

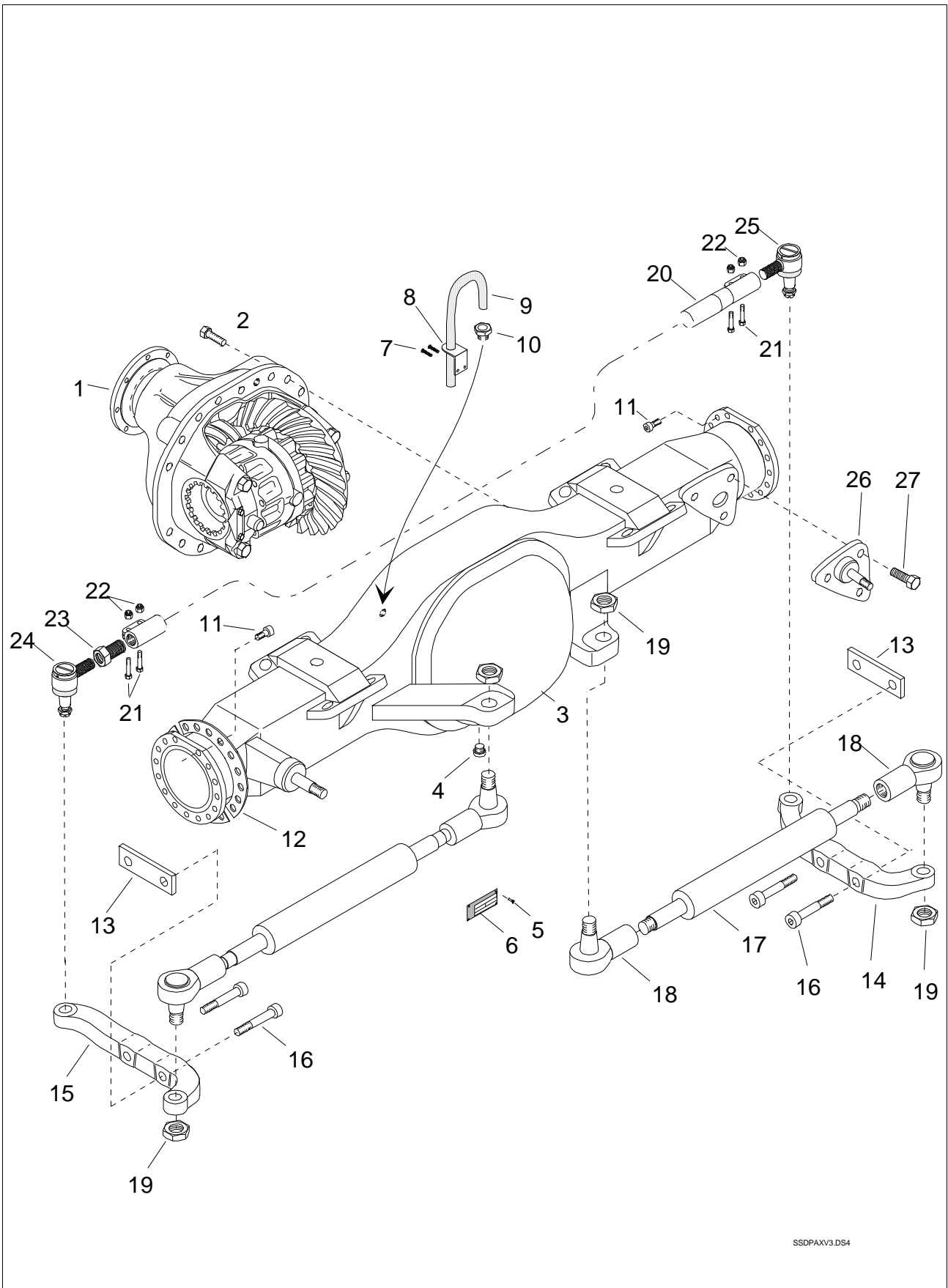
SISU AXLES

SPARE PARTS BOOK

**Front Axle
SSDP-12-S**

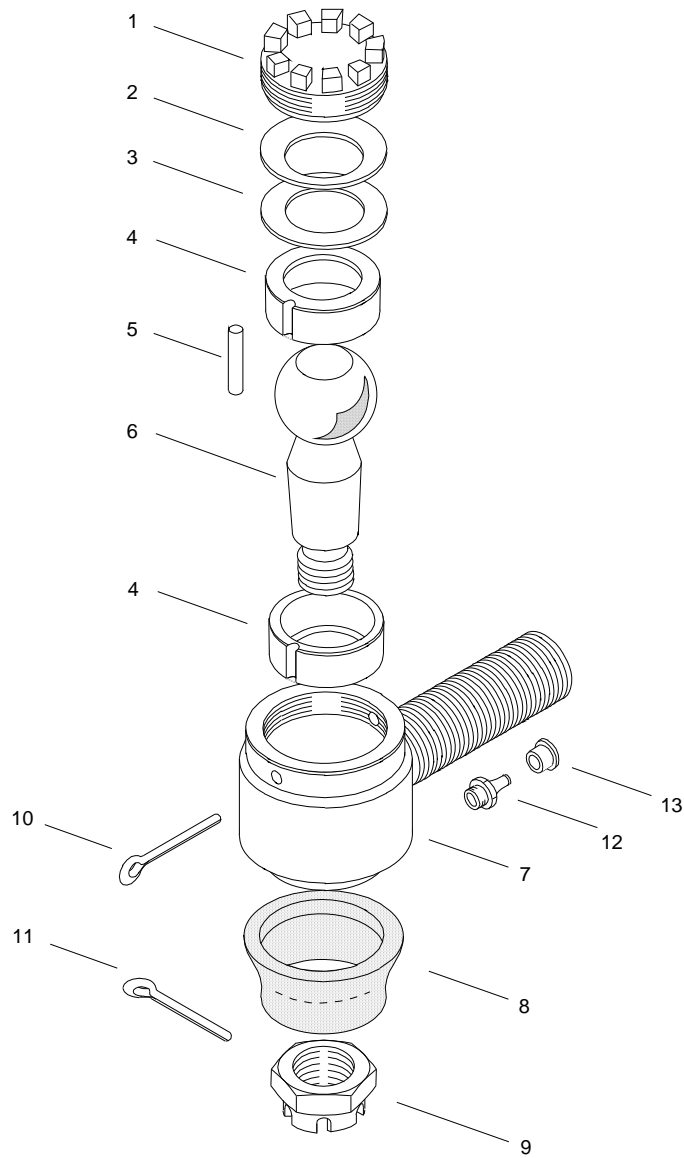
Book No. 209 (4/2010)

