



BV700 Series

Panel Mount Ball Valve SAE & NPT

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.



Servicing Video

Oasis Engineering Ltd
129 Birch Avenue, Tauranga, New Zealand.
T: +64 7 928 3808
E: info@oasisNGV.com
W: www.OasisNGV.com



Instruction Manual

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.

Tools Required



Spanner
(Wrenches)



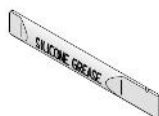
Thread Tape



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



Spray bottle
(Snoop or soapy
water)



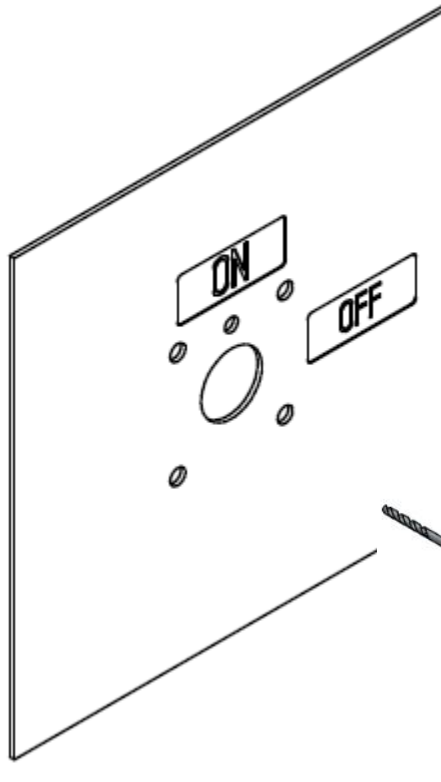
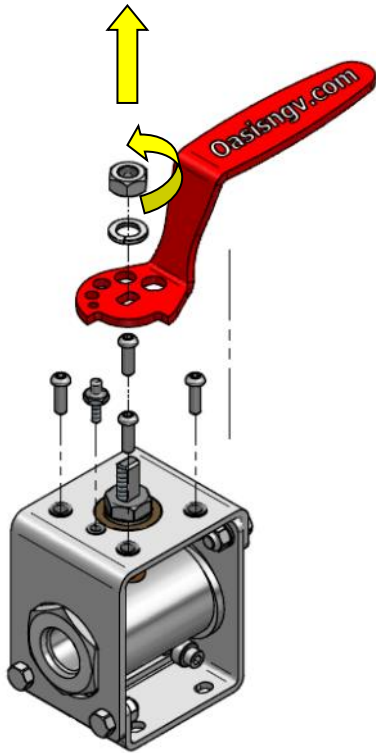
Silicone Grease
(Rocol MX22 or
similar)
For all O-rings



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

1. Before fitting the valve the handle, 4 mounting screws and handle stop pin must be removed.

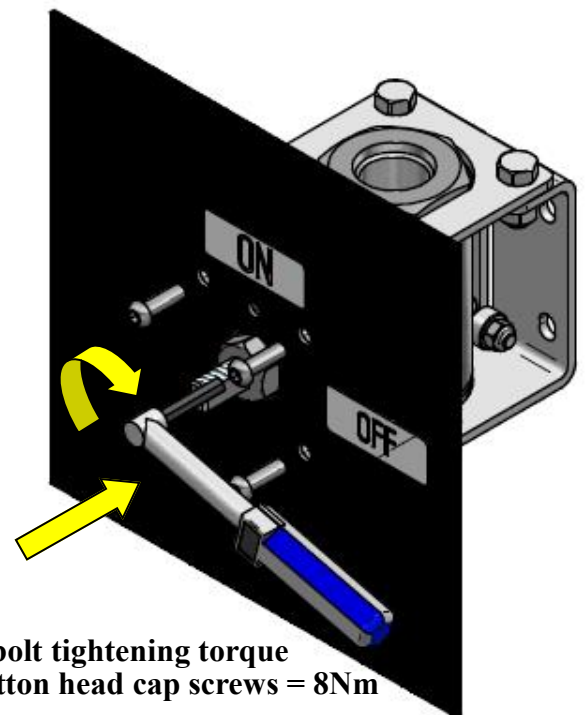
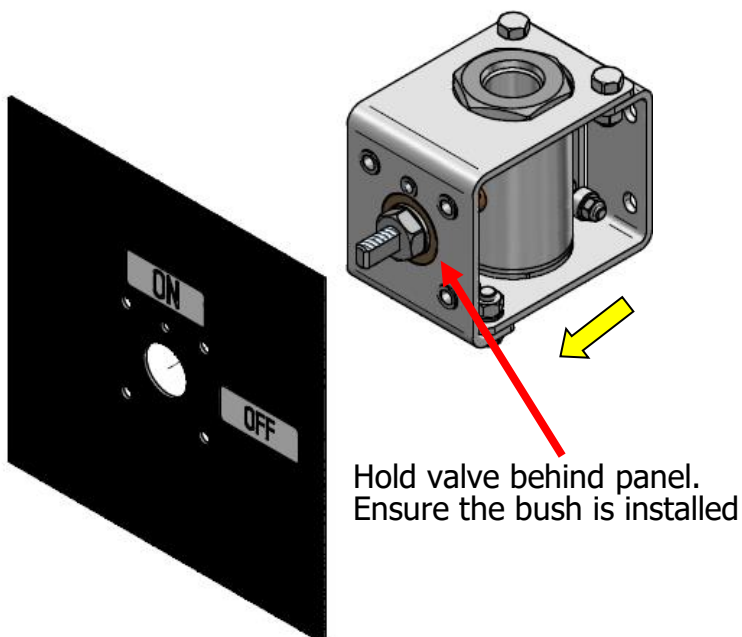
2. Hole pattern needs to be drilled into the panel before valve can be mounted.



**See page 16 for
drilling template**

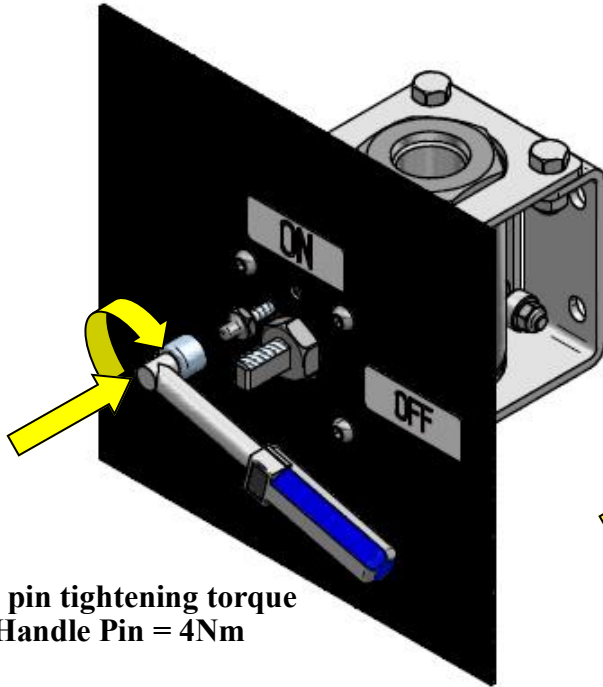
3. Hold valve behind panel.

