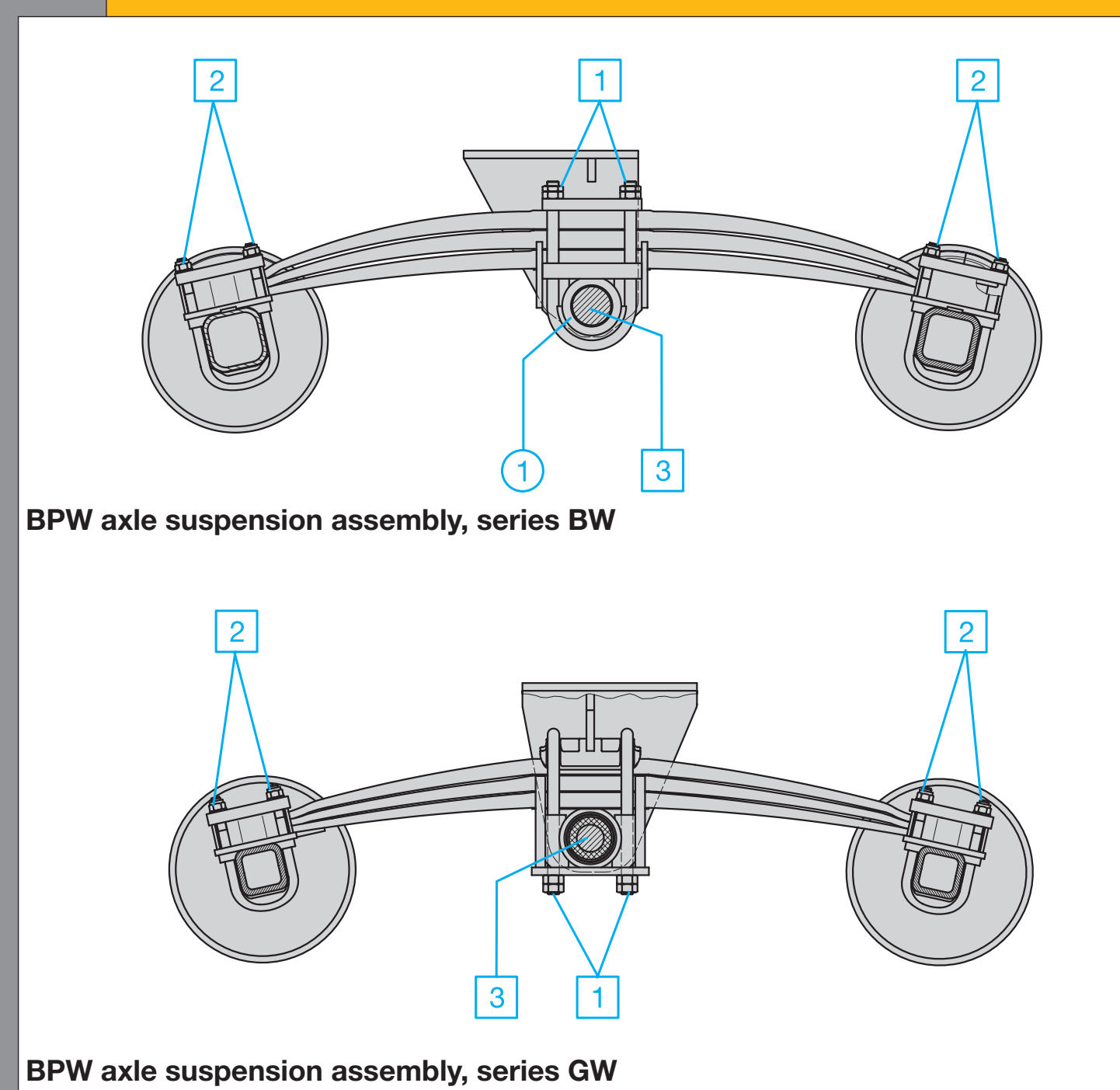
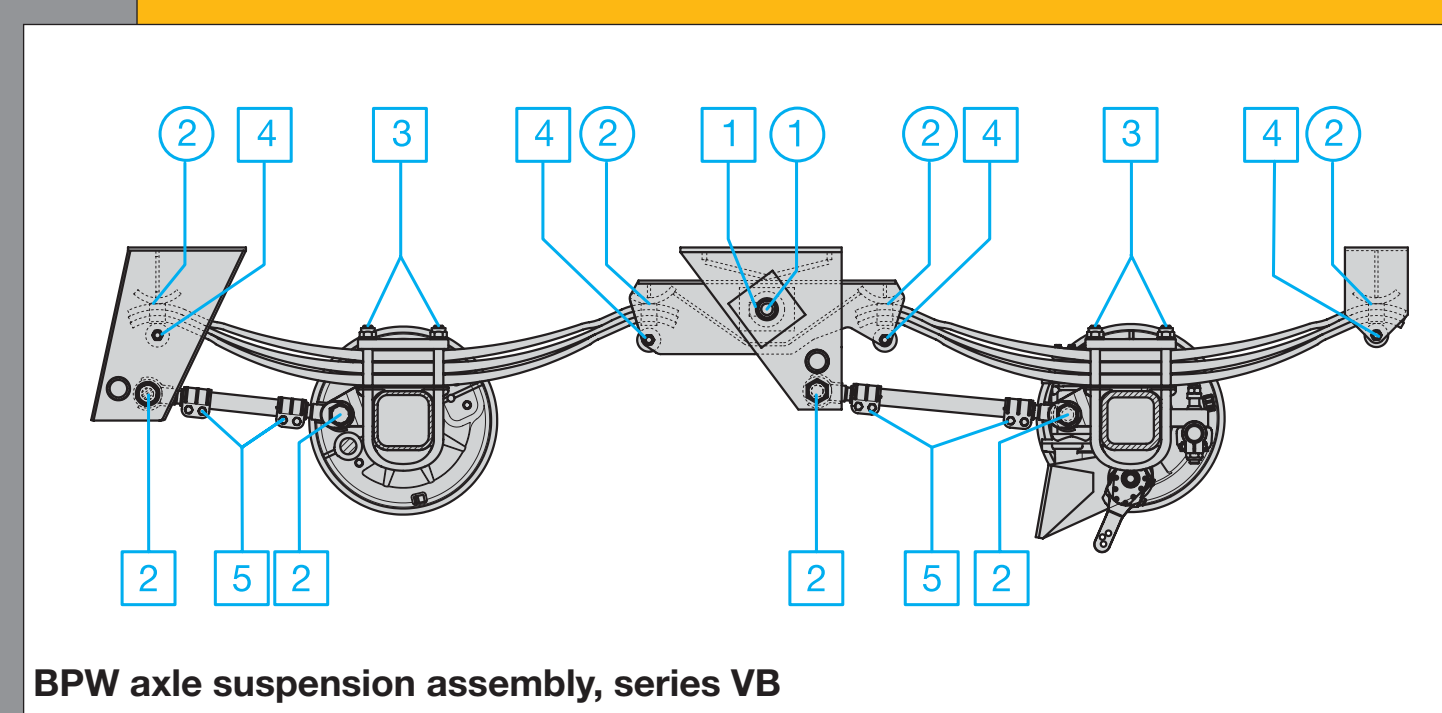