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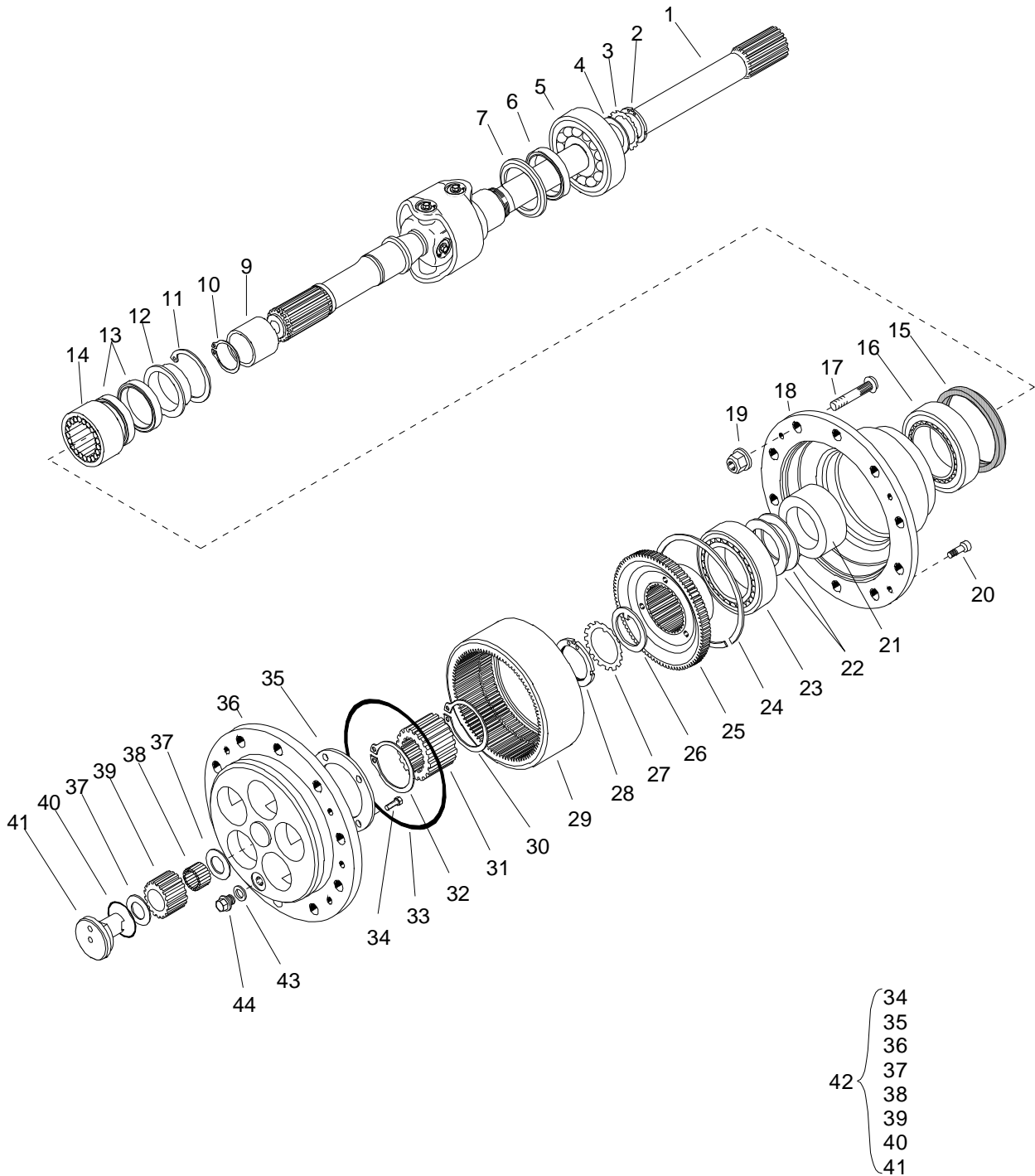
SSDPAXV3.DS4

