5000 SERIES
DISASSEMBLY & MAINTENANCE INSTRUCTIONS

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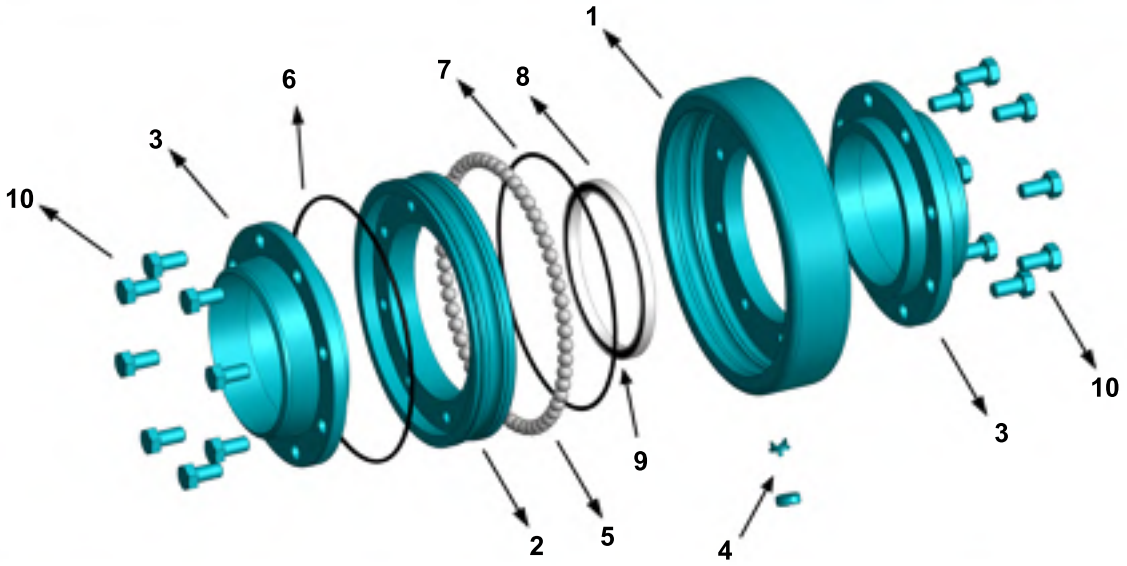

Read all of the maintenance instructions and safety procedures before proceeding.

1	5000 SERIES HOUSING	1
2	5000 SERIES SHAFT	1
3	5000 SERIES HOUSING FLANGE	2
4	BALL PLUG	1
5*	BALL BEARING	X
6*	O-RING	1
7*	O-RING	1
8*	SEAL RING	1
9*	O-RING	2
10	BOLTS	X

* Spare parts list

5000 Series swivel joint design allows seals to be changed without removing the ball bearings. No need to disassemble the joint from the system. If only seal ring change is needed, apply steps 1-9.

1.Close inlet and outlet valves and wait for all the medium in the system to be drained completely. If hot medium is used, wait system to be cooled down to normal temperature. If ball bearings need to be changed, skip to step 10.

2-Remove hex bolts(10) of the housing flange(3) with an appropriate wrench and seperate it from the housing(1).

3-Take out the seal ring(8-9) from the seal chamber inside the housing(1).

4.Clean housing flange(3) and sealing chamber inside housing(1) carefully. Pay attention not to leave any dirt, burr, etc. inside the sealing chamber.

5-Apply grease to a new seal ring(9) and place it inside sealing chamber.

6-When assembling the housing flange(3) to the housing(1), becareful not to damage or dislocate seal ring.

7-With an appropriate tool, tighten bolts(10) of the housing flange(3) correspondingly

8-If there is a problem with the rotation of the swivel joint, skip to step 10 and apply all steps.

9-Open inlet and outlet valves, check if any leaking occurs. If there is no leakage, the swivel joint is ready to be placed back in service.

10.Disassemble the swivel joint from the system with an appropriate tool according to the connection style (welded / flanged) of the joint.

11.Now the joint is ready for maintenance.

12.Put the swivel joint on a clean table on to the backside of the joint.

13.Remove hex bolts(9) of the front housing flange with an appropriate wrench and seperate housing flange(3) from the housing(1).

14.Take out the seal ring(9) from the seal chamber.

15.Turn the swivel joint onto the other side and remove bolts(10) of the back housing flange.

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16.Remove ball plug set(4) with an appropriate tool. Becareful not to damage edges of the ball plugs when taking out from the housing.

17.Remove all grease inside ball bearing chamber with a degreaser.

18.Rotate the shaft(2) and take out all ball bearings(5).

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19.After all ball bearings are removed, take out the shaft from the housing.

20.Remove ball bearing o-rings(6-7) from the shaft.

21.Clean all parts carefully. Pay attention not to leave any dirt, burr, etc. inside the sealing chamber.

22.Control ball bearings o-rings(6-7), if necessary replace them with new ones.

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23.Becareful not to damage when assembling ball bearing o-rings onto the shaft.

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24.After applying grease onto the ball bearing o-rings, while rotating the shaft, push the shaft into the housing until ball bearing races are aligned.

25. Replace all deformed ball bearings(5) with new ones and place them all inside the bearing chamber.

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26.Align ball plug(4.1) to the ball bearings and place it inside the housing and fix it with the plug stopper(4.2).

27.Control rotation of the swivel joint, if there is any problem, take out all ball bearings and control bearing chambers.

28.Assemble front housing flange to the shaft with appropriate bolts.

29.Place swivel joint on the table onto the shaftside.

30.Apply grease to a new seal ring(7) and place it inside sealing chamber.

31.When assembling the housing flange(3) to the housing(1), becareful not to damage or dislocate seal ring. Fix housing flange to the housing with appropriate bolts(10)

32.Swivel joint is ready to be assembled back in system.

33.Assemble swivel joint to the system.

34.Open inlet and outlet valves, check if any leaking occurs from the drain port. If there is no leakage, the swivel joint is ready to be placed back in service.