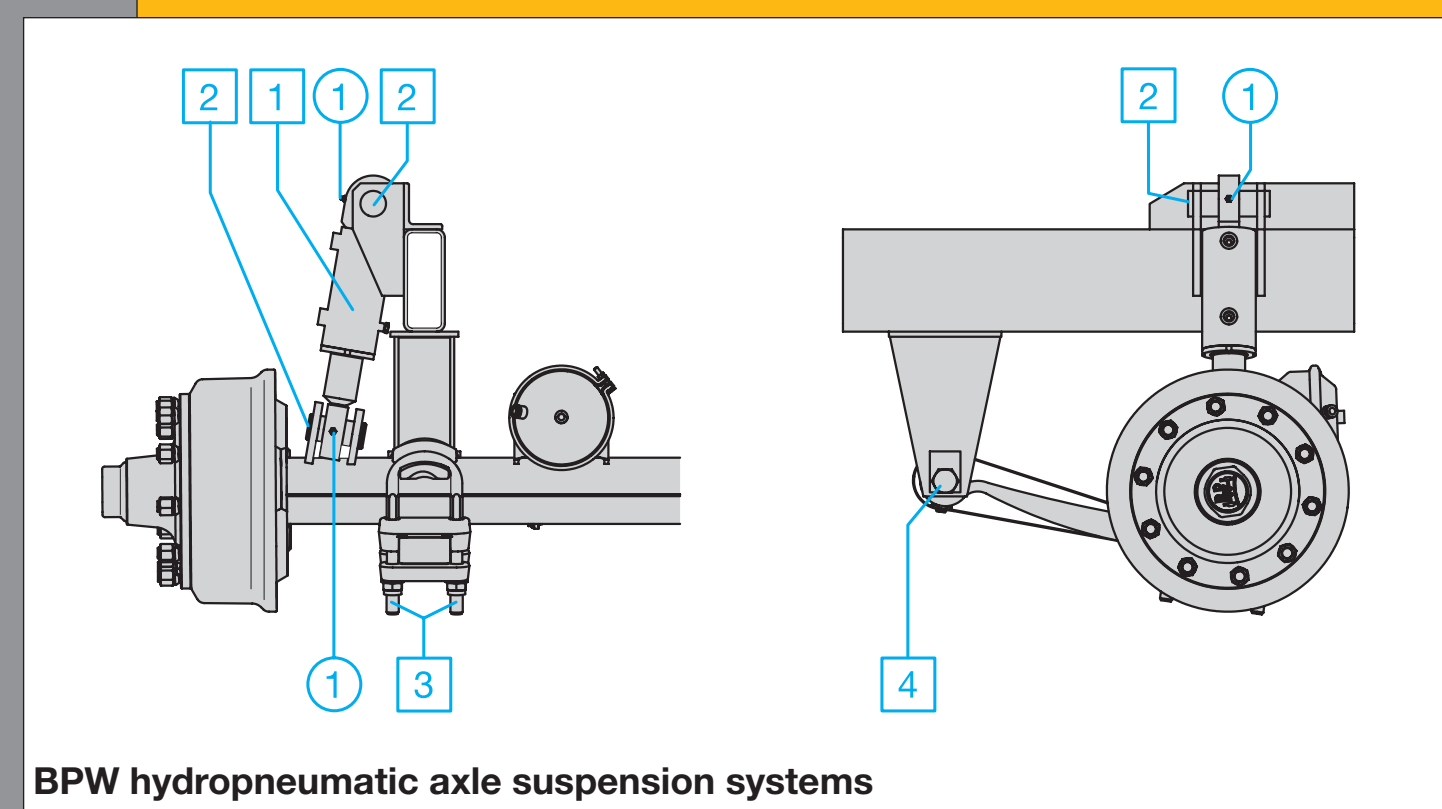
