

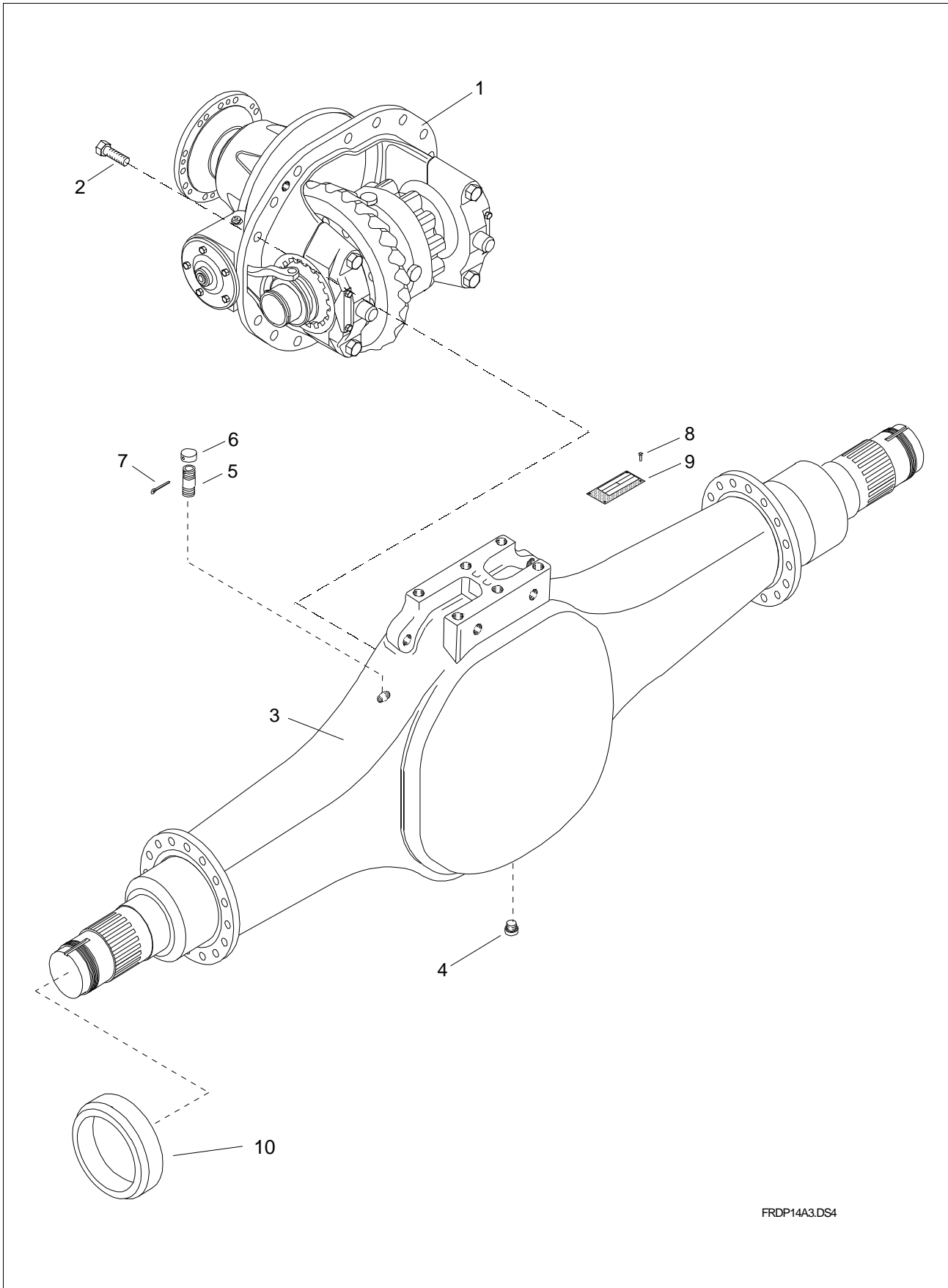
SISU AXLES

SPARE PARTS BOOK

**Rear Axle
FRDP-14-S**

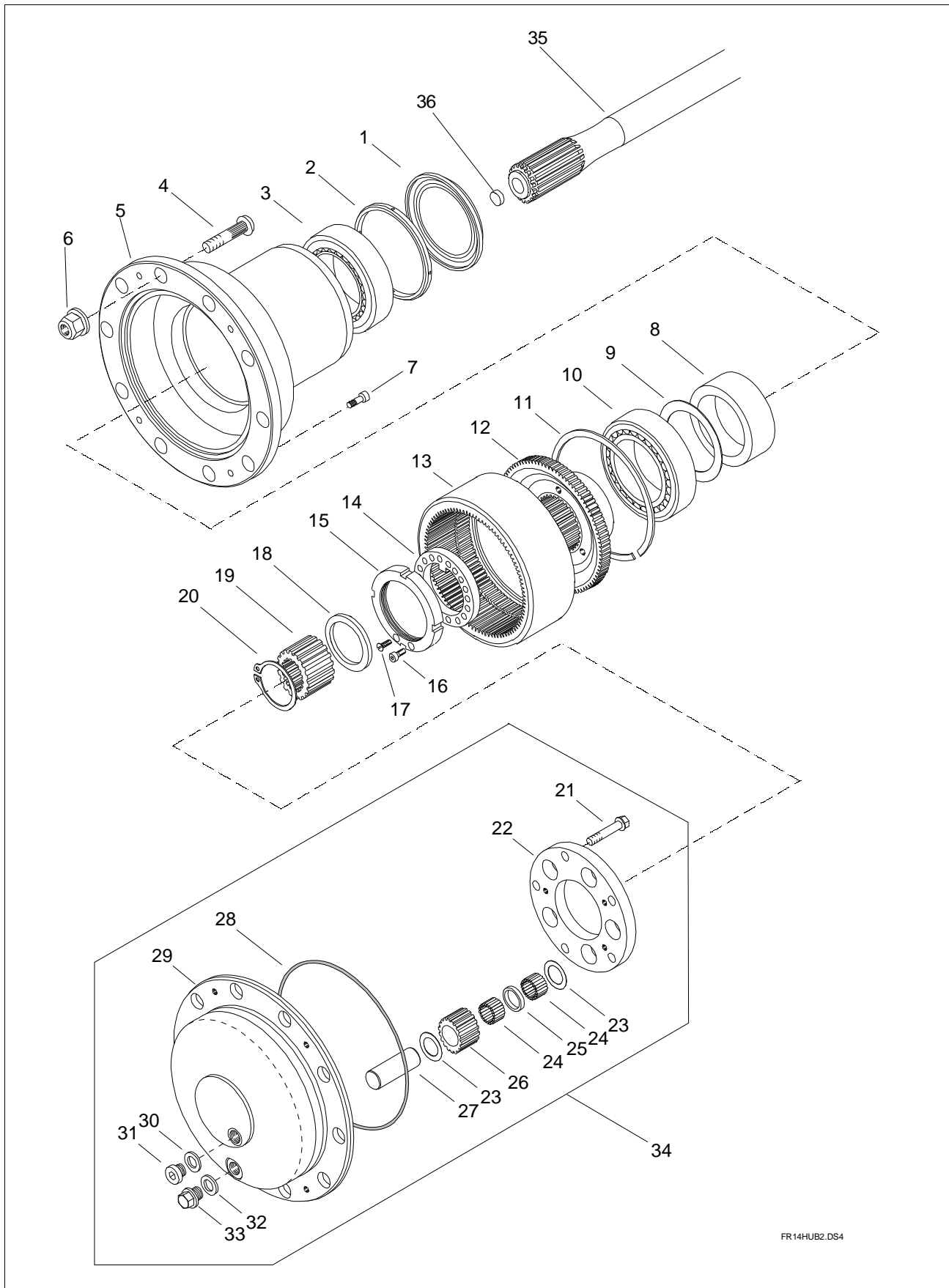
Book No. 393 (11/2009)

