BPW-MI

BPW Maintenance intervals

we think transport
हमारी सोच परिवहन

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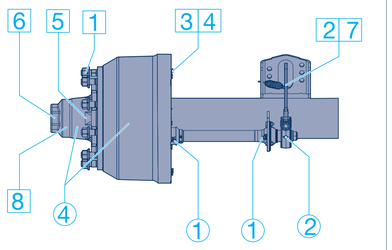
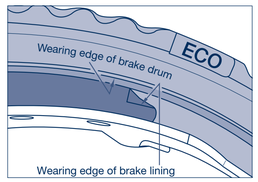
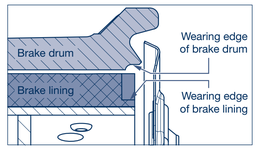
BPW axles and suspensions

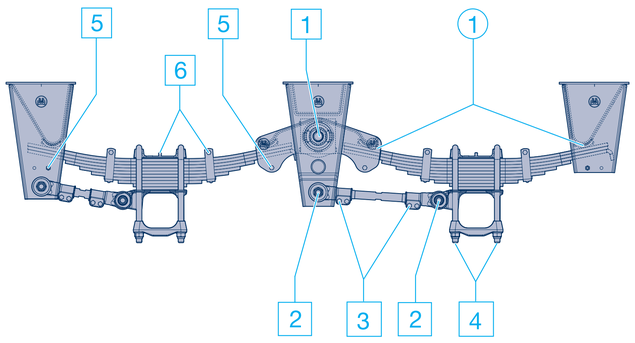
Axle



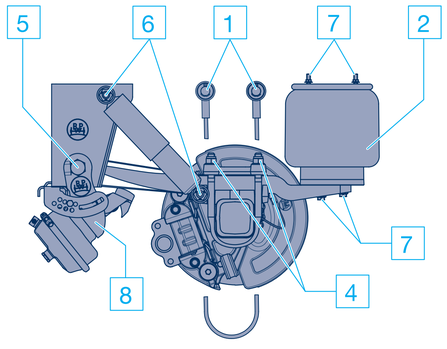




Mechanical suspension ECO Cargo VB IN



Air suspension SL/AL



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

Lubrication

1) BPW Grease only.
2) After a long idle period, prior to initial operation actuate the brake lever and lubricate the brake camshaft bearing.
3) With usage extreme conditions (e.g. extreme Off-Road use) more frequent lubrication with high pressure grease is necessary.

		Monthly once	Quarterly (every 3 months) once	Half yearly (every 6 months) (2) (3)	Yearly once or at every 150,000 km and every brake lining replacement	Latest every 2 years	Latest every 2 years or every 400,000 km
Axles with drum brakes and disc brakes							
1	Brake camshaft bearing			●			
2	Slack adjuster (manual)		●				
	Slack adjuster (automatic)			●			
4	Axle hub unit (400k)						●
	Axle hub unit ECO/Conventional				●		
	Axle hub unit (conventional)				●		
Mechanical suspension ECO Cargo VB IN							
1	Slightly grease the wear pads / ends of leaf springs.	●					

Maintenance

Please ensure the torque (re-torque) of all the fasteners after first 2000 km.

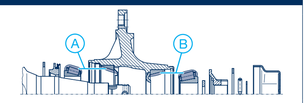
1) Visual inspection of all components and for wear and damage monthly.
2) After the first run under load conditions, likewise after each wheel change.
3) Under extreme conditions, increase frequency (e.g. construction sites and poor roads)

