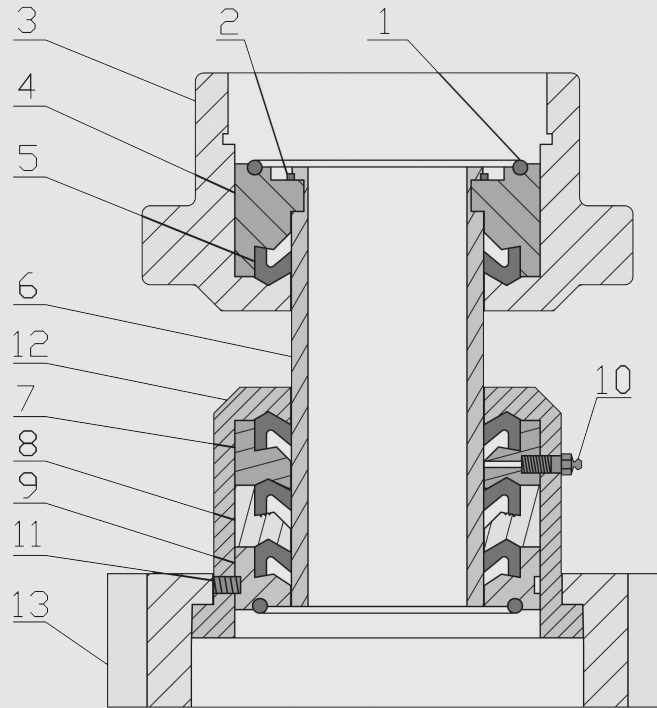


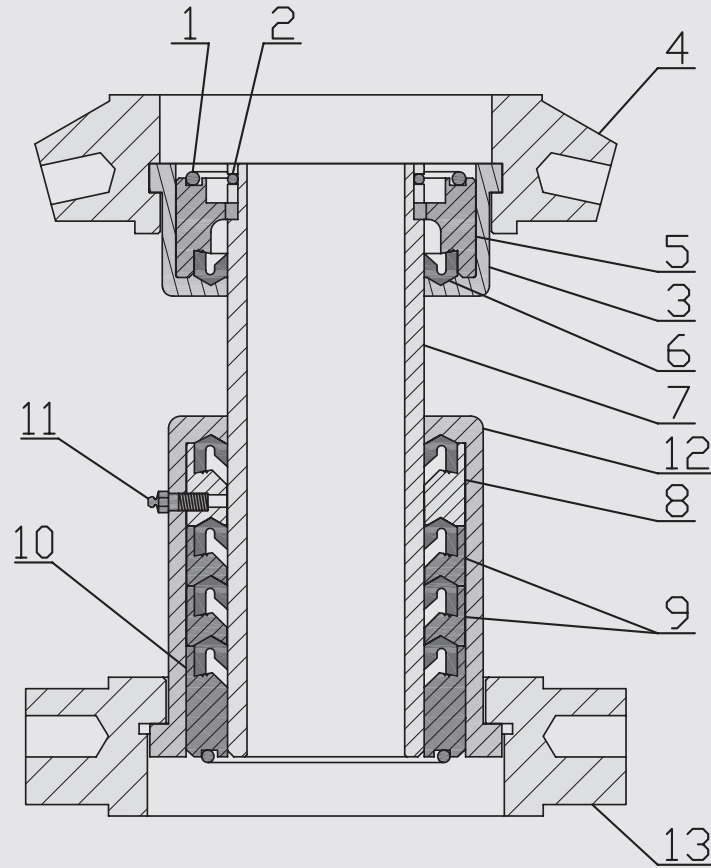
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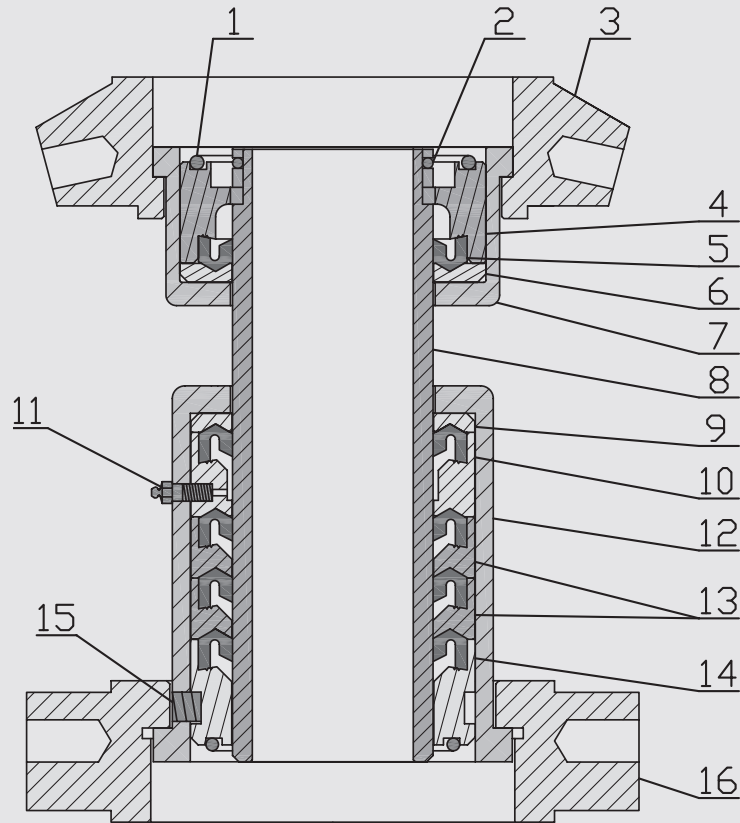
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Item#	Qty	Description	SW150
1	2	O-Ring	SWA459.17
2	1	Snap Ring	SWA459.16
3	1	Top Nut	SWA459.20
4	1	Locking Spacer	SWA459A.18
5	1	Washpipe Packing (Includes 4 Packing Rings and Item 1)	SW150PA
6	1	Washpipe Assembly (Includes Item 2)	SW150WP
7	1	Top Spacer Ring	SWA459A.23
8	1	Middle Spacer Ring	SWA459.24
9	1	Bottom Spacer Ring	SWA459.26
10	1	Grease Nipple	SWA150GB1152-74
11	1	Lock Screw	SWA459A.25
12	1	Lower Packing Box	SWA459A.22
13	1	Lower Nut	SWA459.9
		Cartridge Assembly (Includes Items 1 thru 13)	SW150QC

