

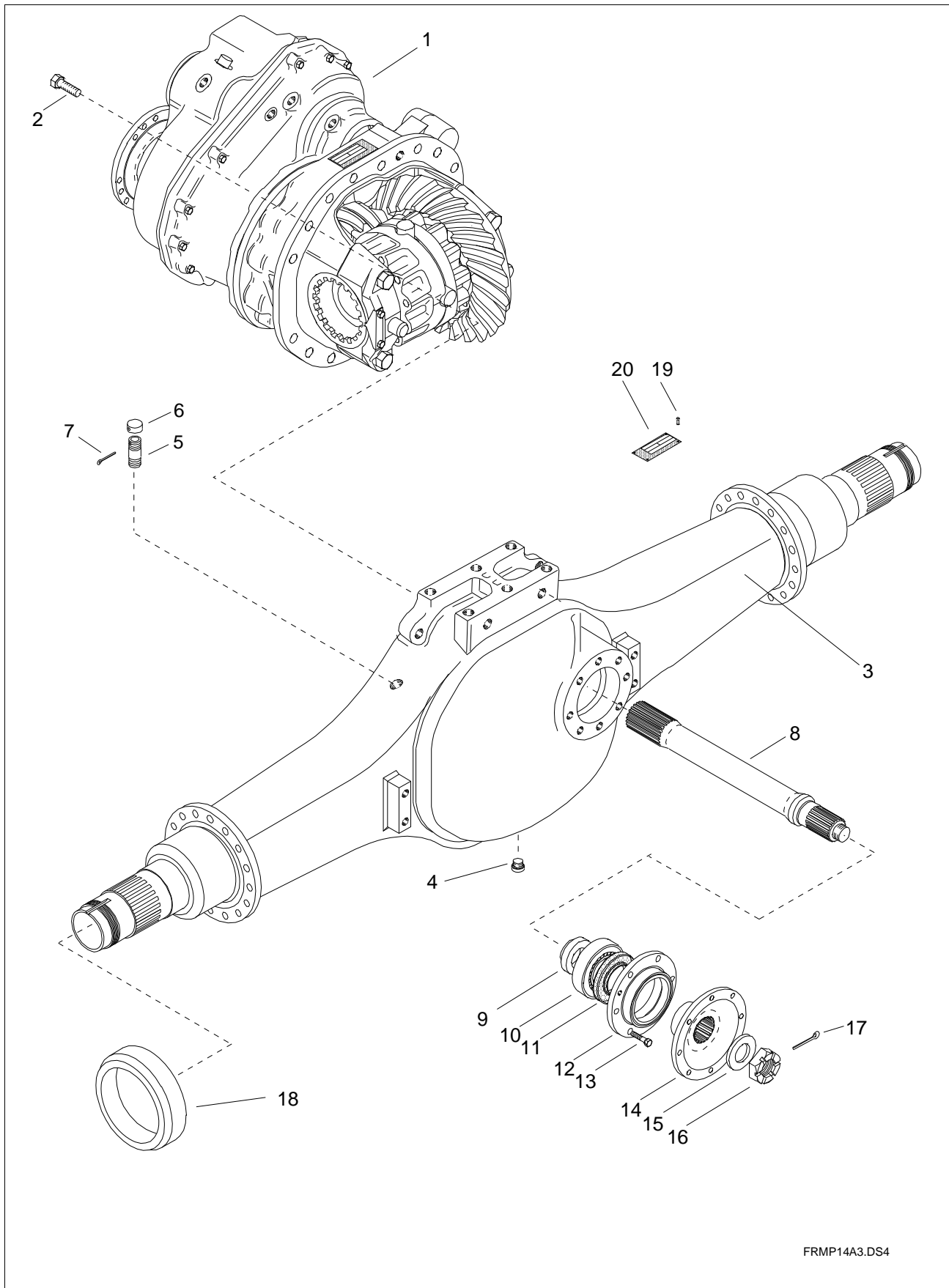
# **SISU AXLES**

## **SPARE PARTS BOOK**

**Foremost Tandem Axle  
FRMP-14-S**

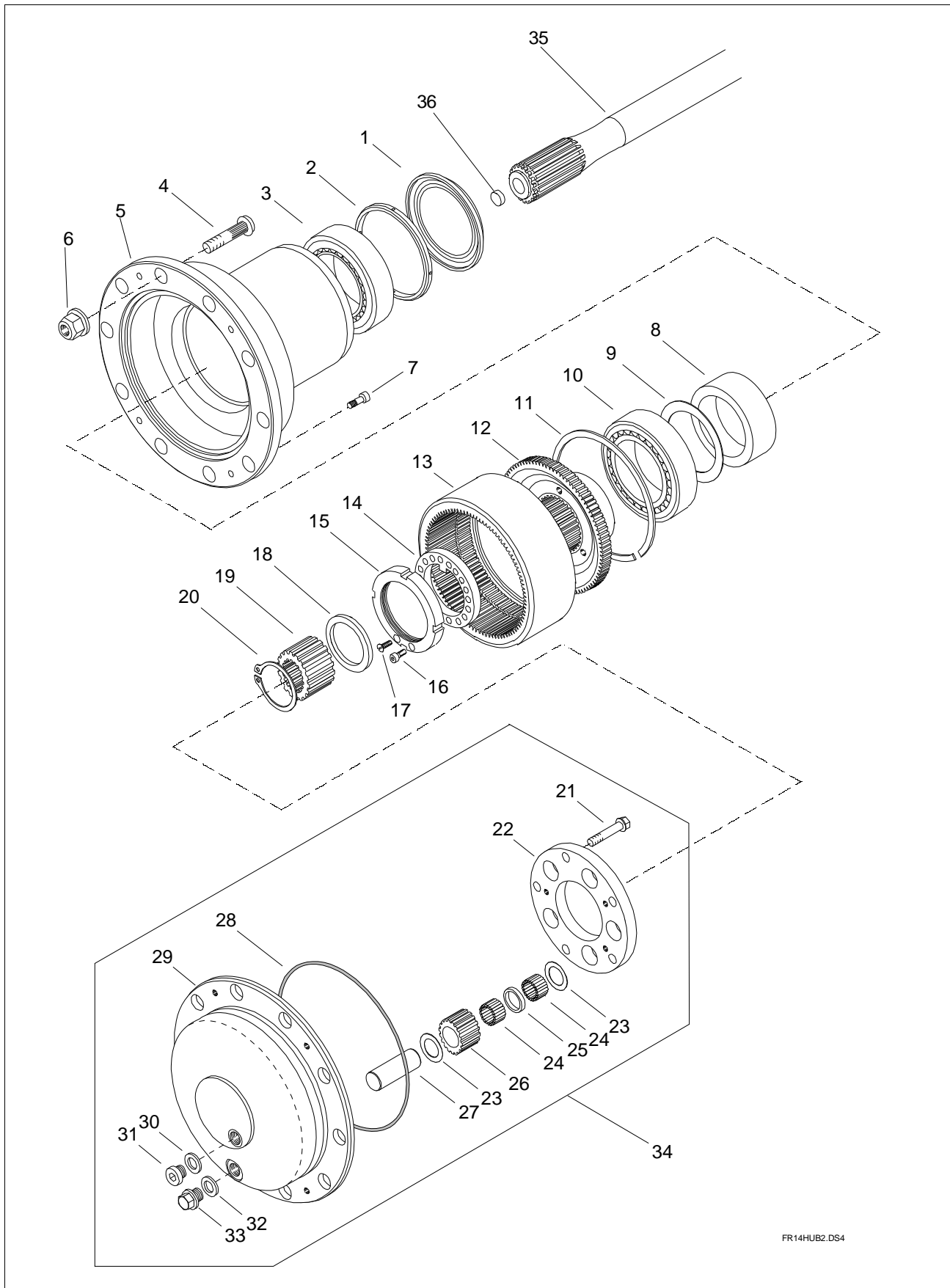
**FRMP14S0636/002  
Book No. 388 (12/2008)**