Item	Qty.	Order no.	Description	Note
1	1	543-203-3222	Diff. Carrier Assembly	14.09, HS1600, w/o lock
1	1	543-203-3223	Diff. Carrier Assembly	14.09, DIN180, w/o lock
1	1	543-203-3227	Diff. Carrier Assembly	14.09, ISO-T150, w/o lock
1	1	543-203-3282	Diff. Carrier Assembly	16.57, HS1600, w/o lock
1	1	543-203-3283	Diff. Carrier Assembly	16.57, DIN180, w/o lock
1	1	543-203-3287	Diff. Carrier Assembly	16.57, ISO 8667-T150, w/o lock
1	1	543-203-3292	Diff. Carrier Assembly	20.78, HS1600, w/o lock
1	1	543-203-3293	Diff. Carrier Assembly	20.78, DIN180, w/o lock
1	1	543-203-3297	Diff. Carrier Assembly	20.78, ISO 8667-T150, w/o lock
2	16	90303-16407	Hex Screw	M16x40, 10.9
3	1	141-113-0600	Axle housing	Welded
3	1	541-113-3500	Axle housing	Cast
4	1	90831-24139	Diff. Carrier Assembly	Up to No. 00702, 2/2000
4	1	90873-22109	Diff. Carrier Assembly	M22x1.5, From No. 00703, 2/2000)
4	1	91201-22150	Seal ring	From No. 00703, 2/2000
5	4	90111-29054	Rivet	D2.9x5
6	1	91600-20811	Name plate	
7	2	90111-29054	Rivet	D2.9x5
8	1	143-227-0800	Mounting Plate	
9	1	95242-06010	Plastic Pipe	9.5/15.5 mm 0.35 m
10	1	592422-01603	Hose clamp	
10	1	91978-30901	Binding screw	R3/8"/D10
11	30	90311-14508	Allen Screw	M14x50
12	2	138-991-0610	Spacer ring	
13	2	140-247-0010	Spacer plate	s=10 mm, 25 mm holes
14	1	140-241-5310	Tie rod arm	LH, for cambered tie rod
14	1	540-241-6410	Tie rod arm	LH, For straight tie rod
15	1	140-241-5300	Tie rod arm	RH, for cambered tie rod
15	1	540-241-6400	Tie rod arm	RH, For straight tie rod
16	4	90311-24118	Allen Screw	M24x100
17	2	375-501-0012	Steering cylinder	
18	4	160-530-0062	Ball Joint Assembly	Includes nut (19) and cotter pin
19	4	90546-24363	Nut	M24x1.5
19	4	90621-50453	Split pin	D5x45
20	1	540-201-9791	Tie rod assy	1490mm, straight (from 4/2000)
20	1	540-211-4811	Tie rod	Cambered, up to 4/2000
21	5	90301-14703	Hex Screw	for cambered tie rod
21	2	90303-12603	Hex Screw	For straight tie rod
22	2	90502-12193	Nut	For straight tie rod
22	5	90550-14227	Nut	for cambered tie rod
23	1	095-130-2031	Binding screw	For -4811 tie rod
24	1	160-530-0035	Ball Joint Assembly	M30x1.5 LH thread, for -4811 tie rod
24	1	160-530-0193	Ball Joint Assembly	LH thread, for straight tie rod
24	1	90546-24363	Nut	M24x1.5
24	1	90621-50453	Split pin	D5x45
25	1	160-530-0045	Ball Joint Assembly	M30x1.5 RH thread, for -4811 tie rod
25	1	160-530-0183	Ball Joint Assembly	RH thread M30x1.5, for straight tie rod
25	1	90546-24363	Nut	M24x1.5
25	1	90621-50453	Split pin	D5x45
26	2	555-924-1310	Bracket	For cast axle housing
27	6	90303-12407	Hex Screw	M12x40



