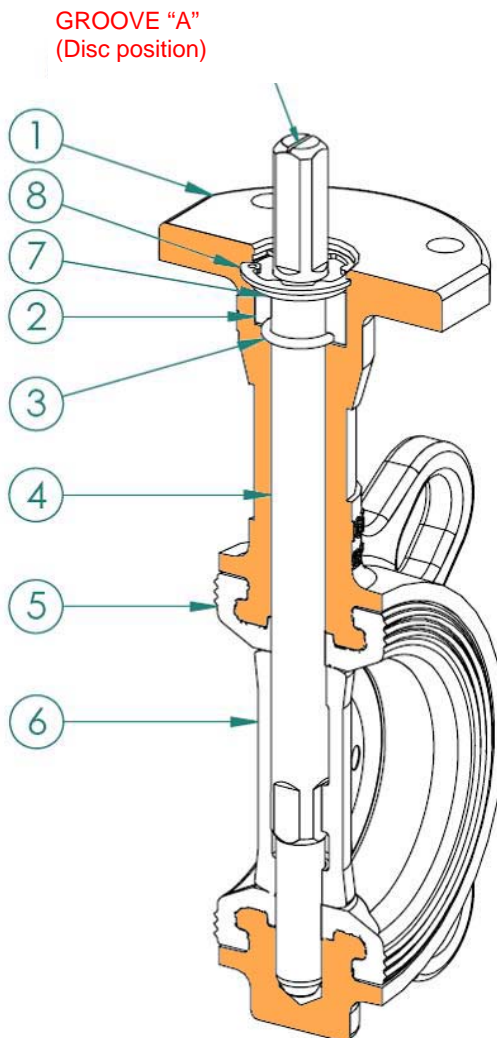


4. ASSEMBLY AND MAINTENANCE

4.2 MAINTENANCE INSTRUCTIONS

4.2.1 VALVES DN 32/100



I - Procedure for dismantling liner.

- Pull out zegi ring (8).
- Put the disc (6) in open position.
- Pull out the combination of:
 - Driving shaft (4).
 - "O" ring sealing (3).
 - Bushing (2).
 - Washer (7).
- Move away the disc (6).
- On one side of the valve, remove the lips of the liner (5) from the lodging of the body. Deform the seat making in a heart shape in order to remove it laterally from the valve body.

II - Procedure for assembling the liner.

Operations describes for disassembling the liner must be in reverse order. Attention must be paid to these remarks:

- Clean all the pieces before assembling using silicone spray in shafts, disc and seat in order to make assembly easiers.
- Holes of the liner must be correctly placed into position with reference to the entries of the shafts.
- Put in disc (6) in open position in order to make easier guiding.
- Replace the driving shaft (4) showing the disc in open position (Groove "A" indicates the position of the disc).
- Replace the "O" ring (3) and the bushing (2).
- Push the shaft (4) to the end position.
- Put in the washer (7) and the zegi ring (8).
- Use wrench to open and close the valve to check proper assembly and operation.

Item	Designation	Qty.
1	Body	1
*2	Bushing	1
3	"O" ring sealing	1
4	Driving shaft	1
5	Liner	1
6	Disc	1
7	Washer	1
8	Zegi ring	1

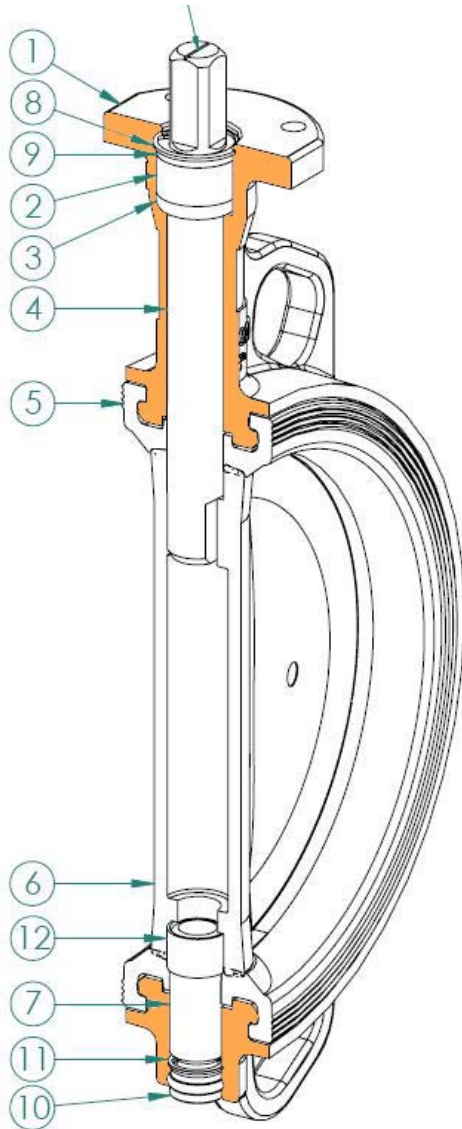
* In DN 32 doesn't exist item 2.