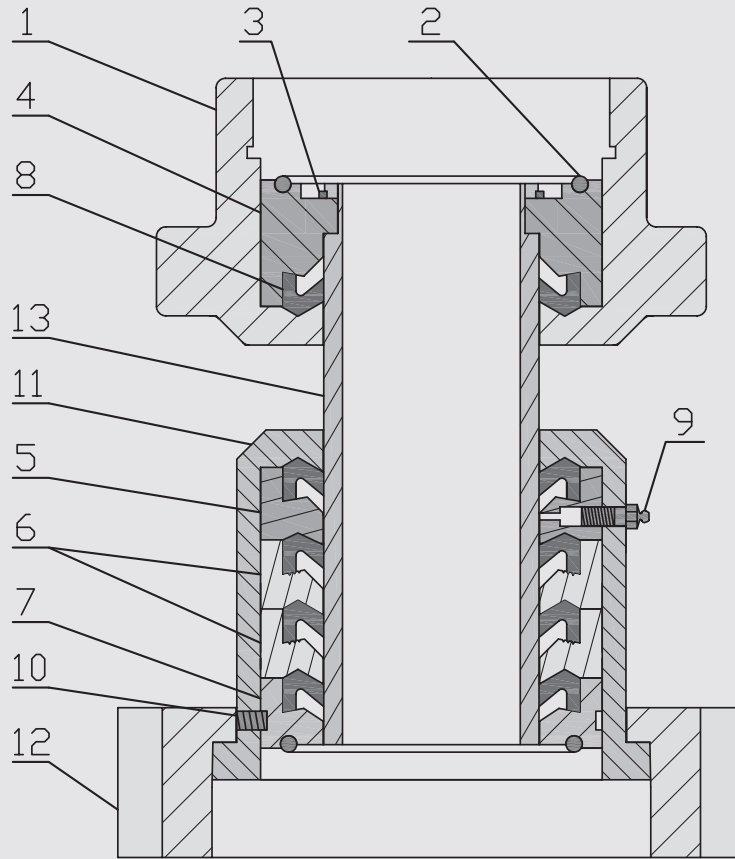


Item#	Qty	Description	SW200
1	2	O-Ring	SW180A430-42
2	1	Snap Ring	SW180A430-31
3	1	Upper Packing Box	SW180A430-34
4	1	Top Nut	SW180A430-32
5	1	Locking Spacer	SW180A430-33
6	1	Washpipe Packing (Includes 5 Packing Rings and Item 1)	SW200PA
7	1	Washpipe Assembly (Includes Item 2)	SW200WP
8	1	Top Spacer Ring	SW180A430-37
9	2	Middle Spacer Ring	SW180A430-38
10	1	Bottom Spacer Ring	SW180A430-41
11	1	Grease Nipple	SW180GB1152-79
12	1	Lower Packing Box	SW180A430-36
13	1	Lower Nut	SW180A430-43
		Cartridge Assembly (Includes Items 1 thru 13)	SW200QC



