



# **BV700 Series**Ball Valve NPT 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



# **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:



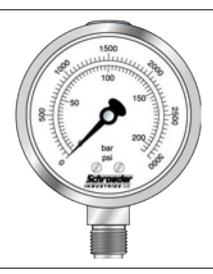








Foot Protection Hearing Protection Safety Helmets Hand Protection Safety Glasses



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

### **Tools Required**



Spanner (Wrenches) Recommended spanner sizes on page 4



Yellow, Gas Rated, PTFE Thread Tape

- AW TITASEAL
- McMaster-Carr High-Density Thread Sealant Tape
- Blue-Monster gas-guard
- Or Similar



Spray bottle (Snoop or soapy water)



**Anaerobic Thread Sealant** with PTFE (Optional)

- Loctite 567
- Swagelok SWAK
- Hernon Dripstop 940
- Gasoila FasSeal-ATS
- Or Similar

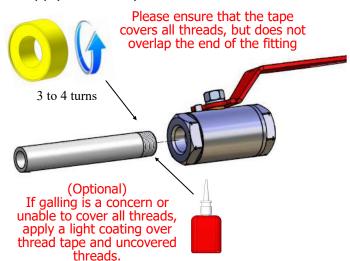


# Installation Instructions

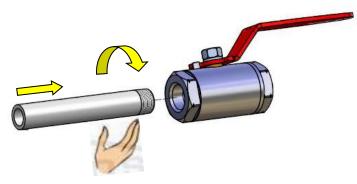
Setting The Standard

### FOR BALL VALVES BV710 & BV712 MAKE SURE YOU INSTALL THE VALVE IN THE FLOW DIRECTION AS INDICATED BY THE ARROW ON THE VALVE BODY

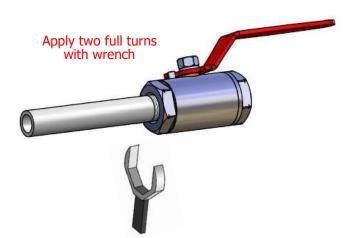
#### 1. Apply thread tape and thread sealant.



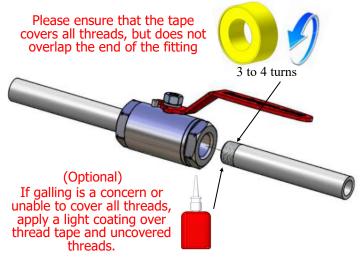
2. Tighten by hand



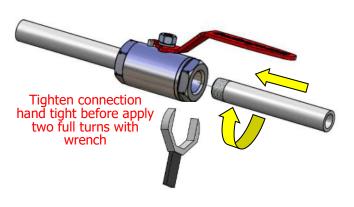
3. Tighten connection.



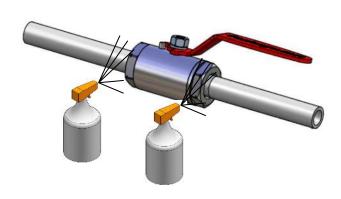
4. Apply thread tape and thread sealant.



5. Join and tighten the connection.



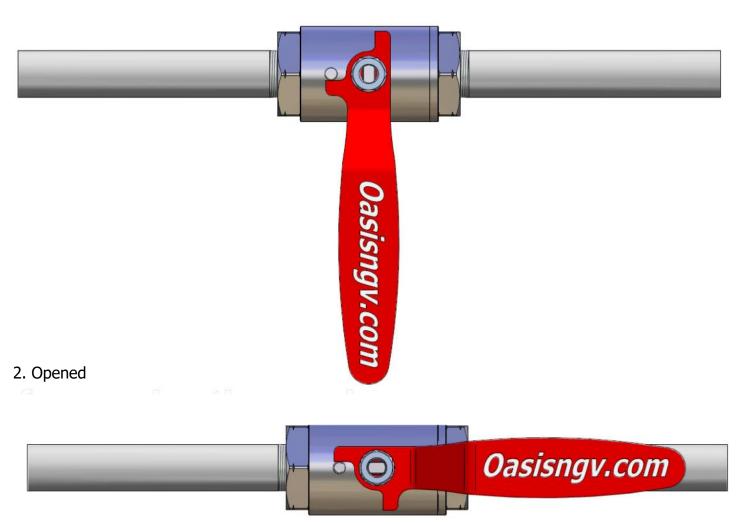
6. Leak test on first use using snoop or soapy water.



