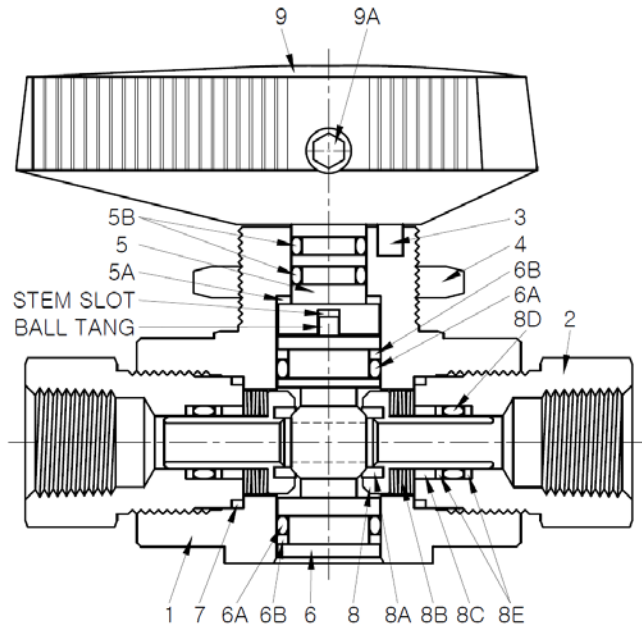


S-LOK Trunnion Ball Valve – Maintenance Instruction

Trunnion Ball Valve STBV & STBVC Series – Straight Pattern (2-Way On/Off)



No.	Components
1	Body
2	End connector
3	Stop pin
4	Panel nut
5	Stem *
5A	Stem bearing *
5B	Stem o-ring *
6	Trunnion ball *
6A	Ball o-ring *
6B	Ball back-up ring *
7	End connector seal *
8	Seat carrier *
8A	Seat *
8B	Disc spring *
8C	Seat carrier guide *
8D	Seat carrier o-ring *
8E	Seat carrier back-up ring *
9	Handle **
9A	Set screw **

* : Components of the seal kit

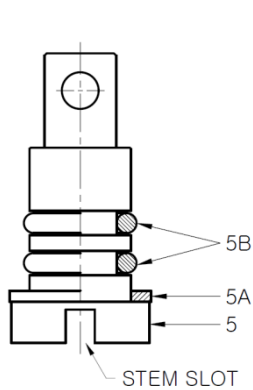
** : Optional components of the seal kit

WARNING !!

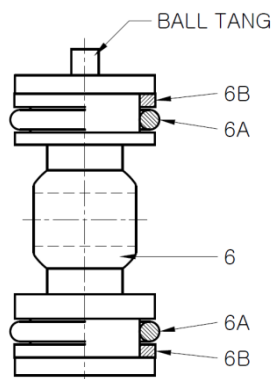
Depressurize system pressure before any valve maintenance.

CAUTION !!

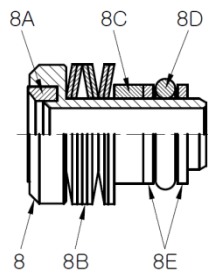
Do not scratch seat and seal surfaces.



Stem assembly



Ball assembly



Seat carrier assembly

Disassembly

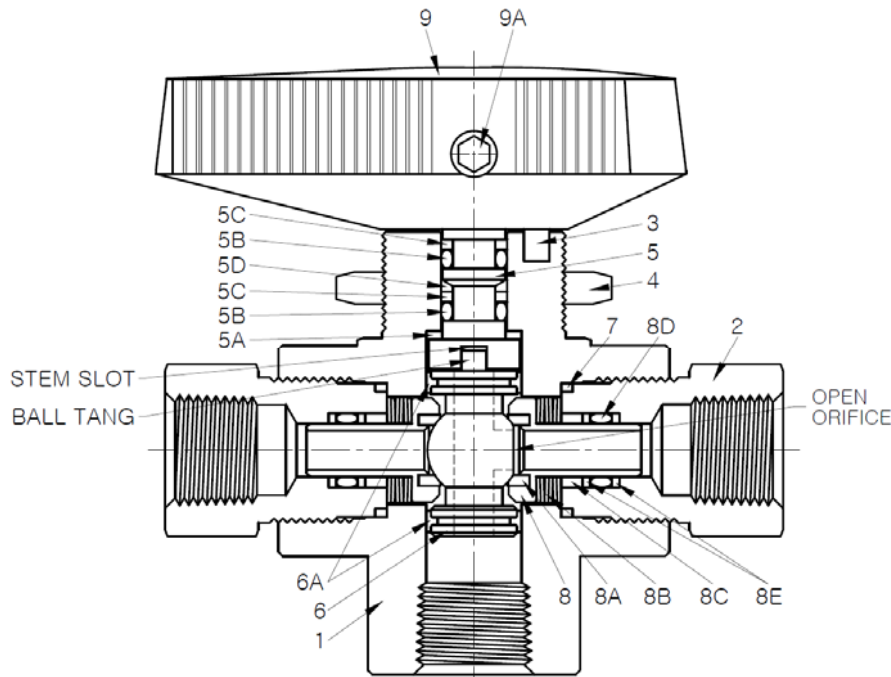
1. Remove the valve from the system.
2. Remove the end connectors(2) from the body(1).
3. Remove seat carrier assemblies(8, 8A, 8B, 8C, 8D, 8E) and end connector seals(7).
4. Remove the set screw(9A) and remove the handle(9) from the stem(5).
5. Remove the ball assembly(6, 6A, 6B) through the bottom of the body(1).
6. Press down on the top of the stem(5) and remove through the bottom of the body(1).
7. Remove all contaminants from the body.