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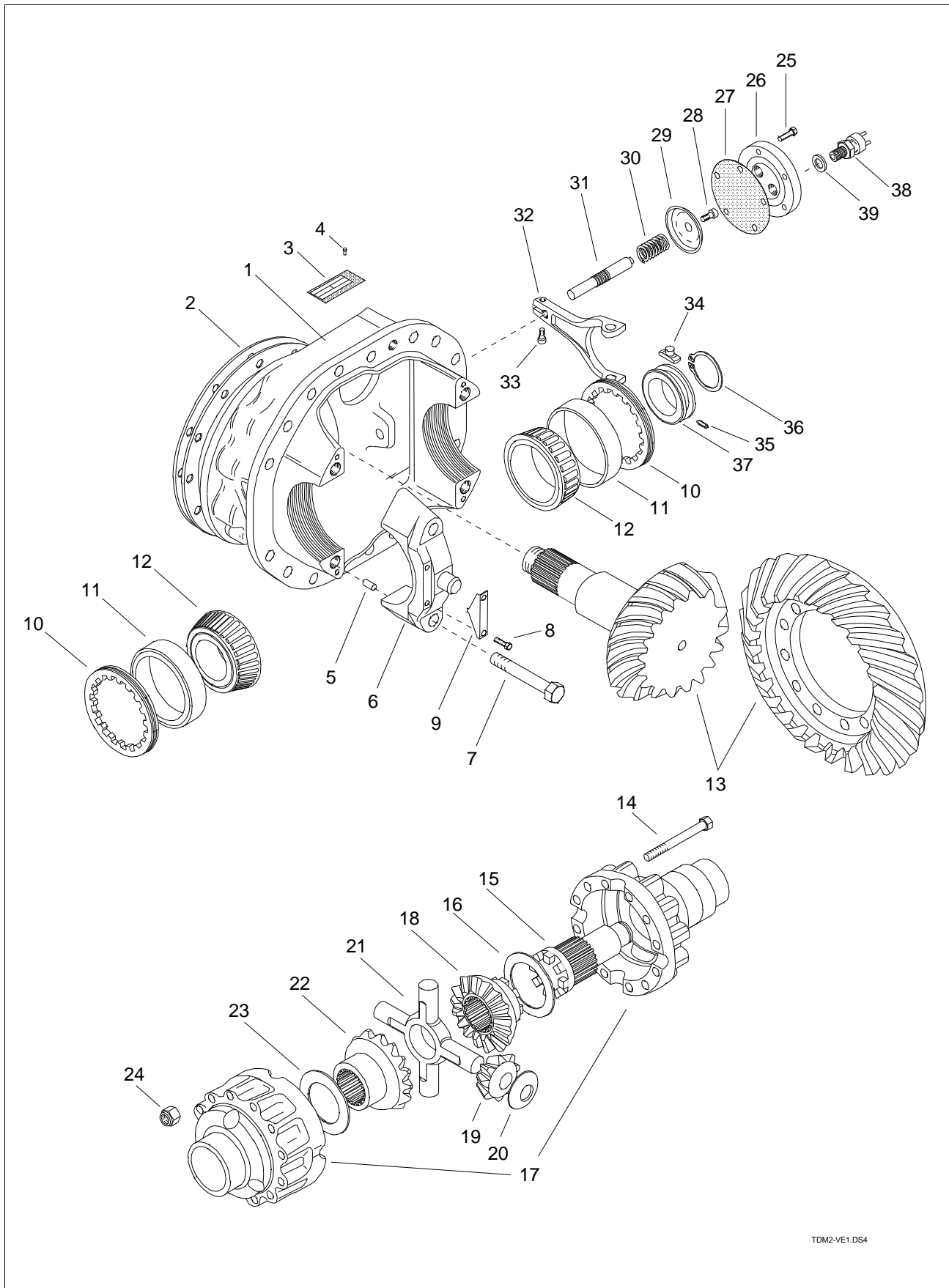
FRMP14A3.DS4

