



# **BV700 Series**Ball Valve SAE Instruction Manual

#### **A 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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Servicing Video Instruction Manual

Setting The Standard



# **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:



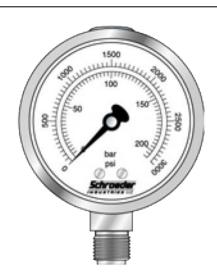






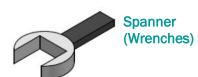


Foot Protection Hearing Protection Safety Helmets Hand Protection Safety Glasses



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

#### **Tools Required**





**Thread Tape** 



**Anti Seize Grease** - Swagelok Silver Goop

- Omega 99
- or similar



Silicone Grease (Rocol MX22 or similar)



Spray bottle (Snoop or soapy water)

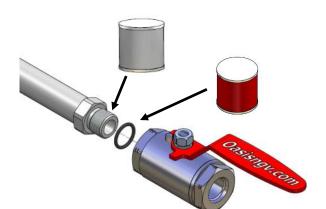
2



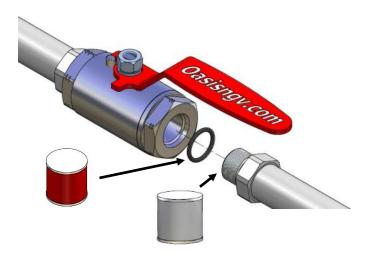
# Installation Instructions

#### Setting The Standard

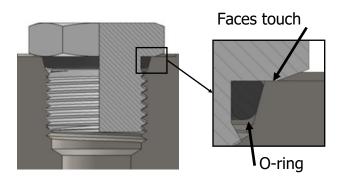
1. Apply anti seize to thread and silicone grease to the O-ring. Install the O-ring on the fitting if not pre-installed.



3. Apply anti seize to thread and silicone grease to the O-ring. Install the O-ring on the fitting if not pre-installed.



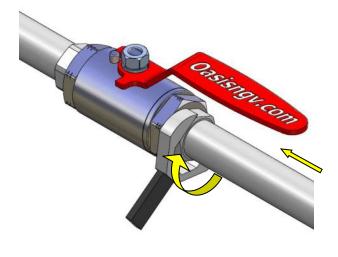
5. Correctly tightened SAE port fittings should bottom out on the port face and the O-ring should neatly fill the void creating the seal.



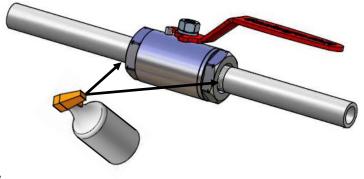
2. Screw the fitting into the body and torque to the fitting suppliers recommended tightening torque.



4. Screw the fitting into the body and torque to the fitting suppliers recommended tightening torque.



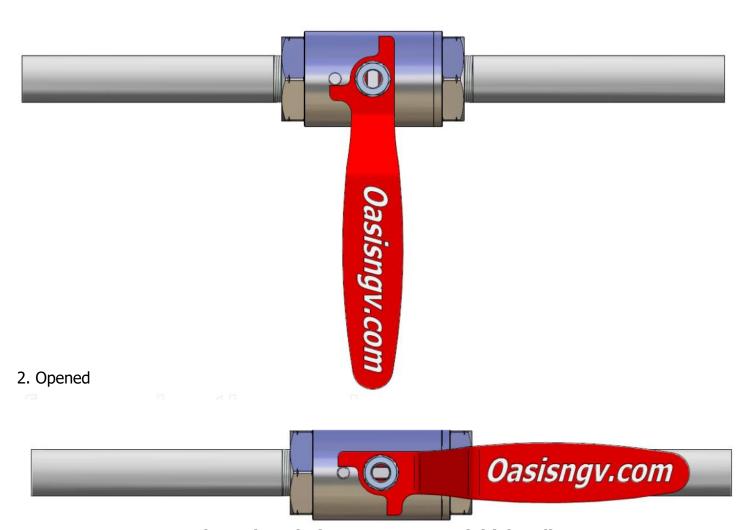
6. Assembly is complete, check for leaks on first use with Snoop or soapy water.



# **Operation Instructions**

Setting The Standard

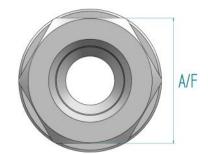
#### 1. Closed



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

# Recommended Spanners for End Caps:

BV702 = 25mm BV703 = 28mm BV704 = 34mm BV706 = 50mm BV708 = 60mm BV710 = 66mm BV712 = 79mm



### Servicing

Setting The Standard

#### **Service Kit Parts**

#### **BV704**

2 x Seats^ 1 x Stem 1 x Ball



1 x Gland 1 x Silicone



1 x Locking Tab\*







(908 Nitrile 90)

1 x Cap O-ring

#### **BV706 — BV708**

2 x Seats<sup>^</sup> 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







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

#### The Complete Oasis Seal Kit must be used

### **Tools Required**



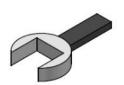
Cleaner (Warm Soapy Water or Similar)



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



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



Spanner (Wrenches)



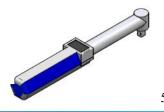
**Pliers** 



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



**Sockets** 



**Torque Wrench** 

<sup>\*</sup> only used when servicing actuated ball valves.

