



BV700 Series Ball Valve ORFS 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

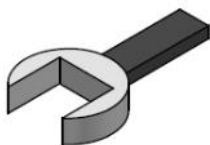


Ensure the system is clean of debris, vented and isolated before any installation or servicing work is carried out.

Attention!

Oasis 700 series ball valves are intended for use with gaseous Hydrogen, CNG, Helium, Biogas or Nitrogen.

Tools Required



Spanner
(Wrenches)



Anti Seize Grease
(Loctite 771 or similar)
For all threads.

Spray bottle
(Snoop or soapy water)



Oasis Plastic Tool
Part Number:
TOOL-BVASSY
(Sold separately)
or Similar

For use in Canada:

This design has been confirmed and tested to standards not recognized by Canadian authorities. For the purposes of installation of this design in ASME B31.3 piping systems, the piping system designer should confirm suitability and consider the following design conditions:

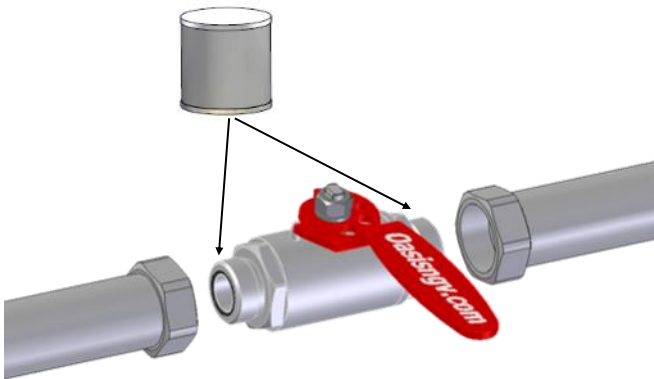
DESIGN PRESSURE: 410 BAR (6000 PSIG)

DESIGN TEMPERATURE: -40 TO +85°C (-40 TO +185°F)

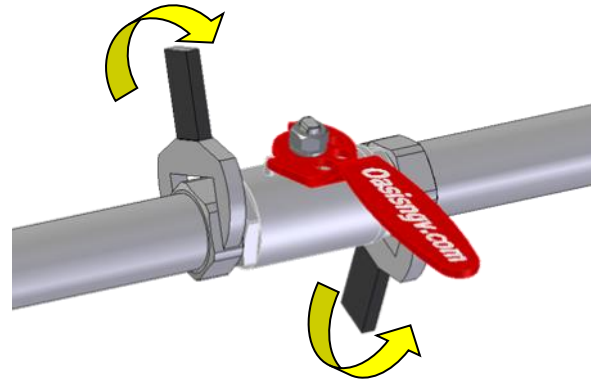
CORROSION ALLOWANCE: 0 mm (0 in)

For installation in ASME B31.3 piping systems, the designer of the piping system should ensure that required leak testing is performed on the piping system prior to operation.

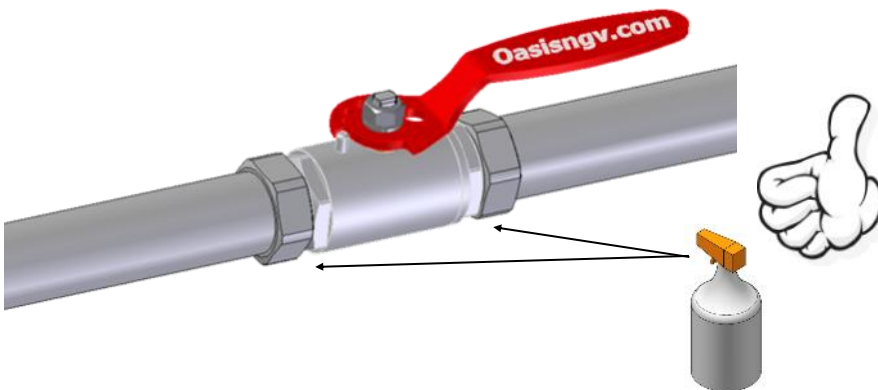
1. Ensure face seal O-rings are in position and sealing faces are free of damage. Apply anti-seize grease to threads.



