

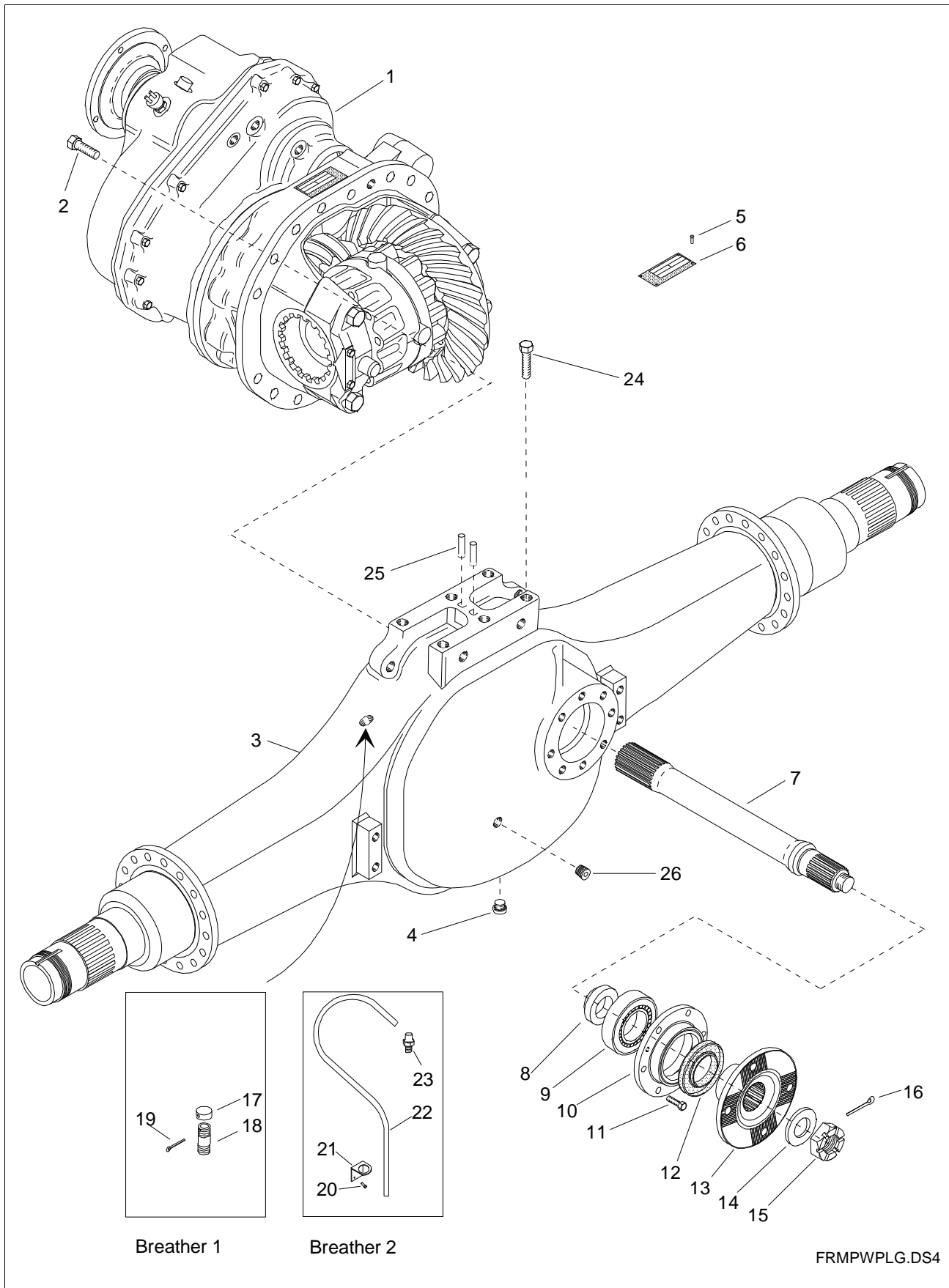
# **SISU AXLES**

## **SPARE PARTS BOOK**

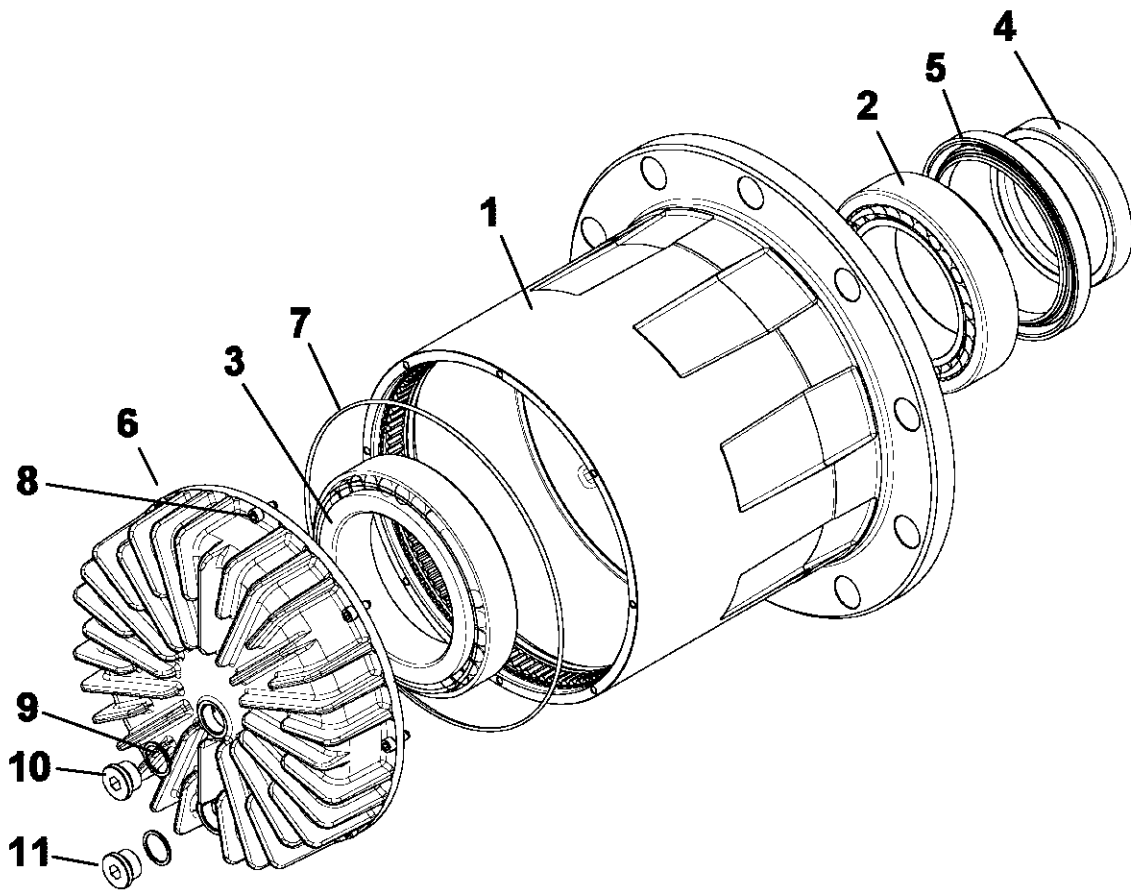
**Foremost Tandem Axle  
FRMP-20-S  
FRMP20S1055/001**

**Book No. 412 (11/2010)**

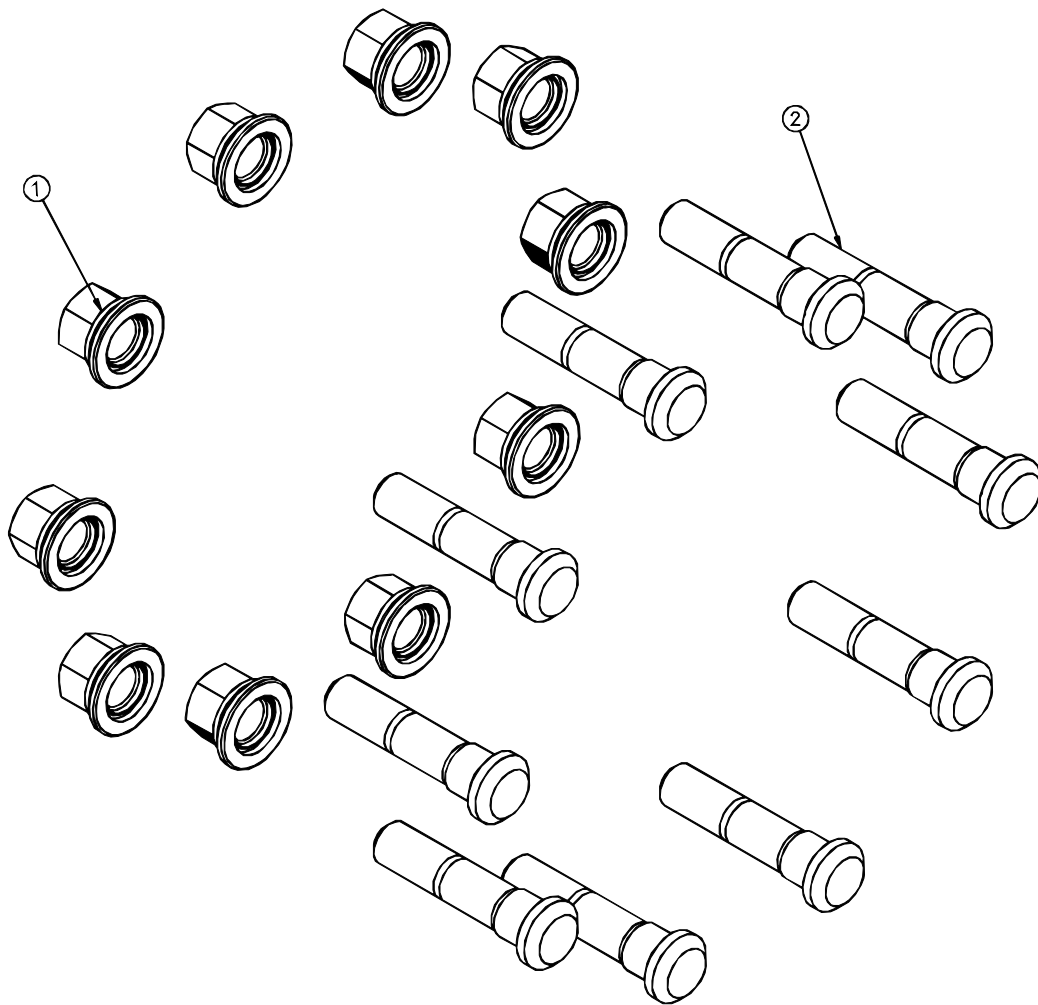
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Item	Qty.	Order no.	Description	Note
1	1	<b>544-304-6351</b>	Diff. Carrier Assembly	FR 8.79, HS1700/1800 flange
1	1	<b>544-304-6381</b>	Diff. Carrier Assembly	FR 10.55, HS1700/1800 flange
2	16	<b>90303-16407</b>	Hex Screw	M16x40, 10.9
3	1	<b>101-0110-311</b>	Axle housing	Track 2180, 20 ton, W/Bendix Brakes
3	1	<b>543-117-3600</b>	Axle housing	Track 2180, 20 ton
4	1	<b>90873-22109</b>	Oil plug	M22x1.5, Allen head
4	1	<b>91201-22150</b>	Seal ring	D22/27x1.5 Cu
5	4	<b>90111-29054</b>	Rivet	D2.9x5