Sisu Axles, Inc.
Autotehtaan tie 1
PO Box 189
FIN-13101 Hämeenlinna
Finland
Phone +358 204 55 2999
Fax +358 204 55 2900



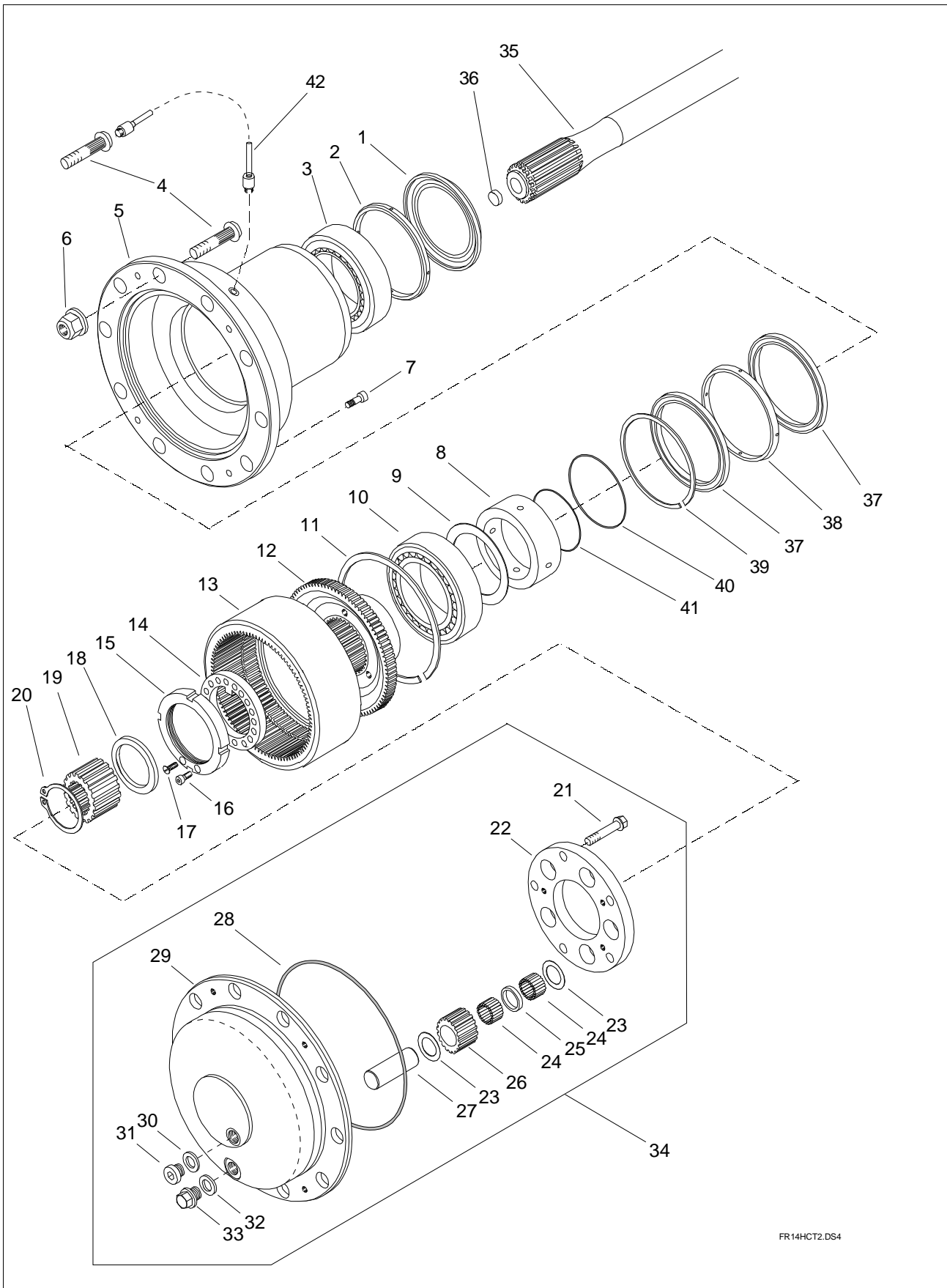
FRDP14A3.DS4

Item	Qty.	Order no.	Description	Note
1	1	380-0205-307	Diff. Carrier Assembly	FR 6.36, HS1700/1800, w/diff lock, CCW
1	1	543-204-3214	Diff. Carrier Assembly	FR 7.01, Yoke 1710 flange, w/diff lock
1	1	543-204-3221	Diff. Carrier Assembly	FR 5.56, HS1700/1800 flange, w/diff lock
1	1	543-204-4451	Diff. Carrier Assembly	FR 8.79, HS1700/1800, w/diff lock, CCW input
2	16	90303-16407	Hex Screw	M16x40, 10.9
3	1	101-0110-343	Axle Housing	Track 2360 mm, w/H-bracket
3	1	101-0110-363	Axle Housing	Track 2360 mm, w/o H-bracket
3	1	543-117-4610	Axle Housing	Track 2360 mm, w/H-bracket, w/CTI
4	1	90873-22109	Oil plug	M22x1.5 - DIN908, Allen head, magnetic
4	1	91201-22150	Seal ring	D22/27x1.5 Cu
5	1	179-841-1000	Breather pipe	
6	1	179-842-0000	Breather Cover	
7	1	90621-32253	Split pin	3.2x25
8	4	90111-29054	Rivet	D2.9x5
9	1	591600-20823	Name plate	
10	2	540-415-1910	Spacer ring	