4. Tighten mounting screws into valve assembly and torque.



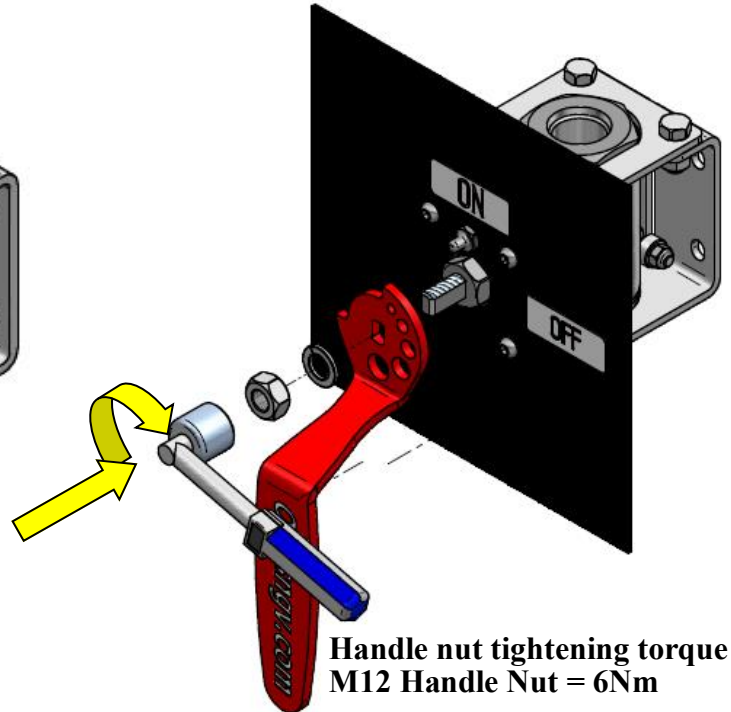
**Mounting bolt tightening torque
4 of M6 button head cap screws = 8Nm**

5. Install the handle stop pin and torque.



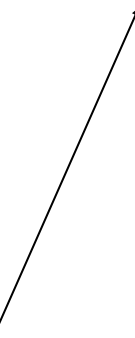
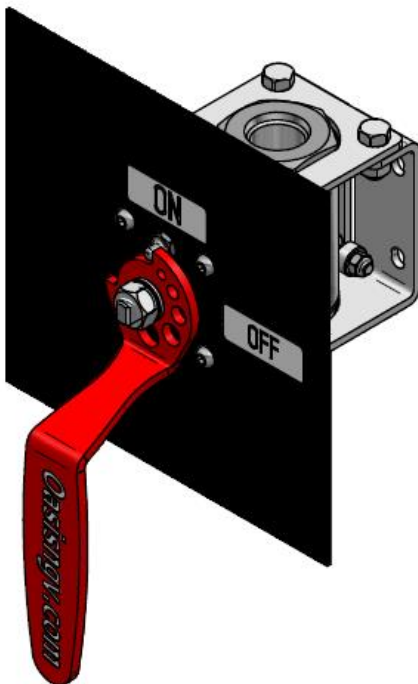
Stop pin tightening torque
M5 Handle Pin = 4Nm

6. Install the handle, washer and nut onto the stem and torque the nut.



Handle nut tightening torque
M12 Handle Nut = 6Nm

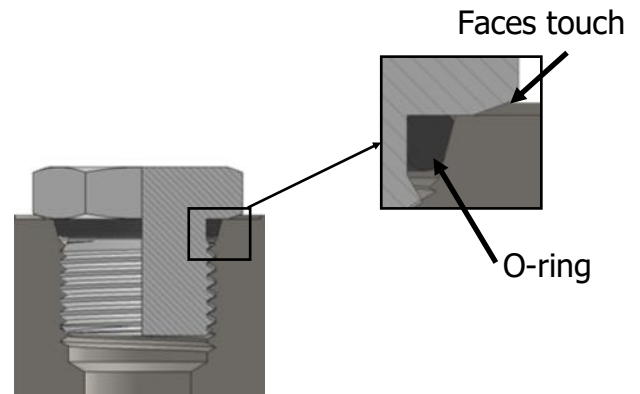
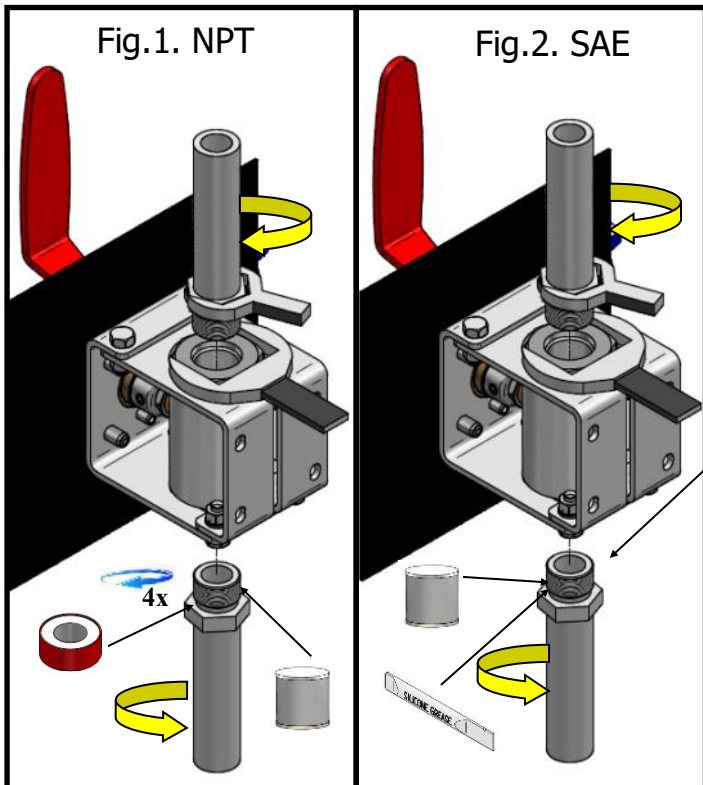
7. The front handle assembly is complete.



8. Fig. 1. Apply thread tape, followed by anti-seize, to thread when installing NPT fitting.

Fig. 2. Apply anti seize to thread and silicone grease to the O-ring when installing SAE fitting. Install the O-ring on the fitting if not pre-installed.