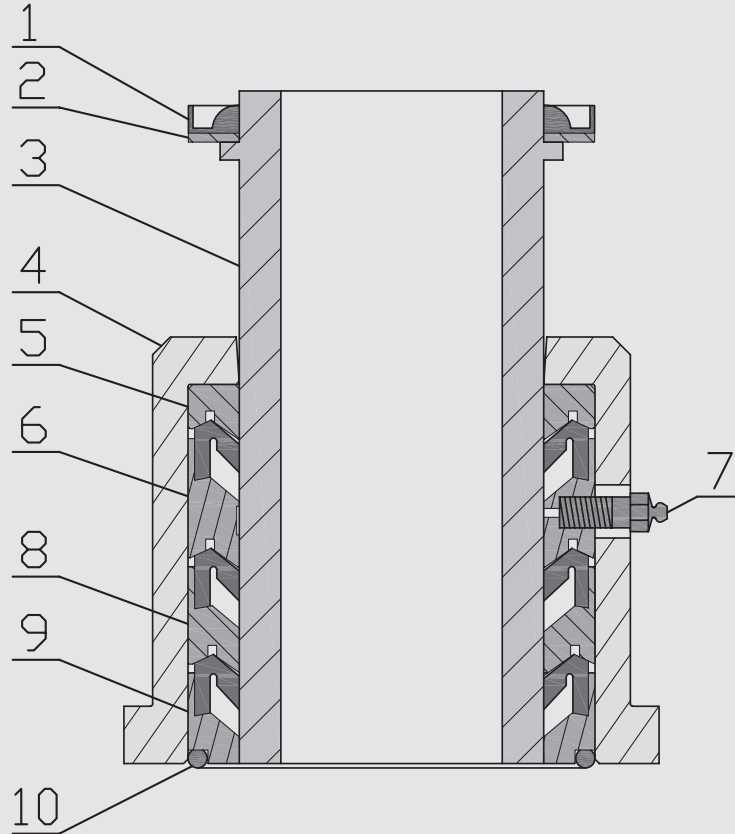
Item#	Qty	Description	SW250/500
1	2	O-Ring	SW250GB1235-76
2	1	Snap Ring	SWSL225-04.02
3	1	Top Nut	SWSL225-04.01
4	1	Locking Spacer	SWSL225-04.03
5	1	Washpipe Packing (Includes 5 Packing Rings and Item 1)	SW250/500PA
6	1	Upper Spacer	SWSL225-04.04
7	1	Upper Packing Box	SWSL225-04.05
8	1	Washpipe Assembly (Includes Item 2)	SW250/500WP
9	1	Lower Spacer	SWSL225-04.08
10	1	Grease Spacer	SWSL225-04.09
11	1	Grease Fitting	SW180GB1152-79
12	1	Lower Packing Box	SWSL225-04.07
13	2	Middle Spacer Ring	SWSL225-04.11
14	1	Lower Packing Spacer	SWSL225-04.12
15	1	Set Screw	SW250GB75-85
16	1	Lower Nut	SWSL225-04.13
		Cartridge Assembly (Includes Items 1 thru 16)	SW250/500QC

## EMSCO LB200/300 LB400/650

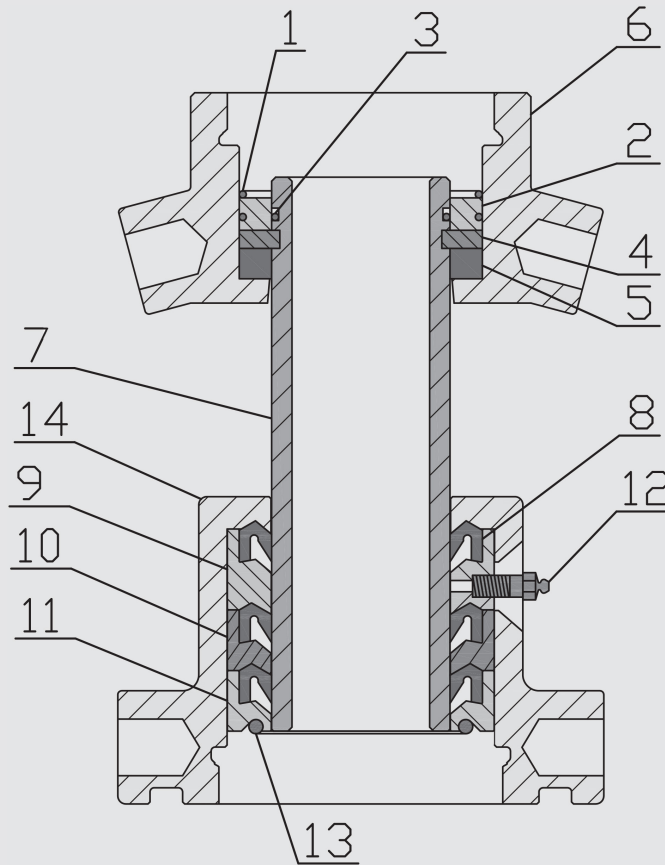


Item#	Qty	Description	LB200/300 Part Number	LB400/650 Part Number
1	1	Upper Gland Nut	SW-6597-0381-00	SW-6597-0381-00
2	2	O-Ring	SW-7602-1600-63	SW-7602-1600-63
3	1	Retaining Ring	SW-6597-0395-00	SW-6597-0395-00
4	1	Upper Packing Spacer	SW-6597-0388-00	SW-6597-0388-00
5	1	Top Packing Spacer	SW-6597-0382-00	SW-6597-0382-00
6	2*	Middle Packing Spacer	SW-6597-0383-00	SW-6597-0383-00
7	1	Bottom Packing Spacer	SW-6597-0384-00	SW-6597-0384-00
8	5*	Packing Ring	SW-6597-0338-00	SW-6597-0338-00
9	1	Grease Fitting	SW-7601-2070-01	SW-7601-2070-01
10	1	Socket Head Setscrew	SW-7601-0370-96	SW-7601-0370-96
11	1	Packing Gland Housing	SW-6597-0380-10	SW-6597-0380-00
12	1	Lower Gland Nut	SW-6597-0379-00	SW-6597-0379-00
13	1	Washpipe c/w Snap Ring (Includes Item 3)	SW-70-103-38	SW-70-103-36
14	1	Washpipe Packing (Includes Items 2 & 8)	SW-75-103-20	SW-75-103-24
		Cartridge Assembly (Includes Items 1 thru 14)	SW-6597-0040-00	SW-6597-0394-00