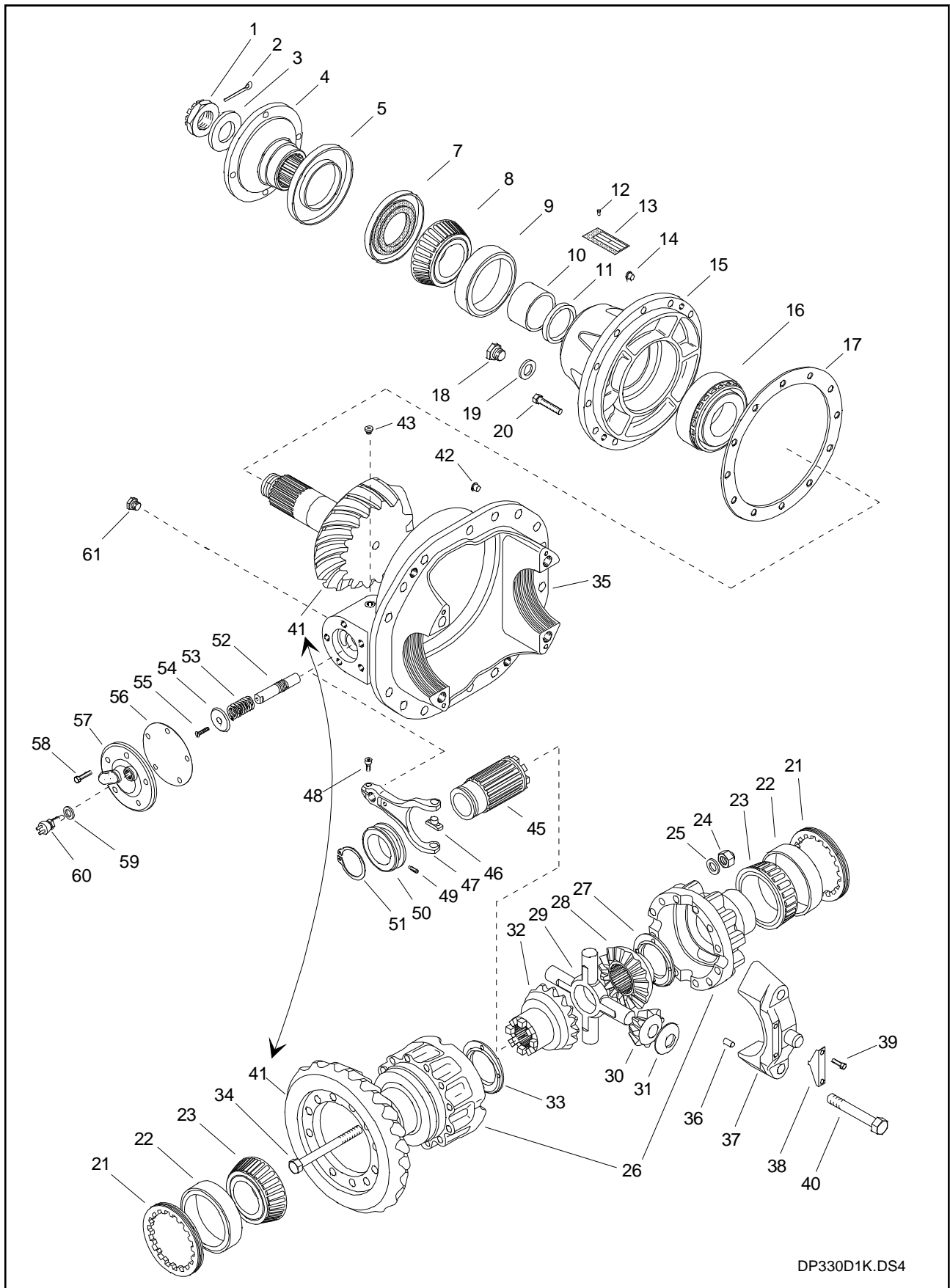
FR14HUB2.DS4

Item	Qty.	Order no.	Description	Note
1	2	591122-12702	Shaft seal	D127/160
2	NLA	540-415-2000	Spacer ring	D152/160x14, Unnecessary
3	2	91744-01051	T. Roller bearing	
4	20	540-911-3500	Wheel bolt	L=103 mm, 12.9
5	2	541-411-2502	Wheel hub	FR-14
6	20	540-916-1610	Wheel nut	M22x1.5
7	8	590313-10303	Allen Screw	M10x30
8	2	543-416-0700	Spacer ring	D95/116x39
9	NLA	590731-09510	Shim	s= 0.1 mm
9	NLA	590731-09515	Shim	s= 0.15 mm
9	ar	590731-09520	Shim	s= 0.2 mm
9	ar	590731-09530	Shim	s= 0.3 mm
9	ar	590731-09550	Shim	s= 0.5 mm
10	2	91744-01201	T. Roller bearing	
11	2	91720-22001	Retainer ring	D220x3
12	2	535-271-0611	Ring gear hub	
13	2	535-261-2110	Ring gear	i=3.636, z58
14	2	143-418-0510	Lock plate	S=6 mm, punched
15	2	599-290-8004	Lock Nut	M90x2
16	2	590319-08186	Allen Screw	M8x18
17	2	590319-08126	Allen Screw	M8x12
18	2	090-721-8500	Protective cup	D60/85x10
19	2	535-211-1310	Sun gear	N55x2x26
20	2	591711-05500	Retainer ring	D55x2
21	10	590169-01670	Special screw	M16x1.5x70
22	2	535-231-1310	Planet carrier	
23	20	590-353-1100	Spacer plate	D33.5/55.5x1.47
24	480	91385-50240	Needle roller	D5x23.8
25	10	590-354-3100	Spacer ring	D33.5/42x7
26	10	535-241-1310	Planet gear	
27	10	535-251-1410	Planet gear shaft	
28	2	591109-66052	O-ring	D266x5.33
29	2	541-471-0400	Planetary gear housing	FR-14
30	2	91201-22150	Seal ring	D22/27x1.5 Cu
31	2	90873-22109	Oil plug	M22x1.5, Allen head
32	2	91201-22150	Seal ring	D22/27x1.5 Cu
33	2	90871-22193	Plug screw	M22x1.5, hex head
34	2	541-404-0161	Planetary gear	FR-14
35	1	543-512-0000	Axle Shaft	RH, W55x2x26, L=1245
35	1	543-512-0010	Axle Shaft	LH, W55x2x26, L=1157
36	2	140-125-0100	Thrust pin	D25



