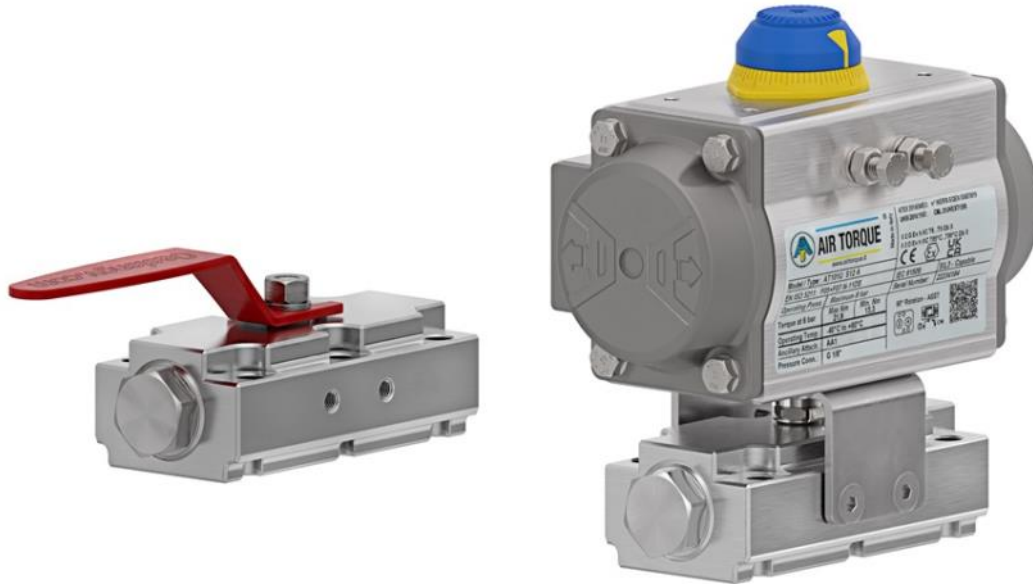


Oasis



MV204 & MV206 Manifold 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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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

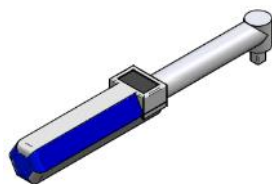


Ensure the system is vented and isolated before any installation or servicing work is carried out.

Tools Required



Allen Key
Actuator mounting
bolts—4mm & 5mm



Allen Key Torque Wrench
Actuator bracket bolts:
4mm & 5mm
Mounting Bolts:
MV204—6mm
MV206—8mm



Metal corrosion inhibitor
CRC soft seal or similar
For mounting bolts only



Spray bottle
(Snoop or soapy water)



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



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

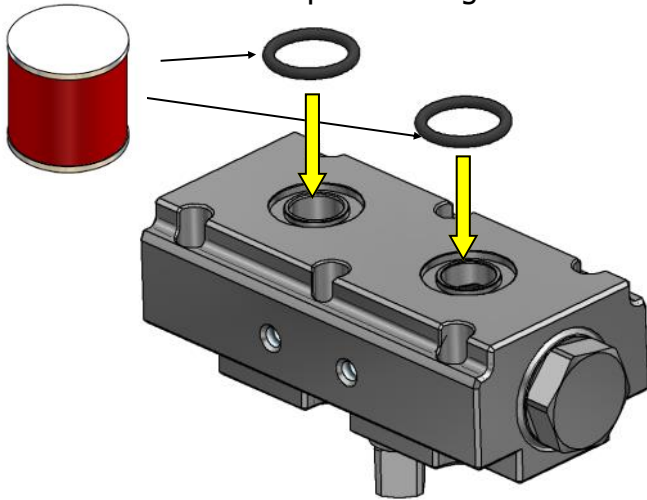
Important

Oasis recommends the use of class 12.9 plain black socket head cap screws with this product.

Some surface corrosion is normal on plain black cap screws over time.

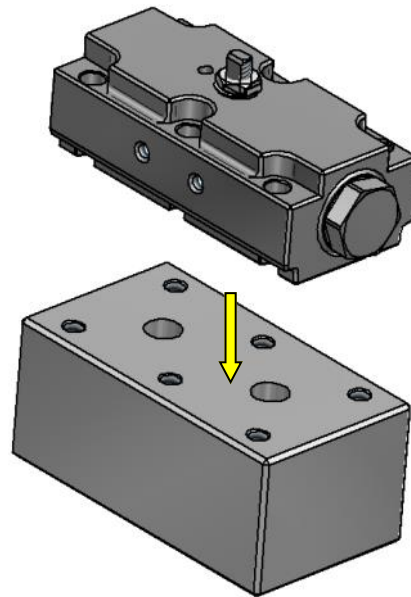
The use of zinc plated cap screws is NOT recommended by Oasis due to potential weakening issues related to hydrogen embrittlement during the plating process of zinc plated cap screws.

1. Grease and place O-rings.



Manifold O-rings are supplied and packaged separately.

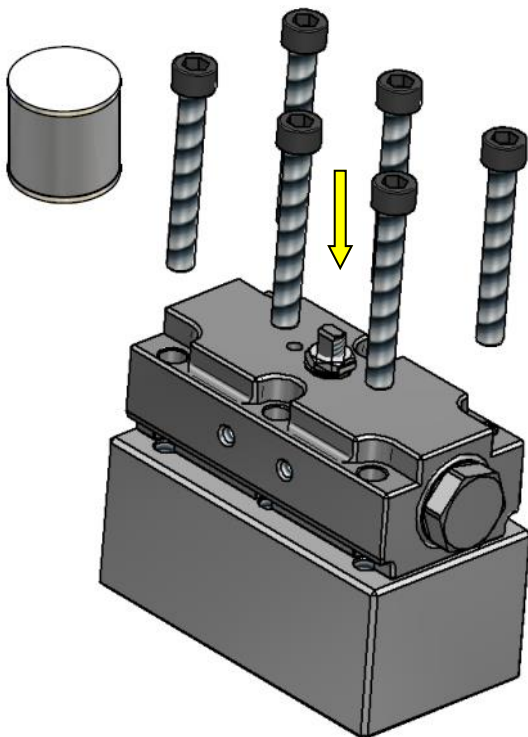
2. Position valve.



Note: Image shows actuated valve with no bracket fitted.