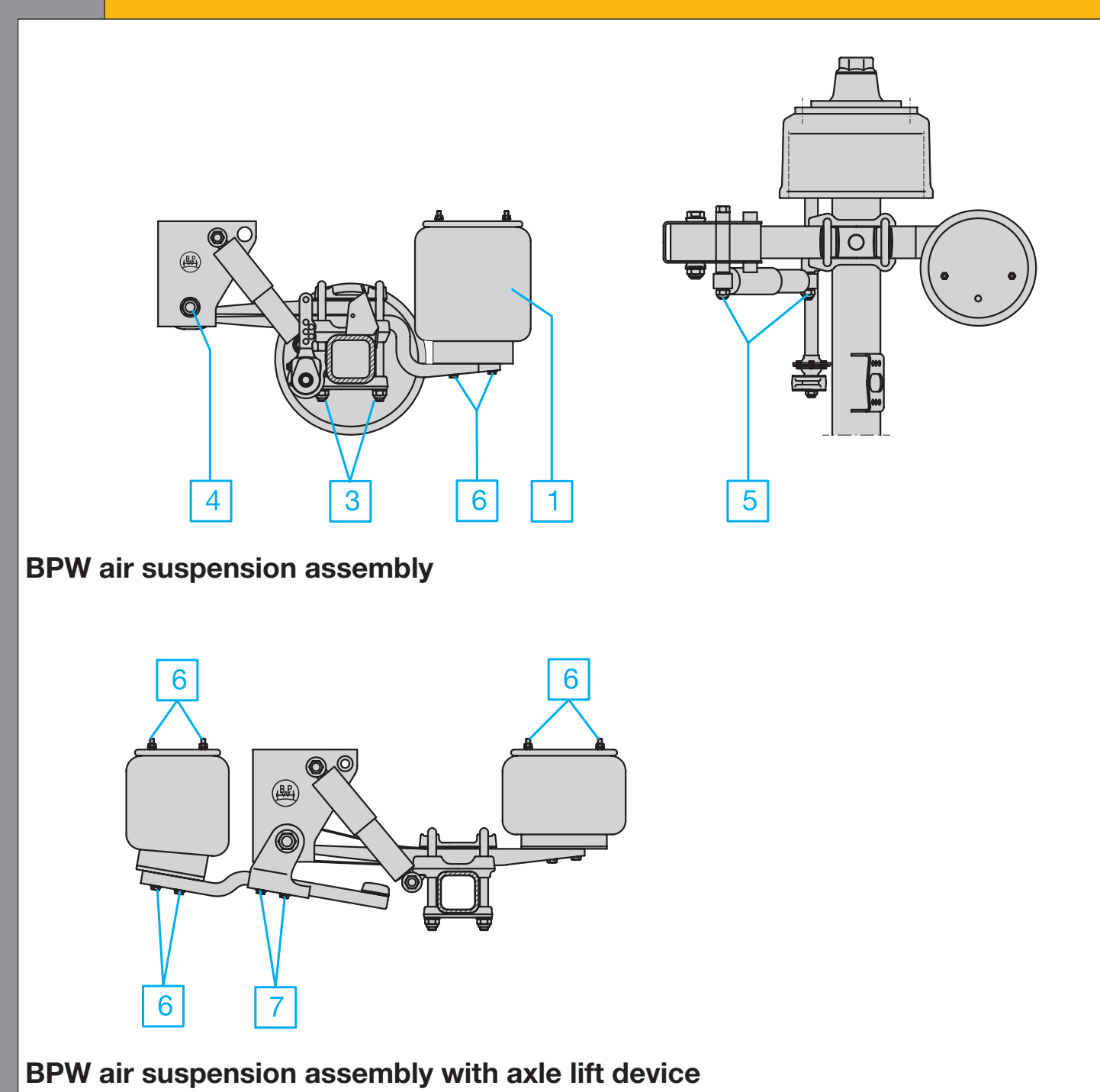
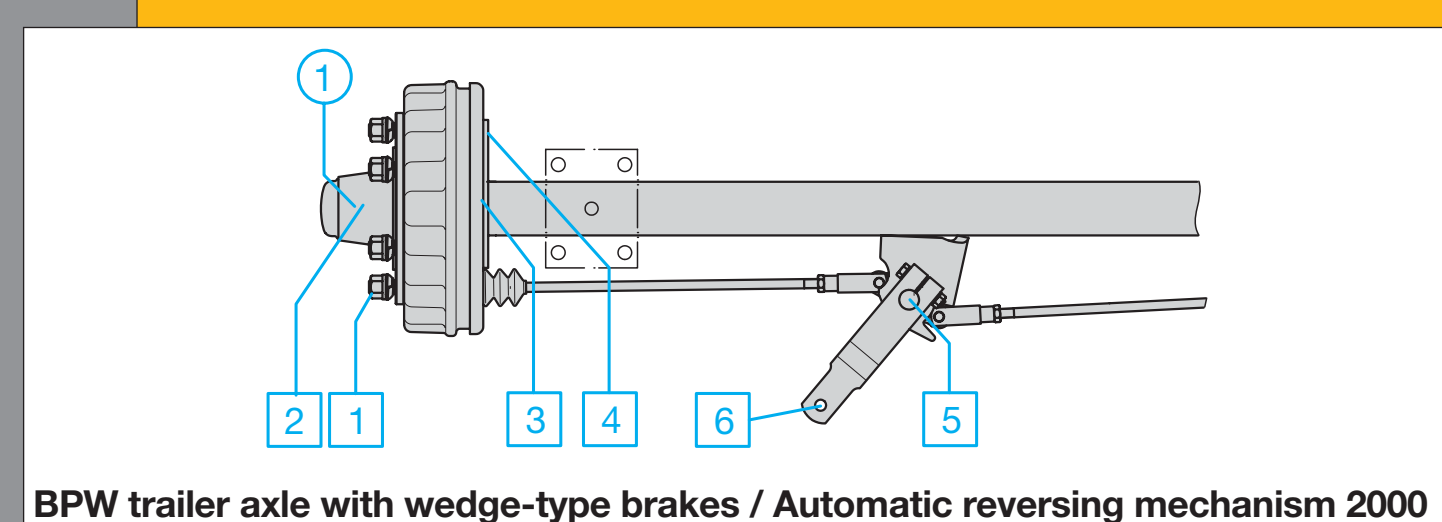
