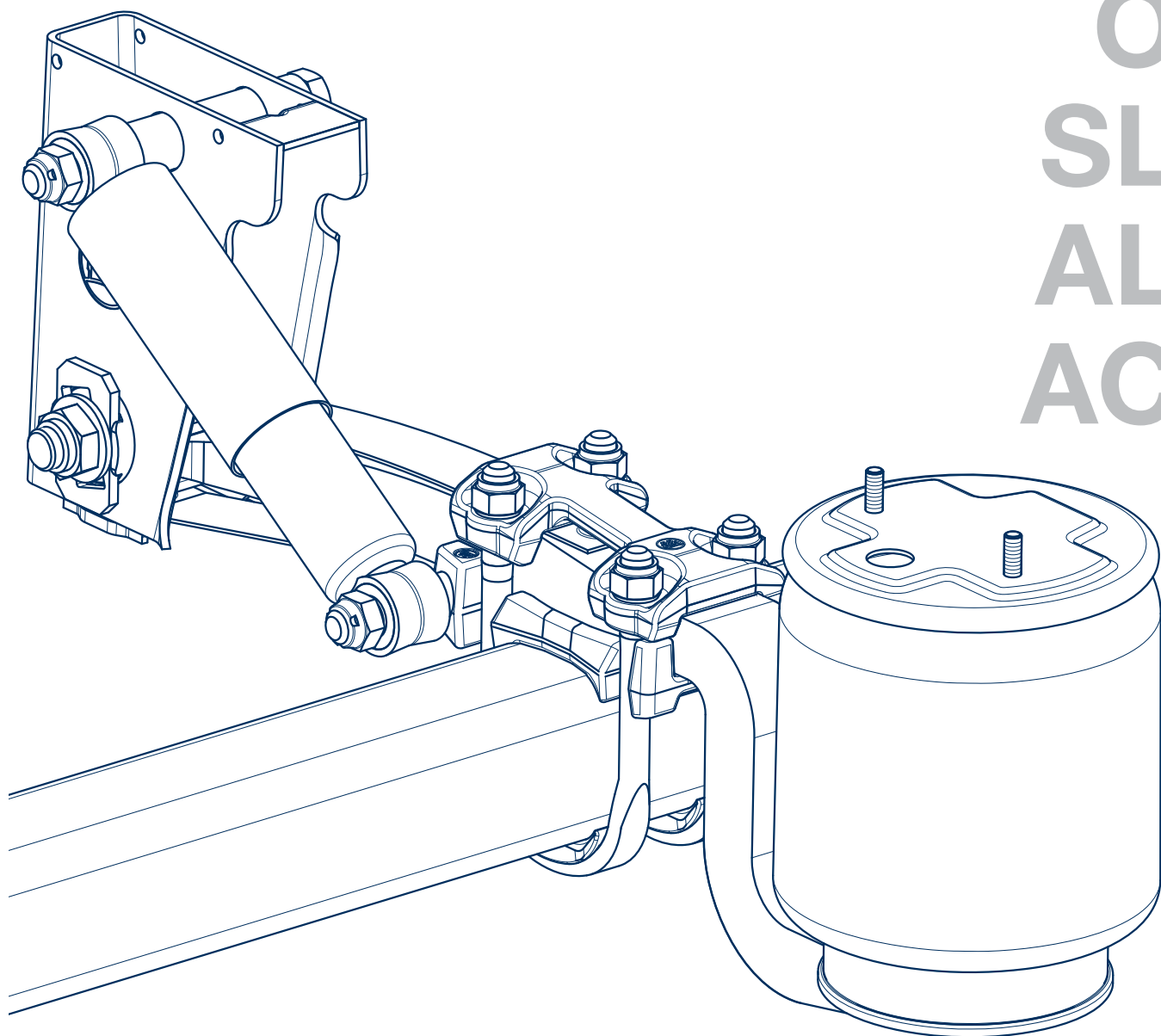


O
SL
AL
AC



BPW Original spare parts

BPW Air suspensions
series O.. / SL.. / AL.. / AC..



BPW-EL-Luft 31051601e

we think transport





BPW-EL-Luft 31051601e

BPW is a globally leading manufacturer of intelligent running gear systems for trailers and semi-trailers. As an international mobility and system partner, we offer a wide range of solutions for the transport industry from a single source, from axle to suspension and brake to user-friendly telematics applications.