6	1	<b>591600-20823</b>	Name plate	
7	1	<b>144-251-3010</b>	Output Shaft	Splines W55x26
8	1	<b>144-287-0310</b>	Spacer ring	D54.6/76.4x21
9	1	<b>91734-40651</b>	Deep groove ball bearing	
10	1	<b>544-321-0500</b>	Seal housing	
11	8	<b>90303-10303</b>	Hex Screw	M10x30
12	1	<b>591122-08507</b>	Shaft seal	Cassette seal D85/120x9/20
13	1	<b>538-917-2510</b>	Output flange	HS1700/1800, N55 (cassette seal)
14	1	<b>90705-43069</b>	washer	D43/80x6
15	1	<b>90546-42653</b>	Nut	M42x1.5
16	1	<b>90621-63633</b>	Split pin	6.3x63
17	1	<b>179-842-0000</b>	Breather Cover	
18	1	<b>179-841-1000</b>	Breather pipe	
19	1	<b>90621-32253</b>	Split pin	3.2x25
23	1	<b>91978-30901</b>	Binding screw	R3/8"/D10
24	6	<b>90303-18503</b>	Hex Screw	M18x50 - 8.8
25	2	<b>90602-14323</b>	Spring cotter	D14x32
26	1	<b>90875-16243</b>	Plug	1/2"NPT