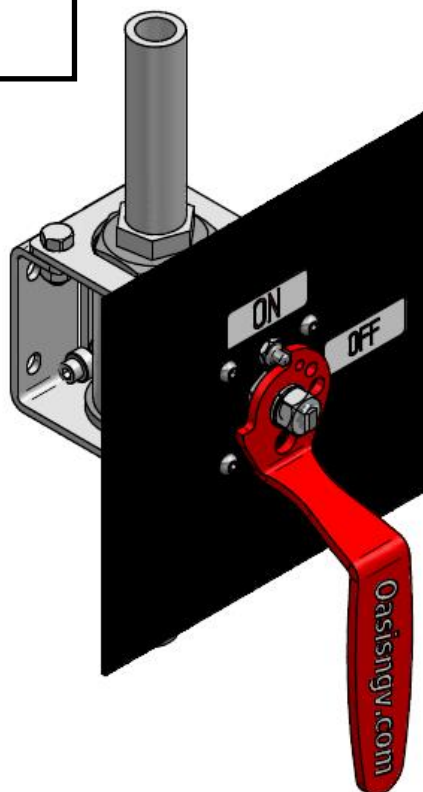
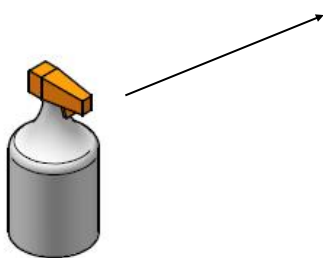
9. Screw the fitting into the body and torque to the fitting suppliers recommended tightening torque. When installing SAE fittings, ensure O-ring is seated as shown below



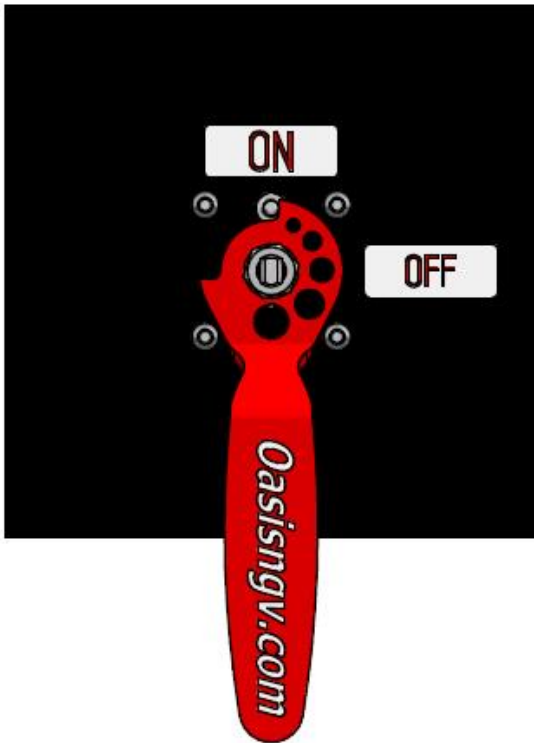
O Ring Sizes for SAE ports
BV706 = 912

10. Operate valve handle 5 times (open and close) to bed in seats.

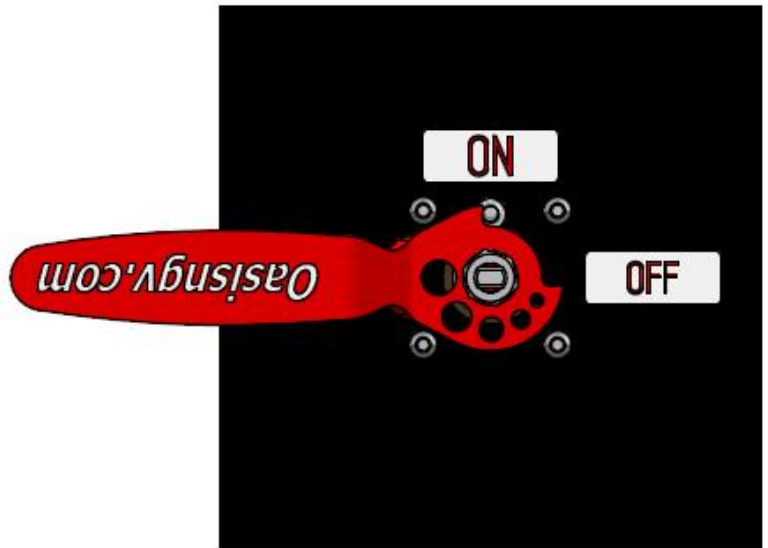
Check valve for leaks.



1. Turn handle to achieve required operation.



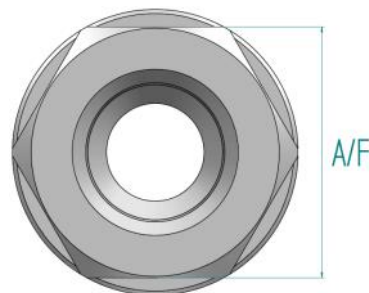
Valve in open position



Valve in closed position

Recommended Spanners for End Caps:

BV702 = 25mm
BV703 = 28mm
BV704 = 34mm
BV706 = 50mm
BV708 = 60mm



Service Kit Parts

BV706**

2 x Seats^



1 x Stem



1 x Ball



1 x Gland



1 x Silicone



1 x Cap O-ring



1 x Locking Tab*



1 x Cap Backup O-ring



2 x SAE Fitting O-rings



(BV706 - 912 Nitrile 90,
916 Nitrile 90 for Matched
Bore Valves)

- 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, 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)



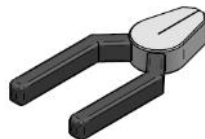
Pick Tool
Part Number:
TOOL-PICK
(Sold separately)



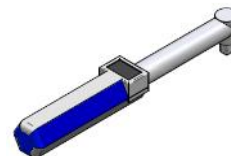
Oasis Plastic Tool
Part Number:
TOOL-BVASSY
(Sold separately)
or Similar



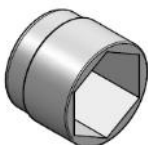
Anti Seize Grease
(Loctite 771 or
Similar)
For All Threads



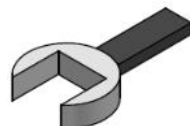
Pliers



Torque Wrench



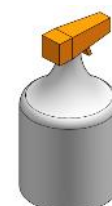
Sockets



Spanner
(Wrenches)

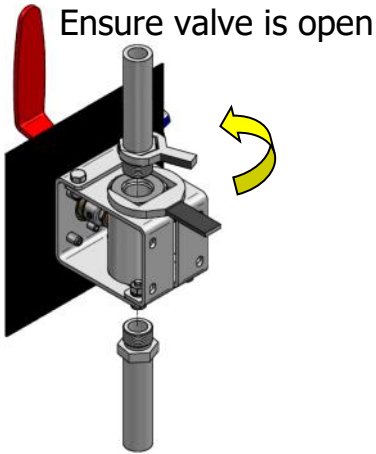


Small flat
screw driver

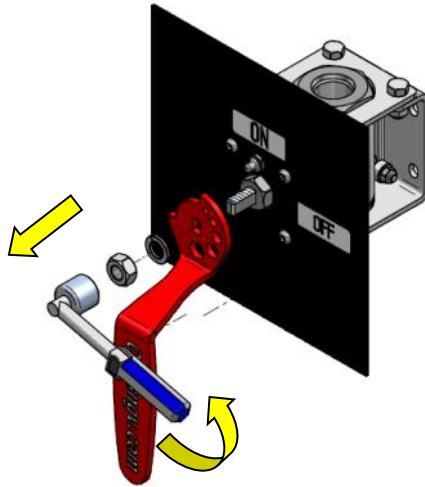


Snoop or
Soapy Water

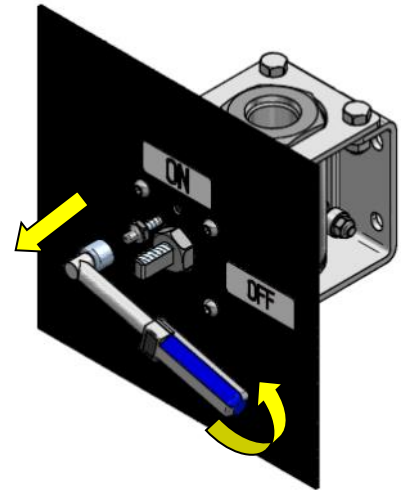
1. Remove plumbing from valve.



