

BPW Maintenance intervals

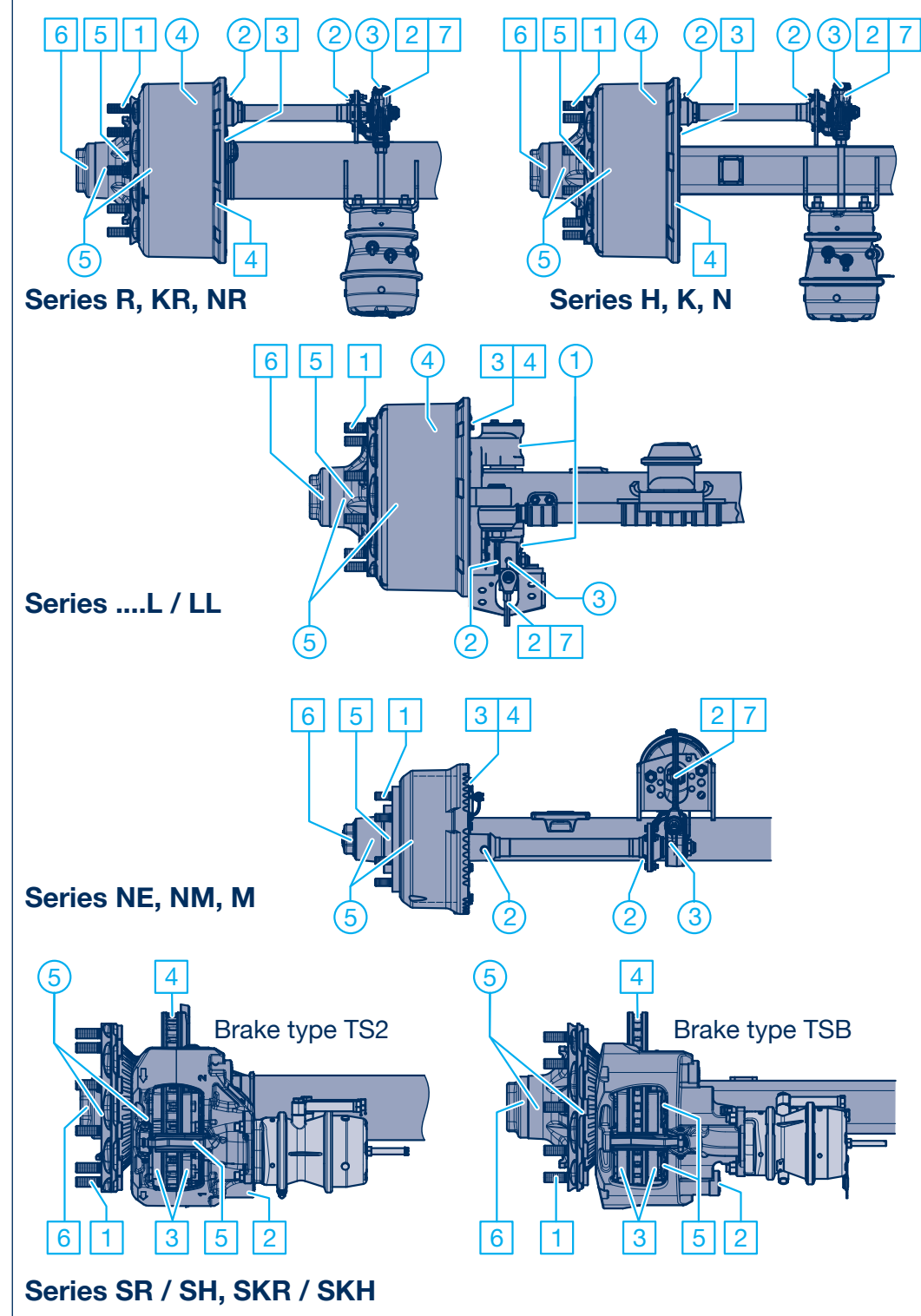


07.03.2023

we think transport

BPW axles and suspensions

BPW axles



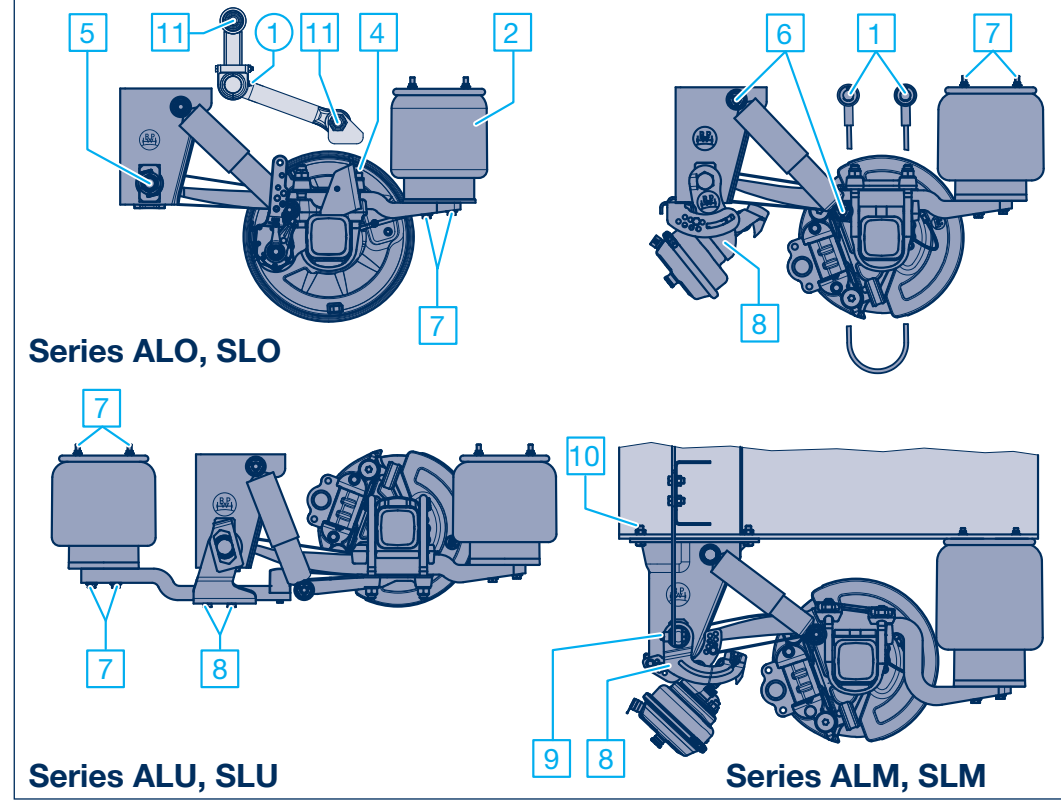
Lubrication	initially after 2 weeks	every 6 weeks	every 12 weeks (quarterly)	every 26 weeks (twice annually)	at every brake lining replacement ^a	every 2 years	every 3 years or every 500,000 km ^a
Axles with drum brakes and disc brakes							
1 Steering knuckle bearing, top and bottom (Series ...L/LL)		●					
2 Brake camshaft bearing, outer and inner On-Road-Conditions Off-Road conditions				●	●		
3 Slack adjusters manual Slack adjuster ECO-Master On-Road conditions Off-Road conditions			●	●	●		
4 Brake shoes with closed anchor eye (Bremsen SN 3015-1 / 3020-1)					●		
5 ECO Plus 3, ECO Plus 2 and ECO ^{Plus} Unit On-Road conditions Off-Road conditions						●	●
ECO Unit						●	●
Conventional hub bearing							●

BPW air suspensions SL / AL	initially after 2 weeks	every 6 weeks	every 12 weeks (quarterly)	every 26 weeks (twice annually)	at every brake lining replacement ^a	every 2 years	every 3 years or every 500,000 km ^a
1 Grease stabilizer bearing bushes and check for wear. (where fitted)	●			●			

BPW suspensions, series ECO Cargo VB / VB HD / VB 5.5 t	initially after 2 weeks	every 6 weeks	every 12 weeks (quarterly)	every 26 weeks (twice annually)	at every brake lining replacement ^a	every 2 years	every 3 years or every 500,000 km ^a
1 Grease bearings (suspension type E). (Not applicable in the case of rubber / steel bushes).		●	●				
2 Slightly grease the slide elements / slide ends of springs.		●	●				