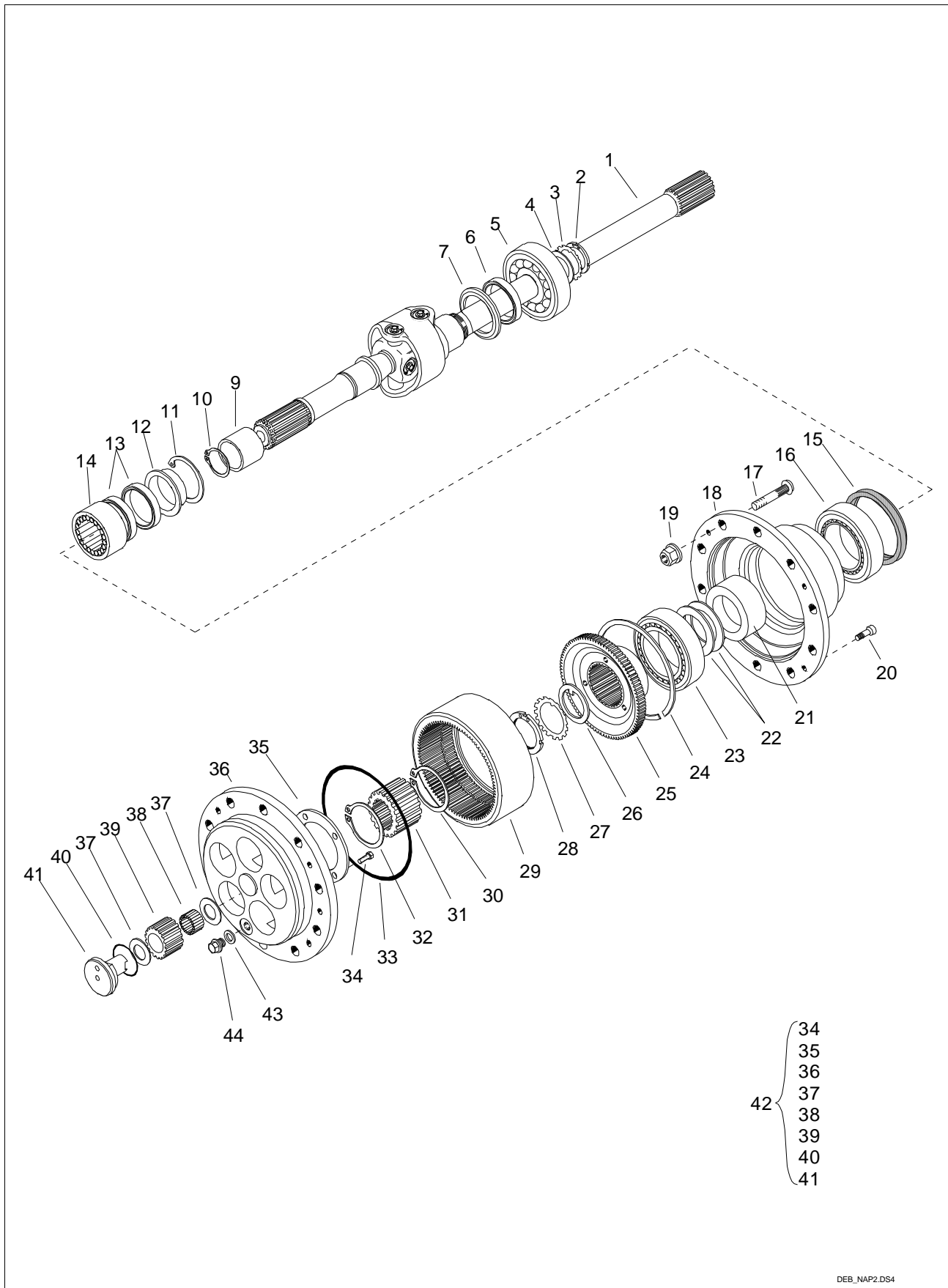
DEB_KNIV.DS4

Item	Qty.	Order no.	Description	Note
0	1	160-530-0035	Ball Joint Assembly	LH, LH Thread, includes all items
0	1	160-530-0045	Ball Joint Assembly	RH, RH Thread, includes all items
1	1	140-227-0311	Cover	
2	1	92055-25460	Disc spring	D50/25.4x1.5
3	1	90700-29001	Spacer plate	D29/50x2
4	2	140-225-0400	Ball seat	
5	1	090-005-0390	Needle roller	D3x25.4
6	1	140-229-1310	Ball stud	D40
7	1	140-221-0810	Balljoint housing	RH Thread (for 160-530-0045)
7	1	140-222-0810	Balljoint housing	LH Thread (for 160-530-0035)
8	1	090-610-2610	Dust membrane	
9	1	90546-24363	Nut	M24x1.5
10	1	90621-50323	Split pin	D5x32
11	1	90621-50453	Split pin	D5x45
12	1	91402-10003	Grease nipple	M10x1, Straight (for 160-530-0035)
12	1	91402-10453	Grease nipple	M10x1, 45° (for 160-530-0045)
13	1	91421-06060	Shield hat	
14	1	160-580-0011	Service kit	Includes items 1 - 6 & 8 -12



