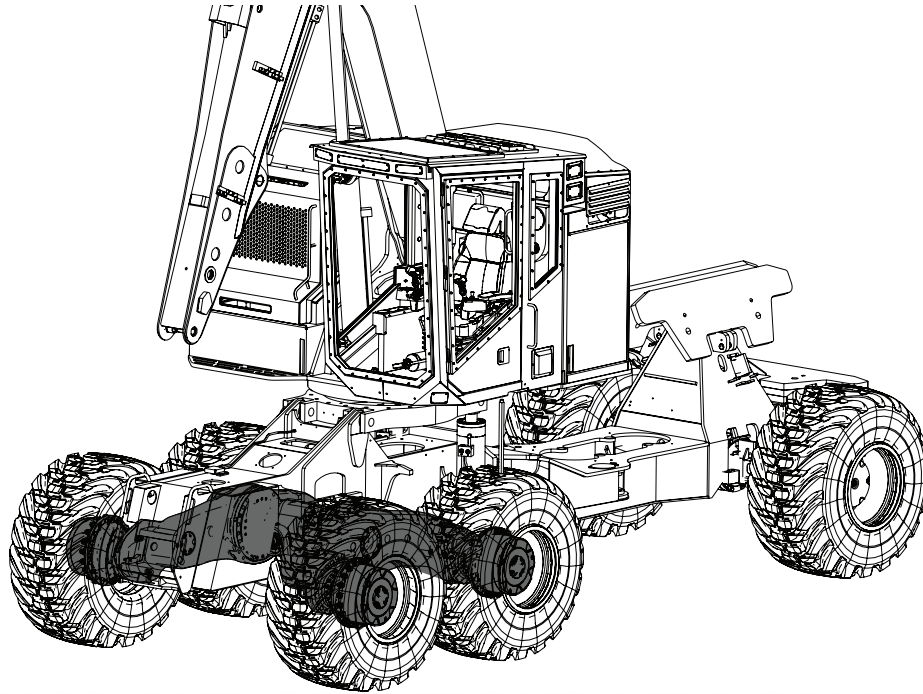


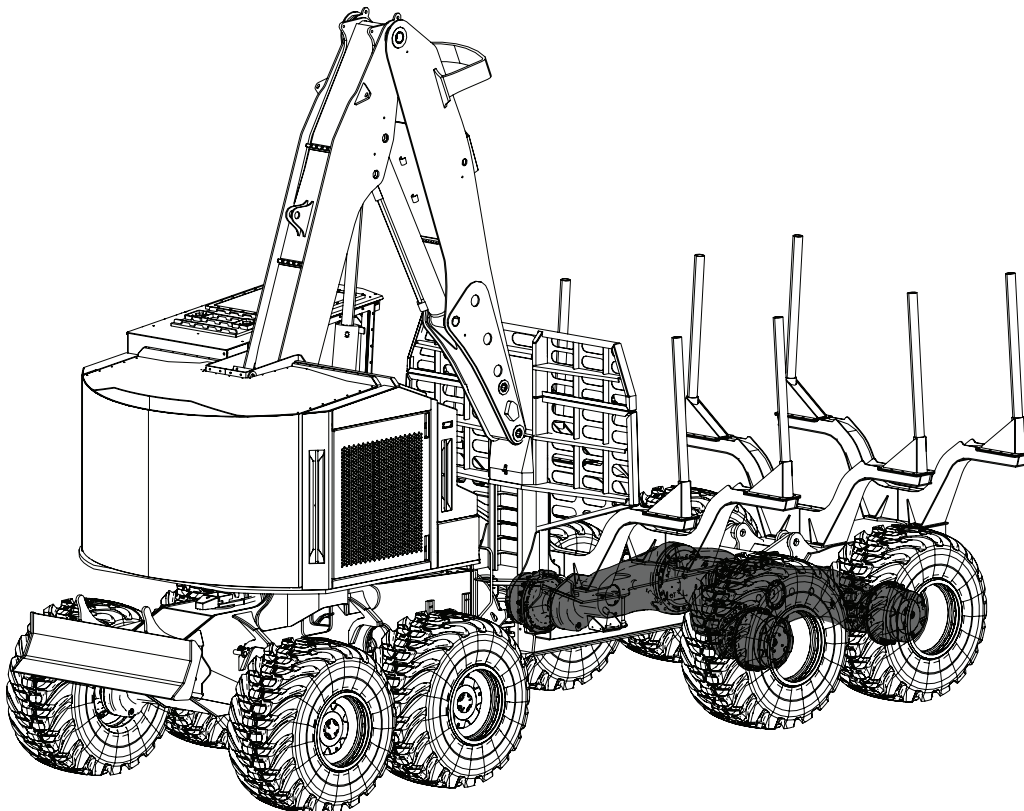
AXLES, GEARBOXES, AND WHEELS

FRONT AND REAR AXLE ASSEMBLY AND INSTALLATION

SECTION AX-1



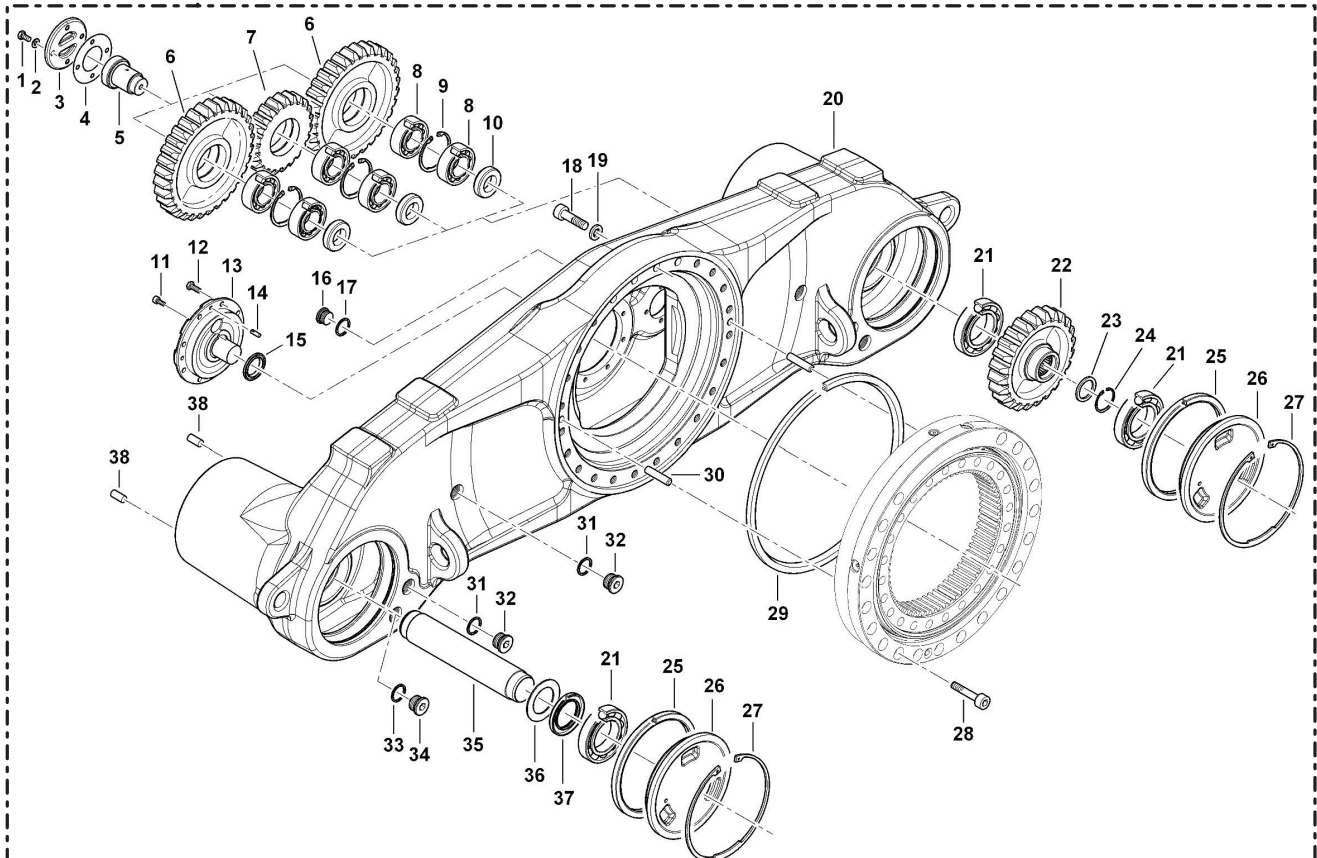
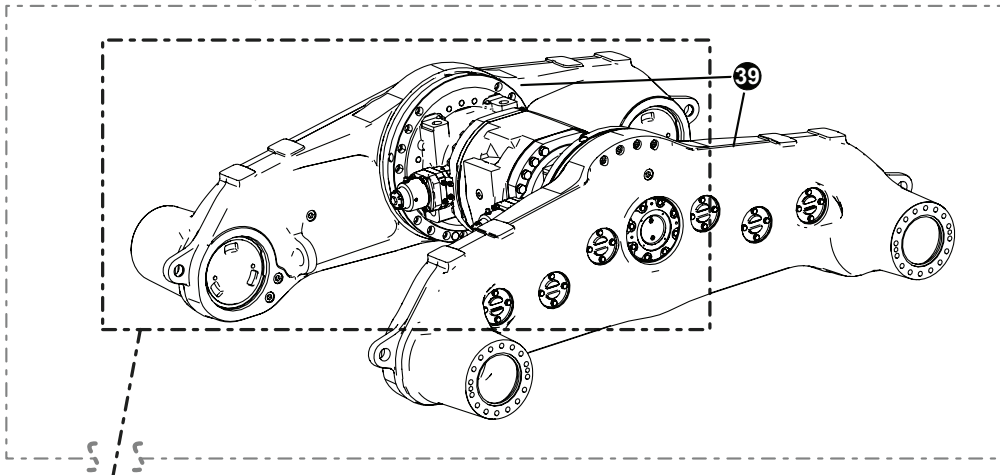
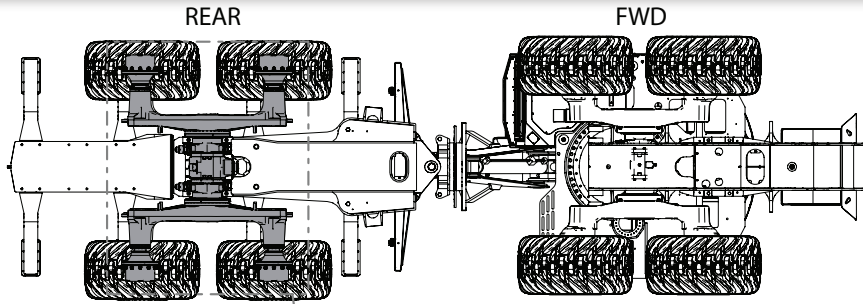
TIM 17 (630 AND 830) FRONT AXLE GEARBOXES



TIM 08 (840) REAR AXLE GEARBOXES

AXLES, GEARBOXES, AND WHEELS

REAR TANDEM AXLE ASSEMBLY AND INSTALLATION



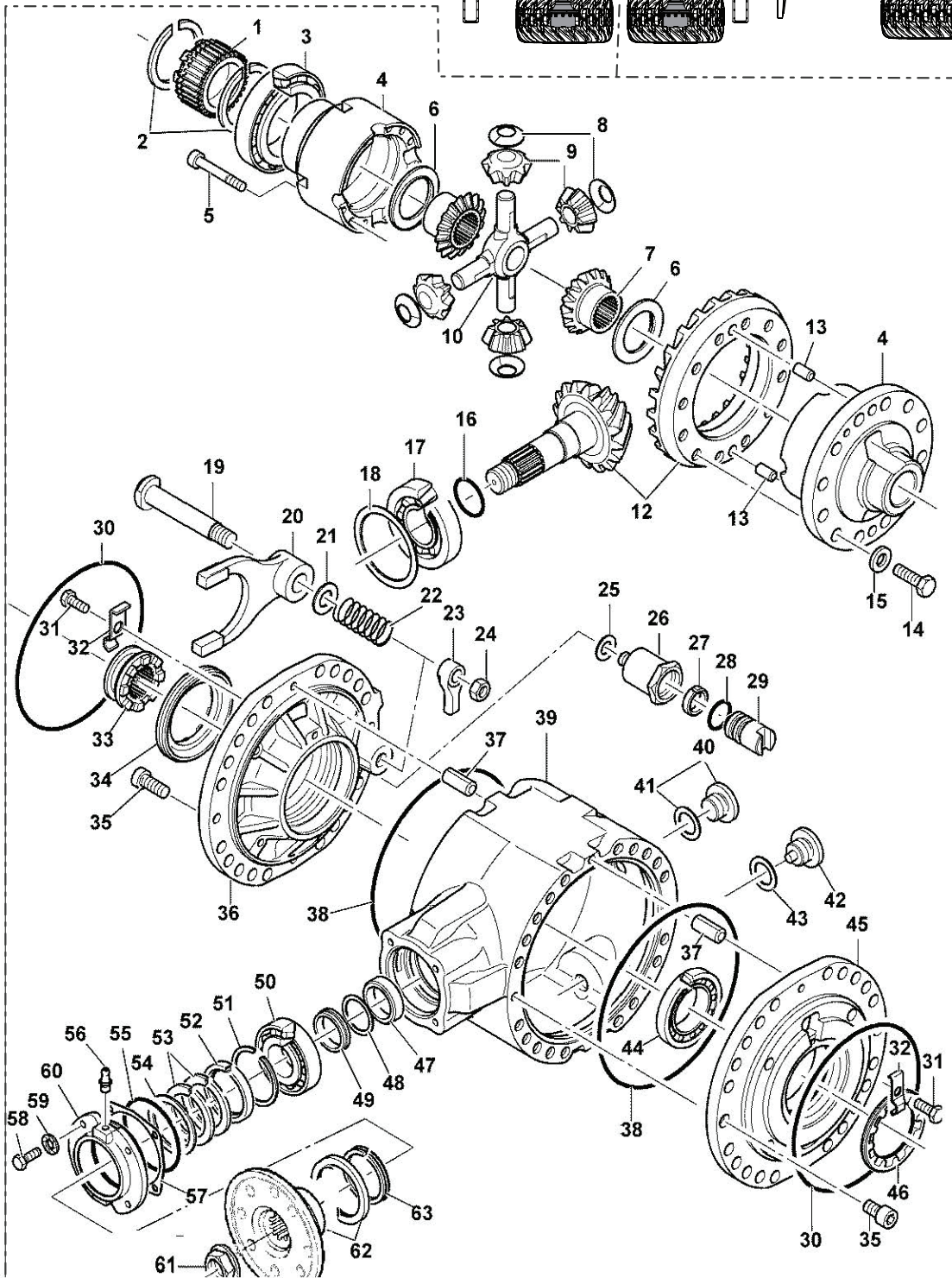
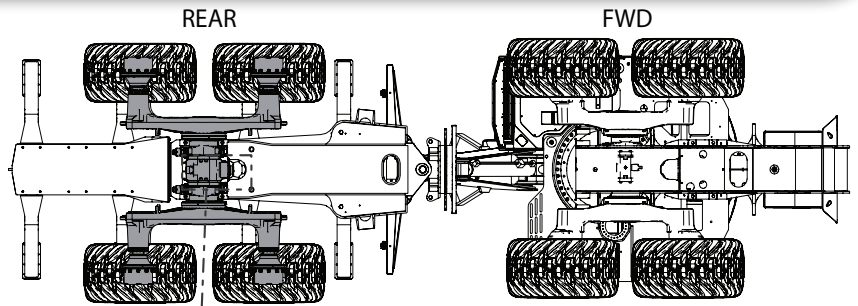
AXLES, GEARBOXES, AND WHEELS

REAR TANDEM AXLE ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
39	23492	1	AXLE, TANDEM - TIM 08 (840)	
39	55139	1	AXLE, TANDEM - TIM 17 (630 AND 830)	
	2405.178		Bogie housing Complete (two per 23492 axle assembly)	
1	1010.233	24	Hexagon bolt	
2	7316.048	24	Washer	
3	7302.011	6	Cover	
4	7319.161	6	Gasket	
5	7321.131	6	Pin	
6	9804.356	4	Spur gear	
7	9804.313	2	Spur gear	
8	1130.057	12	Cylindrical roller bearing	
9	1220.702	6	Seeger circlip ring	
10	7311.089	6	Spacer bushing	
11	1020.113	2	Allen screw	
12	1010.234	8	Hexagon bolt	
13	7321.120	1	Bearing pin	
14	1200.309	1	Grooved dowel pin	
15	1180.841	1	Shaft seal	
16	1040.103	1	Screw plug	
17	1180.507	1	Seal ring	
18	1020.618	4	Allen screw	
19	7316.044	4	Washer	
20	7277.126	1	Bogie housing	
21	1120.107	4	Deep groove ball bearing	
22	9804.352	2	Spur gear	
23	1210.110	2	Seeger support washer	
24	1220.714	2	Seeger circlip ring	
25	7308.051	2	Seal ring	
26	7302.082	2	Cover	
27	1220.837	2	Seeger circlip ring	
28	1020.618	20	Allen screw	
29	7308.040	1	Seal ring	
30	1200.206	2	Dowel pin	
31	1180.507	4	Seal ring	
32	1040.103	4	Screw plug	
33	1180.507	2	Seal ring	
34	7323.013	2	Screw plug	
35	7343.030	2	Tube	
36	7315.106	2	Washer	
37	1160.275	2	Oil seal	
38	1200.286	4	Dowel pin	

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



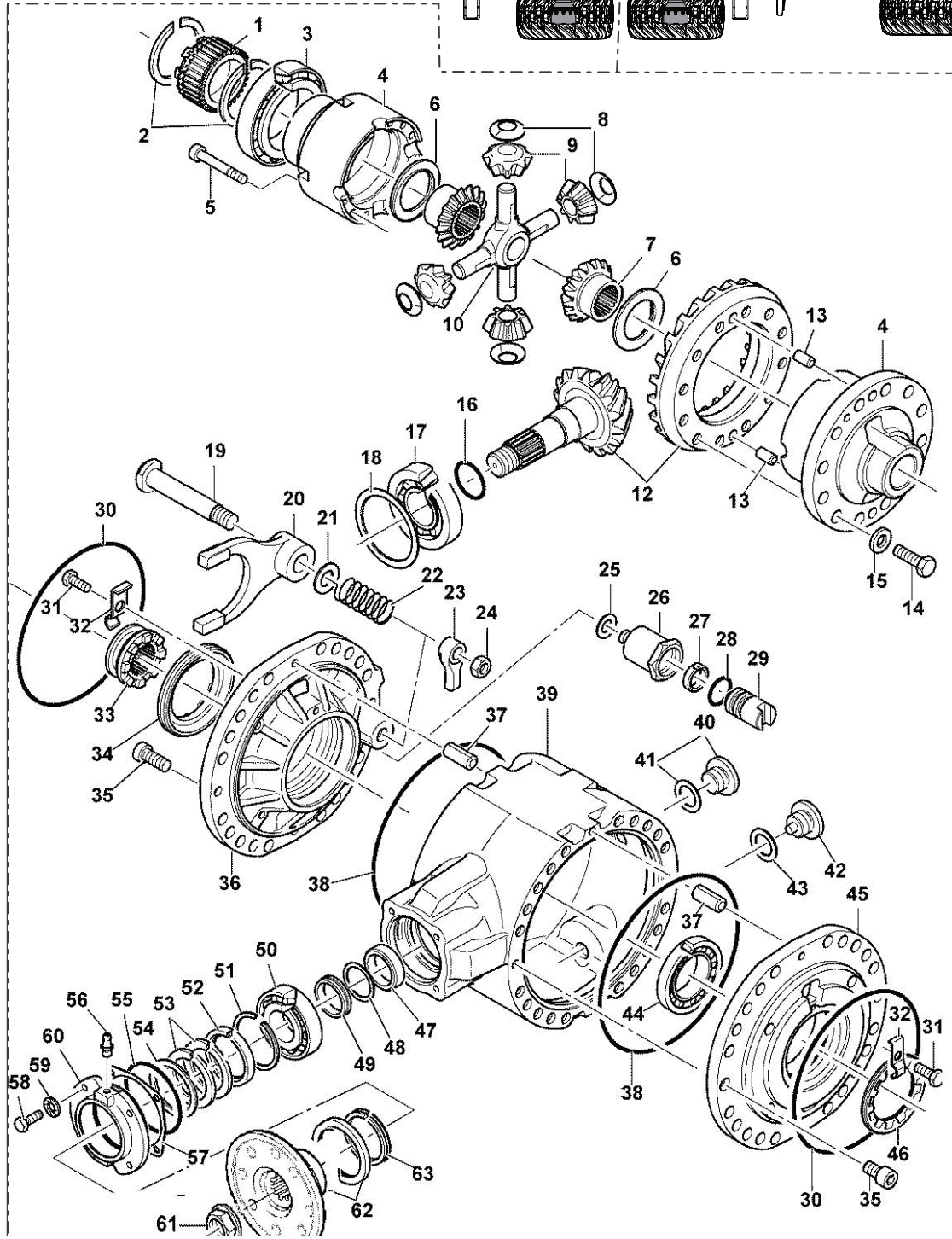
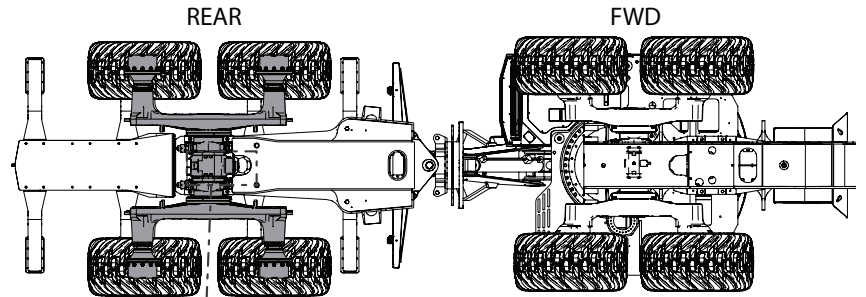
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
	2401.324	1	Differential complete	
---	2219.131	1	Diff.-cage cpl-Pos. 1/2/4/5/6/7/8/9/10	
1	9813.103	1	Coupling sleeve	
2	1220.311	2	Snap ring	
3	1110.175	1	Tapered roller bearing	
4	2102.146	1	Differential cage	
5	1020.335	12	Allen screw	
6	7316.067	2	□ Adjusting kit	
	7316.101	n/a	Thrust washer D95x1.50	
	7316.102	n/a	Thrust washer D95x1.70	
	7316.103	n/a	Thrust washer D95x2.00	
	7316.104	n/a	Thrust washer D95x2.20	
7	7513.046	2	Differential gear	
8	7518.022	4	Thrust washer	
9	7514.038	4	Compensating gear	
10	7515.028	1	Cross bolt	
11	---			
12	2101.315	1	Crown wheel/pinion	
13	1200.228	4	Dowel pin	
14	1510.558	16	Hexagon bolt	
15	7316.045	16	Washer	
16	1170.013	1	O-Ring	
17	1110.114	1	Tapered roller bearing	
18	7317.026	1	□ Adjusting kit	
	7317.251	n/a	Adjusting washer D120xD145.5x2.25	
	7317.514	n/a	Adjusting washer D120xD145.5x2.30	
	7317.513	n/a	Adjusting washer D120xD145.5x2.35	
	7317.512	n/a	Adjusting washer D120xD145.5x2.40	
	7317.511	n/a	Adjusting washer D120xD145.5x2.45	
	7317.120	n/a	Adjusting washer D120xD145.5x2.50	
	7317.510	n/a	Adjusting washer D120xD145.5x2.55	
	7317.509	n/a	Adjusting washer D120xD145.5x2.60	
	7317.508	n/a	Adjusting washer D120xD145.5x2.65	
	7317.507	n/a	Adjusting washer D120xD145.5x2.70	
	7317.119	n/a	Adjusting washer D120xD145.5x2.75	
	7317.506	n/a	Adjusting washer D120xD145.5x2.80	
	7317.505	n/a	Adjusting washer D120xD145.5x2.85	
	7317.504	n/a	Adjusting washer D120xD145.5x2.90	
	7317.503	n/a	Adjusting washer D120xD145.5x2.95	
	7317.118	n/a	Adjusting washer D120xD145.5x3.00	
19	9816.132	1	Shifting rod	
20	9809.066	1	Shifting fork	
21	7317.023	1	□ Adjusting kit	
	7317.111	n/a	Adjusting washer D20.4xD34.6x1.5	
	7317.112	n/a	Adjusting washer D20.4xD34.6x2.0	
	7317.113	n/a	Adjusting washer D20.4xD34.6x2.5	
	7317.114	n/a	Adjusting washer D20.4xD34.6x3.0	
22	7331.016	1	Compression spring	
23	9809.116	1	Shifting lever	
24	1060.003	1	Hexagon nut	

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



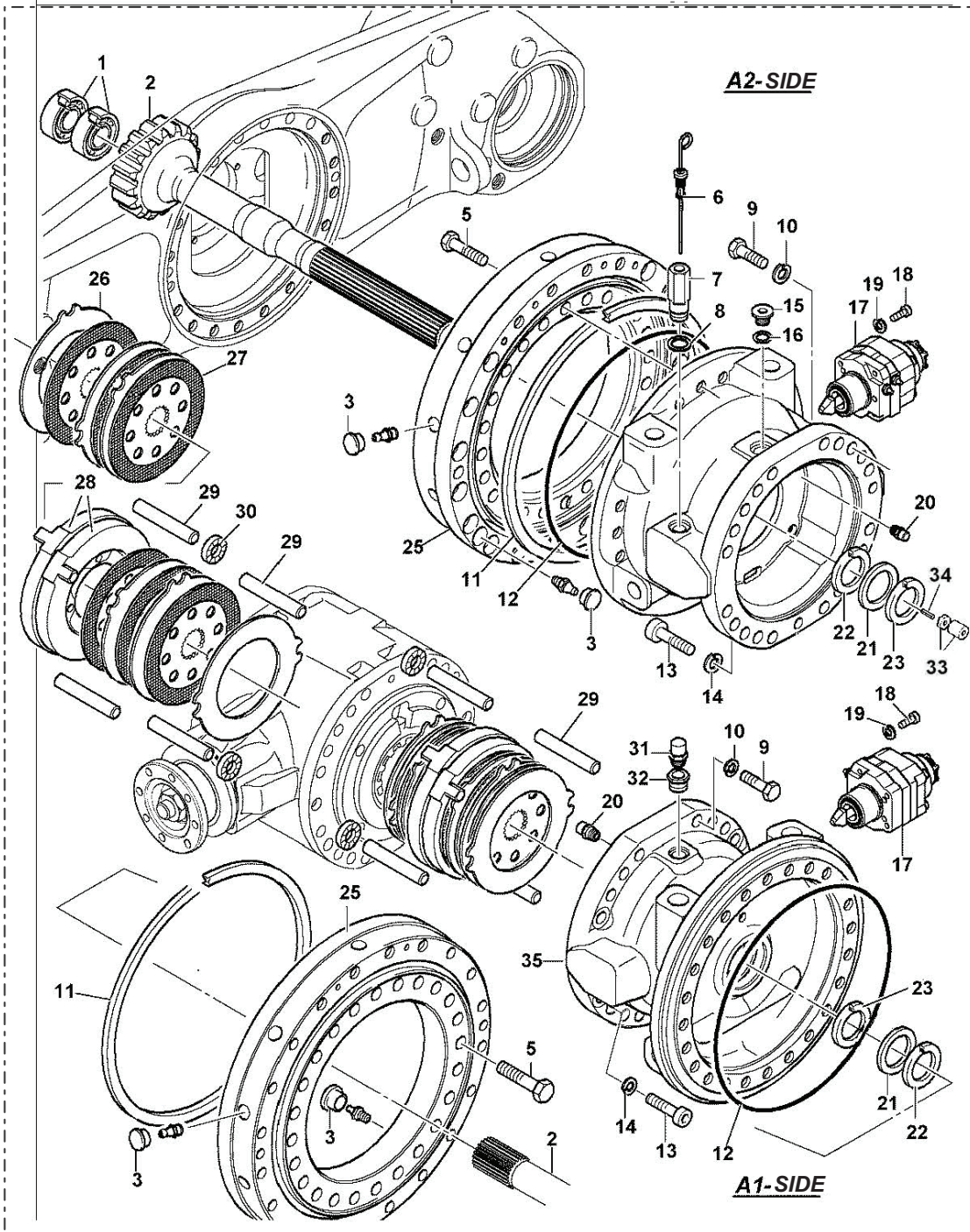
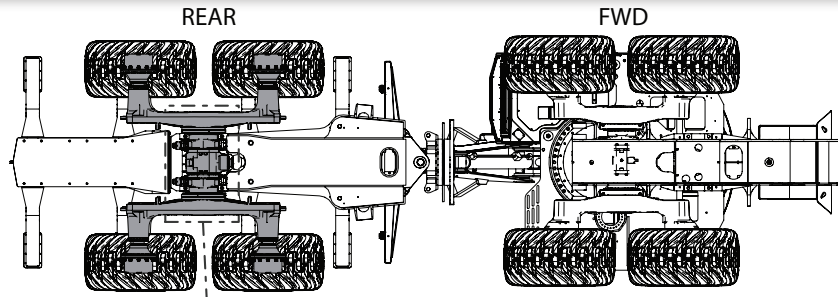
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
27	1180.734	1	Lip seal	
28	1180.811	1	Piston packing	
29	5252.100	1	Piston	
30	1170.716	2	O-Ring	
31	1010.129	2	Hexagon bolt	
32	9566.010	2	Locking plate	
33	9813.104	1	Shifting sleeve	
34	7329.012	1	Nut	
35	1020.212	4	Allen screw	
36	7527.140	1	Flange	
37	1200.481	2	Clamping sleeve	
38	1170.702	2	O-Ring	
39	7506.313	1	Differential housing	
40	1040.103	1	Screw plug	
41	1180.507	1	Seal ring	
42	9556.021	1	Screw plug	
43	1180.502	1	Seal ring	
44	1110.007	1	Tapered roller bearing	
45	7527.139	1	Flange	
46	7329.082	1	Nut M128x1.5	
47	7311.070	1	Spacer bushing	
48	7317.037	1	□ Adjusting kit	
	7317.185	n/a	Adjusting washer D55xD68x0.96	
	7317.184	n/a	Adjusting washer D55xD68x1.00	
	7317.183	n/a	Adjusting washer D55xD68x1.04	
	7317.182	n/a	Adjusting washer D55xD68x1.08	
	7317.181	n/a	Adjusting washer D55xD68x1.12	
	7317.180	n/a	Adjusting washer D55xD68x1.16	
	7317.179	n/a	Adjusting washer D55xD68x1.20	
	7317.178	n/a	Adjusting washer D55xD68x1.24	
	7317.177	n/a	Adjusting washer D55xD68x1.28	
	7317.176	n/a	Adjusting washer D55xD68x1.32	
	7317.175	n/a	Adjusting washer D55xD68x1.36	
	7317.174	n/a	Adjusting washer D55xD68x1.40	
	7317.173	n/a	Adjusting washer D55xD68x1.44	
49	7311.071	1	Spacer bushing D70x12.26	
49	7311.062	1	Spacer bushing D70x11.3	
49	7311.063	1	Spacer bushing D70x11.78	
50	1110.186	1	Tapered roller bearing	
51	1220.932	1	Seeger snap ring	
52	7308.054	1	Radial seal	
53	7308.055	2	Seal ring	
54	7315.110	1	Washer	
55	1170.534	1	O-Ring	
56	1250.103	1	Tapered lube nipple	
57	7319.091	1	Gasket	
58	1010.201	4	Hexagon bolt	
59	1190.011	4	Lock washer	
60	7301.077	1	Cover	
61	7329.057	1	Nut	
62	7521.236	1	Cardan flange	

AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING A1 SIDE ASSEMBLY AND INSTALLATION



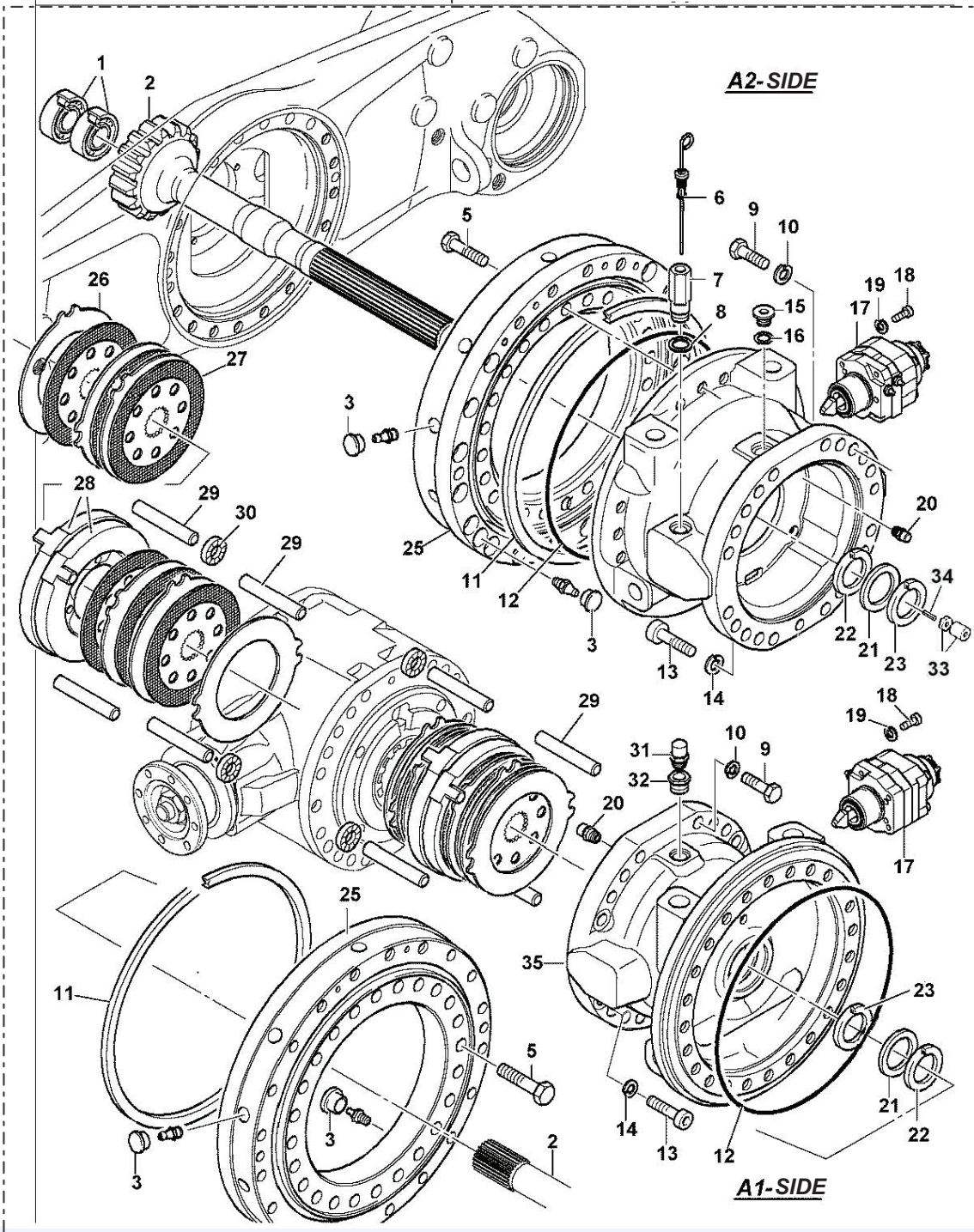
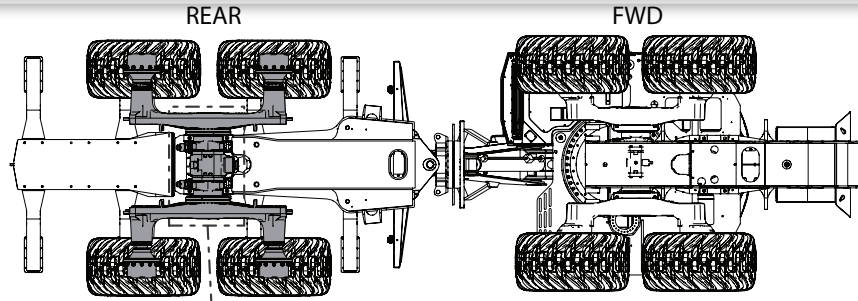
AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING A1 SIDE ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	1130.067	2	Cylindrical roller bearing	
2	7818.175	1	Sun gear shaft	
3	1750.683	4	Plug	
4	---			
5	1010.669	24	Hexagon bolt	
6	---			
7	---			
8	---			
9	1010.668	16	Hexagon bolt	
10	1190.014	16	Detent edged ring	
11	7308.071	1	Scraper ring	
12	1170.726	1	O-Ring	
13	1020.620	4	Allen screw	
14	1190.014	4	Detent edged ring	
15	---			
16	---			
17	5350.090	1	Spring brake cylinder	
18	1020.260	3	Allen screw	
19	1190.031	3	Detent edged ring	
20	1250.002	1	Breather	
21	7315.187	1	Washer	
22	1160.236	1	Oil seal	
23	7308.063	1	Seal ring	
24	---			
25	7305.051	1	Slewing ring	
26	7344.036	6	Intermediate disk	
27	7345.057	6	Lined disk	
28	5504.002	1	Operating disk assembly	
29	7321.151	4	Pin	
30	1190.211	2	Toothed ring	
31	1250.015	1	Breather	
32	1750.705	1	Reducing nipple	
33	2108.101	1	Adjusting set	
	7321.186	1	Adjusting pin	
	7315.300	n/a	Washer 1.0 Thick	
	7315.301	n/a	Washer 1.5 Thick	
34	1200.480	1	Clamping sleeve	
35	7276.114	1	Axle housing - A1 Side	

AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING A2 SIDE ASSEMBLY AND INSTALLATION



AXLES, GEARBOXES, AND WHEELS

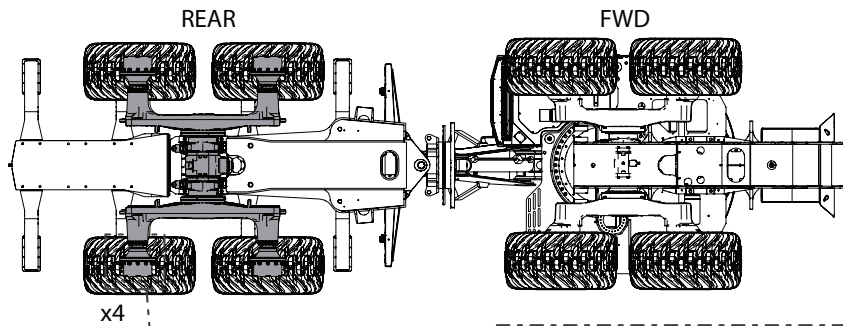
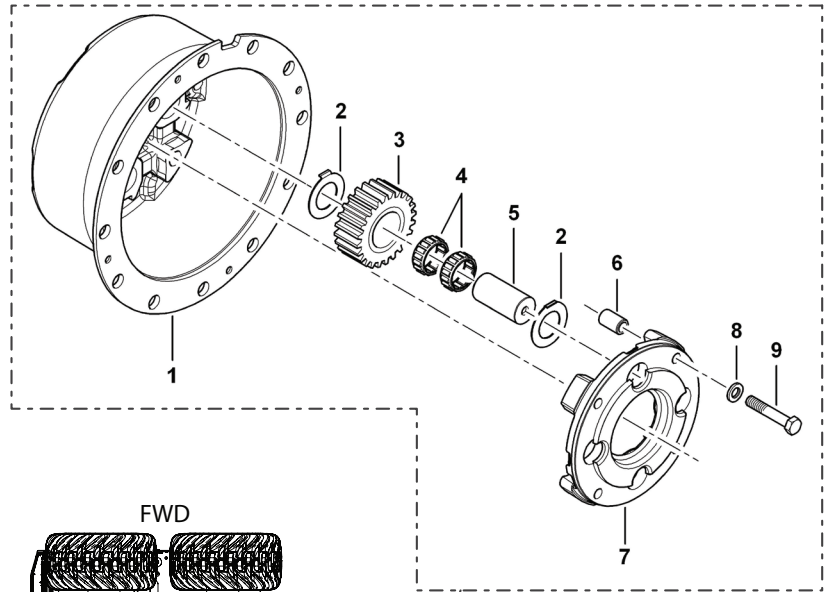
AXLE HOUSING A2 SIDE ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE SECTION
1	1130.067	2	Cylindrical roller bearing	
2	7818.175	1	Sun gear shaft	
3	1750.683	4	Plug	
4	---			
5	1010.669	24	Hexagon bolt	
6	7325.026	1	Oil dip stick	
7	7322.074	1	Threaded stud	
8	1180.541	1	Seal ring	
9	1010.668	16	Hexagon bolt	
10	1190.014	16	Detent edged ring	
11	7308.071	1	Scraper ring	
12	1170.726	1	O-Ring	
13	1020.620	4	Allen screw	
14	1190.014	4	Detent edged ring	
15	1040.151	1	Screw plug	
16	1180.541	1	Seal ring	
17	5350.090	1	Spring brake cylinder	
18	1020.260	3	Allen screw	
19	1190.031	3	Detent edged ring	
20	1250.002	1	Breather	
21	7315.187	1	Washer	
22	1160.236	1	Oil seal	
23	7308.063	1	Seal ring	
24	7276.115	1	Axle housing - A2 Side	
25	7305.051	1	Slewing ring	
26	7344.036	6	Intermediate disk	
27	7345.057	6	Lined disk	
28	5504.002	1	Operating disk assembly	
29	7321.151	4	Pin	
30	1190.211	2	Toothed ring	
31	-			
32	1750.705	1	Reducing nipple	
33	2108.101	1	Adjusting set	
	7321.186	1	Adjusting pin	
	7315.300	n/a	Washer 1.0 Thick	
	7315.301	n/a	Washer 1.5 Thick	
34	1200.480	1	Clamping sleeve	

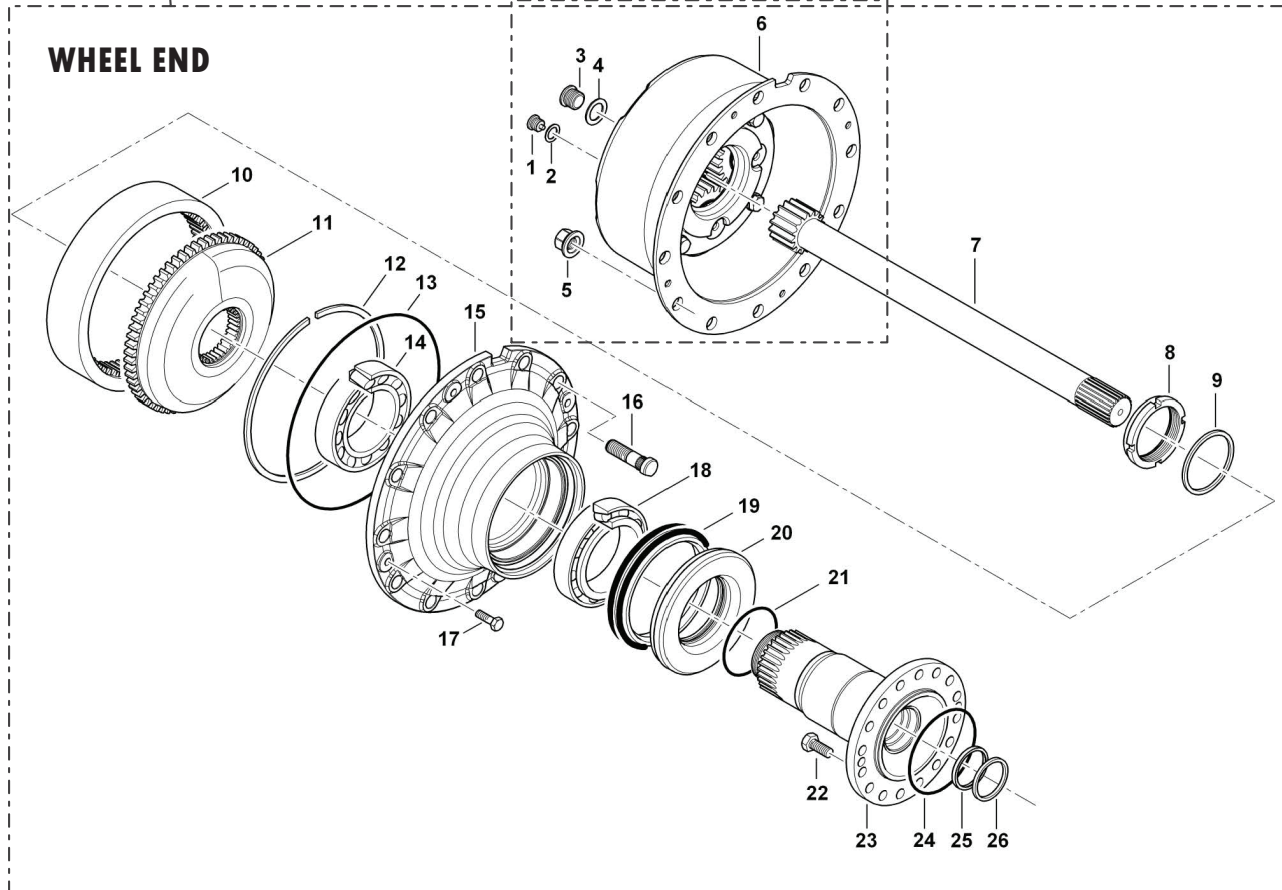
AXLES, GEARBOXES, AND WHEELS

PLANETARY AND WHEEL END ASSEMBLY AND INSTALLATION

PLANETARY ASSEMBLY



WHEEL END



AXLES, GEARBOXES, AND WHEELS

PLANETARY AND WHEEL END SIDE ASSEMBLY AND INSTALLATION

PLANETARY ASSEMBLY

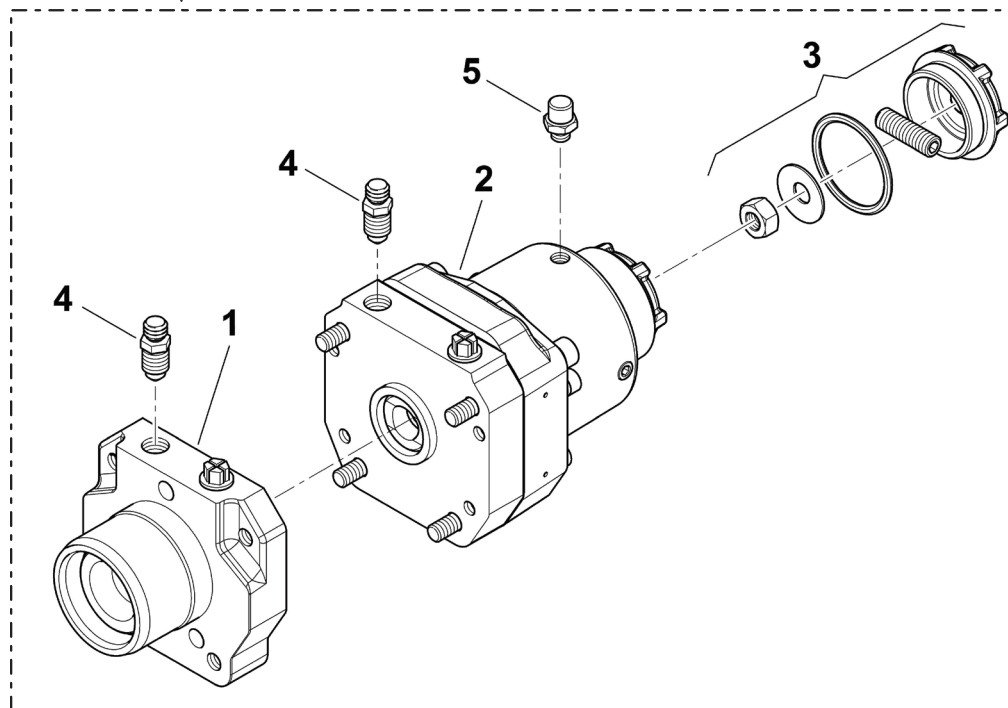
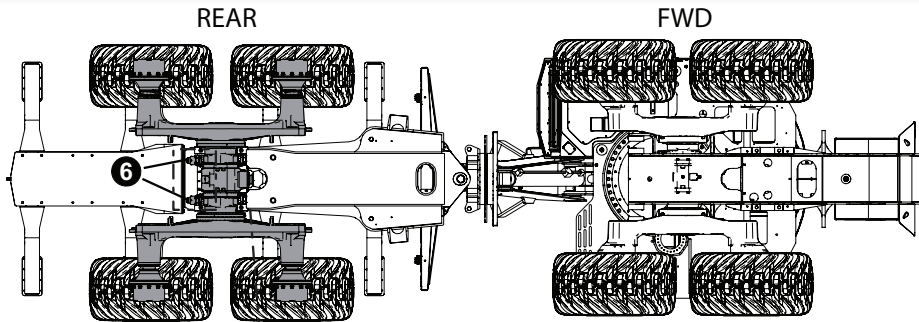
REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	2218.014	1	Planetary gear drive	
1	7821.271	1	Planet carrier	
2	9633.010	8	Thrust washer	
3	7806.060	4	Planet gear	
4	7305.071	4	Two-row roller bearing	
5	7807.056	4	Planetary pin	
6	7313.018	4	Shear pin	
7	7821.179	1	Planet carrier	
8	7316.045	4	Washer	
9	1010.536	4	Hexagon bolt	

WHEEL END ASSEMBLY

REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	2402.157	4	Wheel end complete	
1	9556.021	2	Screw plug	
2	1180.502	2	Seal ring	
3	7323.016	1	Screw plug	
4	2108.017	1	☐ Shim kit	
	1210.296	n/a	Seeger adjusting washer 30x42x0.5	
	1210.295	n/a	Seeger adjusting washer 30x42x1.0	
	1210.113	n/a	Seeger support washer	
5	1060.408	12	Wheel nut with rotating washer	
6	2218.014	1	Planetary gear drive COMPLETE	
7	7818.086	1	Sun gear shaft	
8	7329.073	1	Nut M85x2	
9	7317.047	1	☐ Adjusting kit	
	7317.199	n/a	Adjusting washer D86xD105.5x2.500	
	7317.200	n/a	Adjusting washer D86xD105.5x2.375	
	7317.201	n/a	Adjusting washer D86xD105.5x2.250	
	7317.202	n/a	Adjusting washer D86xD105.5x2.125	
	7317.203	n/a	Adjusting washer D86xD105.5x2.000	
	7317.204	n/a	Adjusting washer D86xD105.5x1.875	
	7317.205	n/a	Adjusting washer D86xD105.5x1.750	
	7317.206	n/a	Adjusting washer D86xD105.5x1.625	
	7317.207	n/a	Adjusting washer D86xD105.5x1.500	
	7317.208	n/a	Adjusting washer D86xD105.5x1.375	
10	7801.042	1	Ring gear	
11	7804.044	1	Ring gear carrier	
12	1220.913	1	Seeger snap ring	
13	1170.755	1	O-Ring	
14	1110.221	1	Tapered roller bearing	
15	7828.143	1	Wheel hub	
16	7133.018	12	Wheel bolt	
17	1110.222	1	Tapered roller bearing	
18	7322.088	4	Hexagon bolt	
19	1180.325	1	Face seal	
20	7306.032	1	Spindle ring	
21	1170.547	1	O-Ring	
22	7322.069	16	Hexagon bolt	
23	7814.182	1	Spindle	
24	1170.553	1	O-Ring	
25	1160.244	1	Oil seal	
26	7315.107	1	Washer	

AXLES, GEARBOXES, AND WHEELS

BRAKE CYLINDER ASSEMBLY AND INSTALLATION

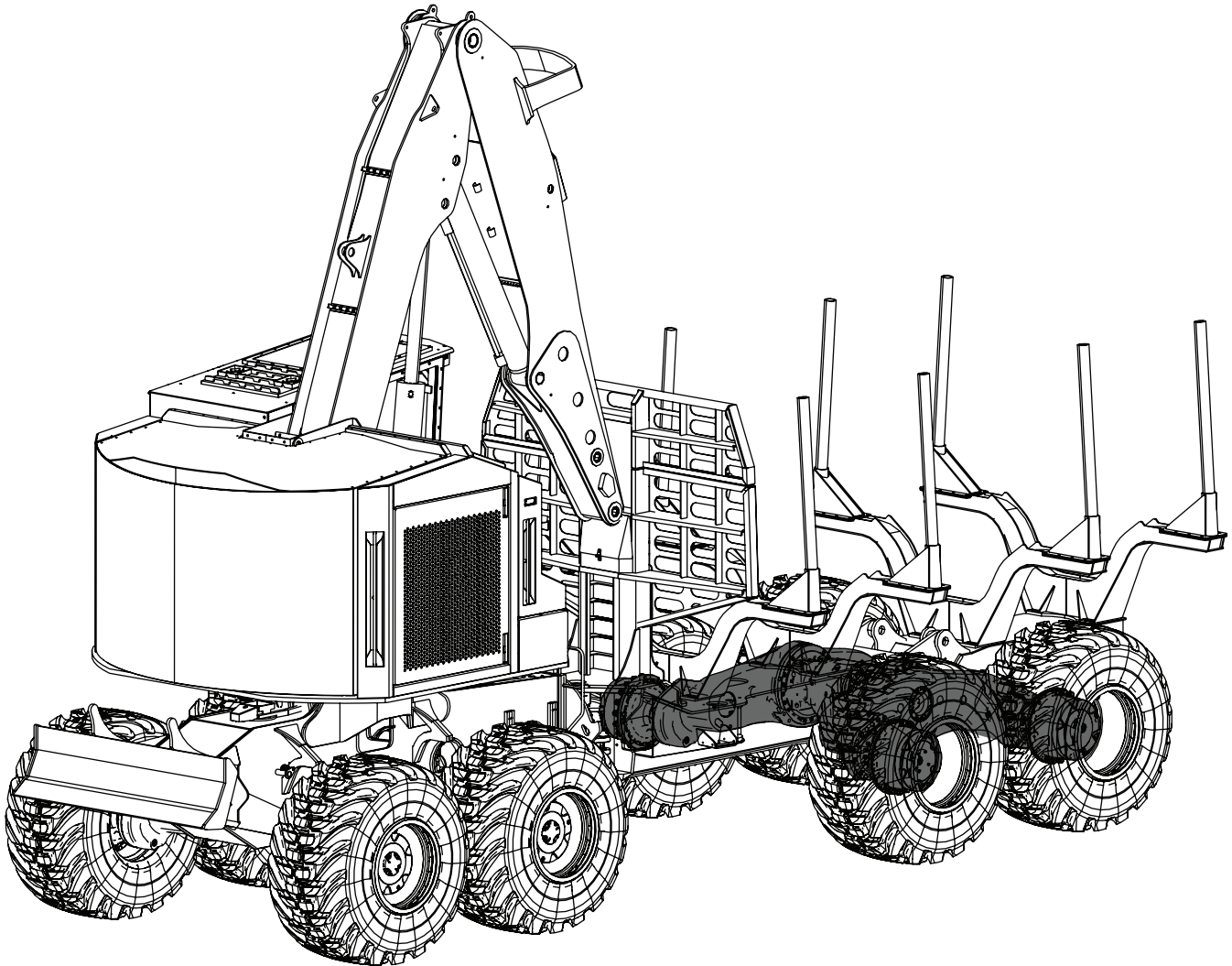


REF	PART #	QTY	DESCRIPTION	SEE PAGE
6	52746-AX		☐ Spring loaded cyl. complete	
1	5350.097	1	Brake cylinder (lower part)	
2	5350.100	1	Spring brake (upper part)	
3	2208.004	1	Park brake release kit	
4	1250.598	2	Breather valve	
5	1250.002	1	Breather	
-	53969-AX		Seal Kit Brake Cylinder	

