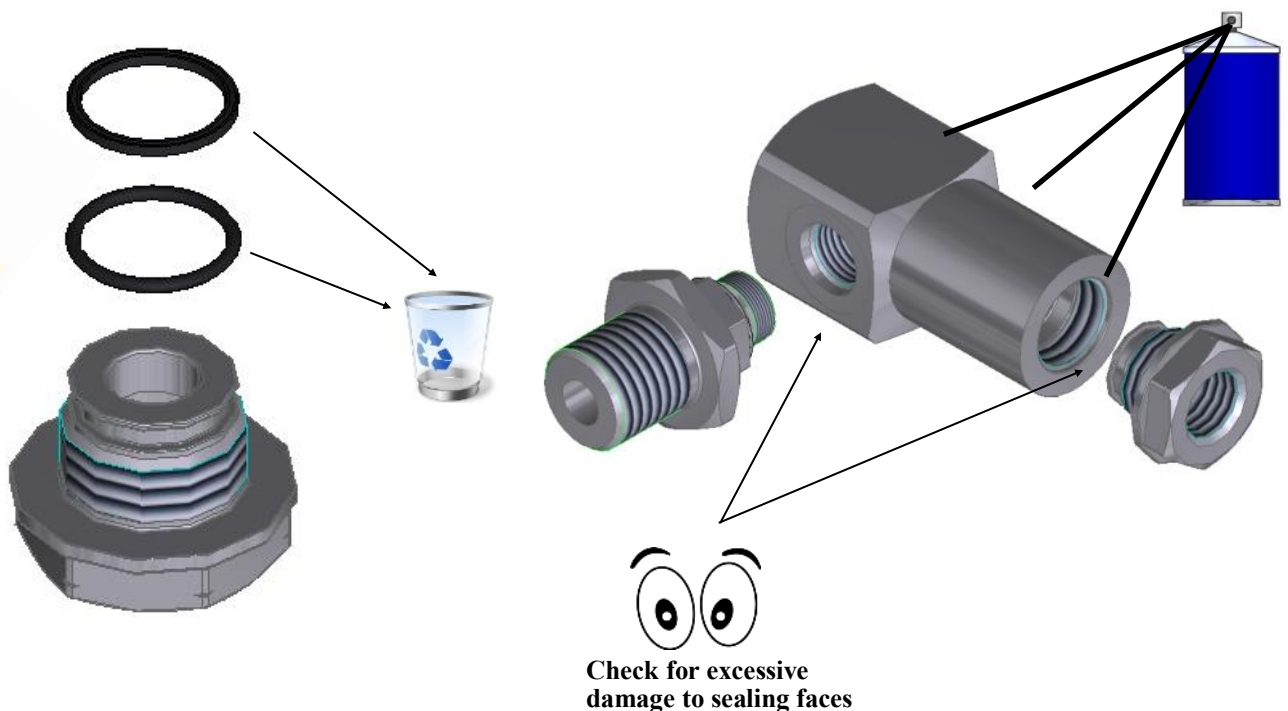
9. Discard the stem.

10. Discard the second seat.



11. Discard the cap O-rings.

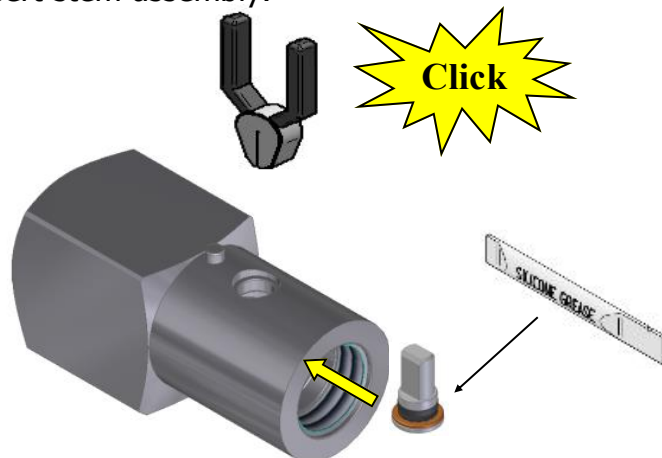
12. Clean the components and inspect for damage.



