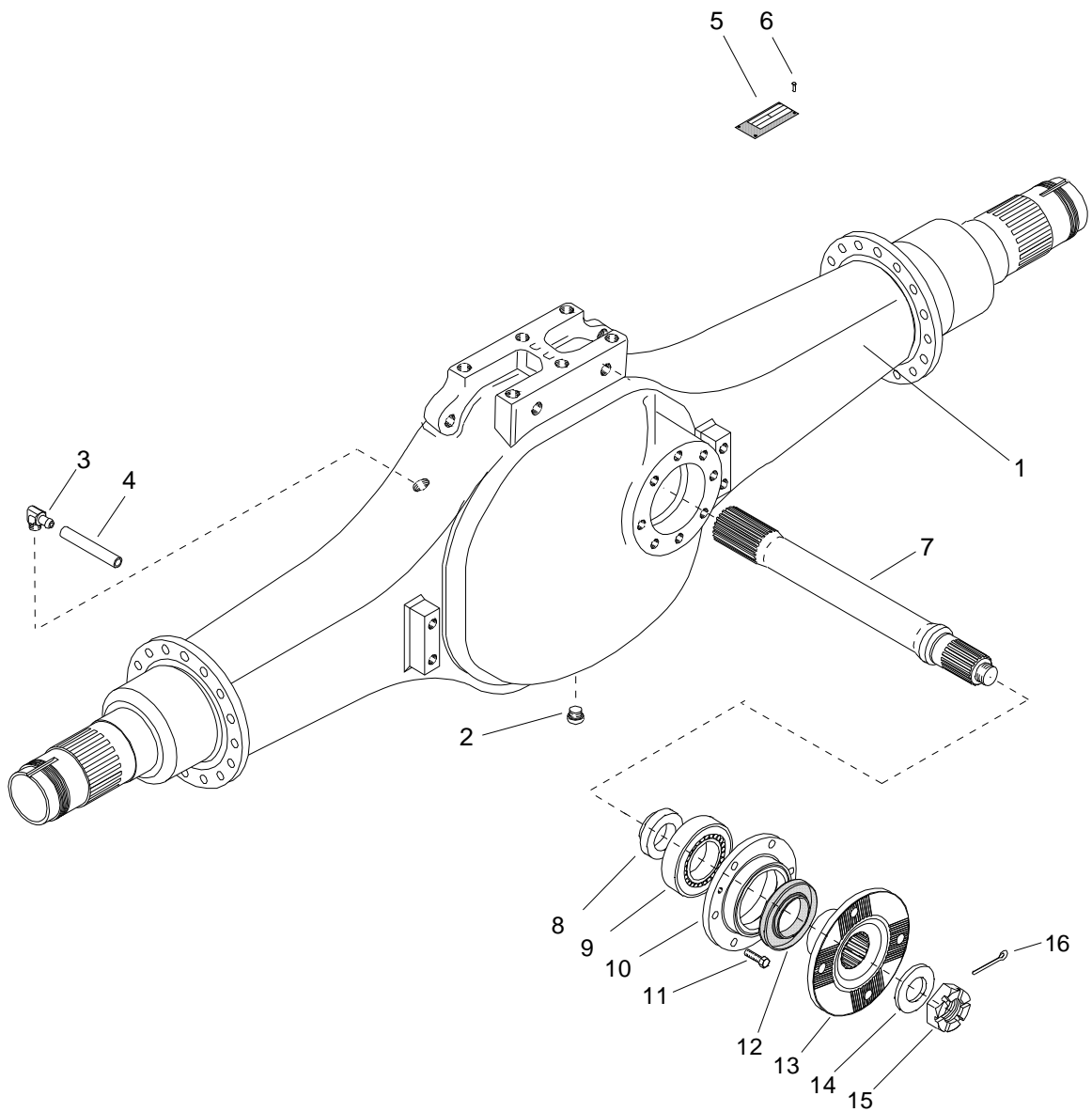


SISU AXLES

SPARE PARTS BOOK

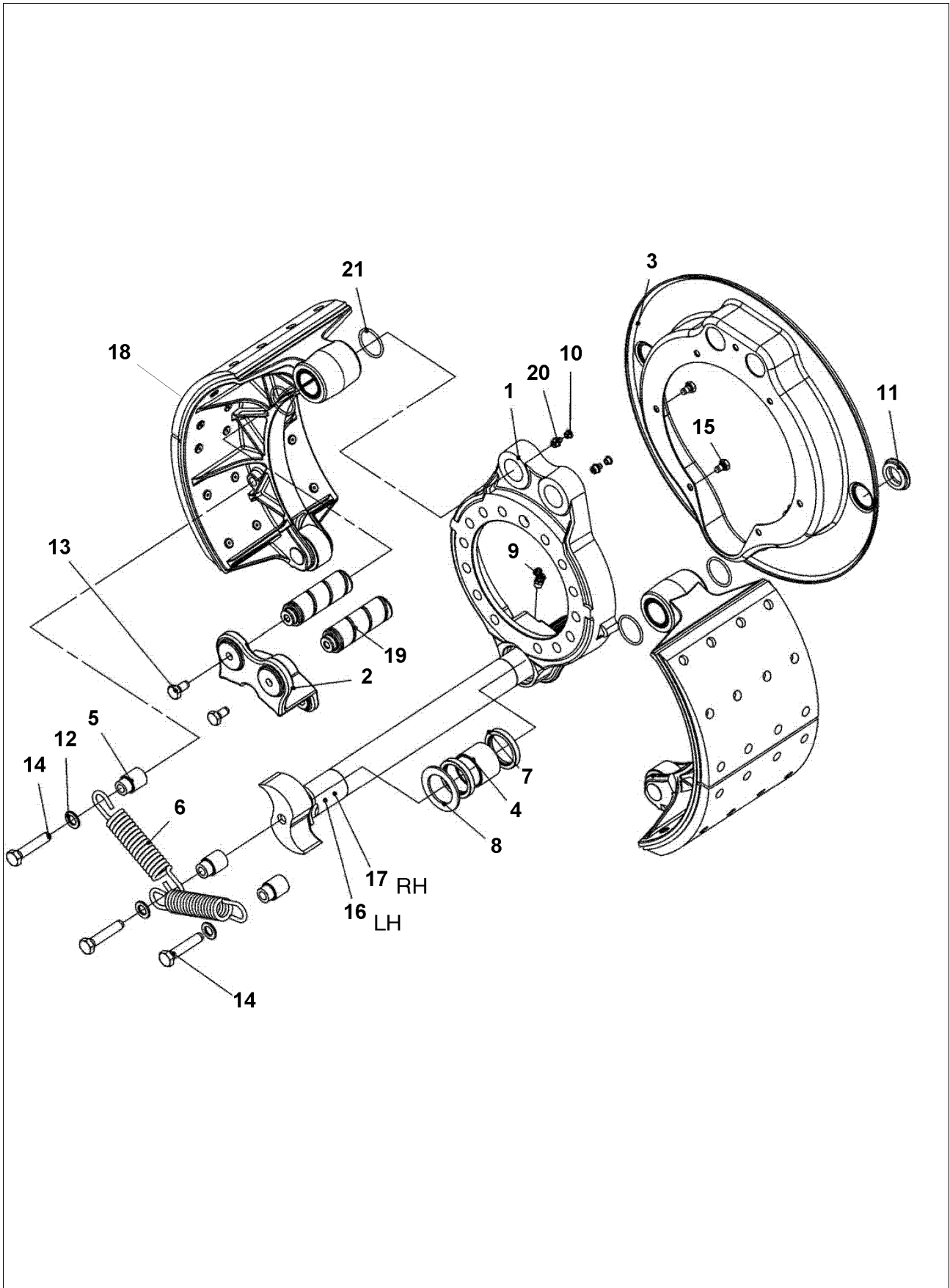
**Tridem Axle
FRFP-20-S
FRFP20S0879/004
Book No. 448 (6/2014)**