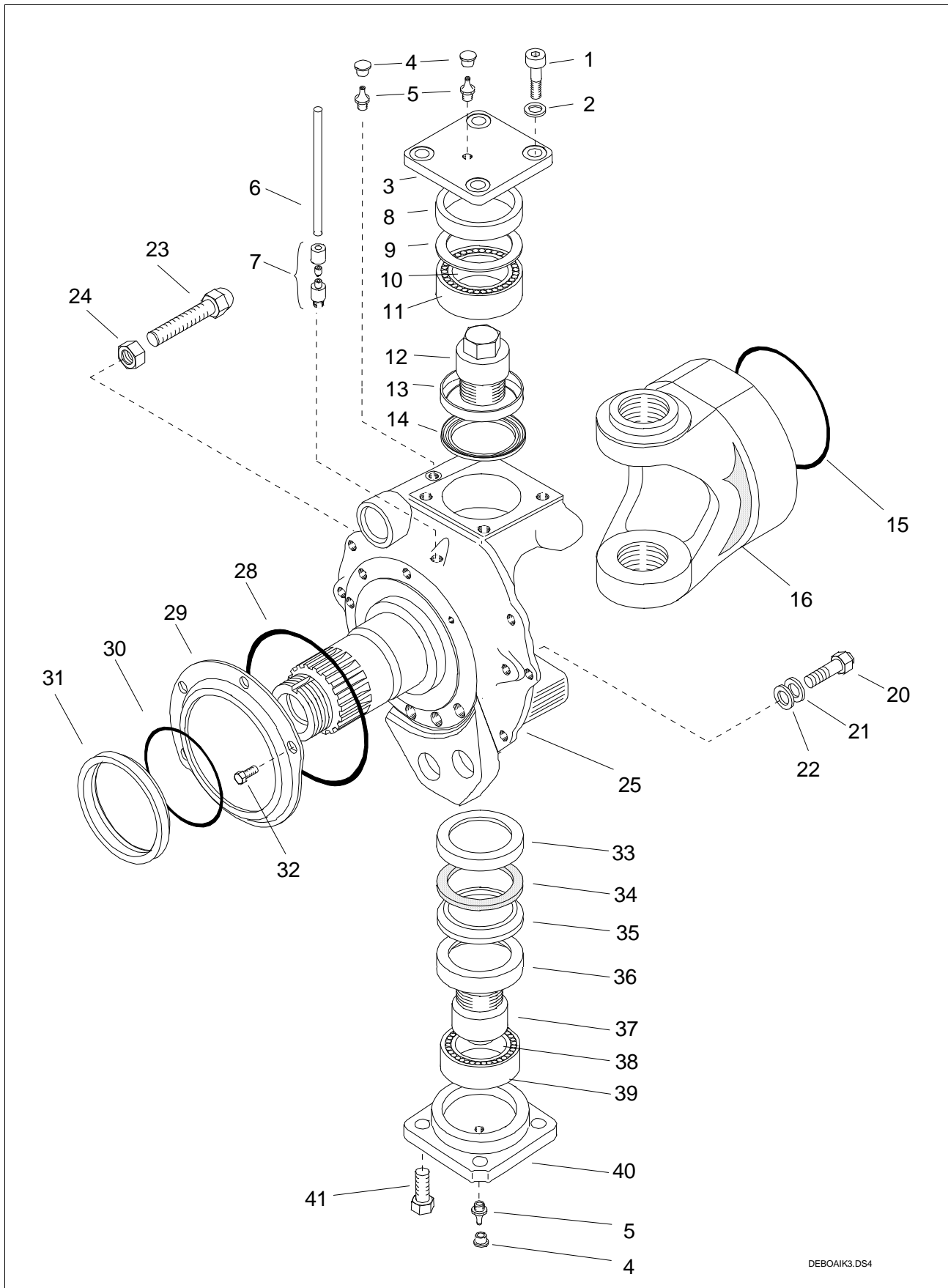
DEB_NAP2.DS4

Item	Qty.	Order no.	Description	Note
1	2	141-502-0181	Axle Shaft	L=1172
2	2	099-250-8000	Lock nut	M50x1.5
3	2	099-455-0000	Lock washer	D50/74x1.25
4	2	099-455-0010	washer	D50/75x4
5	2	090-010-5020	Deep groove ball bearing	
6	2	91122-06001	Shaft seal	D60/75x8
7	2	91121-06001	Seal ring	ID 60
9	2	090-160-5020	Sleeve	D50/60x50
10	2	092-953-5030	Retainer ring	D50x2
11	2	092-957-8000	Retainer ring	D80x2.5
12	2	141-533-0200	Shield ring	For double shaft seals
13	4	91122-06001	Shaft seal	D60/75x8
14	2	090-060-6040	Needle bush	D60/72x25
15	2	91122-14003	Shaft seal	D140/165x15
16	2	91744-01051	T. Roller bearing	
17	20	140-911-2510	Wheel bolt	L=93 mm
18	2	141-411-0510	Wheel hub	
19	20	540-916-1610	Wheel nut	M22x1.5
20	8	90303-12303	Hex Screw	M12x30
21	2	143-416-0010	Spacer ring	D90/118x41
22	NLA	099-519-1001	Shim	s=0.10 mm, D91/108, Ms
22	NLA	099-519-1002	Shim	s=0.20 mm, D91/108, Ms
22	NLA	099-519-1003	Shim	s=0.50 mm, D91/108, Ms
22	ar	590731-09020	Shim	s=0.20 mm, D90x110, St
22	ar	590731-09030	Shim	s=0.30 mm, D90x110, St
22	ar	590731-09050	Shim	s=0.50 mm, D90x110, St
23	2	91744-01101	T. Roller bearing	
24	2	91720-22001	Retainer ring	D220x3
25	2	535-271-0800	Ring gear hub	
26	2	099-458-0010	washer	D80/100x2
27	2	099-458-0000	Lock washer	D80/112x1,75
28	2	90575-08040	Lock nut	M80x2
29	2	135-261-1600	Ring gear	
30	2	092-953-4710	Retainer ring	D47x1.5
31	2	135-211-1000	Sun gear	
32	2	092-953-4710	Retainer ring	D47x1.5
33	2	090-512-6500	O-ring	D265x2
34	10	90303-10203	Hex Screw	M10x20
35	2	135-259-0110	Lock plate	
36	2	141-441-0810	Planet carrier	
37	20	090-353-5020	Spacer plate	D57/35x1.5
38	260	090-005-0530	Needle roller	D4.762x28.5
39	10	135-241-1000	Planet gear	
40	10	91100-76025	O-ring	D76x2.5
41	10	135-251-1000	Planet gear shaft	
42	2	141-404-0071	Planetary gear	
43	2	91201-22150	Seal ring	D22/27x1.5 Cu
44	2	90871-22193	Plug screw	M22x1.5, hex head



