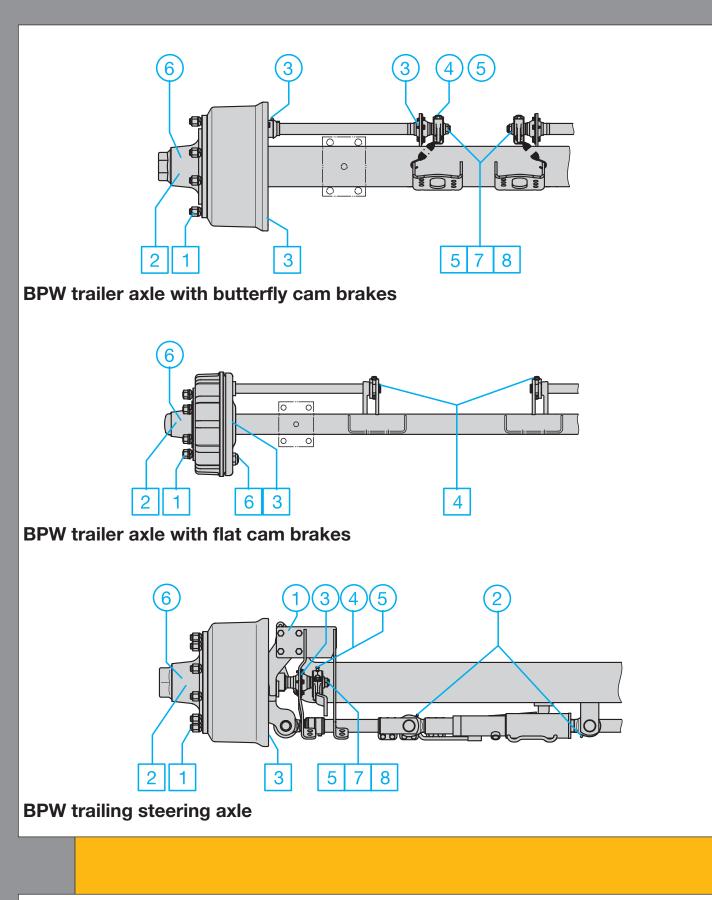
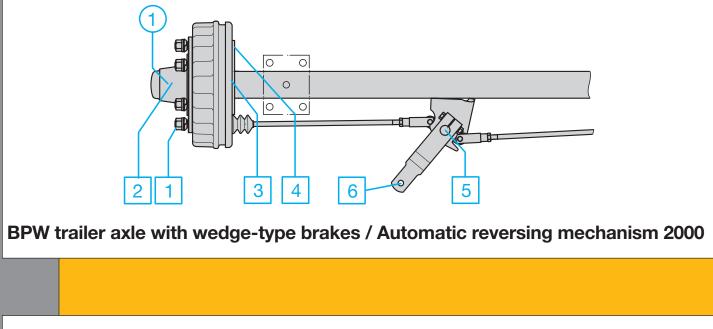
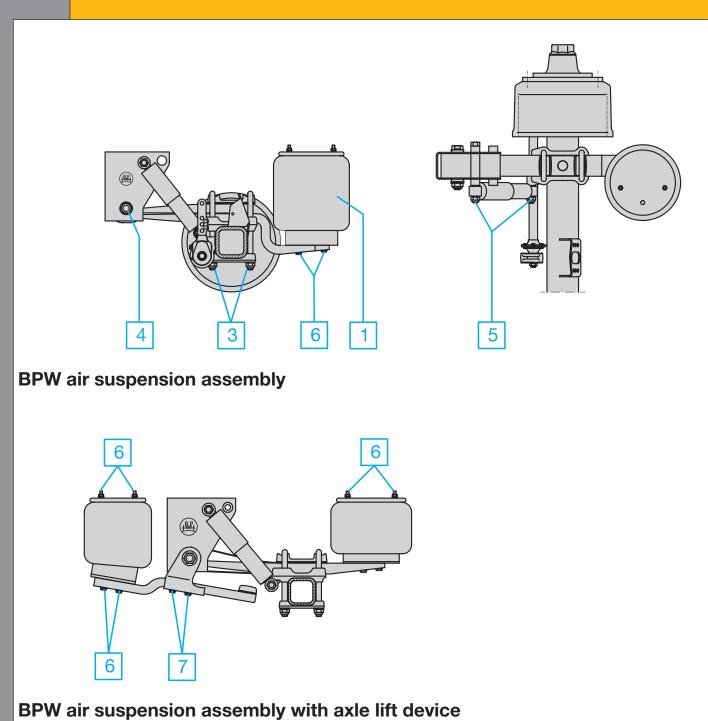
## Maintenance intervals