2. Torque to the tube or hose fitting supplier's recommendations.



3. . Installation complete, check for leaks with snoop or similar on first use.



Note: Oasis recommends routine back pressure leakage testing as part of a good preventative maintenance schedule and servicing the valves as required. This will ensure safe and reliable operation over their lifetime.

1. Closed

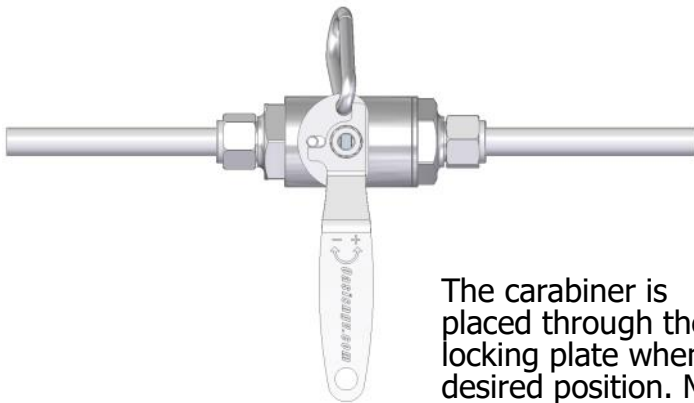


2. Opened



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

Optional - Lock-plate & Carabiner In Closed Position



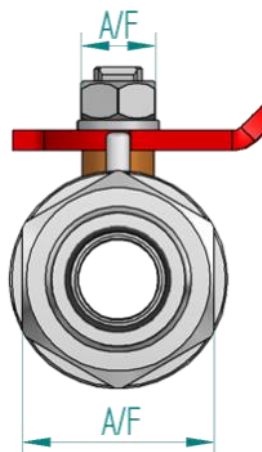
Optional - Lock-plate & Carabiner In Open Position



The carabiner is placed through the available hole on the locking plate when the handle is in the desired position. Movement of the handle is prevented until carabiner is removed.

Recommended Spanners for End Caps:

- BV702 = 25mm**
- BV704 = 34mm**
- BV706 = 50mm**
- BV708 = 60mm**



Recommended Spanners for Stem Nuts:

- BV702 = 13mm**
- BV704 = 13mm**
- BV706 = 19mm**
- BV708 = 19mm**

Service Kit Parts

BV702 — BV703 — BV704**



BV706** — BV708**



* only used when servicing actuated ball valves.

**It is normal for the service kit to include a ball with a small hole in the bottom

^For low pressure service kits, the seats will be supplied with an O-ring installed

The Complete Oasis Seal Kit must be used

Tools Required



Cleaner (Warm Soapy Water or Similar)



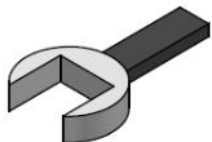
Pick Tool
Part Number:
TOOL-PICK
(Sold separately)



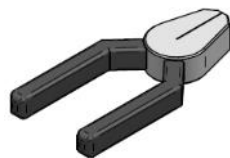
Small flat screw driver*
* only used when servicing actuated ball valves.



Anti Seize Grease
(Loctite 771 or Similar)
For All Threads



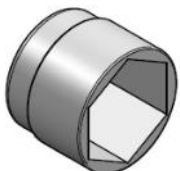
Spanner
(Wrenches)