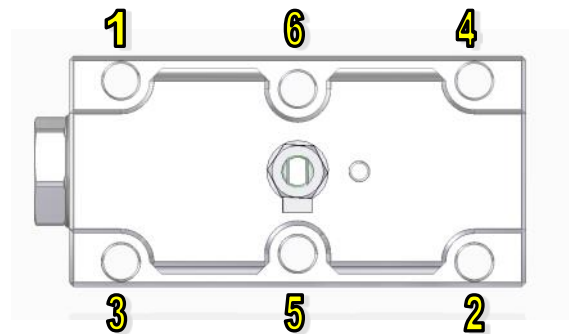
Manual valves will require removal of the handle before fitting to the manifold.

3. Apply Anti-seize grease to the mounting bolts and thread in by hand. See page 14 for recommended sizes.

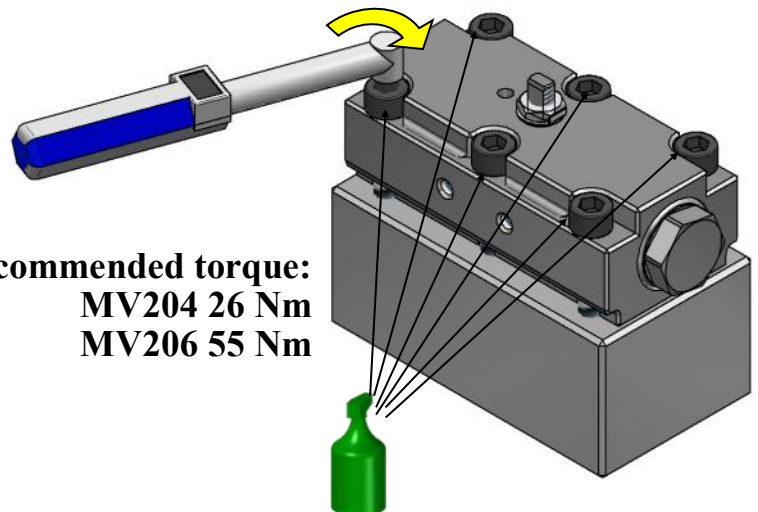


4. Tighten the 6 mounting bolts and apply corrosion inhibitor.

! Tighten and torque mounting bolts in a star pattern as shown below.

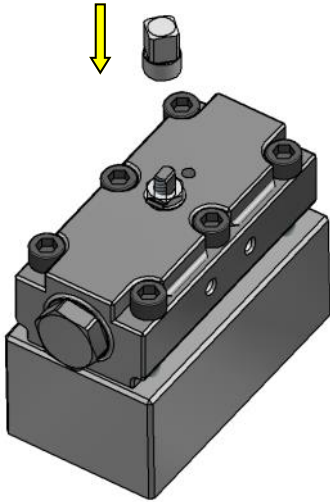


Recommended torque:
MV204 26 Nm
MV206 55 Nm

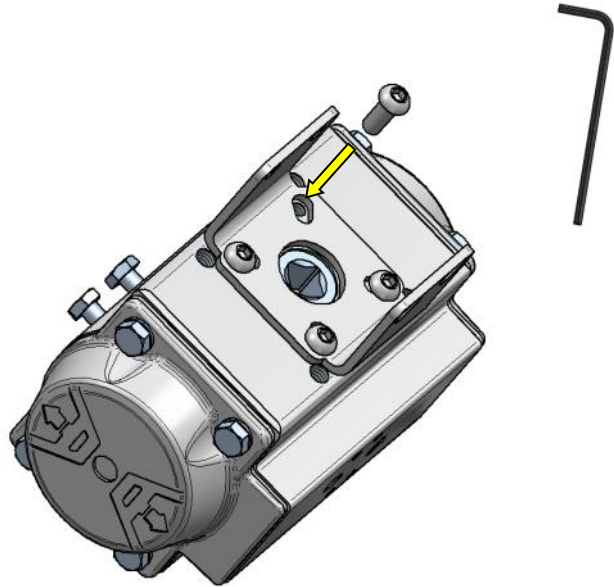


ACTUATED VALVES

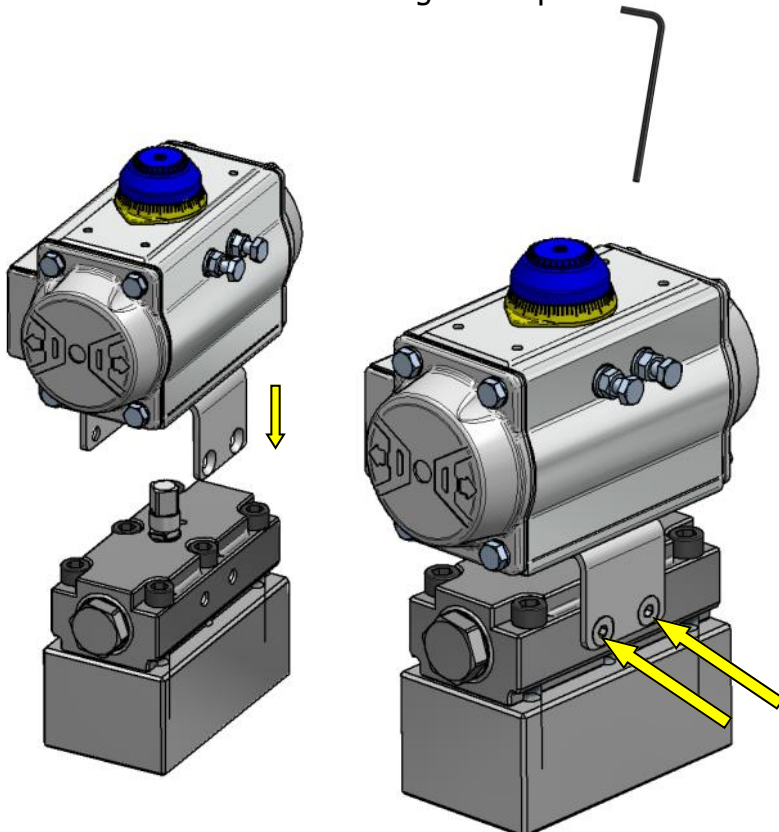
5. **Actuated valve:** Install drive dog over stem.



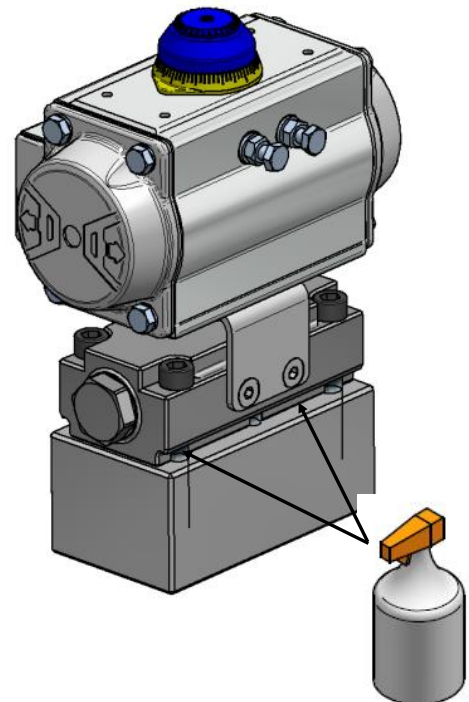
6. Attach actuator bracket to actuator and tighten.