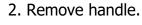
<sup>^</sup> For low pressure service kits, the seats will be supplied with an O-ring installed.



# Servicing Disassembly

#### Setting The Standard

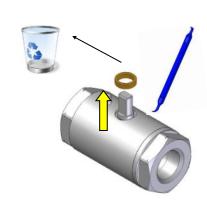
1. Undo handle nut.



3.Discard gland.







4. Remove end cap.

5.Discard seat.

6.Remove ball.

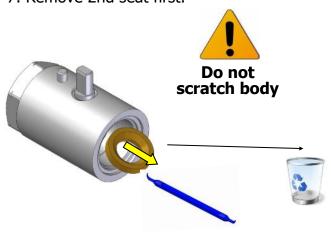






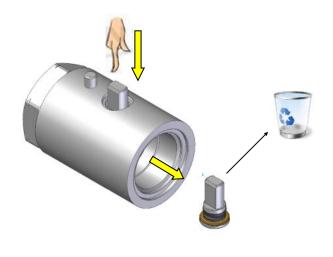
**BV703** 

7. Remove 2nd seat first.



BV704 - BV706 - BV708

7. Remove stem first.



6

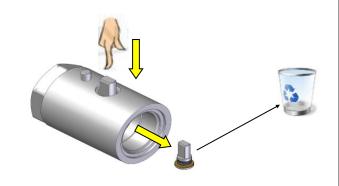


# Servicing Disassembly

Setting The Standard

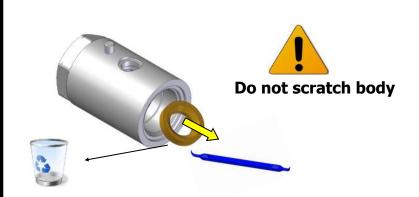
#### **BV703**

8. Remove and discard stem.



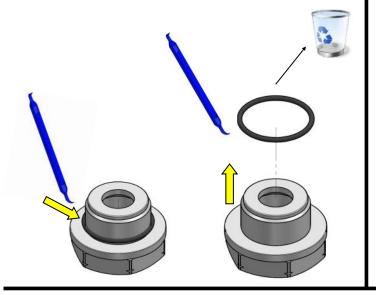
#### BV704 - BV706 - BV708

8. Remove and discard 2nd seat.



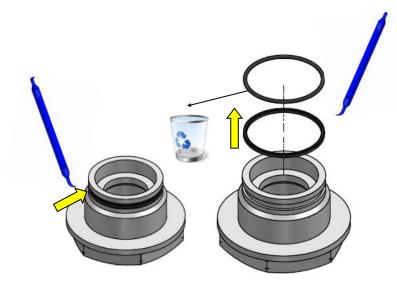
#### BV703 - BV704

9. Remove cap O-ring and discard.

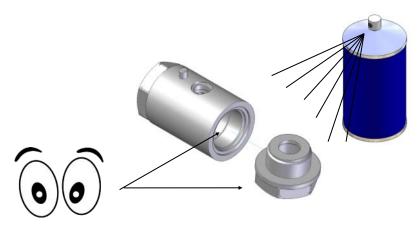


#### **BV706 - BV708**

9. Remove cap O-rings and discard.



10. Clean body and end cap. Visually inspect parts for damage.

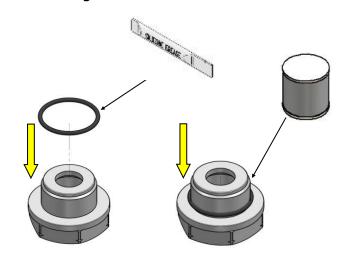


# Servicing Assembly

Setting The Standard

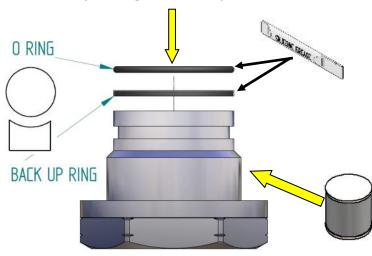
#### BV703 - BV704

1. Fit O-ring.



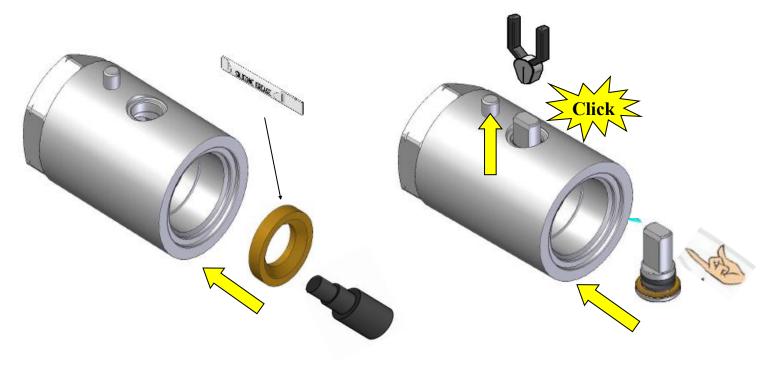