Item	Qty.	Order no.	Description	Note
1	1	<b>544-304-6327</b>	Diff. Carrier Assembly	i= 6.36, ISO 8667-T180 flange
2	16	<b>90303-16407</b>	Hex Screw	M16x40, 10.9
3	1	<b>101-0110-327</b>	Axle housing	
4	1	<b>90873-22109</b>	Oil plug	M22x1.5 - DIN908, Allen head, magnetic
4	1	<b>91201-22150</b>	Seal ring	D22/27x1.5 Cu
5	1	<b>179-841-1000</b>	Breather pipe	
6	1	<b>179-842-0000</b>	Breather Cover	
7	1	<b>90621-32253</b>	Split pin	3.2x25
8	1	<b>144-251-3010</b>	Output Shaft	
9	1	<b>144-287-0310</b>	Spacer ring	D54.6/76.4x21
10	1	<b>91734-40651</b>	Deep groove ball bearing	D65/120 x 23
11	1	<b>591122-08507</b>	Shaft seal	Cassette seal D85/120x9/20
12	1	<b>544-321-0500</b>	Seal housing	For cassette seal
13	8	<b>90303-10303</b>	Hex Screw	M10x30
14	1	<b>538-917-2511</b>	Output flange	ISO 8667 - T180, N55 (cassette seal)
15	1	<b>90705-43069</b>	washer	D43/80x6
16	1	<b>90546-42653</b>	Nut	M42x1.5
17	1	<b>90621-63633</b>	Split pin	6.3x63
18	2	<b>540-415-1910</b>	Spacer ring	D111/127x22
19	4	<b>90111-29054</b>	Rivet	D2.9x5
20	1	<b>591600-20823</b>	Name plate	