6. Mount actuator and tighten cap screws.

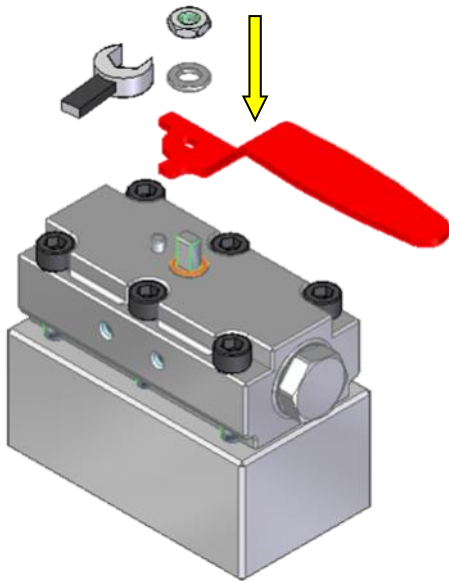


7. Leak test connection with Snoop or soapy water.

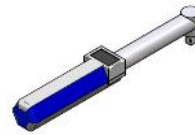


MANUAL VALVES

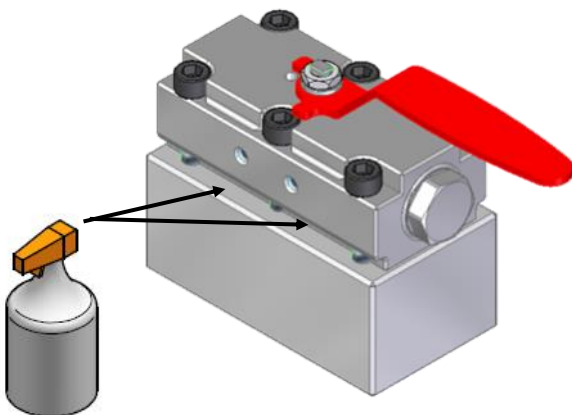
5. Install handle, spring washer and stem nut. Torque to spec.



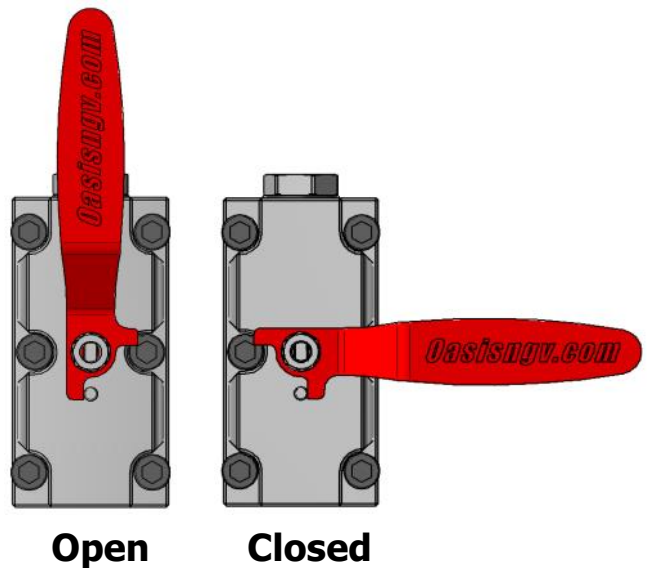
Recommended torque:
MV204 3 Nm
MV206 6 Nm



6. Leak test connection with Snoop or soapy water.



7. Check handle orientation is in the correct position (open or closed) for your application.



Service Kit Parts

2 x Seats



1 x Stem



1 x Ball*



1 x Locking Tab
(for actuated MV only)



1 x Gland



1 x Silicone



1 x Cap O-ring



1 x Retainer O-ring



2 x Sealing Face O-rings



1 x Cap Backup O-ring



1 x Retainer O-ring



The Complete Oasis Seal Kit must be used

Tools Required



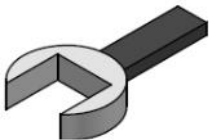
Cleaner (Warm Soapy
Water or Similar)



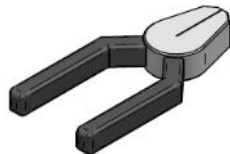
Pick Tool
Part Number:
TOOL-PICK
(Sold separately)



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



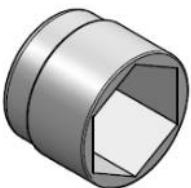
Spanners
(Wrenches)



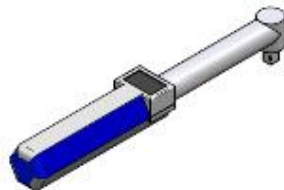
Pliers



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



Sockets



Torque Wrench



Allen Key
6mm
8mm



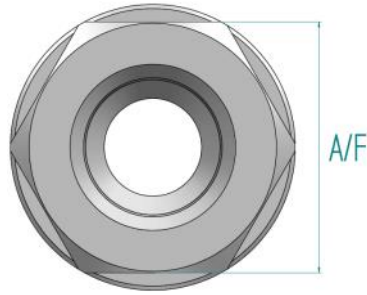
Screw driver



Spray bottle
(Snoop or soapy water)

Hex End Cap Sizes (A/F)

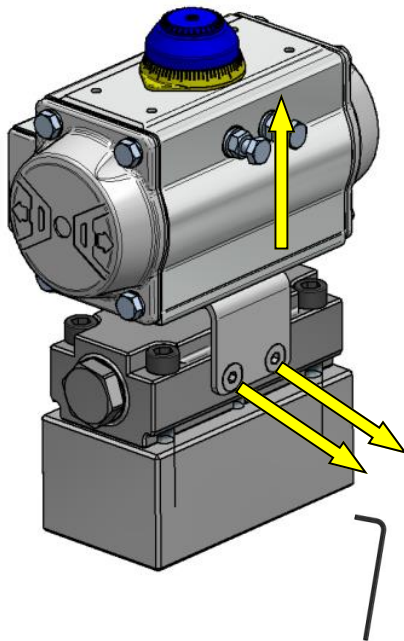
MV204=24mm
MV206= 40mm



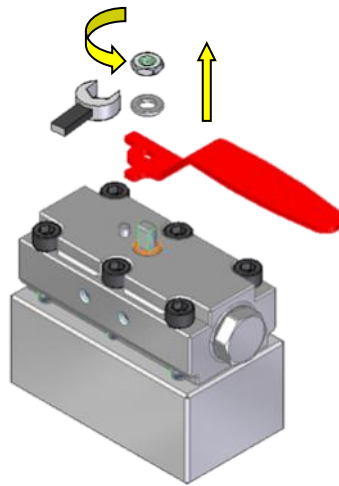
Stem Nuts Sizes (A/F)