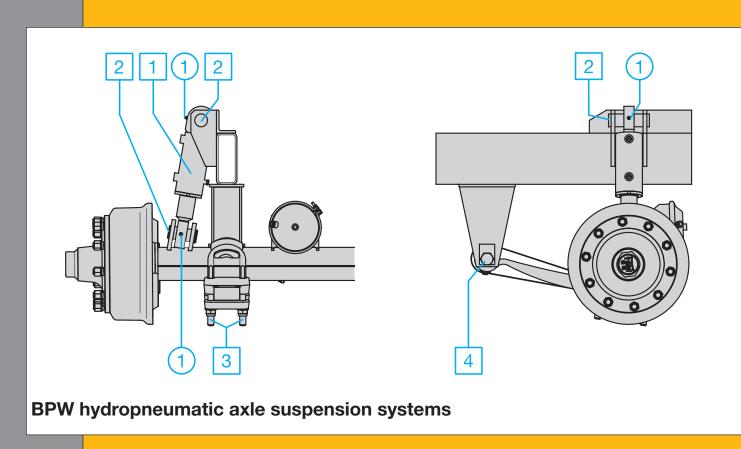
## BPW agricultural trailer axles and assemblies

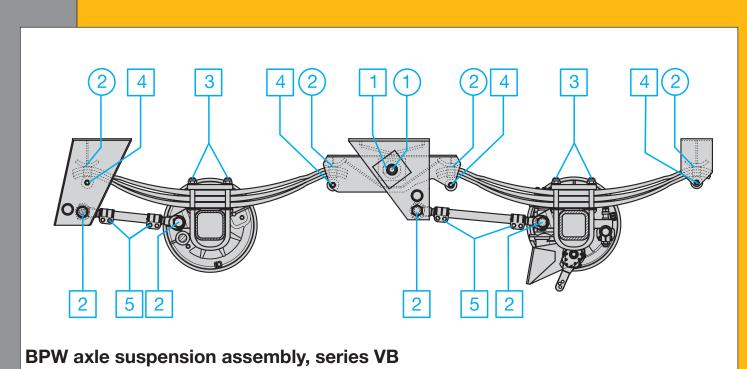


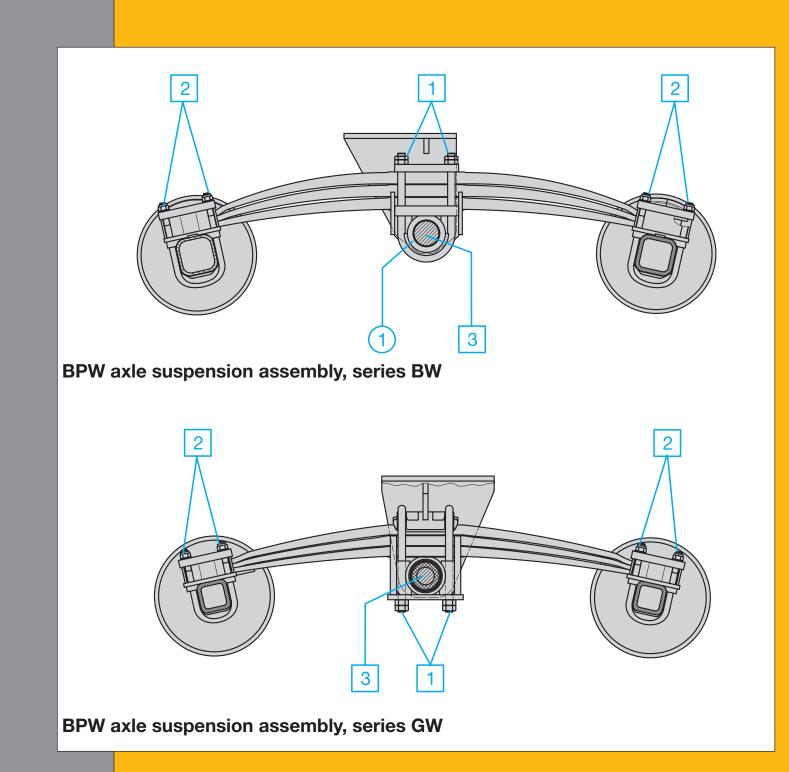












	Lubrication work			_	_	_	uc
		ney	tion	operation	operation	operation	hours in operation
		jour	operation	obei	obei		do L
		aden	.⊑	S E	s i	s (	JIS ii
		rst la	40 hours	100 hours	200 hours	500 hours annually)	1000 hou
		he fi				500 t ann	1000
	1) at least every three months	after the first laden journey	every	every	every	every {	every 1
	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 rev	/ersin	g med	chanis	sm	1)	
1	BPW trailer axles with wedge-type brake / System 2000 automatic revenue Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.	versin	g med	chanis	sm	1)	
1	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.	versin	g med	chanis	sm	1)	
	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.  BPW air suspension systems	versin	g med	chanis	sm	1)	
	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.	versin	g med	chanis	sm	1)	
	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.  BPW air suspension systems	versin	g med	chanis	sm	1)	
	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.  BPW air suspension systems  No lubrication necessary	versin	g med	chanis	sm	1)	
	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.  BPW air suspension systems  No lubrication necessary  BPW hydropneumatic axle suspension systems	versin	g med	chanis	sm		
	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.  BPW air suspension systems  No lubrication necessary  BPW hydropneumatic axle suspension systems  Lubricate the bearings of the damping cylinders, top and bottom.	versin	g med	chanis	sm		
1	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.  BPW air suspension systems  No lubrication necessary  BPW hydropneumatic axle suspension systems  Lubricate the bearings of the damping cylinders, top and bottom.  BPW axle suspension assemblies, series VB	versin	g med	chanis	sm		
1	Change grease in wheel hub bearings, check taper roller bearings for wear.  Lubricate all bearings.  BPW air suspension systems  No lubrication necessary  BPW hydropneumatic axle suspension systems  Lubricate the bearings of the damping cylinders, top and bottom.  BPW axle suspension assemblies, series VB  Lubricate equaliser bearings.	versin	g med	chanis	sm		