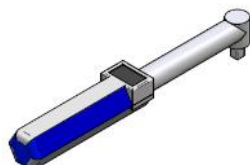
Pliers



Oasis Plastic Tool
Part Number:
TOOL-BVASSY
(Sold separately)
or Similar



Sockets



Torque Wrench



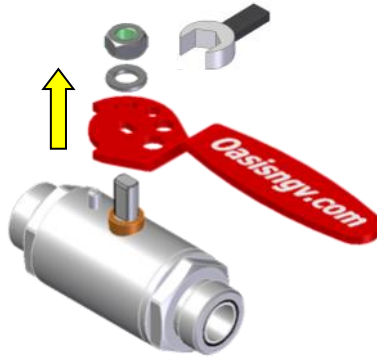
Snoop or
Soapy Water

1. Release any trapped pressure.

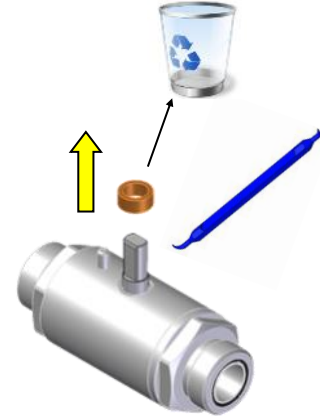


Open and close valve to ensure all trapped gas is released.

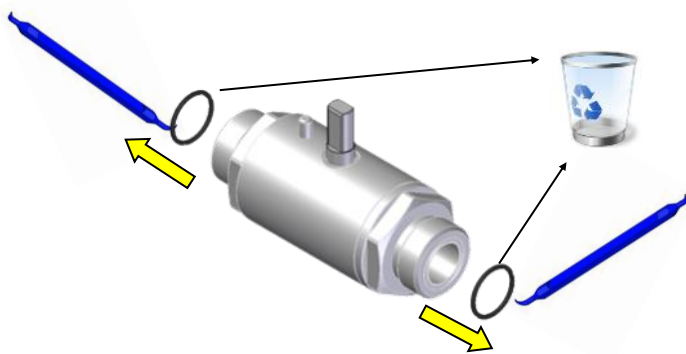
2. Remove stem nut, washer and handle.



3. Discard gland.

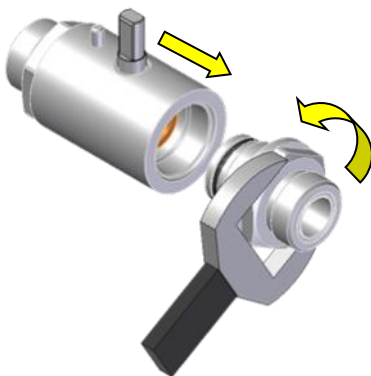


4. Remove face orings from valve cap and body. Discard orings.

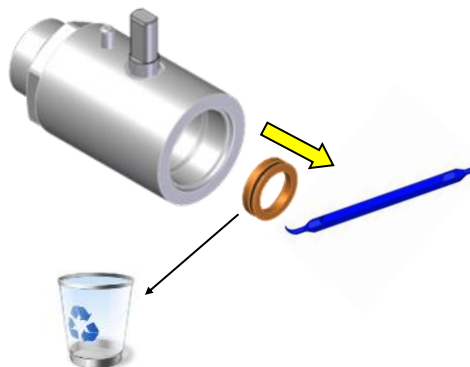


Do not scratch seal grooves

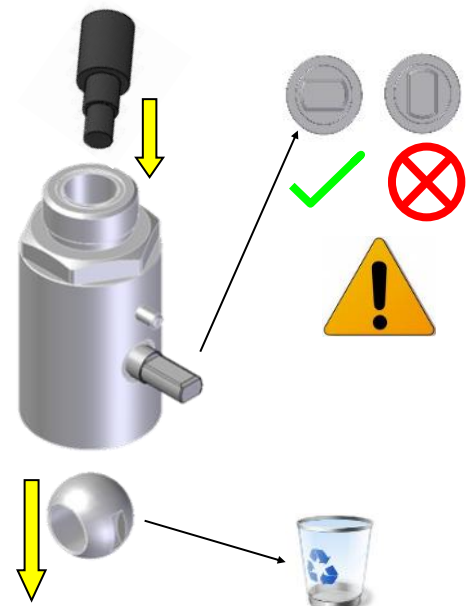
5. Remove end cap.