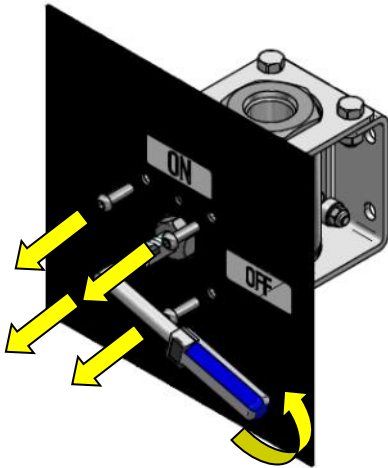
2. Remove handle from valve.



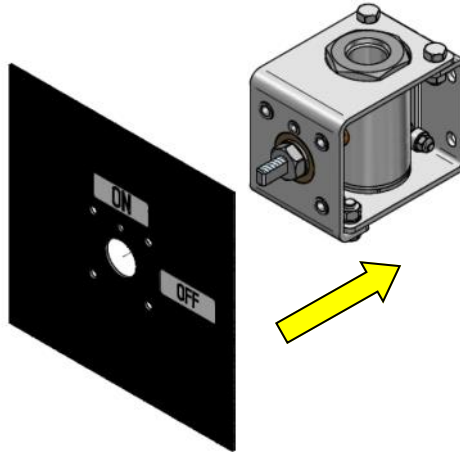
3. Remove handle stop pin.



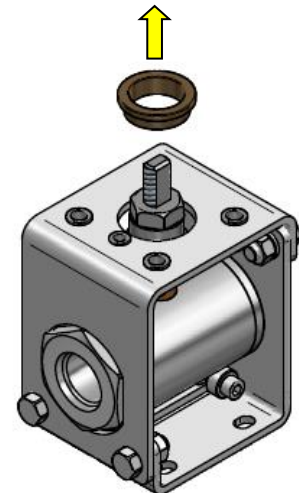
4. Remove panel mounting screws.



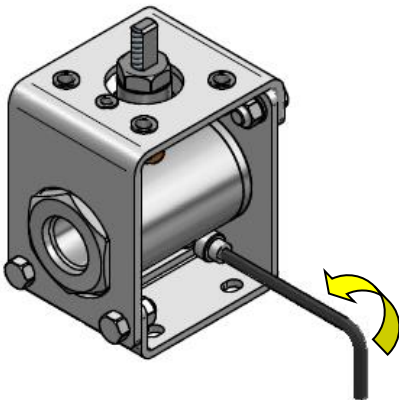
5. Remove valve from the panel.



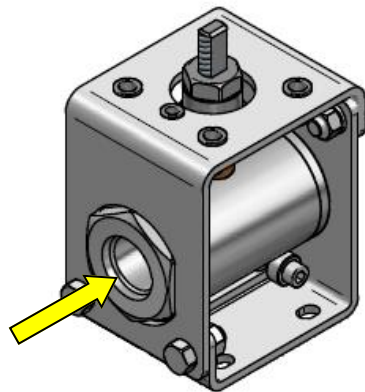
6. Remove handle bush.



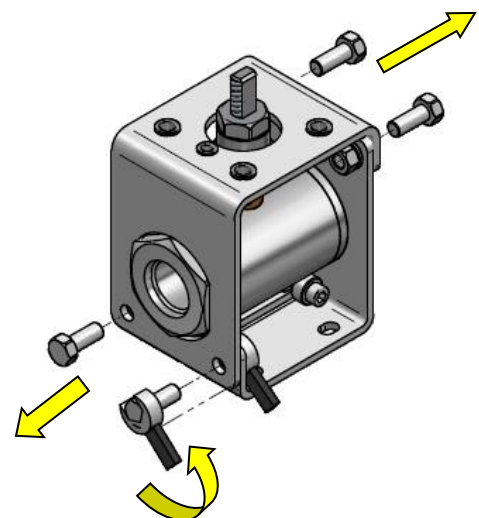
7. Loosen valve pinch bolt.



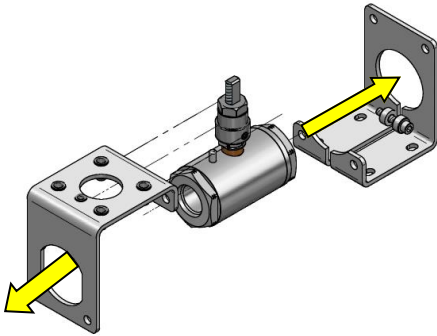
8. Push valve forward inside bracket.



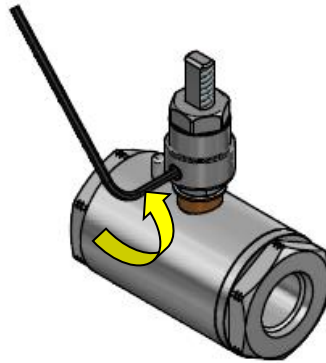
9. Remove 4 x bracket bolts.



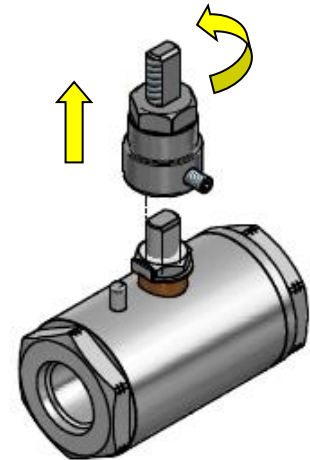
10. Remove bracket from valve.



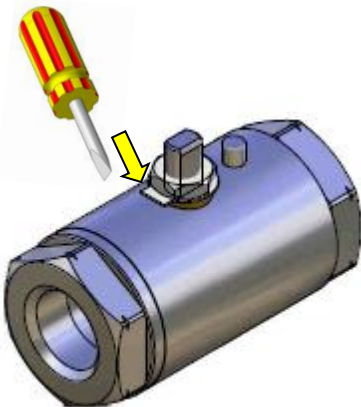
11. Loosen the handle extension grub screws x2.