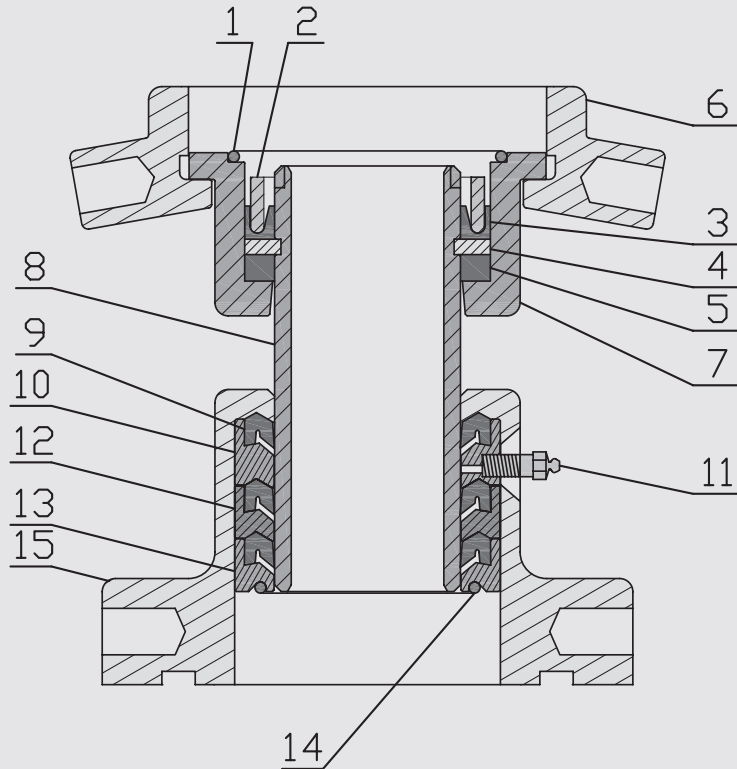
\*The LB200/300 Requires (1) less of each



Item#	Qty	Description	SW400/550
1	1	Washpipe Packing (Includes 4 Packing Rings and Item 10)	SW-75-116-2
2	1	Packing Ring	SW-126961
3	1	Washpipe	SW-70-116-2
4	1	Packing Box	SW-185303
5	1	Top Spacer	SW-185304
6	1	Spacer Ring	SW-185305
7	1	Grease Fitting	SW-118043
8	1	Middle Spacer	SW-185306
9	1	Bottom Spacer	SW-185307
10	1	O-Ring	SW-162810

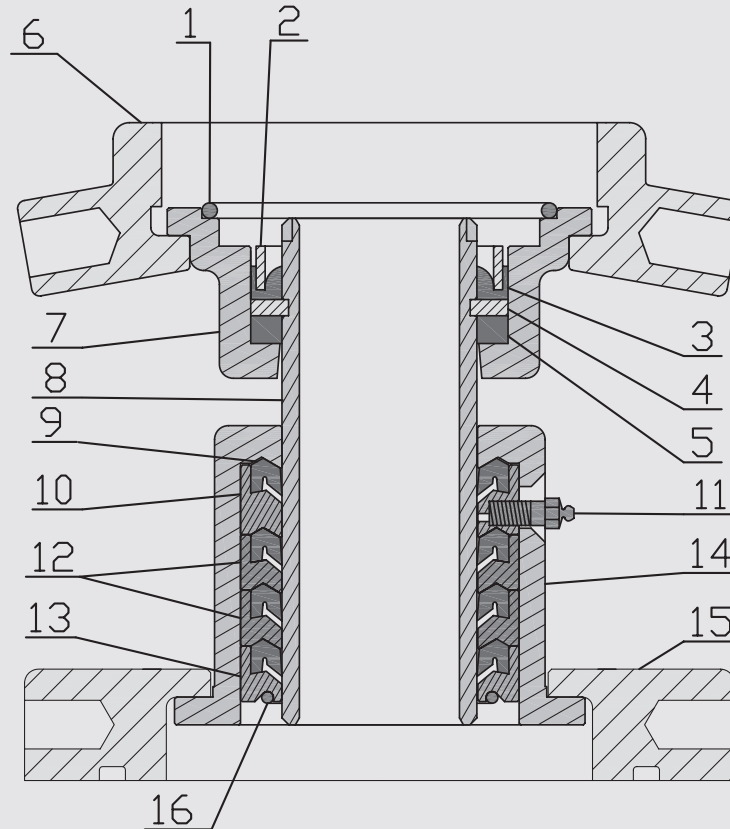


Item#	Qty	Description	TL120
	1	Upper Packing Assembly (Includes Items 1 thru 5)	SW-IP-166
1	2	O-Ring	SW-IO-531
2	1	Seal Adapter	SW-339-32
3	1	O-Ring	SW-IO-523
4	1	Retaining Ring	SW-339-DA
5	1	Fleximount Ring	SW-339-DB
6	1	Upper Cartridge	SW-559-10
7	1	Washpipe	SW-70-107-4
	1	Lower Packing Assembly (Includes Items 8 thru 13 & Grease)	SW-IP-177
8	1	Washpipe Packing (Includes 3 Packing Rings and Item 13)	SW-75-107-16
9	1	Upper Packing Spacer	SW-559-23-01
10	1	Middle Packing Spacer	SW-559-23-03
11	1	Lower Packing Spacer	SW-559-23-04
12	1	Grease Fitting	SW-IF-161
13	1	O-Ring	SW-IO-502
14	1	Lower Cartridge	SW-559-23-02
		Quick Change Cartridge Assembly (Includes Items 1 thru 14)	SW-TL120QC