# **Operation Instructions**

Setting The Standard

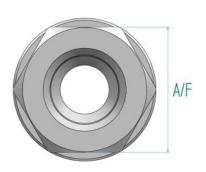
#### 1. Closed



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



# **Recommended Spanners** for Stem Nuts:

BV702 = 10mm BV703 = 13mm BV704 = 13mm BV706 = 19mm BV708 = 19mm BV710 = 22mm BV712 = 22mm

Setting The Standard

#### **Service Kit Parts**



2 x Seats<sup>^</sup>

1 x Stem

1 x Ball





1 x Gland

1 x Silicone

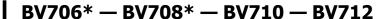


1 x Silicone



1 x Locking Tab\*\*





2 x Seats<sup>^</sup>

1 x Stem

1 x Ball





1 x Gland

and

1 x Silicone

1 x Cap O-ring







1 x Locking Tab\*\*

ng Tab\*\* 1 x Cap Backup O-ring

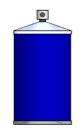




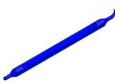
- \*It is normal for the service kit to include a ball with a small hole in the bottom
- \*\* only used when servicing actuated ball valves.

#### 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)



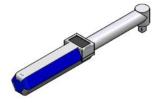
**Pliers** 



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



Sockets



**Torque Wrench** 

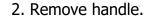
<sup>^</sup> For low pressure service kits, the seats will be supplied with an O-ring installed.



# Servicing Disassembly

#### Setting The Standard

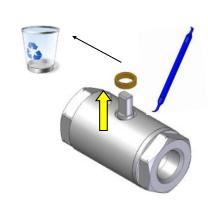
1. Unscrew stem nut.



3.Discard gland.





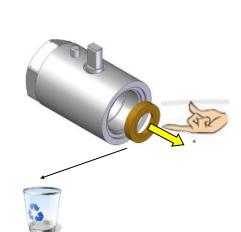


4. Remove end cap.

5.Discard seat.

6.Remove ball.

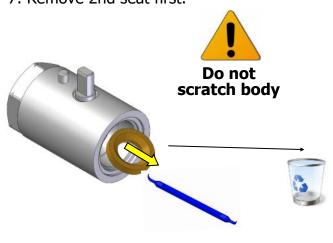






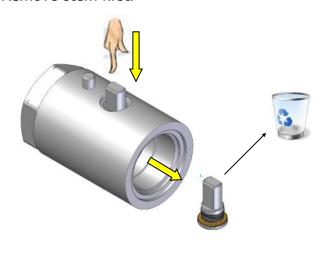
BV702 - BV703

7. Remove 2nd seat first.



BV704 - BV706 - BV708 - BV710 - BV712

7. Remove stem first.



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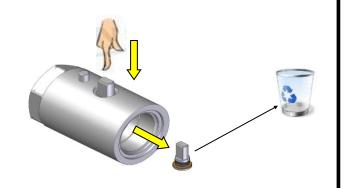


# Servicing Disassembly

Setting The Standard

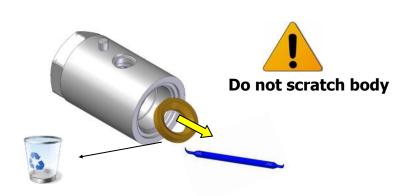
#### BV702 - BV703

8. Remove and discard stem.



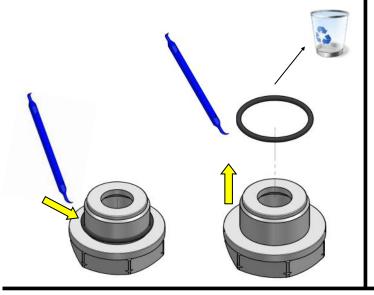
#### BV704 - BV706 - BV708 - BV710 - BV712