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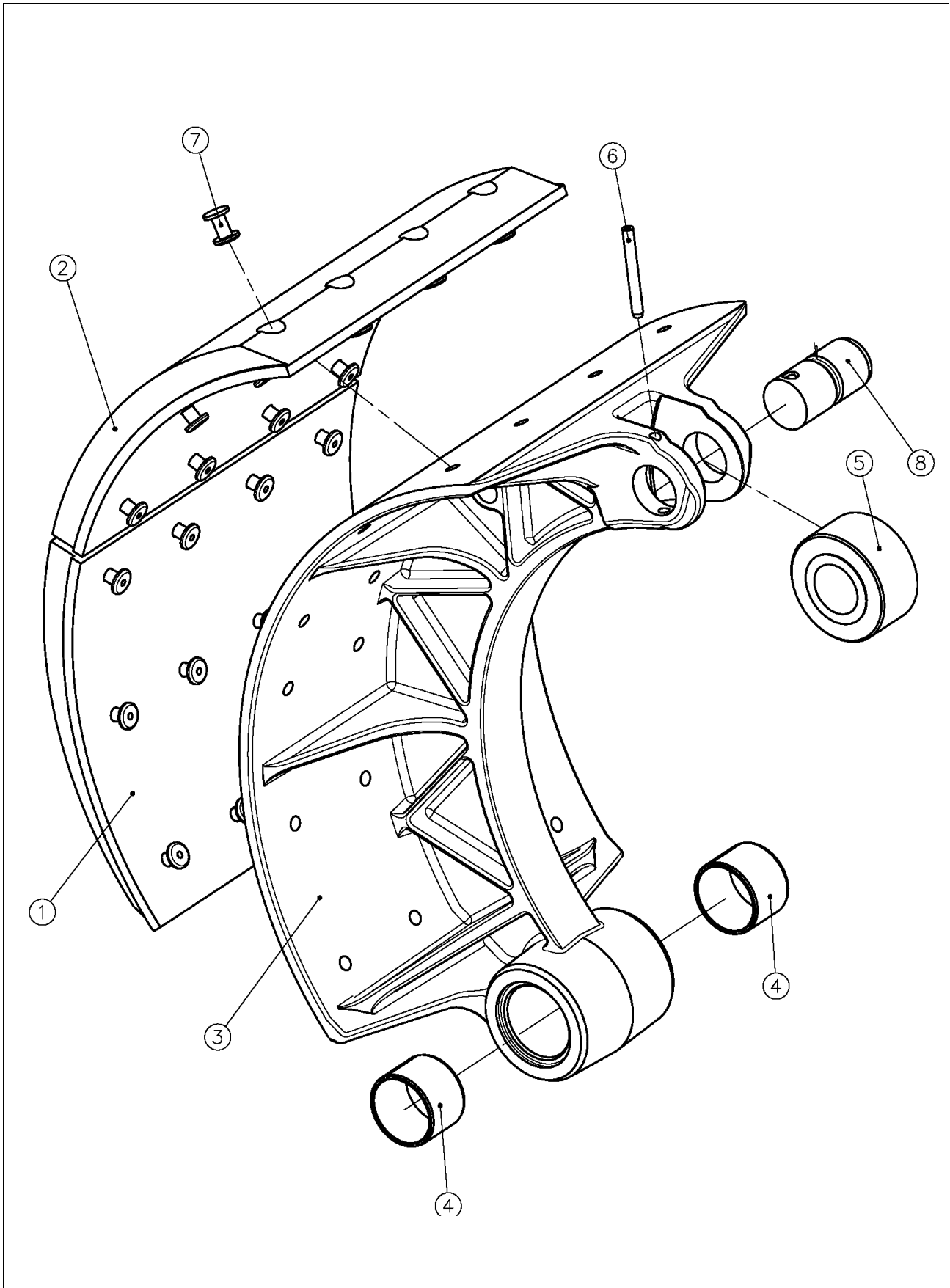


M309-001.DS4

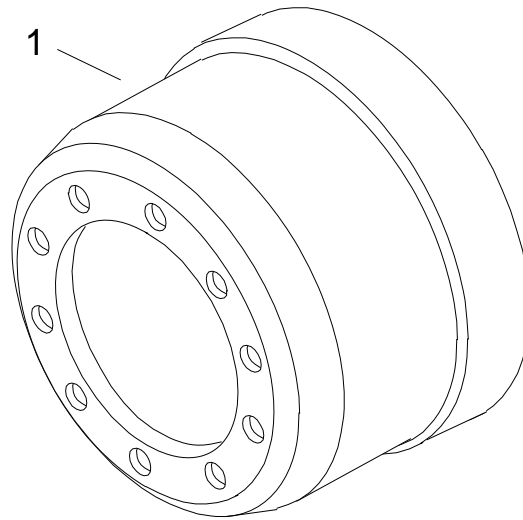
Item	Qty.	Order no.	Description	Note
1	1	101-0110-477	Axle housing	Track 2040
2	1	90873-22109	Oil plug	M22x1.5 - DIN908, Allen head, magnetic
2	1	91201-22150	Seal ring	D22/27x1.5 Cu
3	1	591952-10604	Fitting	R1/8", 6 mm
3	1	91201-22150	Seal ring	D22/27x1.5 Cu
4	1	579-616-0000	Breather pipe	D6/4, L=1500
4	1	591937-04027	Support ring	D4
7	1	544-251-3610	Output Shaft	Splines W65x24
8	0	0		Not installed
9	1	91734-40651	Deep groove ball bearing	D65/120 x 23
10	1	544-321-0500	Seal housing	
11	8	90303-10303	Hex Screw	M10x30
12	1	591122-08507	Shaft seal	Cassette seal D85/120x9/20
13	1	538-918-0510	Output flange	ISO 8667 - T180
14	1	90705-43069	washer	D43/80x6
15	1	90546-42653	Nut	M42x1.5
16	1	590621-63503	Split pin	D6,3x50



Item	Qty.	Order no.	Description	Note
1	2	146-111-2610	Brake Bracket	
2	2	146-331-0400	Anchor support	
3	2	146-131-2210	Dust Shield	210 mm
4	2	590-314-2062	Sleeve	D42/48x36
5	6	599-601-8900	Bush	D12/20/25x36
6	4	92052-30002	Return spring	D30x165.5
7	4	91122-04201	Shaft seal	D42/55x8
8	2	91726-43065	Support ring	D43/65x3
9	2	91402-10453	Grease nipple	M10x1, 45°
10	6	91421-06060	Shield hat	
11	4	095-553-2000	Shield plug	D33/44
12	6	90705-13023	washer	D13/24x2.5
13	4	90303-10203	Hex Screw	M10 x 20 - DIN 933 - 8.8
14	6	90303-12603	Hex Screw	M12x60
15	14	90303-08123	Hex Screw	M8x12
16	1	546-213-2800	S-cam shaft	RH, L=659.5
17	1	546-213-2900	S-cam shaft	LH, L=659.5
18	4	546-306-0083	Brake shoe assy	210mm, Beral1561
19	4	146-341-1200	Anchor bolt	With grease nipple
20	4	91402-10003	Grease nipple	M10x1, Straight
21	8	91106-36212	O-ring	D36,2x3 Viton