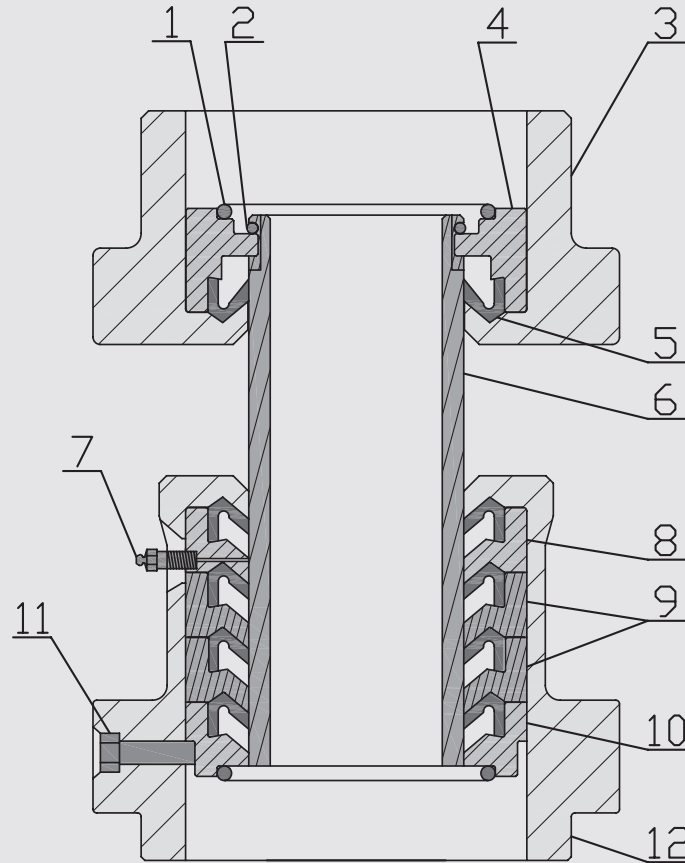


Item#	Qty	Description	TL200
	1	Upper Packing Assembly (Includes Items 1 thru 5)	SW-IP-159
1	1	O-Ring	SW-IO-518
2	1	Spacer	SW-491-17
3	1	Seal Ring	SW-IP-158
4	1	Retaining Ring	SW-491-19
5	1	Fleximount Ring	SW-491-18
6	1	Upper Nut	SW-531-13
7	1	Upper Cartridge	SW-531-14-01
8	1	Washpipe	SW-70-107-12
	1	Lower Packing Assembly (Includes Items 9 thru 13 & Grease)	SW-IP-802
9	1	Washpipe Packing (Includes 3 Packing Rings and Item 14)	SW-75-107-9
10	1	Upper Packing Spacer	SW-531-23-01
11	1	Grease Fitting	SW-IF-161
12	1	Middle Packing Spacer	SW-531-23-03
13	1	Lower Packing Spacer	SW-531-23-04
14	1	O-Ring	SW-IO-516
15	1	Lower Cartridge	SW-531-23
		Quick Change Cartridge Assembly (Includes Items 1 thru 15)	SW-TL200QC