AXLES, GEARBOXES, AND WHEELS

REAR AXLE ASSEMBLY AND INSTALLATION

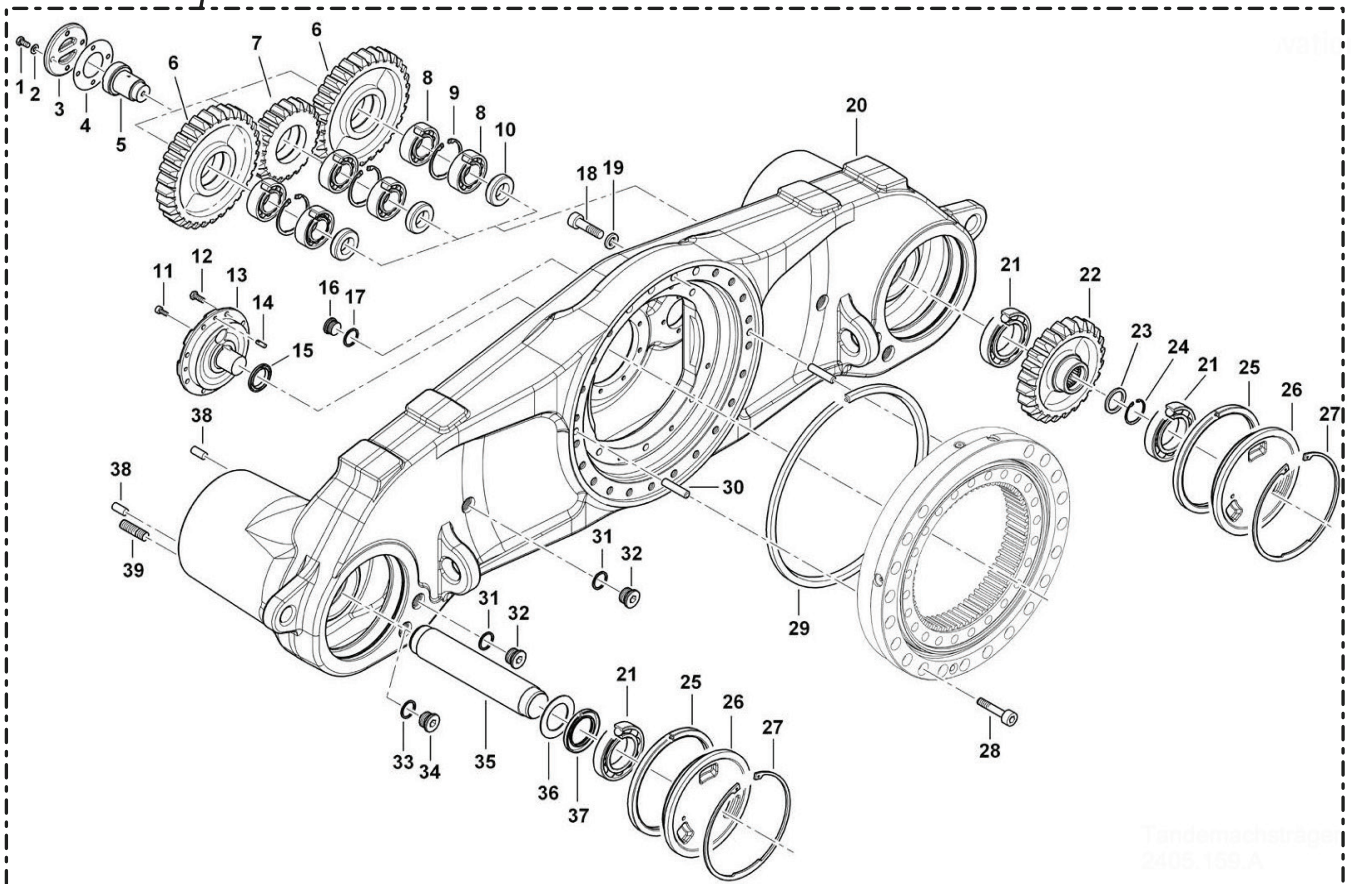
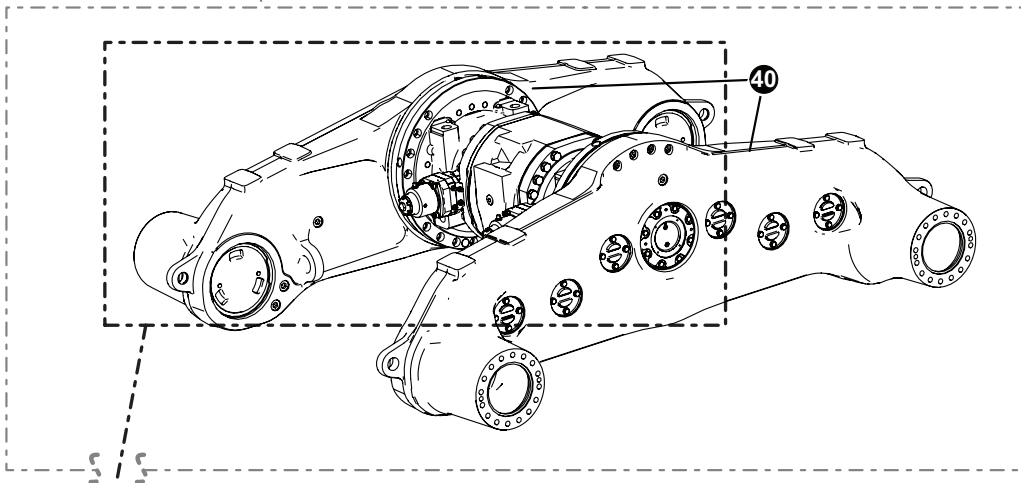
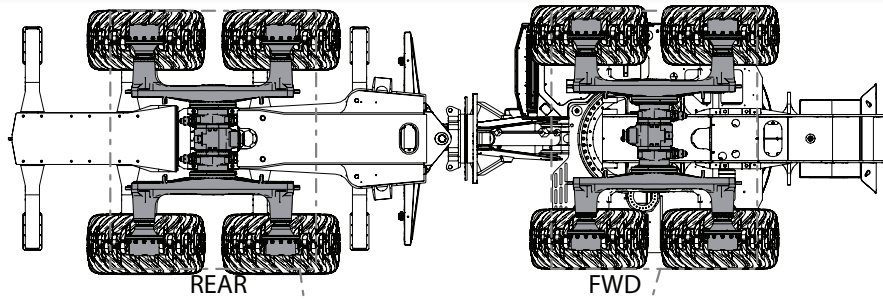
SECTION AX-2



TIM 23 (840) REAR BOGI AXLE GEARBOXES

AXLES, GEARBOXES, AND WHEELS

REAR TANDEM AXLE ASSEMBLY AND INSTALLATION



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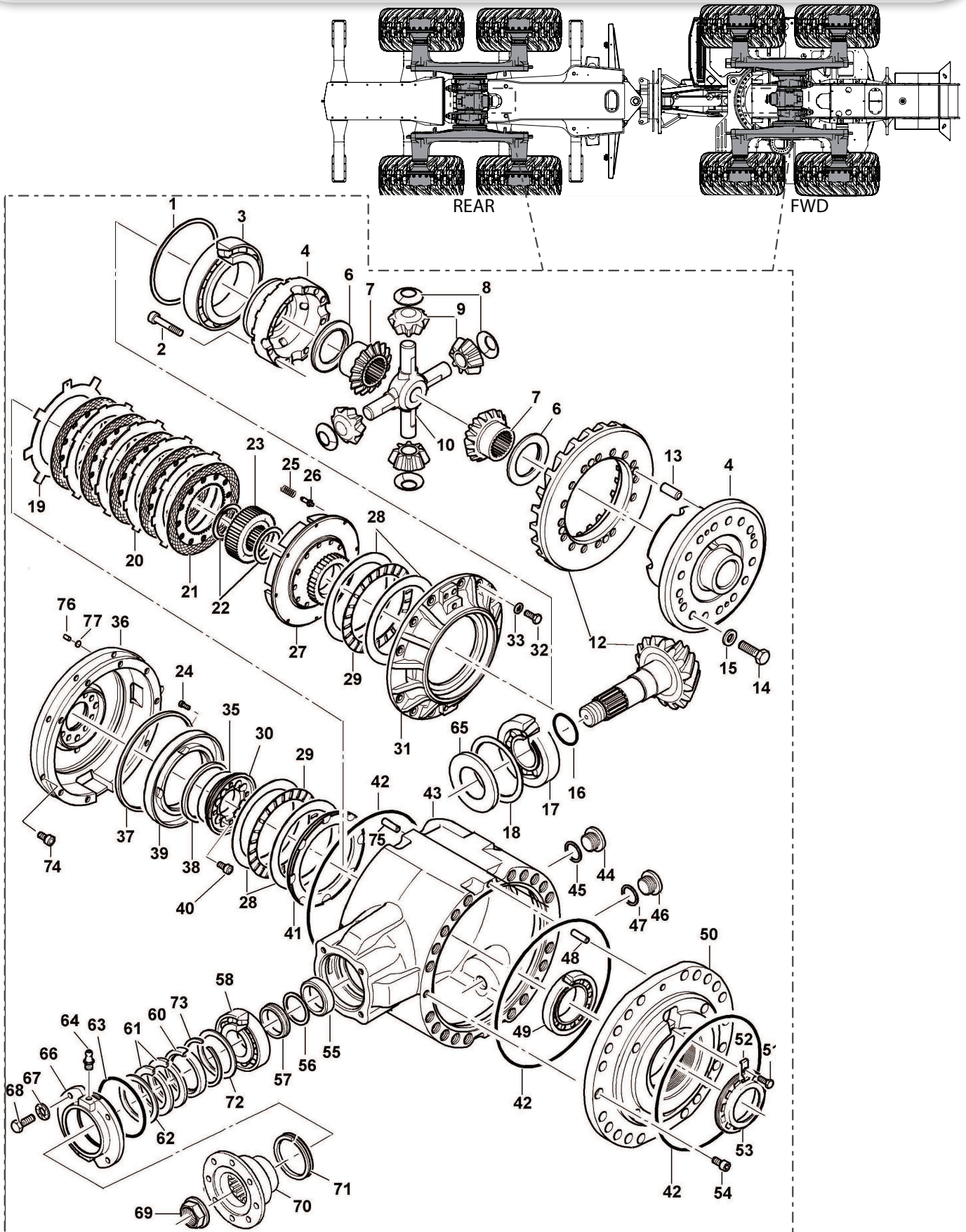
AXLES, GEARBOXES, AND WHEELS

REAR TANDEM AXLE ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
40	53625	2	AXLE, TANDEM - TIM 23 (NON BALANCED) 840D	
	2405.159	2	Bogie housing complete	
1	1010.233	24	Hexagon bolt	
2	7316.048	24	Washer	
3	7302.011	6	Cover	
4	7319.161	6	Gasket	
5	7321.131	6	Pin	
6	9804.532	4	Spur gear	
7	9804.589	2	Spur gear	
8	1130.057	12	Cylindrical roller bearing	
9	1220.702	6	Seeger circlip ring	
10	7311.089	6	Spacer bushing	
11	1020.113	2	Allen screw	
12	1010.234	8	Hexagon bolt	
13	7321.120	1	Bearing pin	
14	1200.309	1	Grooved dowel pin	
15	1180.841	1	Shaft seal	
16	1040.103	1	Screw plug	
17	1180.507	1	Seal ring	
18	1020.618	4	Allen screw	
19	7316.044	4	Washer	
20	7277.148	1	Bogie housing	
21	1120.107	4	Deep groove ball bearing	
22	9804.533	2	Spur gear	
23	1210.110	2	Seeger support washer	
24	1220.714	2	Seeger circlip ring	
25	7308.051	2	Seal ring	
26	7302.082	2	Cover	
27	1220.837	2	Seeger circlip ring	
28	1020.618	20	Allen screw	
29	7308.040	1	Seal ring	
30	1200.206	2	Dowel pin	
31	1180.507	4	Seal ring	
32	1040.103	4	Screw plug	
33	1180.507	2	Seal ring	
34	7323.013	2	Screw plug	
35	7343.030	2	Tube	
36	7315.106	2	Washer	
37	1160.275	2	Oil seal	
38	1200.286	4	Dowel pin	
39	1030.614	32	Stud	

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



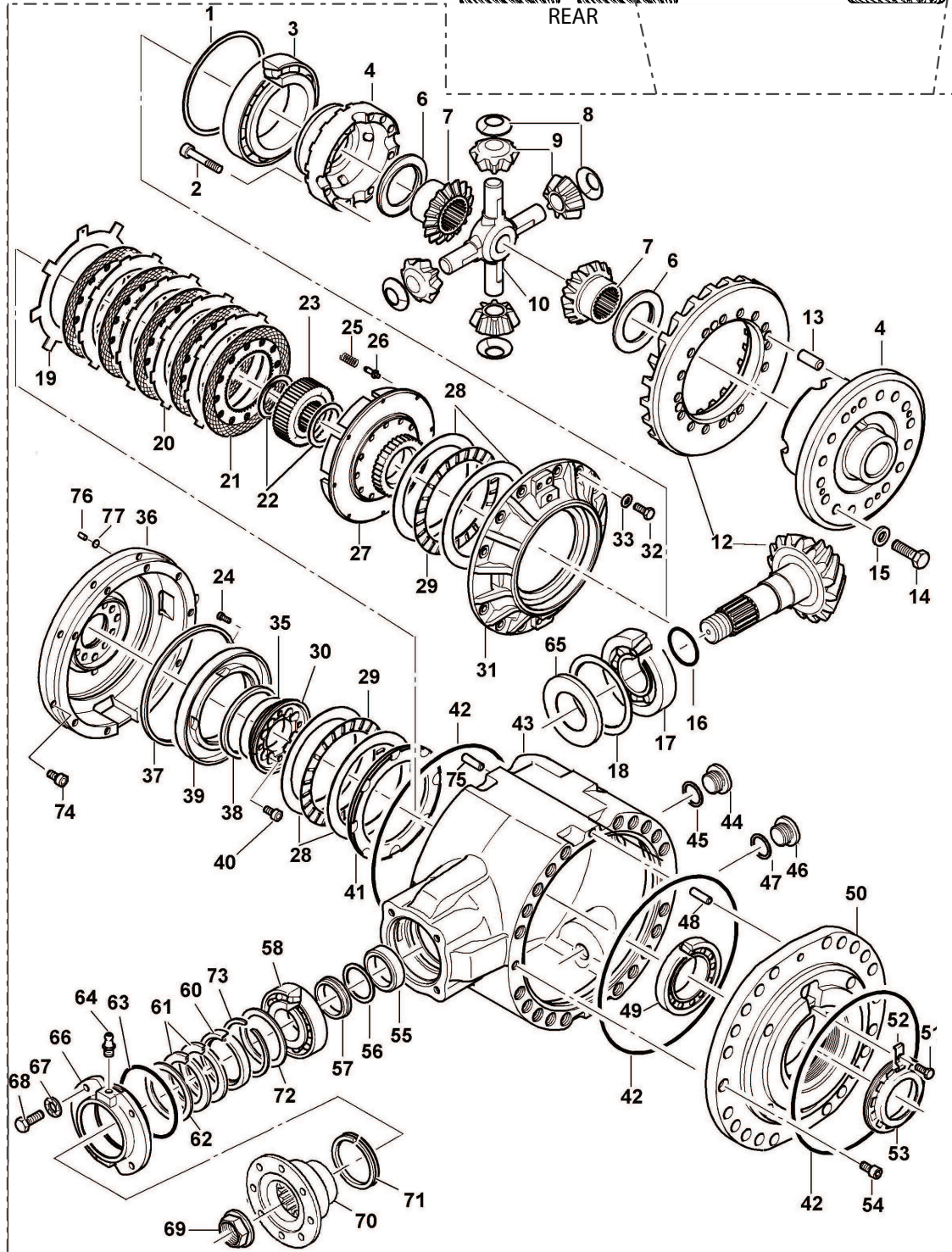
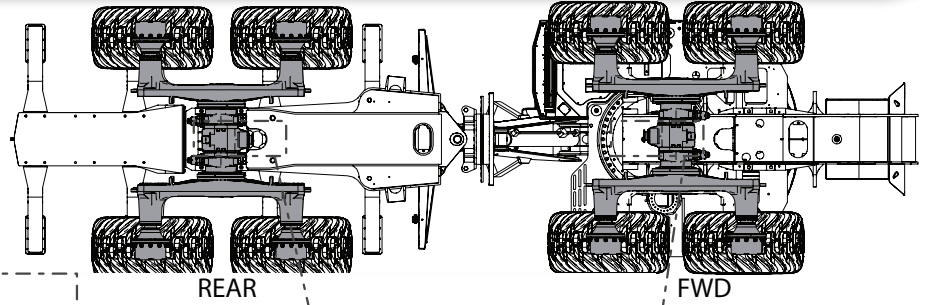
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	2401.496	1	Differential complete	
---	2219.086	1	Diff.-cage complete	
---	7570.016	1	Multiple disk diff. lock	
1	2108.060	1	☒ Shim kit s=1,0 - 2,25	
1	7317.297	na	Adjusting washer	s=1,5
1	7317.298	na	Adjusting washer	s=1,55
1	7317.299	na	Adjusting washer	s=1,6
1	7317.300	na	Adjusting washer	s=1,65
1	7317.301	na	Adjusting washer	s=1,7
1	7317.302	na	Adjusting washer	s=1,75
1	7317.303	na	Adjusting washer	s=1,8
1	7317.304	na	Adjusting washer	s=1,85
1	7317.305	na	Adjusting washer	s=1,9
1	7317.306	na	Adjusting washer	s=1,95
1	7317.307	na	Adjusting washer	s=2,0
1	7317.308	na	Adjusting washer	s=2,05
1	7317.309	na	Adjusting washer	s=2,1
1	7317.310	na	Adjusting washer	s=2,15
1	7317.311	na	Adjusting washer	s=2,2
1	7317.312	na	Adjusting washer	s=2,25
1	7317.323	na	Adjusting washer	s=1,0
1	7317.324	na	Adjusting washer	s=1,2
2	1020.374	12	Allen screw	
3	1110.233	1	Tapered-roller bearing	
4	2102.188	1	Differential cage	
5	---			
6	7517.014	2	☒ Adjusting kit	s=1,5 - 4,0
6	7517.028	na	Thrust washer	s=2,8
6	7517.029	na	Thrust washer	s=3,0
6	7517.030	na	Thrust washer	s=3,2
6	7517.031	na	Thrust washer	s=2,0
6	7517.032	na	Thrust washer	s=2,2
6	7517.033	na	Thrust washer	s=2,6
6	7517.034	na	Thrust washer	s=4,0
6	7517.035	na	Thrust washer	s=3,4
6	7517.036	na	Thrust washer	s=3,6
6	7517.037	na	Thrust washer	s=3,8
7	7513.055	2	Differential gear	
8	7518.030	4	Thrust washer	
9	7514.033	4	Compensating gear	
10	7515.032	1	Cross bolt	
11	---			
12	2101.355	1	Crown wheel/pinion	
13	1200.228	4	Dowel pin	
14	1510.559	16	Hexagon bolt	
15	7316.045	16	Washer 16.1x30x4 C45 HARDENED	
16	1170.013	1	O-ring OR 42x4.5 72NBR872	
17	1110.223	1	Tapered-roller bearing	
18	2108.047	1	☒ Shim kit s=3,0 - 2,5 step 0,25	
18	7317.247	na	Adjusting washer	s=3,0
18	7317.248	na	Adjusting washer	s=2,75
18	7317.249	na	Adjusting washer	s=2,5

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



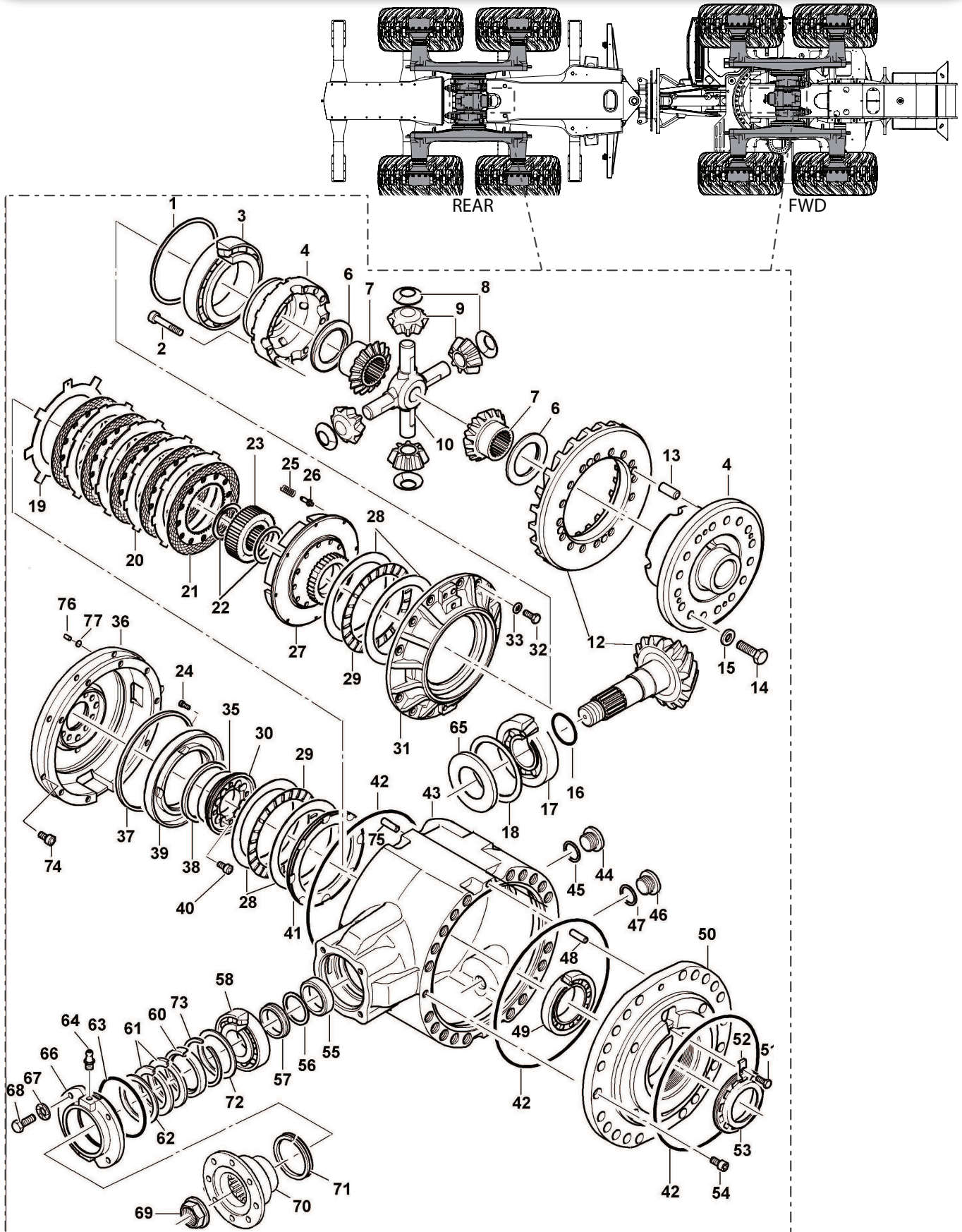
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
19	7344.050	1	Steel disk	
20	7344.049	5	Steel disk	
21	7345.056	6	Lined disk	
22	7316.125	2	Thrust washer	
23	9867.106	1	Disk carrier	
24	1020.029	1	Allen screw	
25	7331.048	8	Compression spring	
26	7322.113	8	Bolt	
27	9867.107	1	Disk carrier	
28	1130.596	4	Washer	
29	1130.283	2	Thrust needle cage	
30	5252.176	1	Piston	
31	7527.175	1	Flange	
32	1010.266	11	Hexagon bolt	
33	7316.048	11	Washer	
34	---			
35	1170.612	1	O-ring	
36	7527.239	1	Flange	
37	1180.879	1	Shaft packing	
38	1180.911	1	Piston packing	
39	5252.143	1	Piston	
40	1020.220	8	Allen screw	
41	7316.176	1	Thrust washer	
42	1170.735	3	O-ring	
43	7506.400	1	Differential housing	
44	1040.151	1	Screw plug	
45	1180.541	1	Seal ring	
46	7323.025	1	Screw plug	
47	1180.541	1	Seal ring	
48	1200.235	1	Dowel pin	
49	1110.111	1	Tapered-roller bearing	
50	7527.283	1	Flange	
51	1010.129	1	Hexagon bolt	
52	9566.019	1	Locking plate	
53	7329.133	1	Nut	
54	1020.216	2	Allen screw	
55	7311.116	1	Spacer bushing	
56	2108.046	1	Shim kit	
56	7317.234	na	Adjusting washer	s=0,96
56	7317.235	na	Adjusting washer	s=1,0
56	7317.236	na	Adjusting washer	s=1,04
56	7317.237	na	Adjusting washer	s=1,08
56	7317.238	na	Adjusting washer	s=1,12
56	7317.239	na	Adjusting washer	s=1,16
56	7317.240	na	Adjusting washer	s=1,20
56	7317.241	na	Adjusting washer	s=1,24
56	7317.242	na	Adjusting washer	s=1,28
56	7317.243	na	Adjusting washer	s=1,32
56	7317.244	na	Adjusting washer	s=1,36
56	7317.245	na	Adjusting washer	s=1,40
56	7317.246	na	Adjusting washer	s=1,44

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



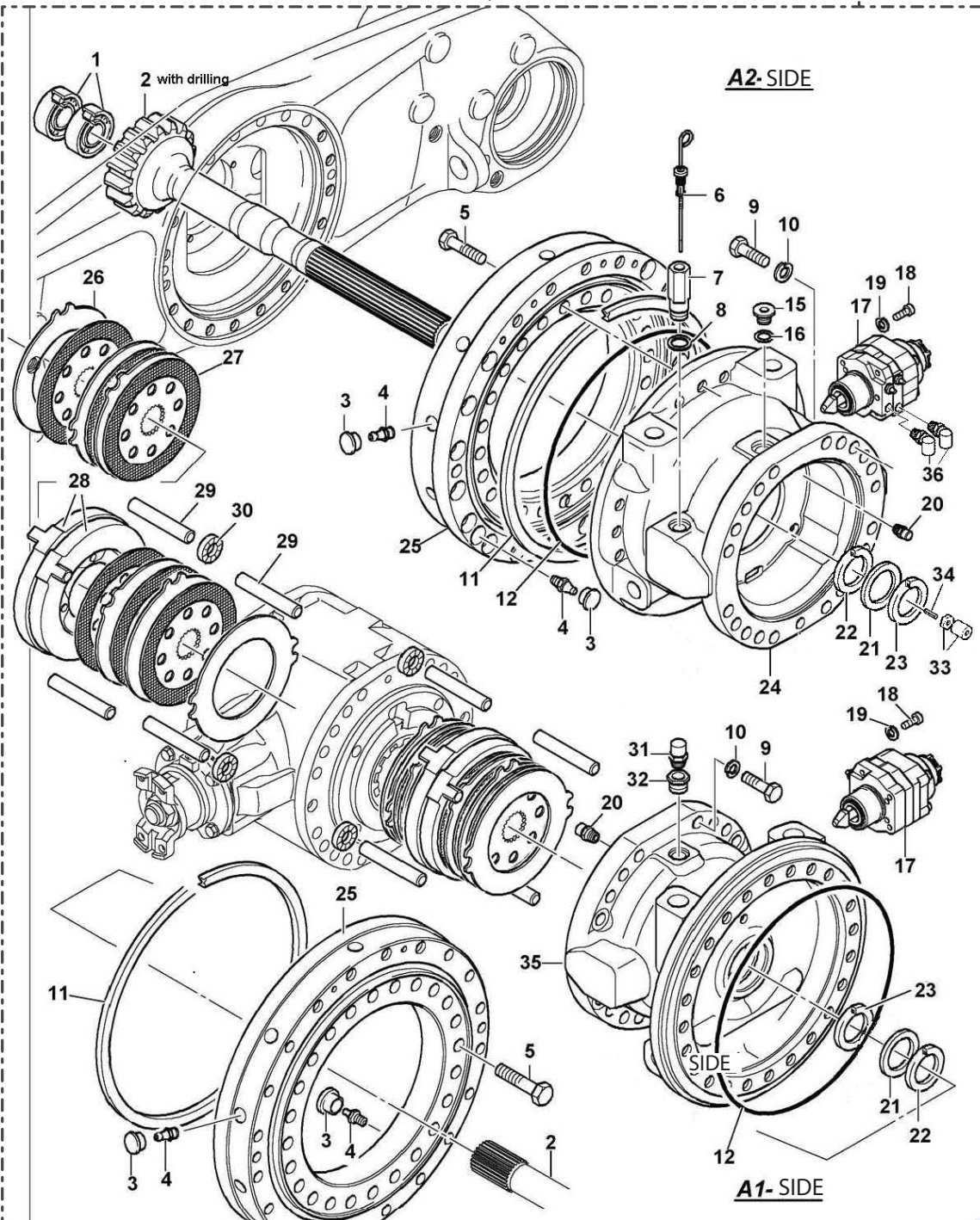
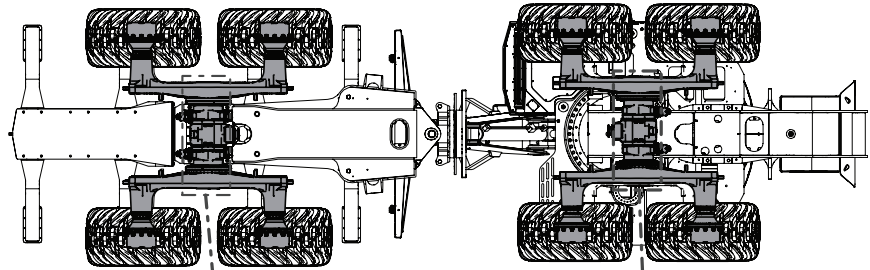
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
57	2108.045	1	☐ Spacer bushing Kit	D58xD76x"s"
57	7311.117	na	Spacer bushing.....	s=11,51
57	7311.118	na	Spacer bushing.....	s=11,99
57	7311.119	na	Spacer bushing.....	s=12,47
58	1110.229	1	Tapered-roller bearing	
59	---			
60	7308.054	1	Radial seal	
61	7308.055	2	Seal ring	
62	7315.110	1	Washer	
63	1170.526	1	O-ring OR	
64	1250.103	1	Tapered lube nipple	
65	7301.064	1	Cover	
66	7301.124	1	Cover	
67	1190.011	4	Lock washer	
68	1010.201	4	Hexagon bolt	
69	7329.057	1	Nut M40x1.5 bonded	
70	7521.236	1	Cardan flange	
71	1180.125	1	V-ring	
72	7315.181	1	Washer	
73	1220.932	1	Seeger snap ring	
74	1020.228	12	Allen screw	
75	1200.286	1	Dowel pin	
76	7312.079	1	Bushing	
77	1170.006	1	O-ring	

AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING A1 SIDE ASSEMBLY AND INSTALLATION



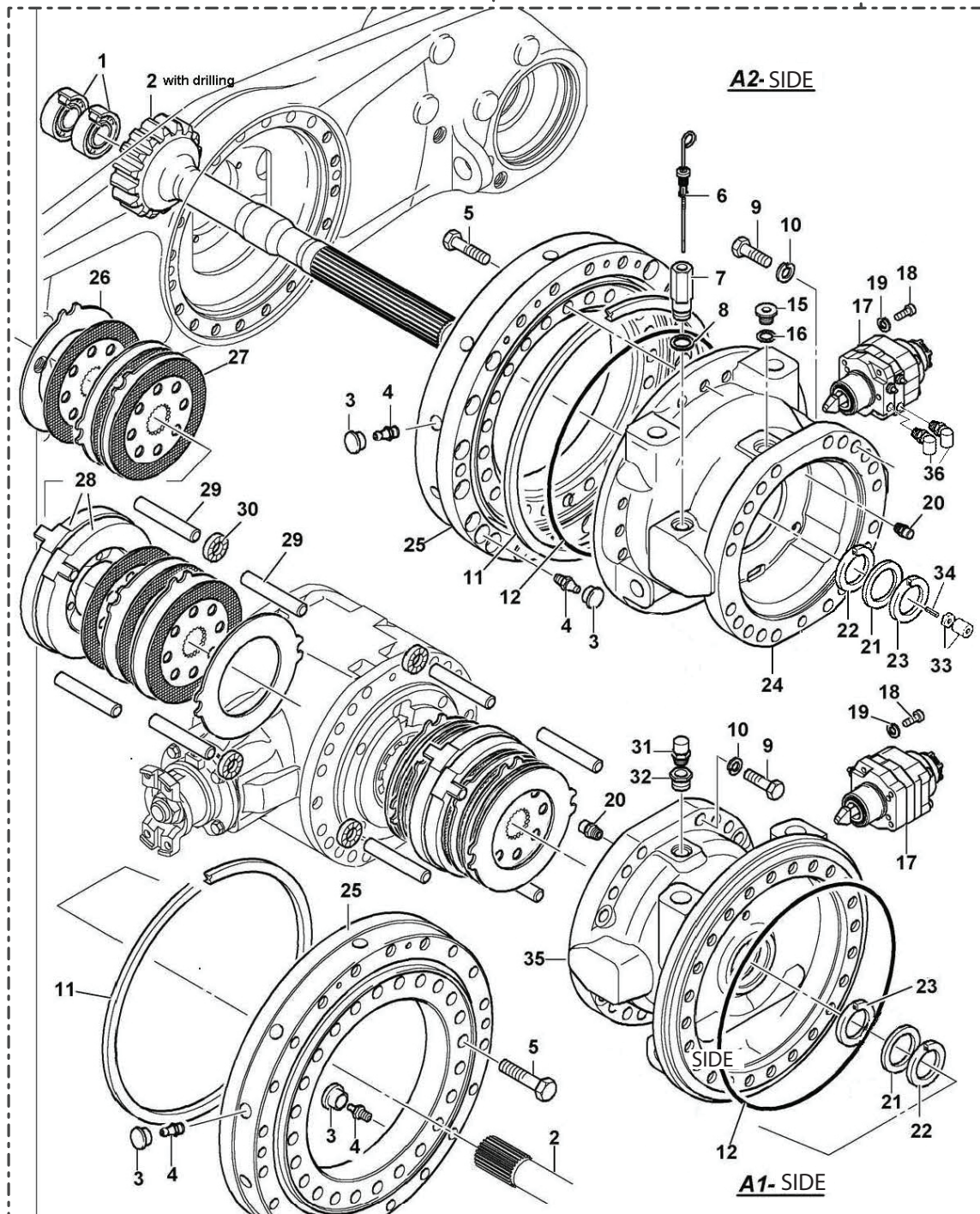
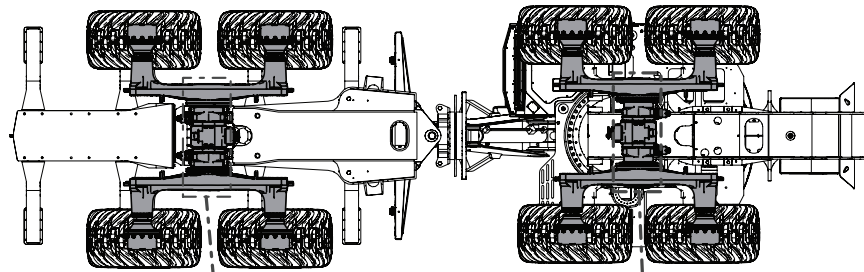
AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING A1 SIDE ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	2403.160	1	Axle housing complete A1	
1	1130.067	2	Cylindrical roller bearing	
2	7818.183	1	Sun gear shaft	
3	1750.683	4	Plug	
4	1250.104	2	Tapered lube nipple	
5	1010.669	24	Hexagon bolt	
6	---			
7	---			
8	---			
9	1010.664	18	Hexagon bolt	
10	7316.044	18	Washer	
11	7308.071	1	Scraper ring	
12	1170.726	1	O-ring	
13	---			
14	---			
15	---			
16	---			
17	5350.090	1	Spring brake cylinder	
18	1020.260	3	Allen screw	
19	1190.031	3	Detent edged ring	
20	1250.002	1	Breather	
21	7315.187	1	Washer	
22	1160.236	1	Oil seal	
23	7308.063	1	Seal ring	
24	---			
25	7305.050	1	Slewing ring	
26	7344.036	6	Intermediate disk	
27	7345.057	6	Lined disk	
28	5504.002	1	Operating disk assembly	
29	7321.151	4	Pin	
30	1190.211	2	Toothed ring	
31	1250.015	1	Breather	
32	1750.705	1	Reducing nipple	
33	---			
34	---			
35	7276.137	1	Axle housing	
36	1750.900	1	Adapter	

AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING A2 SIDE ASSEMBLY AND INSTALLATION



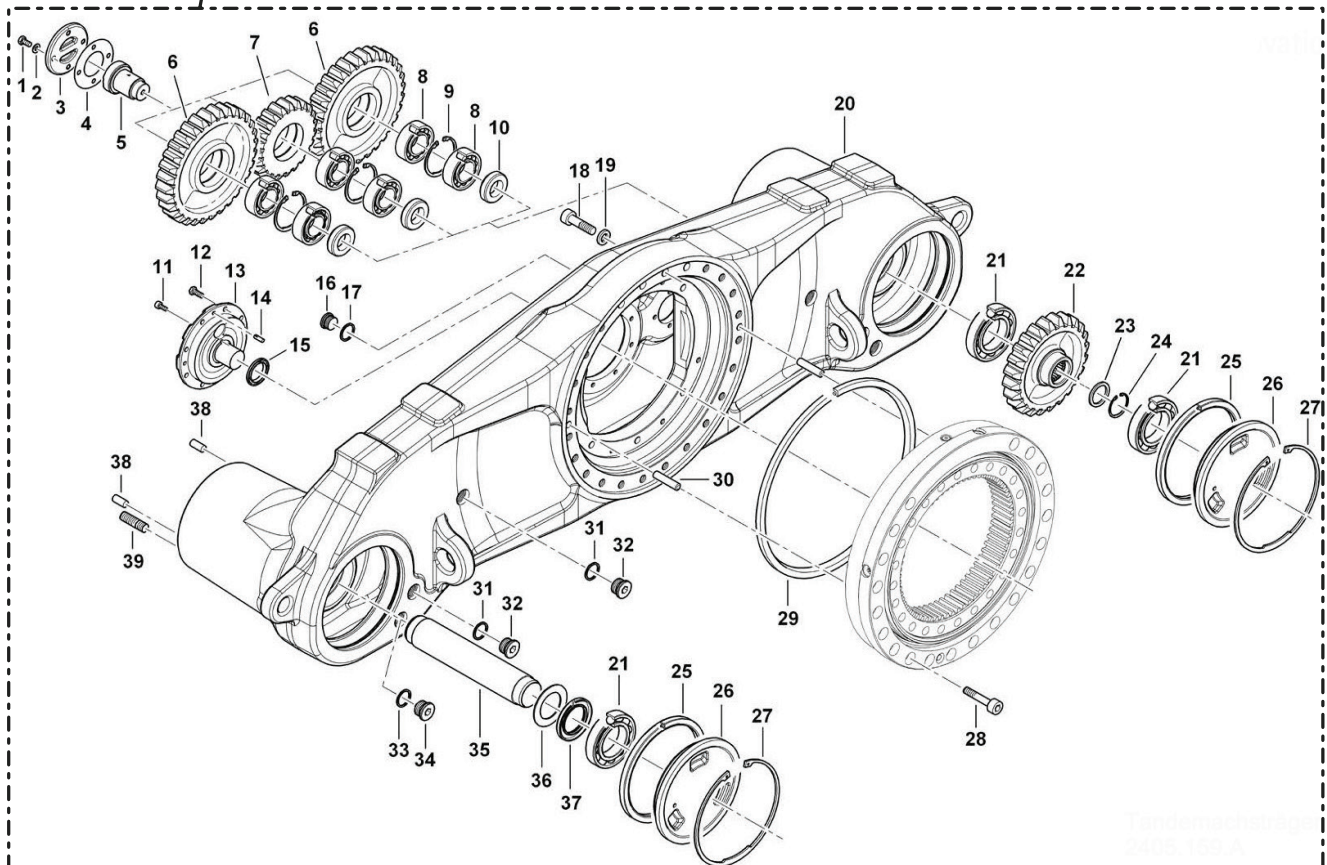
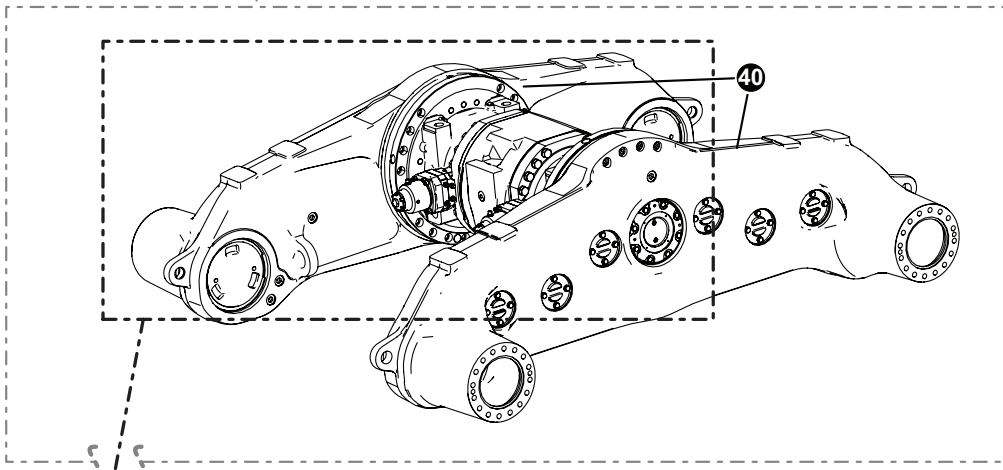
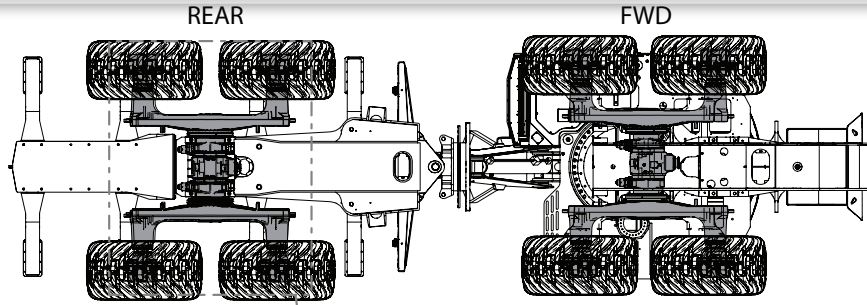
AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING A2 SIDE ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	2403.161	1	Axle housing complete A2	
1	1130.067	2	Cylindrical roller bearing	
2	7818.182	1	Sun gear shaft	
3	1750.683	4	Plug	
4	1250.104	2	Tapered lube nipple	
5	1010.669	24	Hexagon bolt	
6	7325.037	1	Oil dip stick	
7	7322.074	1	Threaded stud	
8	1180.541	1	Seal ring	
9	1010.662	18	Hexagon bolt	
10	7316.044	18	Washer	
11	7308.071	1	Scraper ring	
12	1170.726	1	O-ring	
13	---			
14	---			
15	1040.151	1	Screw plug	
16	1180.541	1	Seal ring	
17	5350.090	1	Spring brake cylinder	
18	1020.260	3	Allen screw	
19	1190.031	3	Detent edged ring	
20	1250.002	1	Breather	
21	7315.187	1	Washer	
22	1160.236	1	Oil seal	
23	7308.063	1	Seal ring	
24	7276.136	1	Axle housing	
25	7305.050	1	Slewing ring	
26	7344.036	6	Intermediate disk	
27	7345.057	6	Lined disk	
28	5504.002	1	Operating disk assembly	
29	7321.096	4	Pin	
30	1190.211	2	Toothed ring	
31	---			
32	---			
33	2108.103	1	Adjusting kit	
33	7321.191	1	Adjusting pin	
33	7315.300	3	Washer	
33	7315.301	3	Washer	
34	1200.480	1	Clamping sleeve	
35	---			
36	1750.900	1	Adapter	

AXLES, GEARBOXES, AND WHEELS

PLANETARY AND WHEEL END ASSEMBLY AND INSTALLATION



Technical drawing
1:100, Top A

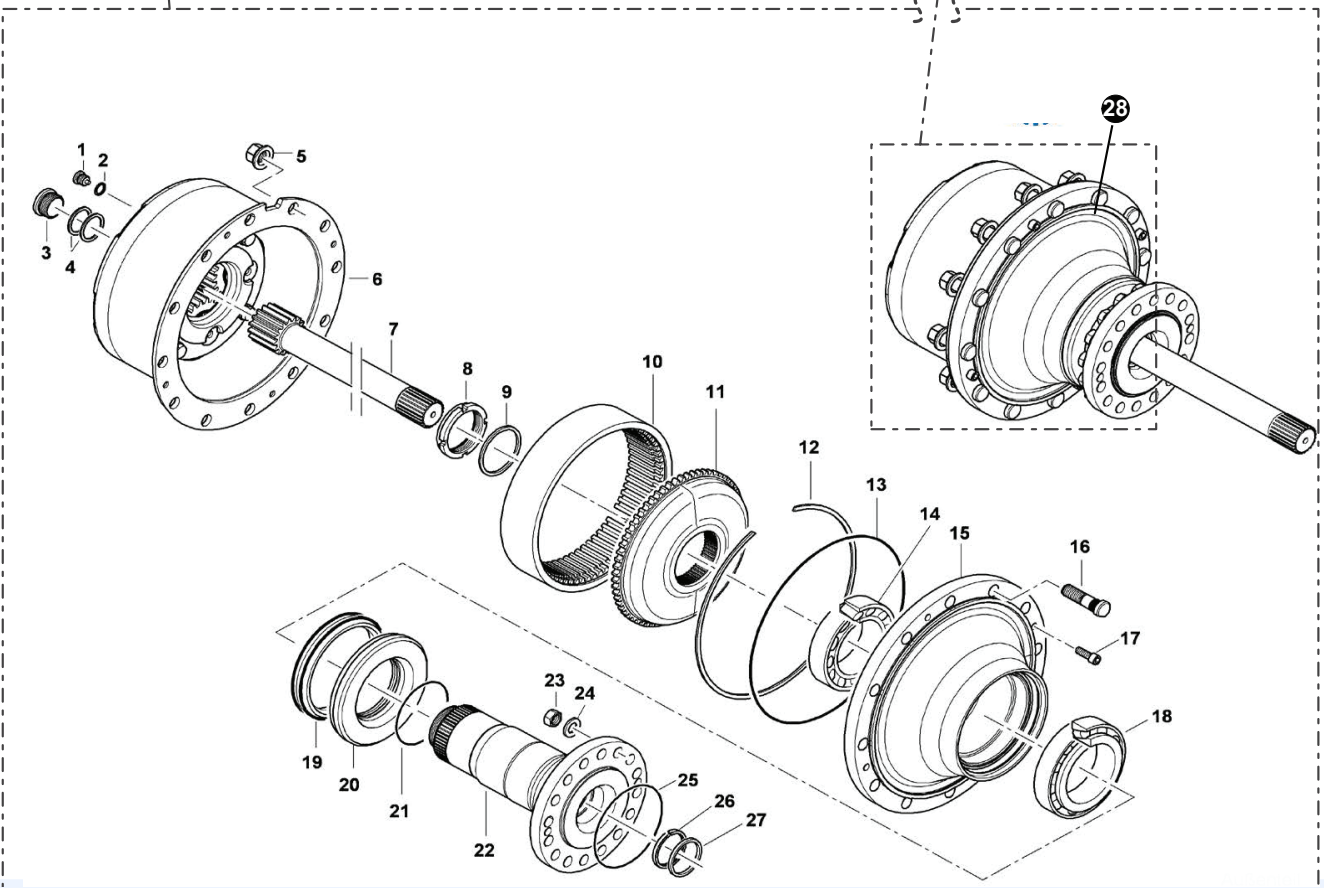
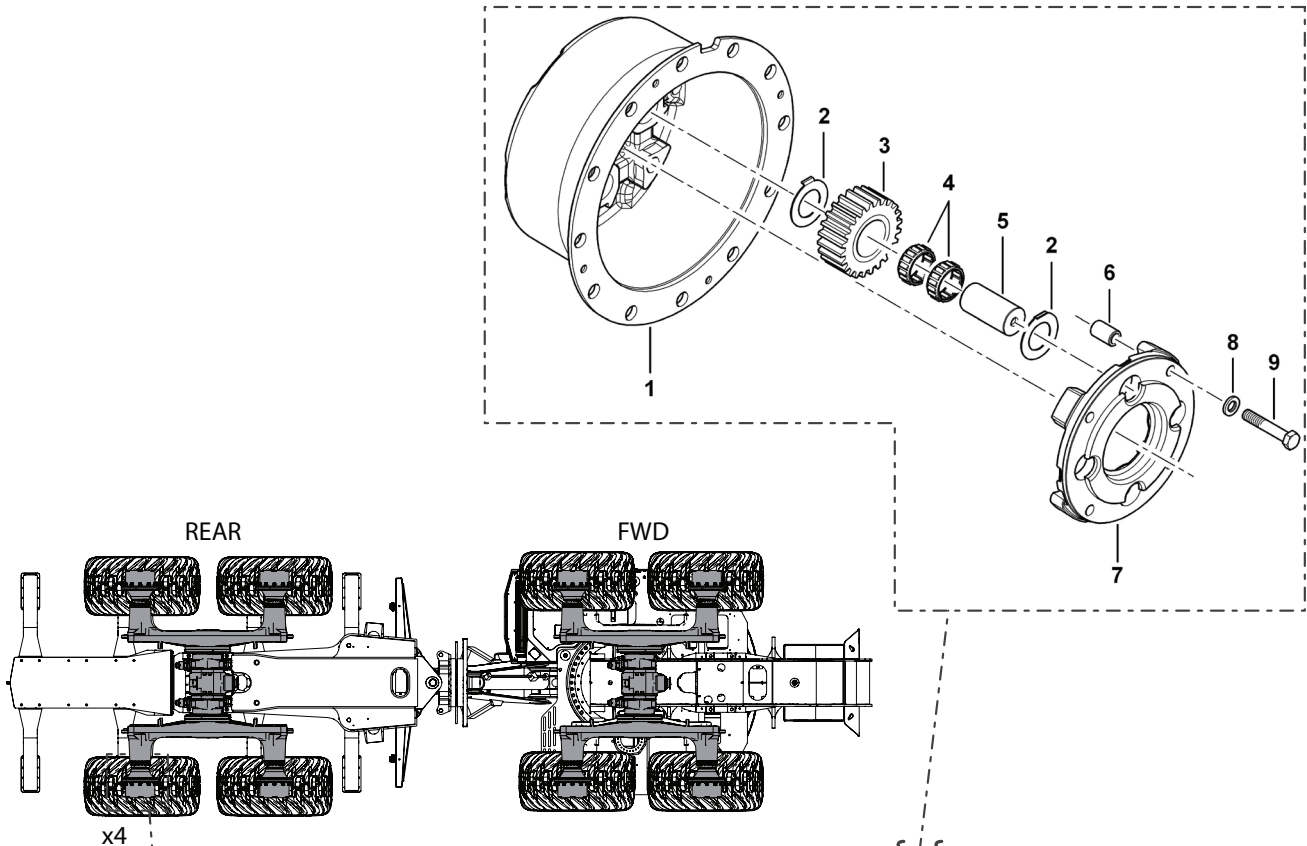
AXLES, GEARBOXES, AND WHEELS

PLANETARY AND WHEEL END SIDE ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
40	2405.159	2	Bogie housing complete	
1	1010.233	24	Hexagon bolt	
2	7316.048	24	Washer	
3	7302.011	6	Cover	
4	7319.161	6	Gasket	
5	7321.131	6	Pin	
6	9804.532	4	Spur gear	
7	9804.589	2	Spur gear	
8	1130.057	12	Cylindrical roller bearing	
9	1220.702	6	Seeger circlip ring	
10	7311.089	6	Spacer bushing	
11	1020.113	2	Allen screw	
12	1010.234	8	Hexagon bolt	
13	7321.120	1	Bearing pin	
14	1200.309	1	Grooved dowel pin	
15	1180.841	1	Shaft seal	
16	1040.103	1	Screw plug	
17	1180.507	1	Seal ring	
18	1020.618	4	Allen screw	
19	7316.044	4	Washer	
20	7277.148	1	Bogie housing	
21	1120.107	4	Deep groove ball bearing	
22	9804.533	2	Spur gear	
23	1210.110	2	Seeger support washer	
24	1220.714	2	Seeger circlip ring	
25	7308.051	2	Seal ring	
26	7302.082	2	Cover	
27	1220.837	2	Seeger circlip ring	
28	1020.618	20	Allen screw	
29	7308.040	1	Seal ring	
30	1200.206	2	Dowel pin	
31	1180.507	4	Seal ring	
32	1040.103	4	Screw plug	
33	1180.507	2	Seal ring	
34	7323.013	2	Screw plug	
35	7343.030	2	Tube	
36	7315.106	2	Washer	
37	1160.275	2	Oil seal	
38	1200.286	4	Dowel pin	
39	1030.614	32	Stud	

AXLES, GEARBOXES, AND WHEELS

PLANETARY AND WHEEL END ASSEMBLY AND INSTALLATION



AXLES, GEARBOXES, AND WHEELS

PLANETARY AND WHEEL END SIDE ASSEMBLY AND INSTALLATION

PLANETARY ASSEMBLY

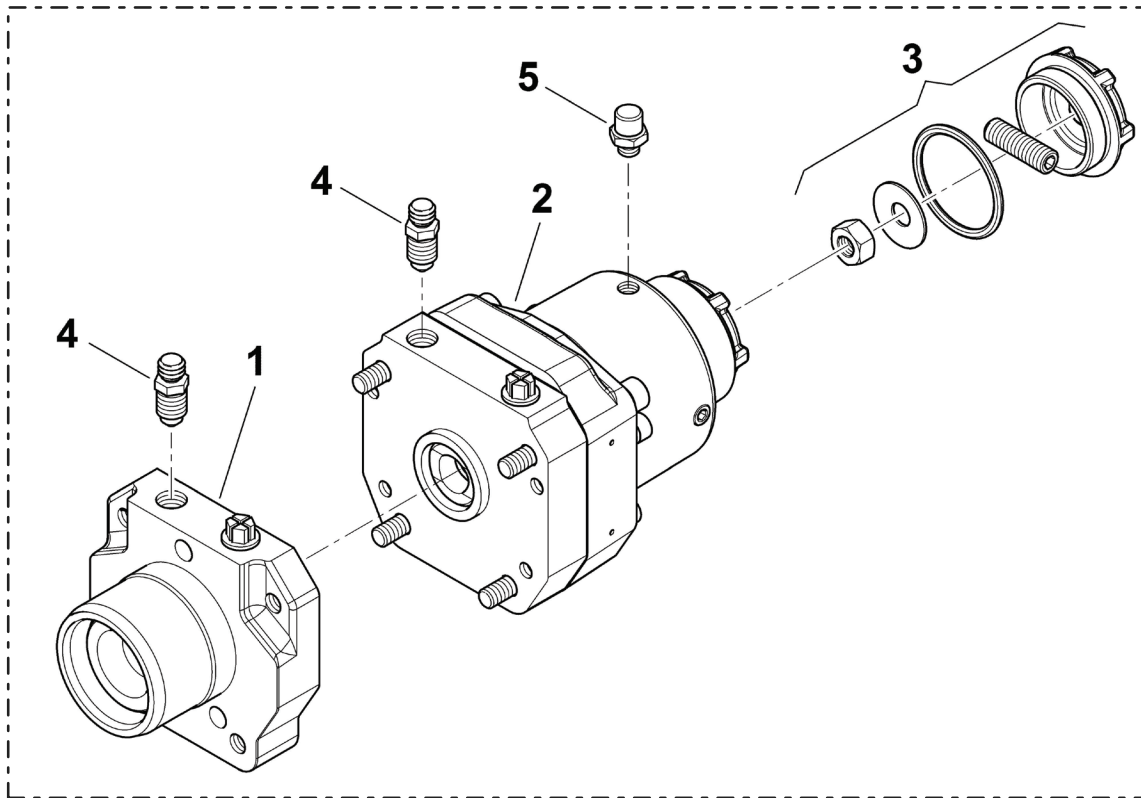
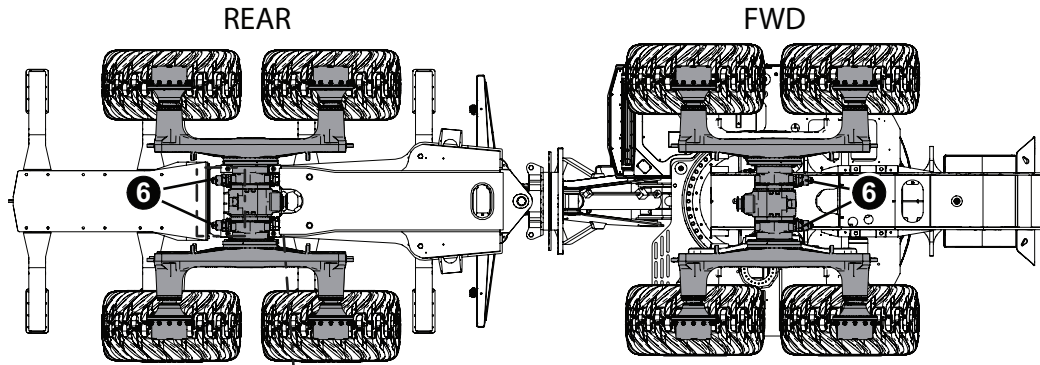
REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	2218.014	1	Planetary gear drive	
1	7821.271	1	Planet carrier	
2	9633.010	8	Thrust washer	
3	7806.060	4	Planet gear	
4	7305.071	4	Two-row roller bearing	
5	7807.056	4	Planetary pin	
6	7313.018	4	Shear pin	
7	7821.179	1	Planet carrier	
8	7316.045	4	Washer	
9	1010.536	4	Hexagon bolt	