4. ASSEMBLY AND MAINTENANCE

4.2 MAINTENANCE INSTRUCTIONS

4.2.2 VALVES DN 125/200

GROOVE "A"
(Disc position)



Item	Designation	Qty.
1	Cuerpo	1
2	Casquillo de rozamiento	1
3	Junta tórica	1
4	Eje superior	1
5	Anillo	1
6	Mariposa	1
7	Eje inferior	1
8	Anillo elástico	1
9	Arandela plana	1
10	Tapón	1
11	Anillo elástico	1
*12	Casquillo de rozamiento	1

* In DN 125/150 doesn't exist item 12.

I - Procedure for dismantling liner.

- Pull out zegi ring (8).
- Put the disc (6) in open position.
- Pull out the combination of:
Driving upper shaft (4).
Bushing (2).
"O" ring sealing (3).
Washer (9).
- Remove the plug (10) and the lower zegi ring (11).
- Put a metal stick in the upper shaft lodging, then push down the lower shaft (7).
- Move away the disc (6).
- On one side of the valve, remove the lips of the liner (5) from the lodging of the body. Deform the seat making in a heart shape in order to remove it laterally from the valve body.

II - Procedure for assembling the liner.

Operations describes for disassembling the liner must be in reverse order. Attention must be paid to these remarks:

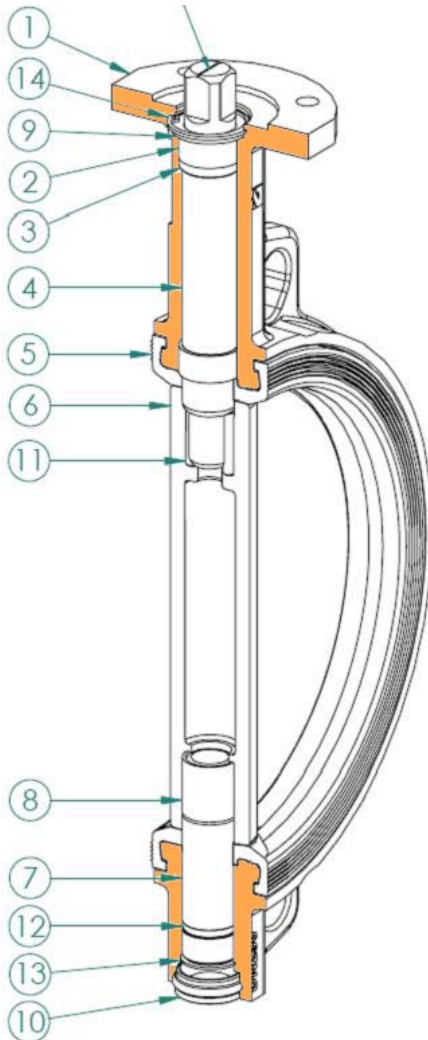
- Clean all the pieces before assembling using silicone spray in shafts, disc and seat in order to make assembly easiers.
- Holes of the liner must be correctly placed into position with reference to the entries of the shafts.
- Put in disc (6) in open position in order to make easier guiding, bushing (12) included.
- Push the lower shaft (7) smoothly until it stop with the inner of the disc, then install the zegi ring (11) and the plug (10).
- Put in the upper driving shaft (4). Direction of assembling must be respected (Groove "A" indicates the position of the disc).
- Put in the bushing (2), "O" ring sealing (3) and the washer (9).
- Install the upper zegi ring (8).
- Use wrench to open and close the valve to check proper assembly and operation.

4. ASSEMBLY AND MAINTENANCE

4.2 MAINTENANCE INSTRUCTIONS

4.2.3 VALVES DN 250/500

GROOVE "A"
(Disc position)



I - Procedure for dismantling liner.

- a) Pull out zegi ring (14).
- b) Put the disc (6) in open position.
- c) Pull out the combination of: upper shaft (4) together with the "O" ring sealing (3), the upper bushing (2) and the washer (9).
- d) Remove the plug (10) and the lower zegi ring (13).
- e) Put a metal stick in the upper shaft lodging, then push down the lower shaft (7).
- a) Move away the disc (6).
- f) On one side of the valve, remove the lips of the liner (5) from the lodging of the body. Deform the seat making in a heart shape in order to remove it laterally from the valve body.

II - Procedure for assembling the liner.