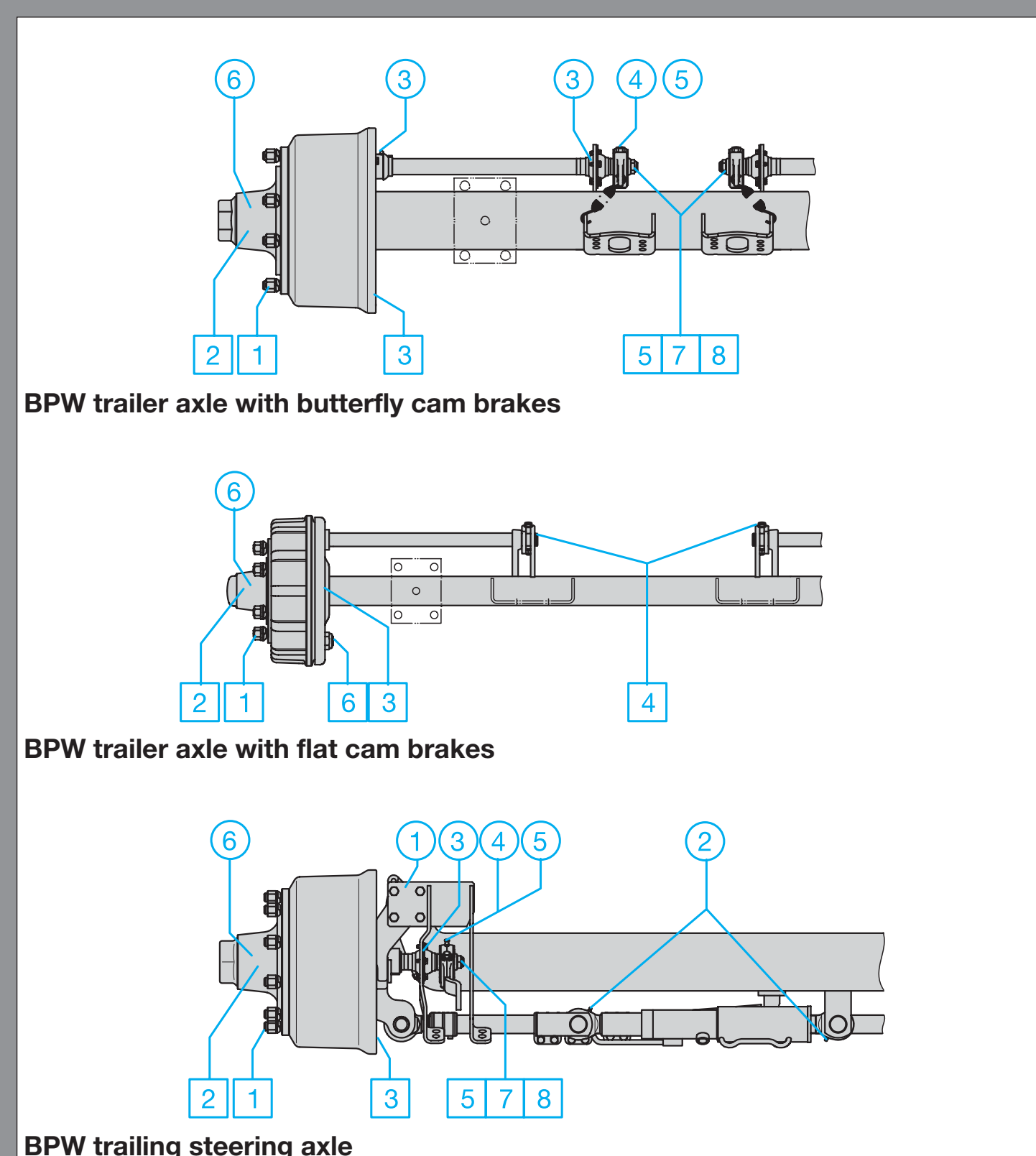