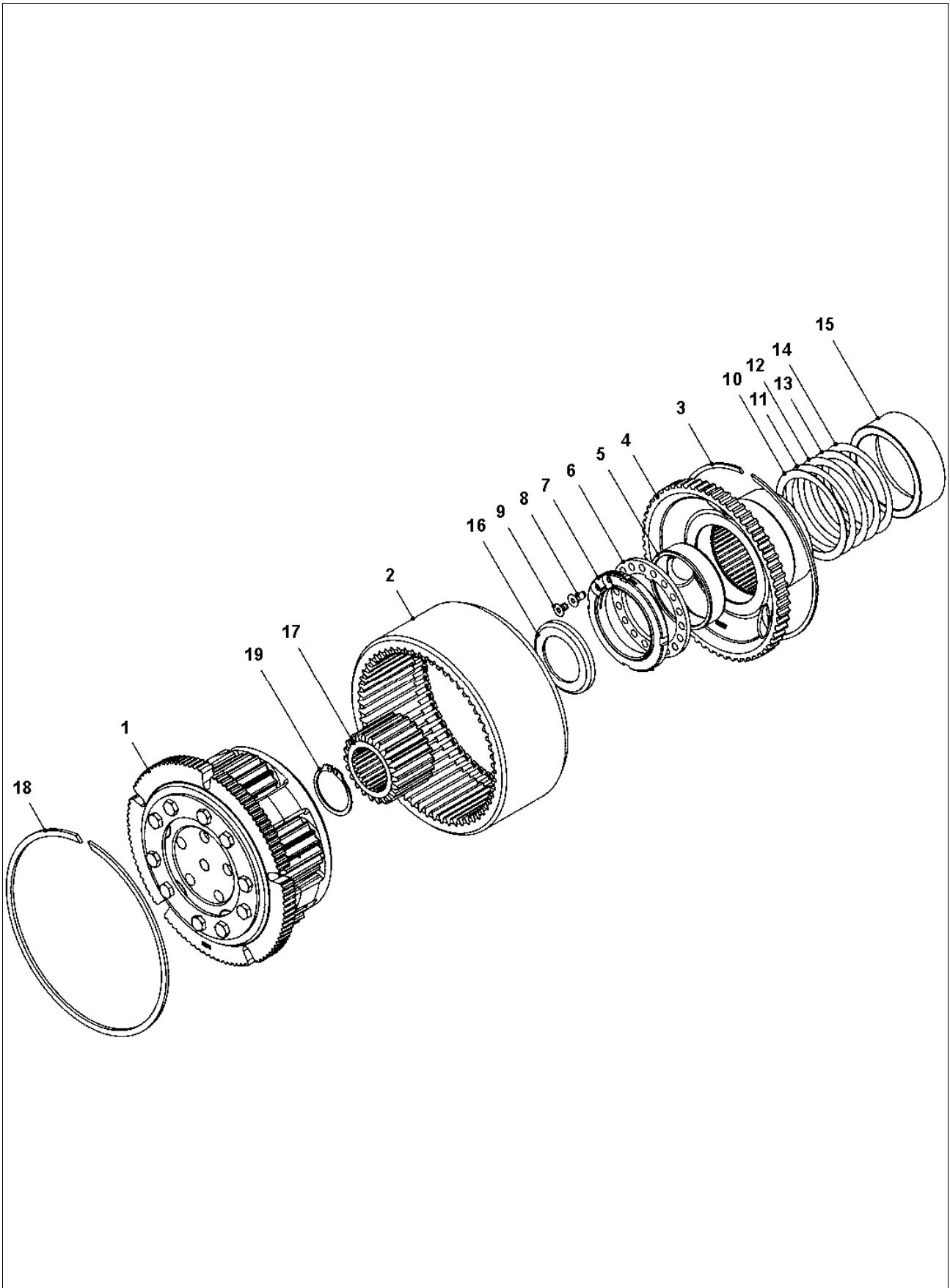


Item	Qty.	Order no.	Description	Note
1	2	<b>543-441-1100</b>	Wheel hub	20 ton
2	2	<b>591744-01202</b>	T. Roller bearing	33024, D120x180x48
3	2	<b>591744-01202</b>	T. Roller bearing	33024, D120x180x48
4	2	<b>543-415-0610</b>	Spacer ring	D126/135x24
5	2	<b>591122-15001</b>	Shaft seal	Ø150/180x16.5
6	1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



