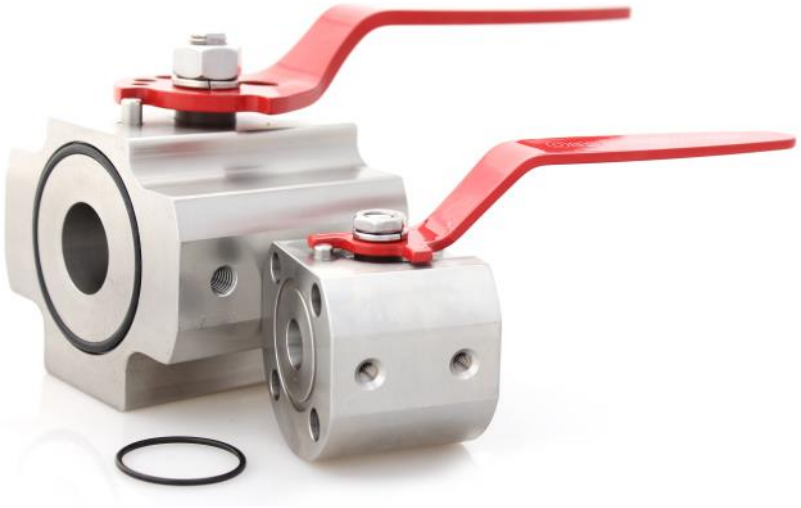

SV100 Series
Sandwich Valve
Instruction Manual

⚠ 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.

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

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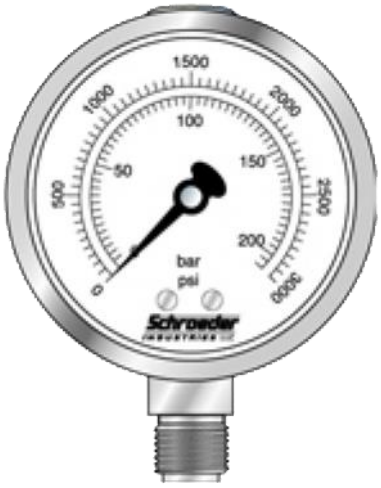
E: info@oasisNGV.com
W: www.OasisNGV.com

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:



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

Important for Canadian systems

The design has been confirmed and tested to standards not recognised 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 conditions:

Design pressure:	**410 bar (6000 psi)**
Design temperature:	**-40 to +85°C (-40 to + 185°F)**
Corrosion allowance:	**0mm (0in)**

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Important

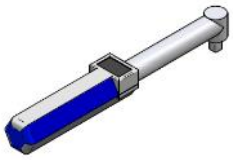
Oasis recommends the use of class 12.9 plain black socket head cap screws with this product.

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

The use of zinc platted 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.

Tools Required

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

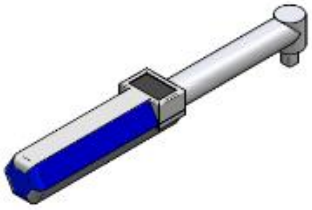


Torque Wrench

Spray bottle
(Snoop or soapy water)

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

Torque wrench hex sizes



SV103= 6mm
SV104= 6mm
SV106= 10mm
SV108= 12mm

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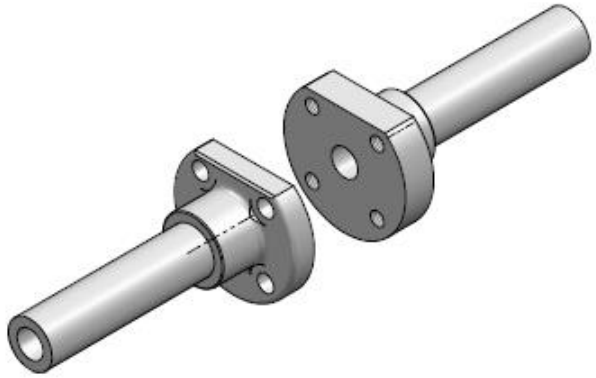
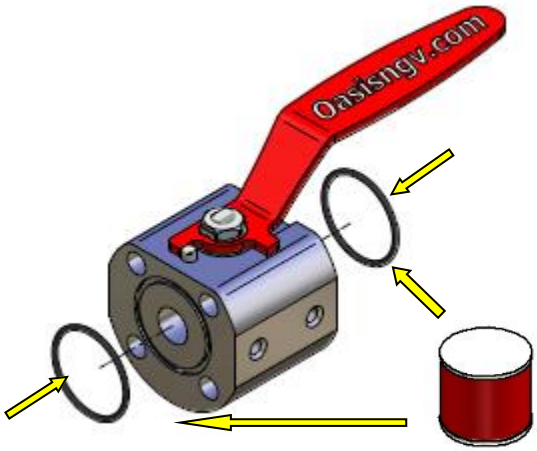
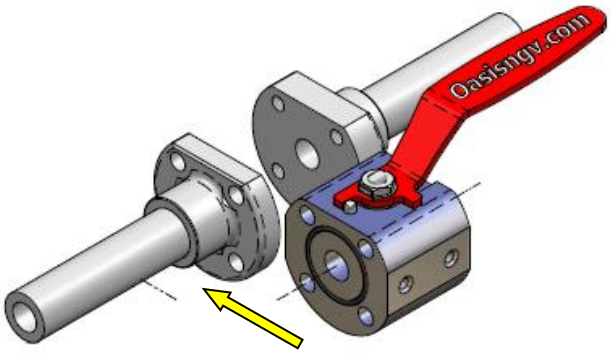
1. Mount sandwich valve end caps.