# Maintenance intervals

## BPW agricultural trailer axles and assemblies



Lubrication work	after the first laden journey	every 40 hours in operation	every 100 hours in operation	every 200 hours in operation	every 500 hours in operation (latest annually)	every 1000 hours in operation (latest annually)
	<sup>1)</sup> at least every three months					

BPW trailer axles						
1	Steering pivot bearings, top and bottom		●			
2	Locking cylinder ends on steering axles			●		
3	Outer and inner brake camshaft			●		
4	Slack adjuster, manual				●	
5	ECO-Master slack adjuster				●	
6	Change grease in wheel hub bearings, check taper roller bearings for wear.					●

BPW trailer axles with wedge-type brake / System 2000 automatic reversing mechanism						
1	Change grease in wheel hub bearings, check taper roller bearings for wear.				● <sup>1)</sup>	
2	Lubricate all bearings.					●

BPW air suspension systems						
	No lubrication necessary					

BPW hydropneumatic axle suspension systems						
1	Lubricate the bearings of the damping cylinders, top and bottom.				●	

BPW axle suspension assemblies, series VB						
1	Lubricate equaliser bearings.	●		●		
2	Lightly grease sliders/sliding ends of the springs.	●		●		

BPW axle suspension assemblies, series BW / GW						
1	Lubricate axle support bearing for series BW. (Not needed with series GW rubber/steel bushes).	●			●	

Maintenance work	after the first laden journey	first after 50 hours in operation	every 200 hours in operation	every 500 hours in operation (annually)		
	<sup>1)</sup> more frequently under heavy usage					

BPW trailer axles						
1	Check that wheel nuts are tight, retighten if necessary.	●			●	
2	Check hubs for bearing play, adjust if necessary.			●		
3	Check brake linings			●		
4	Check the brake adjustment on the brake lever, adjust if necessary.			●		
5	Check the brake adjustment on the slack adjuster, adjust if necessary.			●		
6	Check brake adjustment on Backmat cam brakes, adjust if necessary.			●		
7	Check brake adjustment on the automatic slack adjuster, adjust if necessary.			●		
8	Check the operation of the automatic slack adjuster.				●	