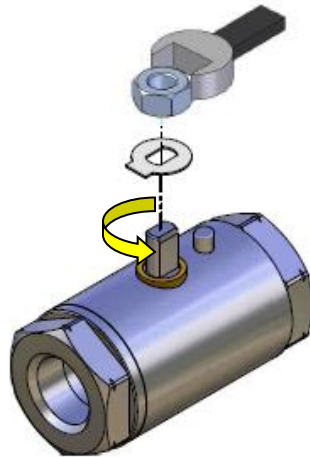
12. Remove handle extension.



13. Fold down metal tab.



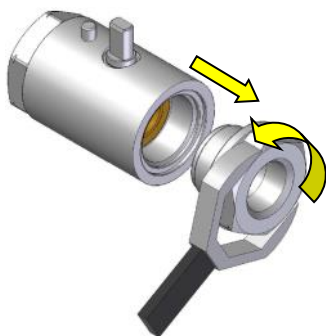
14. Remove nut and tab.



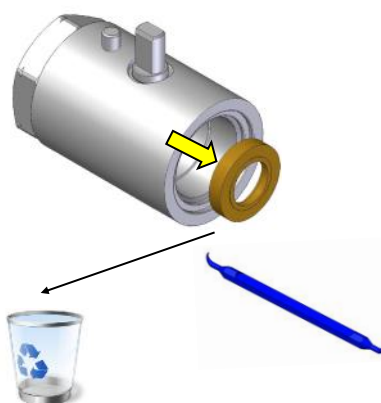
15. Discard gland.



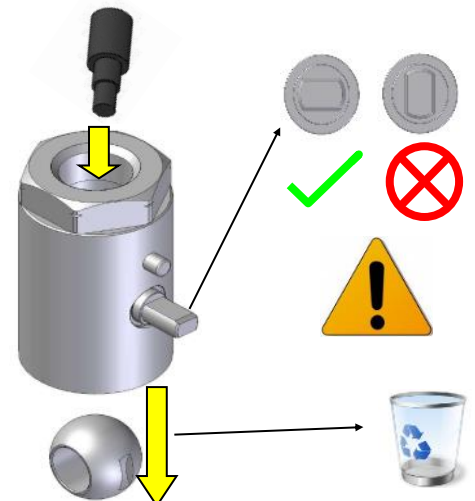
16. Remove end cap.