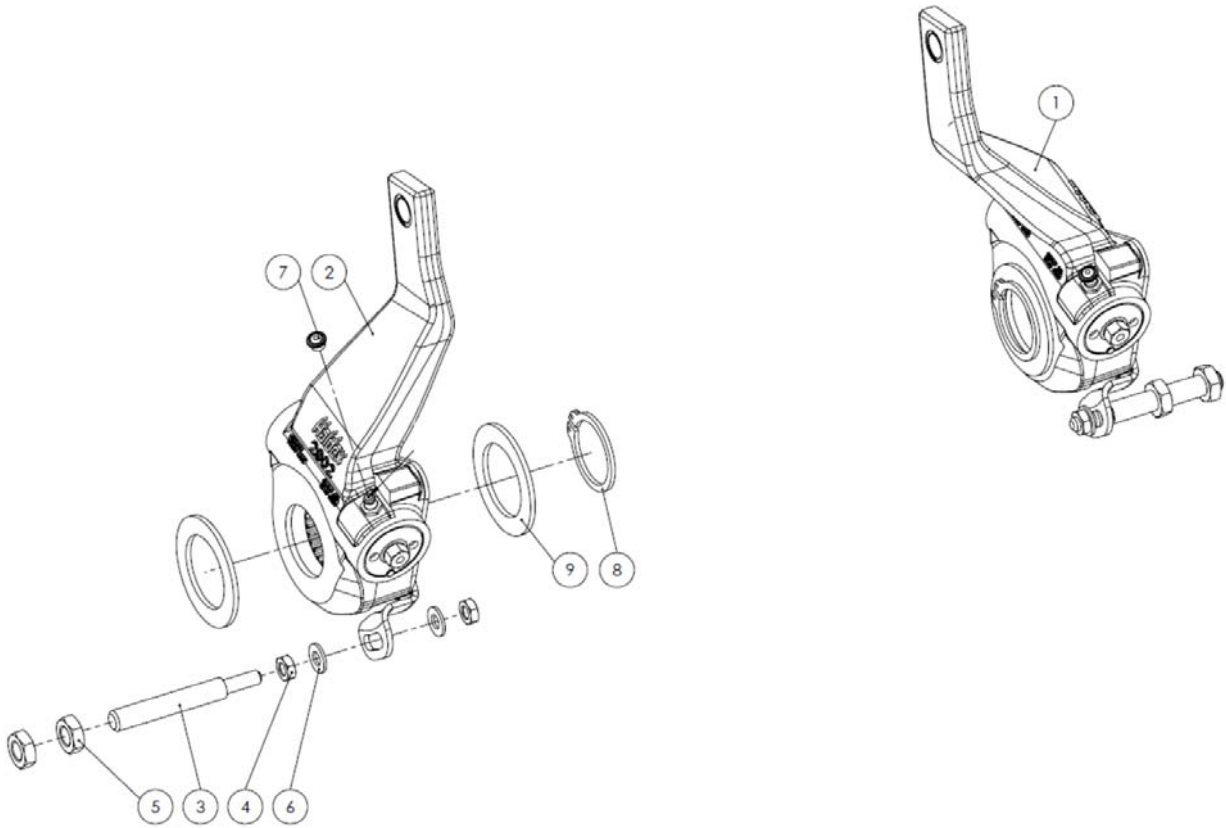


Item	Qty.	Order no.	Description	Note
1,2	ar	546-360-3113	Brake lining set	210mm, Beral1561, for one wheel
3	1	146-351-4100	Brake shoe	210 mm, o-ring sealing
4	2	590-313-2091	Sleeve	D32/36x25
5	1	146-371-0700	Roller	D25/54x28
6	1	90602-05450	Spring cotter	D5x40
7	24	91501-00819	Rivet	Included in lining set (pos1,2)
8	1	146-373-0201	Pin	D25x50

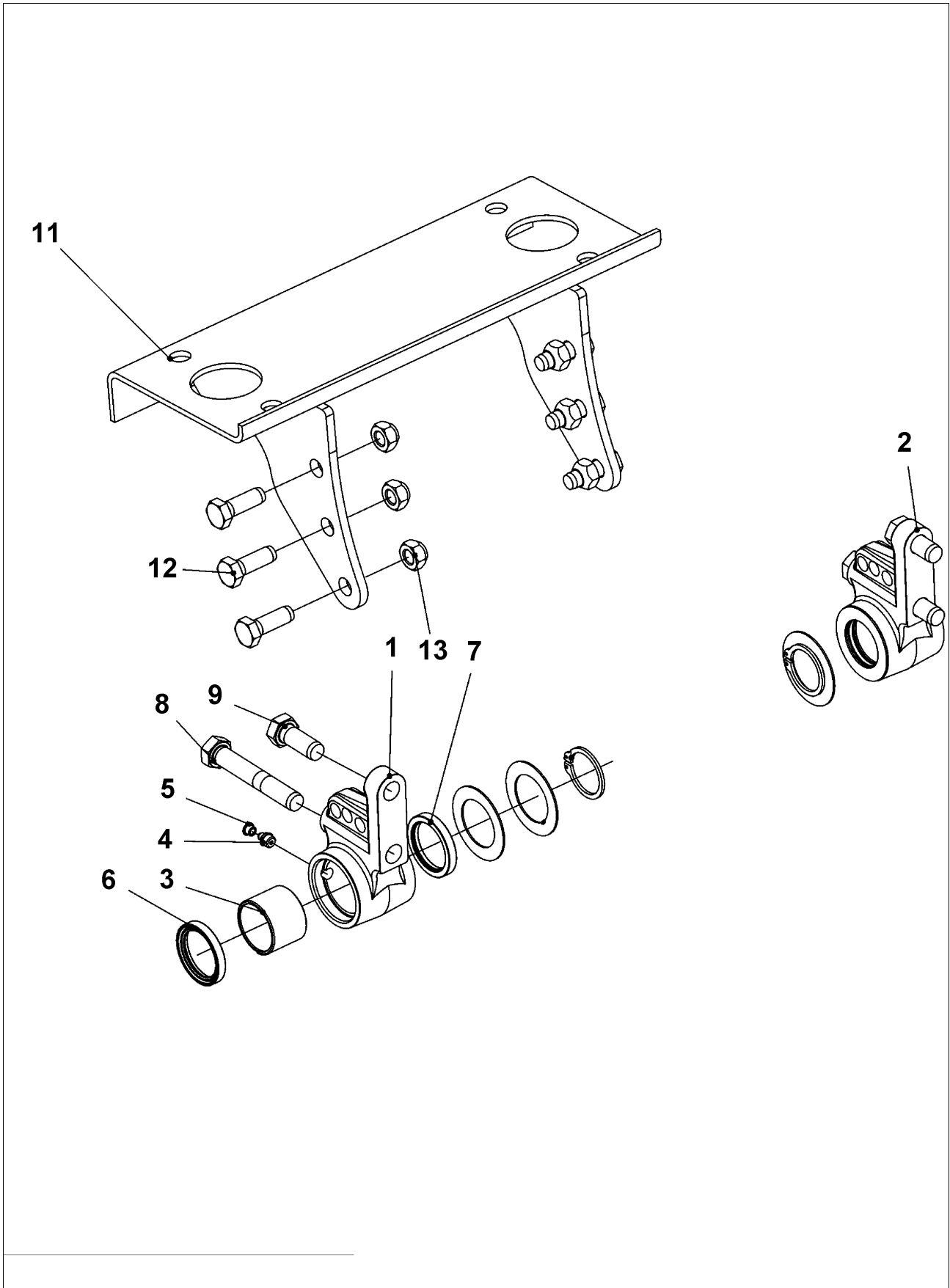


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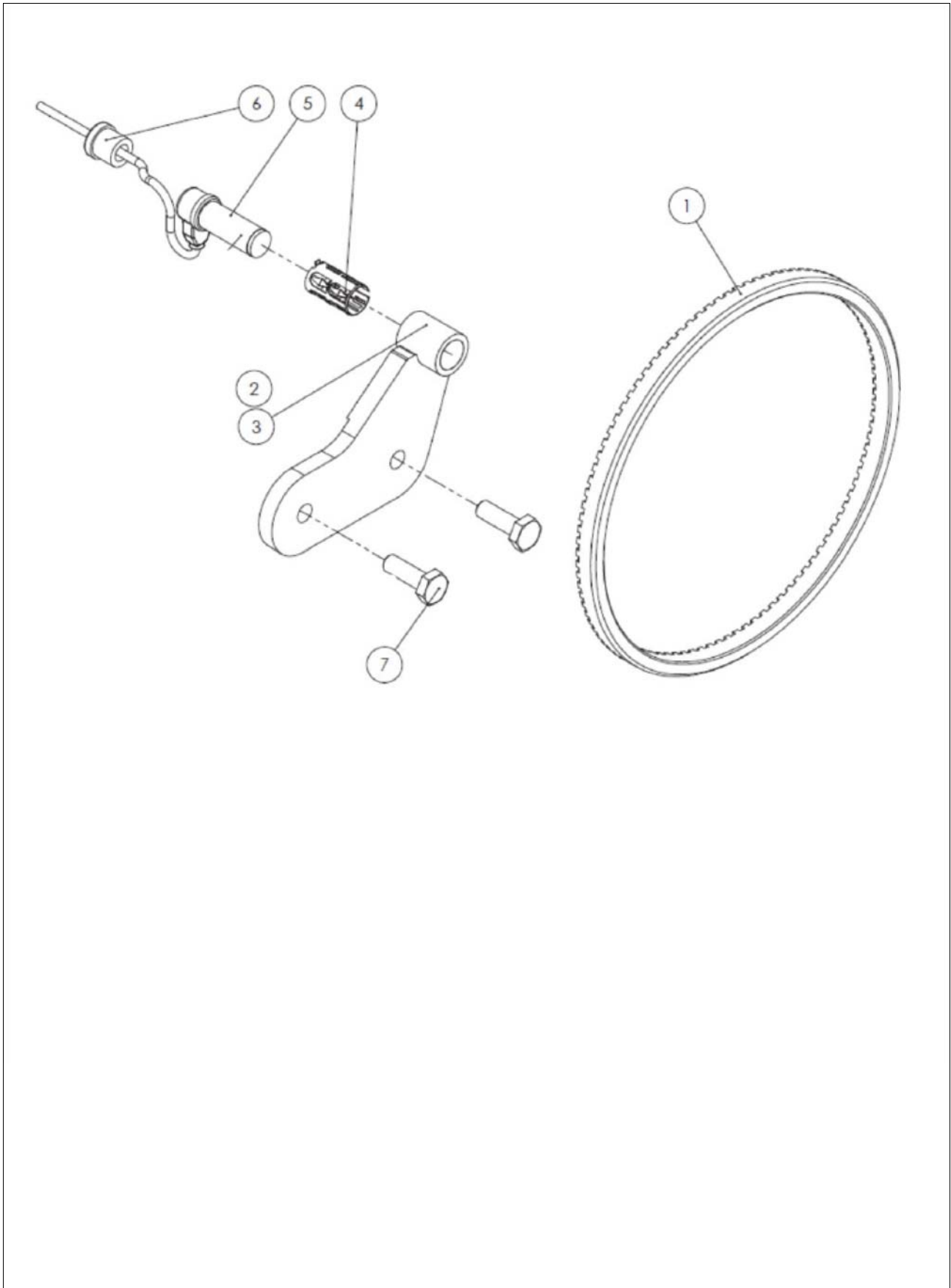
Item	Qty.	Order no.	Description	Note
0	0	0		
1	2	546-311-8211	Brake drum	D410x210 mm