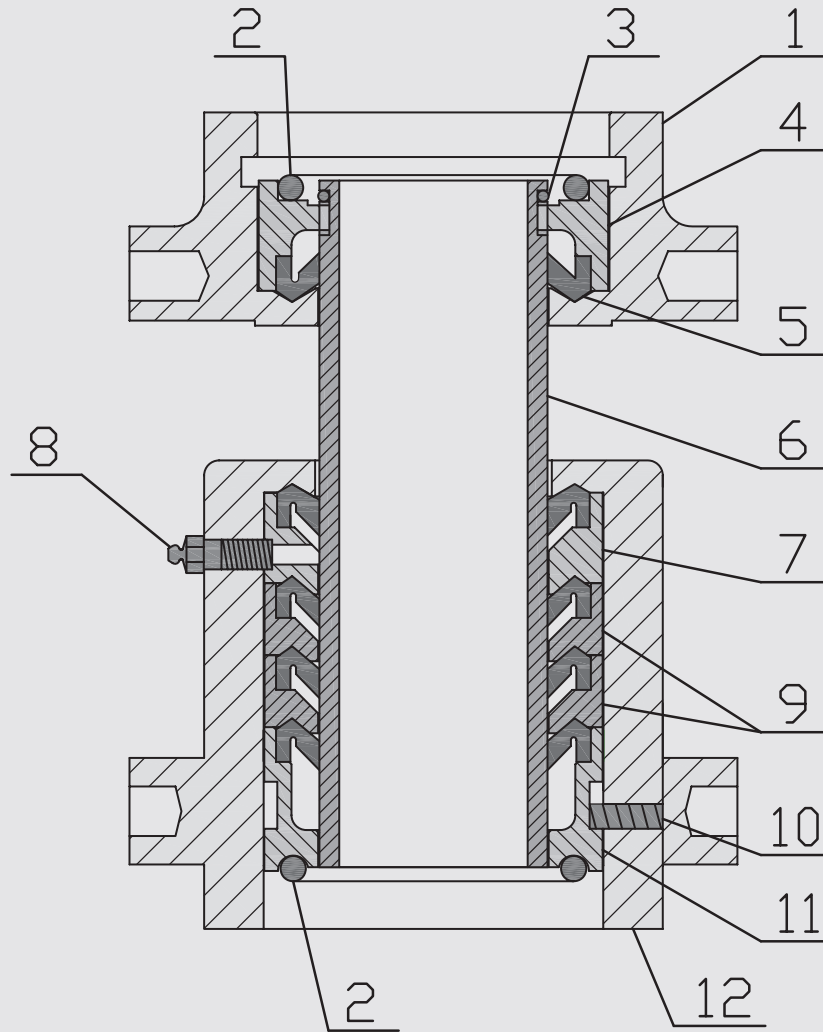


Item#	Qty	Description	TL300/500
	1	Upper Packing Assembly (Includes Items 1 thru 5)	SW-IP-162
1	1	O-Ring	SW-IO-519
2	1	Spacer	SW-491-17
3	1	Seal Ring	SW-IP-158
4	1	Retaining Ring	SW-491-19
5	1	Fleximount Ring	SW-491-18
6	1	Upper Nut	SW-491-10
7	1	Upper Cartridge	SW-491-20
8	1	Washpipe	SW-70-107-12 (TL200/400) SW-70-107-10 (TL500)
	1	Lower Packing Assembly (Includes Items 9 thru 13 & Grease)	SW-IP-801
9	1	Washpipe Packing (Includes 4 Packing Rings and Item 16)	SW-75-107-3
10	1	Upper Packing Spacer	SW-531-23-01
11	1	Grease Fitting	SW-IF-161
12	2	Middle Packing Spacer	SW-531-23-03
13	1	Lower Packing Spacer	SW-531-23-04
14	1	Lower Cartridge	SW-491-27
15	1	Lower Nut	SW-491-11
16	1	O-Ring	SW-IO-516
		Quick Change Cartridge Assembly (Includes Items 1 thru 16)	SW-TL500QC SW-TL400QC (TL300/400)



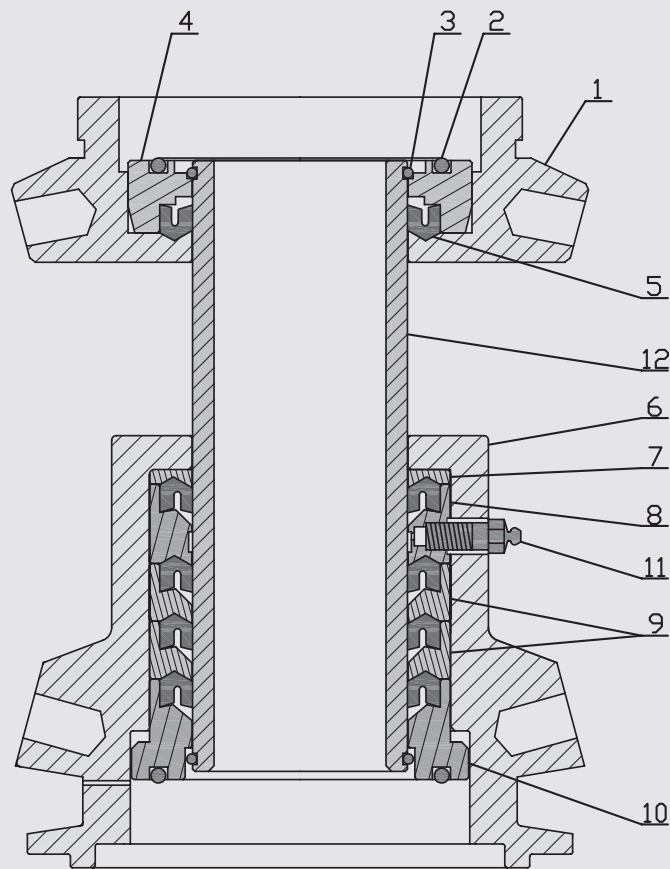
Item#	Qty	Description	P200/650
1	2	O-Ring	SW-7817600-438
2	1	Snap Ring	SW-623459
3	1	Washpipe Holding Nut	SW-649357
4	1	Washpipe Holding Ring	SW-649356
5	1	Washpipe Packing (Includes 5 Packing Rings and Item 1)	SW-75-106-24
6	1	Washpipe Assembly (Includes Item 2)	SW-70-106-24
7	1	Grease Fitting	SW-7805138
8	1	Washpipe Packing Spacer	SW-649358-A
9	2	Middle Washpipe packing Spacer	SW-649359
10	1	Lower Washpipe Packing Spacer	SW-649360
11	1	Set Screw	SW-649369
12	1	Washpipe Packing Nut (Includes Item 11)	SW-649361-A
		Cartridge Assembly (Includes Items 1 thru 12)	SW-703429-G1U