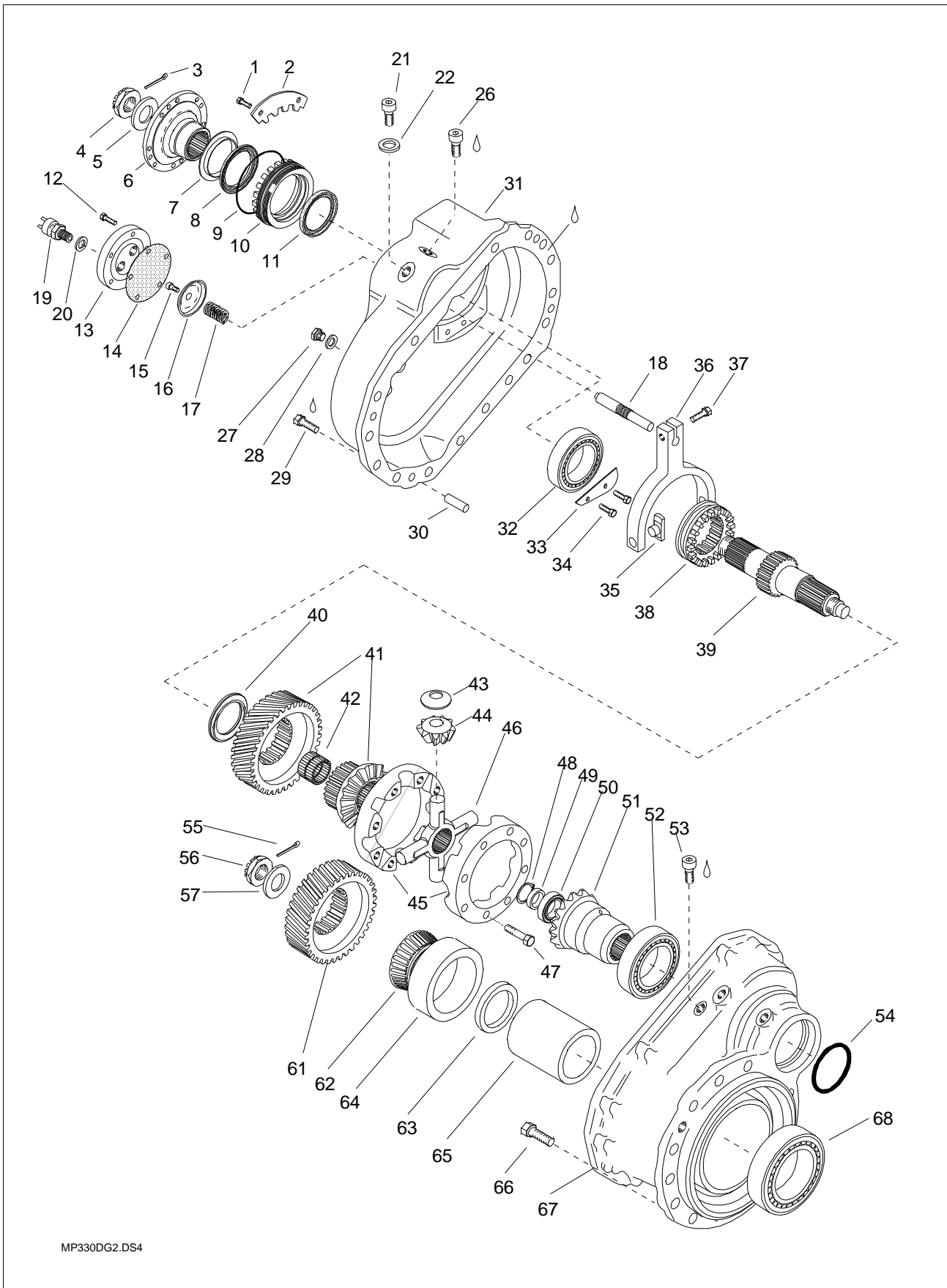
FR14HUB2.DS4

Item	Qty.	Order no.	Description	Note
1	2	<b>591122-12702</b>	Shaft seal	D127/160
2	NLA	<b>540-415-2000</b>	Spacer ring	D152/160x14, Unnecessary
3	2	<b>91744-01051</b>	T. Roller bearing	
4	20	<b>140-911-2510</b>	Wheel bolt	L=93 mm
5	2	<b>541-411-2502</b>	Wheel hub	FR-14
6	20	<b>540-916-1610</b>	Wheel nut	M22x1.5
7	8	<b>590313-10303</b>	Allen Screw	M10x30
8	2	<b>543-416-0700</b>	Spacer ring	D95/116x39
9	NLA	<b>590731-09510</b>	Shim	s= 0.1 mm
9	NLA	<b>590731-09515</b>	Shim	s= 0.15 mm
9	ar	<b>590731-09520</b>	Shim	s= 0.2 mm
9	ar	<b>590731-09530</b>	Shim	s= 0.3 mm
9	ar	<b>590731-09550</b>	Shim	s= 0.5 mm
10	2	<b>91744-01201</b>	T. Roller bearing	
11	2	<b>91720-22001</b>	Retainer ring	D220x3
12	2	<b>535-271-0611</b>	Ring gear hub	
13	2	<b>535-261-2110</b>	Ring gear	i=3.636, z58
14	2	<b>143-418-0510</b>	Lock plate	S=6 mm, punched
15	2	<b>599-290-8004</b>	Lock Nut	M90x2
16	2	<b>590319-08186</b>	Allen Screw	M8x18
17	2	<b>590319-08126</b>	Allen Screw	M8x12
18	2	<b>090-721-8500</b>	Protective cup	D60/85x10
19	2	<b>535-211-1310</b>	Sun gear	N55x2x26
20	2	<b>591711-05500</b>	Retainer ring	D55x2
21	10	<b>590169-01670</b>	Special screw	M16x1.5x70
22	2	<b>535-231-1310</b>	Planet carrier	
23	20	<b>590-353-1100</b>	Spacer plate	D33.5/55.5x1.47
24	480	<b>91385-50240</b>	Needle roller	D5x23.8
25	10	<b>590-354-3100</b>	Spacer ring	D33.5/42x7
26	10	<b>535-241-1310</b>	Planet gear	
27	10	<b>535-251-1410</b>	Planet gear shaft	
28	2	<b>591109-66052</b>	O-ring	D266x5.33
29	2	<b>541-471-0400</b>	Planetary gear housing	FR-14
30	2	<b>91201-22150</b>	Seal ring	D22/27x1.5 Cu
31	2	<b>90873-22109</b>	Oil plug	M22x1.5, Allen head
32	2	<b>91201-22150</b>	Seal ring	D22/27x1.5 Cu
33	2	<b>90871-22193</b>	Plug screw	M22x1.5, hex head
34	2	<b>541-404-0161</b>	Planetary gear	FR-14
35	1	<b>543-512-0000</b>	Axle Shaft	FRMP & FRFP, RH, W55x2x26, L=1245
35	1	<b>543-512-0000</b>	Axle Shaft	FRDP, LH, W55x2x26, L=1245
35	1	<b>543-512-0010</b>	Axle Shaft	FRMP & FRFP, LH, W55x2x26, L=1157
35	1	<b>543-512-0010</b>	Axle Shaft	FRDP, RH, W55x2x26, L=1157
36	2	<b>140-125-0100</b>	Thrust pin	D25



TDM2-VE1.DS4

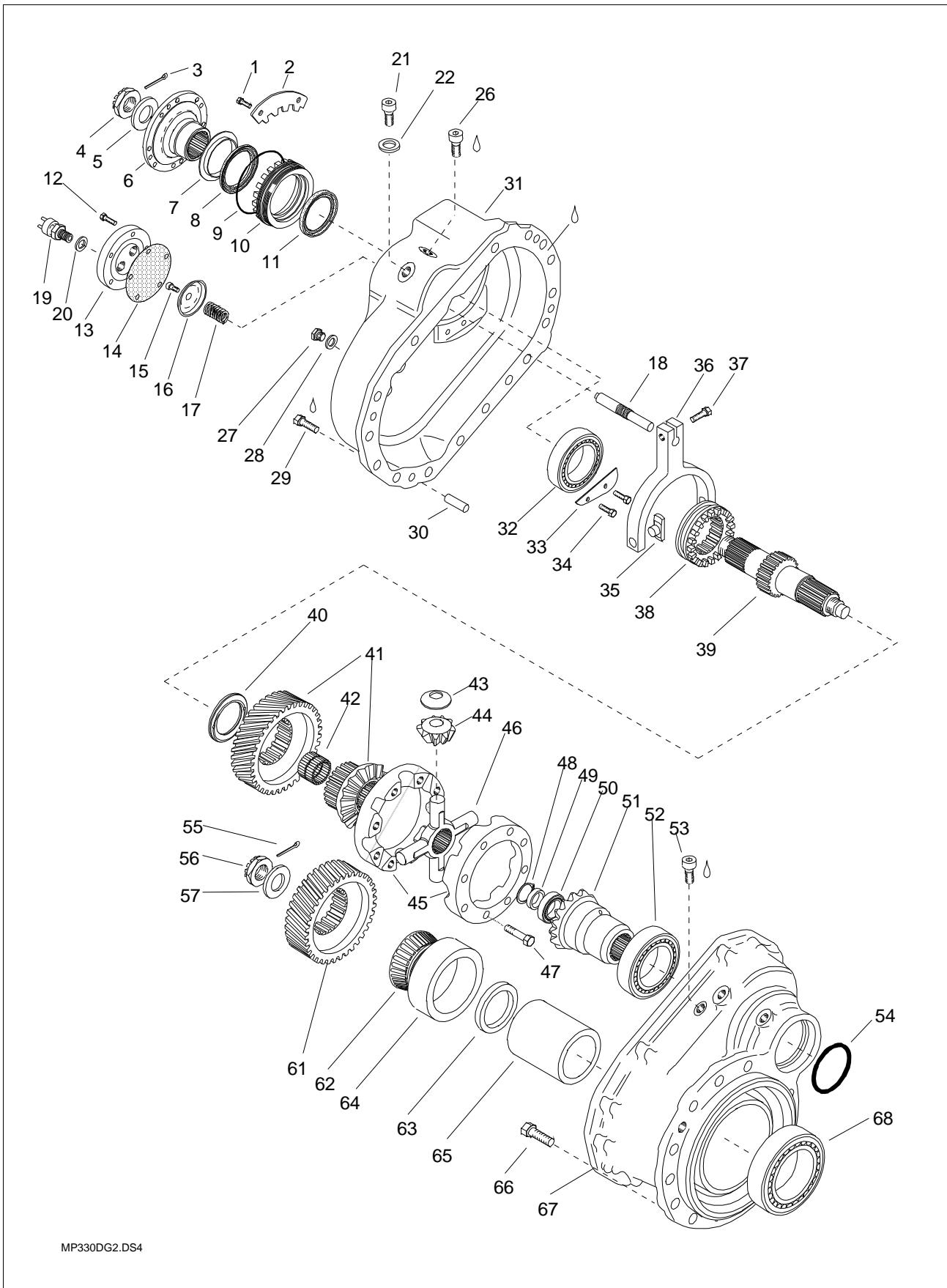
Item	Qty.	Order no.	Description	Note