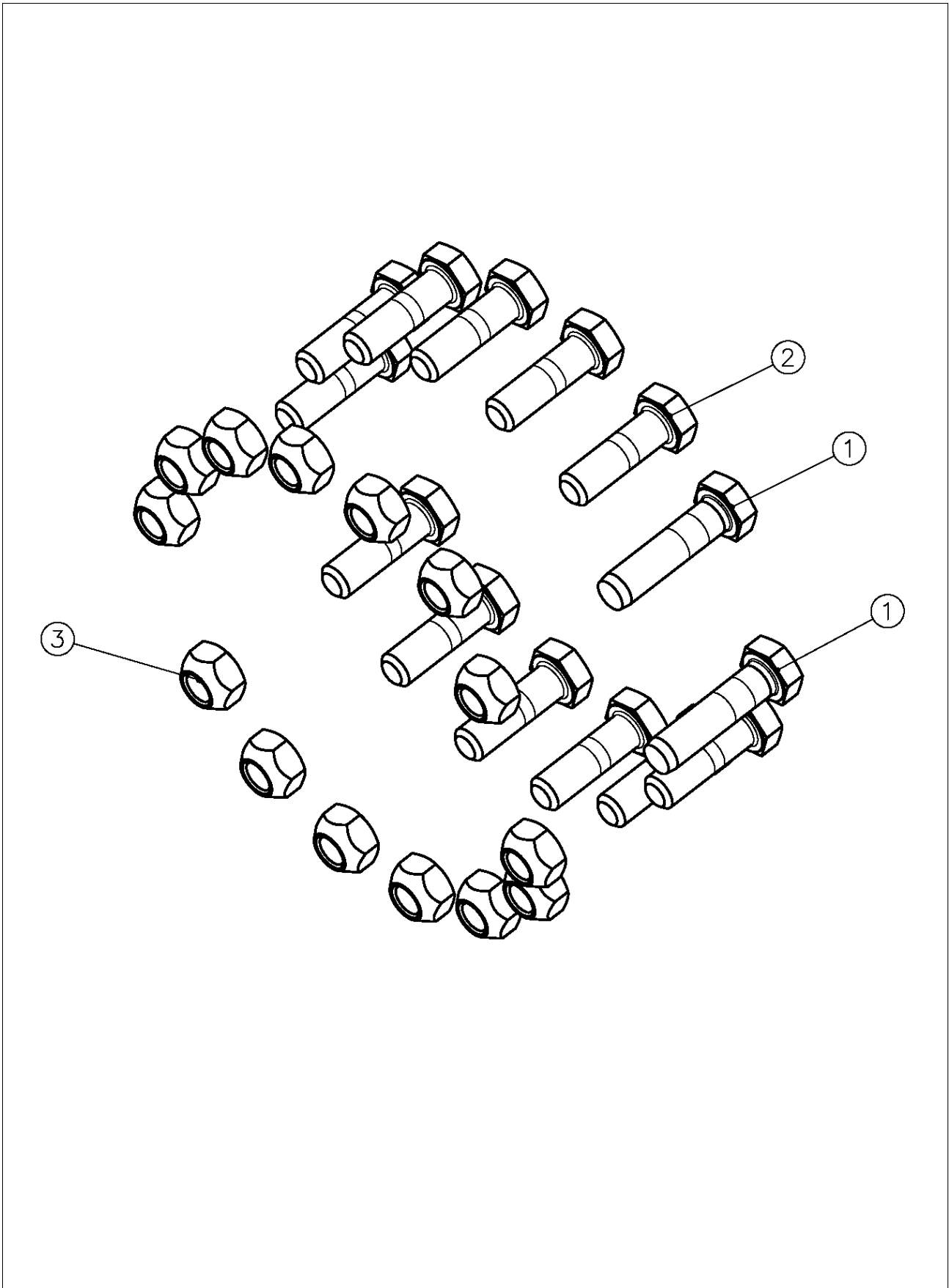
Item	Qty.	Order no.	Description	Note
1	0	0		Not installed
2	0	0		Not installed
3	2	90177-01203	Stud bolt	M12/M8, L=94
4	4	90502-08133	Nut	M8
5	4	90502-12193	Nut	M12
6	4	90705-08423	washer	D8.4/17x1.6
7	2	91421-06060	Shield hat	
8	2	91712-04000	Retainer ring	D40x2.5
9	4	090-354-3030	Spacer plate	D43/66x1.5



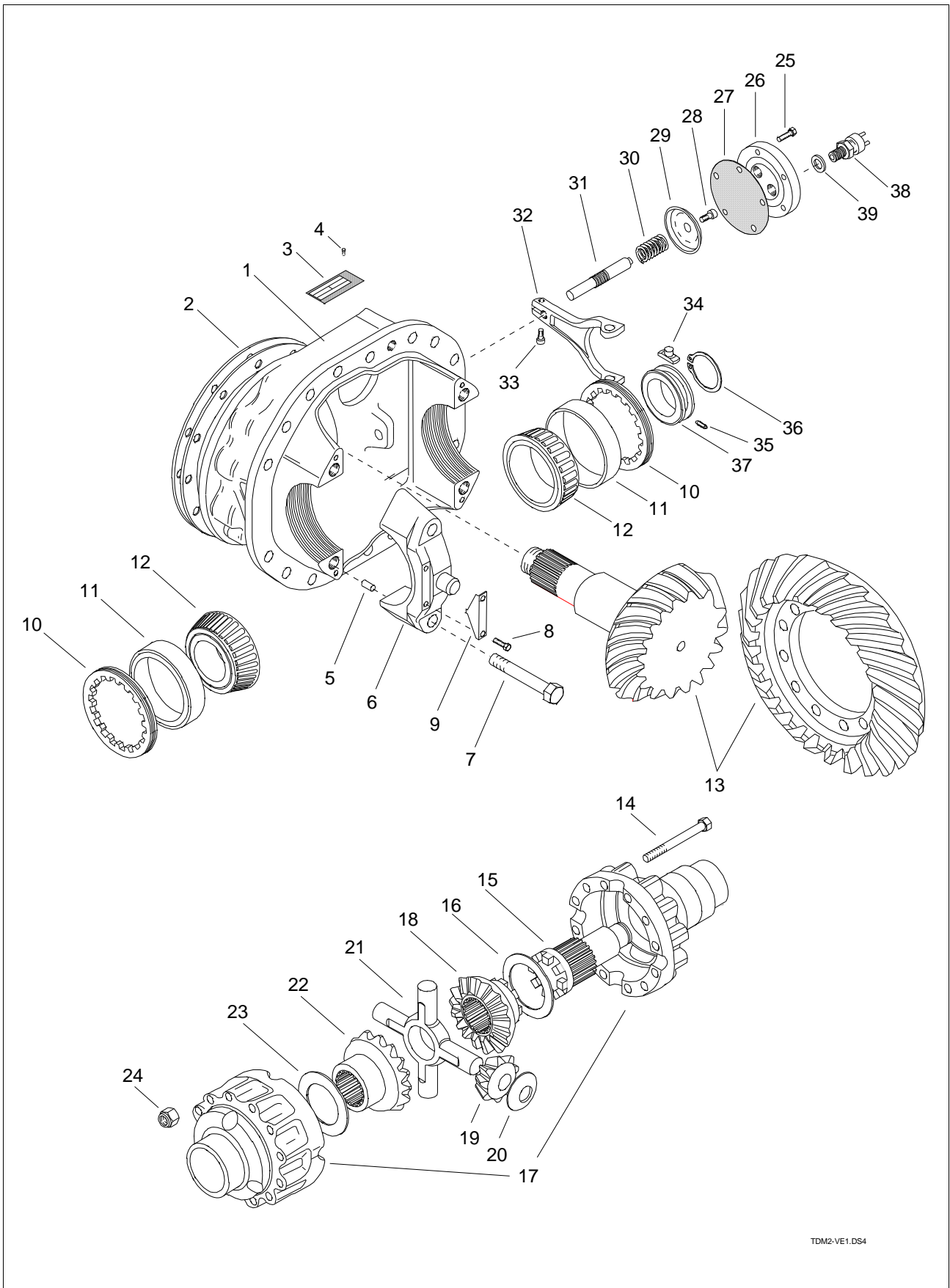
Item	Qty.	Order no.	Description	Note
1	1	146-224-2400	Bearing housing	RH
2	1	146-224-2310	Bearing housing	LH
3	2	590-314-2062	Sleeve	D42/48x36
4	2	91402-10003	Grease nipple	M10x1, Straight
5	2	91421-06060	Shield hat	
6	2	91122-04202	Shaft seal	D42/55x7
6	2	91720-05500	Retainer ring	D55x1.5, since S/N 164224 (9/2006)
7	2	91122-04201	Shaft seal	D42/55x8
8	2	90301-16117	Hex Screw	M16x100, 10.9
9	2	90303-16407	Hex Screw	M16x40, 10.9
11	0	0		Not installed
12	6	90303-14407	Hex Screw	M14x40
13	6	90550-14227	Nut	M14 self locking