We thereby ensure outstanding transparency in loading and transport processes and facilitate efficient fleet management. Today, the well-established brand represents an international corporation with a wide product and service portfolio for the commercial vehicle industry. Offering running gear systems, telematics, lighting systems, composite solutions and trailer superstructures, BPW is the right system partner for automotive manufacturers.

BPW, the owner-operated company, consistently pursues one target: To always give you exactly the solution which will pay off. To this end, we focus our attention on uncompromising quality for high reliability and service life, weight and time-saving concepts for low operating and maintenance costs as well as personal customer service and a close-knit service network for quick and direct support. You can be sure that with your international mobility partner BPW, you always use the most efficient method.

Your partner on the path to economic viability



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info@bpw.de · www.bpw.de

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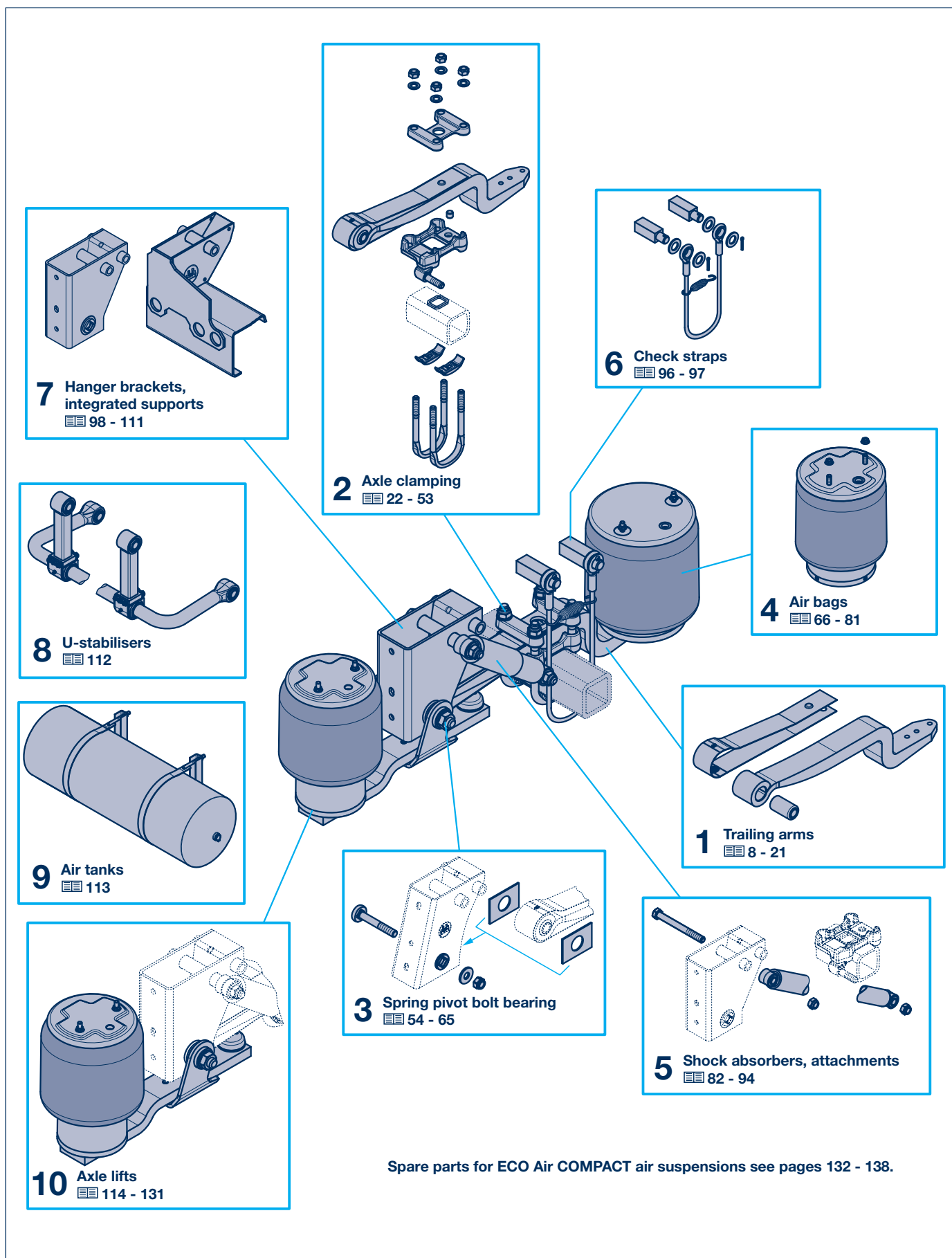
Valid: 1.3.2016

This spare parts list shows fast moving parts for air suspension bogies of the series **O.. / SL.. / AL.. 6 - 13 tonnes** and **ECO Air COMPACT**. For further spare parts see BPW spare parts catalogue and / or spare parts lists of the corresponding single axles without bogie parts. Current versions and additional informations can be found online at www.bpw.de.