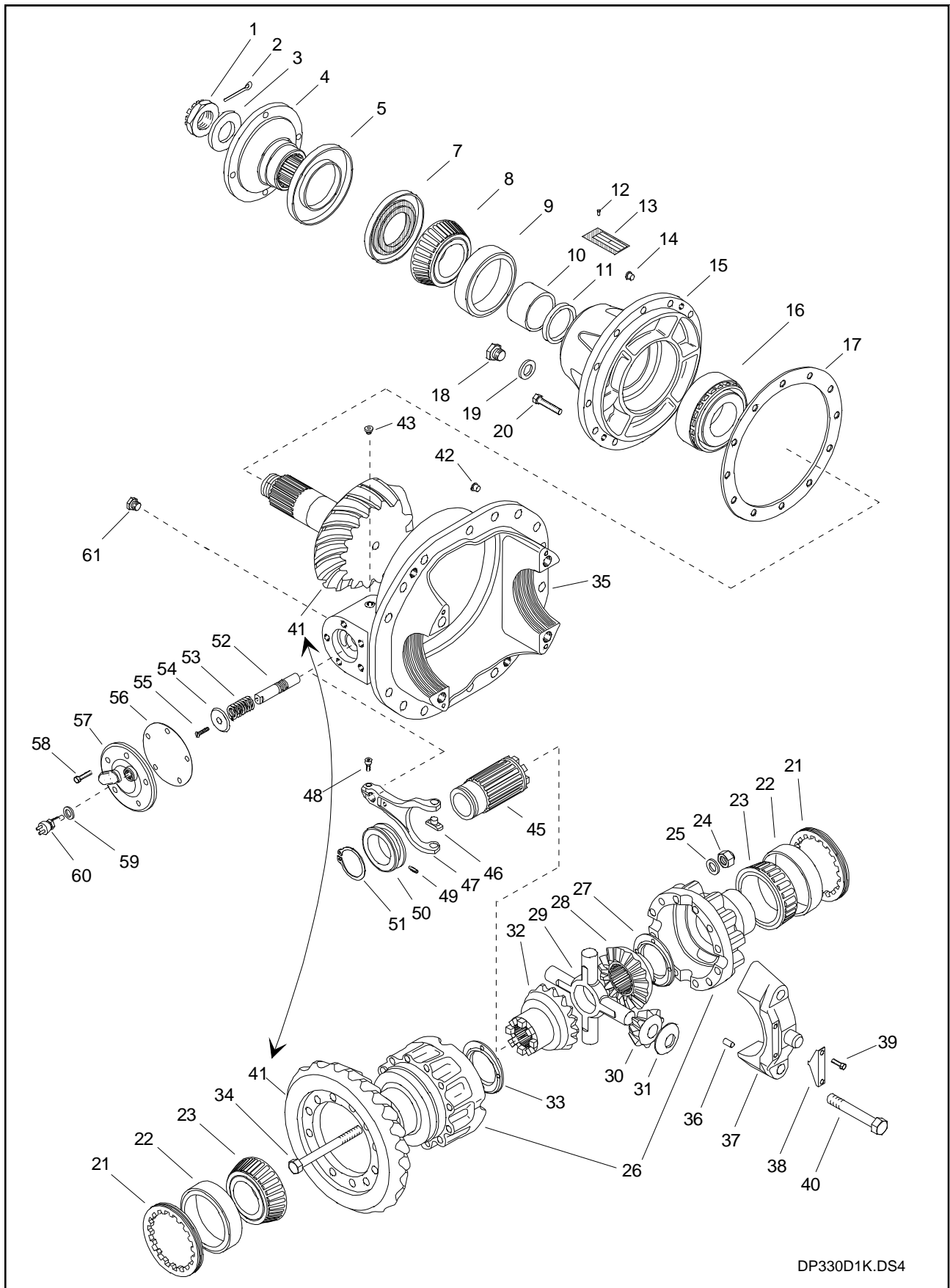
FR14HCT2.DS4

Item	Qty.	Order no.	Description	Note
1	2	591122-12702	Shaft seal	D127/160
2	NLA	540-415-2000	Spacer ring	D152/160x14, Unnecessary
3	2	91744-01051	T. Roller bearing	
4	18	540-911-3500	Wheel bolt	L=103 mm, 12.9
4	2	540-911-3700	Wheel bolt	CTI, L=103 mm, 12.9
5	2	541-411-2312	Wheel hub	FR-14, CTI
6	20	540-916-1610	Wheel nut	M22x1.5
7	8	590313-10303	Allen Screw	M10x30
8	2	540-415-1900	Spacer ring	CTI, D95/125x39
9	ar	590731-09510	Shim	s= 0.1 mm
9	ar	590731-09515	Shim	s= 0.15 mm
9	ar	590731-09520	Shim	s= 0.2 mm
9	ar	590731-09550	Shim	s= 0.5 mm
10	2	91744-01201	T. Roller bearing	
11	2	91720-22001	Retainer ring	D220x3
12	2	535-271-0611	Ring gear hub	
13	2	535-261-2110	Ring gear	i=3.636, z58
14	2	143-418-0510	Lock plate	S=6 mm, holed
15	2	599-290-8004	Lock Nut	M90x2
16	2	590319-08186	Allen Screw	M8x18
17	2	590319-08126	Allen Screw	M8x12
18	2	090-721-8500	Protective cup	D60/85x10
19	2	535-211-1310	Sun gear	N55x2x26
20	2	591711-05500	Retainer ring	D55x2
21	10	590169-01670	Special screw	M16x1.5x70
22	2	535-231-1310	Planet carrier	
23	20	590-353-1100	Spacer plate	D33.5/55.5x1.47
24	480	91385-50240	Needle roller	D5x23.8
25	10	590-354-3100	Spacer ring	D33.5/42x7
26	10	535-241-1310	Planet gear	
27	10	535-251-1410	Planet gear shaft	
28	2	591109-66052	O-ring	D266x5.33
29	2	541-471-0400	Planetary gear housing	FR-14
30	2	91201-22150	Seal ring	D22/27x1.5 Cu
31	2	90873-22109	Oil plug	M22x1.5, Allen head
32	2	91201-22150	Seal ring	D22/27x1.5 Cu
33	2	90871-22193	Plug screw	M22x1.5, hex head
34	2	541-404-0161	Planetary gear	FR-14
35	1	543-512-0000	Axle Shaft	LH, W55x2x26, L=1245
35	1	543-512-0010	Axle Shaft	RH, W55x2x26, L=1157
36	2	140-125-0100	Thrust pin	D25
37	4	591122-12501	Shaft seal	CTI, D125/145x7.5/11,3
38	2	540-415-1810	Spacer ring	CTI, D145/137x14.5
39	2	591720-14501	Retainer ring	CTI, 145/6.0x1.5
40	2	591107-01222	O-ring	CTI, Ø101.27x2.62
41	2	91106-89532	O-ring	CTI, D89.5x3
42	2	579-615-0500	Pipe	CTI, including fittings