MV204=13mm
MV206=19mm

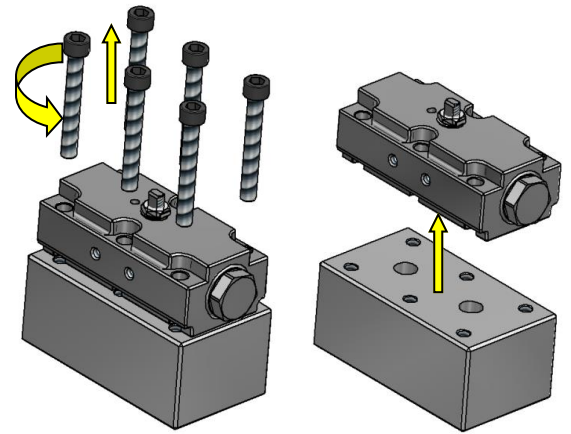
1a. Remove actuator from valve.



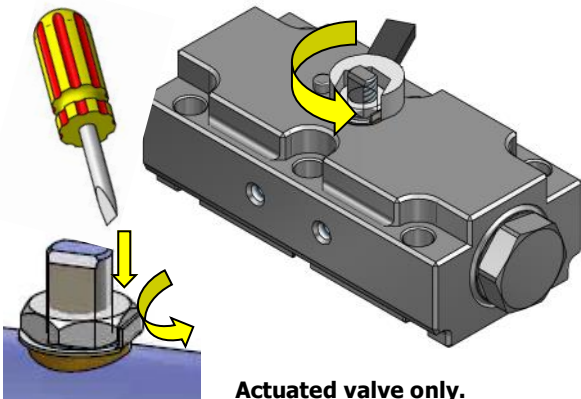
1b. Remove handle.



2. Undo mounting bolts and remove manifold valve from block.

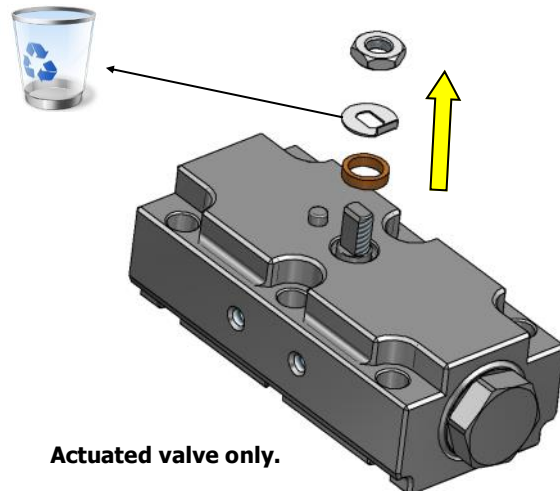


3. Remove stem nut (first release locking tab).



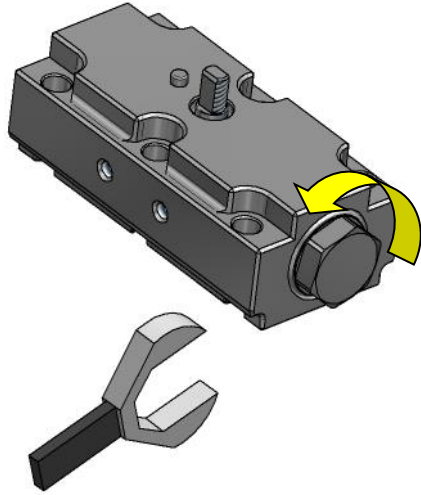
Actuated valve only.

4. Discard locking tab and gland.

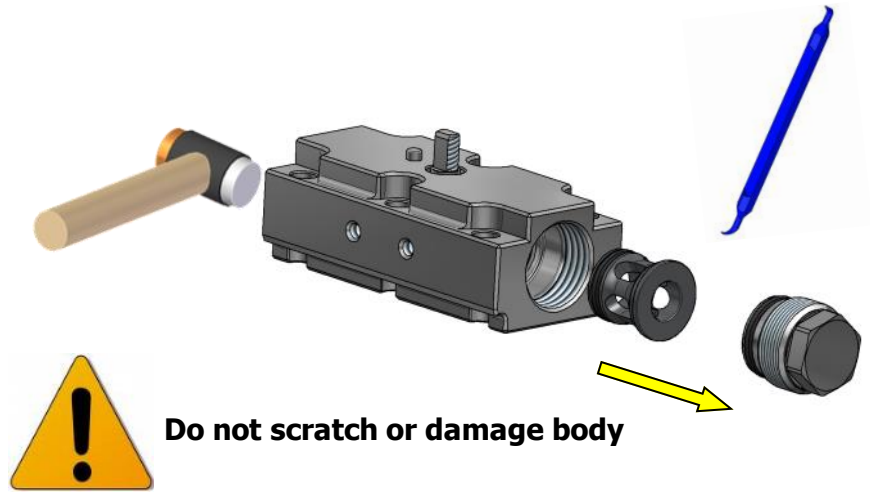


Actuated valve only.