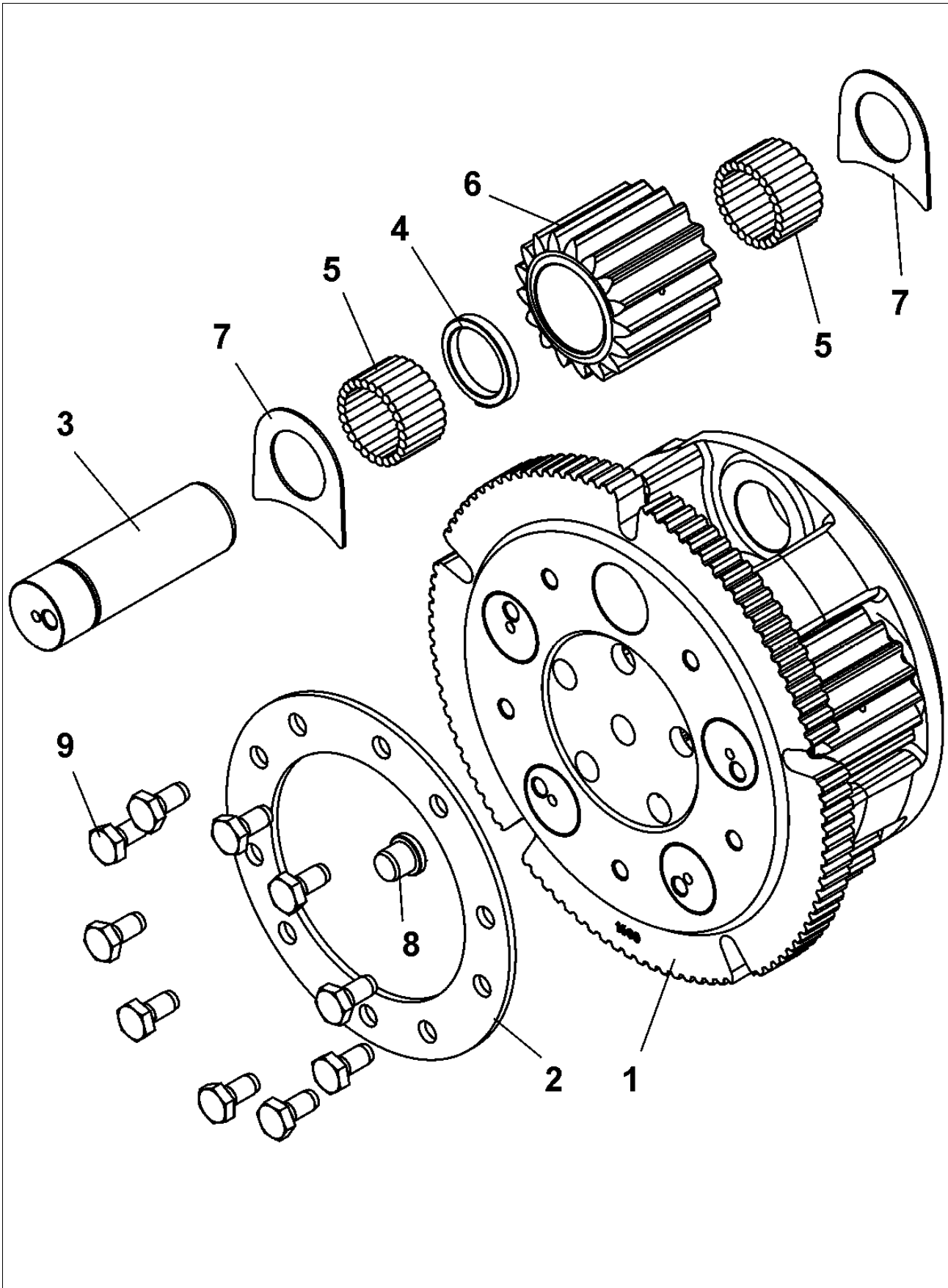
M402-036.DS4

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

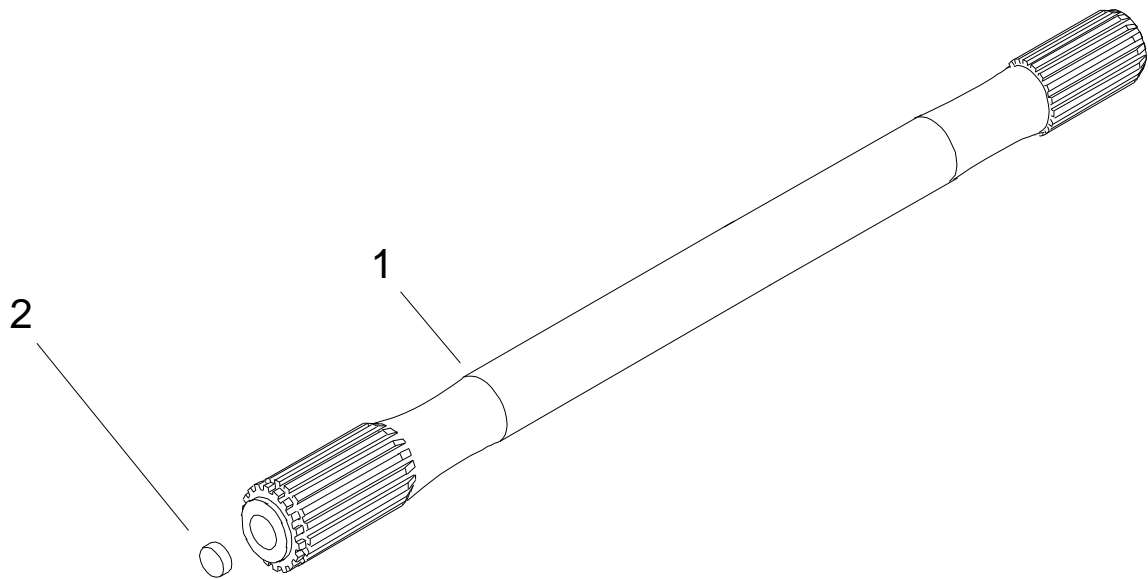




Item	Qty.	Order no.	Description	Note
1	2	<b>541-404-0211</b>	Planetary gear	FR 4.28/4.29/4.65/5.56/6.36/7.01/8.79/10.55
2	2	<b>535-261-2110</b>	Ring gear	i=3.636, z58
3	2	<b>91720-22001</b>	Retainer ring	D220x3
4	2	<b>535-271-0901</b>	Ring gear hub	i=3.636, z58
5	N/A	<b>543-416-0710</b>	Spacer ring	Obsolete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