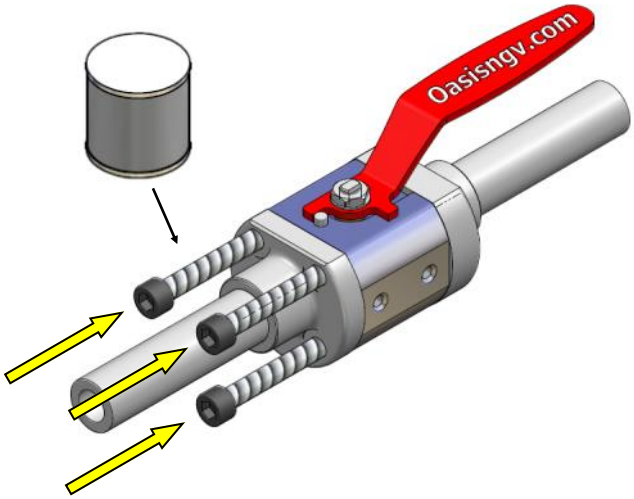
2. Grease O-rings and position in grooves.



3. Position valve.



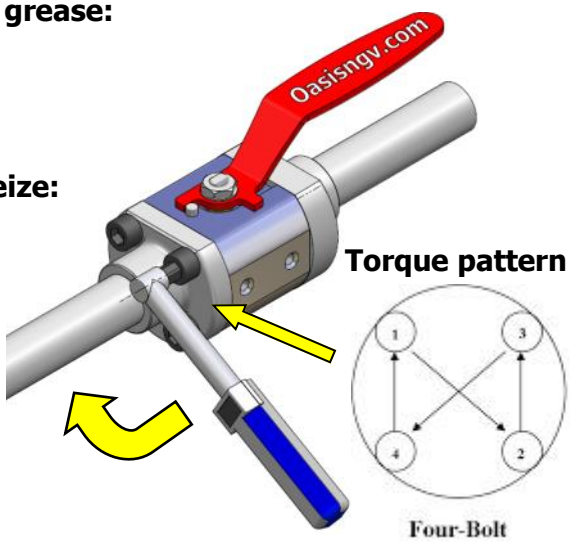
4. Insert bolts.



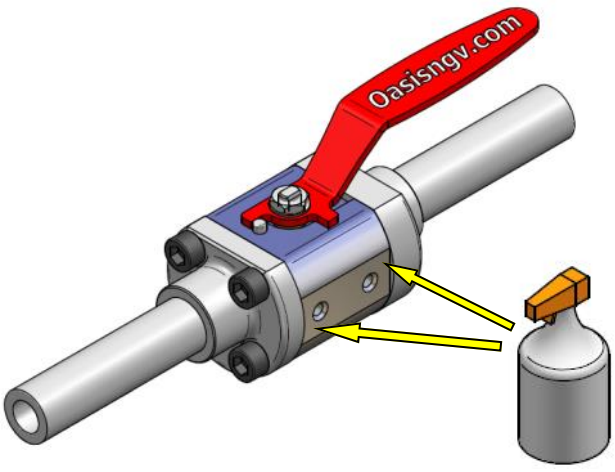
4. Tighten bolts to the recommended torque.