#### **BV706 - BV708**

1. Fit end cap O-ring and backup.



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

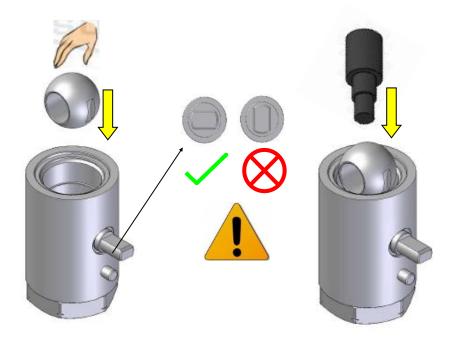
3. Insert stem assembly.



**Servicing** 

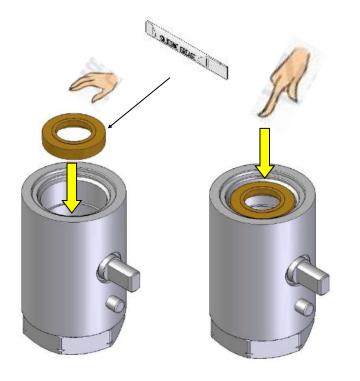


#### 4. Insert ball.



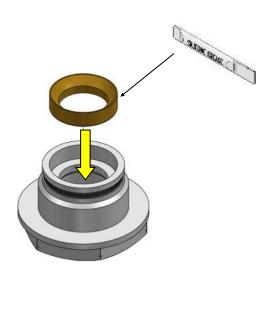
#### BV703 - BV704

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



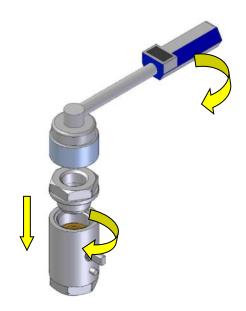
#### **BV706 - BV708**

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



Setting The Standard

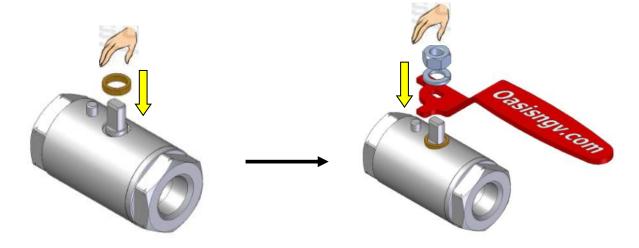
#### 6. Torque tight the end cap.



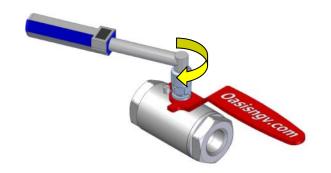
Recommended End Cap Torques:

BV704=60Nm BV706=120Nm BV708=120Nm

#### 7. Install gland and screw on handle nut.



#### 8. Tighten stem nut.



Recommended Handle Nut Torques:

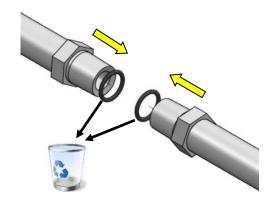
BV704=3Nm BV706=6Nm BV708=6Nm



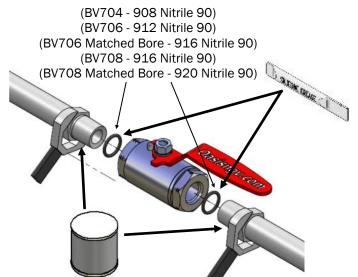
### Servicing Assembly

#### Setting The Standard

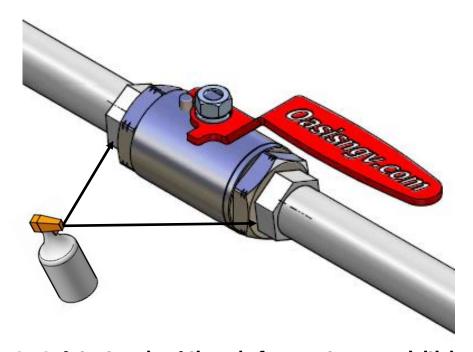
### 9. Remove SAE O-rings from valve fittings.



# 10. Re-attach valve to system with new SAE O-rings supplied.



11. Check for leaks on first use using snoop or soapy water.



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