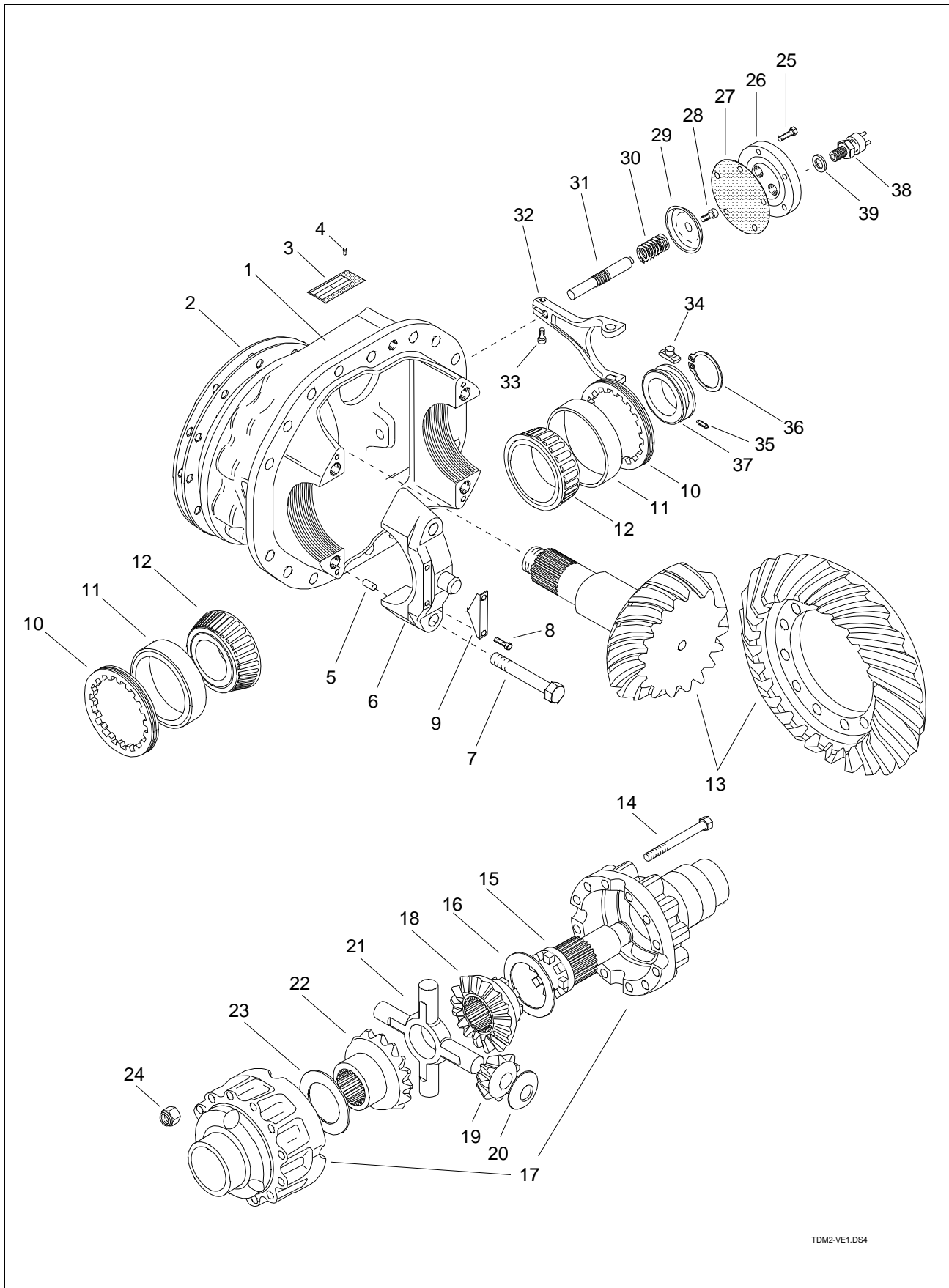


Item	Qty.	Order no.	Description	Note
1	1	<b>541-441-1600</b>	Planet carrier	i=3.636, c.d.=75
2	1	<b>535-259-0311</b>	Lock plate	D126/184x4
3	5	<b>535-251-1710</b>	Planet gear shaft	i=3.636, D34.75/35
4	5	<b>090-353-5000</b>	Spacer ring	D35/44x6.2
5	260	<b>090-005-0530</b>	Needle roller	D4.762x28.5
6	5	<b>535-241-1510</b>	Planet gear	Z17, D44.3/75
7	10	<b>590-353-1400</b>	Thrust washer	D34.9x1.5
8	1	<b>141-581-0001</b>	Counter Piece	D15/20x17
9	10	<b>90303-10203</b>	Hex Screw	M10 x 20 - DIN 933 - 8.8