Recommended torque with anti-seize grease:
SV103= 26 Nm
SV104= 26 Nm
SV106= 60 Nm
SV108= 70 Nm

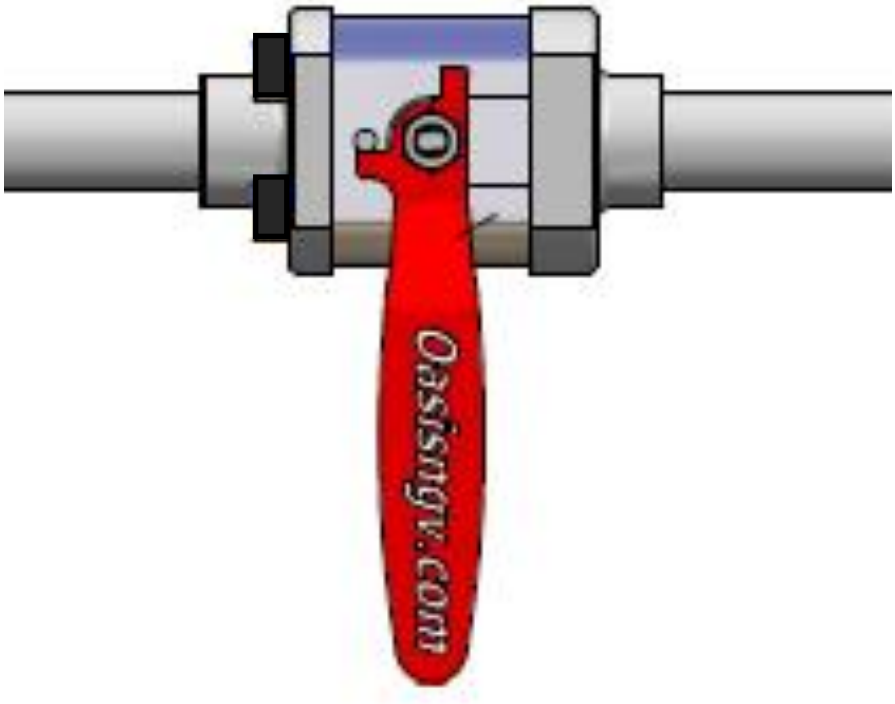
Without anti-seize:
SV103= 37 Nm
SV104= 37 Nm
SV106= 60 Nm
SV108= 70 Nm



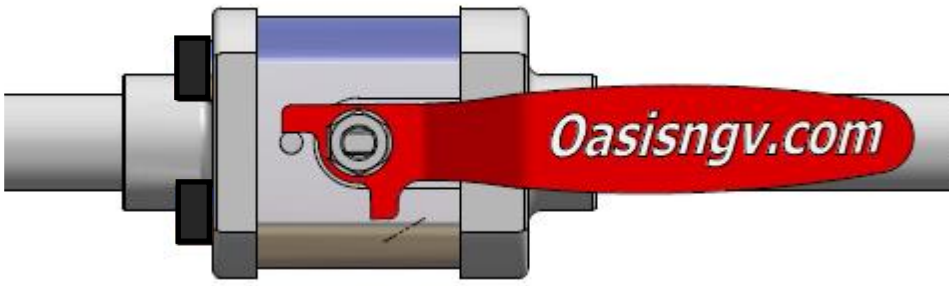
5. Installation complete, Check for leaks on first use with Snoop or soapy water.



1. Closed.



2. Opened.



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

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Seal Kit Parts

SV103 - SV104**

2 x Seats^

1 x Stem

1 x Ball

1 x Gland

1 x Silicone

2 x Face O-rings

(SV103 - 022 Nitrile 90)
(SV104 - 025 Nitrile 90)

1 x Locking Tab*

SV106** — SV108**

2 x Seats^

1 x Stem

1 x Ball

1 x Gland

1 x Silicone

1 x Cap O-ring

1 x Cap Backup O-ring

2 x Face O-rings

(SV106 - 131 Nitrile 90)
(SV108 - 138 Nitrile 90)

1 x Locking Tab*

* only used when servicing actuated sandwich 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.