Lubricate all bearings.	eel hub bearings, check taper roller bearings for wear.					
Jan Jan 1901						
PDW oir cusponsi	ion systems					
BPW air suspensi		T		T		ı
No lubrication necess	ary					
BPW hydropneum	natic axle suspension systems					
Lubricate the bearings	s of the damping cylinders, top and bottom.					
BPW axle suspen	sion assemblies, series VB					
Lubricate equaliser be	earings.					
Lightly grease sliders/	sliding ends of the springs.					$\neg$
BPW axle suspen	nsion assemblies, series BW / GW					
	t bearing for series BW.					
(Not needed with serie	es GW rubber/steel bushes).					
				1		-
■ Maintenan	ce work				<u>\$</u>	
			ırs		nually	
		st e	0 hours	ours 1	every 500 hours in operation (annually)	
		after the first laden journey	er 50 ation	every 200 hours in operation	ation	
<sup>1)</sup> more frequently under heavy	' usage	er th ten jo	first after 50 in operation	ery 2 oper	ery £	
		aft	first in op	i. e ∈	⊇. e	
BPW trailer axles						
Check that wheel nuts	s are tight, retighten if necessary.					
Check hubs for bearing	ng play, adjust if necessary.					
Check brake linings						
Check the brake adjust	stment on the brake lever, adjust if necessary.					
Check the brake adjust	stment on the slack adjuster, adjust if necessary.					
Check brake adjustme	ent on Backmat cam brakes, adjust if necessary.					$\neg$
Check brake adjustme	ent on the automatic slack adjuster, adjust if necessary.					$\neg$
Check the operation of	of the automatic slack adjuster.					$\exists$
				_		
BPW trailer axles	with wedge-type brake / System 2000 automatic re	versin	a med	chanis	sm	
1	s are tight, retighten if necessary.	Т				П
	ng play, adjust if necessary.	+				
Check brake linings						$\dashv$
Check brake adjustme	ent on wedge-type brakes, adjust if necessary.					$\exists$
Check function of brak						
Check that counter nu	ut of transmission equipment is tight.					$\neg$
BPW air suspensi	ion systems					
Visual check. Check a	all components for damage and wear.					
Check the condition of	of the air bags.					
Check the condition of are firmly seated.	of the air suspension valves, ensure that they are not leaking and					
-	mountings are firmly attached, using a torque wrench.					$\dashv$
	bolts are tight, using a torque wrench.				1)	
Check that the shock	absorber mountings are firmly attached and undamaged,				1)	
using a torque wrench					1)	
Check that the air has	IS ALE HILLON ADACTOROUS ONLY A CONTROL TO THE CONTROL OF THE CONT					$\perp$
	gs are firmly attached, using a torque wrench.  for wear and firm attachment.				1)	
	for wear and firm attachment.				1)	
Check axle lift device	for wear and firm attachment.				1)	
Check axle lift device  BPW hydropneum	for wear and firm attachment.  natic axle suspension systems				1)	
BPW hydropneum Visual check. Check a	for wear and firm attachment.  natic axle suspension systems all components for damage and wear.				1)	
Check axle lift device  BPW hydropneum  Visual check. Check a  Damping cylinders: ch	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks.				1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders.				1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench.				1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders.				1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench.				1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench.				1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring BPW axle suspen	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench. bolts are tight using a torque wrench.				1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring BPW axle suspen Visual check. Check a	for wear and firm attachment.  natic axle suspension systems  all components for damage and wear.  neck condition and test for leaks.  t of the damping cylinders.  mountings are firmly attached, using a torque wrench.  bolts are tight using a torque wrench.				1) 1) 1) 1) 1) 1) 1) 1) 1)	
BPW hydropneum Visual check. Check a Damping cylinders: ch Check the attachment Check that the spring Check that the spring Check that the spring BPW axle suspen Visual check. Check a Check that the thread	for wear and firm attachment.  natic axle suspension systems  all components for damage and wear.  neck condition and test for leaks.  t of the damping cylinders.  mountings are firmly attached, using a torque wrench.  bolts are tight using a torque wrench.  sion assemblies, series VB  all components for damage and wear.				1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock no	for wear and firm attachment.  natic axle suspension systems all components for damage and wear.  neck condition and test for leaks.  t of the damping cylinders.  mountings are firmly attached, using a torque wrench.  bolts are tight using a torque wrench.  sion assemblies, series VB all components for damage and wear.  ed bolts on the equaliser bearings are tight.				1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1)	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock nu Check that the axle as	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench. bolts are tight using a torque wrench.  sion assemblies, series VB all components for damage and wear. ed bolts on the equaliser bearings are tight. uts on the axle guide rods are tight, using a torque wrench.				