6. Discard seat.

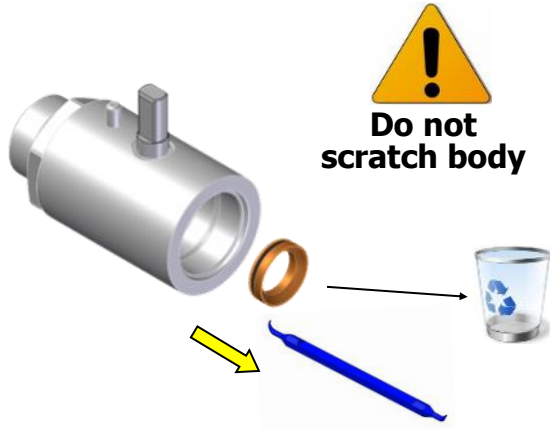


7. Remove ball.

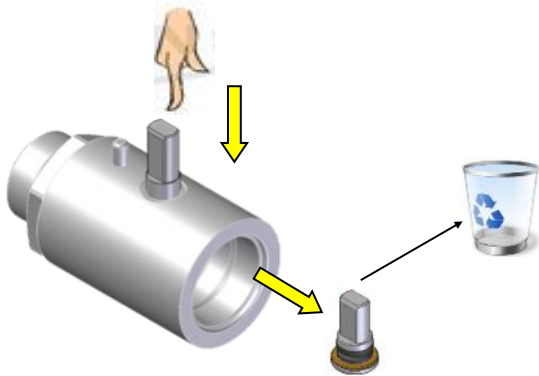


BV702

7. Remove 2nd seat first

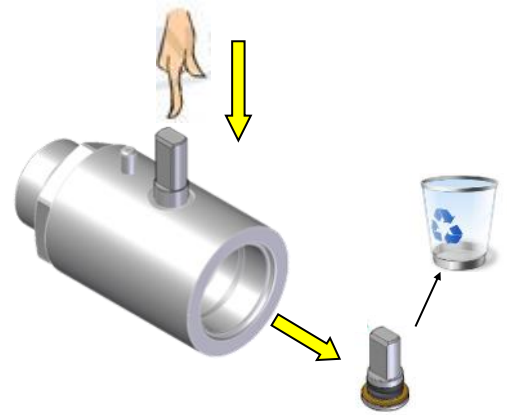


8. Remove and discard stem .

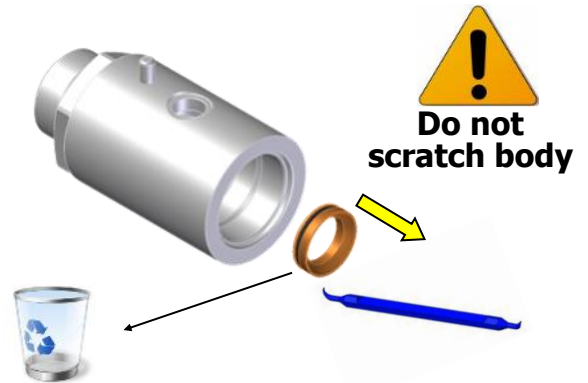


BV704 - BV706 - BV708

7. Remove stem first