WHEEL END ASSEMBLY

REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	2402.255	4	Wheel end complete	
1	9556.021	2	Screw plug	
2	1180.502	2	Seal ring	
3	7323.016	1	Screw plug	
4	2108.017	1	Adjusting kit	
4	1210.113	1	Seeger support washer	
4	1210.295	2	Seeger adjusting washer	
4	1210.296	1	Seeger adjusting washer	
5	1060.408	12	Wheel nut with rotating washer	
6	2218.038	1	Planetary gear drive cpl.	
7	7818.153	1	Sun gear shaft	
8	7329.073	1	Nut	
9	7317.047	1	□ Adjusting kit	
9	7317.199	na	Adjusting washer D86xD105.5x2.500	
9	7317.200	na	Adjusting washer D86xD105.5x2.375	
9	7317.201	na	Adjusting washer D86xD105.5x2.250	
9	7317.202	na	Adjusting washer D86xD105.5x2.125	
9	7317.203	na	Adjusting washer D86xD105.5x2.000	
9	7317.204	na	Adjusting washer D86xD105.5x1.875	
9	7317.205	na	Adjusting washer D86xD105.5x1.750	
9	7317.206	na	Adjusting washer D86xD105.5x1.625	
9	7317.207	na	Adjusting washer D86xD105.5x1.500	
9	7317.208	na	Adjusting washer D86xD105.5x1.375	
10	7801.065	1	Ring gear	
11	7804.058	1	Ring gear carrier	
12	1220.913	1	Seeger snap ring	
13	1170.755	1	O-Ring	
14	1110.221	1	Tapered-roller bearing	
15	7828.164	1	Wheel hub	
16	7133.032	12	Wheel bolt	
17	1020.345	4	Allen screw	
18	1110.222	1	Tapered-roller bearing	
19	1180.325	1	Face seal	
20	7306.032	1	Spindle ring	
21	1170.547	1	O-Ring	
22	7814.233	1	Spindle	
23	1060.010	16	Hexagon nut	
24	7316.050	16	Washer	
25	1170.553	1	O-Ring	
26	1160.244	1	Oil seal	
27	7315.107	1	Washer	

AXLES, GEARBOXES, AND WHEELS

BRAKE CYLINDER ASSEMBLY AND INSTALLATION

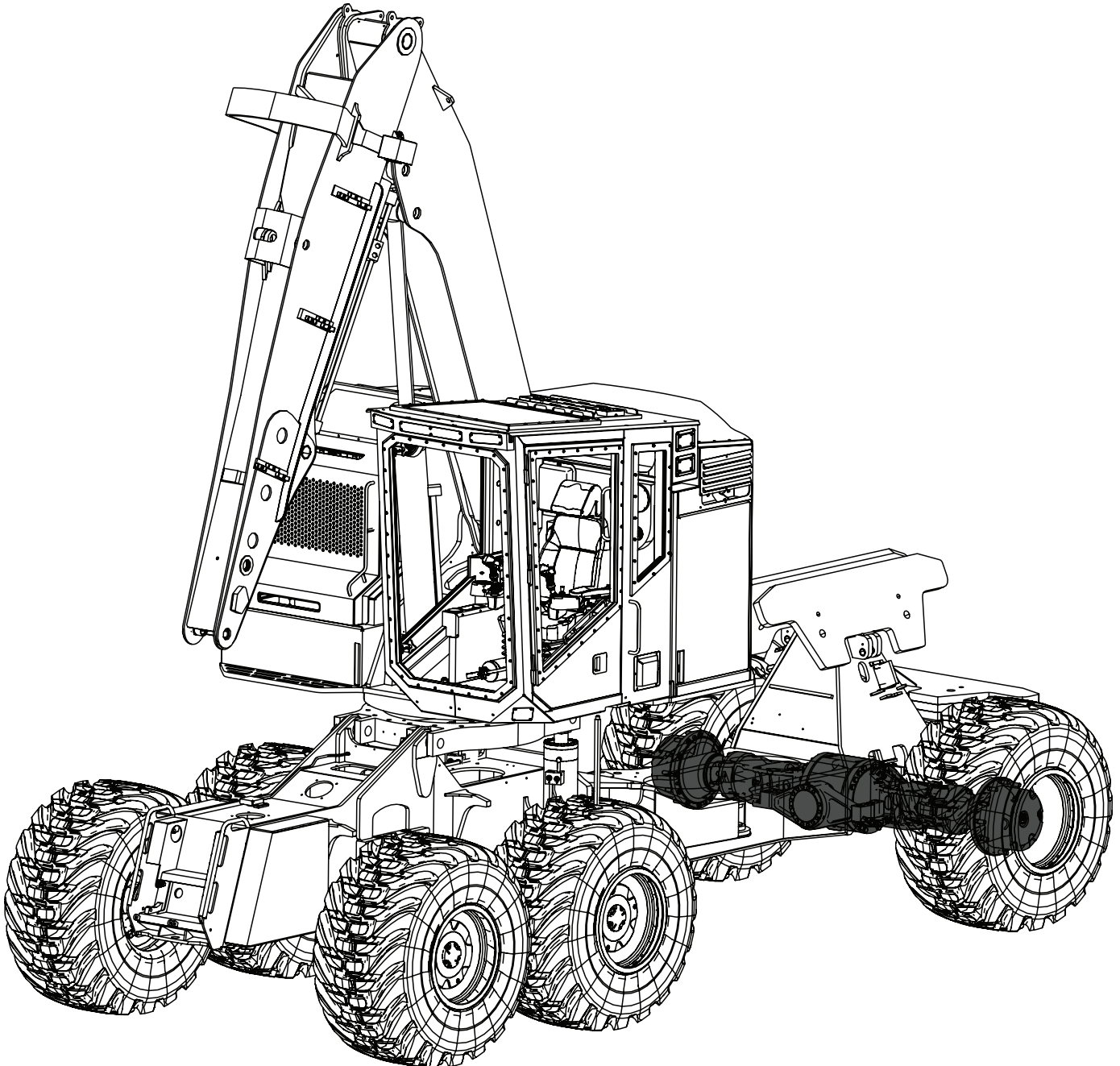


REF	PART #	QTY	DESCRIPTION	SEE PAGE
6	5350.090	1	Spring loaded cylinder Assembly	
1	5350.097	1	Brake cylinder	
2	5350.100	1	Spring loaded	
3	2208.004	1	Emergency kit	
4	1250.598	2	Breather valve	
5	1250.002	1	Breather	
-	53969-AX		Seal Kit Brake Cylinder	

AXLES, GEARBOXES, AND WHEELS

REAR AXLE ASSEMBLY AND INSTALLATION

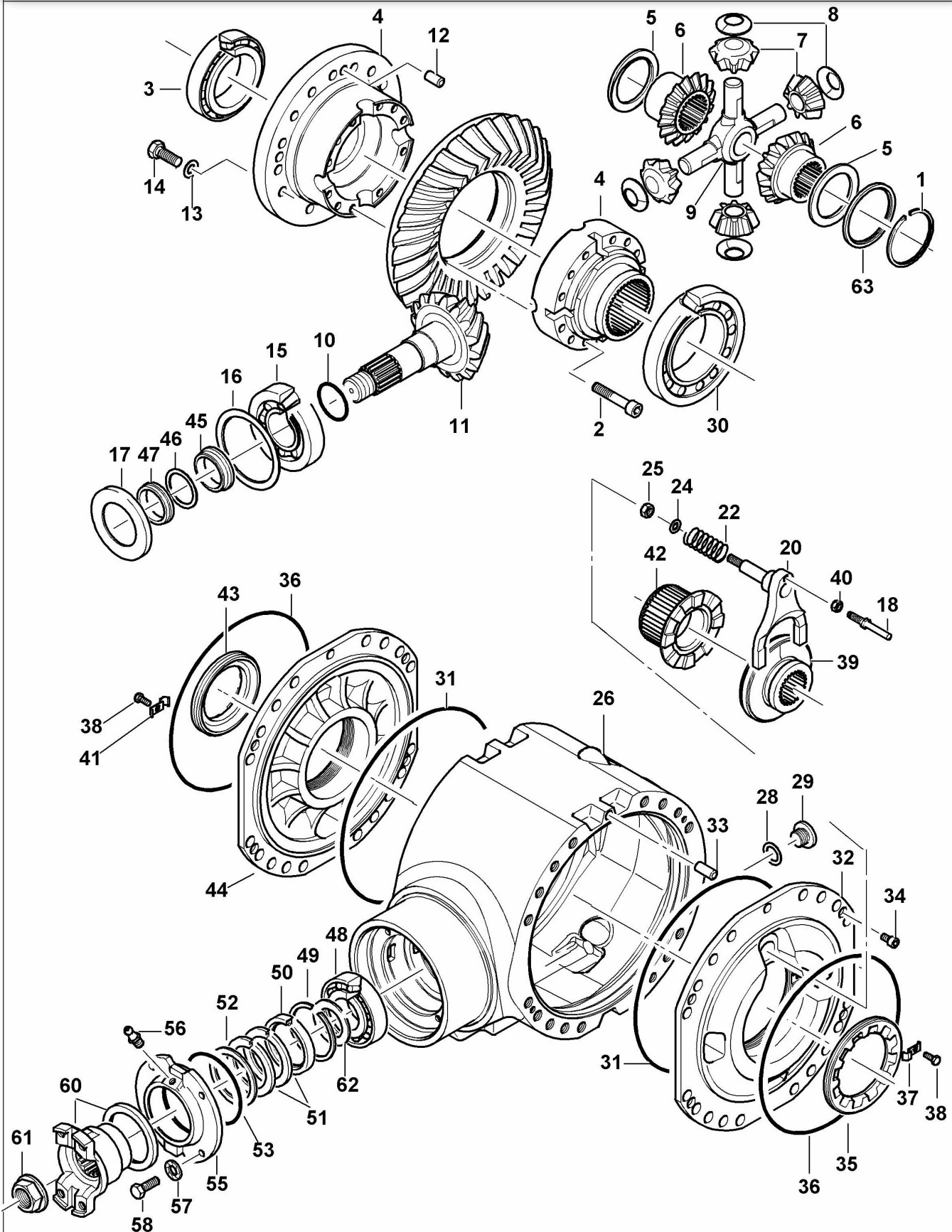
SECTION AX-3



TIM 14 (630) REAR BOGI AXLE GEARBOXES

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



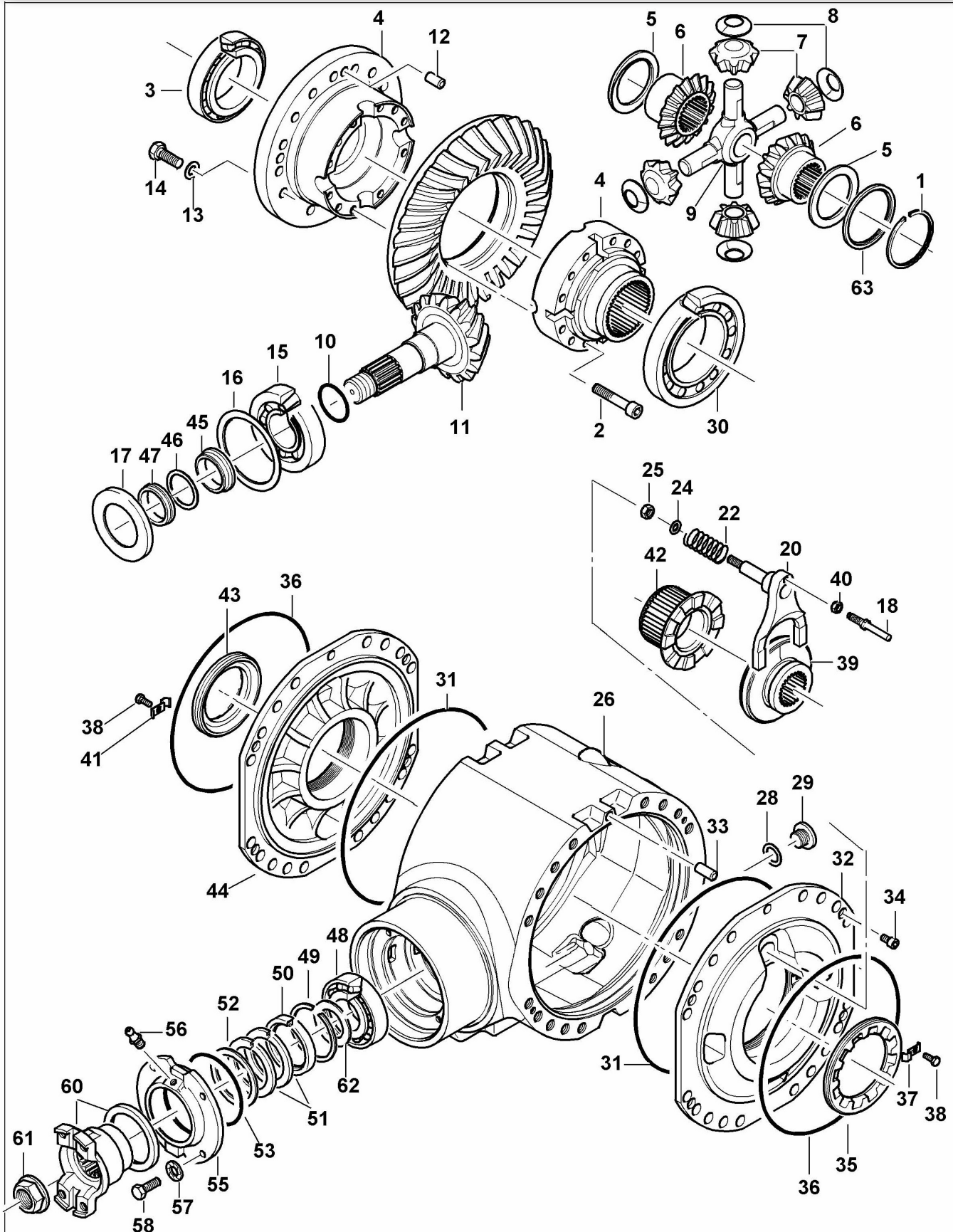
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
	25015-AX		TIM 14 AXLE - COMPLETE	
1	1220.936	1	Spring ring	
2	1020.374	12	Allen screw	
3	1110.111	1	Tapered-roller bearing	
4	2102.157	1	Differential cage	
5	7517.014	2	Adjusting kit	
5	7517.028		Check disk s=2,8	
5	7517.029		Check disk s=3,0	
5	7517.030		Check disk s=3,2	
5	7517.031		Check disk s=2,0	
6	7517.032		Check disk s=2,2	
6	7513.053	2	Differential gear	
7	7514.031	4	Planetary gear	
8	7518.024	4	Thrust washer	
9	7515.029	1	Cross bolt	
10	1170.013	1	O-ring	
11	2101.335	1	Crown wheel / pinion	
12	1200.228	4	Straight pin	
13	7322.077	16	Screw	
14	7316.045	16	Washer	
15	1110.223	1	Tapered-roller bearing	
16	2108.047	1	Adjusting kit	
16	7317.247		Adjusting washer s=3,0	
16	7317.248		Adjusting washer s=2,75	
16	7317.249		Adjusting washer s=2,5	
17	7301.064	1	Cover	
18	9816.129	1	Shifting rod	
19				
20	9809.115	1	Shift fork	
21				
22	7331.016	1	Pressure spring	
23				
24	7316.047	1	Washer	
25	1060.009	1	Hex. nut	
26	7506.250	1	Differential housing	
27				
28	1180.541	1	O-ring	
29	1040.151	1	Screw plug	
30	1110.220	1	Tapered-roller bearing	
31	1170.735	4	O-ring	
32	7527.185	1	Flange	
33	1200.228	2	Straight pin	
34	1020.203	4	Allen screw	
35	7329.092	1	Nut	
36				
37	9566.010	2	Locking plate	
38	1010.129	2	Hexagon screw	
39	9813.144	1	Shifting sleeve	
40	1060.007	1	Hex. nut	
41	9566.019	1	Locking plate	
42	9813.142	1	Clutch-coupling sleeve	

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



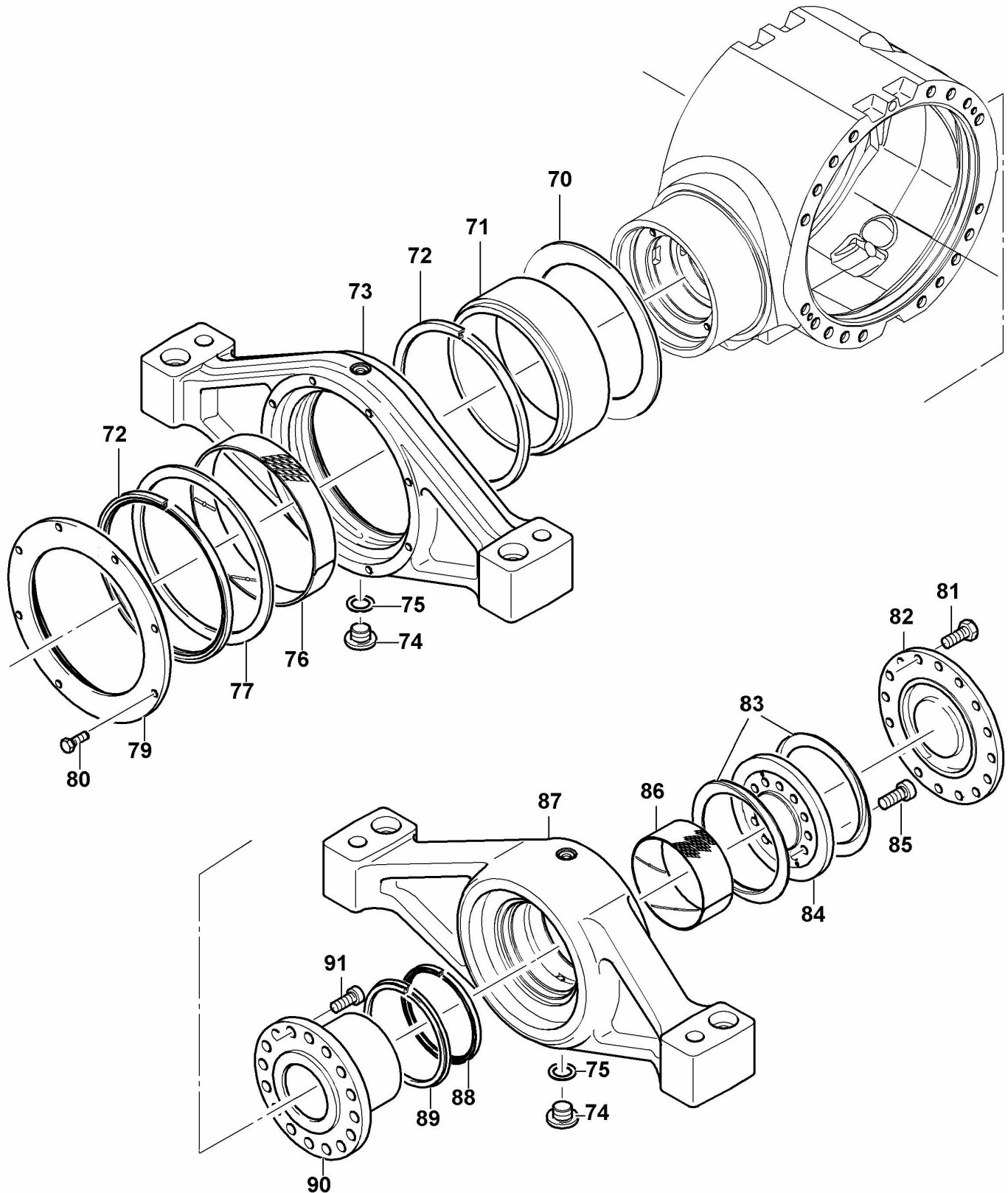
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
43	9310.072	1	Nut	
44	7527.184	1	Flange	
45	7311.116	1	Spacer bush	
46	2108.046	1	⊠ Adjusting kit	
46	7317.234		Adjusting washer s=0,96	
46	7317.235		Adjusting washer s=1,0	
46	7317.236		Adjusting washer s=1,04	
46	7317.237		Adjusting washer s=1,08	
46	7317.238		Adjusting washer s=1,12	
46	7317.239		Adjusting washer s=1,16	
46	7317.240		Adjusting washer s=1,20	
46	7317.241		Adjusting washer s=1,24	
46	7317.242		Adjusting washer s=1,28	
46	7317.243		Adjusting washer s=1,32	
46	7317.244		Adjusting washer s=1,36	
46	7317.245		Adjusting washer s=1,40	
46	7317.246		Adjusting washer s=1,44	
47	2108.045	1	⊠ Adjusting kit	
47	7311.117		Spacer bush s=11,51	
47	7311.118		Spacer bush s=11,99	
47	7311.119		Spacer bush s=12,47	
48	1110.229	1	Tapered-roller bearing	
49	1220.932	1	Spring ring	
50	7308.054	1	Radial seal	
51	7308.055	2	Seal ring	
52	7315.110	1	Washer	
52a	1180.125	1	V - ring	
53	1170.534	1	O-ring	
54				
55	7301.124	1	Cover	
56	1250.103	1	Taper grease nipple	
57	1190.011	4	Locking clip	
58	1010.201	4	Hexagon screw	
59				
60	23997-AX	1	YOKE, companion flange	
61	7329.057	1	Nut	
62	7315.181	1	Washer	
63	7311.159	1	Spacer bush	

AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION



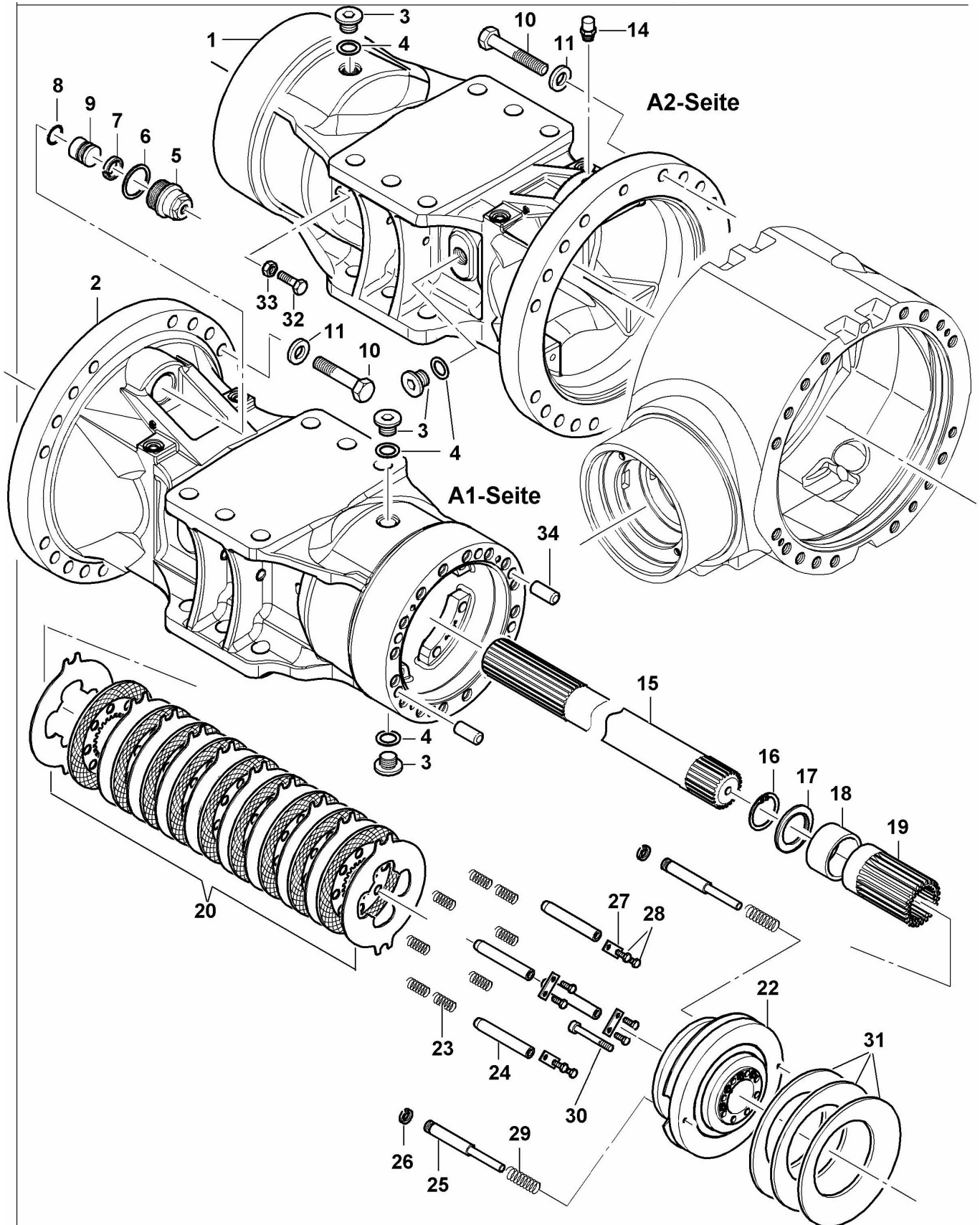
AXLES, GEARBOXES, AND WHEELS

REAR DIFFERENTIAL ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
70	7316.153	1	Washer	
71	7307.135	1	Ring	
72	7308.036	2	Oil seal	
73	7533.011	1	Axle balancer	
74	1040.115	2	Screw plug	
75	1180.505	2	Seal ring	
76	7312.101	1	Boxtrees	
77	7316.154	1	Washer	
78				
79	7315.219	1	Washer	
80	1010.201	8	Hexagon screw	
81	7322.088	16	Screw	
82	7302.051	1	Cover	
83	7316.114	2	Check disk	
84	7302.050	1	Cover	
85	1020.372	12	Allen screw	
86	7312.102	1	Boxtrees	
87	7533.012	1	Axle balancer	
88	1180.881	1	Oil seal	
89	1180.126	1	V-ring	
90	7321.102	1	Bearing stud	
91	1020.506	16	Allen screw	

AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING ASSEMBLY AND INSTALLATION



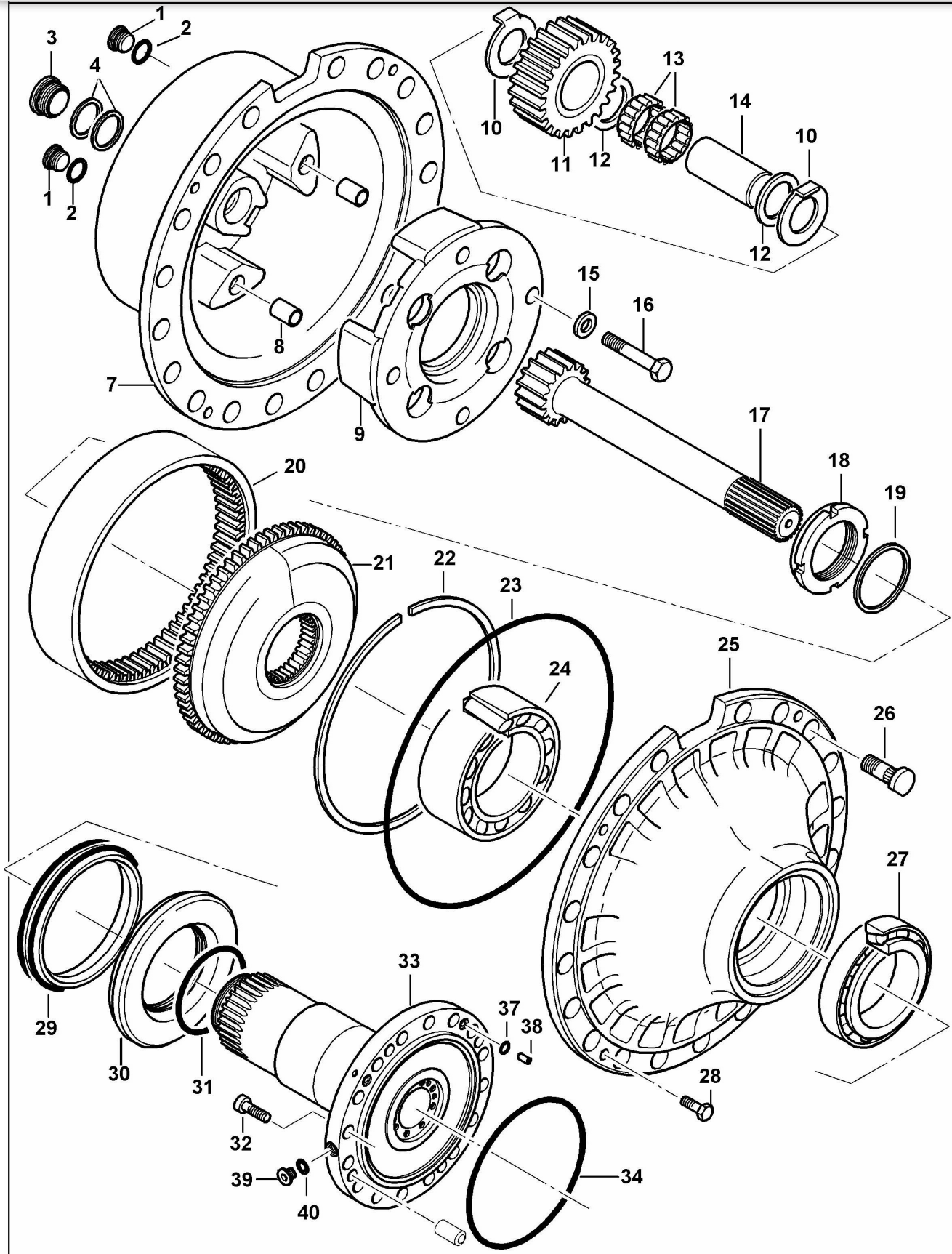
AXLES, GEARBOXES, AND WHEELS

AXLE HOUSING ASSEMBLY AND INSTALLATION

1	7271.197	1	Axle housing
2			
3	1040.151	3	Screw plug
4	1180.541	3	Seal ring
5			
6			
7			
8			
9			
10	7322.122	8	Hexagon screw
11	7316.044	18	Washer
12			
13			
14	9566.030	1	Breather
15	7220.131	1	Drive shaft
16	1220.626	1	Seeger-ring
17	7316.111	1	Check disk
17a	7321.205	2	Pin
18	7312.038	1	Bush
19	9867.099	1	Disk support
20	2109.008	1	Multi-plate package
20	7344.037	10	Driven disk
20	7345.038	9	Drive disk th. = 5,0
20	7345.059	9	Drive disk th. = 5,3
21			
22	5360.037	1	Ring piston bracke cylinder
23	7331.036	8	Pressure spring
24	7320.034	4	Stud
25	7320.033	2	Stud
26	1180.827	2	Shaft seal
27	7315.116	4	Washer
28	1010.010	8	Hexagon screw
29	7331.055	2	Pressure spring
30	1020.154	8	Allen screw
31	7331.030	3	Disk spring
32	1010.304	2	Hexagon screw
33	1060.132	2	Hex nut
34	1200.228	2	Straight pin