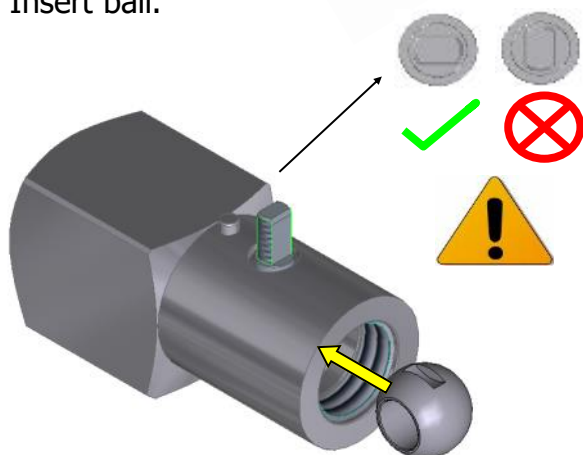
1. Insert 1st seat. Ensure the curved surface is facing up.



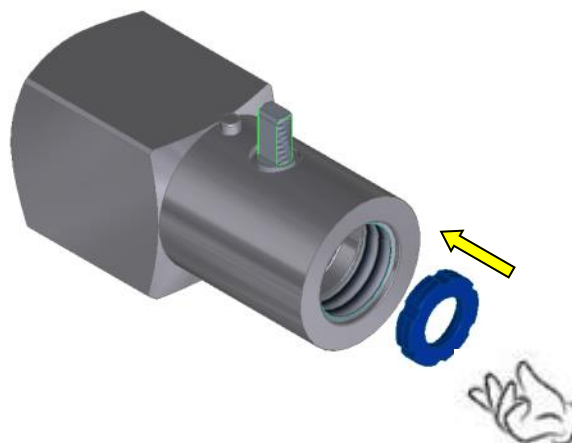
2. Apply grease to the stem O-ring and insert stem assembly.



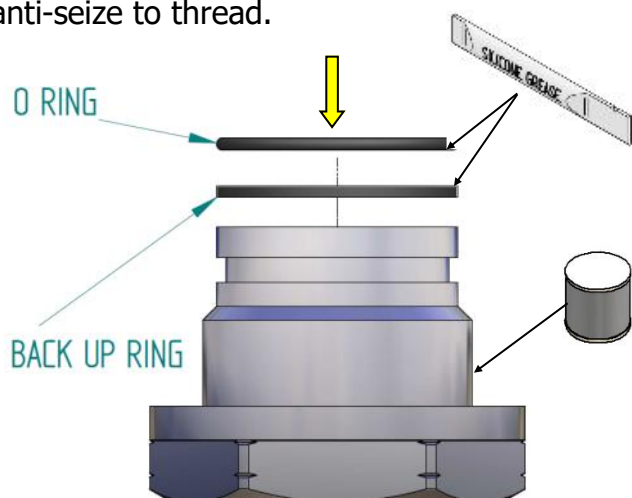
3. Insert ball.



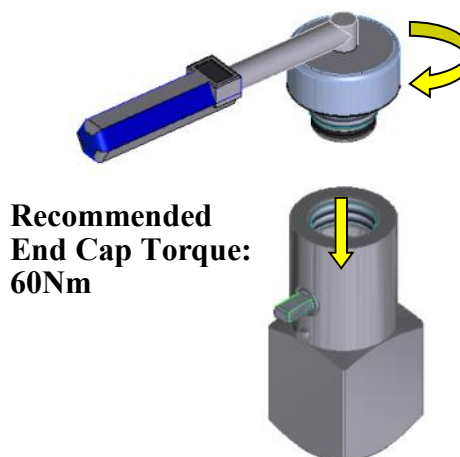
4. Insert 2nd seat. Ensure the curved surface is facing down.



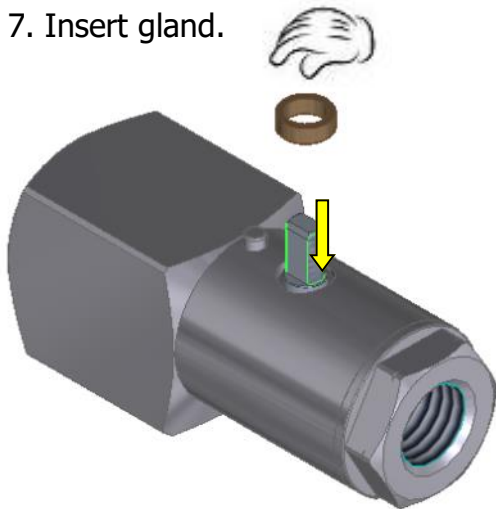
5. Grease & fit cap O-rings. Apply anti-seize to thread.