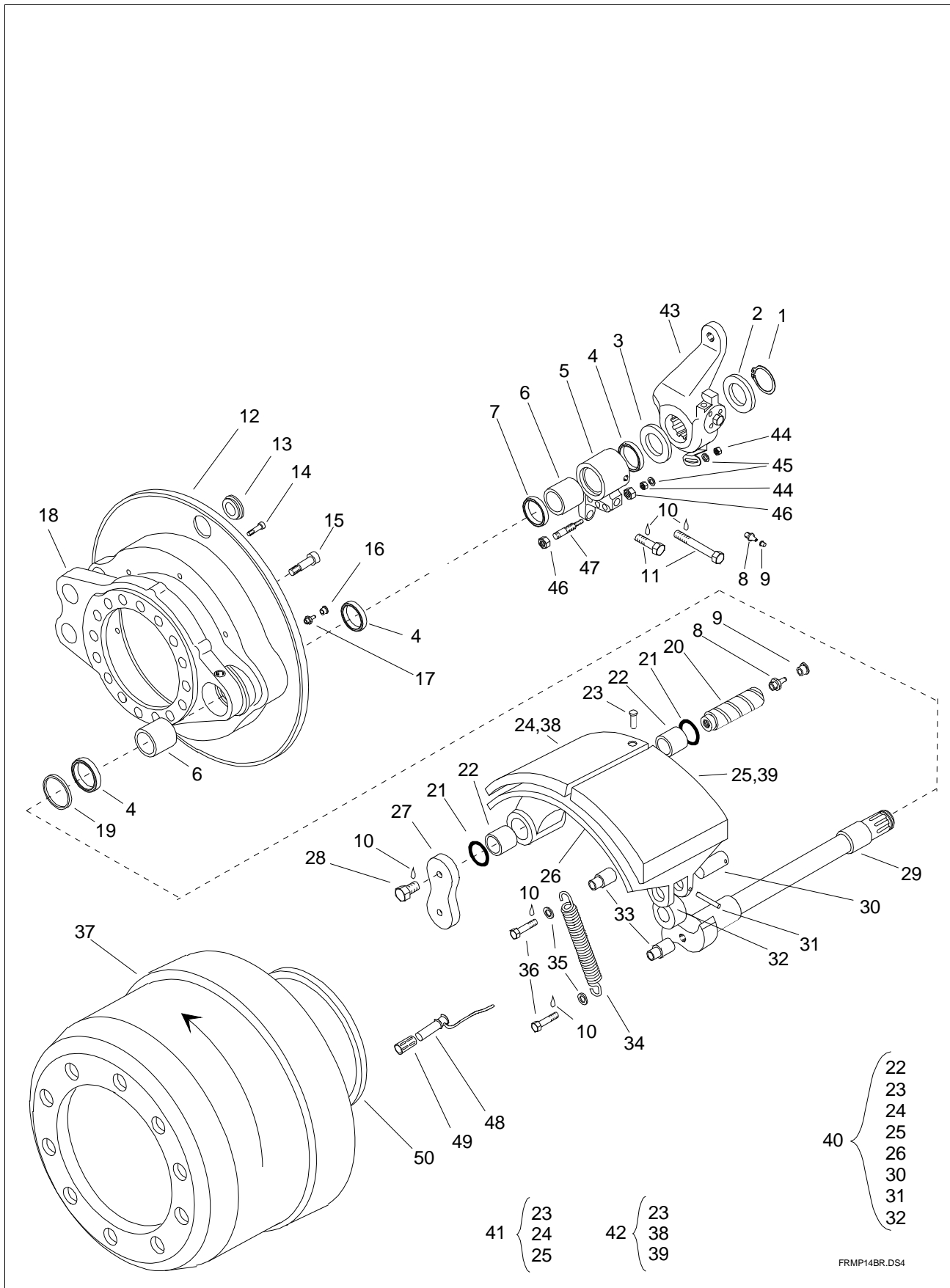
DP330D1K.DS4

Item	Qty.	Order no.	Description	Note
1	1	90546-42653	Nut	M42x1.5
2	1	90621-63633	Split pin	6.3x63
3	1	90705-43069	washer	D43/80x6
4	1	138-918-0400	Flange	HS1700-1800
4	1	138-918-0401	Flange	ISO 8667 - T180
4	1	538-967-0100	End Yoke	Input Splined Yoke 1710
5	1	090-711-9000	Shield	
7	1	591122-08508	Shaft seal	D85/140x13/20
8	1	090-110-6740	Bearing inner race	
9	1	090-121-3700	Bearing outer race	
10	ar	099-557-1026	Spacer ring	(l=53.70)
10	ar	099-557-1028	Spacer ring	(l=53.74)
10	ar	099-557-1030	Spacer ring	(l=53.78)
11	ar	099-517-1000	Shim	(s=0.30)
11	ar	099-517-1001	Shim	(s=0.40)
11	ar	099-517-1002	Shim	(s=0.50)
12	4	90111-29054	Rivet	D2.9x5
13	1	91600-20811	Name plate	
14	2	91425-09100	Shield plug	
15	1	144-231-0502	Bearing housing	
16	1	090-050-7001	T. Roller bearing	
17	ar	144-239-1400	Shim	(s= 0.50 mm)
17	ar	144-239-1401	Shim	(s= 0.20 mm)
17	ar	144-239-1403	Shim	(s= 0.10 mm)
17	ar	144-239-1404	Shim	(s= 1.00 mm)
18	1	90871-22193	Plug screw	M22x1.5, hex head
19	1	91201-22150	Seal ring	D22/27x1.5 Cu
20	14	90303-12308	Hex Screw	M12x30
21	2	143-226-0012	Adjusting nut	D149
22	2	090-121-4700	Bearing outer race	
23	2	090-110-9000	Bearing inner race	
24	12	90556-16247	Nut	M16x1.5
25		0		Not installed
26	1	543-310-4811	Diff. case assy	With diff lock
26	1	543-310-4831	Diff. case assy	W/o diff lock
27	1	090-357-5000	Thrust washer	D75/111x3
28	1	543-351-4210	Side gear	D55/Z26
29	1	143-331-0603	Spider	
30	4	143-341-0700	Pinion gear	
31	4	143-345-0400	Thrust washer	D29/65x1.5
32	1	543-351-4310	Side gear	D55/Z26, w/diff lock
32	1	543-351-4610	Side gear	D55/Z26, W/o diff lock
33	1	090-359-7000	Thrust washer	D97/127x3
34	12	599-116-3250	Hex Screw	M16x1.5, L= 207, 12.9
35	1	143-210-1511	Differential Carrier	Incl. Bearing Case Halfs and Bolts
36	4	590604-08141	Pin	Ø8x14
37		143-214-2180	Bearing Case Half	Not Servised Separately
38	2	143-227-0610	Lock plate	
39	4	90303-08163	Screw	M8x16
40	4	90301-20377	Hex Screw	M20x130
41	1	143-240-1819	Ring and pinion gear set	14/27, FR 7.01, LH
41	1	143-240-1821	Ring and pinion gear set	17/26, FR 5.56, LH
41	1	143-240-1829	Ring and pinion gear set	16/28, FR 6.36, LH
41	1	143-240-1851	Ring and pinion gear set	12/29, FR 8.79, LH
41	1	143-240-1881	Ring and pinion gear set	10/29, FR 10.55, LH
41	1	543-240-5789	Ring and pinion gear set	13/34, FR 9.51, RH
41	1	543-240-5851	Ring and pinion gear set	12/29, FR 8.79, RH (ccw input)
41	1	543-240-7111	Ring and pinion gear set	25/32, FR 4.65, LH
42	2	91425-13120	Shield plug	