1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock nu Check that the axle as Check that the fixing the	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench. bolts are tight using a torque wrench.  sion assemblies, series VB all components for damage and wear. ed bolts on the equaliser bearings are tight. uts on the axle guide rods are tight, using a torque wrench. essembly is firmly attached, using a torque wrench.				1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock nu Check that the axle as Check that the fixing the	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench. bolts are tight using a torque wrench.  sion assemblies, series VB all components for damage and wear. ed bolts on the equaliser bearings are tight. uts on the axle guide rods are tight, using a torque wrench. essembly is firmly attached, using a torque wrench. bolt for the rubber rollers and sliders are tight.					
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock no Check that the axle as Check that the fixing the Check connecting roce	for wear and firm attachment.  natic axle suspension systems all components for damage and wear. neck condition and test for leaks. t of the damping cylinders. mountings are firmly attached, using a torque wrench. bolts are tight using a torque wrench.  sion assemblies, series VB all components for damage and wear. ed bolts on the equaliser bearings are tight. uts on the axle guide rods are tight, using a torque wrench. essembly is firmly attached, using a torque wrench. bolt for the rubber rollers and sliders are tight.					
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock nu Check that the lock nu Check that the fixing the Check connecting roce  BPW axle suspen  Check that the syring  Check that the lock nu Check that the lock nu Check that the syring	for wear and firm attachment.  Inatic axle suspension systems  all components for damage and wear.  Ineck condition and test for leaks.  It of the damping cylinders.  Immountings are firmly attached, using a torque wrench.  It bolts are tight using a torque wrench.  It is ion assemblies, series VB  It components for damage and wear.  It is on the equaliser bearings are tight.  It is on the axle guide rods are tight, using a torque wrench.  It is on the rubber rollers and sliders are tight.  It clamping bolts for firm seating.				1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock nu Check that the axle as Check that the fixing the Check connecting roce BPW axle suspen Visual check. Check a	for wear and firm attachment.  Inatic axle suspension systems  all components for damage and wear.  Ineck condition and test for leaks.  It of the damping cylinders.  Immountings are firmly attached, using a torque wrench.  Institute bolts are tight using a torque wrench.  Institute bolts on the equaliser bearings are tight.  Institute on the axle guide rods are tight, using a torque wrench.  Institute on the rubber rollers and sliders are tight.  Institute of the rubber for damage and wear.  Institute of the rubber rollers and sliders are tight.  Institute of the rubber for damage and wear.				1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1) 1	
BPW hydropneum Visual check. Check a Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Wisual check. Check a Check that the thread Check that the lock nu Check that the fixing the Check that the fixing the Check connecting roc  BPW axle suspen Visual check. Check a Check that the Jesuspen Visual check. Check a Check that the U-bolts	for wear and firm attachment.  Inatic axle suspension systems  Ill components for damage and wear.  Ineck condition and test for leaks.  It of the damping cylinders.  Immountings are firmly attached, using a torque wrench.  Insion assemblies, series VB  Ill components for damage and wear.  Indeed bolts on the equaliser bearings are tight.  Insion the axle guide rods are tight, using a torque wrench.  Insion the rubber rollers and sliders are tight.  Insion assemblies, series BW / GW					
BPW hydropneum Visual check. Check as Damping cylinders: check the attachment Check that the spring Check that the spring Check that the spring Check that the thread Check that the lock nutries that the fixing the Check that the fixing the Check that the fixing the Check connecting root BPW axle suspensive BPW axle suspensive Check that the U-bolts Check that the U-bolts Check that the axle as Check that the U-bolts Check that the axle as Check that the U-bolts Check that the axle as Check that the U-bolts Check that the axle as Check that the U-bolts Check that the Axle as Check that the U-bolts Check that the Axle as Check that the A	for wear and firm attachment.  Inatic axle suspension systems  all components for damage and wear.  Ineck condition and test for leaks.  It of the damping cylinders.  Immountings are firmly attached, using a torque wrench.  Institute bolts are tight using a torque wrench.  Institute bolts on the equaliser bearings are tight.  Institute on the axle guide rods are tight, using a torque wrench.  Institute on the rubber rollers and sliders are tight.  Institute of the rubber for damage and wear.  Institute of the rubber rollers and sliders are tight.  Institute of the rubber for damage and wear.					