17. Discard seat.

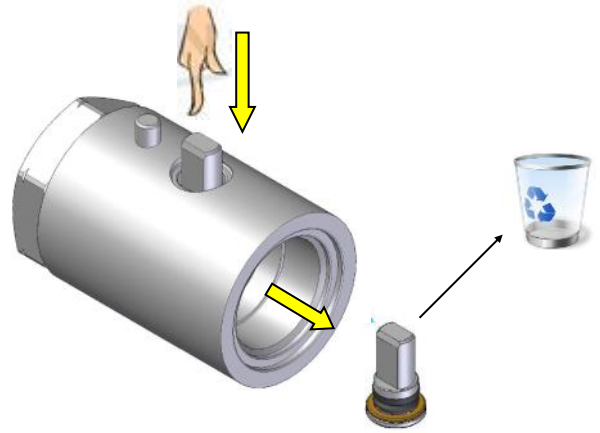


18. Remove ball.

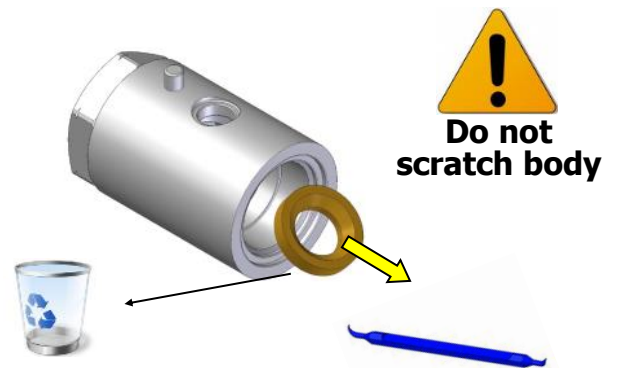


BV706

19. Remove stem first.

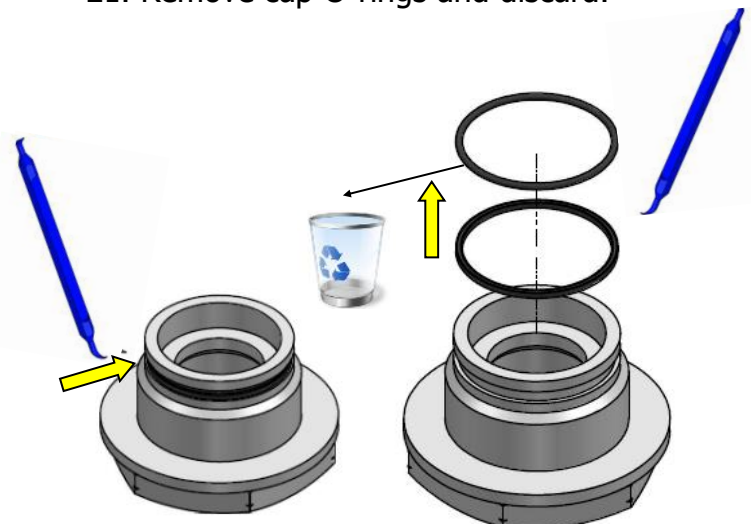


20. Remove and discard 2nd seat.

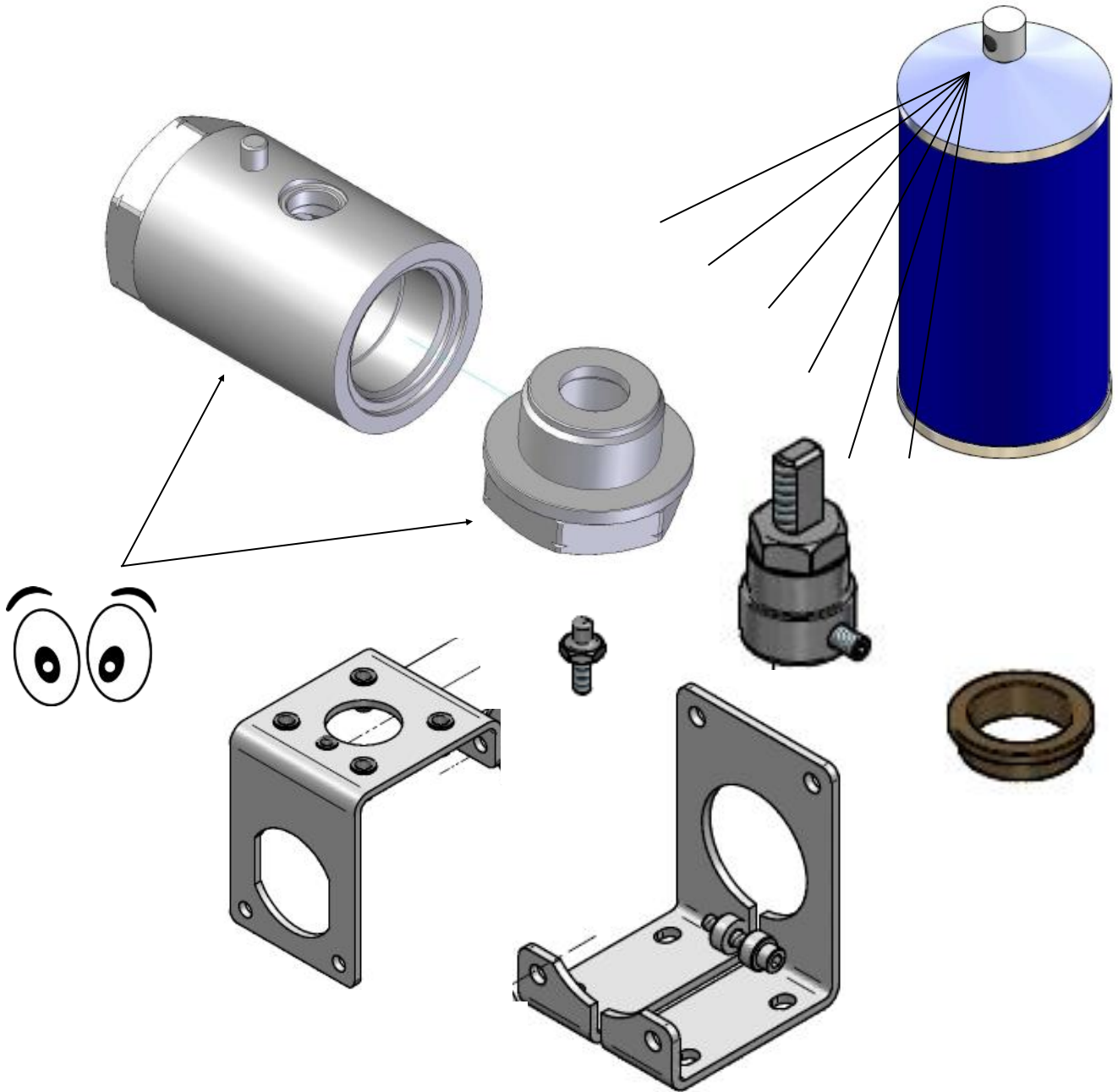


BV706

21. Remove cap O-rings and discard.

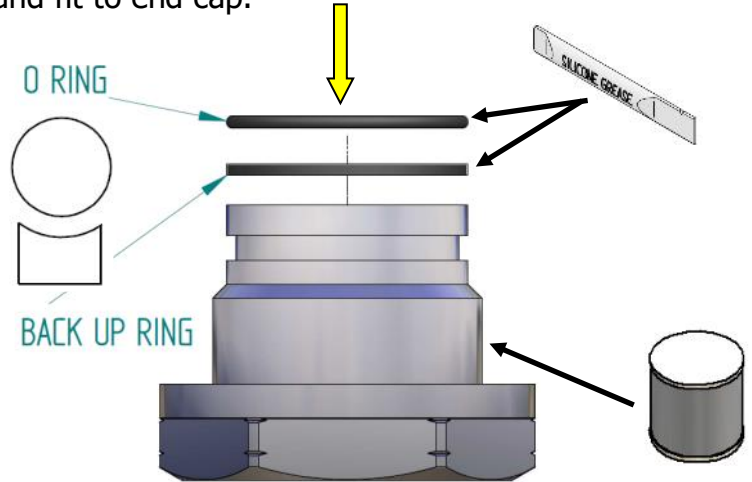


22. Clean body and end cap, visually check parts for damage.



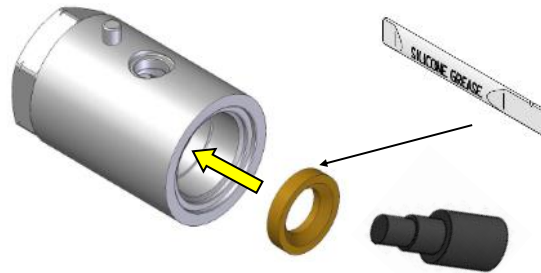
BV706

1. Apply silicone grease to O-ring and backup and fit to end cap.

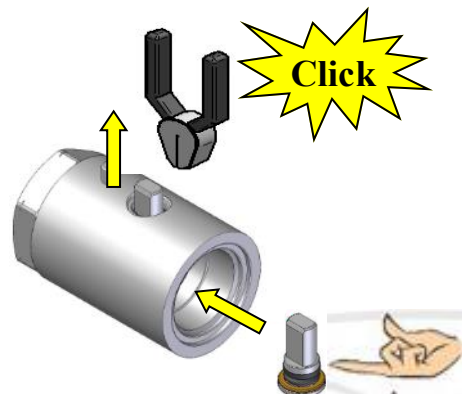


BV706

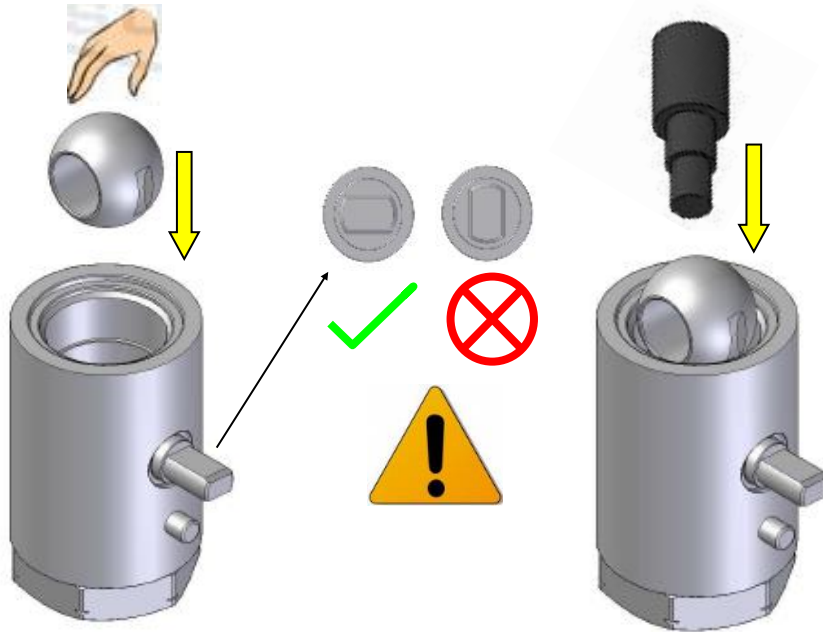
2. Apply silicone grease to new seat and install. Take care not to pinch O-ring when installing low pressure seat.