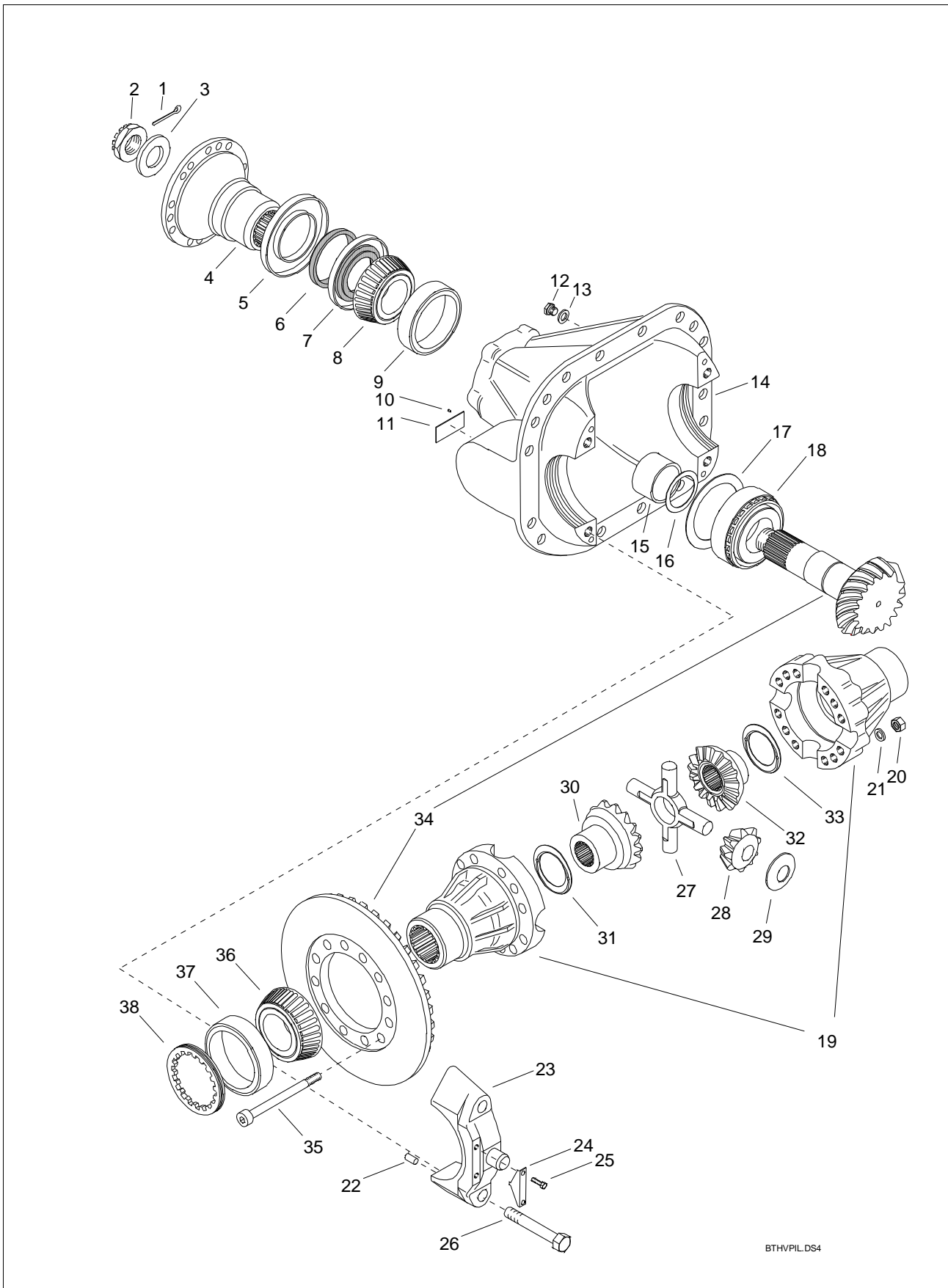
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Item	Qty.	Order no.	Description	Note
1	2	541-502-0501	Axle Shaft	Reinforced
2	4	099-250-8000	Lock nut	M50x1.5
3	0	0		Not installed
4	2	590700-50001	washer	D50/75x4
5	2	090-010-5020	Deep groove ball bearing	
6	2	91122-06001	Shaft seal	D60/75x8
7	2	91121-06001	Seal ring	ID 60
9	2	090-160-5020	Sleeve	D50/60x50
10	2	092-953-5030	Retainer ring	D50x2
11	2	092-957-8000	Retainer ring	D80x2.5
12	2	141-533-0200	Shield ring	For double shaft seals
13	4	91122-06001	Shaft seal	D60/75x8
14	2	090-060-6040	Needle bush	D60/72x25
15	2	91122-14003	Shaft seal	D140/165x15
16	2	91744-01051	T. Roller bearing	
17	20	140-911-2510	Wheel bolt	L=93 mm
18	2	141-411-0510	Wheel hub	
19	20	540-916-1610	Wheel nut	M22x1.5
20	8	90303-12303	Hex Screw	M12x30
21	2	143-416-0010	Spacer ring	D90/118x41
22	NLA	099-519-1001	Shim	s=0.10 mm, D91/108, Ms
22	NLA	099-519-1002	Shim	s=0.20 mm, D91/108, Ms
22	NLA	099-519-1003	Shim	s=0.50 mm, D91/108, Ms
22	ar	590731-09020	Shim	s=0.20 mm, D90x110, St
22	ar	590731-09030	Shim	s=0.30 mm, D90x110, St
22	ar	590731-09050	Shim	s=0.50 mm, D90x110, St
23	2	91744-01101	T. Roller bearing	
24	2	91720-22001	Retainer ring	D220x3
25	2	535-271-0800	Ring gear hub	
26	2	099-458-0010	washer	D80/100x2
27	2	099-458-0000	Lock washer	D80/112x1,75
28	2	90575-08040	Lock nut	M80x2
29	2	135-261-1600	Ring gear	
30	2	092-953-4710	Retainer ring	D47x1.5
31	2	135-211-1000	Sun gear	
32	2	092-953-4710	Retainer ring	D47x1.5
33	2	090-512-6500	O-ring	D265x2
34	10	90303-10203	Hex Screw	M10x20
35	2	135-259-0110	Lock plate	
36	2	141-441-0810	Planet carrier	
37	20	090-353-5020	Spacer plate	D57/35x1.5
38	260	090-005-0530	Needle roller	D4.762x28.5
39	10	135-241-1000	Planet gear	
40	10	91100-76025	O-ring	D76x2.5
41	10	135-251-1000	Planet gear shaft	
42	2	141-404-0071	Planetary gear	
43	2	91201-22150	Seal ring	D22/27x1.5 Cu
44	2	90871-22193	Plug screw	M22x1.5, hex head