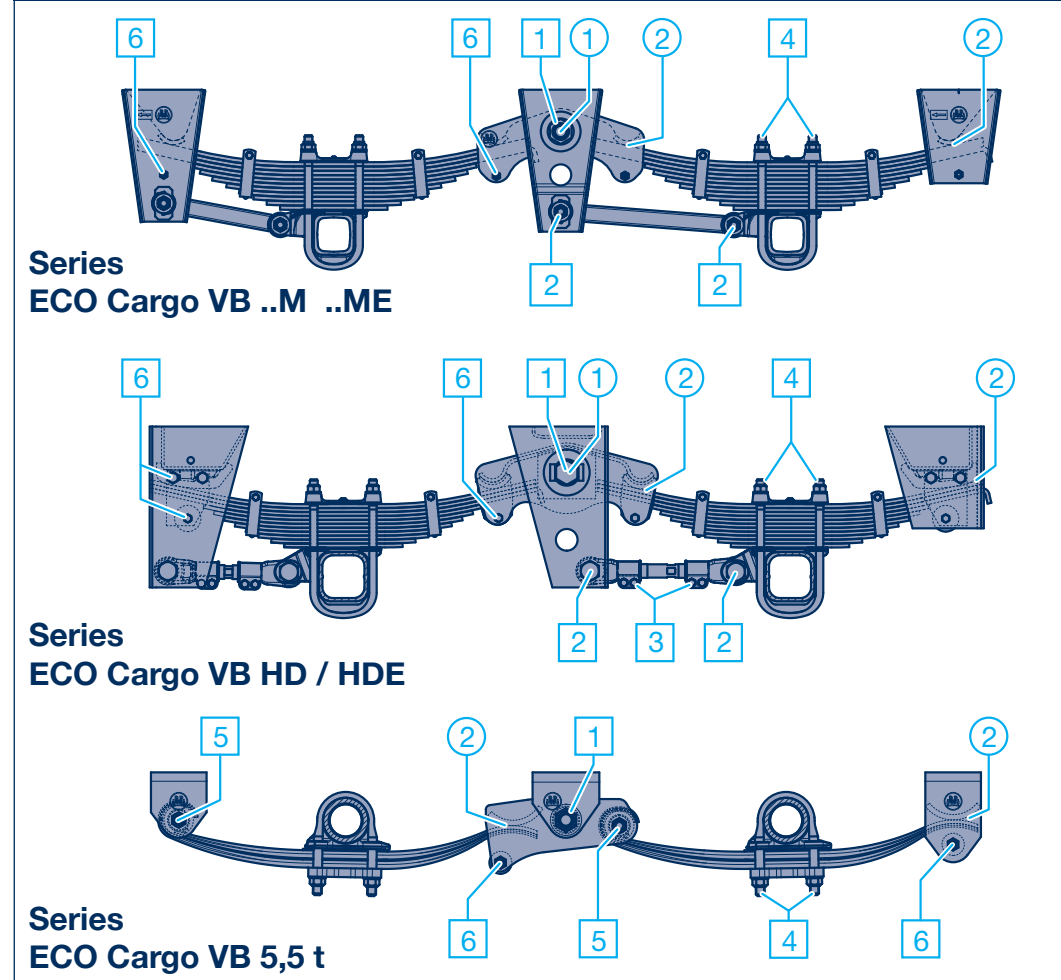
BPW suspensions, series ECO Cargo W / BW / GW	initially after 2 weeks	every 6 weeks	every 12 weeks (quarterly)	every 26 weeks (twice annually)	at every brake lining replacement ^a	every 2 years	every 3 years or every 500,000 km ^a
1 Grease axle support bearing series W, BW.		●	●				
2 Grease spring tension casing series W.		●	●				