Assembly

1. Prior to reassembly, make sure that all components are clean and free of contaminants.
2. Insert stem assembly(5, 5A, 5B) through the bottom of the body(1) and press the stem(5) slowly until it is fully inserted.
Be careful that o-rings are not caught between the body and stem.
3. Place the handle(9) over the stem(5). Place the set screw(9A) in handle(9) and tighten.
4. Insert the ball assembly(6, 6A, 6B) through the bottom of the body(1).
Be careful that o-rings(6A) and back-up rings(6B) are not caught between the body(1) and ball(6).
Press upward until the ball tang engages the stem slot.
If ball tang is engaged, turning the handle(9) will rotate the ball(6).
5. Insert the seat carrier assemblies(8, 8A, 8B, 8C, 8D, 8E) into the end connectors(2).
Place the end connector seals(7) on the end connectors(2).
End connector assemblies(2, 7, 8, 8A, 8B, 8C, 8D, 8E) are now complete.
6. Fully close the valve.
7. Insert the end connector assemblies and tighten the end connector(2). (68 N•m)

S-LOK Trunnion Ball Valve – Maintenance Instruction

Trunnion Ball Valve STBV & STBVC Series – Angle Pattern (3-Way Switching)



No.	Components
1	Body
2	End connector
3	Stop pin
4	Panel nut
5	Stem *
5A	Stem bearing *
5B	Stem o-ring *
5C	Stem back-up ring *
5D	Stem support ring *
6	Trunnion ball *
6A	Slip ring *
7	End connector seal *
8	Seat carrier *
8A	Seat *
8B	Disc spring *
8C	Seat carrier guide *
8D	Seat carrier o-ring *
8E	Seat carrier back-up ring *
9	Handle **
9A	Set screw **

* : Components of the seal kit

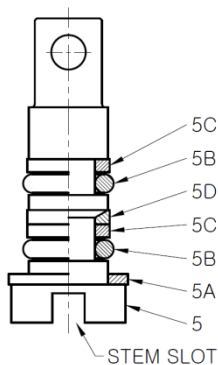
** : Optional components of the seal kit

WARNING !!

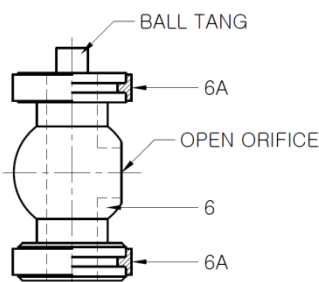
Depressurize system pressure before any valve maintenance.

CAUTION !!

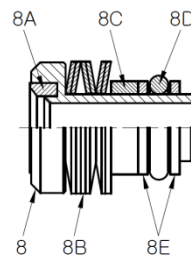
Do not scratch seat and seal surfaces.



Stem assembly



Ball assembly



Seat carrier assembly

Disassembly

1. Remove the valve from the system.
2. Remove the end connectors(2) from the body(1).
3. Remove seat carrier assemblies(8, 8A, 8B, 8C, 8D, 8E) and end connector seals(7).
4. Remove the set screw(9A) and remove the handle(9) from the stem(5).
5. Remove the ball assembly(6, 6A, 6B) through the bottom of the body(1).
6. Press down on the top of the stem(5) and remove through the bottom of the body(1).
7. Remove all contaminants from the body.

Assembly

1. Prior to reassembly, make sure that all components are clean and free of contaminants.
2. Insert stem assembly(5, 5A, 5B, 5C, 5D) through the bottom of the body(1) and press the stem(5) slowly until it is fully inserted.
Be careful that o-rings and back-up rings are not caught between the body and stem.
3. Place the handle(9) over the stem(5). Place the set screw(9A) in handle(9) and tighten.
4. Insert the ball assembly(6, 6A) through the bottom of the body(1).
Be sure the open orifice is positioned towards the handle(9) front.
Press upward until the ball tang engages the stem slot.
If ball tang is engaged, turning the handle(9) will rotate the ball(6).
5. Insert the seat carrier assemblies(8, 8A, 8B, 8C, 8D, 8E) into the end connectors(2).
Place the end connector seals(7) on the end connectors(2).
End connector assemblies(2, 7, 8, 8A, 8B, 8C, 8D, 8E) are now complete.
6. Center-off close the valve.
7. Insert the end connector assemblies and tighten the end connector(2). (68 N•m)