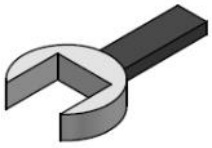
The Complete Oasis Seal Kit must be used

Tools Required

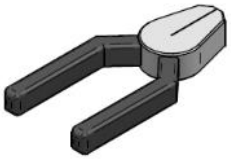
Cleaner (Warm Soapy Water or

Oasis Plastic Pick Tool
Part Number:
TOOL-PICK
(Sold Separately)

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

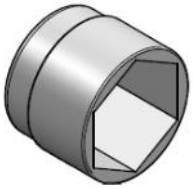


Spanner
(Wrenches)

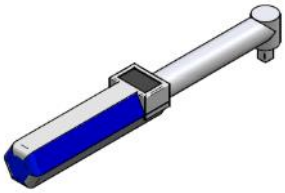


Pliers

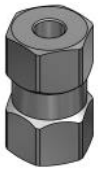
Oasis Plastic Tool
Part Number:
TOOL-BVASSY
(sold Separately)



Sockets

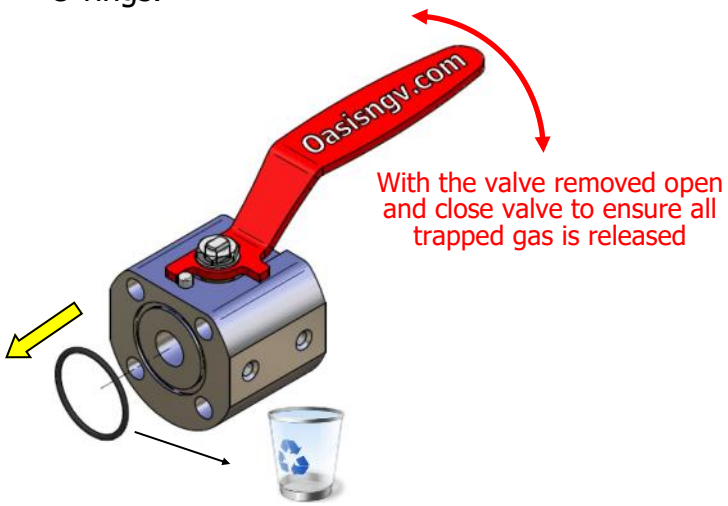


Torque Wrench



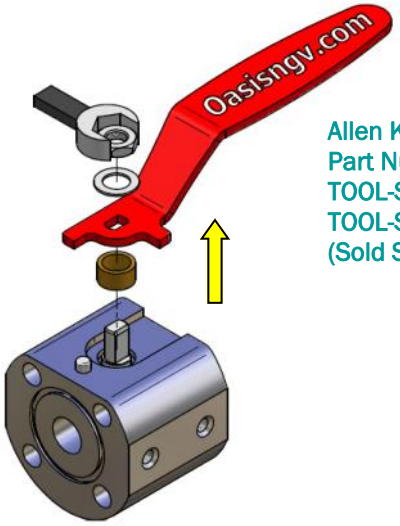
Oasis Allen Key
Socket Adapter
Part Number:
TOOL-SV106
TOOL-SV108
(Sold Separately)

1.Remove the sandwich valve and remove the sealing face O-rings.



2. Undo stem nut.

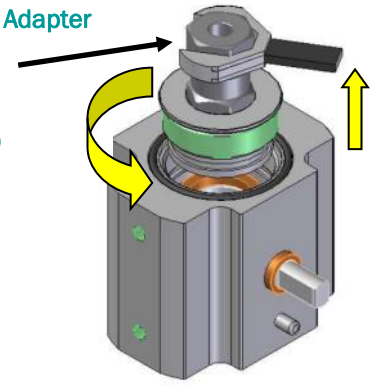
3. Remove handle.



4. Remove the end cap.

SV106 / SV108

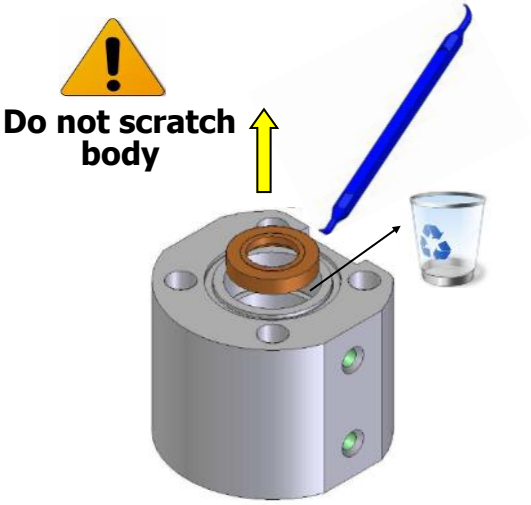
Allen Key Socket Adapter
Part Number:
TOOL-SV106
TOOL-SV108
(Sold Separately)