Subject to change (without notice).

⊙ -parts are embossed with BPW Code no.

Contents (Exploded View)



2 Explanation of BPW suspension type codes

2.2 Air suspensions (Extract)

Example:												
HSF	ALO	A	LL	3/	9010	/12°	E	F30	ECO Plus 2			
H..												
K..												
N..										For explanation of axle type codes, see EL-HKN / EL-SB / EL-TSB		
a.o.												
										Air suspension series	Ride height	
O										O	straight overslung trailing arm	490 - 500
OM										OM	cranked overslung trailing arm	370 - 470
OMN										OMN	cranked overslung trailing arm	355
OMT										OMT	cranked underslung trailing arm	290
OT										OT	underslung trailing arm	220 - 360
SLO										SLO	straight overslung trailing arm	420 - 490
SLM										SLM	cranked overslung trailing arm	360 - 440
SLU										SLU	underslung trailing arm	220 - 330
ALO										ALO	straight overslung trailing arm	380 - 490
ALM										ALM	cranked overslung trailing arm	305 - 420
ALMT										ALMT	cranked overslung trailing arm	245 - 290
ALU										ALU	underslung trailing arm	175 - 300
DLU										DLU	Airlight ^{Direct}	260 - 330
ACAU										ACAU	ECO Air COMPACT	205 - 350
ACAM										ACAM		245 - 370
ACAO										ACAO		335 - 385
ACBU										ACBU		260 - 330
ACBM										ACBM		300 - 425
ACBO										ACBO		330 - 510
A										With axle lift device		
R										With frame (= ride height + 100 mm)		
U										With U-stabilizer		
L										With steering axle, series L	steering angle max. 40°	
LL										With self-steering axle, series LL	steering angle max. 27°	
-										Single axle		
2/										Tandem axle suspension		
3/										Tri-axle suspension		
					6006 to 13010					Axle load (kg) + quantity of wheel studs per hub		
						/12° to /40°				Steering angle of steering axle		

Explanation of BPW suspension type codes **2**

Air suspensions (Extract) **2.2**

Example:

HSF	ALO	A	LL	3/	9010	/12°	E	F30	ECO Plus 2		
										Hanger bracket type	
										A	Alloy hanger bracket
										C	Integrated support
										D	Hanger bracket with top plate
										E	Hanger bracket without top plate
										K	Bolted on hanger bracket
										S	Taper mounted hanger bracket (70 mm wide)
										T	with support (trailing axle)
										V	Adjustable hanger bracket
										X	with stainless steel hanger bracket
										Y	without mounted hanger brackets, hanger brackets separate
										Air bag type	
										30	Air bag Ø 300 mm, for stroke 200 mm (standard)
										30-1	Ø 300 mm, for stroke up to 340 mm
										30 K	Ø 300 mm, for stroke 150 mm
										36	Ø 360 mm, for stroke 200 mm (standard)
										36-1	Ø 360 mm, for stroke up to 340 mm
										36-2	Ø 360 mm, for stroke up to 450 mm
										36 K	Ø 360 mm, for stroke 180 mm
										F30	Ø 300 mm, central on the trailing arm
										G	Air bag with split piston
										Z	without mounted air bags, air bags separate
										Hub assembly type	
										ECO	Single axle with ECO Unit, 1996 (1998) -
										ECO-MAXX	Weight-optimized axle with ECO Unit, - 2003
										ECO^{Plus}	Weight-optimized axle with ECO ^{Plus} Unit, 2003 -
										ECO Plus 2	Single axle with ECO Plus 2 Unit, 2007 -
										ECO Plus 3	Single axle with ECO Plus 3 Unit, 2015 -
										MAXX	Weight-optimized axle with conventional hub bearing system

3 Explanation of BPW code numbers

3.1 Axles and suspensions (Extract)

Example:

30.	38.	743.	000				
61.	38.	441.	001				
				1. + 2. digit			
				Wheel brake			
				Air suspension type	Drum	Disc	
21.				Air suspension single axle	all	-	
28.				Air suspension single axle	all	all	
30.				Air suspension single axle	all	-	
32.				Tandem axle air suspension / tri-axle air suspension	all	-	
38.				Air suspension single axle without air bags, air bags loose, separate	all	-	
39.				Tri-axle air suspension / Tandem axle air suspension / tri-axle air suspension	all	Ø 430	
61.				Air suspension single axle	SN 420	Ø 430	
62.				Tandem axle air suspension	SN 420	Ø 430	
63.				Tri-axle air suspension	SN 420	Ø 430	
64.				Air suspension single axle	SN 360	Ø 370	
65.				Tandem axle air suspension	SN 360	Ø 370	
66.				Tri-axle air suspension	SN 360	Ø 370	
67.				Air suspension single axle	SN 300	-	
68.				Tandem axle air suspension	SN 300	-	
69.				Tri-axle air suspension	SN 300	-	
71.				Module without hanger bracket and air bag (ECO Air COMPACT)	SN 420	Ø 430	
74.			SN 360		Ø 370		
77.			SN 300		-		
72.				Module with hanger bracket and without air bag (ECO Air COMPACT)	SN 420	Ø 430	
75.			SN 360		Ø 370		
78.			SN 300		-		
73.				Module with hanger bracket and air bag (ECO Air COMPACT) + Tandem or tri-axle suspension	SN 420	Ø 430	
76.			SN 360		Ø 370		
79.			SN 300		-		
98.				Air suspension unit, air suspension without axles			
99.				Air suspension unit, air suspension without axles			
				3. + 4. digit			
				Axle load	Roller bearing	Year of manuf.	Remark
06.				6500 kg	33116 / 32310	1982 -	Conventional hub bearing system
08.				8000 - 9000 kg	33116 / 32310	1982 -	
09.							
10.				10000 - 12000 kg	33118 / 33213	1982 -	
14.				13000 - 14000 kg	32219 / 33215	1983 -	
36.				6500 kg	33116 / 32310	1991 (1992) -	ECO / ECO- MAXX Unit
37.				8000 - 9000 kg	33116 / 32310	1991 (1992) -	
38.							
39.							
40.				10000 - 12000 kg	33118 / 33213	1991 (1992) -	
41.				13000 - 14000 kg	32219 / 33215	1994 -	
44.							
48.				8000 - 9000 kg	33118 / 33213	2000 -	ECO ^{Plus} Unit
49.							
50.				10000 - 12000 kg	33118 / 33213	2000 -	
51.				6500/7000 kg	33118 / 33213	2007 -	ECO Plus 2 Unit
56.							
57.							
58.				8000 - 9000 kg	33118 / 33213	2007 -	
59.				6400 kg	33215 / 32310	1985 - 1980 - 1982	Conv. hub bearing system
65.							
66.				6500 kg	33118 / 33213	2015 -	ECO Plus 3 Unit
68.				9000 kg	33118 / 33213	2015 -	

Explanation of BPW code numbers 3

Axles and suspensions (Extract) 3.1

Example:			
30.	38.	743.	000
61.	38.	441.	001
		5. + 6. digit (Ref. number 7...)	Type
01.		Designation trailing guide and air bag beam (ECO Air COMPACT)	ACAU
02.			ACAM
03.			ACBM
04.			ACBO
05.			ACBU
06.			ACAO
		5. - 7. digit (Ref. number 2... / 3... / 6...)	
001. to 099.		Premounted air suspension axle without hanger brackets and air bags in the case of ref. number 61.xx.xxx.xxx to 69.xx.xxx.xxx e.g. .0xx. = Premounted air suspension axle .x51. = Premounted air suspension axle with trailing arm 05.082.13.51.0	
220. to 509.		Designation of ride height and air bag type 220 to 509 in the case of ref. number 61.xx.xxx.xxx - 69.xx.xxx.xxx e.g. .22x. = 220 mm ride height .44x. = 440 mm ride height Air bag type: .xx0. = BPW 30 (Ø 300 mm) .xx1. = BPW 36 (Ø 360 mm) .xx2. = BPW 36-1 (Ø 360 mm) .xx3. = BPW 30-1 (Ø 300 mm) .xx4. = BPW 30 K (Ø 300 mm) .xx5. = BPW 36 K (Ø 360 mm) .xx6. = BPW 36-2 (Ø 360 mm) .xx9. = BPW 30 / 36 loose separately	
501. to 839.		Designation of wheel brake in the case of ref. number 20... - 39... For explanation of code number, see EL-HKN / EL-SB / EL-TSB	
		7. - 10. digit (Ref. number 7...)	
		0000	Consecutive number 0000 - 9999
		8. - 10. digit (Ref. number 2... / 3... / 6...)	
		000	Consecutive number 000 - 999