BPW air suspension



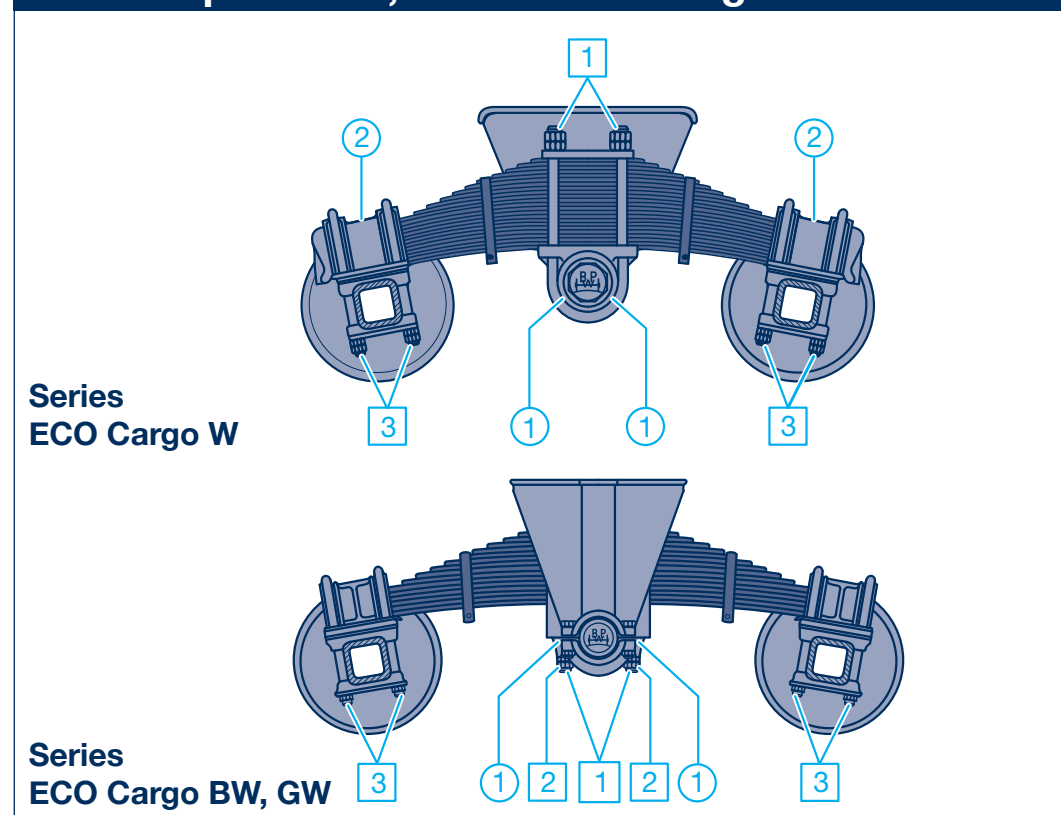
Maintenance	initially	every 1 to 3 weeks	Within 2 weeks of first journey under load, latest after 2000 km	every 12 weeks (quarterly)	every 26 weeks (twice annually)	annually and at every brake lining replacement ^a
Axles with drum brake						
1 Check wheel nuts for tightness.	●					
2 With manual slack adjusters, check brake play, adjust if necessary to 10 - 12% of the connected brake lever length.			●			
3 Check brake lining thickness.				●		
4 Check the brake drum for cracks and check the internal diameter.				●		
5 Visual check, check all components and welding seams for damage, wear and corrosion.					●	●
6 Re-adjust the bearings to the required settings. ECO Plus 3, ECO Plus 2 and ECO ^{Plus} Unit ECO Unit / conventional bearing				●	●	●
7 Check caps for firm seating (not necessary with ECO Plus axles).					●	●
8 Check operation of automatic slack adjusters.					●	●
Axles with disc brakes						
1 Check wheel nuts for tightness.	●					
2 Check brake caliper guide system (check play and adjustment).					●	●
3 Check brake pad thickness.				●		
4 Check brake disc thickness and visually check for cracks.				●		●
5 Visual check, check all components and welding seams for damage, wear and corrosion. TS2: Check bellow with pressure plate. TSB: Check coarse dirt seals and the pressure plates.					●	●
6 Re-adjust the bearings to the required settings. ECO Plus 3, ECO Plus 2 and ECO ^{Plus} Unit				●	●	●

BPW suspensions, series ECO Cargo VB



BPW air suspension, series SLO / AL / AL II	initially	every 1 to 3 weeks	Within 2 weeks of first journey under load, latest after 2000 km	every 12 weeks (quarterly)	every 26 weeks (twice annually)	annually and at every brake lining replacement ^a
Visual inspection, check all component parts and welding seams for damage and wear.					●	●
1 Check strap: Check condition and fastening.				●		●
2 Check condition of air bags				●		●
3 Check air suspension level valves for condition, seal-tightness and tightness.				●		●
4 Check spring mounting kit for tightness.				●		●
5 Check spring pivot bolts for tightness with a torque wrench.				●		●
6 Check shock absorber fastening for tightness with a torque wrench.				●		●
7 Check air bag fastening for tightness.				●		●
8 Check axle lift for tightness.				●		●
9 Tighten the spring bolt to gusset plate connection bolt.				●		●
10 Check the bolt connection between the air suspension hanger bracket and the longitudinal member for tightness.				●		●
11 Check stabilizer fastenings. (where fitted)				●		●