BPW trailer axles with wedge-type brake / System 2000 automatic reversing mechanism						
1	Check that wheel nuts are tight, retighten if necessary.	●			●	
2	Check hubs for bearing play, adjust if necessary.			●		
3	Check brake linings			●		
4	Check brake adjustment on wedge-type brakes, adjust if necessary.			●		
5	Check function of brake system			●		
6	Check that counter nut of transmission equipment is tight.			●		

BPW air suspension systems						
-	Visual check. Check all components for damage and wear.			●		
1	Check the condition of the air bags.			●		
2	Check the condition of the air suspension valves, ensure that they are not leaking and are firmly seated.			●		
3	Check that the spring mountings are firmly attached, using a torque wrench.	●		●		
4	Check that the spring bolts are tight, using a torque wrench.	●		●		
5	Check that the shock absorber mountings are firmly attached and undamaged, using a torque wrench	●		●		<sup>1)</sup>
6	Check that the air bags are firmly attached, using a torque wrench.	●		●		<sup>1)</sup>
7	Check axle lift device for wear and firm attachment.	●		●		<sup>1)</sup>

BPW hydropneumatic axle suspension systems						
-	Visual check. Check all components for damage and wear.			●		
1	Damping cylinders: check condition and test for leaks.			●		<sup>1)</sup>
2	Check the attachment of the damping cylinders.			●		<sup>1)</sup>
3	Check that the spring mountings are firmly attached, using a torque wrench.	●		●		
4	Check that the spring bolts are tight using a torque wrench.	●		●		<sup>1)</sup>

BPW axle suspension assemblies, series VB						
-	Visual check. Check all components for damage and wear.			●		<sup>1)</sup>
1	Check that the threaded bolts on the equaliser bearings are tight.			●		<sup>1)</sup>
2	Check that the lock nuts on the axle guide rods are tight, using a torque wrench.	●		●		<sup>1)</sup>
3	Check that the axle assembly is firmly attached, using a torque wrench.	●		●		<sup>1)</sup>
4	Check that the fixing bolt for the rubber rollers and sliders is tight.	●		●		<sup>1)</sup>
5	Check connecting rod clamping bolts for firm seating.	●		●		<sup>1)</sup>

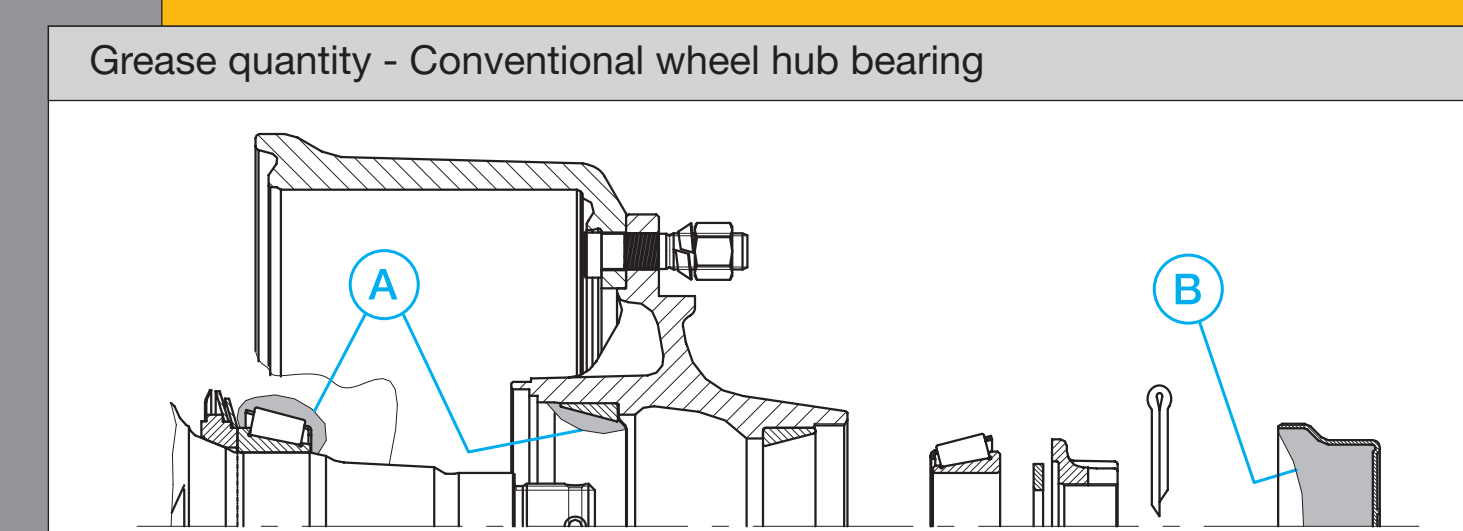
BPW axle suspension assemblies, series BW / GW						
-	Visual check. Check all components for damage and wear.			●		<sup>1)</sup>
1	Check that the U-bolts on the trunnion axle are tight.	●		●		<sup>1)</sup>
2	Check that the axle assembly mountings on the spring housing are firmly attached.	●		●		<sup>1)</sup>
3	Check that the trunnion bolts on the spring housings are tight.	●		●		<sup>1)</sup>