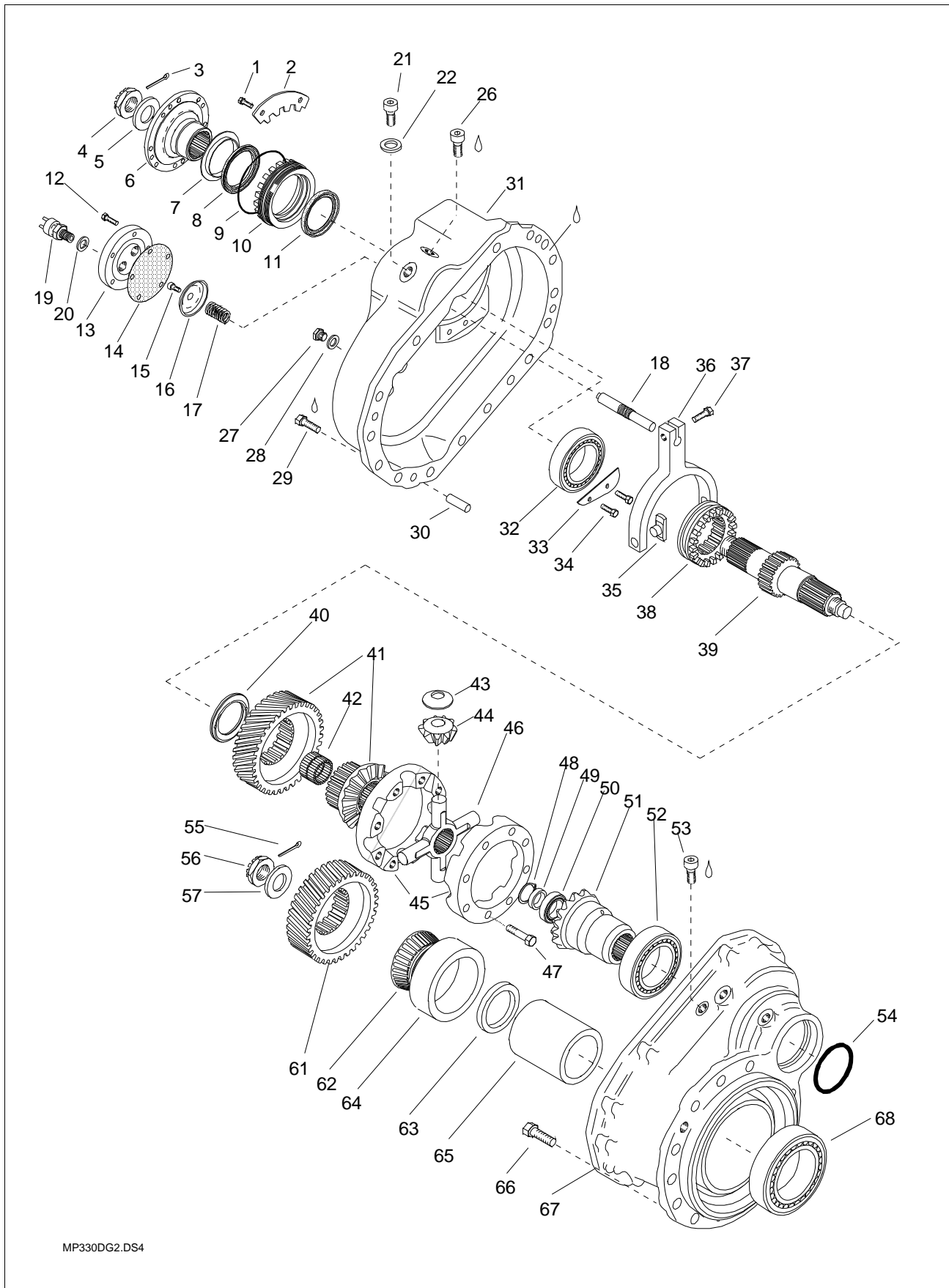
M306-096.DS4

Item	Qty.	Order no.	Description	Note
1	1	<b>543-512-0204</b>	Axle Shaft	LH, L=1280, W55x26
1	1	<b>543-512-0206</b>	Axle shafts	RH, L=1370, W55x26
2	2	<b>140-125-0100</b>	Thrust pin	D25