Item	Qty.	Order no.	Description	Note
1	2	589-291-0600	Ring gear	
2	1	589-931-1210	Bracket	Left
3	1	589-931-1200	Bracket	Right
4	2	189-295-0000	Bush	Wabco 899 760 510
5	2	589-250-0081	Sensor	Knorr, protected wire
6	2	592235-17101	Rubber bushing	D10/17, for Knorr sensor
7	4	90303-10303	Hex Screw	M10x30

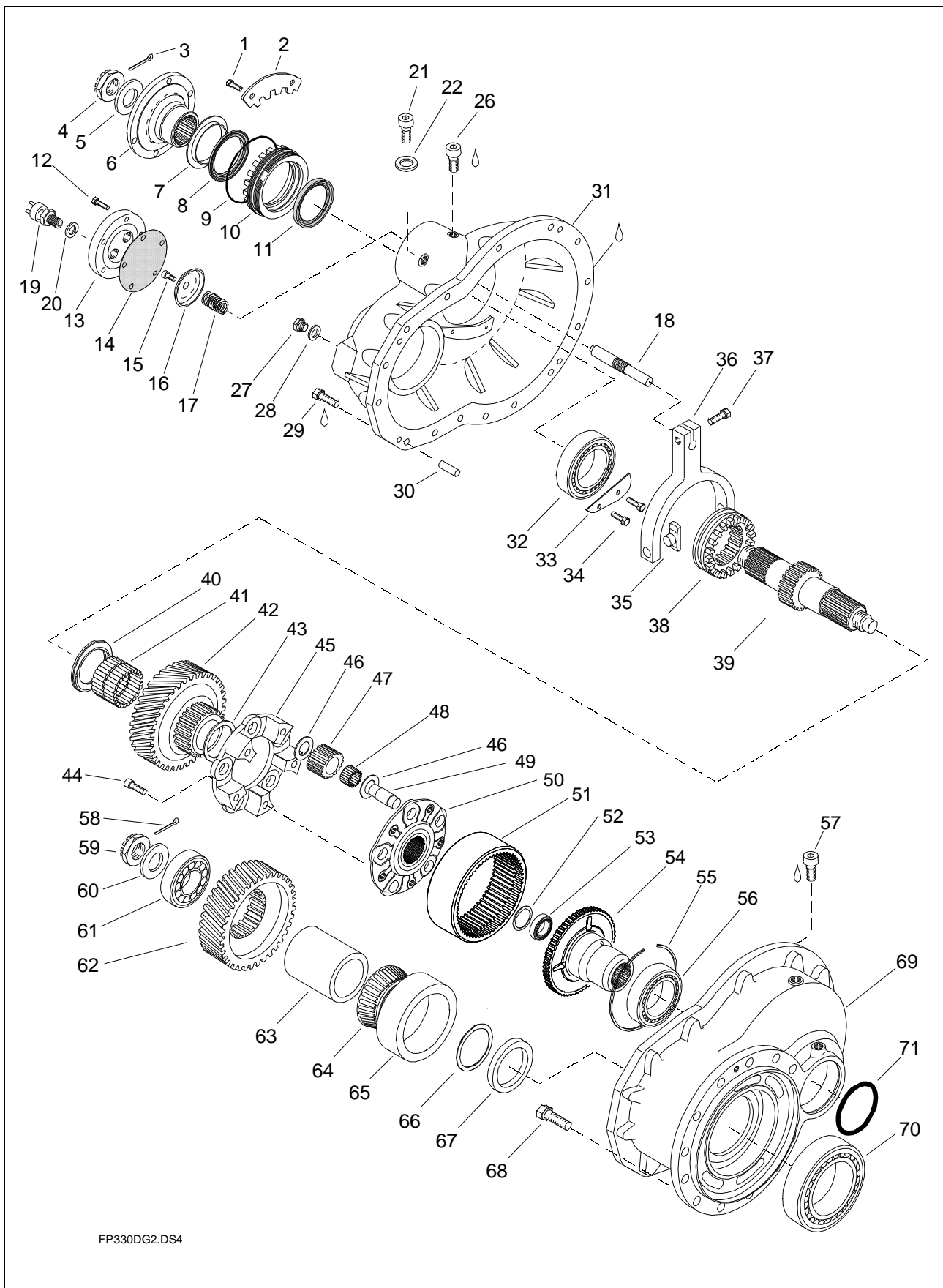


Item	Qty.	Order no.	Description	Note
1	4	90301-14558	Hex Screw	M14x55
2	24	90169-01401	Hex Screw	M14x45
3	28	90550-14227	Nut	M14 self locking