BPW suspensions, series ECO Cargo W / BW / GW



BPW suspensions, series ECO Cargo VB / VB HD / VB 5.5 t	initially	every 1 to 3 weeks	Within 2 weeks of first journey under load, latest after 2000 km	every 12 weeks (quarterly)	every 26 weeks (twice annually)	annually and at every brake lining replacement ^a
Visual inspection, check all component parts for wear and damage.					●	●
1 Check threaded bolts on equaliser arm bearings for tightness.				●		●
2 Check axle connecting rod bolts for tightness.				●		●
3 Check connecting rod clamping screws for tightness.				●		●
4 Check spring U-bolts for tightness using a torque wrench.				●		●
5 Check spring pivot bolts for tightness. (Serie up to 5.5 t)				●		●
6 Check slide elements for tightness.					●	●

BPW suspensions, series ECO Cargo W / BW / GW	initially	every 1 to 3 weeks	Within 2 weeks of first journey under load, latest after 2000 km	every 12 weeks (quarterly)	every 26 weeks (twice annually)	annually and at every brake lining replacement ^a
Visual inspection, check all component parts for wear and damage.					●	●
1 Check spring U-bolt of support axle for tightness.				●		●
2 Check fastening screws on the bearing covers for tightness.				●		●
3 Check spring U-bolts on the spring housing for tightness.				●		●

Lubricants

Axle load	Grease quantity per taper roller bearing	
	A inner	B outer
8000 - 12000 kg	170 g 130 g*	120 g 90 g*

Axle load	Grease quantity per taper roller bearing	
	A inner	B outer
8000 - 9000 kg	170 g 130 g*	120 g 90 g*

Axle load	Grease quantity per taper roller bearing	
	A inner	B outer
8000 - 9000 kg	120 g	120 g
10000 - 12000 kg	170 g	120 g
13000 - 14000 kg	230 g	150 g

Axle load	Grease quantity per taper roller bearing	
	A inner	B outer
4000 - 5500 kg	80 g	130 g
6000 - 9000 kg	170 g	290 g
10000 - 12000 kg	180 g	320 g
13000 - 14000 kg	240 g	500 g
16000 - 18000 kg	400 g	800 g
20000 kg	440 g	900 g

BPW special longlife grease ECO-L ^{Plus}	Cartridge 0.4 kg		Bucket 5 kg	
	Cartridge 0.45 kg	Bucket 25 kg	02.1040.45.00	02.1040.47.00
			02.1040.45.00-450	02.1040.49.00

Tightening torques

Axles				
Wheel nuts				
Wheel stud arrangement	M 14 x 1.5	SW 19	125 Nm	
	M 18 x 1.5	SW 24 / 27	290 Nm	
	M 20 x 1.5	SW 27	380 Nm	
	M 22 x 1.5	SW 32	510 Nm	
	M 22 x 2	SW 32 / 33	460 Nm	
	M 18 x 1.5	SW 27	350 Nm	
Spigot arrangement	M 20 x 1.5	SW 30	480 Nm	
	M 22 x 1.5	SW 32 / 33	630 Nm	
	M 24 x 1.5	SW 36	860 Nm	
	M 22 x 1.5	SW 32 / 33	630 Nm	
Alloy wheels	M 22 x 1.5	SW 32 / 33	630 Nm	
Hub caps				
with BPW oval shape	ECO Plus 3 Unit	SW 110	350 Nm	
	ECO Plus 2 Unit	SW 120	800 Nm	
	ECO ^{Plus} Unit	8 - 12 tonnes	SW 110	800 Nm
	ECO Unit	6 - 12 tonnes	SW 110	800 Nm
for conventional bearing hub	13 - 14 tonnes	SW 120	800 Nm	
	5.5 tonnes	SW 70	500 Nm	
	6.5 - 9 tonnes	SW 95	500 Nm	
	10 - 12 tonnes	SW 110	500 Nm	
	13 - 14 tonnes	SW 120	800 Nm	
	16 - 18 tonnes	SW 140	350 Nm	
Alloy cap	6 - 12 tonnes	SW 110	350 Nm	
with octagonal shape	13 - 20 tonnes	SW 120	700 Nm	
Axle nut				
(Hub cap with BPW oval shape)	≤ 5.5 tonnes		70 Nm / 100 Nm	
(Hub cap with BPW oval shape)	6 - 18 tonnes		150 Nm	
(Hub cap with octagonal shape)	16 - 30 tonnes		350 Nm	
ECO Plus 3, ECO Plus 2 and ECO ^{Plus} Unit: Axle bolt or axle nut with torque limiter - do not use an impact driver -				