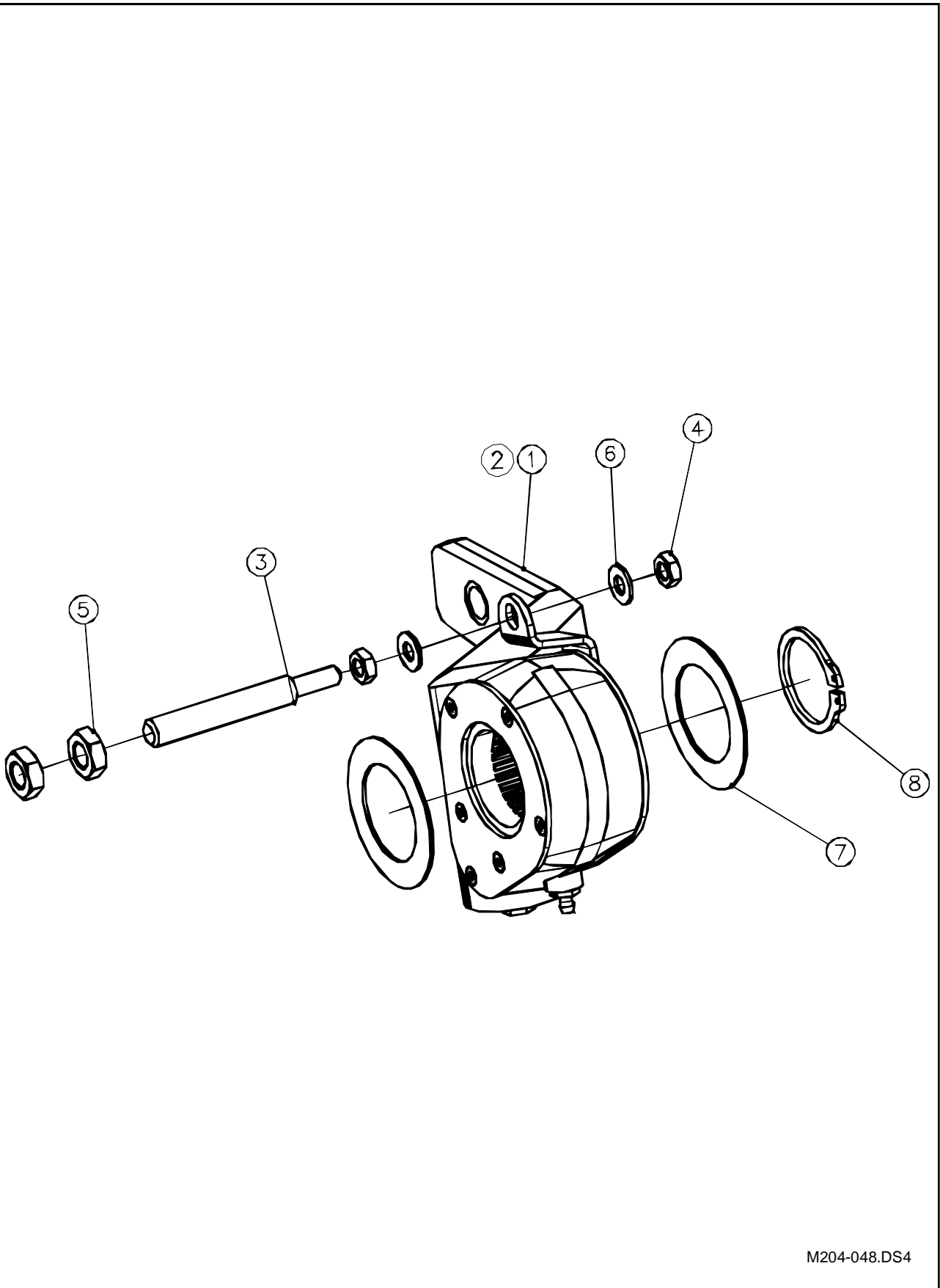


DP330D1K.DS4

Item	Qty.	Order no.	Description	Note
43	1	90871-10143	Plug screw	M10x1, hex head 14 mm
45	1	144-341-1700	Sliding Gear	
46	2	133-348-0710	Sliding shoe	
47	1	144-751-1210	Control fork	
48	1	90313-06208	Allen Screw	M6x20
49	1	90335-05108	Stopping screw	M5x10
50	1	144-348-0000	Sliding ring	
51	1	91711-06500	Retainer ring	D65
52	1	172-212-1710	Sliding Shaft	
53	1	097-122-0100	Return spring	
54	1	172-361-0410	Push plate	
55	1	90319-08206	Screw	M8x20
56	1	172-351-1202	Membrane	
57	1	144-736-0300	Cover	Without diff lock
57	1	572-161-1502	Membrane cover	For Signal Lamp Switch Option
58	5	90303-08203	Hex Screw	M8x20
59	1	91201-18150	Seal ring	D18/22x1.5 Cu
60	1	586-490-0381	Signal Lamp Switch	M18x1.5
61	1	90871-18173	Plug screw	M18x1.5
61	1	91201-18150	Seal ring	D18/22x1.5 Cu