5. Unscrew and remove the end cap.

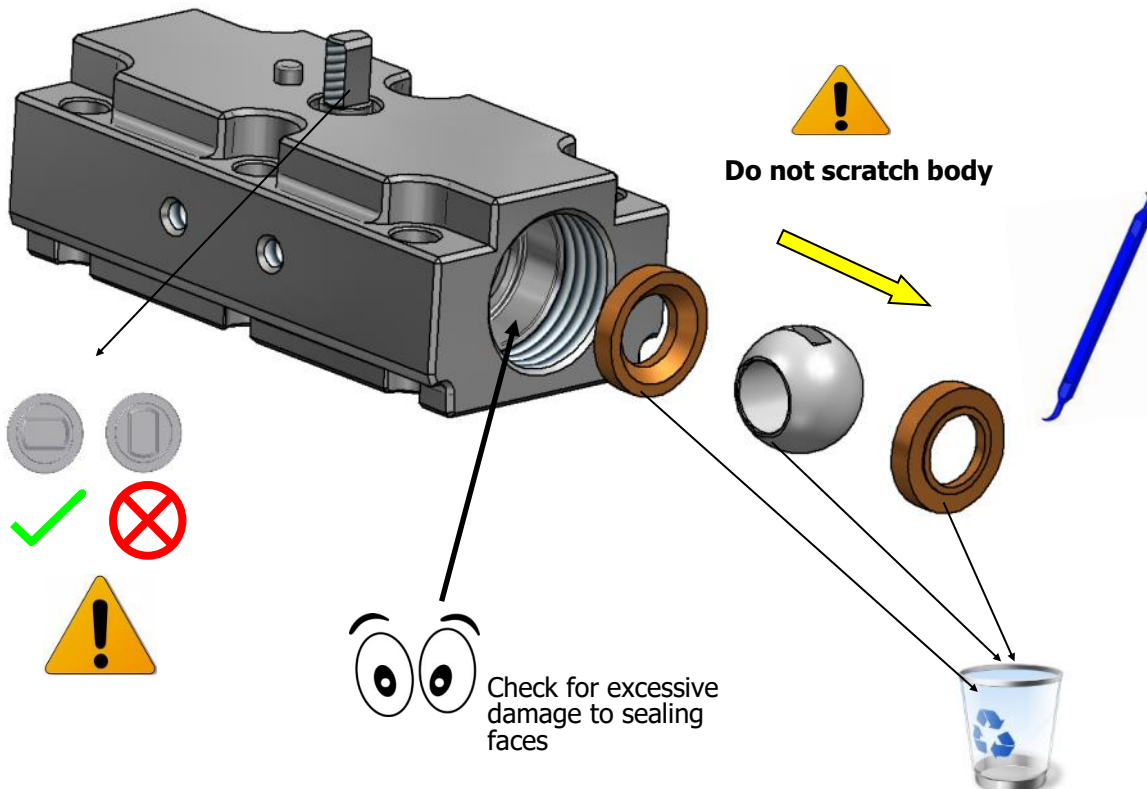


6. Remove the seat retainer.

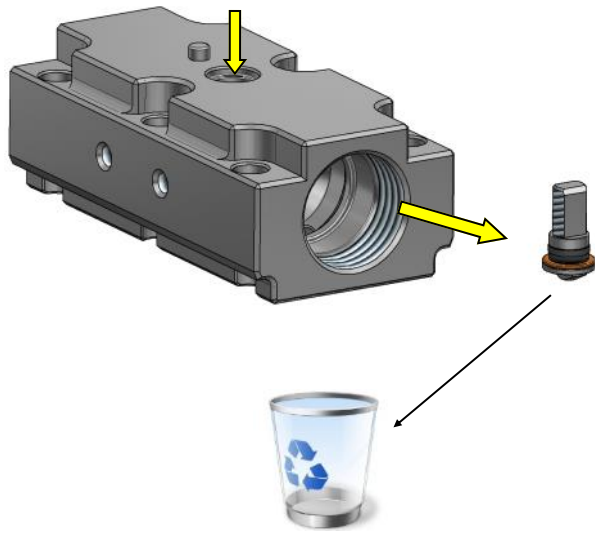


The retainer may be unseated by gentle tapping with a soft mallet, on the opposite face.

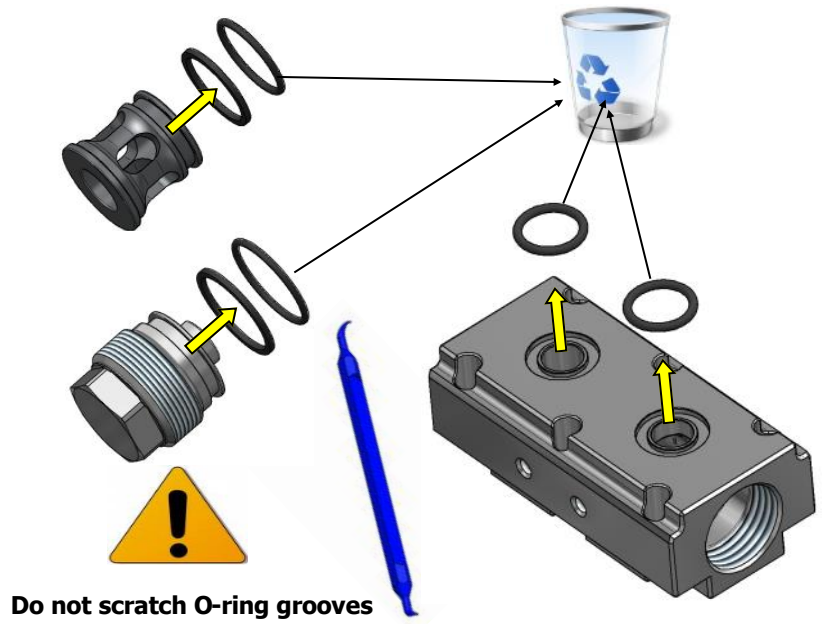
7. Remove and discard the seats and ball.