**NATIONAL N24/35  
N47/1324**

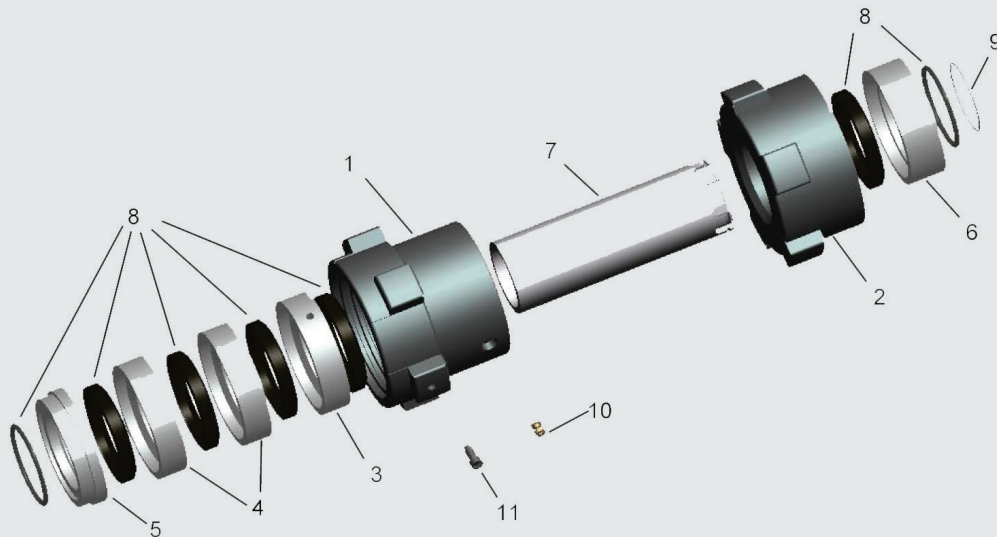


Item#	Qty	Description	N24/35	N47/1324
1	1	Washpipe Holding Cap	SW-627395	SW-624565
2	2	O-Ring	SW-627398	SW-621827
3	1	Snap Ring	SW-627399	SW-623459
4	1	Wash Pipe Holding Spacer	SW-627396	SW-623454-B
5	1	Washpipe Packing (Includes 5 Packing Rings & Item 2)	SW-75-106-17	SW-75-106-22
6	1	Washpipe Assembly (Includes Item 3)	SW-70-106-22	SW-70-106-12
7	1	Upper Spacer	SW-614198-A	SW-613151-A
8	1	Grease Fitting	SW-47640	SW-47640
9	2	Middle Spacer	SW-614197	SW-613150
10	1	Set Screw	SW-623457	SW-623457
11	1	Lower Packing Spacer	SW-627397	SW-623456
12	1	Washpipe Packing Box	SW-627394-A	SW-623455-A
		Quick Change Cartridge Assembly (Includes Items 1 thru 12)	SW-627394-AA2	SW-623455-AA2