1	1	<b>144-210-1911</b>	Differential Carrier	Inc. Bearing Case Halfs and Bolts
2	ar	<b>144-239-2000</b>	Shim	(1.0 mm)
2	ar	<b>144-239-2001</b>	Shim	(0.5 mm)
2	ar	<b>144-239-2002</b>	Shim	(0.2 mm)
2	ar	<b>144-239-2003</b>	Shim	(0.1 mm)
3	1	<b>591600-20823</b>	Name plate	
4	4	<b>90111-29054</b>	Rivet	D2.9x5
5	4	<b>590604-08141</b>	Pin	8x14
6	2	<b>143-214-2180</b>	Bearing Case Half	Not Serviced Separately
7	4	<b>90301-20377</b>	Hex Screw	M20x130
8	4	<b>90303-08103</b>	Hex Screw	M8x10
9	2	<b>143-227-0610</b>	Lock plate	
10	2	<b>143-226-0012</b>	Adjusting nut	D149
11	2	<b>090-121-4700</b>	Bearing outer race	
12	2	<b>090-110-9000</b>	Bearing inner race	
13	1	<b>543-240-6119</b>	Ring and pinion gear set	14/27, FR 7.01
13	1	<b>543-240-6129</b>	Ring and pinion gear set	16/28, FR 6.36
13	1	<b>543-240-6151</b>	Ring and pinion gear set	12/29, FR 8.79
13	1	<b>543-240-6181</b>	Ring and pinion gear set	10/29, FR 10.55
13	1	<b>543-240-6311</b>	Ring and pinion gear set	25/32, FR 4.28/4.65 (FR 3.78/4.11 w/3.214 hub)
14	12	<b>90321-16538</b>	Hex Screw	M16x1.5
15	1	<b>144-341-1700</b>	Sliding Gear	
16	1	<b>090-359-7000</b>	Thrust washer	D97/127x3
17	1	<b>143-310-3811</b>	Diff. case assy	
18	1	<b>543-351-4310</b>	Side gear	D55/Z26
19	4	<b>143-341-0700</b>	Pinion gear	
20	4	<b>143-345-0400</b>	Thrust washer	D29/65x1.5
21	1	<b>143-331-0603</b>	Spider	
22	1	<b>543-351-4210</b>	Side gear	D55/Z26
23	1	<b>090-357-5000</b>	Thrust washer	D75/111x3
24	12	<b>90556-16247</b>	Nut	M16x1.5
25	5	<b>90303-08203</b>	Hex Screw	M8x20
26	1	<b>572-161-1502</b>	Membrane cover	For Signal Lamp Switch
27	1	<b>172-351-1202</b>	Membrane	
28	1	<b>90319-08206</b>	Screw	M8x20
29	1	<b>172-361-0410</b>	Push plate	D70x12
30	1	<b>097-122-0100</b>	Return spring	D29.5x43
31	1	<b>172-212-1710</b>	Sliding Shaft	D16/20x125
32	1	<b>144-751-1210</b>	Control fork	
33	1	<b>90313-06208</b>	Allen Screw	M6x20
34	2	<b>133-348-0710</b>	Sliding shoe	
35	1	<b>90335-05108</b>	Stopping screw	M5x10
36	1	<b>91711-06500</b>	Retainer ring	D65
37	1	<b>144-348-0000</b>	Sliding ring	
38	1	<b>586-490-0381</b>	Signal Lamp Switch	M18x1.5, connection M27x1.5
38	1	<b>586-490-0481</b>	Signal Lamp Switch	M18x1.5, connection DIN72585 bayonet
39	1	<b>91201-18150</b>	Seal ring	D18/22x1.5 Cu