Operations describes for disassembling the liner must be in reverse order. Attention must be paid to these remarks:

- a) Clean all the pieces before assembling using silicone spray in shafts, disc and seat in order to make assembly easiers.
- b) Holes of the liner must be correctly placed into position with reference to the entries of the shafts.
- c) Put in disc (6) in open position in order to make easier guiding. The disc includes bushing (8) and cilindric keyways (11) assembled.
- d) Push the lower shaft (7) smoothly, together with the "O" ring sealing, until it stop with the inner of the disc, then install the zegi ring (13) and the plug (10).
- e) Verify that bushings (2) are correctly placed in upper and lower holes in the body of the valve.
- f) Put in the upper shaft (4) with the "O" ring sealing (3) until it stop with the inner of the disc. Direction of assembling must be respected (Groove "A" defines position of the disc).
- g) Put in the bushing (2) and the washer (9).
- h) Install the upper zegi ring (14).
- i) Use wrench to open and close the valve to check proper assembly and operation.

Item	Designation	Qty.
1	Body	1
2	Bushing	2
3	"O" ring sealing	1
4	Upper sealing	1
5	Liner	1
6	Disc	1
7	Lower shaft	1
8	Bushing	1
9	Washer	1
10	Plug	1
*11	Keyway	2/4
12	"O" ring sealing	1
13	Zegi ring	1
14	Zegi ring	1

* In DN 450/500 doesn't exist item 11 (drive by square).

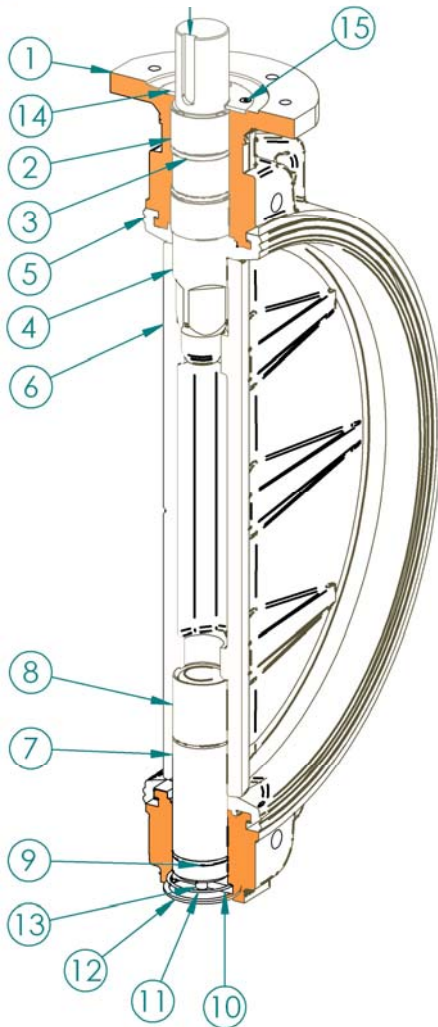
4. ASSEMBLY AND MAINTENANCE

4.2 MAINTENANCE INSTRUCTIONS

4.2.4 VALVES DN 600/1400

KEYWAY

↓ (Disc position)



Item	Designation	Qty.
1	Body	1
2	Bushing	2
3	"O" ring sealing	2
4	Upper shaft	1
5	Liner	1
6	Disc	1
7	Lower shaft	1
8	Bushing	1
9	"O" ring sealing	1
10	Lower Cover	1
11	"O" ring sealing Cover	1
12	Zegi Ring	1
13	Adjusting Bolt	1
14	Upper Cover	1
15	Bolts	6

I - Procedure for dismantling liner.

- Loose and extract the upper screws (15).
- Put the disc (6) in open position.
- Pull out the combination of: upper shaft (4) together with the "O" ring sealing (3), the upper bushing (2) and the upper cover (14).
- Remove the zegi ring (12) and the lower cover (10), together o`ring (11).
- Put a metal stick in the upper shaft lodging, then push down the lower shaft (7), together the o`ring (9).
- Move away the disc (6).
- On one side of the valve, remove the lips of the liner (5) from the lodging of the body. Deform the seat making in a heart shape in order to remove it laterally from the valve body.

II - Procedure for assembling the liner.

Operations describes for disassembling the liner must be in reverse order. Attention must be paid to these remarks:

- Clean all the pieces before assembling using silicone spray in shafts, disc and seat in order to make assembly easiers.
- Holes of the liner must be correctly placed into position with reference to the entries of the shafts.
- Put in disc (6) in open position in order to make easier guiding. The disc includes bushing (8).
- Push the lower shaft (7) smoothly, together with the "O" ring sealing (9), until it stop with the inner of the disc, then install the coger cover (10), o`ring (11) and the zegi ring (12). Adjust the lower shaft position with the srew (13)
- Verify that bushings (2) are correctly placed in upper and lower holes in the body of the valve.
- Put in the upper shaft (4) with the "O" ring sealing (3) until it stop with the inner of the disc. Direction of assembling must be respected (Groove "A" defines position of the disc).
- Put in the bushing (2), the upper cover (14), and tight the screws of the cover (15).
- Use wrench to open and close the valve to check proper assembly and operation.

*** In DN 600/700 doesn't exist item 13. We recomend Horizontal Assembly/Disassembling in these DN.**