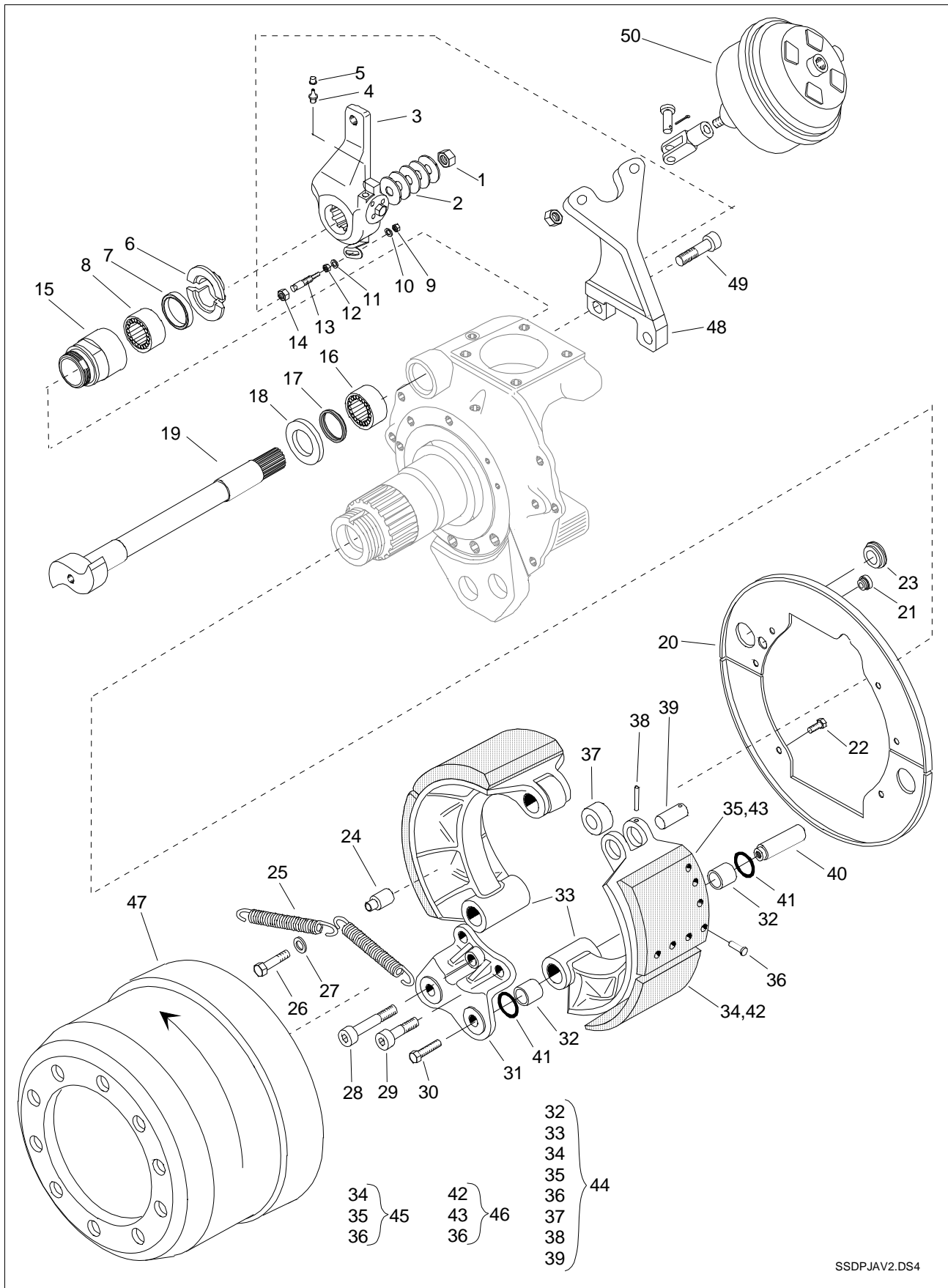


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Item	Qty.	Order no.	Description	Note
1	8	90303-16307	Hex Screw	
2	0			Not used
3	2	140-123-1110	King pin cover	
4	6	91421-06060	Shield hat	
5	6	91402-10003	Grease nipple	M10x1, Straight
6	2	179-614-1110	Breather pipe	l=0.5 m
7	2	91950-11010	Pipe joint	M10x1, 6 mm
8	2	099-607-6050	Spacer ring	D94/76.3x21.5
9	ar	099-518-0011	Shim	(s=0.10 mm)
9	ar	099-518-0012	Shim	(s=0.20 mm)
9	ar	099-518-0013	Shim	(s=0.50 mm)
10	2	090-110-5130	Bearing inner race	
11	2	090-120-9300	Bearing outer race	
12	2	140-121-1200	King pin	
13	2	090-721-7400	Protective cup	D74/93.3x7
14	2	090-400-7000	Gamma-seal	D70/90x5.5
15	2	090-511-2110	O-ring	D120,0 x 2,0 NBR 70
16	2	141-117-0610	Swivel head	Steel, R88x15x30deg
20	2	140-249-1510	Stop screw	Total L=45.5mm
21	2	099-551-6000	Spacer ring	s = 2.0
22	2	099-551-6001	Spacer ring	s = 3.0
23	2	140-249-1400	Stop screw	Total L=80mm
23	2	140-249-1700	Stop screw	Total L=100mm
24	2	90502-16243	Nut	M16
25	1	141-141-0700	Steering knuckle	LH
25	1	141-141-0710	Steering knuckle	RH
28	2	591101-94230	O-ring	194.2x3, sursession for 91101-90030
29	2	143-871-0100	Shield	
30	2	91101-33026	O-ring	133x2.62
31	2	540-415-1100	Sliding Ring	Supersession for 140-415-0712
32	4	90303-08123	Hex Screw	M8x12
33	2	090-722-1100	Protective cup	D70.5/109.6x5.5
34	2	090-551-9200	Seal plate	D92/108x5
35	2	090-400-7000	Gamma-seal	D70/90x5.5
36	2	090-722-1110	Protective cup	D72/111.1x11.5
37	2	140-121-1200	King pin	
38	2	090-110-5140	Bearing inner race	
39	2	090-121-1110	Bearing outer race	
40	2	140-123-1010	King pin cover	
41	8	90303-16307	Hex Screw	M16x30