MP330DG2.DS4

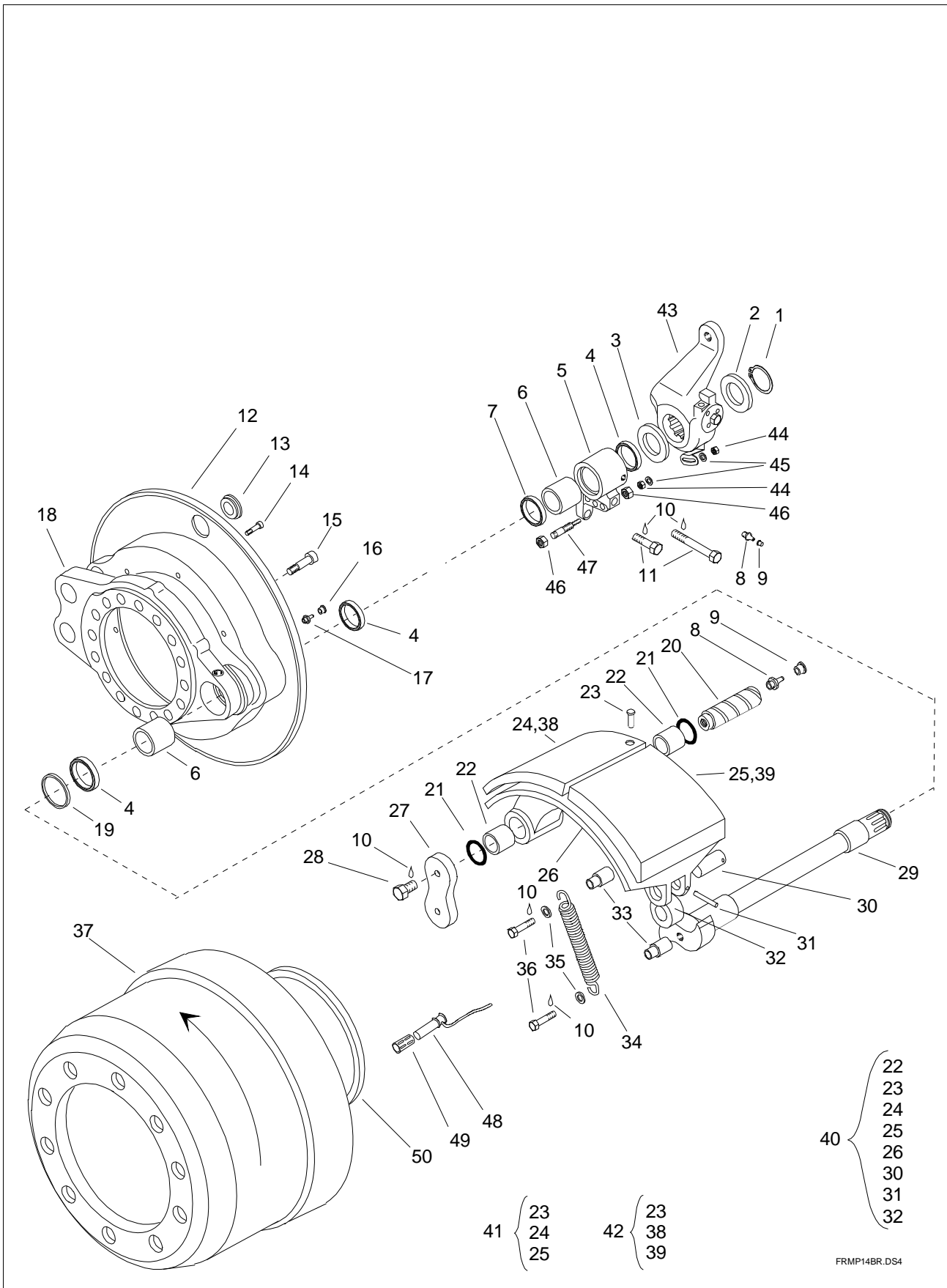


Item	Qty.	Order no.	Description	Note
1	2	90303-08203	Hex Screw	M8x20
2	1	143-227-0710	Lock plate	
3	1	90621-63633	Split pin	6.3x63
4	1	90546-42653	Nut	M42x1.5
5	1	90705-43069	washer	D43/80x6
6	1	538-918-1610	Flange	HS 1700/1800 L=74.5
6	1	538-918-1611	Flange	ISO 8667-T180 L=76
7		0		Not installed
8	1	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	1	90871-22193	Plug screw	M22x1.5, hex head
28	1	91201-22150	Seal ring	D22/27x1.5 Cu
29	16	90303-12308	Hex Screw	M12x30
30	2	90604-10201	Cotter Pin	D10x20
31	1	144-221-0600	Diff. Carrier Cover	
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	544-274-0910	Sliding Ring	
39	1	144-251-3300	Intermediate Shaft	