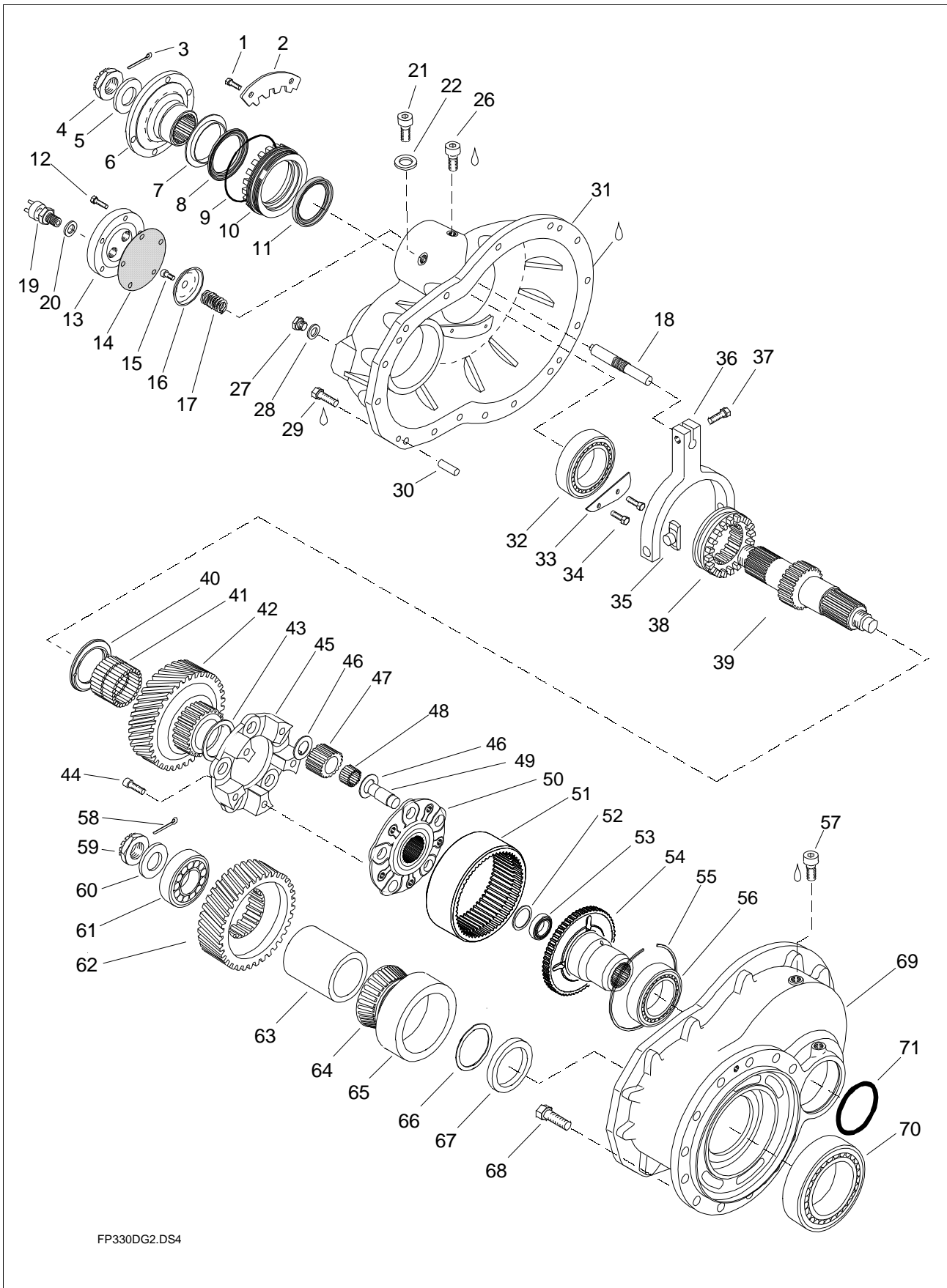
TDM2-VE1.DS4

Item	Qty.	Order no.	Description	Note
1	1	144-210-1911	Differential Carrier	Inc. Bearing Case Halfs
2	ar	144-239-2000	Shim	(1.0 mm)
2	ar	144-239-2001	Shim	(0.5 mm)
2	ar	144-239-2002	Shim	(0.2 mm)
2	ar	144-239-2003	Shim	(0.1 mm)
3	1	591600-20823	Name plate	
4	4	90111-29054	Rivet	D2.9x5
5	4	590604-08141	Pin	Ø8x14
6	2	143-214-2180	Bearing Case Half	Not Serviced Separately
7	4	90301-20377	Hex Screw	M20x130
8	4	90303-08103	Hex Screw	M8x10
9	2	143-227-0610	Lock plate	
10	2	143-226-0012	Adjusting nut	D149
11	2	090-121-4700	Bearing outer race	
12	2	090-110-9000	Bearing inner race	
13	1	543-240-3419	Ring and pinion gear set	14/27, FR 7.01
13	1	543-240-3421	Ring and pinion gear set	17/26, Final Ratio 5.56
13	1	543-240-3429	Ring and pinion gear set	16/28, FR 6.36
13	1	543-240-3451	Ring and pinion gear set	12/29, FR 8.79
13	1	543-240-3481	Ring and pinion gear set	10/29, FR 10.55
13	1	543-240-6411	Ring and pinion gear set	25/32, FR 4.65 and lower
14	12	90321-16538	Hex Screw	M16x1.5
15	1	144-341-1700	Sliding Gear	
16	1	090-359-7000	Thrust washer	D97/127x3
17	1	143-310-3811	Diff. case assy	
18	1	543-351-4310	Side gear	D55/Z26
19	4	143-341-0700	Pinion gear	
20	4	143-345-0400	Thrust washer	D29/65x1.5
21	1	143-331-0603	Spider	
22	1	543-351-4210	Side gear	D55/Z26
23	1	090-357-5000	Thrust washer	D75/111x3
24	12	90556-16247	Nut	M16x1.5
25	5	90303-08203	Hex Screw	M8x20
26	1	572-161-1502	Membrane cover	For Signal Lamp Switch
27	1	172-351-1202	Membrane	
28	1	90319-08206	Screw	M8x20
29	1	172-361-0410	Push plate	D70x12
30	1	097-122-0100	Return spring	D29.5x43
31	1	172-212-1710	Sliding Shaft	D16/20x125
32	1	144-751-1210	Control fork	
33	1	90313-06208	Allen Screw	M6x20
34	2	133-348-0710	Sliding shoe	
35	1	90335-05108	Stopping screw	M5x10
36	1	91711-06500	Retainer ring	D65
37	1	144-348-0000	Sliding ring	
38	1	586-490-0381	Signal Lamp Switch	M18x1.5, connection M27x1.5
38	1	586-490-0481	Signal Lamp Switch	M18x1.5, connection DIN72585 bayonet
39	1	91201-18150	Seal ring	D18/22x1.5 Cu

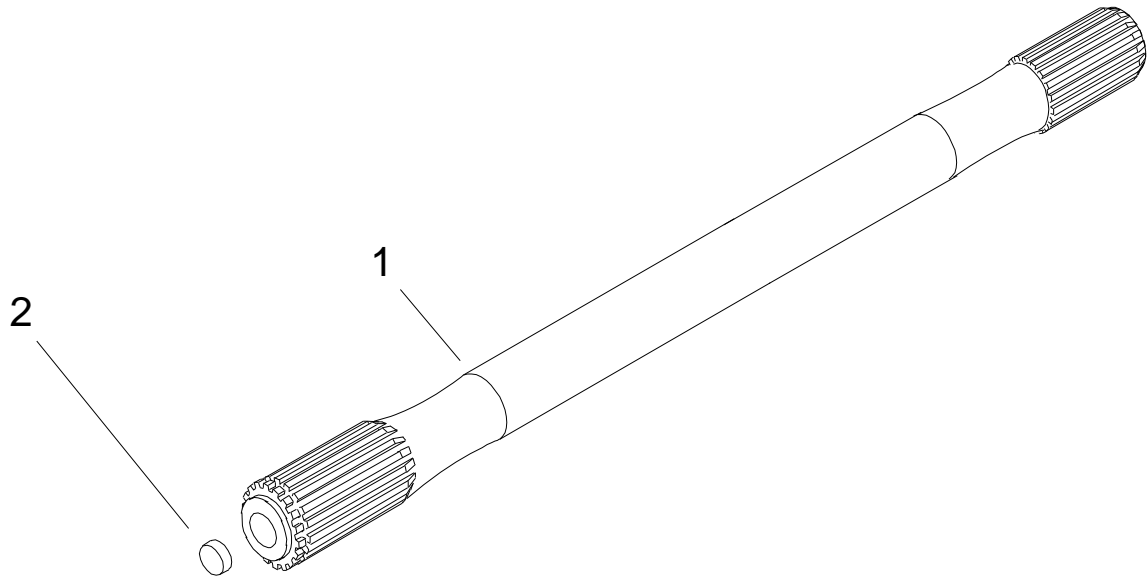


FP330DG2.DS4

Item	Qty.	Order no.	Description	Note
1	2	90303-08203	Hex Screw	M8x20
2	1	143-227-0710	Lock plate	
3	1	90621-63633	Split pin	D6.3x63
4	1	90546-42653	Nut	M42x1.5
5	1	90705-43069	washer	D43/80x6
6	1	538-918-0511	Flange	ISO 8667 - T180
6	1	538-918-0900	Flange	HS 1700/1800
7	0	0		Not installed
8	1	591122-08507	Shaft seal	Cassette seal D85/120x9/20
9	1	91101-39530	O-ring	D139.5x3
10	1	543-226-1400	Adjusting nut	For cassette seal
11	0	0		Not installed
12	5	90303-08203	Hex Screw	M8x20
13	1	172-161-0701	Membrane cover	Only w/pressure lubrication
13	1	572-161-1502	Membrane cover	Standard, w/signal lamp switch thread
14	1	172-351-1202	Membrane	
15	1	90319-08206	Screw	M8x20
16	1	172-361-0410	Push plate	D70x12
17	1	097-122-0100	Return spring	D29.5x43
18	1	172-212-1710	Sliding Shaft	D16/20x125
19	1	586-490-0381	Signal Lamp Switch	M18x1.5, connection M27x1.5
19	1	586-490-0481	Signal Lamp Switch	M18x1.5, connection DIN72585 bayonet
20	1	91201-18150	Seal ring	D18/22x1.5 Cu
21	1	90871-18173	Plug screw	M18x1.5
22	1	91201-18150	Seal ring	D18/22x1.5 Cu
26	1	90873-10053	Plug screw	M10x1, Allen head
27	2	90871-22193	Plug screw	M22x1.5, hex head
28	2	91201-22150	Seal ring	D22/27x1.5 Cu
29	16	90303-12308	Hex Screw	M12x30
30	2	90604-10201	Cotter Pin	D10x20
31	1	544-221-0700	Diff. Carrier Cover	w/o pressure lubrication
32	1	91744-00704	T. Roller bearing	
33	1	546-167-1101	Oil Plate	
34	2	90303-08203	Hex Screw	M8x20
35	2	133-348-1701	Sliding shoe	
36	1	144-751-1300	Control fork	
37	1	90313-08208	Allen Screw	M8x20
38	1	544-274-0800	Sliding Ring	Ret. angle 0 deg., up to S/N 154399 (10/2005)
38	1	544-274-0910	Sliding Ring	Ret. angle 6 deg., since S/N 154400 (10/2005)
39	1	309-0110-307	Intermediate Shaft	
39	NLA	544-251-3600	Intermediate Shaft	Superceded by 309-0110-307
40	1	544-282-0100	Spacer ring	D75/99x6.5
41	1	591738-40751	Needle bush	D75/83x40
42	1	544-269-0910	Gear assembly	FR 4,65 and up, dog teeth ret. angle 0 deg.
42	1	544-269-1310	Gear assembly	FR 4,28, dog teeth ret. angle 0 deg.
42	1	544-269-1900	Gear assembly	FR 4,65 and up, dog teeth ret. angle 6 deg.
42	1	544-269-1910	Gear assembly	FR 4,28, dog teeth ret. angle 6 deg.
42	1	544-269-2000	Gear assembly	FR 4.11 (z34, ratio 1:0.882) ret. angle 6 deg.
43	1	544-282-0210	Spacer ring	D67.5/85x4
44	5	90311-16508	Allen Screw	M16x50
45	1	535-231-1400	Planet carrier	
46	10	590-354-3210	Spacer ring	D32/54x1.47
47	5	535-241-1400	Planet gear	
48	5	591738-40321	Needle bush	
49	5	535-251-1500	Planet gear shaft	
50	1	541-441-1300	Planet carrier	