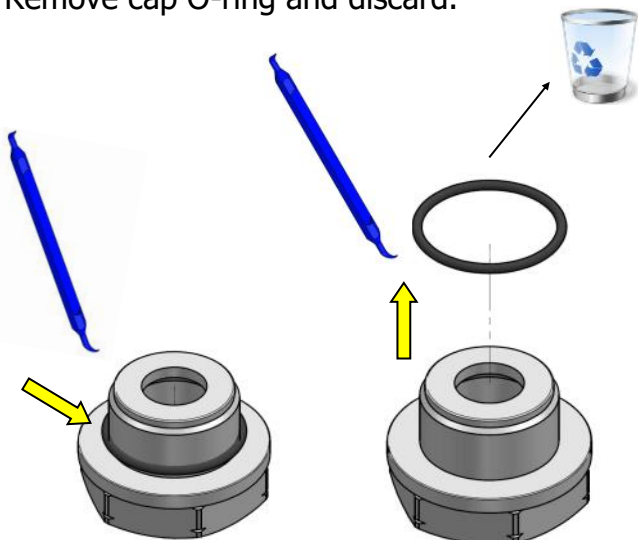


8. Remove and discard 2nd seat



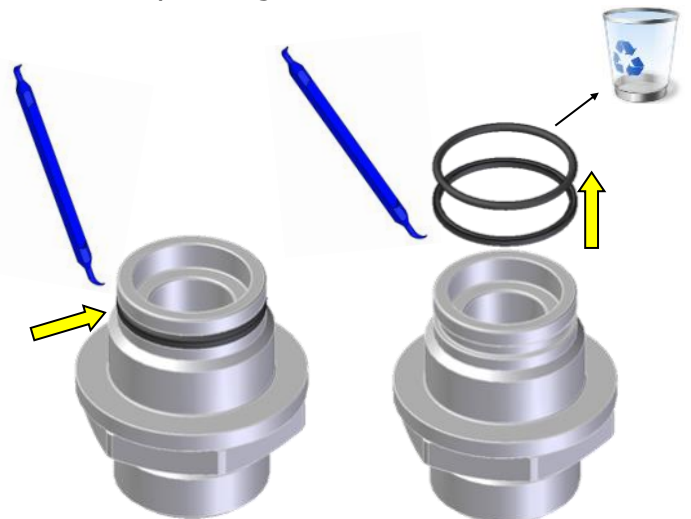
BV702 - BV704

9. Remove cap O-ring and discard.

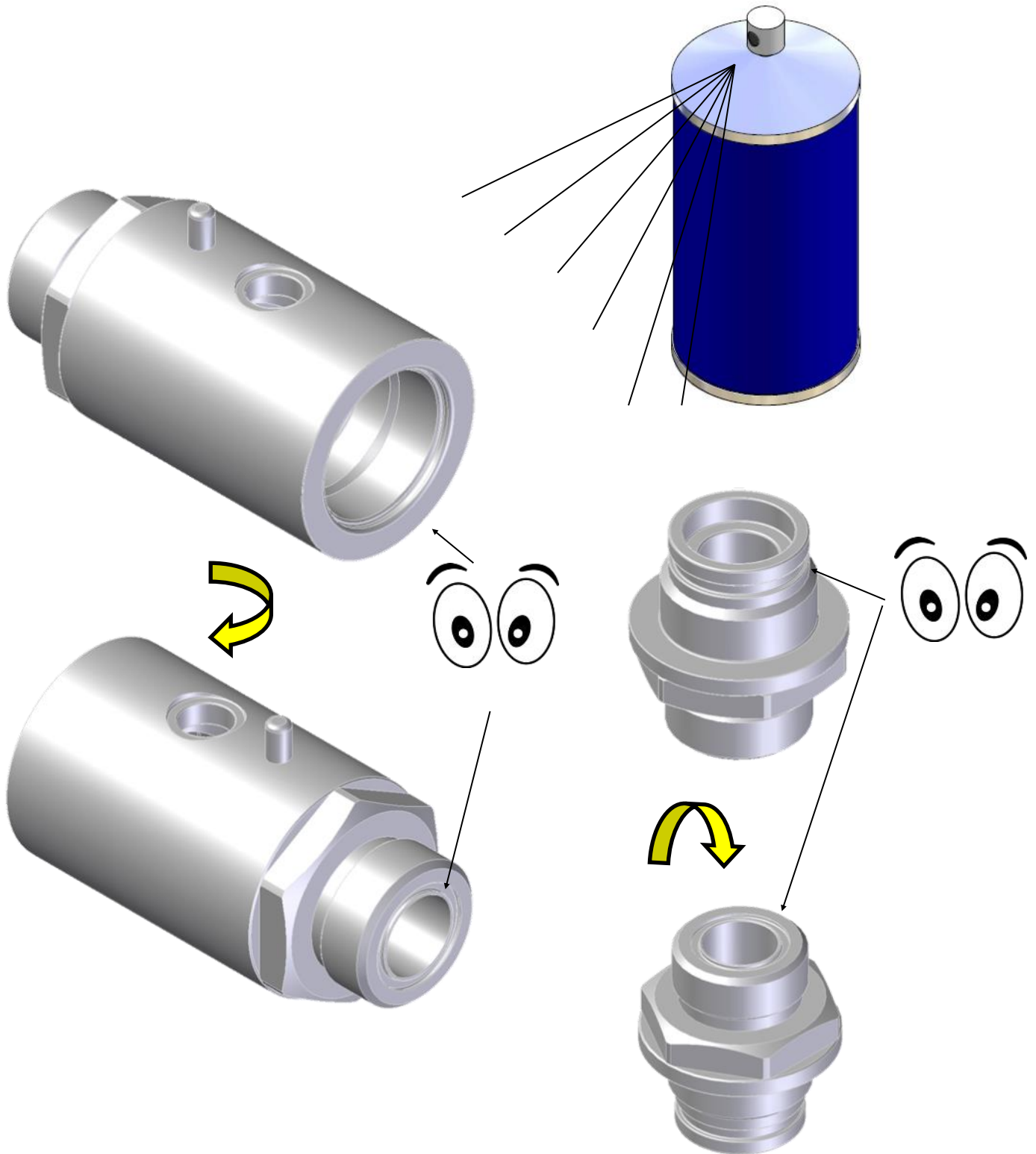


BV706 - BV708

9. Remove cap O-rings and discard.

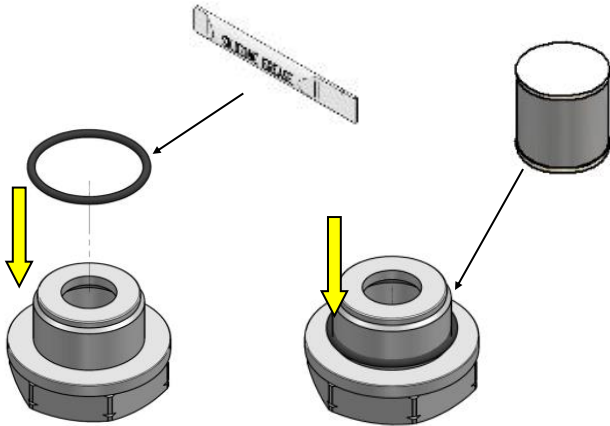


14. Clean body and end cap, visually check parts for damage