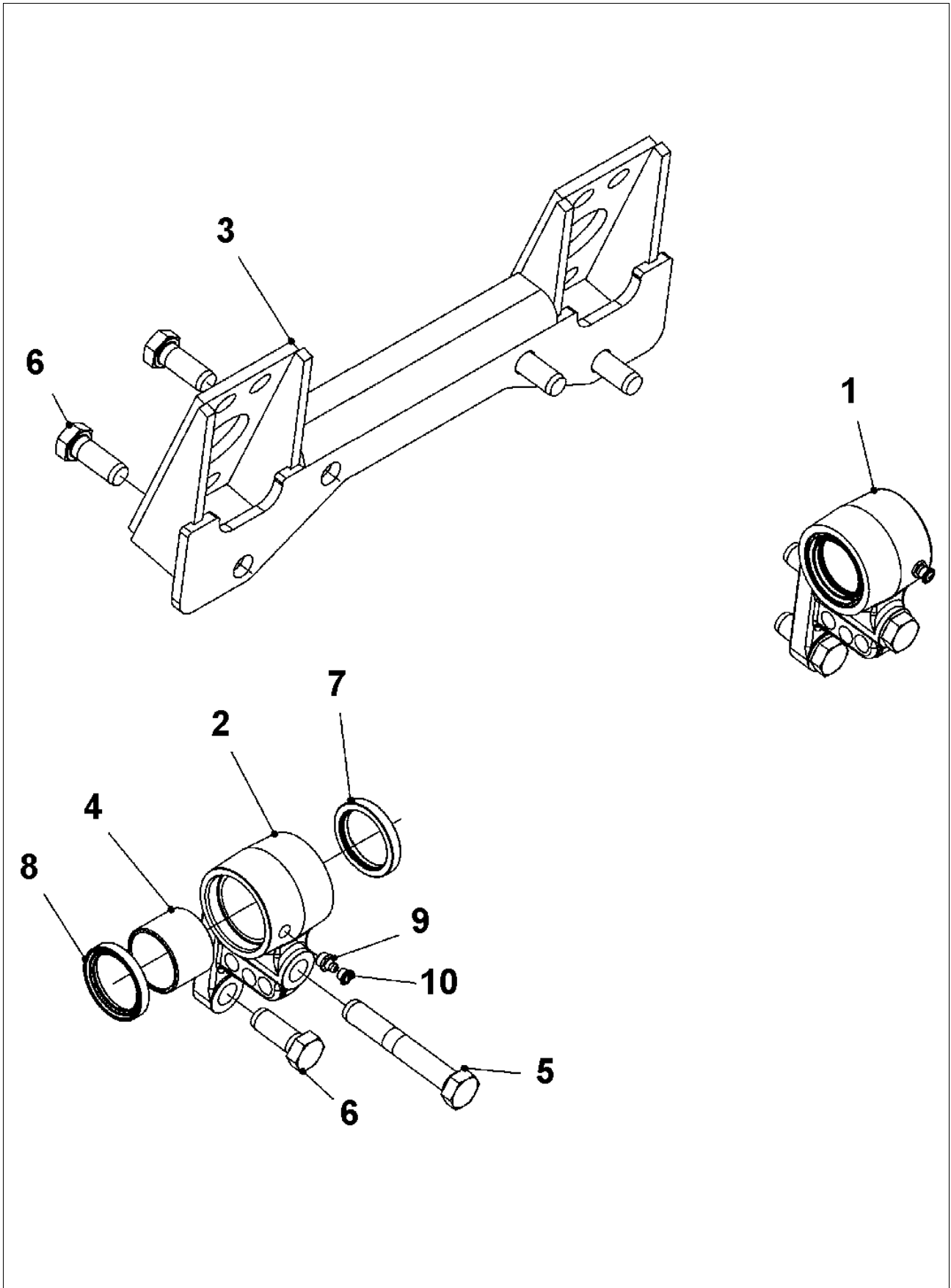
MP330DG2.DS4

Item	Qty.	Order no.	Description	Note
40	1	<b>144-282-0013</b>	Thrust washer	D64/99x6
41	1	<b>544-269-1610</b>	Gear assembly	z28, ratio 1:1
42	1	<b>91738-40621</b>	Needle bush	
43	4	<b>143-345-0400</b>	Thrust washer	D29/65x1.5
44	4	<b>143-341-0700</b>	Pinion gear	
45	1	<b>143-310-3611</b>	Diff. case assy	
45		<b>543-301-4211</b>	Differential case set	Includes items 43 - 47
46	1	<b>143-331-1900</b>	Spider	
47	8	<b>90301-12703</b>	Hex Screw	M12x70
48	1	<b>91711-05600</b>	Retainer ring	D56x2
49	ar	<b>90731-03510</b>	Shim	(0.1 mm)
49	ar	<b>90731-03520</b>	Shim	(0.2 mm)
49	ar	<b>90731-03550</b>	Shim	(0.5 mm)
49	ar	<b>90732-03510</b>	Shim	(1.0 mm)
50	1	<b>91744-00351</b>	T. Roller bearing	
51	1	<b>143-351-3700</b>	Side gear	
52	1	<b>91744-00951</b>	T. Roller bearing	
53	1	<b>90873-10053</b>	Plug screw	M10x1, Allen head
54	1	<b>591106-99532</b>	O-ring	D99.5x3
55	1	<b>90621-63633</b>	Split pin	6.3x63
56	1	<b>90546-42653</b>	Nut	M42x1.5
57	1	<b>90705-43069</b>	washer	D43/80x6
61	1	<b>544-261-3010</b>	Gear	z28, ratio 1:1
62	1	<b>591744-10754</b>	Bearing inner race	
63	ar	<b>590731-07510</b>	Shim	s=0.10 mm
63	ar	<b>590731-07530</b>	Shim	s=0.30 mm
63	ar	<b>590731-07550</b>	Shim	s=0.50 mm
64	1	<b>591744-21451</b>	Bearing outer race	
65	ar	<b>543-261-1300</b>	Spacer ring	L=89.00 mm
65	ar	<b>543-261-1301</b>	Spacer ring	L=89.02 mm
65	ar	<b>543-261-1302</b>	Spacer ring	L=89.05 mm
65	ar	<b>543-261-1303</b>	Spacer ring	L=89.08 mm
66	12	<b>90303-16407</b>	Hex Screw	M16x40, 10.9
67	1	<b>544-211-1900</b>	Diff. Carrier Housing	
68	1	<b>591744-00760</b>	T. Roller bearing	