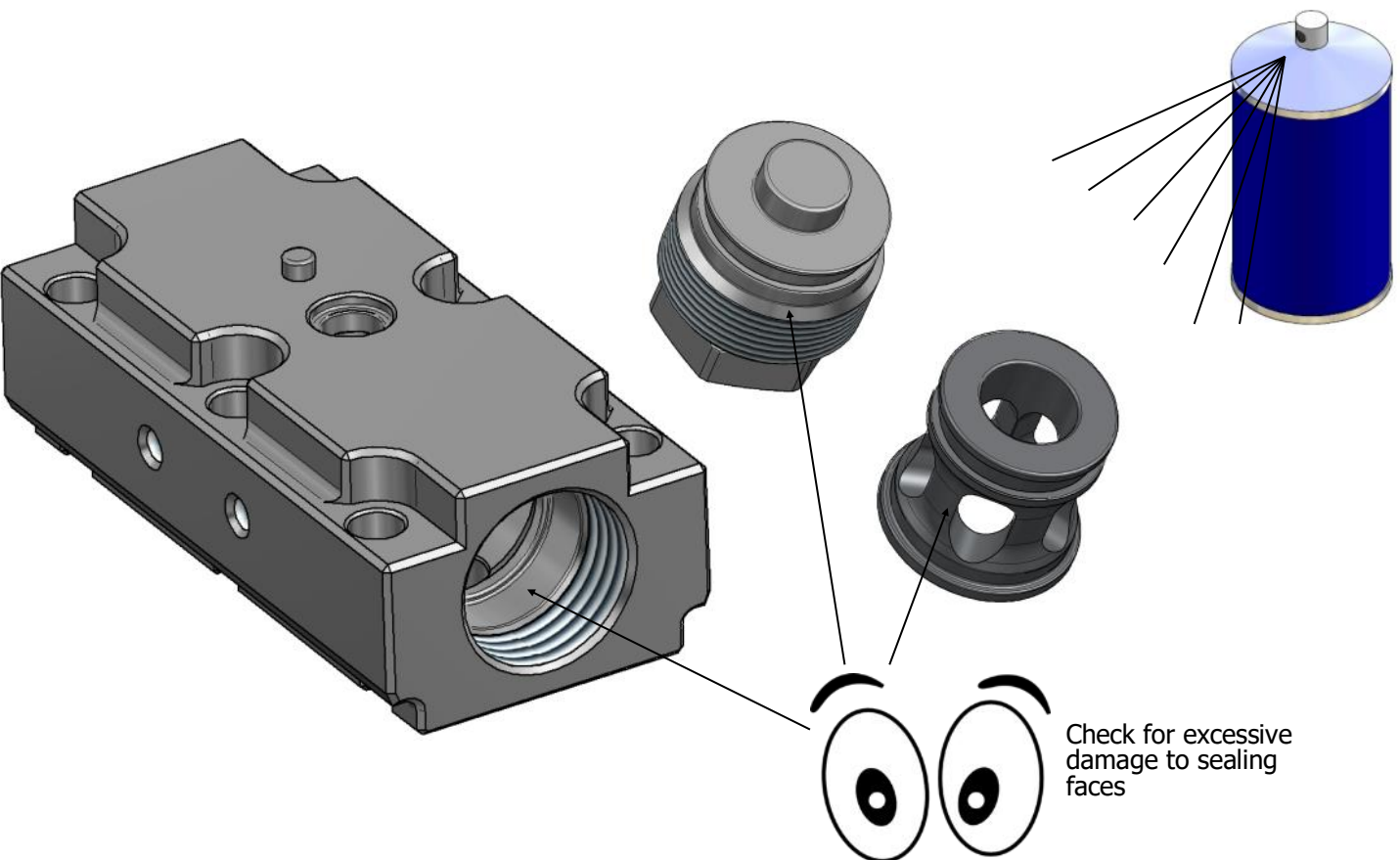
8. Remove stem and discard.



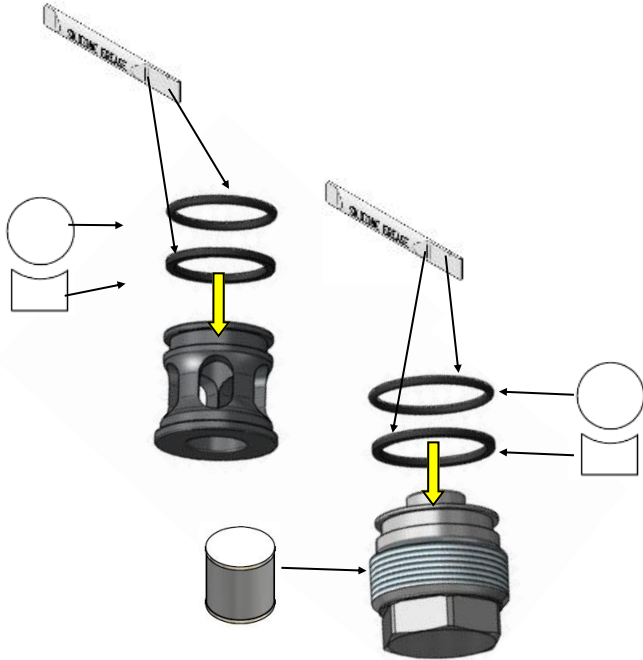
9. Remove O-rings and discard



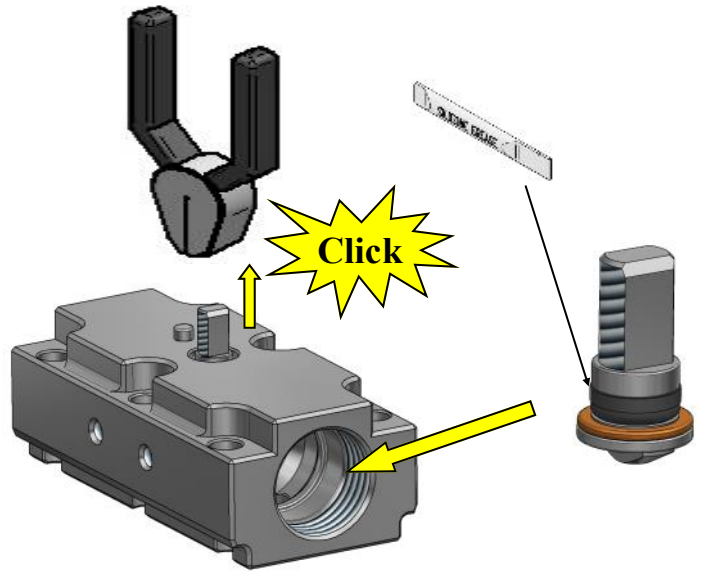
10. Clean body, retainer and end cap. Visually inspect components for damage.



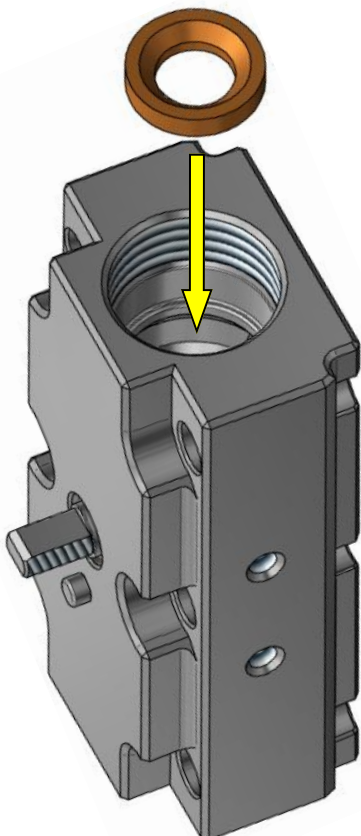
1. Fit O-rings and backups to end cap and retainer.