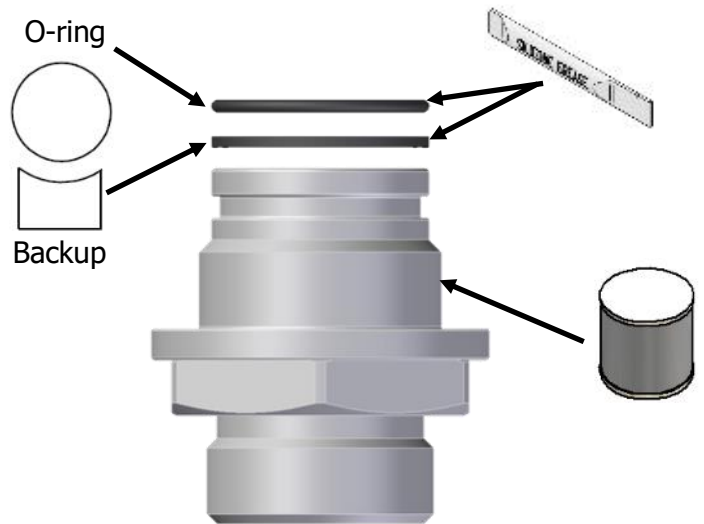
BV702 — BV704

1. Fit O-ring.



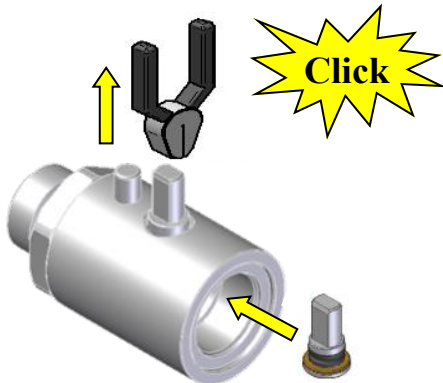
BV706 — BV708

1. Fit end cap O-rings.

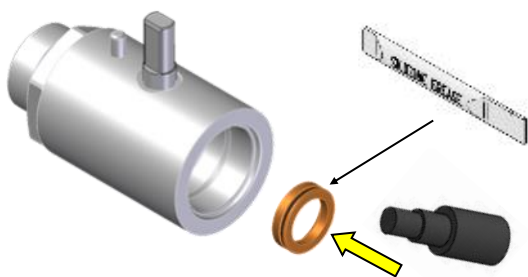


BV702

2. Insert stem assembly first.

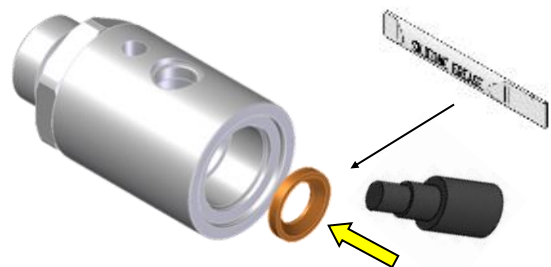