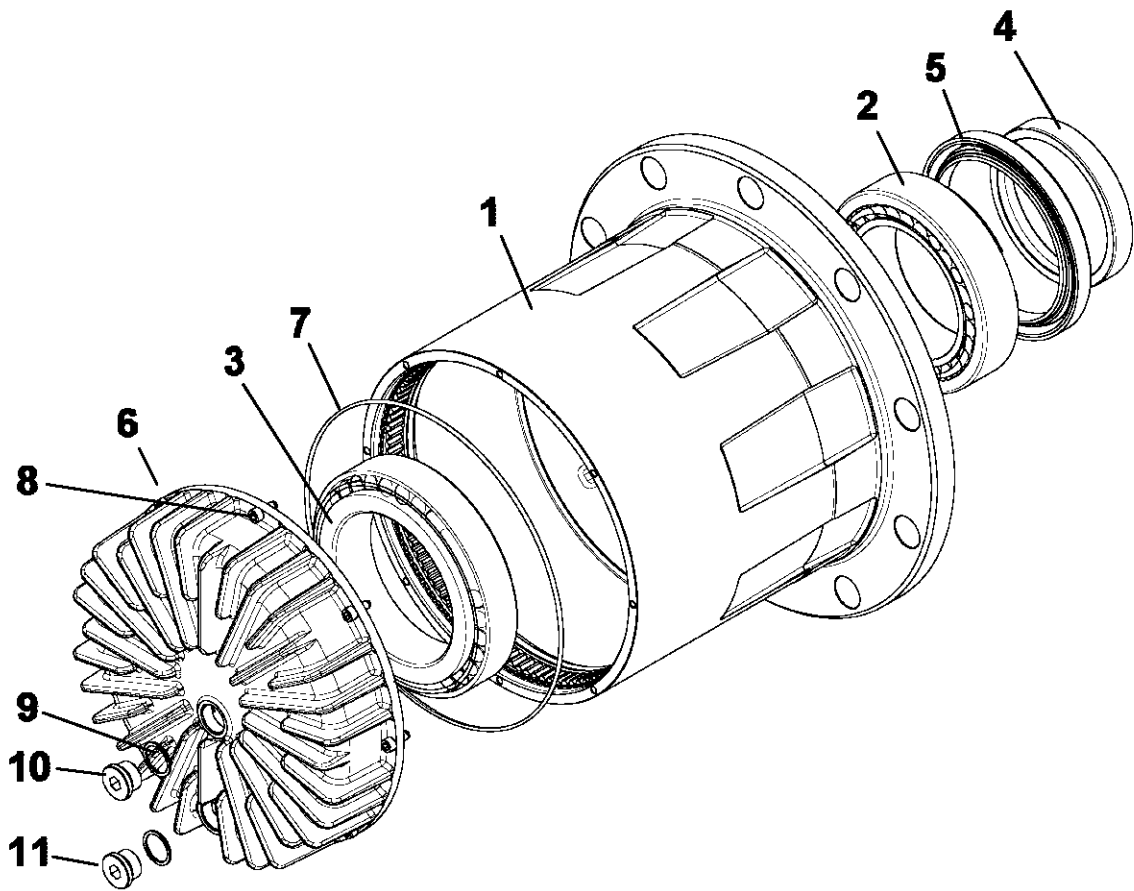


Item	Qty.	Order no.	Description	Note
51	1	535-261-2200	Ring gear	
52	NLA	90731-03510	Shim	(0.1 mm)
52	NLA	90731-03520	Shim	(0.2 mm)
52	NLA	90731-03550	Shim	(0.5 mm)
52	ar	90731-04010	Shim	0,1 mm
52	ar	90731-04010	Shim	0,1 mm
52	ar	90731-04020	Shim	0,2 mm
52	ar	90731-04050	Shim	0,5 mm
52	NLA	90732-03510	Shim	(1.0 mm)
53	NLA	591744-00352	T. Roller bearing	
53	1	591744-00401	T. Roller bearing	
54	NLA	535-271-0700	Ring gear hub	
54	1	704-0710-307	Ring gear hub	
55	1	591720-25001	Retainer ring	D250x3
56	1	090-111-0903	Bearing inner race	
56	1	090-121-5913	Bearing outer race	
56	NLA	91744-00951	T. Roller bearing	
57	1	90873-10053	Plug screw	M10x1, Allen head
58	1	90621-63633	Split pin	6.3x63
59	1	90546-42653	Nut	M42x1.5
60	1	90705-43069	washer	D43/80x6
61	1	591736-30553	Roller bearing	
62	1	544-261-2200	Gear	FR 4.65 and over (z28, ratio 1:1)
62	1	544-261-3300	Gear	FR 4.28 (z34, ratio 1:0.919)
62	1	544-261-3410	Gear	FR 4.11 (z30, ratio 1:0.882)
63	1	543-261-1200	Spacer ring	D66.5/86.5x80
64	1	090-110-6740	Bearing inner race	
65	1	090-121-3700	Bearing outer race	
66	ar	099-516-7000	Shim	(0.1 mm)
66	ar	099-516-7001	Shim	(0.3 mm)
66	ar	099-516-7002	Shim	(0.5 mm)
66	ar	099-516-7003	Shim	(0.25 mm)
67	ar	599-557-1050	Spacer ring	L=18.40
67	ar	599-557-1052	Spacer ring	L=18.44
67	ar	599-557-1054	Spacer ring	L=18.48
68	12	90303-16407	Hex Screw	M16x40, 10.9
69	1	301-0210-309	Diff. Carrier Housing	With oilpump
69	1	301-0210-310	Diff. Carrier Housing	W/o pressure lubrication
69	NLA	544-211-1600	Diff. Carrier Housing	w/o pressure lubrication
70	1	91744-00681	T. Roller bearing	
71	1	591106-99532	O-ring	D99.5x3