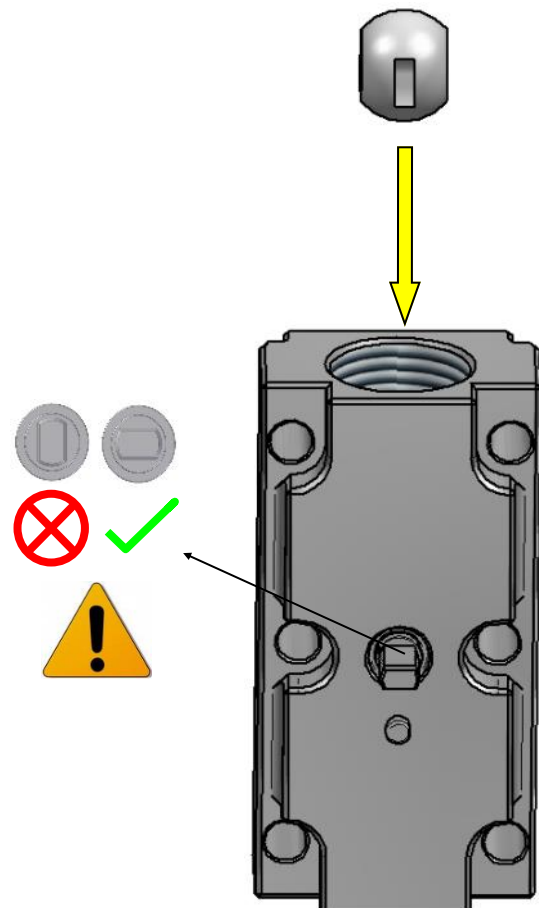
2. Lubricate stem O-rings and install into body. Pull with pliers until it 'clicks' into place.



3. Insert body seat. Ensure curved face is pointing outward.

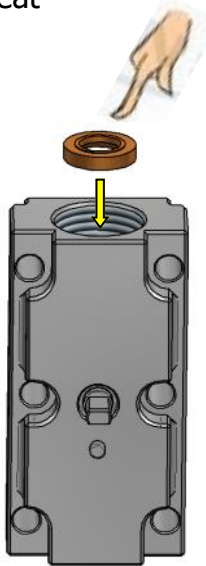


4. Insert ball

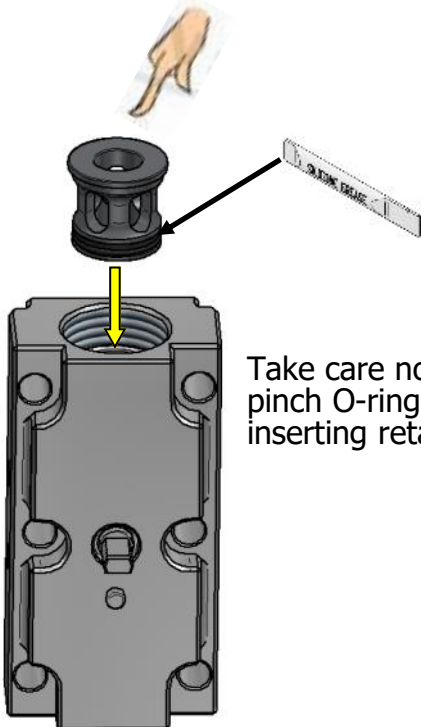


MV204

5. Insert 2nd seat



6. Apply silicone grease to the retainer O-rings and insert retainer into body.



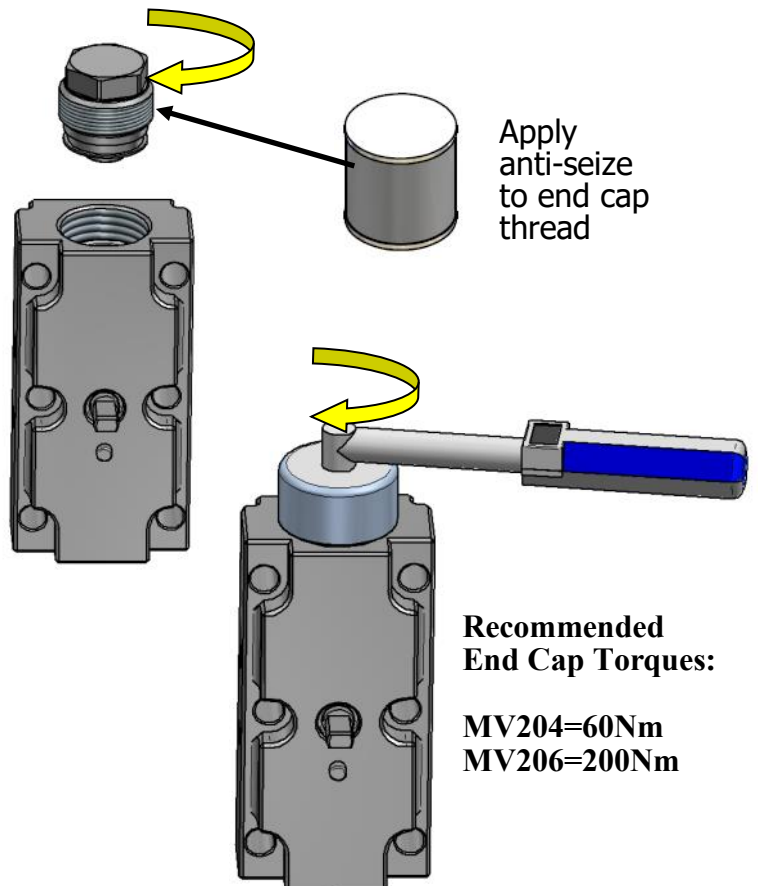
Take care not to pinch O-rings when inserting retainer.

MV206

5. Insert 2nd seat into retainer.



7. Thread in end cap and torque to spec.

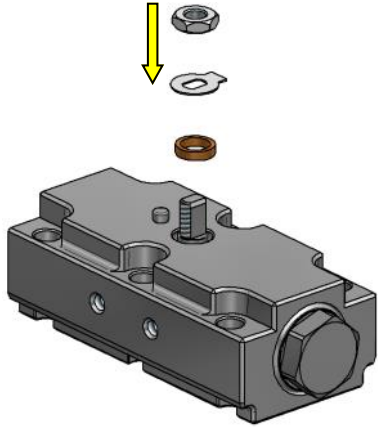


Apply anti-seize to end cap thread

Recommended End Cap Torques:

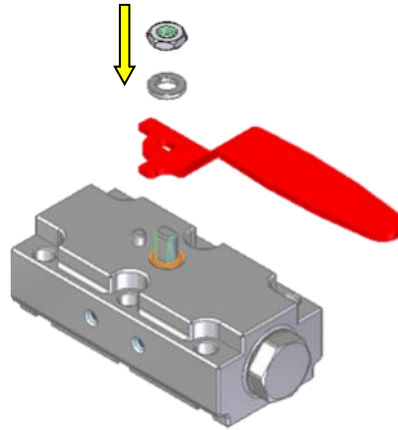
**MV204=60Nm
MV206=200Nm**

8a. Install gland, lock washer and stem nut.