3. Apply silicone grease to new seat and install. Take care not to pinch O-ring when installing low pressure seat.

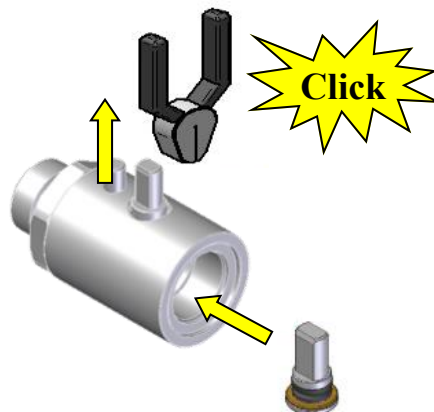


BV704 - BV706 - BV708

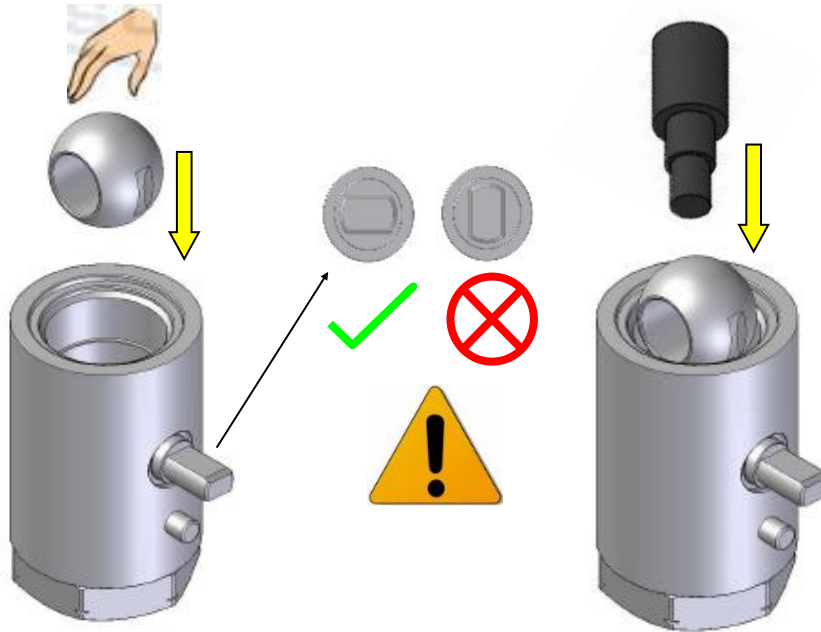
2. Apply silicone grease to new seat and install. Take care not to pinch O-ring when installing low pressure seat.