BPW air suspension Series SL / AL / AL II			
Tightening torques with a torque wrench			
Axle clampings / U-bolt			
ECO Air when servicing			
M 20	SW 30		450 Nm
ECO Air when replacing			
M 20	SW 30		450 Nm + 90° + 90° rotation angle
ECO Air COMPACT when servicing			
M 20	SW 30		420 Nm
ECO Air COMPACT when replacing			
M 20	SW 30		420 Nm + 90° rotation angle
Airlight II when servicing			
M 22	SW 32		550 Nm
Airlight II when replacing			
M 22	SW 32		550 Nm + 90° rotation angle
SL / AL / AIRLIGHT II			
M 24	SW 36		650 Nm
Air suspension 3.5 - 5.5 tonnes, hexagon screws			
M 20	SW 30		340 Nm
Spring pivot bolts			
Hanger brackets and channel crossmember			
M 24	SW 36		650 Nm
Airlight II from 09/2007			
M 30	SW 46		900 Nm
Hanger brackets from 08/2001			
M 30	SW 46		900 Nm
Channel cross member			
M 30	SW 46		900 Nm
Shock absorber fastening			
Steel hanger brackets			
M 20	SW 30		320 Nm
Steel hanger brackets			
M 24	SW 36		420 Nm
Aluminium and stainless steel hanger brackets			
M 24	SW 36		320 Nm
Air bag fastenings			
M 12	SW 17		66 Nm
M 16	SW 22		260 Nm
Central screw			
M 16	SW 22		300 Nm
Axle lift			
Supporting arm (SL / AL)			
M 16	SW 22		230 Nm
Cylinder			
M 20	SW 30		360 Nm
Cylinder			
M 16	SW 24		190 Nm
Hexagon screw			
M 12	SW 17		75 Nm
Lock nut			
M 10	SW 16		38 Nm
Cylinder cap screw			
M 10	SW 8		50 Nm
Stabilizer fastenings			
M 10-10.9	SW 17		53 Nm
M 30	SW 46		750 Nm
Sundries			
Spring bolt screw connection on the gusset plate			
M 18 x 1.5	SW 27		420 Nm
Bolt connection between the air suspension hanger bracket and the longitudinal chassis beam			
M 16	SW 22		260 Nm

BPW suspensions Series ECO Cargo VB / VB HD / VB 5.5 t			
Equalizer arm bearings			
up to an axle load of 5.5 tonnes (from 03/2016)			
M 30	SW 46		725 Nm
up to an axle load of 12 tonnes (from 08/2013)			
M 42 x 3	SW 65		1300 Nm
up to an axle load of 12 tonnes (up to 07/2013)			
M 42 x 3	SW 65		1100 Nm
Series HD / HDE			
M 48 x 3	SW 65		1240 Nm
Axle guide linkages / Connecting rods			
M 24 x 2	SW 36		650 Nm
M 30	SW 46		725 Nm
M 36	SW 55		1425 Nm
Connecting rod clamping screws			
M 12	SW 19		66 Nm
M 14	SW 22		140 Nm
U-bolts			
M 20	SW 30		340 Nm
M 24	SW 36		620 Nm
Spring pivot bolt / Screw			
M 20	SW 30		340 Nm
Fixing screws of slide elements			
M 14	SW 22		140 Nm
M 16	SW 24		163 Nm
M 20	SW 30		320 Nm
BPW suspensions Series ECO Cargo W / BW / GW			
Spring U-bolt of support axle			
M 30 x 2	SW 46		980 Nm
M 36	SW 55		1555 Nm
Fastening screws on the bearing covers			
M 20	SW 30		320 Nm
M 24	SW 36		570 Nm
Spring U-bolts on the spring housing			
M 20	SW 30		450 Nm
M 24	SW 36		700 Nm

Subject to change (without notice)
- the latest workshop manual has to be considered!
For updates and more information please visit our website: www.bpw.de