AXLES, GEARBOXES, AND WHEELS

PLANETARY ASSEMBLY AND INSTALLATION (CONTINUED)



AXLES, GEARBOXES, AND WHEELS

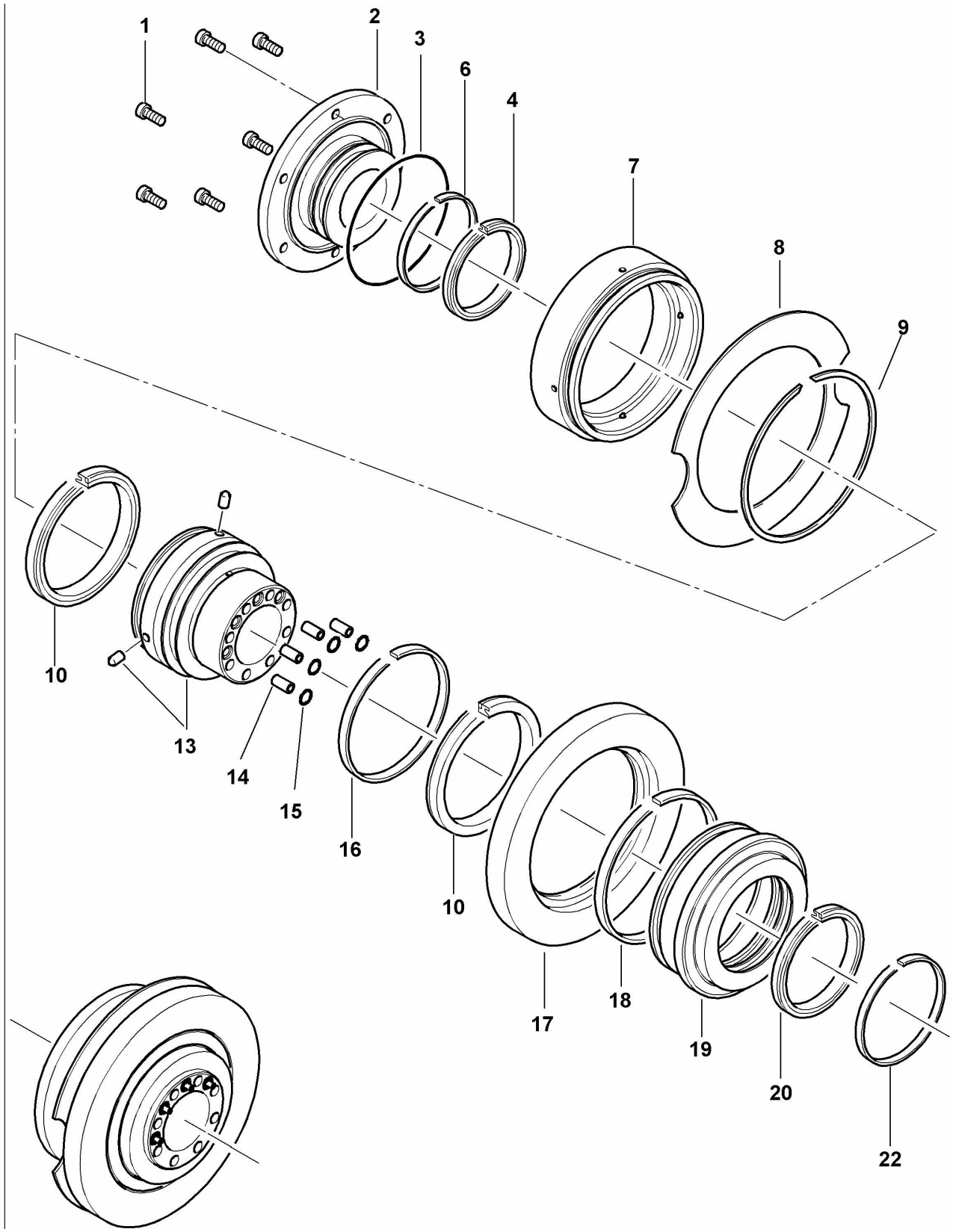
PLANETARY ASSEMBLY AND INSTALLATION (CONTINUED)

1

9556.011	3	Screw plug
2 1180.502	3	Seal ring
3 7323.016	2	Screw plug
4 2108.017	2	Adjusting kit
4 1210.110		Supporting washer
4 1210.218		Seeger washer
5		
6		
7 7821.257	2	Planetary cage
8 7313.018	8	Shear bushing
9 7821.179	2	Planetary cage
10 9633.010	16	Check disk
11 7806.060	8	Planetary gear
12 1210.101	16	Supporting washer
13 1130.280	16	Needle roller cages
14 7807.056	8	Planetary stud
15 7316.045	8	Washer
16 1010.536	2	Hexagon screw
17 7818.083	2	Sun gear shaft
18 7329.073	2	Nut
19 7317.047		⊠ Adjusting kit
19 7317.208		Adjusting washer s=1,375
19 7317.207		Adjusting washer s=1,5
19 7317.206		Adjusting washer s=1,625
19 7317.205		Adjusting washer s=1,75
19 7317.204		Adjusting washer s=1,875
19 7317.203		Adjusting washer s=2.0
19 7317.202		Adjusting washer s=2,125
19 7317.201		Adjusting washer s=2,25
19 7317.200		Adjusting washer s=2,375
19 7317.199		Adjusting washer s=2,5
20 7801.042	2	Gear rim
21 7804.058	2	Ring gear carrier
22 1220.913	2	Spring ring
23 1170755	2	O-ring
24 1110.221	2	Tapered-roller bearing
25 7828.142	2	Wheel hub
26 7133.032	38	Wheel bolt
27 1110.222	2	Tapered-roller bearing
28 7322.088	8	Hexagon screw
29 1180.325	2	Slide ring sealing
30 7306.032	2	Axle stub ring
31 1170.547	2	O-ring
32 1020.625	32	Allen screw
33 7814.239	2	Stub axle
34 1170.725	2	O-ring
35		
36		
37 1170.104	4	O-ring
38 7312.082	4	Bush
39 1040.105	4	Screw plug
40 1180.503	4	Seal ring

AXLES, GEARBOXES, AND WHEELS

BRAKE CYLINDER ASSEMBLY AND INSTALLATION (CONTINUED)



AXLES, GEARBOXES, AND WHEELS

BRAKE CYLINDER ASSEMBLY AND INSTALLATION (CONTINUED)

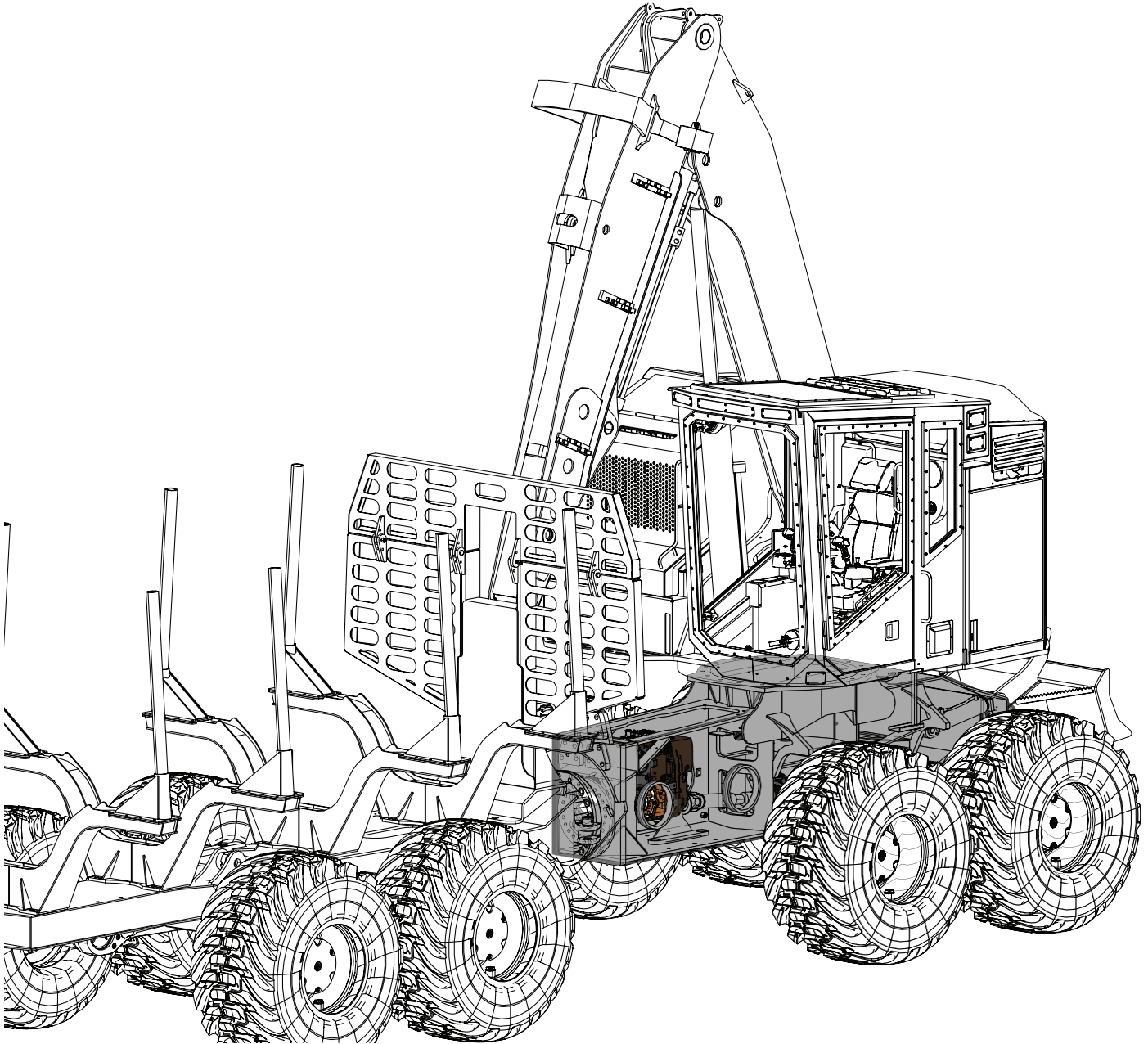
-	5360.037	1	☐	Complete Brake Cylinder
1	1020.155	6		Allen screw
2	5252.135	1		Piston
3	1170.607	1		O-ring
4	7308.088	1		Shaft seal
5				
6	7308.058	1		Piston guide ring
7	7307.124	1		Intermediate ring
8	7315.197	1		Washer
9	1220.901	1		Spring ring
10	7308.087	2		Shaft seal
11				
12				
13	2429.015	1		Cylinder compl.
14	7312.083	4		Bush
15	1170.103	4		O-ring
16	7308.059	1		Piston guide ring
17	7315.114	1		Washer
18	7308.057	1		Piston guide ring
19	5252.154	1		Piston
20	7308.089	1		Shaft seal
21				
22	1180.822	1		Driving band

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AXLES, GEARBOXES, AND WHEELS

DUAL MOTOR AXLE GEARBOX ASSEMBLY AND INSTALLATION

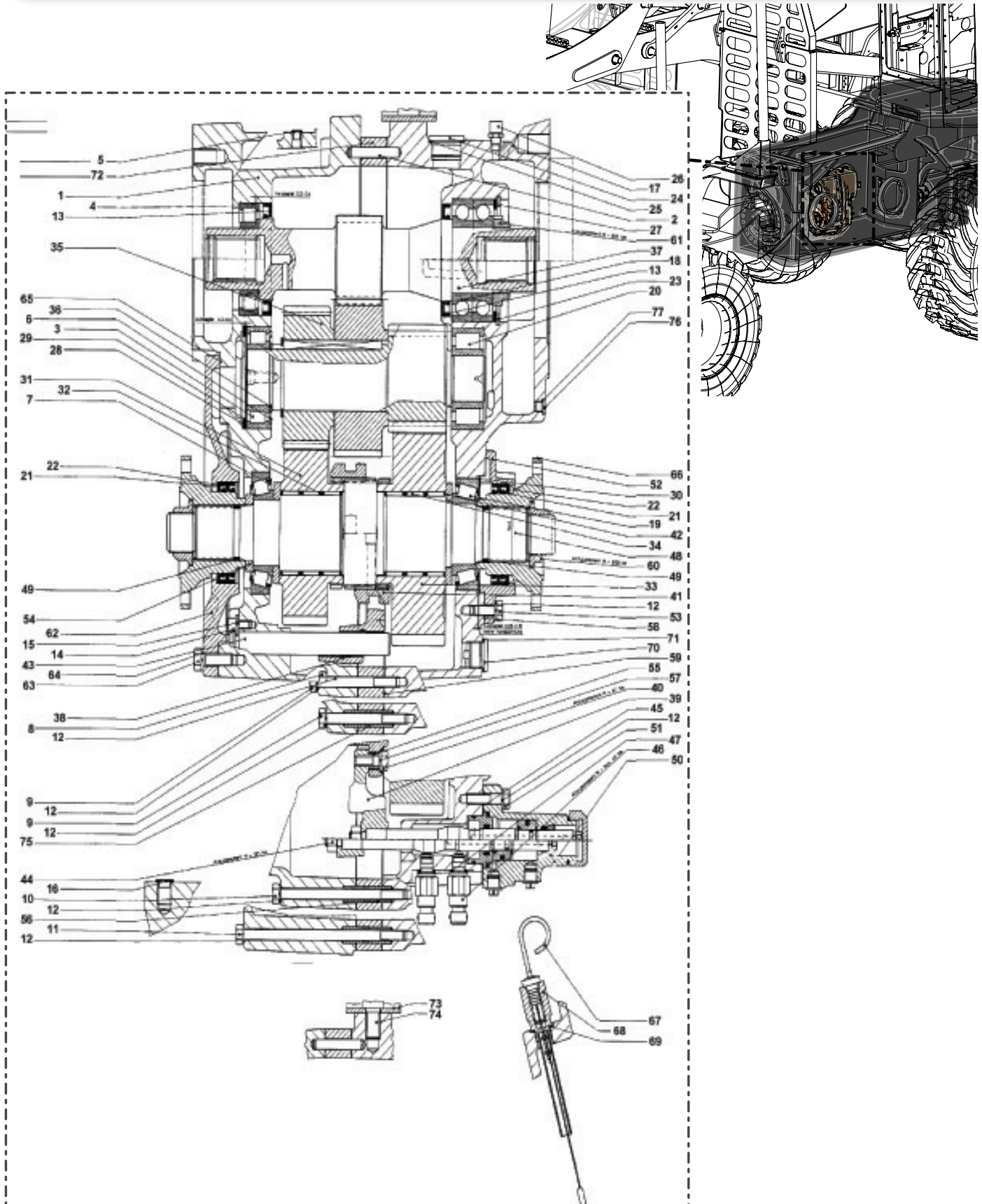
SECTION AX-4



TIM 15 (830/840) DUAL MOTOR AXLE GEARBOXES

AXLES, GEARBOXES, AND WHEELS

TIM 15 DUAL MOTOR GEARBOX



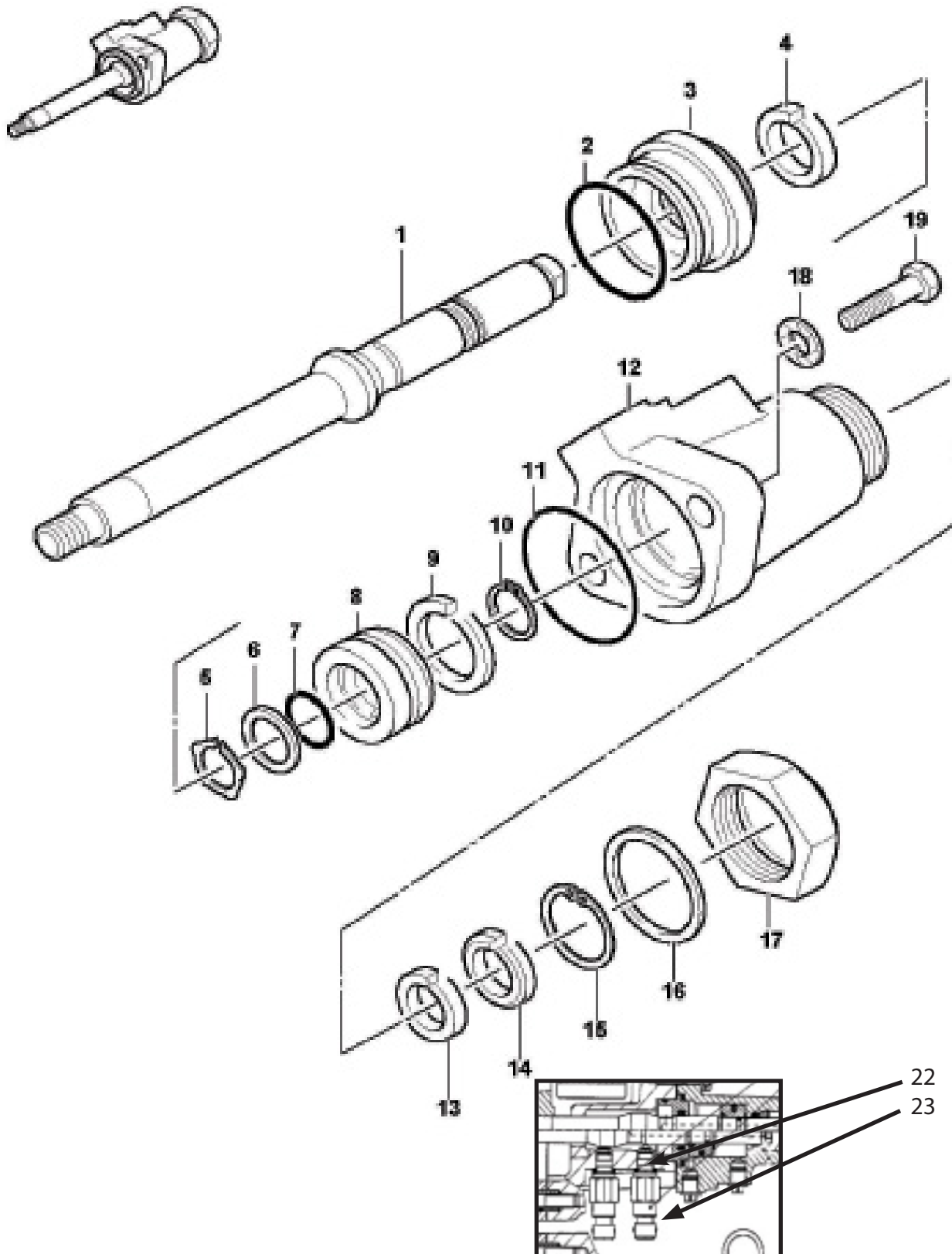
AXLES, GEARBOXES, AND WHEELS

TIM 15 DUAL MOTOR GEARBOX

-	50371-AX		GEARBOX, DUAL	51	1010.242	2	Hexagon screw
			MOTOR-2SP - NAF	52	7301.029	1	Cover
				53	1010.201	6	Hexagon screw
1	9801.517	1	Housing	54	7311.163	1	
2	1200.602	2	Straight pin	55	7311.111	1	Spacer bushing
3	1130.049	1	Cylinder roller bearing	56	7313.012	12	Shear bushing
4	1130.076	1	Cylinder roller bearing	57	7316.048	1	Washer
5	1250.620	1	Plug	58	7319.033	1	Gasket
6	1180.760	1	Nilos-ring	59	7319.129	2	Gasket
7	1110.119	1	Tapered roller bearing	60	7329.057	2	Nut
8	1510.212	6	Hexagon screw	61	7329.093	1	Nut
9	1510.213	4	Hexagon screw	62	7301.141	1	Cover
10	1010.225	1	Hexagon screw	63	1010.346	9	Hexagon screw
11	1510.215	2	Hexagon screw	64	1190.017	9	Locking clip
12	23722-AX	13	Locking clip	65	7319.030	1	Gasket
13	1160.220	2	Oil seal	66	52906-AX	2	Cardan flange
14	1020.113	1	Allen screw	67	7325.046	1	Dipstick
15	7316.057	2	Washer	68	7343.027	1	Tube
16	1250.626	8	Plug	69	1180.508	1	Seal ring
17	9801.434	1	Housing	70	7323.025	1	Screw plug
18	1130.579	2	Tapered-roller bearing	71	1180.541	1	Seal ring
19	1110.014	1	Tapered-roller bearing	72	9801.389	1	
20	1130.058	1	Cylinder roller bearing	73	7412.016	1	
21	1160.121	2	Oil seal	74	1020.522	1	
22	1160.217	2	Oil seal	75	7312.084	6	
23	1220.802	1	Seeger-ring	76	1040.115	1	
24	1040.180	1	Screw plug	77	1180.505	1	
25	1180.518	1	Seal ring				
26	1250.001	1	Breather	--	7340.018	1	Type plate
27	1210.125	1	Supporting washer	--	1200.110	2	Pin
28	1210.119	1	Supporting washer				
29	2108.013	1	Adjusting kit				
30	2108.021	1	Adjusting kit				
31	9804.520	1	Gear				
32	1130.272	2	Needle roller cages				
33	9804.522	1	Gear				
34	1130.272	3	Needle roller cages				
35	2205.156	1	Gear block				
36	1210.121	1	Supporting washer				
37	9805.310	1	Drive pinion				
38	9809.110	1	Shifting lever complete				
39	9809.118	1	Shifting lever complete				
40	1010.219	1	Hexagon screw				
41	9813.149	1	Washer				
42	7315.060	2	Shifting sleeve				
43	9816.119	1	Washer				
44	1060.003	1	Shifting rod				
45	2108.049	1	Hex. nut				
46	54093-AX	2	SWITCH, NAF GEARBOX				
47	2108.003	2	Adjusting kit				
48	7222.080	1	Shaft				
49	1170.065	2	O-ring				
50	9880.098	1	Shift cylinder complete				

AXLES, GEARBOXES, AND WHEELS

TIM 15 DUAL MOTOR GEARBOX (CONTINUED)



AXLES, GEARBOXES, AND WHEELS

TIM 15 DUAL MOTOR GEARBOX (CONTINUED)

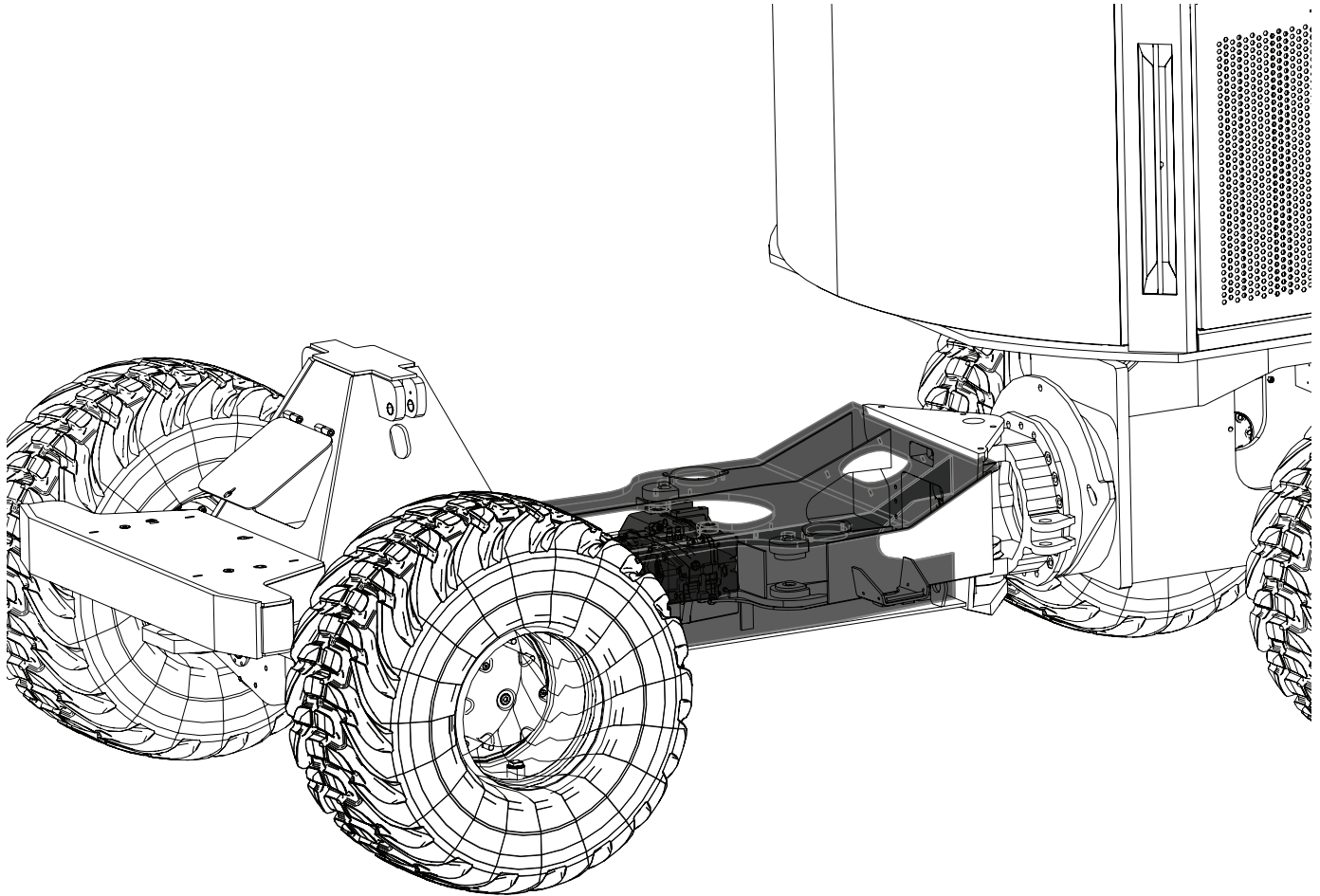
-	52907-AX	1	☐ Complete Shift Cylinder
1	9816137	1	Shifting rod
2	1170.005	1	O-ring
3	7307.097	1	Eccentric ring
4	50519-AX	1	Shaft seal
5	50127-AX	1	Seeger-k-ring
6	7315.090	1	Washer
7	1170.092	1	O-ring
8	5252.097	1	Piston
9	1180.767	1	Shaft seal
10	1220.053	1	Seeger-ring
11	1170.013	1	O-ring
12	5263.086	1	Cylinder
13	1180.643	1	Shaft seal
14	7307.080	1	Eccentric ring
15	50129-AX	1	Seeger-ring
16	50521-AX	1	Seal Ring
17	7302.003	1	Cover
18	1190.015	2	Locking Clip
19	1010.242	2	Bolt
20	1020.260	1	Allen Screw
21	2108.080	1	Shim kit
21	7311.168	1	Washer
21	7311.169	1	Washer
21	7311.170	1	Washer
22	2108.003	2	Adjusting kit
23	54093-AX	2	SWITCH, NAF GEARBOX