Lubricants					
All grease points	All grease points				
Grease all bearing points with	Grease all bearing points with BPW special longlife grease ECO-Li 91.				
the use of a high-pressure cer longlife grease of consistency	Steering knuckle bearing, steering rod ends, brake camshaft bearing and slack adjusters ne use of a high-pressure central lubrication system which is capable of feeding special onglife grease of consistency class 2-3 is permissible. The use of liquid lubricants is not permitted!				
Grease quantity - Conve	ntional wheel hub bearing				
A		B			
	Grease quantity per	tapered roller bearing			
Wheel hub	(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	The grease for the outer tapered roller bearing is pressed into the bearing as the hub cap filled with grease			

of the hub.

is screwed on.

Tighte	Tightening torques				
BPW trai	BPW trailer axles				
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	<b>125 Nm</b> (120 - 130 Nm)		<b>125 Nm</b> (120 - 130 Nm)
M 18 x 1.5	24	6	<b>290 Nm</b> (275 - 305 Nm)	<b>270 Nm</b> (250 - 290 Nm)	<b>320 Nm</b> (300 - 340 Nm)
M 20 x 1.5	27	8	<b>380 Nm</b> (360 - 400 Nm)	<b>380 Nm</b> (360 - 400 Nm)	<b>420 Nm</b> (400 - 440 Nm)
M 22 x 1.5	32	8/10	<b>510 Nm</b> (485 - 535 Nm)	<b>510 Nm</b> (485 - 535 Nm)	<b>560 Nm</b> (535 -585 Nm)
M 22 x 2	32	10	<b>460 Nm</b> (435 - 485 Nm)		<b>505 Nm</b> (480 - 530 Nm)

Hub caps (thread pitch Steel cap	2 mm): 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 wre	ench	
Spring mounting kit	M 24	M = <b>650 Nm</b> (605 - 715 Nm)
Spring bolts Air suspension hanger bracket Channel crossmember	M 30 M 30	M = <b>900 Nm</b> (840 - 990 Nm M = <b>900 Nm</b> (840 - 990 Nm)
Shock absorber attachment	M 24	M = <b>420 Nm</b> (390 - 460 Nm)
Air bag attachment	M 12 M 16	M = <b>66 Nm</b> (62 - 73 Nm) M = <b>230 Nm</b> (214 - 253 Nm)
Axle lift device	M 16	M = <b>230 Nm</b> (214 - 253 Nm)

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

BPW axle suspension	n assemblies, seri	ies VB
Axle guide rods	M 30	M = <b>720 Nm</b> (675 - 800 Nm)
Axle assembly mounting		
U-bolts	M 20	M = <b>375 Nm</b> (350 - 420 Nm)
	M 24	M = <b>650 Nm</b> (605 - 715 Nm
Bolts	M 16	M = <b>160 Nm</b> (150 - 180 Nm)
1 -5.13	M 20	M = <b>320 Nm</b> (300 - 355 Nm)
	M 24	M = <b>550 Nm</b> (520 - 605 Nm)
Clamping brackets on tord	nue arm	
	M 12-8.8	M = <b>86 Nm</b> (80 - 95 Nm)
Fixing bolts for the rubber	rollers and aliders	,
Fixing bolts for the rubber	M 12-8.8	M = <b>20 Nm</b> (17 - 23 Nm)
	M 16-8.8	M = 50  Nm (17 - 23  Nm) M = 50  Nm (47 - 53  Nm)
	10 0.0	33,

U-bolts on the trun	nion axle	
	M 20-10.9	M = <b>450 Nm</b> (420 - 485 Nm)
	M 30 x 2-8.8	M = <b>980 Nm</b> (910 - 1080 Nm)
Dalta an tha anning	h a coalin ara	
Bolts on the spring	•	
Bolts	M 20-8.8	M = <b>320 Nm</b> (300 - 355 Nm)
U-bolts	M 24-10.9	M = <b>700 Nm</b> (650 - 770 Nm)
Trunnion bolts on t	he sprina housina	
series BW	M 52 x 2	M = <b>400 Nm</b> (370 - 440 Nm)
. 014/	14.00	,
series GW	M 36 x 1.5	M = <b>300 Nm</b> (280 - 330 Nm)
	M 52 x 2	M = <b>400 Nm</b> (370 - 440 Nm)