6. Tighten end cap.



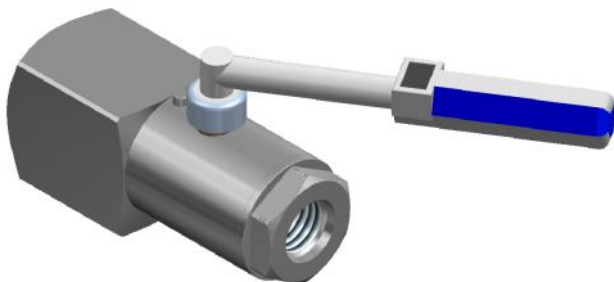
7. Insert gland.



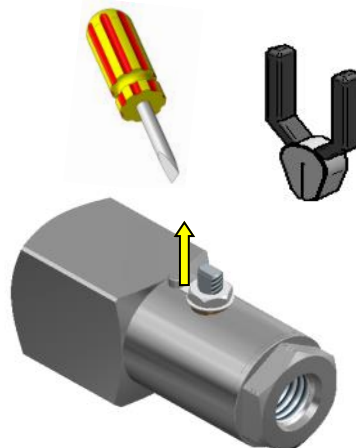
8. Place the locking tab and screw the half nut onto the spindle



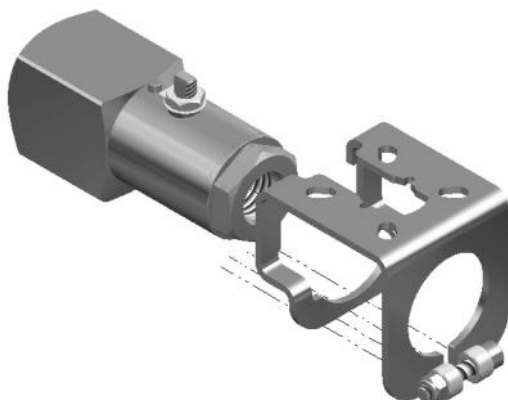
9. Torque half nut to 3NM



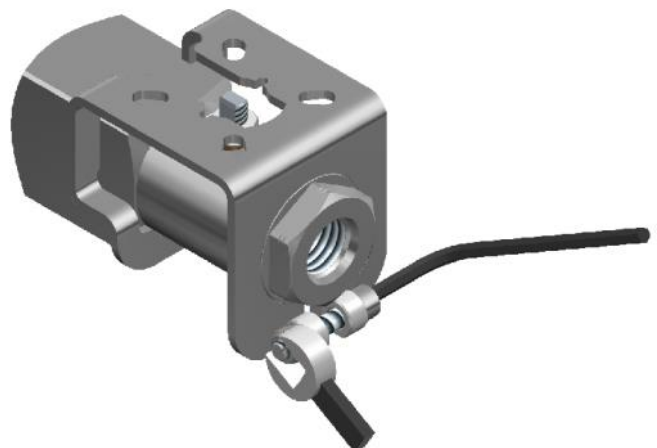
10. Bend locking tab up to lock the half nut



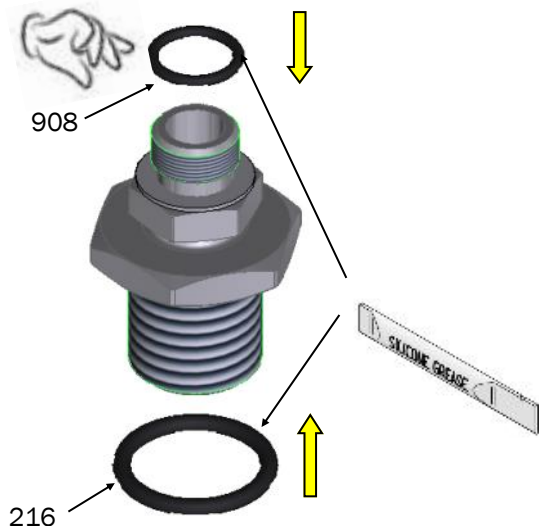
11. Slide the bracket onto the valve.



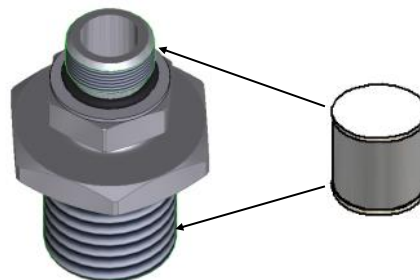
12. Tighten the clamp nut. Torque to 8 NM



13. Apply grease O-rings and fit to adaptor.



14. Apply anti-seize to threads.



15. Follow installation instructions on page 3 of this manual for re-installation of valve. Replace SAE port O-rings with those supplied in service kit.