### Lubricants

**All grease points**

Grease all bearing points with BPW special longlife grease ECO-LI 91.

Steering knuckle bearing, steering rod ends, brake camshaft bearing and slack adjusters the use of a high-pressure central lubrication system which is capable of feeding special longlife grease of consistency class 2-3 is permissible. The use of liquid lubricants is not permitted!



Wheel hub	Grease quantity per tapered roller bearing	
	A inner	B outer
GS 5506	40 g	80 g
GS 7006 / GS 7008	50 g	210 g
GS 8008-1 / GS 8010-1	90 g	230 g
GS 11008-1 / GS 11010-1	170 g	290 g
GS 12008 / GS 12010	180 g	320 g

Work grease into the space between the tapered rollers and the races. Apply remainder to outer race of the hub.

The grease for the outer tapered roller bearing is pressed into the bearing as the hub cap filled with grease is screwed on.

### Tightening torques

Thread	Spanner size mm	Number of bolts per hub piece	Maximum torque setting		
			black	Dakromet	galvanized
M 12 x 1.5	19	4/5	95 Nm (90 - 100 Nm)	--	95 Nm (90 - 100 Nm)
M 14 x 1.5	22	5	125 Nm (120 - 130 Nm)	--	125 Nm (120 - 130 Nm)
M 18 x 1.5	24	6	290 Nm (275 - 305 Nm)	270 Nm (250 - 290 Nm)	320 Nm (300 - 340 Nm)
M 20 x 1.5	27	8	380 Nm (360 - 400 Nm)	380 Nm (360 - 400 Nm)	420 Nm (400 - 440 Nm)
M 22 x 1.5	32	8/10	510 Nm (485 - 535 Nm)	510 Nm (485 - 535 Nm)	560 Nm (535 - 585 Nm)
M 22 x 2	32	10	460 Nm (435 - 485 Nm)	--	505 Nm (480 - 530 Nm)