3. Insert stem assembly.

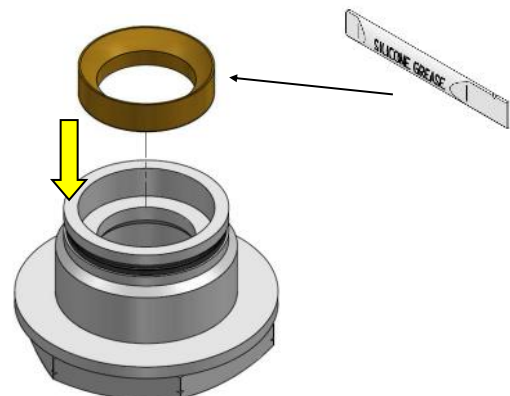


4. Insert ball.



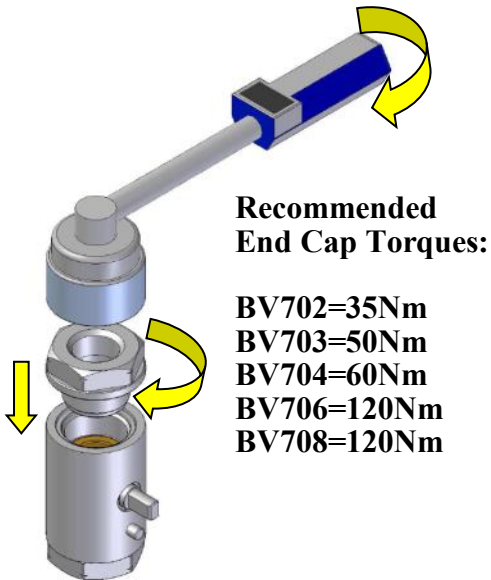
BV706

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



BV706

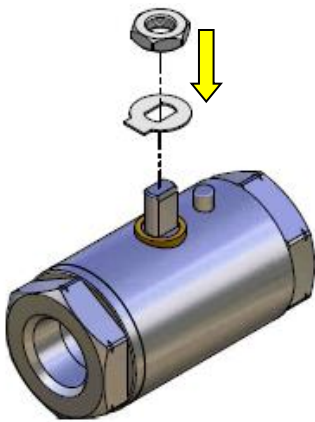
6. Tighten on end cap.



7. Install gland.



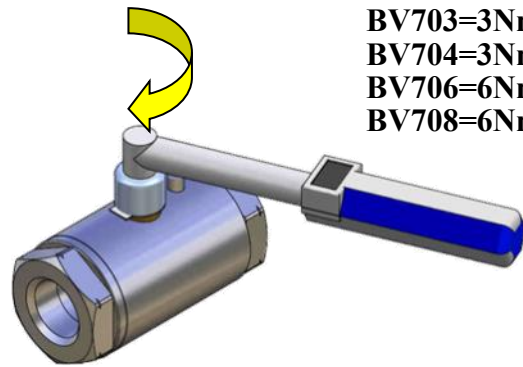
8. Install the lock tab and the nut.



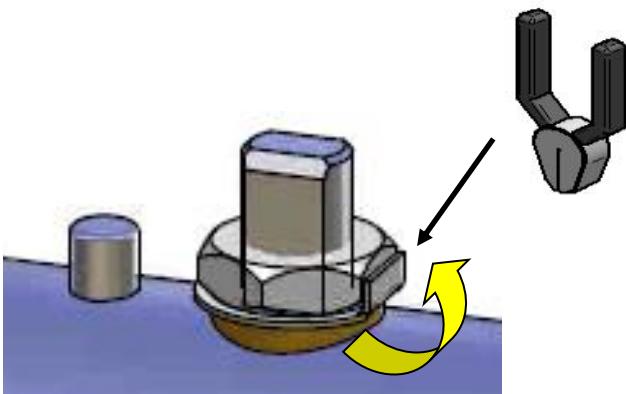
9. Tighten stem nut.

**Recommended
Handle Nut Torques:**

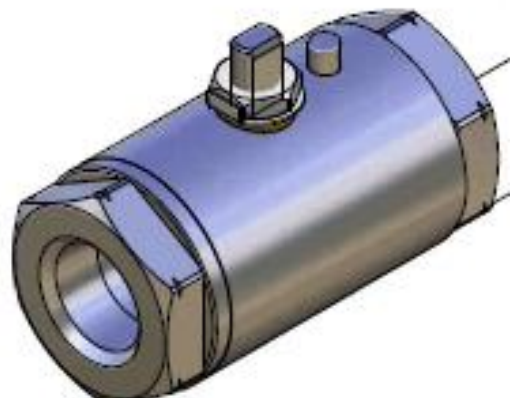
- BV702=3Nm
- BV703=3Nm
- BV704=3Nm
- BV706=6Nm
- BV708=6Nm



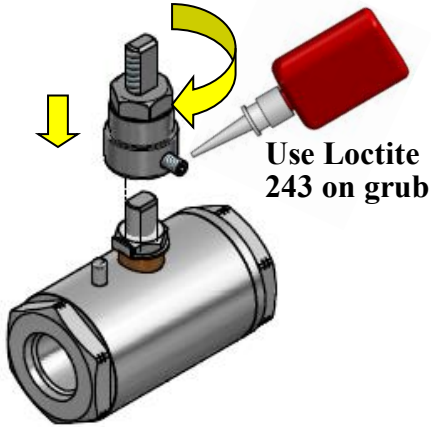
10. Using pliers bend the lock tab upwards so that it is tight against the nut .



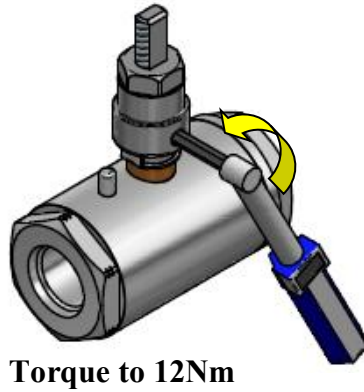
11. Servicing complete, follow on for re-installation of product.



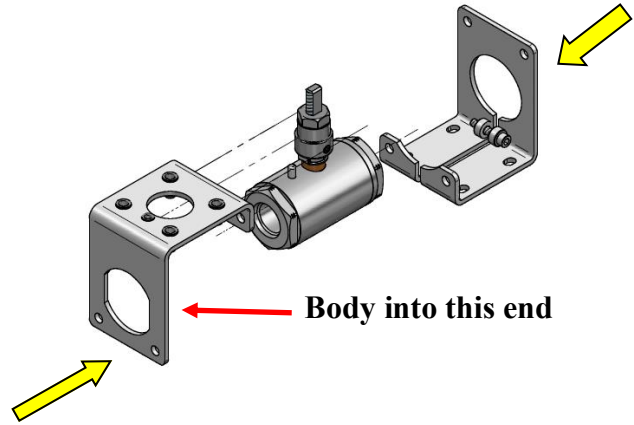
12. Loctite 2x grub screws and install handle extension. Bottom out extension then align with stem flats



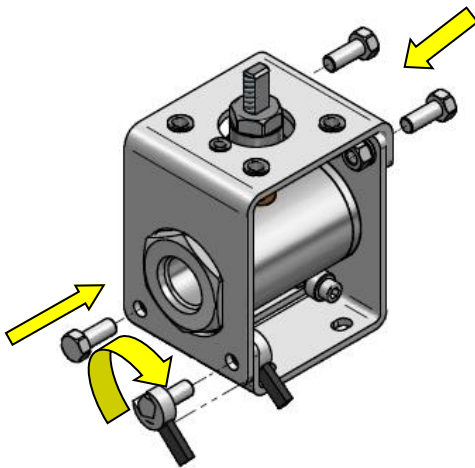
13. Torque handle extension grub screws x2.