SV103 / SV104

5. Discard seat.

Do not scratch body



6. Discard ball.

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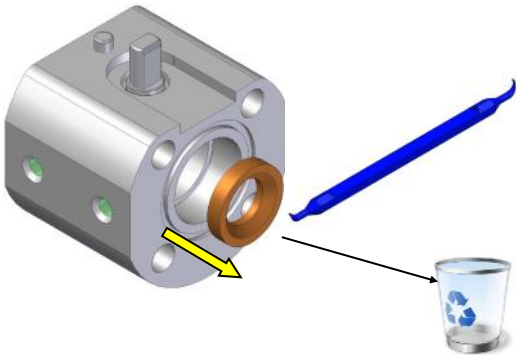
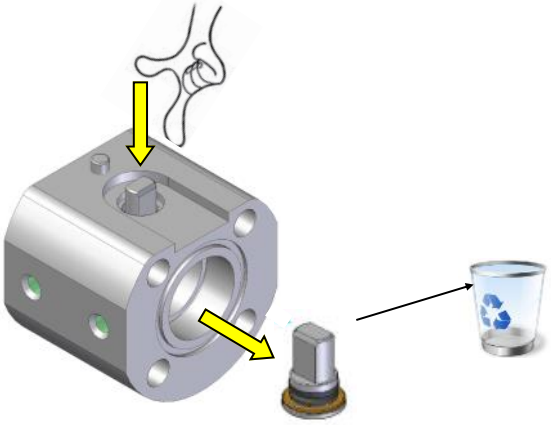
SV103

9. Remove 2nd seat and discard.

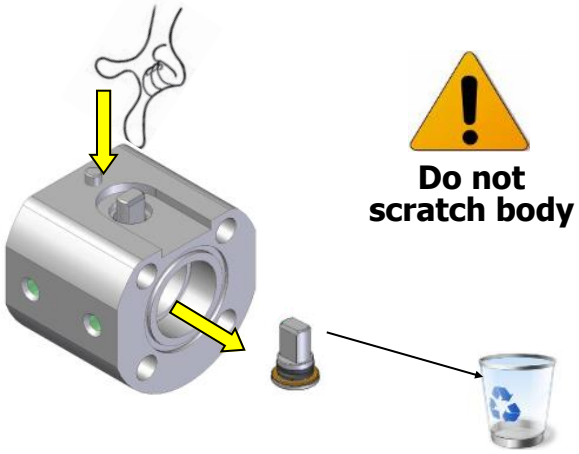


10. Remove stem and discard.

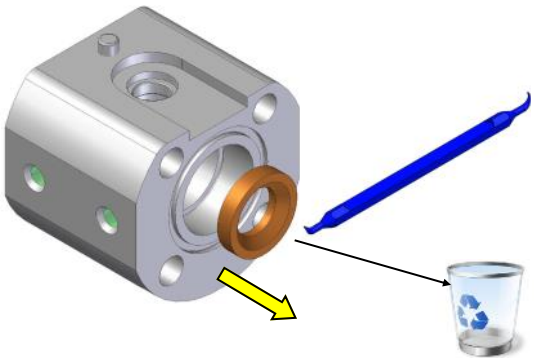


SV104 - SV106 - SV108

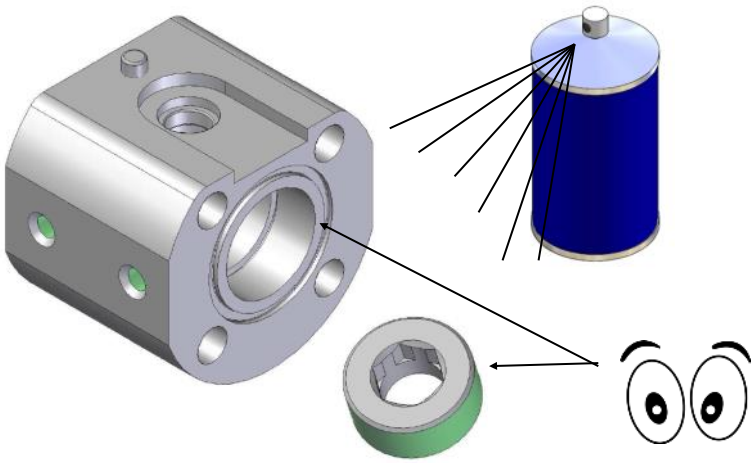
9. Remove stem and discard.