Item	Qty.	Order no.	Description	Note
1	1	90621-63633	Split pin	6.3x63
2	1	90546-42653	Nut	M42x1.5
3	1	90705-43069	washer	D43/80x6
4	1	138-916-2110	Flange	HS1600
4	1	138-918-0400	Flange	HS1700-1800
4	1	138-918-0401	Flange	ISO 8667 - T180
4	1	138-947-0101	Flange	DIN180
4	1	538-916-3401	Flange	ISO 8667 - T150
5	1	090-711-9000	Shield	
6	1	090-400-9500	V-ring	VS-95, Up to serial No 152786 (6/2005)
7	1	591122-08508	Shaft seal	D85/140x13/20, Since serial No. 152787 (6/2005)
7	1	91122-08504	Shaft seal	D85/140x13, Up to serial No 152786 (6/2005)
8	1	090-110-6740	Bearing inner race	
9	1	090-121-3700	Bearing outer race	
10	4	90111-29054	Rivet	D2.9x5
11	1	91600-20811	Name plate	
12	1	90871-22193	Plug screw	M22x1.5, hex head
13	1	91201-22150	Seal ring	D22/27x1.5 Cu
14	1	143-210-1411	Differential Carrier	Without differential lock
15	ar	099-557-1026	Spacer ring	(l=53.70)
15	ar	099-557-1027	Spacer ring	(l=53.72)
15	ar	099-557-1028	Spacer ring	(l=53.74)
15	ar	099-557-1029	Spacer ring	(l=53.76)
15	ar	099-557-1030	Spacer ring	(l=53.78)
16	ar	099-517-1000	Shim	(s=0.30)
16	ar	099-517-1001	Shim	(s=0.40)
16	ar	099-517-1002	Shim	(s=0.50)
17	ar	90731-12010	Shim	(s=0.1)
17	ar	90731-12020	Shim	(s=0.2)
17	ar	90731-12050	Shim	(s=0.5)
17	ar	90732-12010	Shim	(s=1.0)
18	1	090-050-7001	T. Roller bearing	
19	1	543-310-4551	Diff. case assy	Without diff. lock, FR < 12.52
19	1	543-310-4561	Diff. case assy	Without diff. lock, FR => 12.52
20	12	90550-16247	Nut	M16 self locking
21	12	90710-17047	washer	D17/30
22	4	590604-08141	Pin	Ø8x14
23	2	143-214-2180	Bearing Case Half	Not Serviced Separately
24	2	143-227-0610	Lock plate	
25	4	90303-08163	Screw	M8x16
26	4	90301-20377	Hex Screw	M20x130
27	1	143-331-1701	Spider	
28	4	143-341-1710	Pinion gear	
29	4	143-345-1010	Thrust washer	D29.5/63
30	1	543-351-4110	Side gear	
31	1	543-356-0400	Thrust washer	D80/110x3, w/o diff lock
32	1	543-351-4110	Side gear	
33	1	543-356-0400	Thrust washer	D80/110x3
34	1	143-240-2921	Ring and pinion gear set	8/31 Final Ratio 14.09
34	1	143-240-2961	Ring and pinion gear set	9/31 Final Ratio 12.52
34	1	143-240-2981	Ring and pinion gear set	9/41 Final ratio 16.57
34	1	143-240-2991	Ring and pinion gear set	7/40 Final ratio 20.78
35	12	90311-16298	Allen Screw	M16x120, FR => 12.52
35	12	90311-16398	Allen Screw	M16x130, FR < 12.52
36	2	090-110-9000	Bearing inner race	
37	2	090-121-4700	Bearing outer race	
38	2	143-226-0012	Adjusting nut	D149



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Item	Qty.	Order no.	Description	Note
1	2	90550-16247	Nut	M16 self locking
2	10	592055-18330	Disc spring	Supersedes item 92055-18323
3	2	146-520-1911	Slack adjuster	7" (178 mm), straight, manual
3	1	146-520-2011	Slack adjuster	RH, 145 mm, offset 56, manual
3	1	146-520-2021	Slack adjuster	LH, 145 mm, offset 56, manual
3	1	146-530-0911	Slack adjuster	RH, 145 mm, offset 56, autom.
3	1	146-530-0921	Slack adjuster	LH, 145 mm, offset 56, autom.
4	2	91402-08003	Grease nipple	M8x1
5	2	91421-06060	Shield hat	
6	4	146-591-0270	Retainer sleeve	
7	2	91122-04201	Shaft seal	D42/55x8
8	2	090-060-4220	Needle bush	D52/42x20
9	2	90502-08133	Nut	M8
10	2	90705-08423	washer	D8.4/17x1.6
11	2	90705-08423	washer	D8.4/17x1.6
12	2	90502-08133	Nut	M8
13	2	90177-01204	Stud bolt	M12/M8, L=60
14	2	90502-12193	Nut	M12
15	2	146-221-1010	Bearing housing	
16	2	090-060-4220	Needle bush	D52/42x20
17	2	91122-04201	Shaft seal	D42/55x8
18	2	91726-43065	Support ring	D43/65x3
19	1	146-211-7800	S-cam shaft	LH
19	1	146-211-7900	S-cam shaft	RH
20	1	146-131-6300	Dust Shield	LH
20	1	146-131-6310	Dust Shield	RH
21	2	90775-41015	Shield plug	D10/16
22	12	90303-08123	Hex Screw	M8x12
23	4	095-553-2000	Shield plug	D33/44
24	6	599-601-8900	Bush	
25	4	92052-30002	Return spring	
26	6	90303-12603	Hex Screw	M12x60
27	6	90705-13023	washer	D13/24x2.5
28	2	90311-16608	Allen Screw	M16x60
29	4	90313-16308	Allen Screw	M16x30
30	4	90303-10203	Hex Screw	M10x20
31	2	146-331-0500	Anchor support	
32	8	590-313-2091	Sleeve	Sub. for 090-313-2090
33	4	146-351-4000	Brake shoe	180 mm
34	4	546-361-6114	Brake lining	
35	4	546-361-6014	Brake lining	
36	96	91501-00819	Rivet	
37	4	146-371-0700	Roller	Supersedes 146-371-0610
38	4	90602-05450	Spring cotter	D5x40
39	4	146-373-0201	Pin	Supersedes 146-373-0200
40	4	146-341-1210	Anchor bolt	W/o grease nipple
41	8	91106-36212	O-ring	D36,2x3 Viton
44	4	546-306-0054	Brake shoe assy	
45	2	546-360-3014	Brake lining set	for one wheel Ø410x180, FO764
46	2	546-360-3024	Br. lining set(over size)	for one wheel Ø410x180, FO764
47	2	146-311-7400	Brake drum	
48	1	146-711-3100	Chamber bracket	RH, for 165/178 mm straight slack adjuster
48	1	146-711-3110	Chamber bracket	LH, for 165/178 mm straight slack adjuster
48	1	146-711-3700	Chamber bracket	RH, 145 mm, offset 56
48	1	146-711-3710	Chamber bracket	LH, 145 mm, offset 56
49	4	90311-20508	Allen Screw	M20x50
50	2	172-101-2151	Brake chamber	30", L=89, Knorr, Yoke set 592-801-4090
50	2	172-103-3131	Spring Brake Chamber	24"/24", L=89, Knorr, Yoke set 592-801-4080
50	2	572-101-2152	Brake chamber	30", L=89, Arfesan, Yoke set 592-801-4090
50	2	572-103-3132	Spring Brake Chamber	24"/24", L=89, Arfesan, Yoke set 592-801-4080