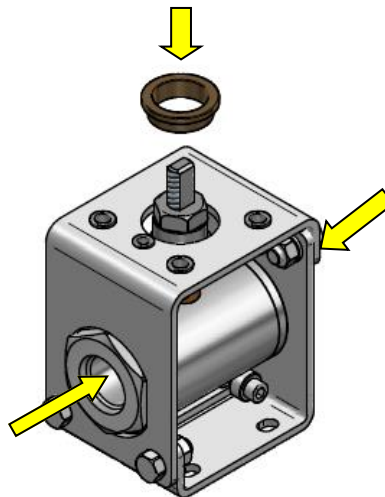
14. Install valve into the bracket.



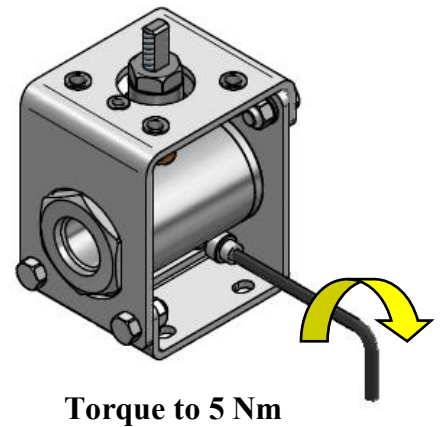
15. Install bracket bolts.



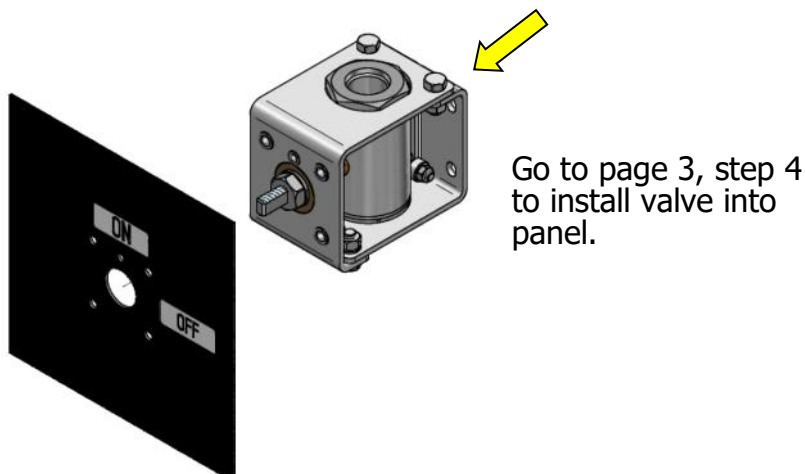
16. Install handle bush.



17. Tighten valve into bracket.



18. Install valve into panel.

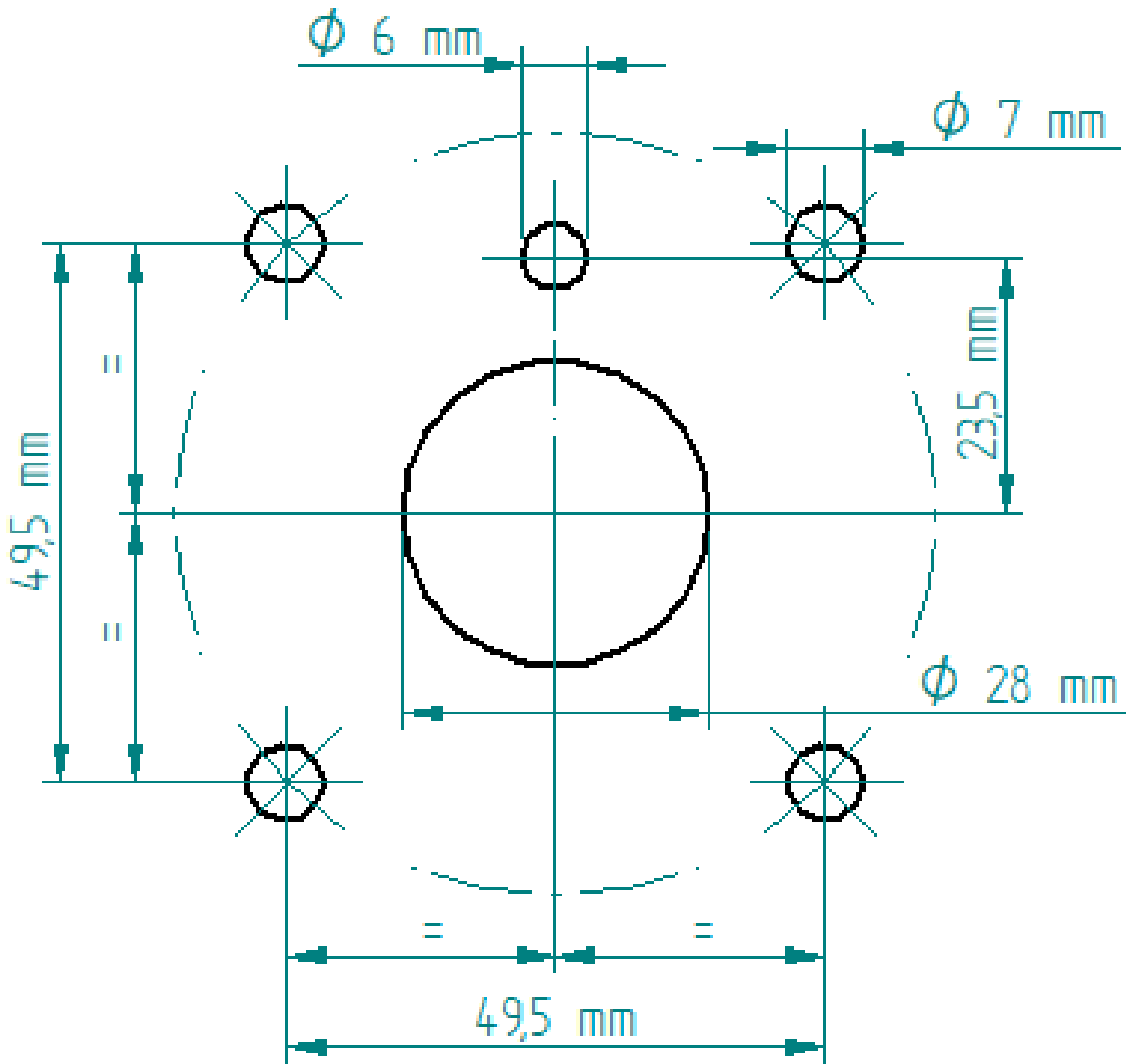


Important: Actuate valve 4 times before use to ensure initial sealing.

BV706 Panel Mount Mounting Template

NOTE:-

Verify product measurements prior to drilling, printer configurations may not be set to print mounting template to actual size



Always use correct PPE for the job, it is recommended eye, ear and foot protection is used at a minimum



Foot Protection



Hearing Protection



Safety Glasses