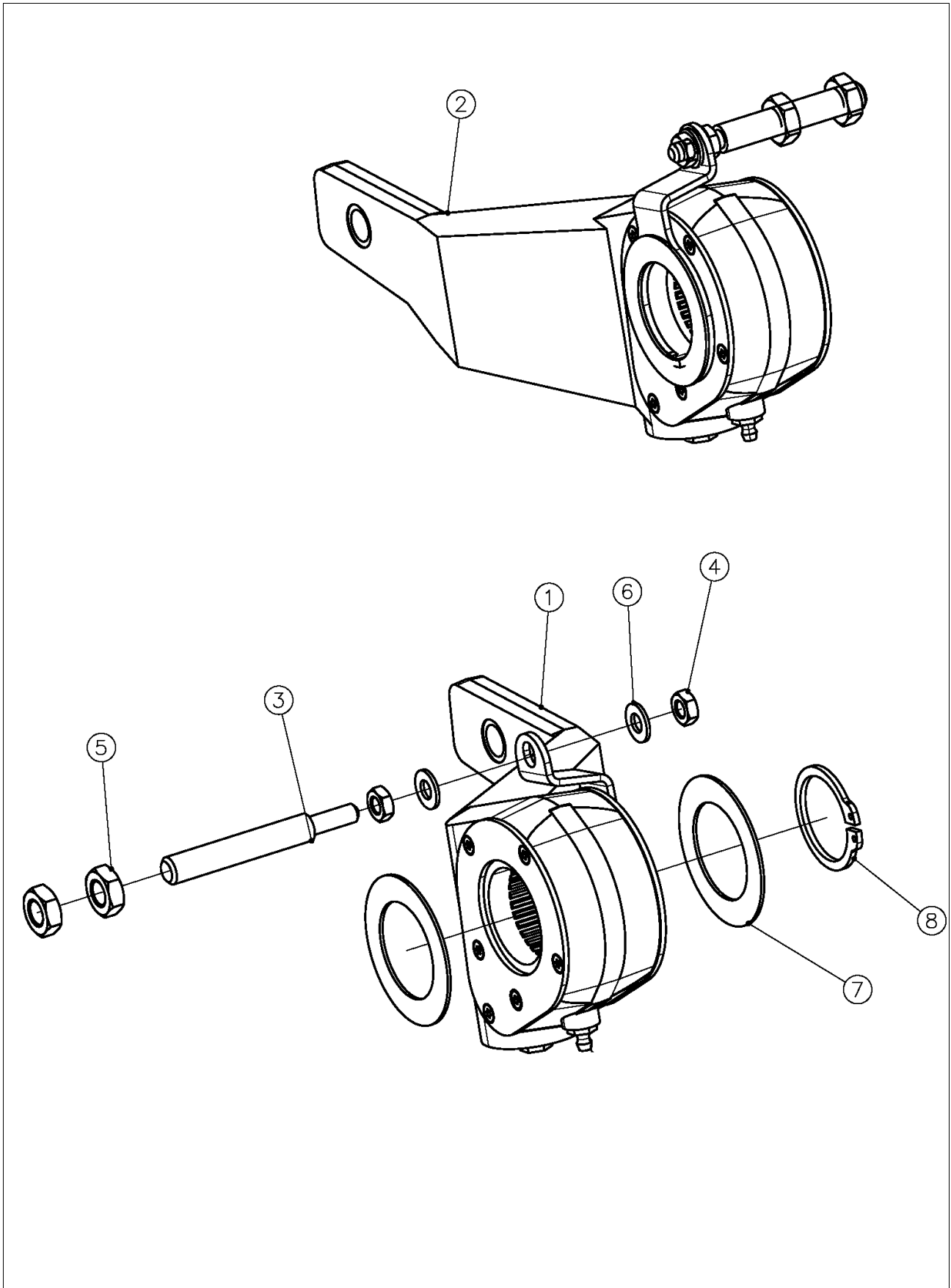


Item	Qty.	Order no.	Description	Note
1		N1	Note	See separate page
2		N1	Note	See separate page
3		N1	Note	See separate page
4	6	91122-04201	Shaft seal	D42/55x8
5	1	146-224-2310	Bearing housing	RH (FRMP & FRFP) or LH (FRDP)
5	1	146-224-2400	Bearing housing	LH (FRMP & FRFP) or RH (FRDP)
6	4	590-314-2062	Sleeve	D42/48x36
7	2	91122-04202	Shaft seal	D42/55x7
8	6	91402-10003	Grease nipple	M10x1, Straight
9	6	91421-06060	Shield hat	
10		95752-10010	Thread locking compound	
11	2	90301-16117	Hex Screw	M16x100
11	2	90303-16407	Hex Screw	M16x40
12	2	146-131-2210	Dust Shield	210 mm
13	4	095-553-2000	Shield plug	D33/44
14	14	90313-08163	Allen Screw	M8x16
15	28	90313-14408	Allen Screw	M14x40
16	2	91421-06060	Shield hat	
17	2	91402-10453	Grease nipple	M10x1, 45°
18	2	546-111-3800	Brake Bracket	FR14
19	2	91726-43065	Support ring	D43/65x3
20	4	146-341-1200	Anchor bolt	D32x108, With grease nipple
21	8	91106-36212	O-ring	D36,2x3 Viton
22	8	590-313-2091	Sleeve	D32/36x25
23	96	91501-00819	Rivet	D6.2/12.3x18.3
24	4	546-361-6313	Brake lining	210 mm, Beral1561, not serviced separately
25	4	546-361-6213	Brake lining	210 mm, Beral1561, not serviced separately
26	4	146-351-4100	Brake shoe	210 mm
27	2	146-331-0401	Anchor support	
28	4	90303-10203	Hex Screw	M10x20
29	1	546-213-2400	S-cam shaft	RH, L=830.5
29	1	546-213-2500	S-cam shaft	LH, L=830.5
30	4	146-373-0201	Pin	D25x50
31	4	90602-05450	Spring cotter	D5x40
32	4	146-371-0700	Roller	D25/54x28
33	6	599-601-8900	Bush	D12/20/25x36
34	4	92052-30002	Return spring	D30x165.5
35	6	90705-13023	washer	D13/24x2.5
36	6	90303-12603	Hex Screw	M12x60
37	2	146-311-7910	Brake drum	D410x210 mm
40	4	546-306-0083	Brake shoe assy	210mm, Beral1561
41	ar	546-360-3113	Brake lining set	210mm, Beral1561, for one wheel
43		N1	Note	See separate page
44	4	90502-08133	Nut	M8
45	4	90705-08423	washer	D8.4/17x1.6
46	4	90502-12193	Nut	M12
47	2	90177-01203	Stud bolt	M12/M8
48	2	589-250-0081	Sensor	Optional, ABS, Knorr, protected wire
49	2	189-295-0000	Bush	Optional, ABS
50	2	189-291-0000	Ring gear	Optional, ABS, 100 Splines