		Every 15 day's (3) (2)	Every month once (1)	Every 3 month's (1)	Every 6 month's (1)	Yearly once and at every brake lining replacement (1)
Axles with drum brake						
1	Check wheel nuts for tightness.	■				
2	Manual slack adjusters: / Automatic slack adjusters: Brake play should be < 2/3rd of the brake chamber stroke length, when applied with system pressure.	■				
3	Check brake lining thickness.		■			
4	Check the brake drum for cracks and check its internal diameter.			■		
5	Check wheel hub bearing play, adjust if necessary.				■	
6	Check hub caps for firm seating.				■	
-	Check ABS sensor positioning.			■		
Mechanical suspension ECO Cargo VB IN						
1	Check M42 bolts on Equalizing beam assembly for tightness.			■		
-	Check equilizing beam bush & connecting rod for wear.			■		
2	Check axle connecting rod bolts for tightness.			■		
3	Check connecting rod clamping screws for tightness.			■		
-	Check axle alignment.			■		
4	Check spring U-bolts for tightness using a torque wrench.			■ (3)		
5	Check wear pad bolts for tightness.			■		
-	Check wearing of wear pads & centre support wear plate			■		
6	Check leaf spring fasteners.			■		
Air suspension SL/AL						
1	Catch strap: Check condition and fastening.			■		
2	Check condition of air bags.			■		
3	Check air suspension leveling valve linkage, ride height, leakage, kinks		■			
4	Check U-bolts for tightness.			■ (3)		
5	Check spring pivot bolts for tightness/rubber bush for wear.			■		
6	Check shock absorber fastening for tightness with a torque wrench.			■		
7	Check air bag fastening for tightness.			■		
8	Check axle lift for tightness.			■		

Lubricants

Grease quantity - 400k Unit

	Grease quantity per taper roller bearing	
Axle load	Ⓐ inner	Ⓑ outer
10000 - 12000 kg	230 g	150 g



Grease quantity - ECO Unit

	Grease quantity per taper roller bearing	
Axle load	Ⓐ inner	Ⓑ outer
10000 - 12000 kg	230 g	150 g

Grease quantity - Conventional wheel hub bearing

	Grease quantity per taper roller bearing	
Axle load	Ⓐ inner	Ⓑ outer
10000 - 12000 kg	240 g	500 g

Tightening torques

Axles					
1	**Wheel nuts**				
		Spigot arrangement	M 22 x 1.5	SW 32/33	M = 630 Nm
			M 22 x 2		M = 400 Nm
6	**Hub caps**				
		400k	10 - 12 tonnes	SW 110	M = 300 Nm
		ECO	10 - 12 tonnes		M = 300 Nm
		Conventional	10 - 12 tonnes		M = 300 Nm
8	**Castle nut**				
		400k	10 - 12 tonnes		M = 150 Nm
		ECO	10 - 12 tonnes		M = 150 Nm
		Conventional	10 - 12 tonnes		M = 150 Nm
Mechanical suspension ECO Cargo VB IN					
4	**U-Bolts**		M 24 x 3	SW 36	M = 600 - 650 Nm
6	**Leaf spring**				
		Centre bolt of leaf spring	M 12	SW 19	M = 123 Nm
		Nuts of the leaf spring	M 12	SW 19	M = 85 Nm
	Connecting rods				
2		Locking nut of the connecting rod	M 24 x 2	SW 36	M = 650 Nm
3		Locking nut of the clamping head	M 12	SW 19	M = 85 Nm
5	**Wear pad**	Wear pad locking nut	M 12	SW 19	M = 85 Nm
1	**Equalizing beam**	Locking nut	M 42 x 3	SW 65	M = 1300 Nm
Air suspension SL/AL					
4	**U-Bolts**		M 24	SW 36	M = 650 Nm
5	**Spring pivot bolts**		M 24	SW 36	M = 650 Nm
			M 30	SW 46	M = 900 Nm
6	**Shock absorber fastening**		M 24	SW 36	M = 420 Nm
7	**Airbag (bellow) fastening**				
		Top attachment	M 12	SW 17	M = 66 Nm
		Bottom attachment	M 16	SW 22	M = 260 Nm
		Central screw	M 16	SW 22	M = 300 Nm
8	**Axle lift**				
		Cylinder screw	M 20	SW 30	M = 365 Nm
		Hexagon screw	M 12	SW 17	M = 130 Nm