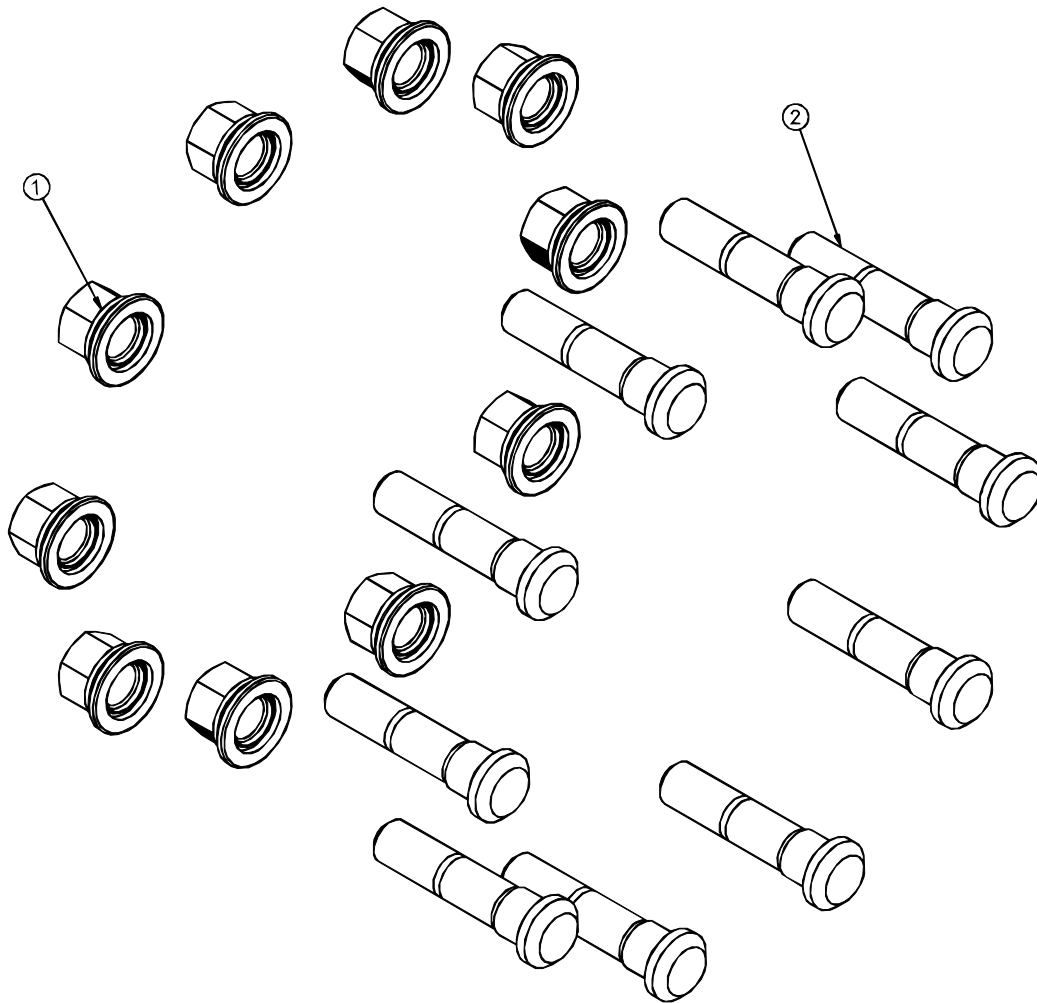


M306-096.DS4

Item	Qty.	Order no.	Description	Note
1	1	543-512-0205	Axle Shaft	LH, L=1210, W55x26
1	1	543-512-0207	Axle Shaft	RH, L=1310, W55x26
2	2	140-125-0100	Thrust pin	D25

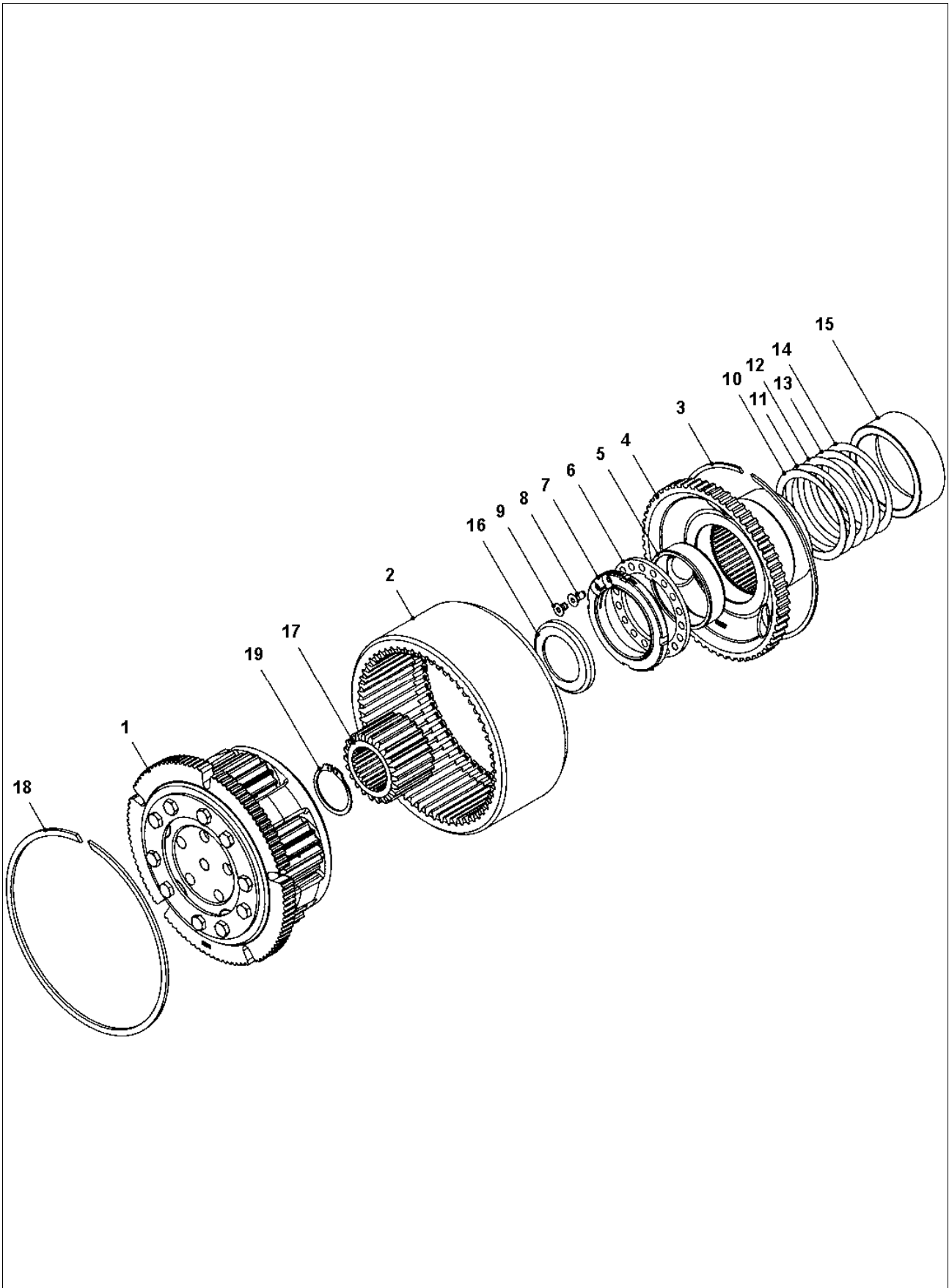


Item	Qty.	Order no.	Description	Note
1	2	543-441-1100	Wheel hub	20 ton
2	2	591744-01202	T. Roller bearing	33024, D120x180x48
3	2	591744-01202	T. Roller bearing	33024, D120x180x48
4	2	543-415-0610	Spacer ring	D126/135x24
5	2	591122-15001	Shaft seal	Ø150/180x16.5
6	1	541-422-1300	Planetary gear cover	Cooled, cast iron
7	2	91109-50030	O-ring	D249.5x3
8	16	90313-06168	Allen Screw	M6x16
9	4	91201-22150	Seal ring	D22/27x1.5 Cu
10	2	90873-22103	Plug	M22x1.5 - DIN908, Allen head
11	2	90873-22109	Oil plug	M22x1.5 - DIN908, Allen head, magnetic



M402-036.DS4

Item	Qty.	Order no.	Description	Note
1	20	540-916-1610	Wheel nut	M22x1.5
2	20	140-911-3210	Wheel bolt	L=122 mm, 12.9



Item	Qty.	Order no.	Description	Note
1	2	541-404-0211	Planetary gear	FR 4.28/4.29/4.65/5.56/6.36/7.01/8.79/10.55
2	2	535-261-2110	Ring gear	i=3.636, z58
3	2	91720-22001	Retainer ring	D220x3
4	2	535-271-0901	Ring gear hub	i=3.636, z58
5	N/A	543-416-0710	Spacer ring	Obsolete
6	2	143-418-0510	Lock plate	S=6 mm, punched
7	2	599-290-8004	Lock Nut	M90x2, s=16 mm
8	2	590319-08186	Allen Screw	M8x18, Cone head
9	2	590319-08126	Allen Screw	M8x12M8x12, Cone head
11	ar	590731-09520	Shim	s= 0.2 mm
12	ar	590731-09530	Shim	s= 0.3 mm
13	ar	590731-09550	Shim	s= 0.5 mm
14	ar	590732-09510	Shim	s= 1.0 mm
15	2	543-416-0800	Spacer ring	D95/135x112
16	2	090-721-8500	Protective cup	D60/85x10
17	2	535-211-1410	Sun gear	i=3.636, z22, spline N55x26
18	2	91720-26001	Retainer ring	D265x4.2
19	2	591711-05500	Retainer ring	D55x2