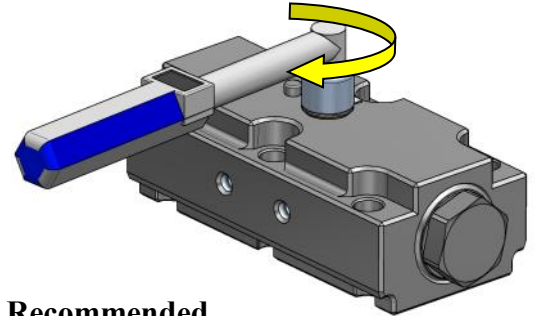
Actuated valve only.

8b. Install gland, handle, washer and stem nut.



Manual valve only.

9. Torque stem nut to specification.



**Recommended
Stem nut Torques:**

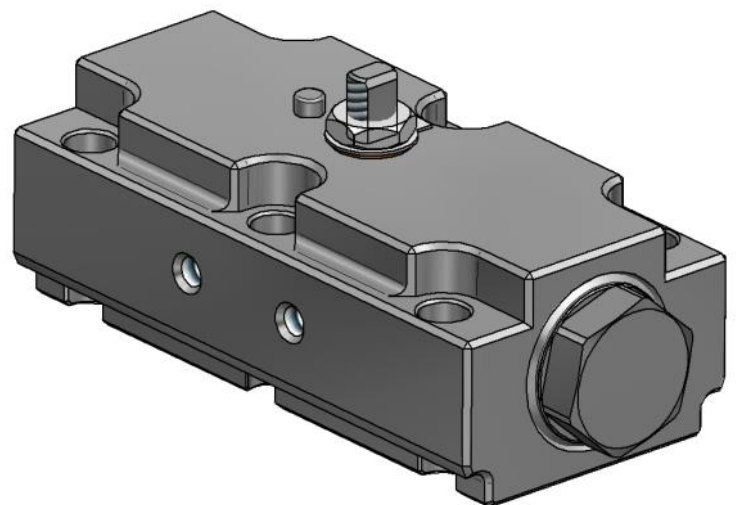
**MV204=3Nm
MV206=6Nm**

10. Fold lock tab on washer onto the nut.

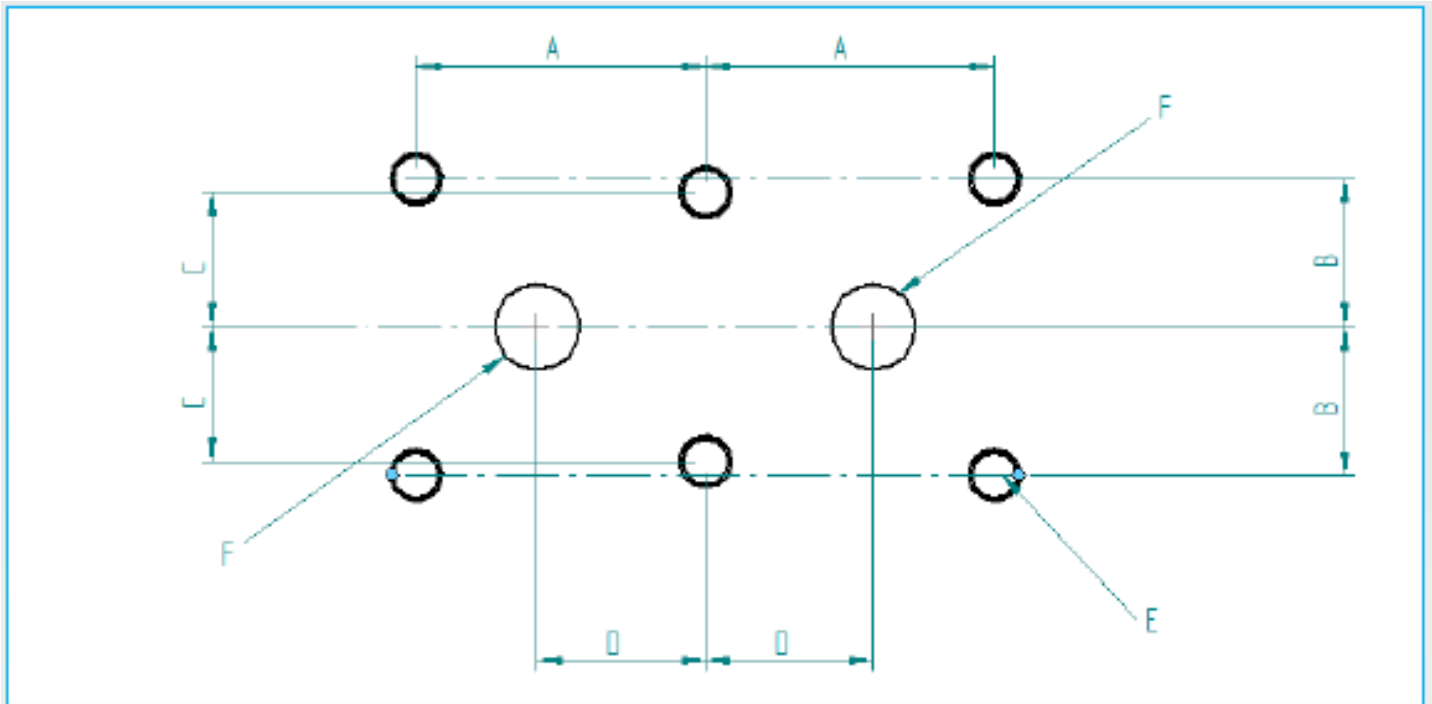


Actuated valve only.

11. Servicing complete. Re-install as in instructed on page 3, leak test on first use using snoop or soapy water.



See specification sheet for full-manifold mating information.



MV200 Series manifold mating surface recommended dimensions

Dimensions. (mm)

Part Code	A	B	C	D	E (Thread - 6x bolt holes)	F (Ports)	G (Surface finish)*
MV204	43.05	22.05	20.05	25.05	M8 - min 35 Deep	12.7 (1/2")	0.8 Ra Max
	42.95	21.95	19.95	24.95			
MV206	57.05	31.55	28.05	31.05	M10 - min 35 Deep	19 (3/4")	0.8 Ra Max
	56.95	31.45	27.95	30.95			

* This surface finish on the sealing face is required for optimum sealing.

The dimensions given are dimensions of the manifold mounting surface, for use with Oasis MV200 Series Manifold Valves. Manifold design, including strength considerations and adherence to relevant standards, as well as testing and certification of the manifold, are the responsibility of the manifold designer.

Dimensions. (mm)

Part Code	Recommended bolt class	Recommended bolt size
MV204	Class 12.9	M8 x 60mm
MV206	Class 12.9	M10 x 80mm