1 Trailing arms

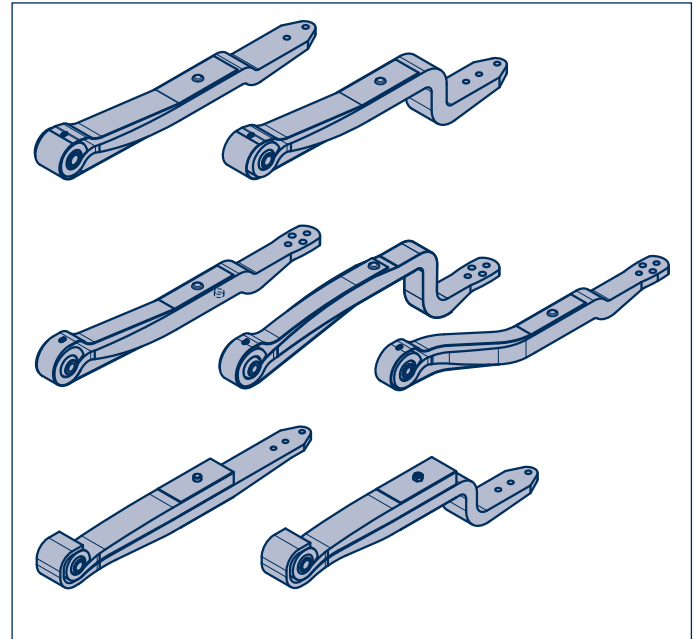
General

BPW Trailing arms

The trailing arm connects the axle to the vehicle frame via the air suspension hanger brackets and the air bag. BPW trailing arms (single or twin leaf) are highly flexible spring steel elements. They are hot-rolled from one piece, after which they are shot-peened, cathoretic dip-coated and zinc-phosphated.

Trailing arms absorb much of the lateral forces and reduce the torsional forces input into the axle beam. Various trailing arm versions permit optimisation of axle load, track, spring centre, centre of gravity height and driving comfort. In every situation, their stiffness and flexibility are exactly matched to the vehicle and its application.

This reduces the stress on the body and ensures that the vehicle achieves a long service life.

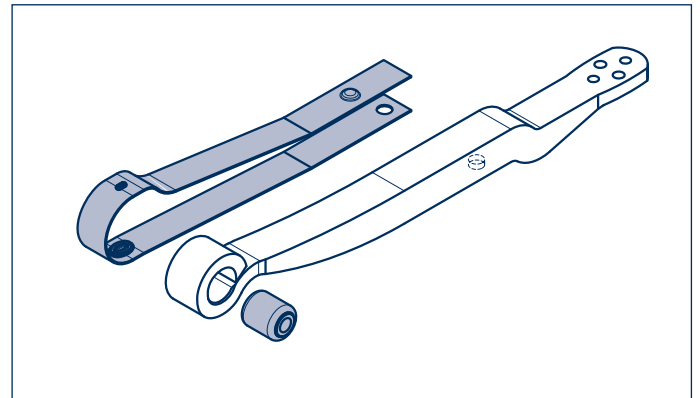


If single leaf trailing arms are mounted, the catch strap offers the necessary safety reserves if the worst should come to the worst.

Long-life steel-rubber-steel bushes (up to 4 times the service life of rubber-steel bushes) offer maintenance-free mounting of the trailing arm.

The axle is precisely located, and tyre wear and operating costs are both reduced.

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.



Trailing arms 1

General

Conversion of spring pivot bolt

As part of the introduction of new products into series production, the spring pivot bolt connection on all Airlight II air suspensions systems was changed from **M 30** to **M 24** from September 2007 onwards.

Introducing an **M 24** pivot bolt provides greater security due to higher bolt tension being achieved. In addition the surface area of the clamped interfaces is increased.