8. Remove and discard 2nd seat.



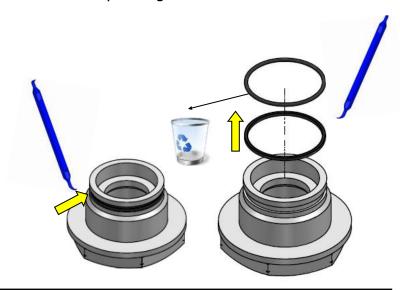
#### BV702 - BV703 - BV704

9. Remove cap O-ring and discard.

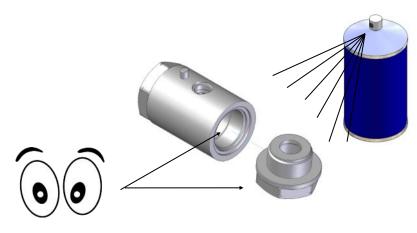


#### BV706 - BV708 - BV710 - BV712

9. Remove cap O-rings and discard.



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

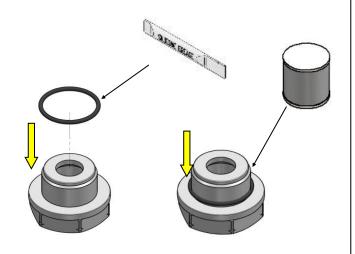


# Servicing Assembly

Setting The Standard

#### BV702 — BV703 — BV704

1. Fit O-ring.

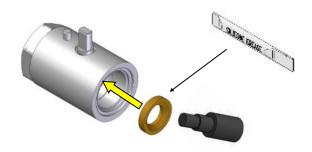


#### **BV702 — BV703**

2. Insert Stem Assembly first.

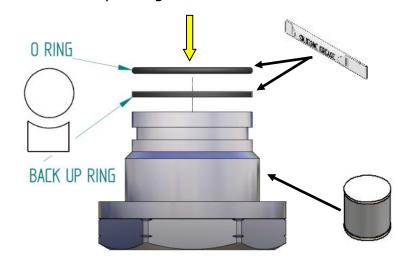


3. Apply silicone grease to new seat and install. Take care not to pinch O-ring when installing low pressure seat.



#### BV706 — BV708 — BV710 — BV712

1. Fit End Cap O-rings.



#### BV704 - BV706 - BV708 - BV710 - BV712

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



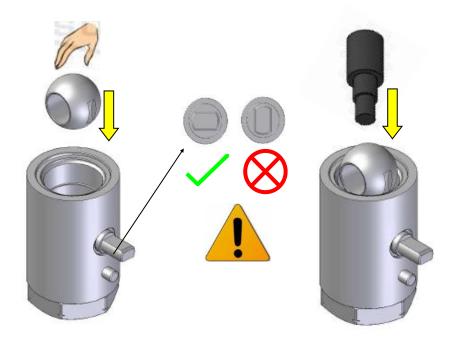
3. Insert Stem Assembly.



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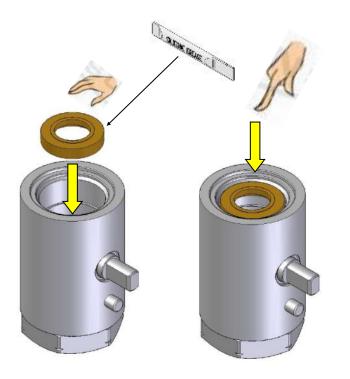


#### 4. Insert Ball.



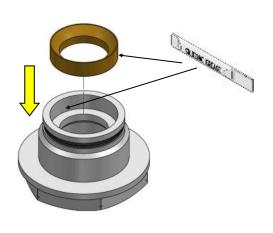
#### BV702 - BV703 - BV704

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



#### BV706 - BV708 - BV710 - BV712

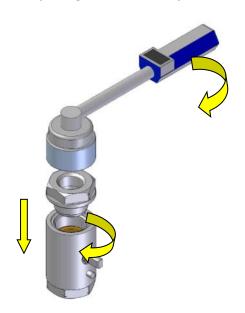
5. Apply silicone grease to new seat and install in cap. Take care not to pinch O-ring when installing low pressure seat.



# Servicing Assembly

Setting The Standard

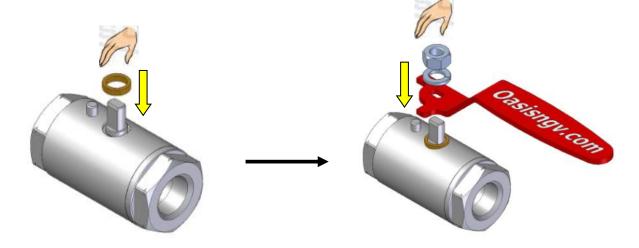
#### 6. Torque tight the end cap.



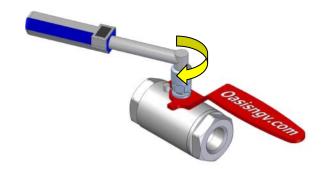
### Recommended End Cap Torques:

BV702=35Nm BV703=50Nm BV704=60Nm BV706=120Nm BV708=120Nm BV710=120Nm BV712=120Nm

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



#### 8. Tighten stem nut.



# Recommended Handle Nut Torques:

BV702=3Nm BV703=3Nm BV704=3Nm BV706=6Nm BV708=6Nm BV710=6Nm BV712=6Nm

# Servicing Assembly

Setting The Standard

9. Servicing complete. Re-install as per the instructions on page 3.



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