TDM2-VE1.DS4

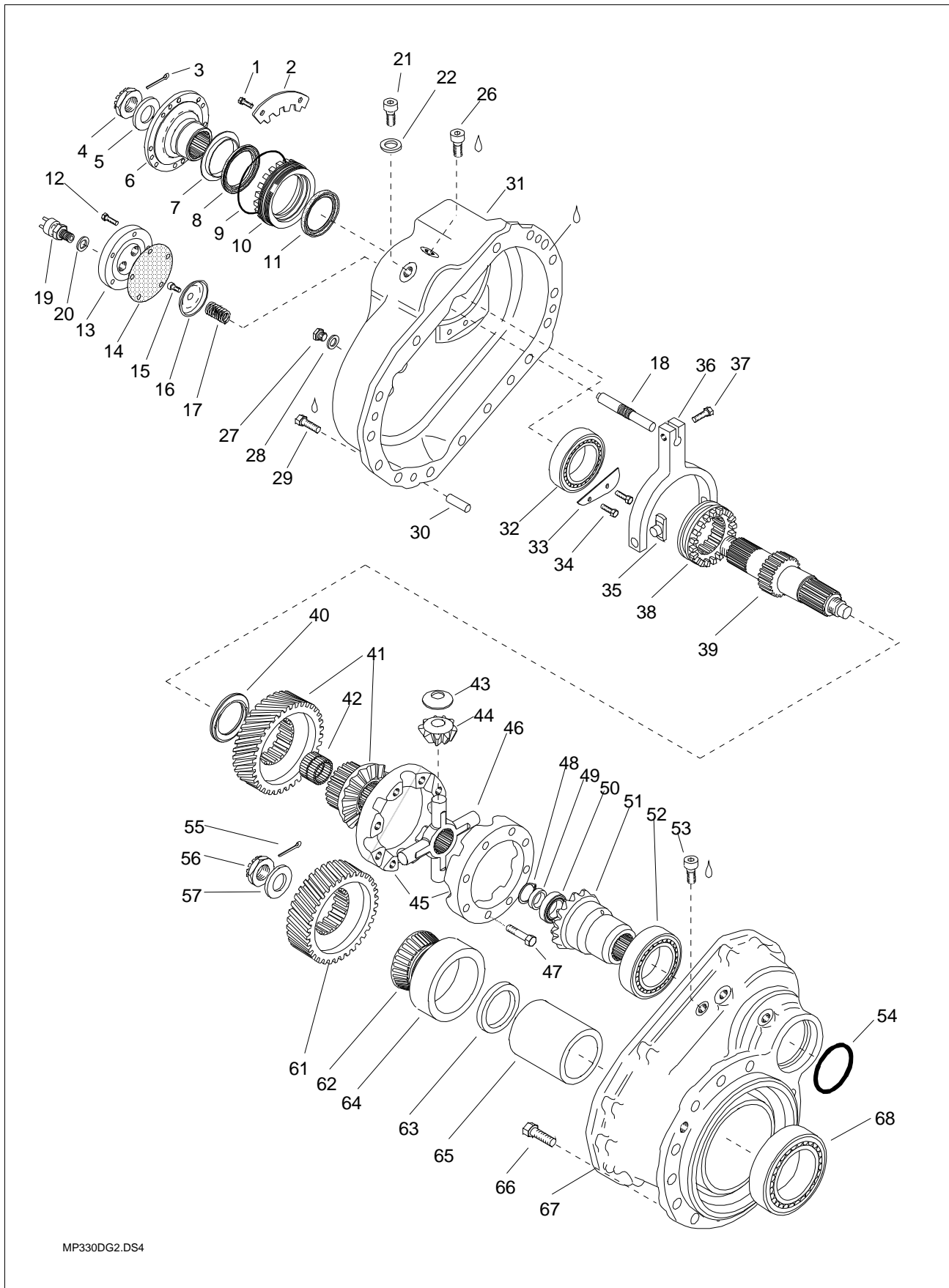
Item	Qty.	Order no.	Description	Note
1	1	144-210-1911	Differential Carrier	Inc. Bearing Case Halfs and Bolts
2	ar	144-239-2000	Shim	(1.0 mm)
2	ar	144-239-2001	Shim	(0.5 mm)
2	ar	144-239-2002	Shim	(0.2 mm)
2	ar	144-239-2003	Shim	(0.1 mm)
3	1	591600-20823	Name plate	
4	4	90111-29054	Rivet	D2.9x5
5	4	590604-08141	Pin	8x14
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	543-240-6119	Ring and pinion gear set	14/27, FR 7.01 (FR 6.20 w/3.214 hub reduction)
13	1	543-240-6121	Ring and pinion gear set	17/26, FR 5.56 (FR 4.92 w/3.214 hub reduction)
13	1	543-240-6129	Ring and pinion gear set	16/28, FR 6.36 (FR 5.63 w/3.214 hub reduction)
13	1	543-240-6131	Ring and pinion gear set	9/31, FR= 12.53 (FR 11.07 w/3.214 hub reduction)
13	1	543-240-6151	Ring and pinion gear set	12/29, FR 8.79 (FR 7.77 w/3.214 hub reduction)
13	1	543-240-6181	Ring and pinion gear set	10/29, FR 10.55 (FR 9.32 w/3.214 hub reduction)
13	1	543-240-6311	Ring and pinion gear set	25/32, FR 4.28/4.65 (FR 3.78/4.11 w/3.214 hub)
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	572-161-1501	Membrane cover	W/O Signal Lamp Switch Hole
26	1	572-161-1502	Membrane cover	W/Signal Lamp Switch Hole
27	1	172-351-1202	Membrane	
28	1	90319-08206	Screw	M8x20
29	1	172-361-0410	Push plate	
30	1	097-122-0100	Return spring	
31	1	172-212-1710	Sliding Shaft	
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
39	1	91201-18150	Seal ring	D18/22x1.5 Cu