This means the bolted connection has been made even less susceptible to settling.

The **M 24** spring bolts are Geomet-coated, removing the need for additional lubrication on new component assembly.

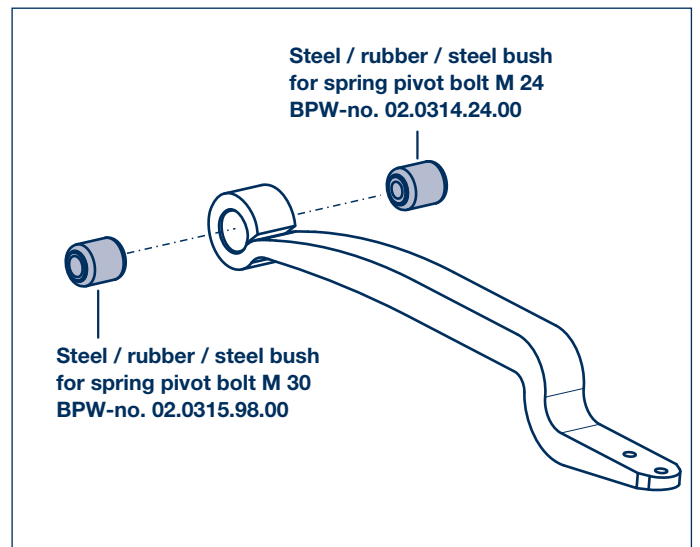
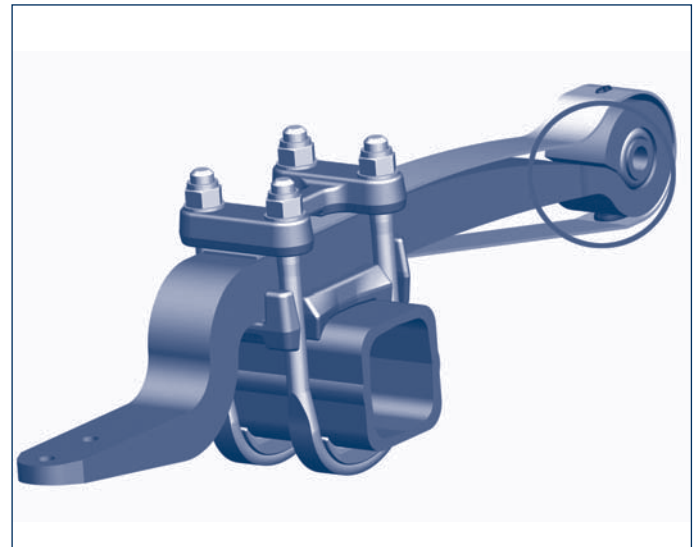
This modification affects all air suspension systems with 70 mm wide trailing arms (all Airlight II versions).

All the versions were changed over to **M 24** at the start of series production from week 36 / 2007 onwards. Versions with **M 30** spring bolts were not produced from that point onwards.

The adaptation to **M 24** spring bolts is performed by changing the spring pivot bolt assemblies, the bushes in the air suspension hanger brackets and channel cross members and the steel / rubber / steel bushes in the trailing arms.

The geometry of the actual trailing arm is not changed. As an assembly, the trailing arms with steel / rubber / steel bushes for **M 24** spring bolts are given the index **2** (example: trailing arm 05.082.13.88.0 for **M 30** spring bolt => trailing arm 05.082.13.88.2 for **M 24** spring bolt).

It is possible to adapt from the **M 30** spring bolt to the **M 24** spring bolt by changing the steel / rubber / steel bush.



1 Trailing arms

General

Optimised trailing arm and air bag attachment

With further development of the Airlight II air suspension, BPW introduced new optimised trailing arms from 1 July 2010 as well as a centrally bolted air bag BPW 30 / 30 K for offset $V = 20$ mm.