3. Insert stem assembly.

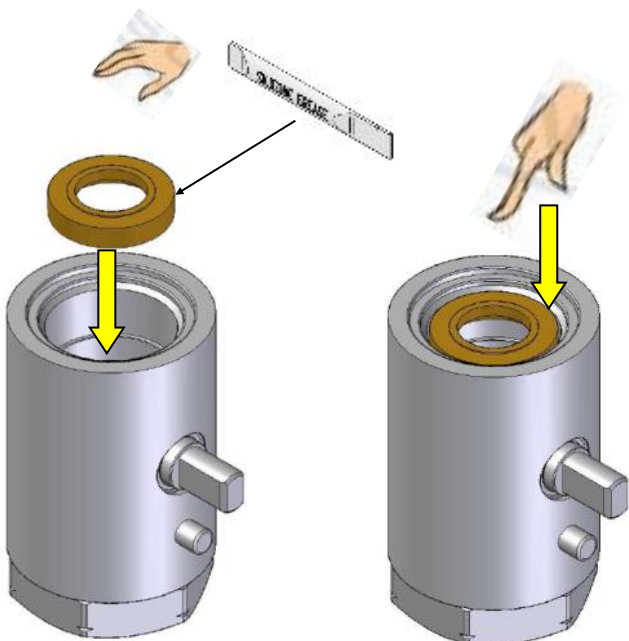


4. Insert ball.



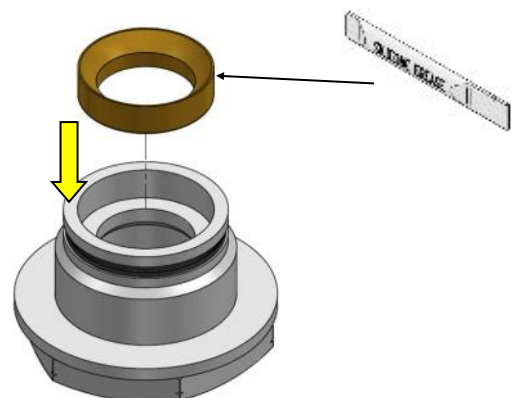
BV702 — BV704

5. Apply silicone grease to new seat and install. Take care not to pinch O-ring when installing low pressure seat.



BV706 — BV708

5. Apply silicone grease to new seat and install in cap. Take care not to pinch O-ring when installing low pressure seat.



BV702 - BV704 - BV706 - BV708

6. Tighten on end cap



7. Install gland.



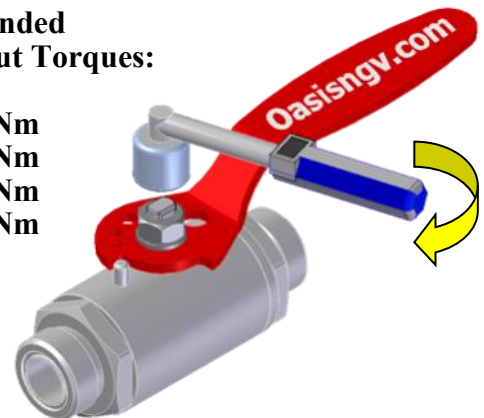
8. Install the handle, washer and nut.



9. Tighten stem nut.

**Recommended
Handle Nut Torques:**

- BV702=3Nm
- BV704=3Nm
- BV706=6Nm
- BV708=6Nm



10. Lubricate and install face o-rings.



11. Servicing complete, follow installation instructions on page 3 for re-installation of product.



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