10. Remove 2nd seat and discard.



11. Clean components and inspect for damage.



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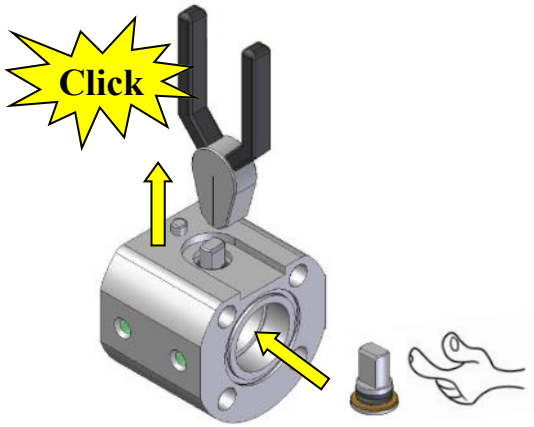
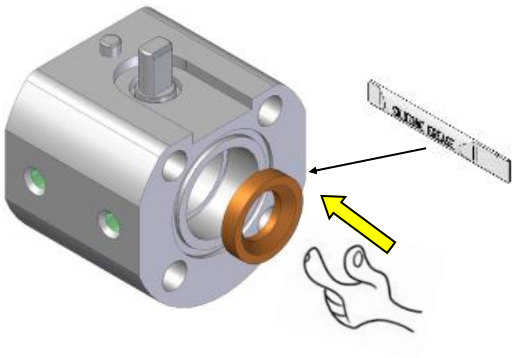
SV103

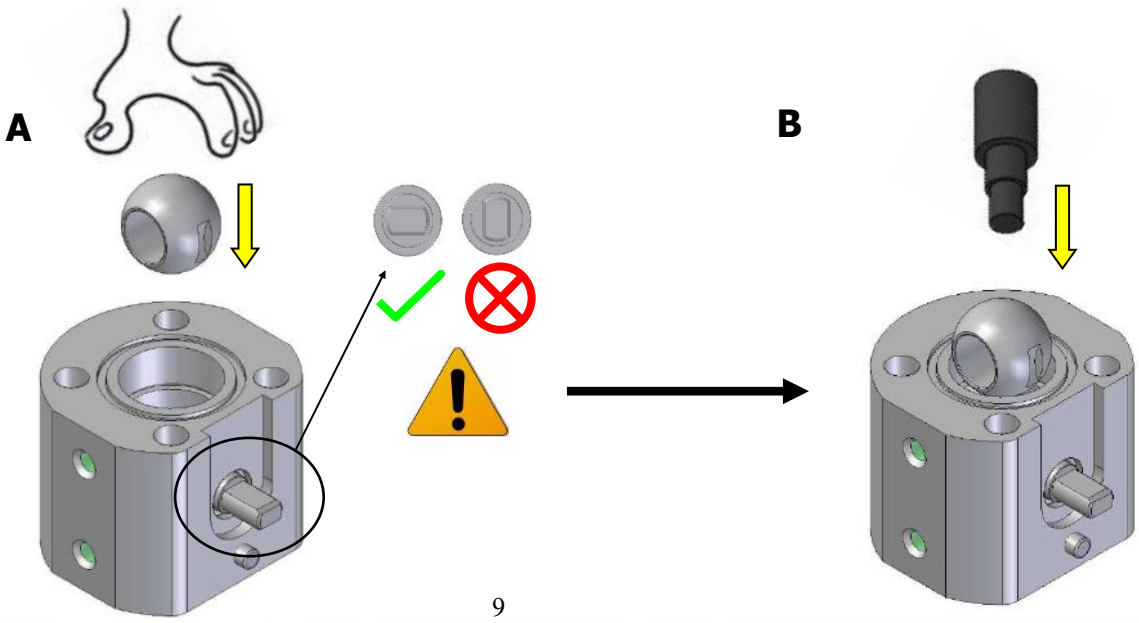
1. Insert stem assembly first.