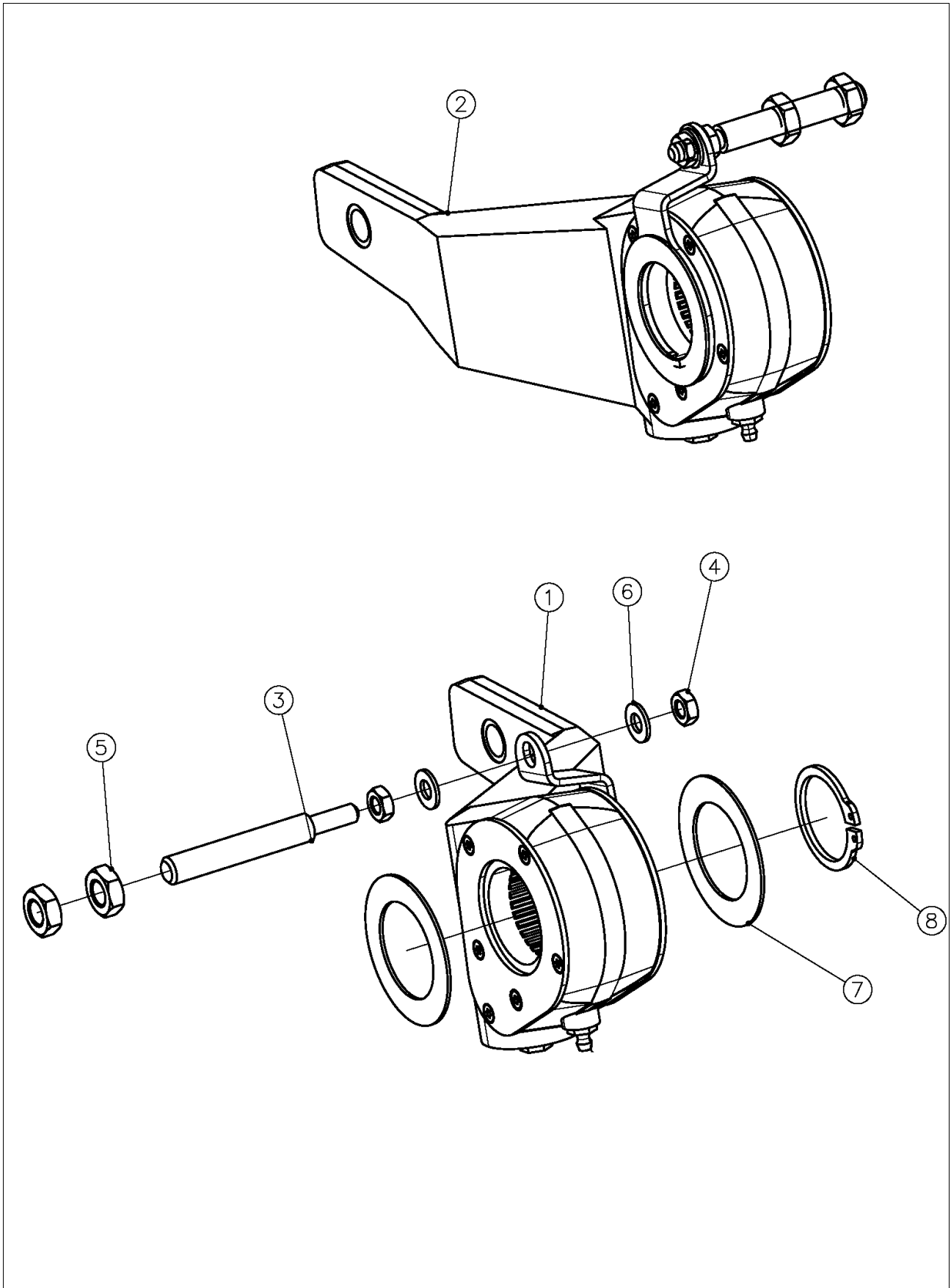


FRMP14BR.DS4

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

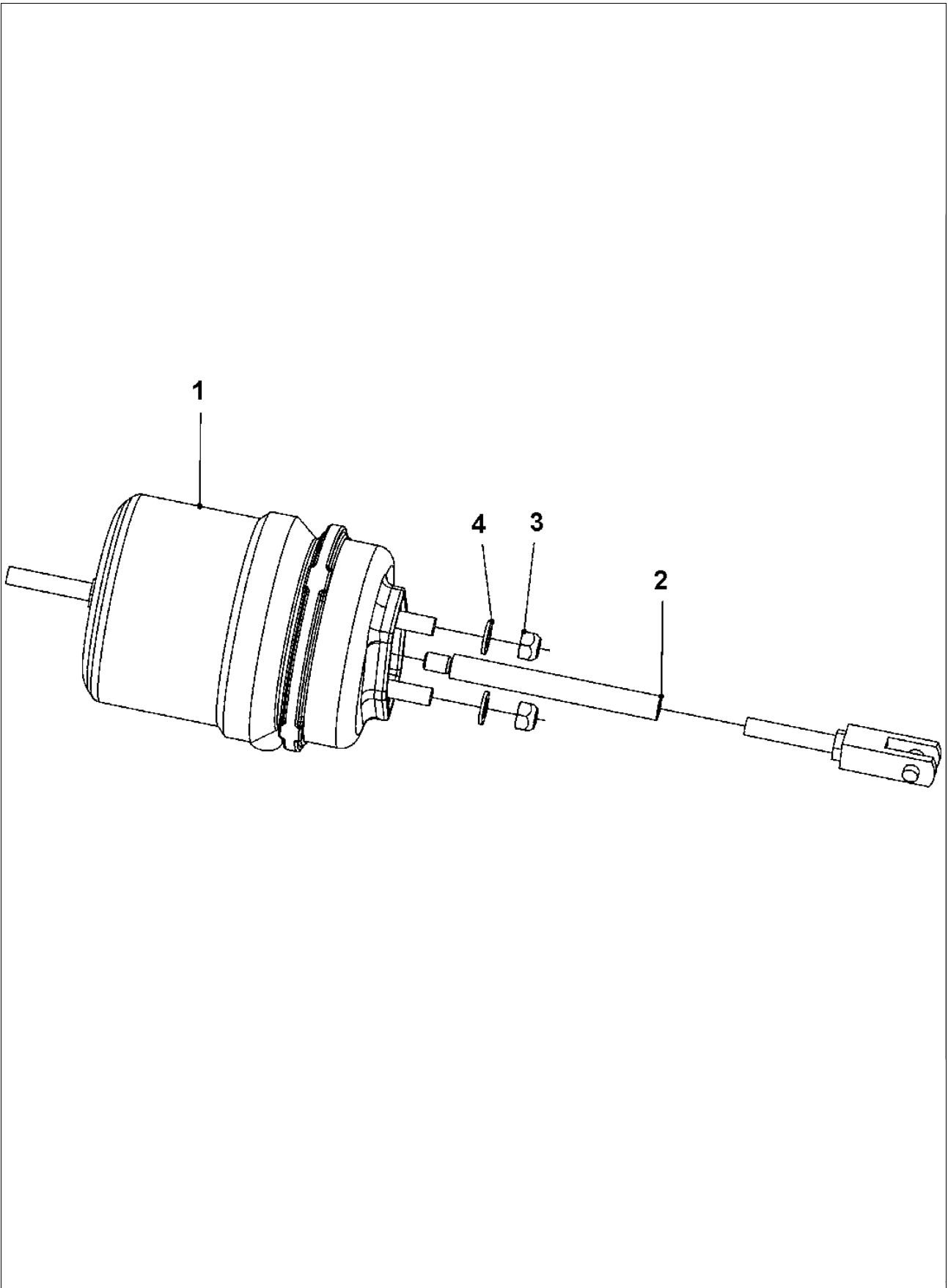


Item	Qty.	Order no.	Description	Note
1	1	<b>146-224-2310</b>	Bearing housing	RH
2	1	<b>146-224-2400</b>	Bearing housing	LH
3	1	<b>546-721-8010</b>	Chamber bracket	17 deg, 165mm, offset 60/75, c/c 302/340
4	2	<b>590-314-2062</b>	Sleeve	D42/48x36
5	2	<b>90301-16117</b>	Hex Screw	M16x100, 10.9
6	6	<b>90303-16407</b>	Hex Screw	M16x40, 10.9
7	2	<b>91122-04201</b>	Shaft seal	D42/55x8
8	2	<b>91122-04202</b>	Shaft seal	D42/55x7
8	2	<b>91720-05500</b>	Retainer ring	D55x1.5, since S/N 164224 (9/2006)
9	2	<b>91402-10003</b>	Grease nipple	M10x1, Straight
10	2	<b>91421-06060</b>	Shield hat	





Item	Qty.	Order no.	Description	Note
1	1	<b>546-530-2012</b>	Slack adjuster	RH, 165 mm, offset 75
2	1	<b>546-530-2022</b>	Slack adjuster	LH, 165 mm, offset 75
3	2	<b>90177-01203</b>	Stud bolt	M12/M8, L=94
4	4	<b>90502-08133</b>	Nut	M8
5	4	<b>90502-12193</b>	Nut	M12
6	4	<b>90705-08423</b>	washer	D8.4/17x1.6
7	4	<b>090-354-3030</b>	Spacer plate	D43/66x1.5
8	2	<b>91712-04000</b>	Retainer ring	D40x2.5



Item	Qty.	Order no.	Description	Note
1	2	<b>172-103-4161</b>	Spring Brake Chamber	30"/30", L=89, Knorr
2	2	<b>90169-11606</b>	Screw	L=190
3	4	<b>90556-16247</b>	Nut	M16x1.5
4	4	<b>90705-17033</b>	washer	D17/30x3