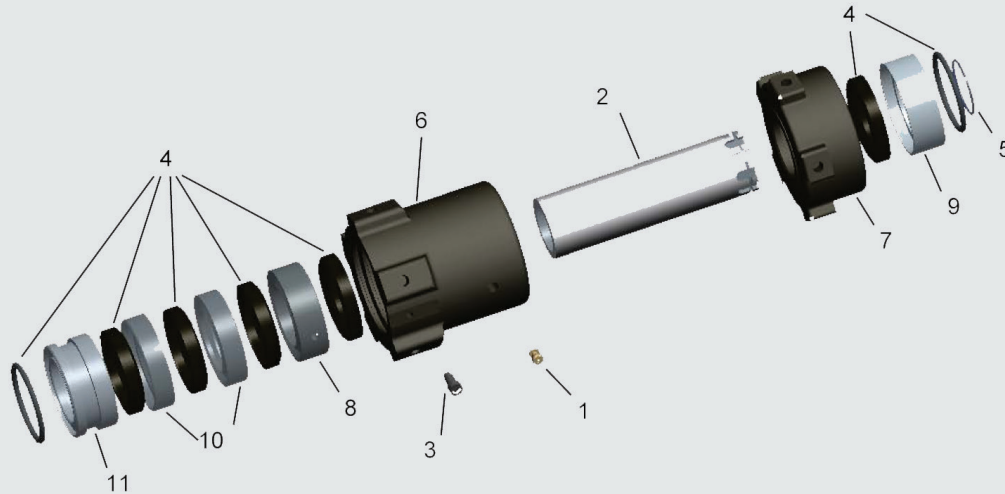
## OILWELL PC100/150 PC225/650



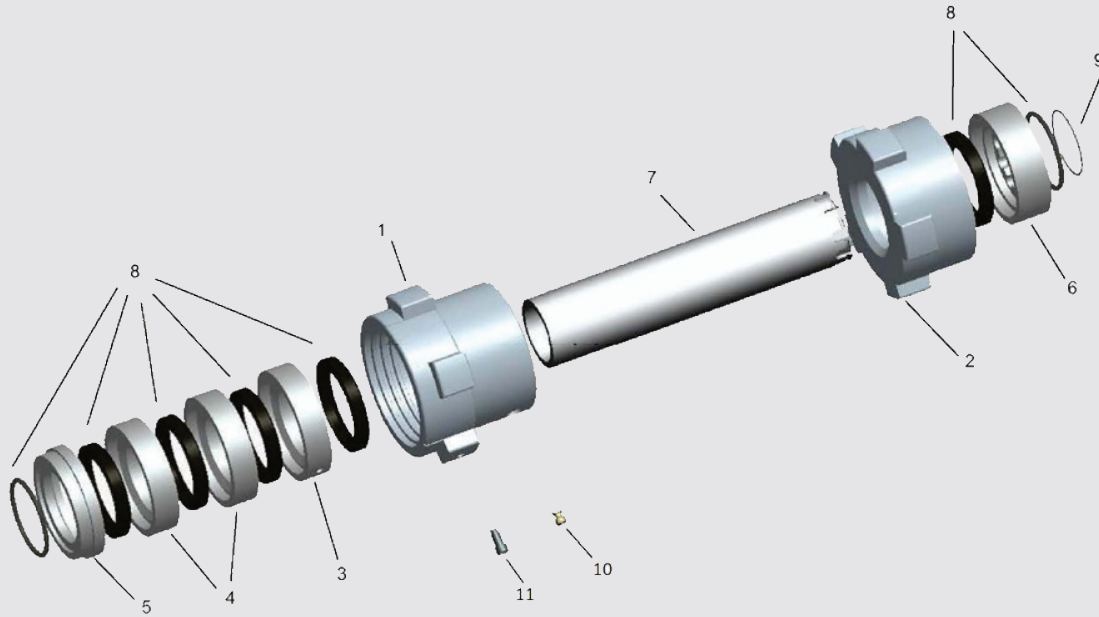
Item#	Qty	Description	PC100/150 Part Number	PC225/650 Part Number
1	1	Ring Nut	SW-22-032-002	SW-22-025-160
2	2	O-Ring	SW-99-607-344	SW-99-607-427
3	2	Snap Ring	SW-22-032-000	SW-22-025-164
4	1	Top Adapter Ring	SW-22-032-001	SW-22-025-169
5	5	Packing Ring	SW-22-028-181	SW-22-034-017
6	1	Packing Housing	SW-22-032-004	SW-22-025-166
7	1	Packing Adapter Ring	SW-22-032-005	SW-22-034-016
8	1	lantern Ring	SW-22-028-186	SW-22-034-015
9	2	Spacer Ring	SW-22-028-187	SW-22-034-013
10	1	Bottom Adapter Ring	SW-22-032-006	SW-22-034-014
11	1	Grease Fitting	SW-64-016-115	SW-64-016-115
12	1	Washpipe c/w Snap Ring (Includes Item 3)	SW-70-109-16	SW-70-109-18
13	1	Washpipe Packing (Includes Items 5 & 2)	SW-75-109-16	SW-75-109-18
		Cartridge Assembly (Includes Items 1 thru 13)	SW-22-030-012	SW-22-035-012



Item#	Qty	Description	TDS 11
1	1	Washpipe Packing Assembly Box	TD-30123563
2	1	Nut	TD-123284
3	1	Upper Spacer	TD-123285
4	2	Middle Spacer	TD-30123286
5	1	Lower Spacer	TD-30123287
6	1	Holding Ring	TD-30123288
7	1	Washpipe Assembly (Includes Item 9)	TD-30123289
8	1	Washpipe Packing (Includes 5 Packing Rings & 2 O-Rings)	TD-123292-2
9	1	Snap Ring	TD-30123562
10	1	Grease Fitting	TD-53219-1
11	1	Screw	TD-30123564
		Cartridge Assembly (Includes Item 1 thru 11)	TD-30123290



Item#	Qty	Description	200T/250T
1	1	Grease Fitting	TD-7808
2	1	Washpipe Assembly (Includes Item 5)	TD-5889
3	1	Seal Ring Bolt	TD-5890
4	1	Washpipe Packing (Includes 5 Packing Rings & 2 O-Rings)	TD-6003
5	1	Snap Ring	TD-6930
6	1	Packing Nut	TD-7178
7	1	Upper Nut	TD-7179
8	1	Upper Spacer	TD-7211
9	1	Upper Holding Spacer	TD-7212
10	2	Middle Spacer	TD-8022
11	1	Lower Spacer	TD-9300
		Cartridge Assembly (Includes Items 1 thru 11)	TD-8021



Item#	Qty	Description	CANRIG 1250AC
1	1	Washpipe Packing Box	TD-01-1005-010
2	1	Nut	TD-01-1000-010
3	1	Upper Spacer	TD-01-1003-010
4	2	Middle Spacer	TD-01-1004-010
5	1	Lower Spacer	TD-01-1006-010
6	1	Holding Ring	TD-01-1001-010
7	1	Washpipe Assembly (Includes Item 9)	TD-722-10-0
8	1	Washpipe Packing (Includes 5 Packing Rings & 2 O-Rings)	TD-01-1002-010
9	1	Snap Ring	TD-01-1007-010
10	1	Grease Fitting	TD-01-1003-01A
11	1	Screw	TD-01-1005-01A
		Cartridge Assembly (Includes Item 1 thru 11)	TD-1250AC