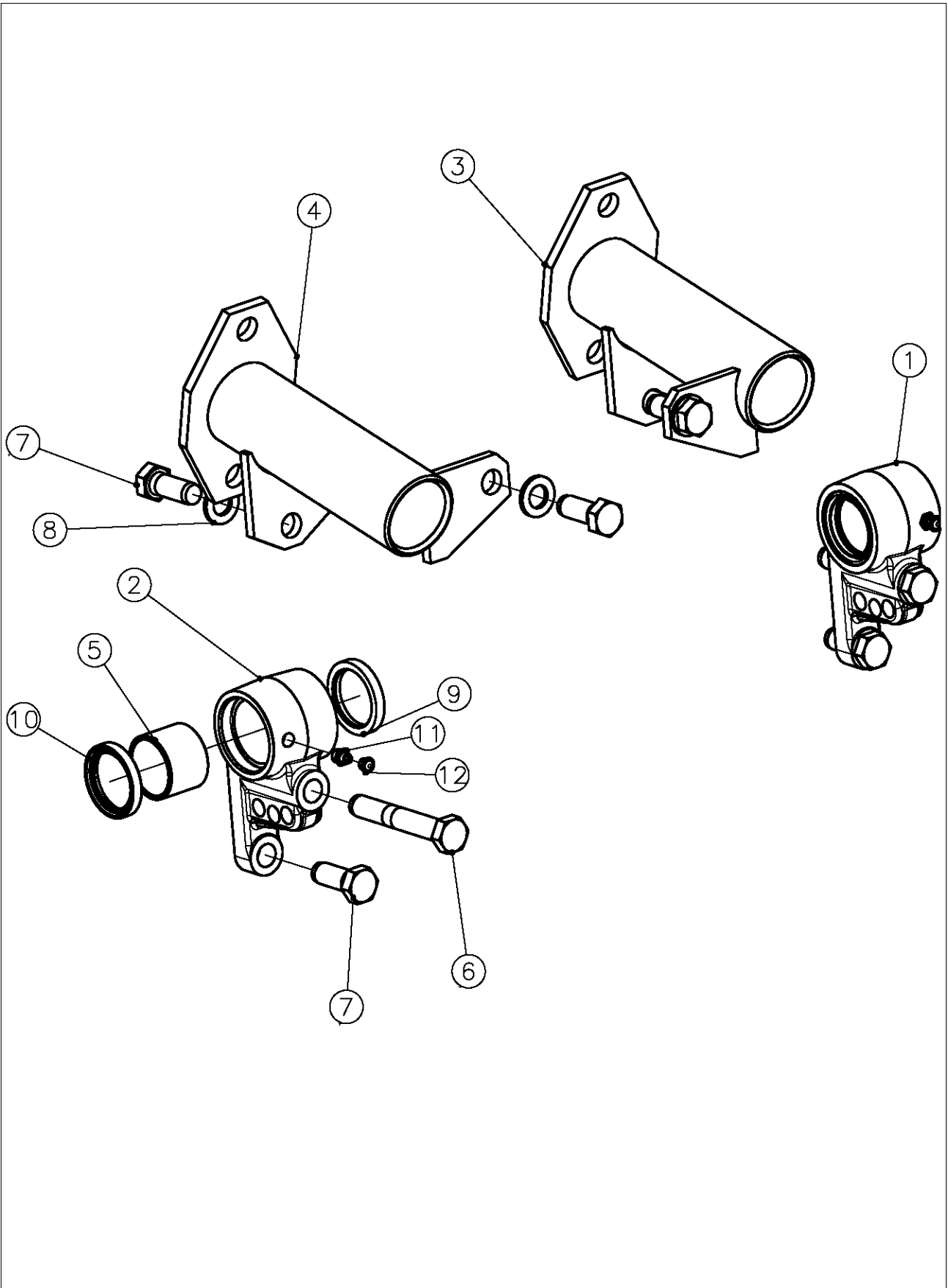


M204-048.DS4

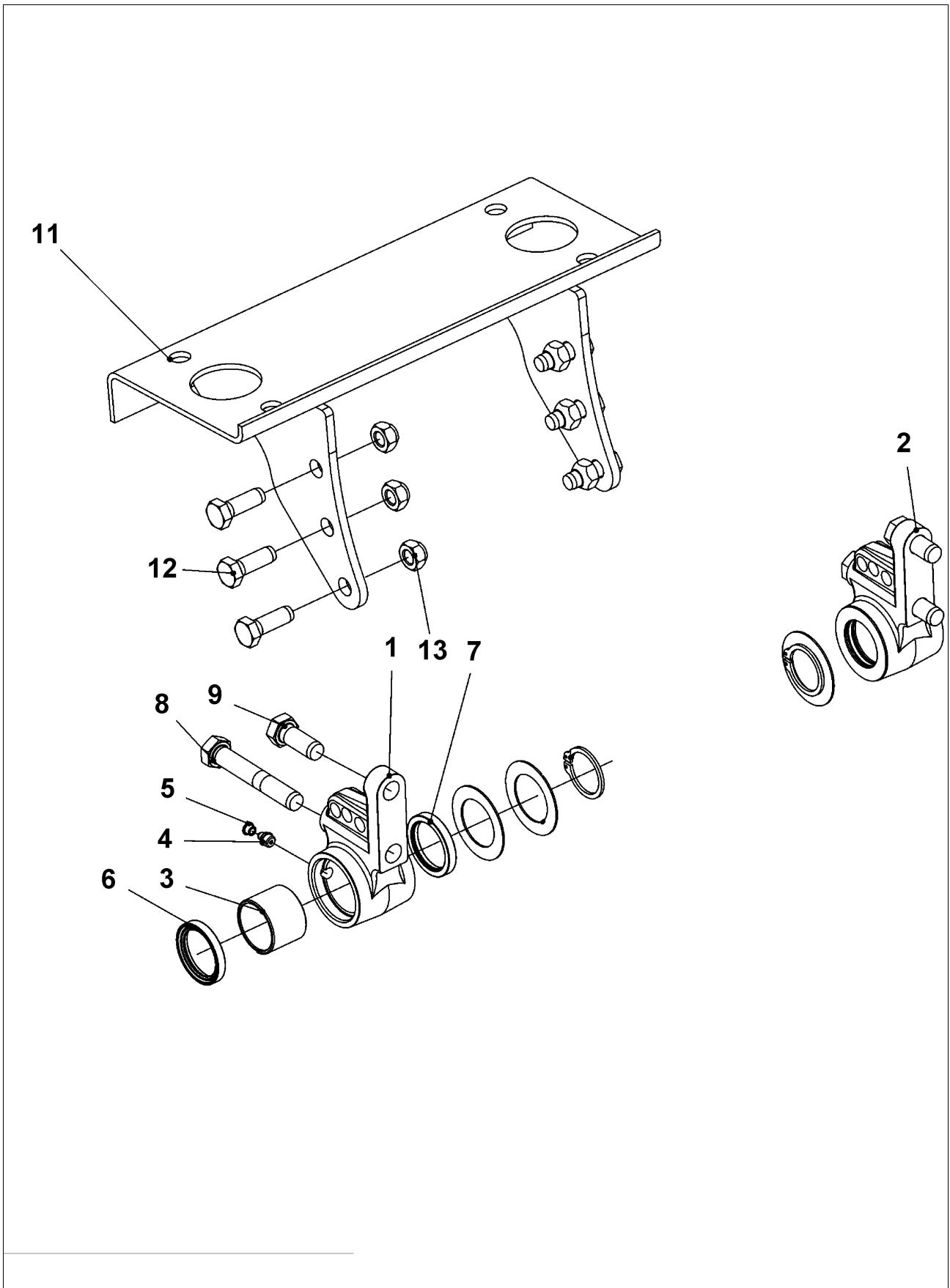
Item	Qty.	Order no.	Description	Note
1	1	546-530-3112	Slack adjuster	RH, 165 mm, offset 60
2	1	546-530-3122	Slack adjuster	LH, 165 mm, offset 60
3	2	90177-01203	Stud bolt	M12/M8, L=94
4	4	90502-08133	Nut	M8
5	4	90502-12193	Nut	M12
6	4	90705-08423	washer	D8.4/17x1.6
7	4	090-354-3030	Spacer plate	D43/66x1.5
8	2	91712-04000	Retainer ring	D40x2.5



Item	Qty.	Order no.	Description	Note
1	1	546-530-2012	Slack adjuster	RH, 165 mm, offset 75
2	1	546-530-2022	Slack adjuster	LH, 165 mm, offset 75
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	4	090-354-3030	Spacer plate	D43/66x1.5
8	2	91712-04000	Retainer ring	D40x2.5



Item	Qty.	Order no.	Description	Note
1	1	146-224-2310	Bearing housing	RH
2	1	146-224-2400	Bearing housing	LH
3	1	546-721-6900	Chamber bracket	RH, 13 deg. for 165 mm slack w/60 mm offset
4	1	546-721-6910	Chamber bracket	LH, 13 deg. for 165 mm slack w/60 mm offset
5	2	590-314-2062	Sleeve	D42/48x36
6	2	90301-16117	Hex Screw	M16x100, 10.9
7	6	90303-16407	Hex Screw	M16x40, 10.9
8	4	90705-17033	washer	D17/30x3
9	2	91122-04201	Shaft seal	D42/55x8
10	2	91122-04202	Shaft seal	D42/55x7
10	2	91720-05500	Retainer ring	D55x1.5, since S/N 164224 (9/2006)
11	2	91402-10003	Grease nipple	M10x1, Straight
12	2	91421-06060	Shield hat	



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	1	546-721-7400	Chamber bracket	86 deg. for 165 mm slack adjuster w/75 mm offset
12	6	90303-14407	Hex Screw	M14x40
13	6	90550-14227	Nut	M14 self locking