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AXLES, GEARBOXES, AND WHEELS

SINGLE MOTOR AXLE GEARBOX ASSEMBLY AND INSTALLATION

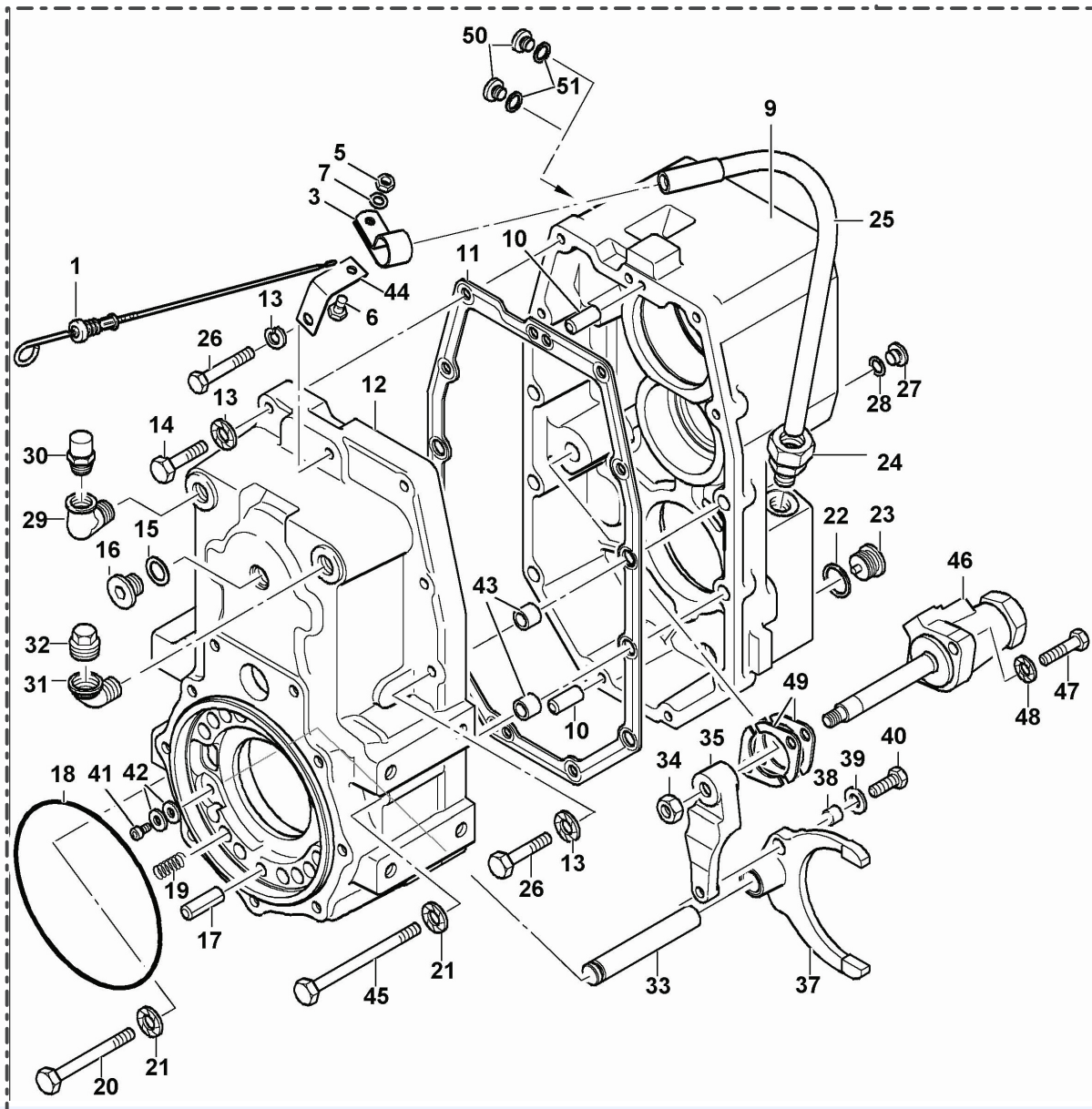
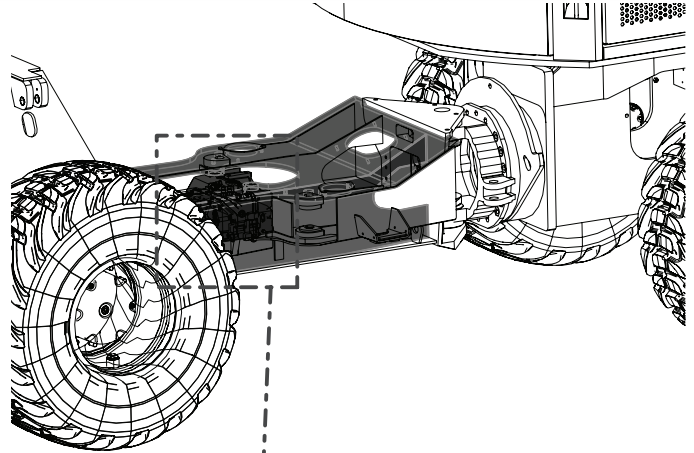
SECTION AX-5



TIM 16 (630) SINGLE MOTOR GEARBOXES

AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION



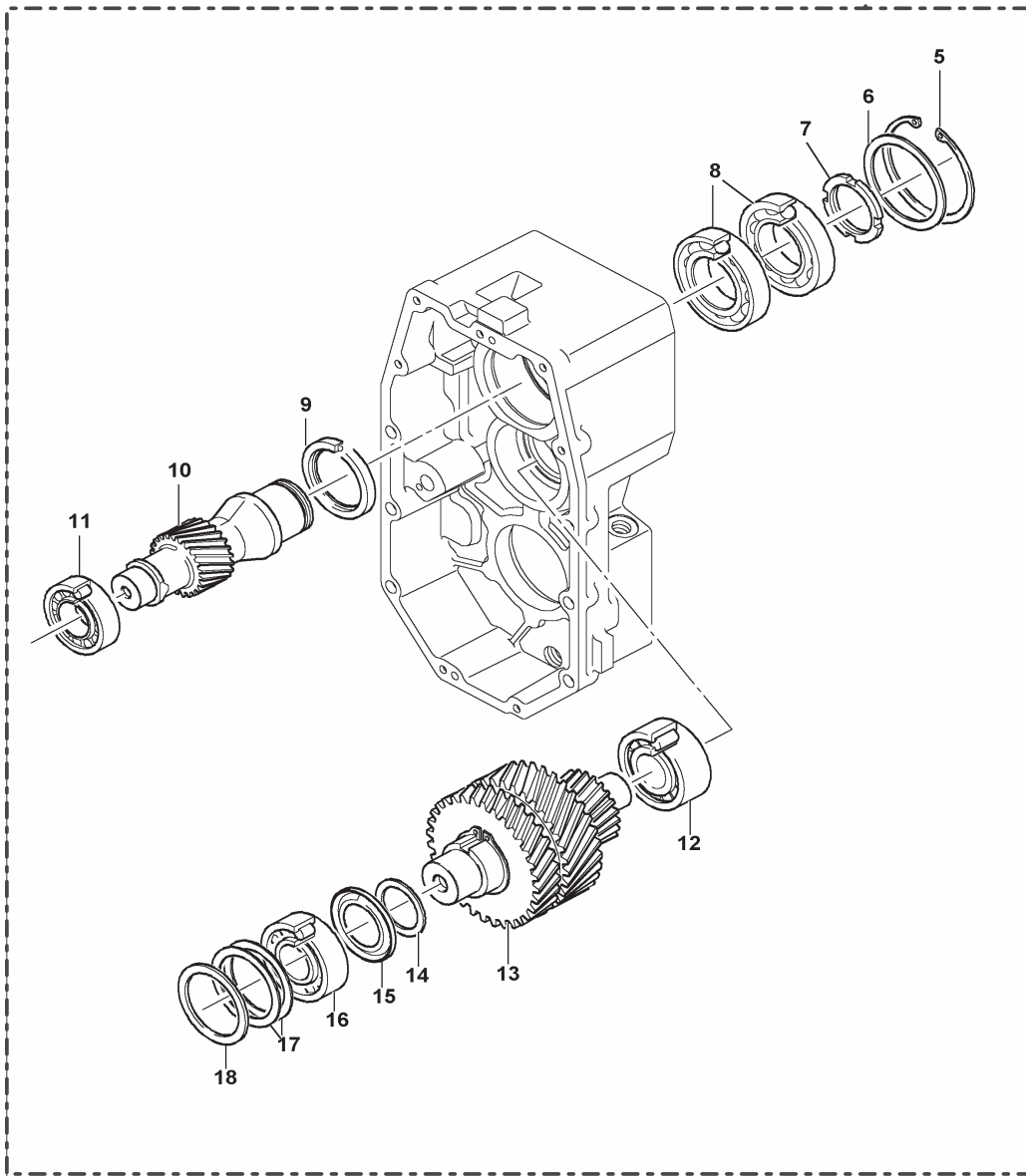
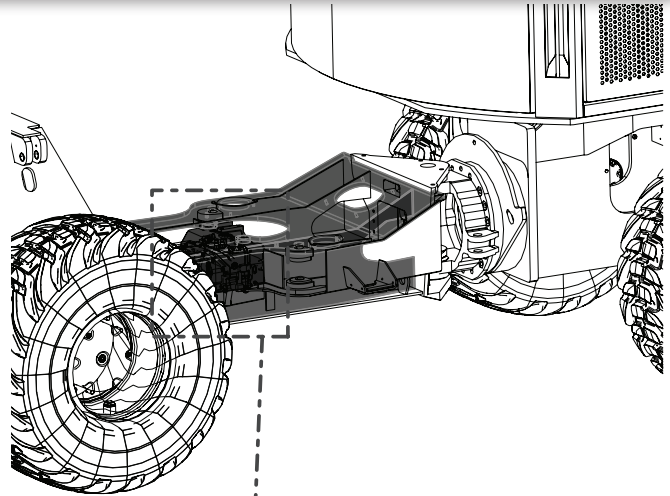
AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
---	50502-AX		TIM 16 GEARBOX COMPLETE	
1	7325.045	1	Dipstick L=620	
3	1750.793	1	Pipe saddle D22X20	
5	1060.014	1	Hex. nut M8, 10 934	
6	1010.101	1	Hexagon screw M8x20, 10.9 933	
7	1190.024	1	Locking clip VSK 8,	
9	9801.536	1	Housing	
10	1200.258	2	Straight pin 10m6x28,	
11	7319.129	1	Gasket 0.75	
12	9801.345	1	Housing	
13	1190.015	11	Locking clip VSK 10,	
14	1010.205	6	Hexagon screw M10x50, 10.9 931	
15	1180.525	1	Seal ring A21x26x1.5, CU 7603	
16	1040.125	1	Screw plug R 1/2 " 908	
17	1200.478	2	Adapter sleeve 14x45,	
18	1170.725	1	O-ring OR 210x4, 72NBR872	
19	7331.036	14	Pressure spring	
20	1010.252	3	Hexagon screw M10x110, 10.9 931	
21	1190.015	2	Locking clip VSK 10,	
22	1180.541	1	Seal ring A27x32x2, CU 7603	
23	7323.025	1	Screw plug R 3/4", 5.8 MIT MAGNET	
25	7341.112	1	Pipe compl	
26	1010.210	4	Hexagon screw M10x60, 10.9 931	
27	1040.115	1	Screw plug M10x1, 5.8 908	
28	1180.505	1	Seal ring A10x13.5x1, CU 7603	
29	1250.621	1	90 deg. Elbow IA 1/2"	
30	1250.015	1	Breather R 1/2 "	
31	1750.659	1	90 deg. Elbow IA 3/4"x1/2"	
32	1040.174	1	Screw plug 3/4" 5.8 909	
33	9816.065	1	Shifting rod	
34	1060.003	1	Hex. nut M14x1.5, 10 934	
35	9809.078	1	Shifting lever	
37	9809.107	1	Shifting lever compl	
38	7311.111	1	Spacer bush	
39	7316.048	1	Washer	
40	1010.219	1	Hexagon screw M8x30, 10.9 933	
41	1020.113	1	Allen screw M8x16, 8.8 VP n.TI-58 912	
42	7316.057	1	SCHEIBE	
43	7313.012	6	Holding plate Hexagon screw	
44	7148.044	1	Shift cylinder compl	
45	1010.226	2	Locking clip M10x150, 10.9 931	
46	9880.108	1	Adjusting kit Hub 27	
47	1010.242	2	Washer M10x40, 10.9 931	
48	1190.015	2	Screw plug VSK 10,	
49	2108.049	1	Seal ring s=1,0	
49	7315.169		SCHEIBE n.Bed.	
50	1040.105	1	Type plate	
51	1180.503	2	Pin	

AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION



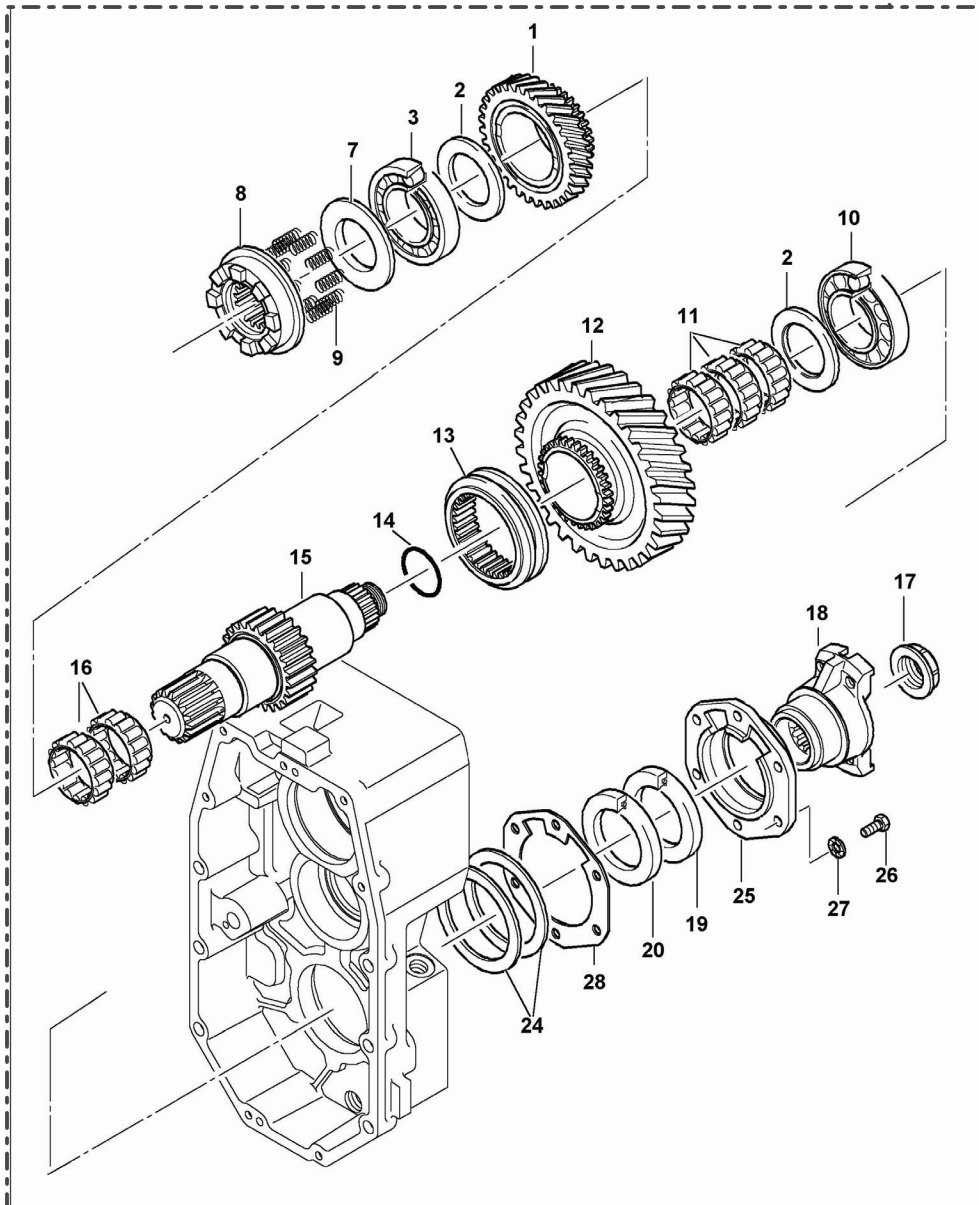
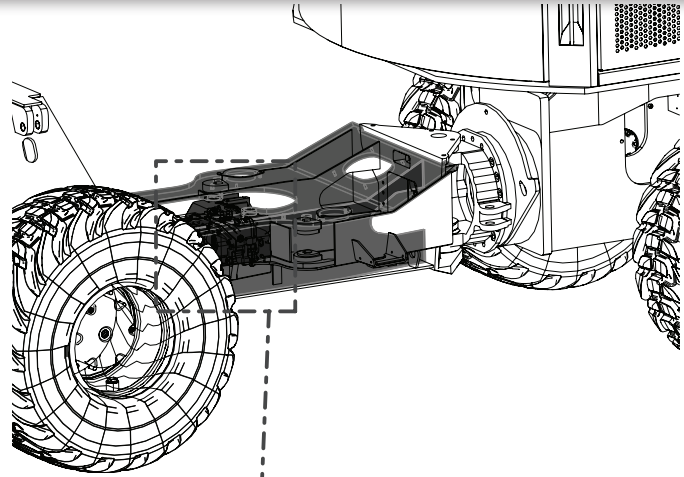
AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	---			
2	---			
3	---			
4	---			
5	1220.802	1	Seeger-ring 120x4 472	
6	1210.125	1	Supporting washer SS 100x120x3.5	
7	7329.093	1	Groove nut M65x1.5	
8	1130.579	2	Taper-rolling bearing 7213 BECB	
9	1160.220	1	Oil seal 80x110x10 BA	
10	9805.312	1	Drive pinion Z=18	
11	1130.045	1	Cylinder roller bearing NJ2209 EC/C3/J	
12	1130.058	1	Cylinder roller bearing NJK 2309 C3 NTN	
13	2205.132	1	Gear block Z=15/37/37	
14	1210.121	1	Supporting washer SS 55x68x3	
15	1180.760	1	Nilos-ring NUP2211AV	
16	1130.049	1	Cylinder roller bearing NJ 2211 EC3	
17	2108.013	1	Adjusting kit 1 s=1,0 / 0,5 / 0,3 / 3,5	
17	1210.229		Seeger washer PS 80x100x1.0	
17	1210.228		Seeger washer PS 80x100x0.5	
17	1210.267		Seeger washer PS 80x100x0.3	
18	1210.119	1	Supporting washer SS 80x100x3.5	

AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION



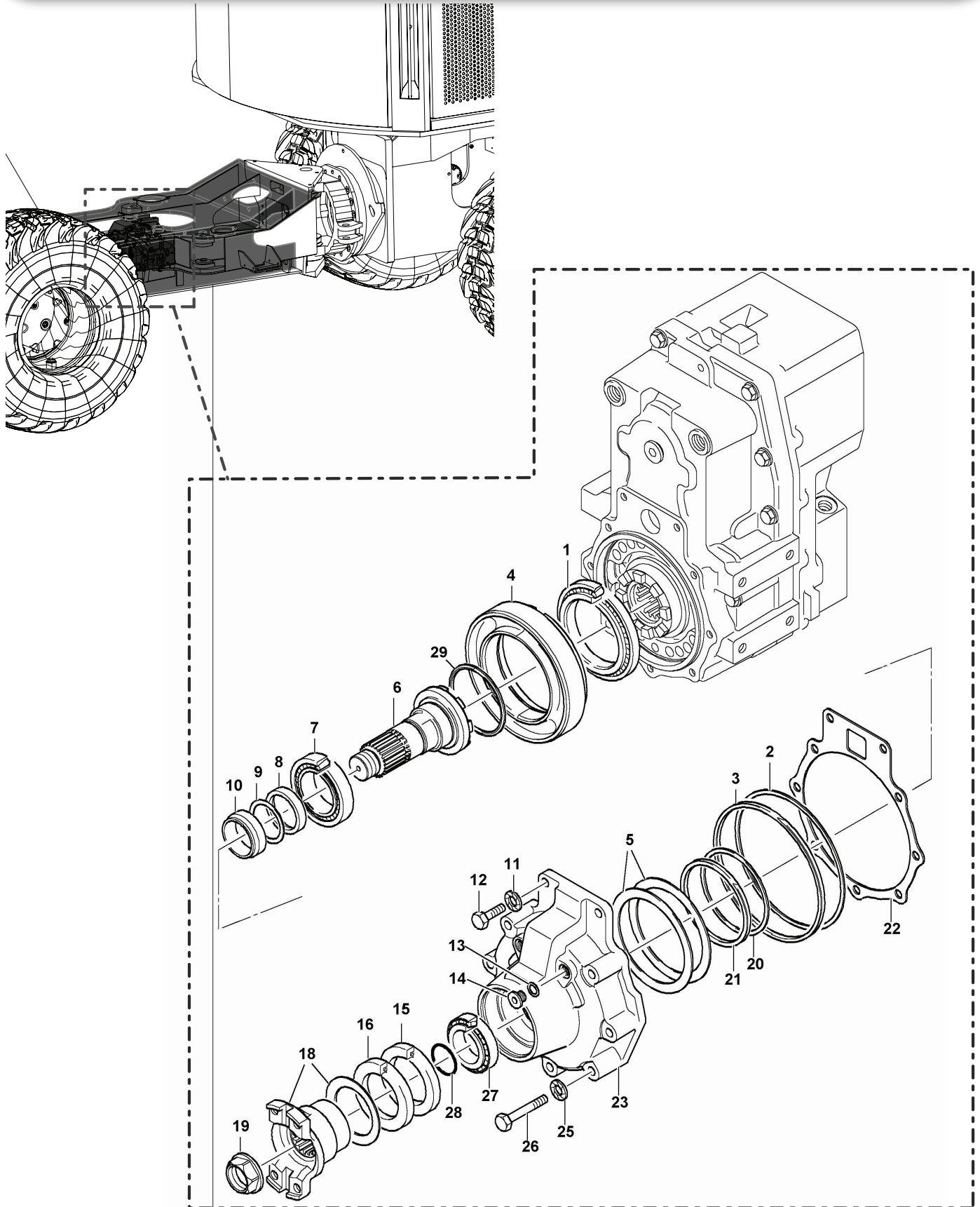
AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	9804.292	1	Gear Z=34	
2	7315.060	2	Washer	
3	1110.119	1	Tapered-roller bearing 30 213	
4	---			
5	---			
6	---			
7	7315.168	1	Washer	
8	9813.072	1	Shifting sleeve	
9	7331.036	10	Pressure spring	
10	1110.014	1	Tapered-roller bearing D60XD110X29.75	
11	1130.272	3	Needle roller cages K75X83X23 2S	
12	9804.440	1	Gear Z=43	
13	9813.135	1	Shifting sleeve	
14	1170.090	1	O-ring OR 45x4.5, 72NBR872	
15	7222.034	1	Shaft	
16	1130.272	2	Needle roller cages K75X83X23 2S	
17	7329.057	1	Nut M40x1.5	
18	7521.150	1	Cardan flange	
19	1160.217	1	Oil seal 80x100x10 BASL	
20	1160.121	1	Oil seal 80x100x10 BA	
21	---			
22	---			
23	---			
24	2108.021	1	Adjusting kit s=1,0 / 0,5 / 0,9 / 0,8 / 0,7/ 0,6	
24	1210.432		Seeger washer n.Bed. 95x115x1,0	
24	1210.433		Seeger washer n.Bed. 95x115x0,5	
24	7317.049		Adjusting washer n.Bed. 95x115x0,9	
24	7317.096		Adjusting washer n.Bed. 95x115x0,8	
24	7317.097		Adjusting washer n.Bed. 95x115x0,7	
24	7317.098		Adjusting washer n.Bed. 95x115x0,6	
25	7301.029	1	Cover	
26	1010.201	6	Hexagon screw M10x25, 10.9 933	
27	1190.015	6	Locking clip VSK 10, FEDERSTAHL DACROM	
28	7319.033	1	Gasket 0.5 stark, AFM31	

AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION



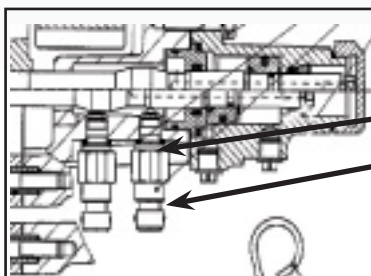
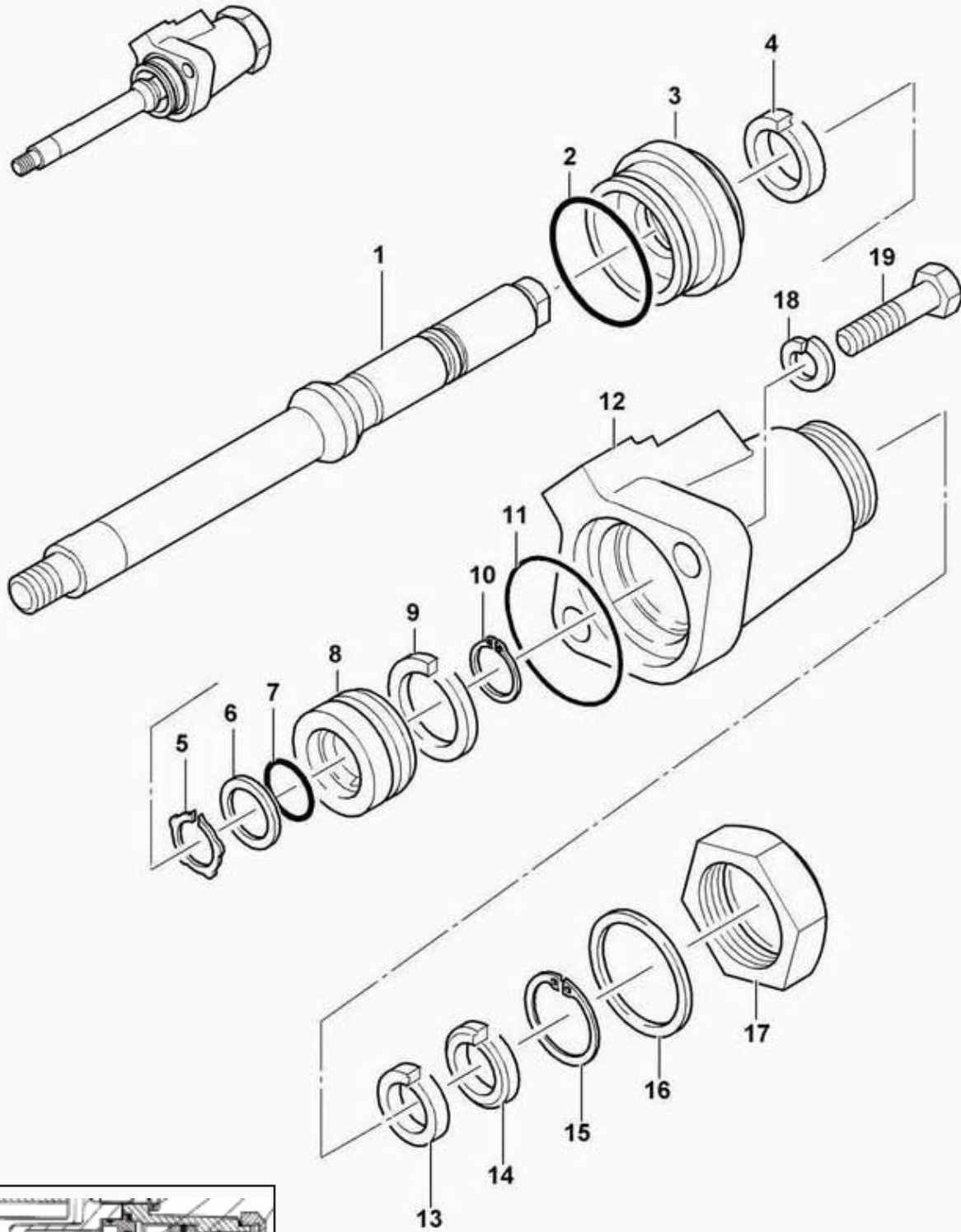
AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	1110.175	1	Tapered-roller bearing 37431A/37625, TIMKEN	
2	1180.765	1	Support washer SU 227x215x2.5P,	
3	1180.756	1	Quad-ring 4446-366Y	
4	5252.071	1	Piston	
5	2108.011	1	Adjusting kit s=1,0 / 0,5	
5	1210.426		Seeger washer n.B. 140x170x1,0	
5	1210.427		Seeger washer n.B. 140x170x0,5	
6	7222.020	1	Driven shaft	
7	1110.004	1	Tapered-roller bearing 32014X	
8	7315.050	1	Washer	
9	7317.050	2	Adjusting kit s=0,5/0,6/0,7/0,8/0,9/1,0/1,3/1,4/1,5/1,6/1,7	
9	7317.209		Adjusting washer n.Bed. s=0,5	
9	7317.210		Adjusting washer n.Bed. s=0,6	
9	7317.211		Adjusting washer n.Bed. s=0,7	
9	7317.212		Adjusting washer n.Bed. s=0,8	
9	7317.213		Adjusting washer n.Bed. s=0,9	
9	7317.214		Adjusting washer n.Bed. s=1,0	
9	7317.215		Adjusting washer n.Bed. s=1,3	
9	7317.216		Adjusting washer n.Bed. s=1,4	
9	7317.217		Adjusting washer n.Bed. s=1,5	
9	7317.218		Adjusting washer n.Bed. s=1,6	
9	7317.219		Adjusting washer n.Bed. s=1,7	
10	7311.079	1	Spacer bush	
11	1190.017	2	Locking clip VSK 12,	
12	1510.320	2	Hexagon screw M12x40, 10.9 933	
13	1180.503	1	Seal ring 14x18x1.5, CU 7603	
14	1040.105	1	Screw plug M14x1.5, 8.8 908	
15	1160.214	1	Oil seal 85x110x12 BA	
16	1160.215	1	Oil seal 85x110x12 BASL	
17	---			
18	2107.127	1	Drive shaft flange	
19	7329.057	1	Nut M40x1.5	
20	1180.766	1	Support washer SG 128x140x2.5P,	
21	1180.754	1	Quad-ring 4428-366Y, NBR	
22	7319.030	1	Gasket 0.5 stark, AFM31	
23	7504.045	1	Housing	
24	---			
25	1190.017	7	Locking clip VSK 12,	
26	1510.338	7	Hexagon screw M12x80, 10.9 931	
27	1110.071	1	Tapered-roller bearing 32011X	
28	1170.090	1	O-ring OR 45x4.5, 72NBR872	
29	1180.763	1	Scraper ring D105xD115x7x10, NBR	

AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX ASSEMBLY AND INSTALLATION



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AXLES, GEARBOXES, AND WHEELS

TIM16 SINGLE MOTOR GEARBOX SHIFT CYLINDER ASSEMBLY AND INSTALLATION

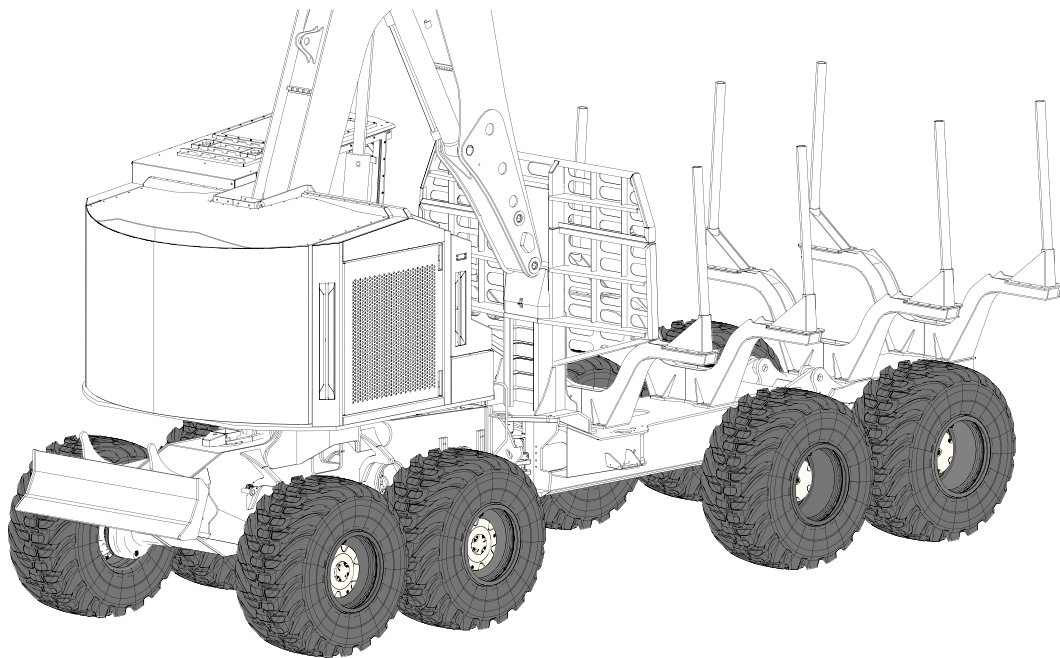
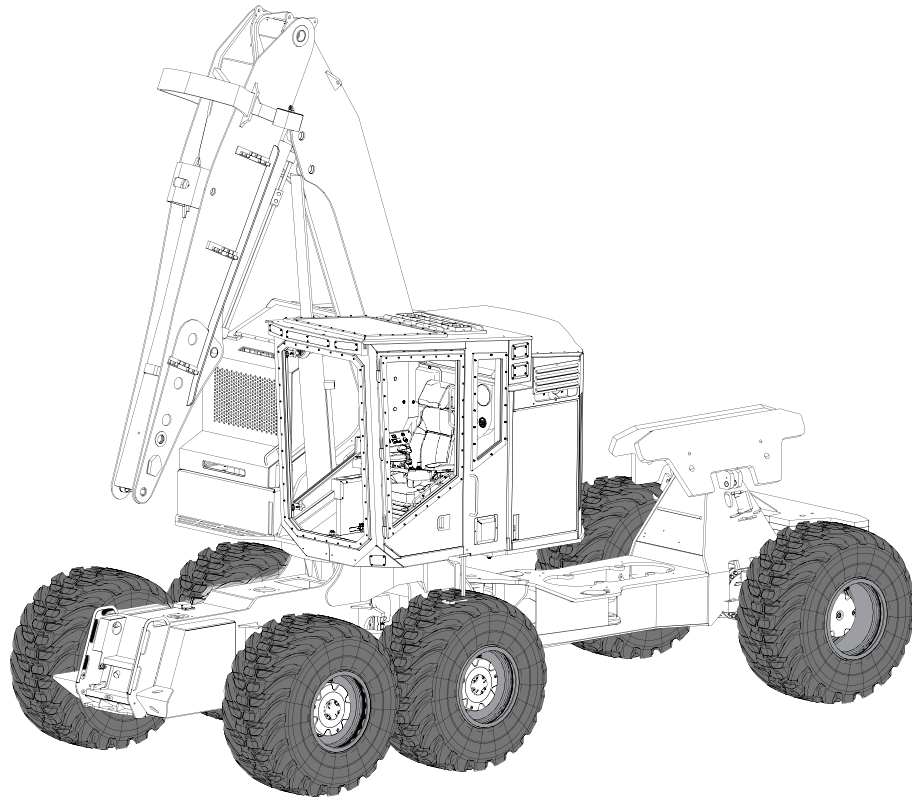
REF	PART #	QTY	DESCRIPTION.....	SEE PAGE
	9880.088		☐ Shift cylinder Complete	
1	9816.117	1	Shifting rod	
2	1170.005	1	O-ring OR 42x3, 72NBR872	
3	7307.097	1	Eccentric ring	
4	1180.724	1	Shaft seal 22x30x6,Q3 2019 Z5048	
5	1220.050	1	Seeger-k-ring AK 20x1.2 983	
6	7315.090	1	Washer	
7	1170.092	1	O-ring OR 15x3, 72NBR872	
8	5252.097	1	Piston	
9	1180.767	1	Shaft seal 40x29x4.2, KR 0040 00701	
10	1220.053	1	Seeger-ring AS 20x1.75 471	
11	1170.013	1	O-ring OR 42x4.5, 72NBR872	
12	5263.086	1	Cylinder	
13	1180.643	1	Shaft seal 20x28x6,Q3	
14	7307.080	1	Eccentric ring	
15	1220.611	1	Seeger-ring 30x1.2 472	
16	1180.526	1	Seal ring A40x47x2, CU 7603	
17	7302.003	1	Cover	
18	1190.015	2	Locking clip VSK 10,	
19	1010.242	2	Hexagon screw M10x40, 10.9	
21	2108.003	2	Adjusting kit	
22	54093-AX	2	SWITCH, NAF GEARBOX	

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AXLES, GEARBOXES, AND WHEELS

TIRES AND WHEELS

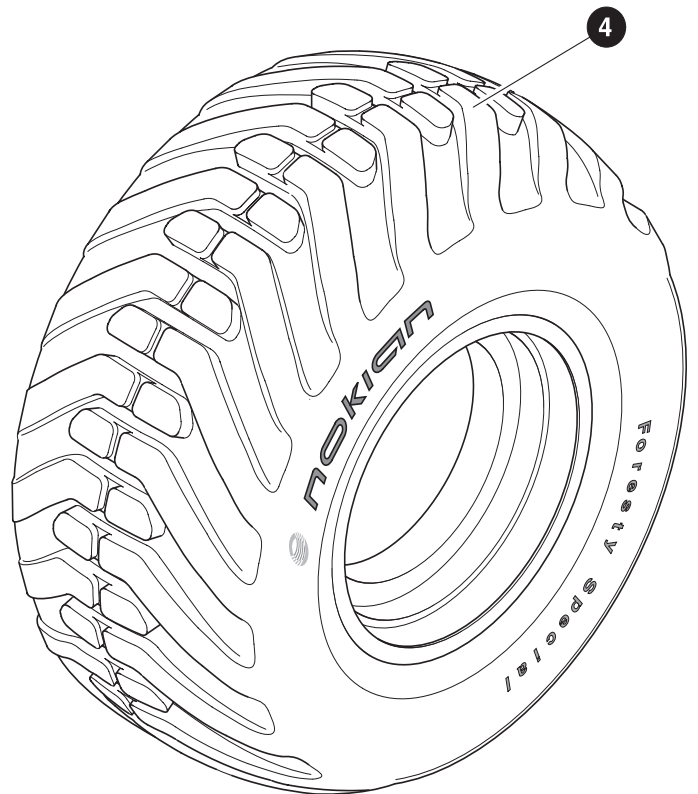
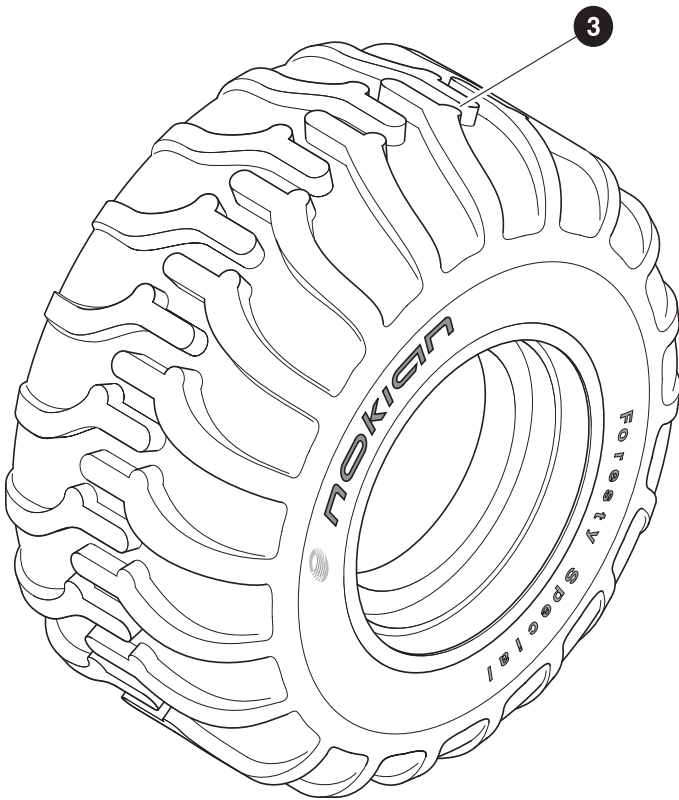
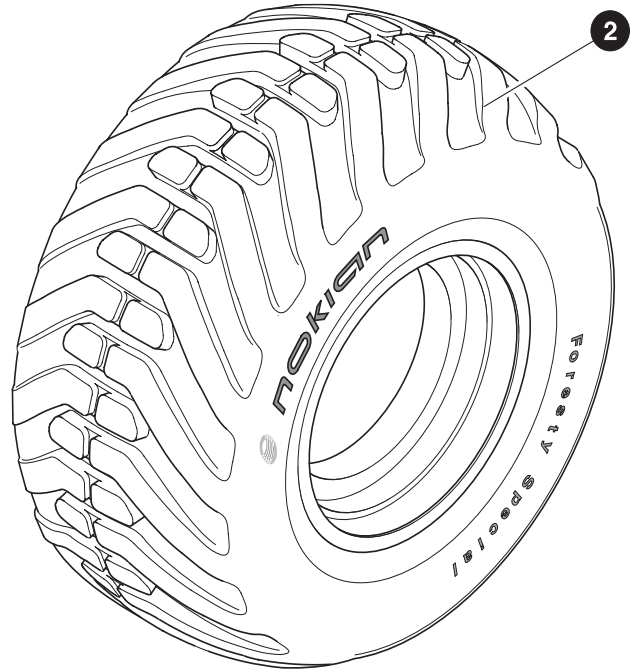
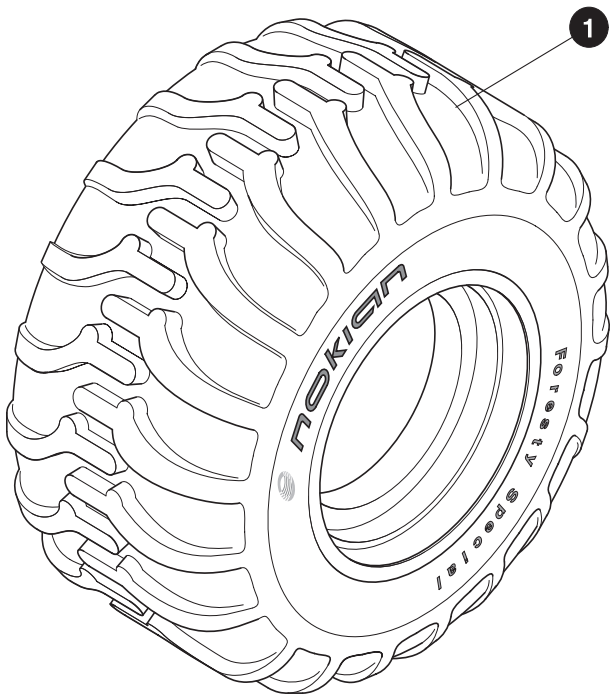
SECTION AX-6



WHEELS AND TIRES - 630, 840, AND 860

AXLES, GEARBOXES, AND WHEELS

WHEEL AND TIRE ASSEMBLY (NOKIAN)



AXLES, GEARBOXES, AND WHEELS

WHEEL AND TIRE ASSEMBLY (NOKIAN)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	20006-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - LH (<i>Aggressive tread</i>)	
1	20007-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - RH (<i>Aggressive tread</i>)	
-	---	1	TIRE - 700/55-26.5"/20 ply (<i>Nokian</i>) (T486091)	
-	21137-AX	1	RIM, wheel - 750/55-26.5"	
-	---	1	PLUG, black pipe - valve stem cover (T499985)	
-	---	1	TUBE, tire - 700/55-26.5" (3550167)	
2	19053-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - LH (<i>Non-aggressive tread</i>)	
2	20005-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 700/55-26.5" - RH (<i>Non-aggressive tread</i>)	
-	---	1	TIRE - 700/55-26.5"/20 ply (<i>Nokian</i>) (T486095)	
-	21137-AX	1	RIM, wheel - 750/55-26.5"	
-	---	1	PLUG, black pipe - valve stem cover (T499985)	
-	---	1	TUBE, tire - 700/55-26.5" (3550167)	
3	23673-L-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - LH (<i>Aggressive tread</i>)	
3	23673-R-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - RH (<i>Aggressive tread</i>)	
-	23674-AX	1	TIRE - 750/55-26.5"/20 ply (<i>Nokian</i>) (<i>Aggressive tread</i>)	
-	21137-AX	1	RIM, wheel - 750/55-26.5"	
-	---	1	PLUG, black pipe - valve stem cover (T499985)	
-	20313-AX	1	TUBE, tire - 750/55-26.5"	
4	20310-L-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - LH (<i>Non-aggressive tread</i>)	
4	20310-R-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 750/55-26.5" - RH (<i>Non-aggressive tread</i>)	
-	20312-AX	1	TIRE - 750/55-26.5"/20 ply (<i>Nokian</i>) (<i>Non-aggressive tread</i>)	
-	21137-AX	1	RIM, wheel - 750/55-26.5"	
-	---	1	PLUG, black pipe - valve stem cover (T499985)	
-	20313-AX	1	TUBE, tire - 750/55-26.5"	

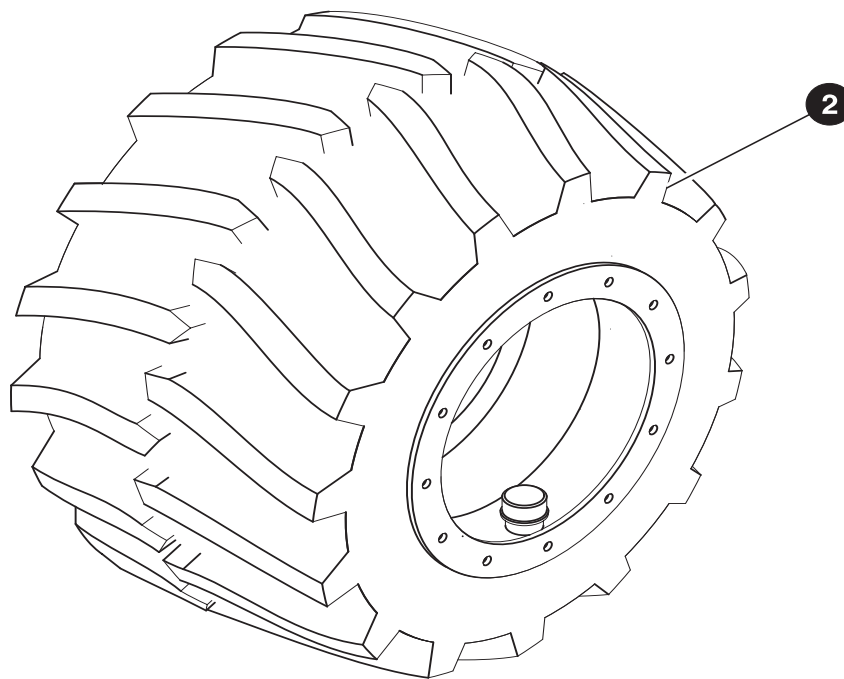
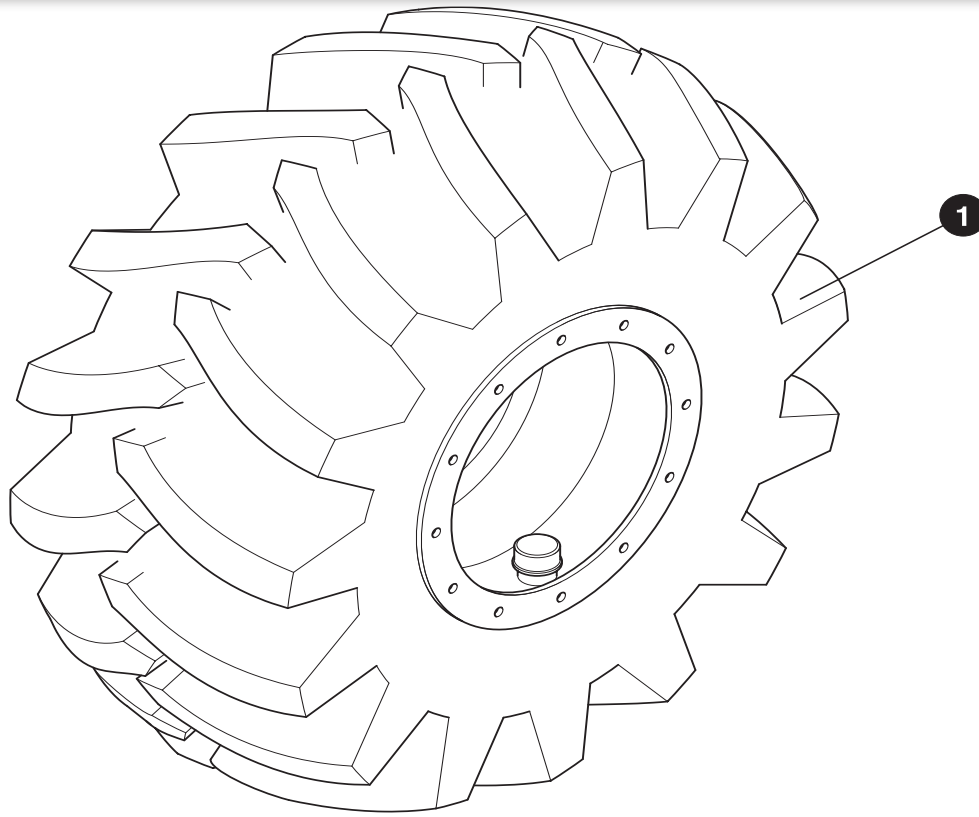
Kit or Assembly - includes all items indented underneath.

Note:

LH and RH wheels are the result of the tire being mounted on the rim so that the tread is running the same direction on both sides of the machine when installed.

AXLES, GEARBOXES, AND WHEELS

WHEEL AND TIRE ASSEMBLY (FIRESTONE)



AXLES, GEARBOXES, AND WHEELS

WHEEL AND TIRE ASSEMBLY (FIRESTONE)

REF	PART #	QTY	DESCRIPTION	SEE PAGE
1	20915-L-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 28L-26 - LH (<i>With spacer for dual tires</i>)	
1	20915-R-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 28L-26 - RH (<i>With spacer for dual tires</i>)	
-	19795-AX	1	TIRE/TUBE - 28L-26/14 ply (<i>Firestone</i>)	
-	22409-AX	1	RIM, wheel - 28L-26 (<i>With spacer for dual tires</i>)	
-	NSS	1	CAP, black pipe - vavle stem cover	
-	19798-AX	1	TUBE, tire - 28L-26	
2	19909-L-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 54 x 37" - LH (high floation)	
2	19909-R-AX		<input type="checkbox"/> WHEEL ASSEMBLY, 54 x 37" - RH (high floation)	
-	19791-AX	1	TIRE - 54 x 37"/12 ply (<i>Firestone</i>)	
-	19803-AX	1	RIM, wheel - 54 x 37"	
-	NSS	1	CAP, black pipe - vavle stem cover	

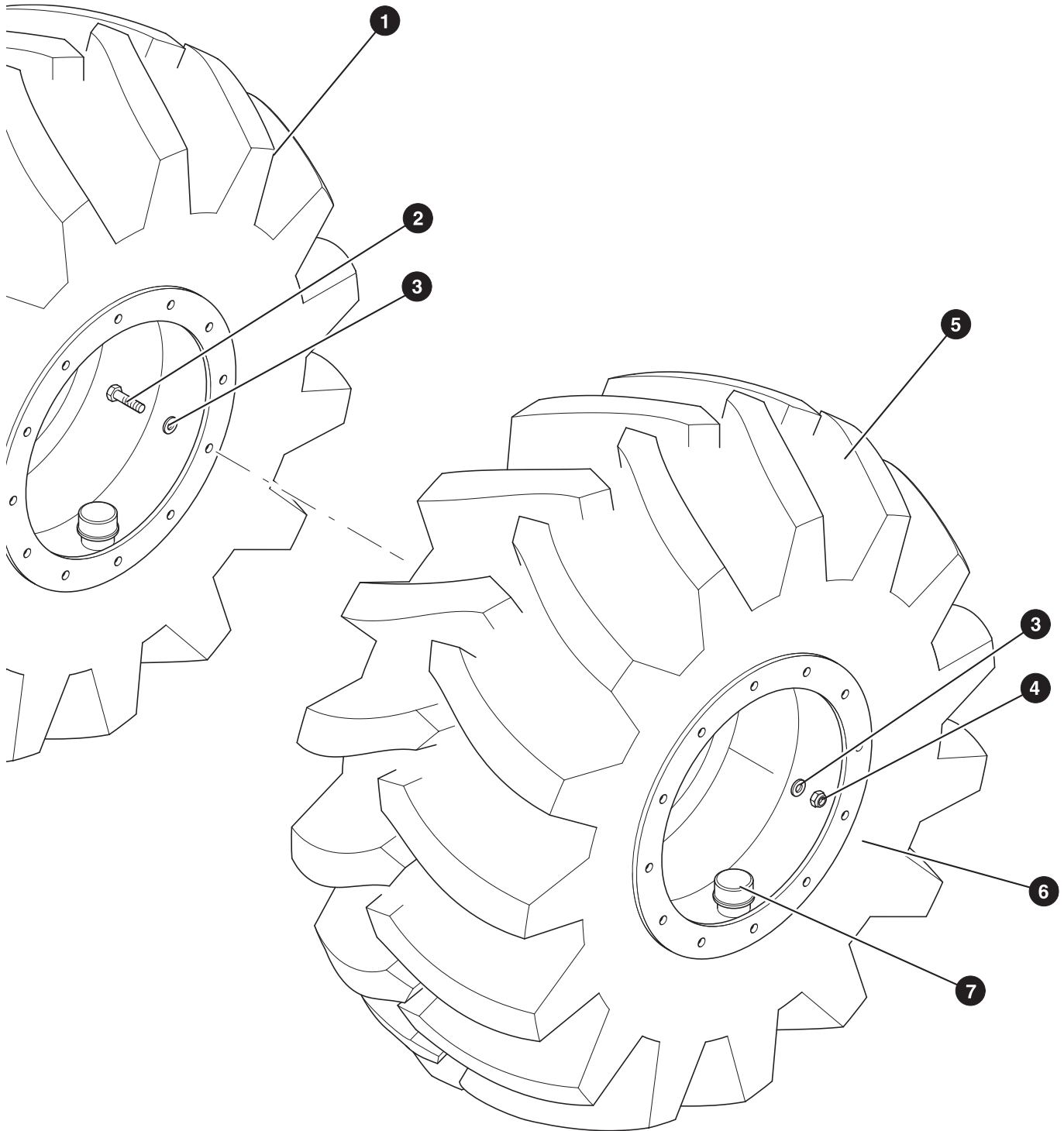
Kit or Assembly - includes all items indented underneath.

Note:

LH and RH wheels are the result of the tire being mounted on the rim so that the tread is running the same direction on both sides of the machine when installed.

AXLES, GEARBOXES, AND WHEELS

WHEEL AND TIRE ASSEMBLY (FIRESTONE, DUAL TIRES (Dual Configuration - 28L-26 & 23.1-26 Wheels Total)






AXLES, GEARBOXES, AND WHEELS

WHEEL AND TIRE ASSEMBLY (FIRESTONE, DUAL TIRES)

(Dual Configuration - 28L-26 & 23.1-26 Wheels Total)

1

REF.			WHEEL ASSEMBLY, 28L-26 - LH	AX-3-2
	REF.		WHEEL ASSEMBLY, 28L-26 - RH	AX-3-2
2	10840-AX	96	BOLT - 3/4" x 3"	
3	15550-AX	192	WASHER, SAE flat - 3/4"	
4	10817-AX	96	NUT, lock - 3/4"	
--	19911-L-AX	4	<input type="checkbox"/> WHEEL ASSEMBLY, 23.1-26 - LH	
--	19911-R-AX	4	<input type="checkbox"/> WHEEL ASSEMBLY, 23.1-26 - RH	
5	19800-AX	1	TIRE/TUBE - 23.1-26/14 ply (<i>Firestone</i>)	
6	19920-AX	1	RIM, wheel - 23.1-26	
7	NSS	1	CAP, black pipe	

-  See referenced page for component or assembly breakdown.
- Kit or Assembly - includes all items indented underneath.

Note:

LH and RH wheels are the result of the tire being mounted on the rim so that the tread is running the same direction on both sides of the machine when installed.

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