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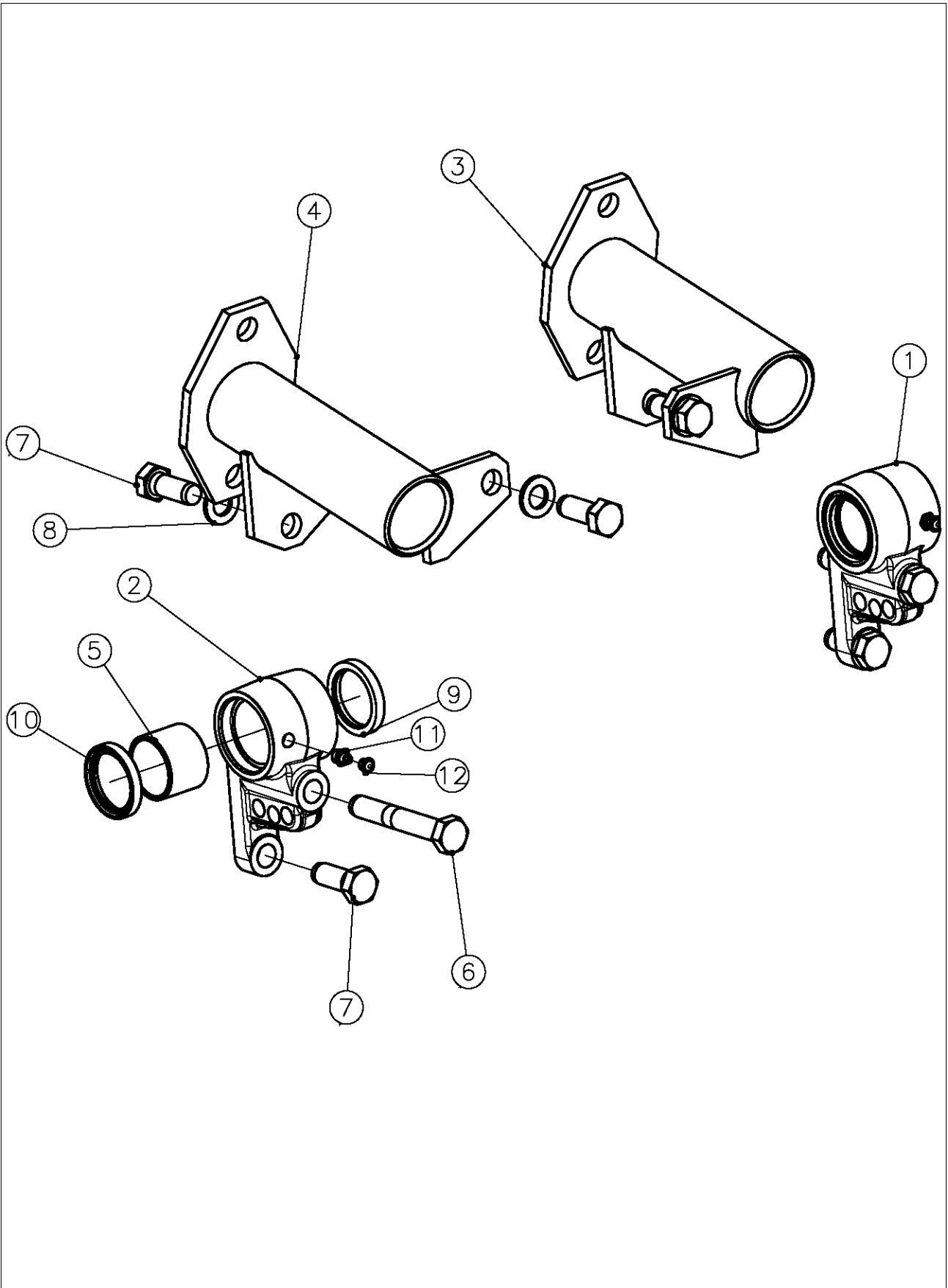


Item	Qty.	Order no.	Description	Note
1	2	90303-08203	Hex Screw	M8x20
2	1	143-227-0710	Lock plate	
3	1	90621-63633	Split pin	6.3x63
4	1	90546-42653	Nut	M42x1.5
5	1	90705-43069	washer	D43/80x6
6	1	538-918-1610	Flange	HS 1700/1800
6	1	538-967-0600	End Yoke	Splined Yoke 1710
7		0		Not installed
8	1	591122-08507	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	
17	1	097-122-0100	Return spring	
18	1	172-212-1710	Sliding Shaft	
19	1	586-490-0381	Signal Lamp Switch	M18x1.5
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>544-269-1600</b>	Gear assembly	FR 4.28 (z37, ratio 1:0.919)
41	1	<b>544-269-1610</b>	Gear assembly	FR 4.65 and over (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	
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>544-261-3000</b>	Gear	FR 4.28 (z34, ratio 1:0.919)
61	1	<b>544-261-3010</b>	Gear	FR 4.65 and over (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	



Item	Qty.	Order no.	Description	Note
1	1	<b>206-0610-301</b>	Bearing housing	
1	1	<b>210-0110-301</b>	Spacer plate	Not shown in picture
1	2	<b>90303-16507</b>	Hex Screw	M16x50, Not shown in picture
2	1	<b>206-0610-302</b>	Bearing housing	
2	1	<b>210-0110-302</b>	Spacer plate	Not shown in picture
2	2	<b>90303-16507</b>	Hex Screw	M16x50, Not shown in picture
3	1	<b>546-721-8200</b>	Chamber bracket	RH, 13 deg. for 180 mm slack adjuster
4	1	<b>546-721-8210</b>	Chamber bracket	LH, 13 deg. for 180 mm slack adjuster
5	2	<b>606-0710-307</b>	Sleeve	D44.5/50x38 mm
6	2	<b>90301-16117</b>	Hex Screw	M16x100, 10.9
7	6	<b>90303-16407</b>	Hex Screw	M16x40, 10.9
8	4	<b>90705-17033</b>	washer	
9	2	<b>591122-04401</b>	Shaft seal	D44.45/57.15x7.9 mm
10	2	<b>591122-04401</b>	Shaft seal	D44.45/57.15x7.9 mm
10	2	<b>591720-05700</b>	Retainer ring	SB57, D57/59.3x1.5 mm
11	2	<b>91402-10003</b>	Grease nipple	M10x1, Straight
12	2	<b>91421-06060</b>	Shield hat	