Hub caps (thread pitch 2 mm); Steel cap 11 t - 12 t M = 500 Nm

Axle nut 11 t - 12 t M = 150 Nm

KMT shaft nut M = 150 Nm

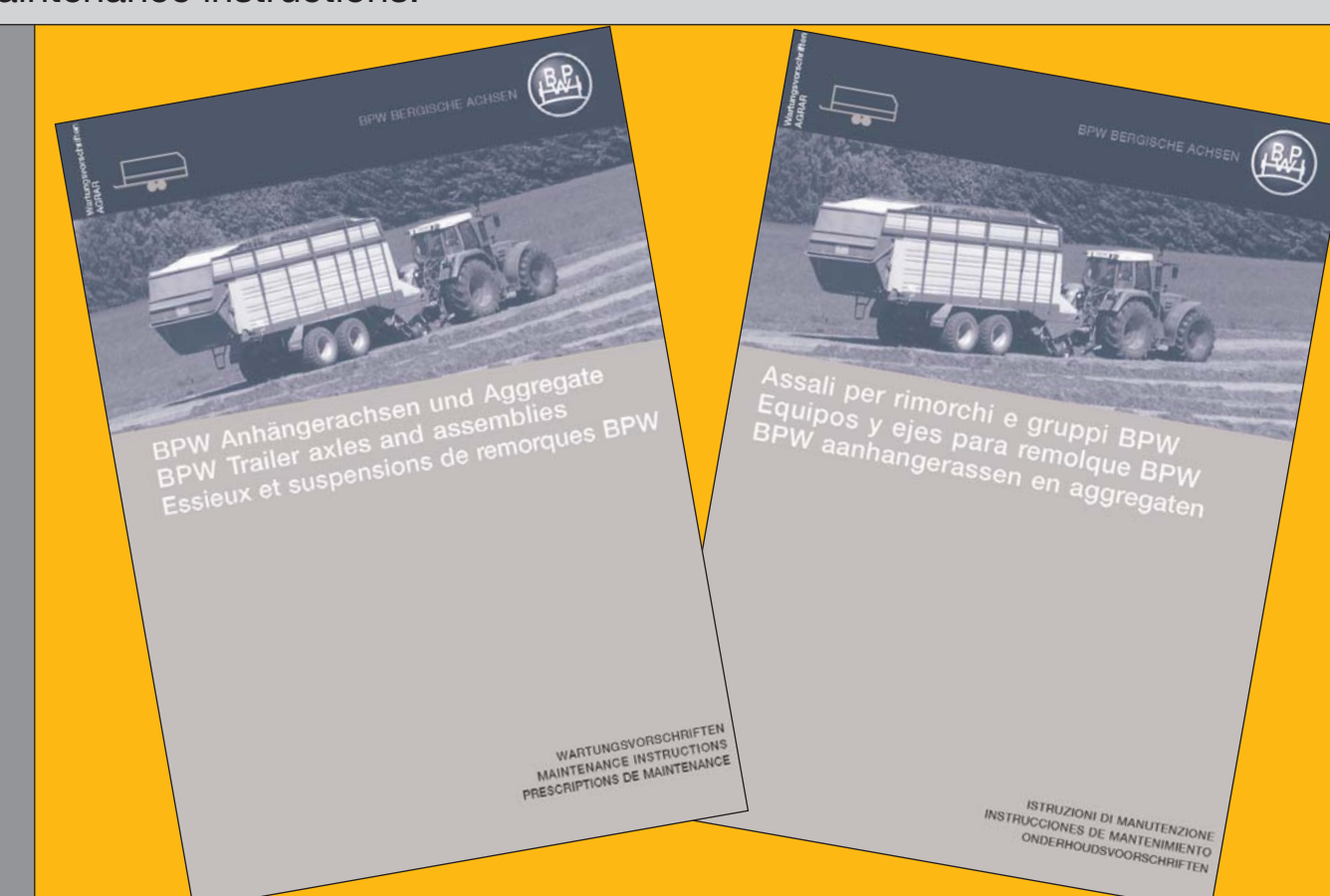
BPW air suspension		
Torque settings with a torque wrench		
Spring mounting kit	M 24	M = 650 Nm (605 - 715 Nm)
Spring bolts		
Air suspension hanger bracket	M 30	M = 900 Nm (840 - 990 Nm)
Channel crossmember	M 30	M = 900 Nm (840 - 990 Nm)
Shock absorber attachment	M 24	M = 420 Nm (390 - 460 Nm)
Air bag attachment	M 12	M = 66 Nm (62 - 73 Nm)
	M 16	M = 230 Nm (214 - 253 Nm)
Axle lift device	M 16	M = 230 Nm (214 - 253 Nm)

BPW hydropneumatic axle suspension systems		
Spring mounting kit	M 24	M = 650 Nm (605 - 715 Nm)
Spring bolts		
Air suspension hanger bracket	M 30	M = 900 Nm (840 - 990 Nm)
Channel crossmember	M 30	M = 900 Nm (840 - 990 Nm)

BPW axle suspension assemblies, series VB		
Axle guide rods	M 30	M = 720 Nm (675 - 800 Nm)
Axle assembly mounting U-bolts	M 20 M 24	M = 375 Nm (350 - 420 Nm) M = 650 Nm (605 - 715 Nm)
Bolts	M 16 M 20 M 24	M = 160 Nm (150 - 180 Nm) M = 320 Nm (300 - 355 Nm) M = 550 Nm (520 - 605 Nm)
Clamping brackets on torque arm	M 12-8.8	M = 86 Nm (80 - 95 Nm)
Fixing bolts for the rubber rollers and sliders	M 12-8.8 M 16-8.8	M = 20 Nm (17 - 23 Nm) M = 50 Nm (47 - 53 Nm)

BPW axle suspension assemblies, series BW / GW		
U-bolts on the trunnion axle	M 20-10.9 M 30 x 2-8.8	M = 450 Nm (420 - 485 Nm) M = 960 Nm (910 - 1080 Nm)
Bolts on the spring housings		
Bolts	M 20-8.8	M = 320 Nm (300 - 355 Nm)
U-bolts	M 24-10.9	M = 700 Nm (650 - 770 Nm)
Trunnion bolts on the spring housing series BW	M 52 x 2	M = 400 Nm (370 - 440 Nm)
series GW	M 36 x 1.5 M 52 x 2	M = 300 Nm (280 - 330 Nm) M = 400 Nm (370 - 440 Nm)

Detailed description of lubrication and maintenance work as per maintenance instructions.



Subject to change (without notice) - the latest maintenance instructions manual has to be considered!