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

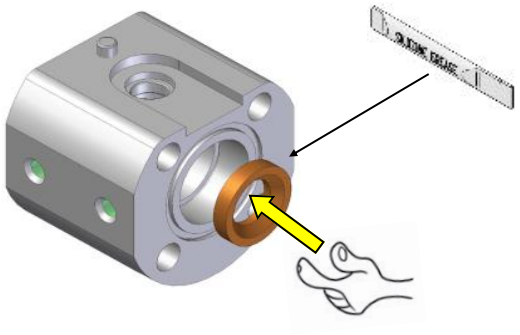


3. Insert ball.

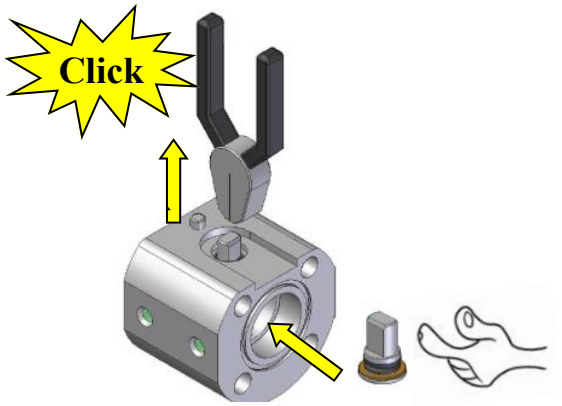


SV104 - SV106 - SV108

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



2. Insert stem assembly.



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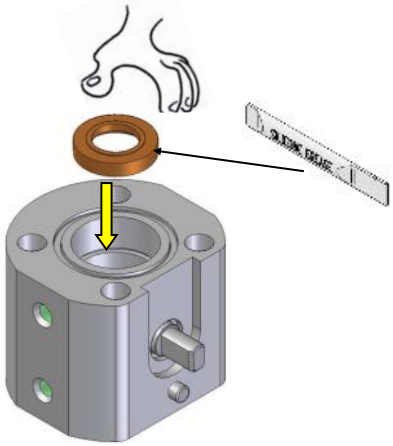
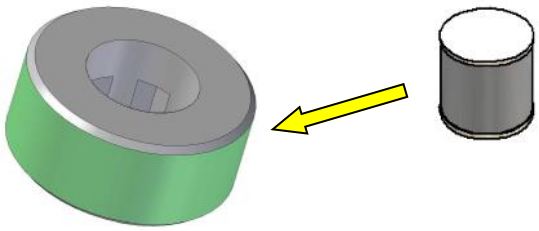
SV103 - SV104

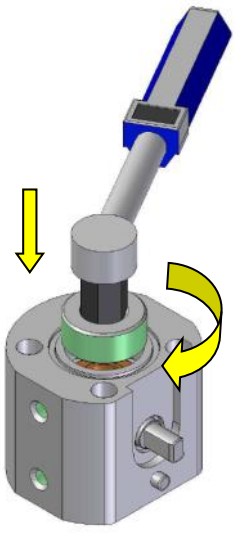
5. Apply silicone grease to new seat and install. Take care not to pinch O-ring when installing low pressure seat.



6. Apply anti seize to cap.



7. Tighten cap.

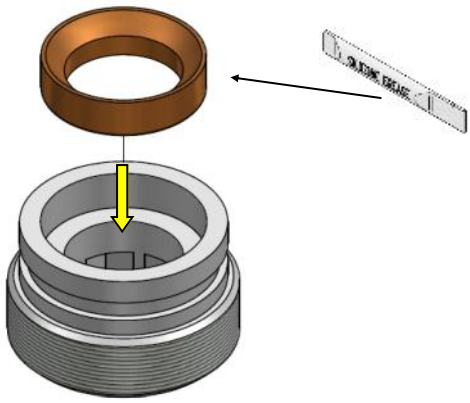


Recommended End Cap Torques:

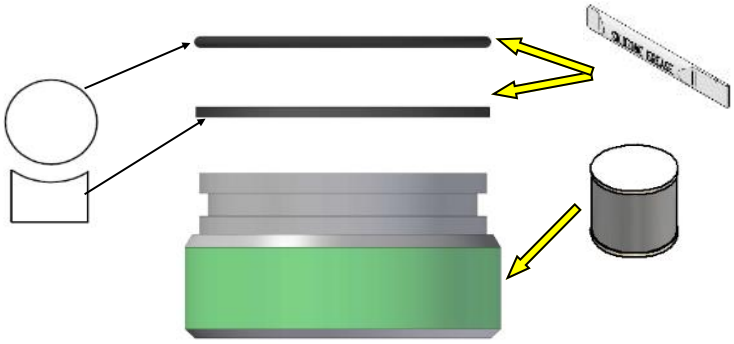
SV103=35Nm
SV104=60Nm

SV106 - SV108

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



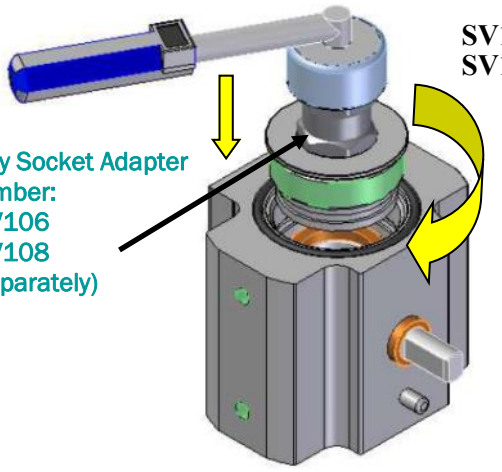
6. Fit new O-rings and back-up to end cap.



7. Tighten cap.

Recommended End Cap Torques:

SV106=120Nm
SV108=120Nm



Allen Key Socket Adapter
Part Number:
TOOL-SV106
TOOL-SV108
(Sold Separately)

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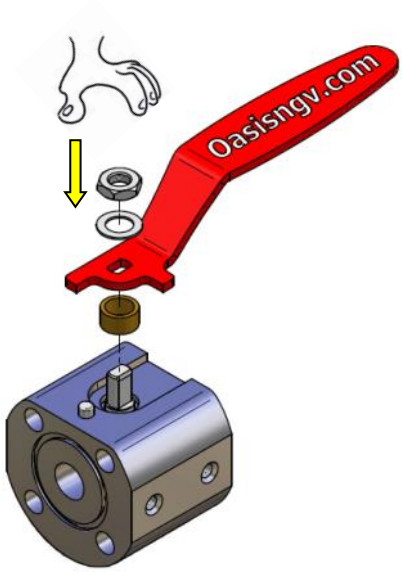
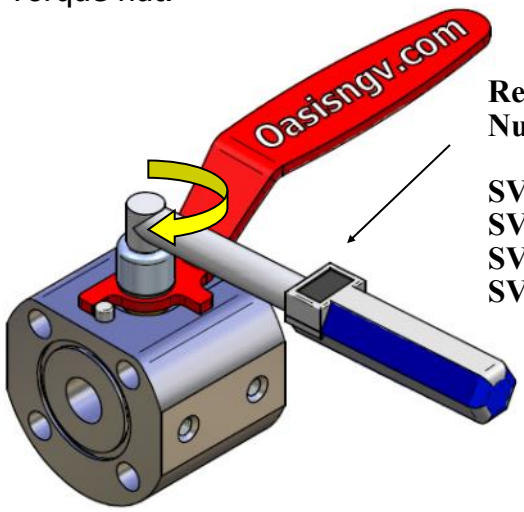
8. Insert handle.



9. Torque nut.

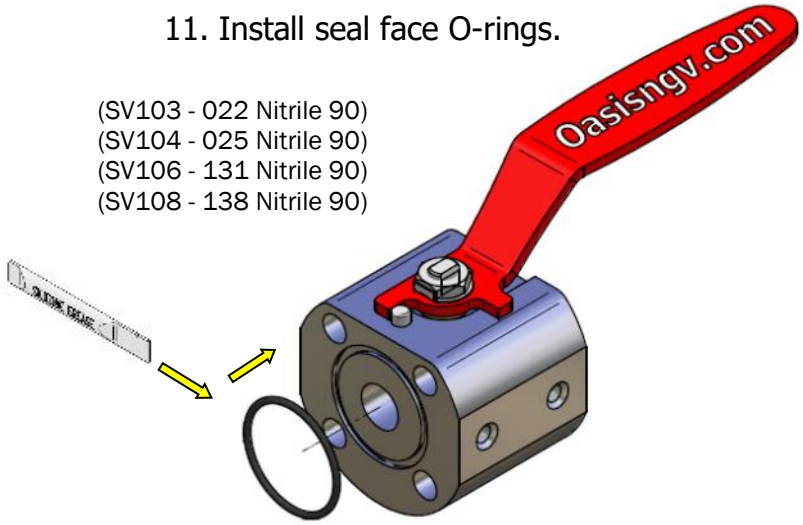


Recommended Nut Torques:

SV103=3Nm
SV104=3Nm
SV106=6Nm
SV108=6Nm

11. Install seal face O-rings.

(SV103 - 022 Nitrile 90)
(SV104 - 025 Nitrile 90)
(SV106 - 131 Nitrile 90)
(SV108 - 138 Nitrile 90)



12. Servicing complete, install the valve as per instructions on page 3.