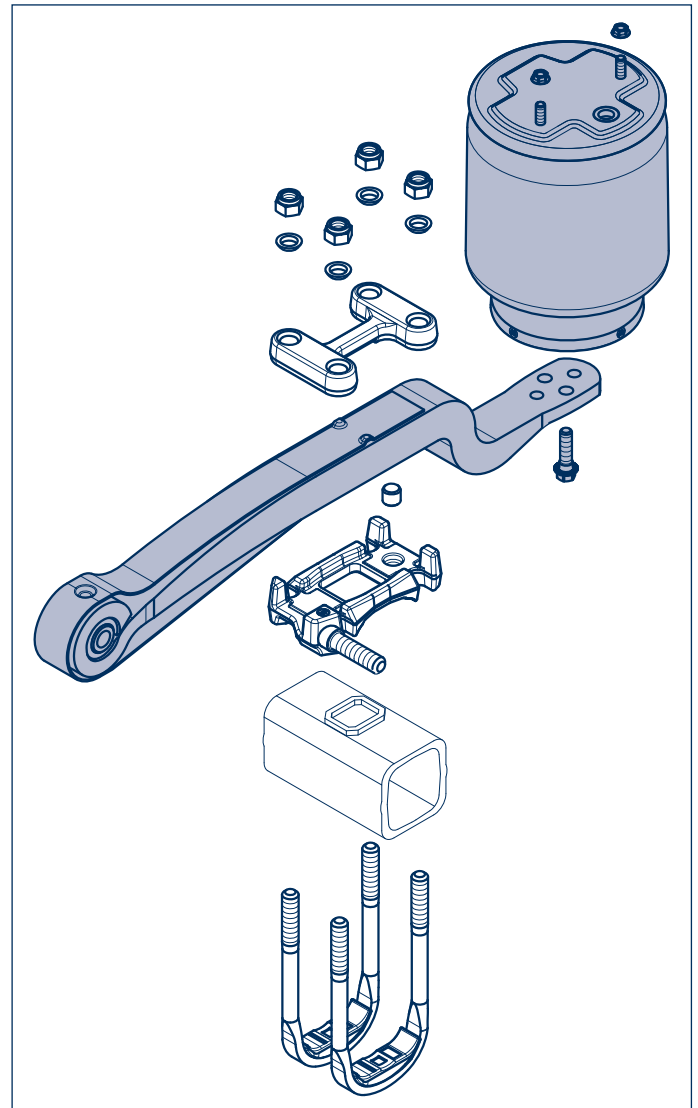
A four-hole pattern was drilled into the new trailing arm and the air bag was bolted directly onto the trailing arm with a single bolt.

In addition to the new centrally bolted air bag, the familiar air bags BPW 30 / 30 K and BPW 36 / 36 K / 36-1 can continue to be attached using a steel plate and different offsets.

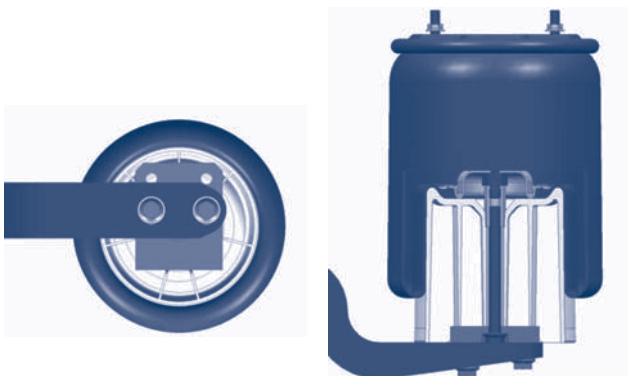
Note: Please note that the new air bag can only be combined with the new trailing arm.

It is impossible to mount a new air bag onto an old trailing arm by mistake due to the bolt / hole dia-meters.

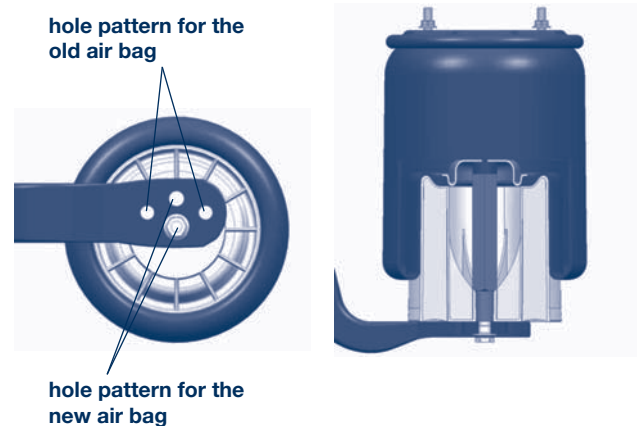
From a technical point of view, there are no restrictions to using both versions on the same axle or vehicle.



Old version



New version



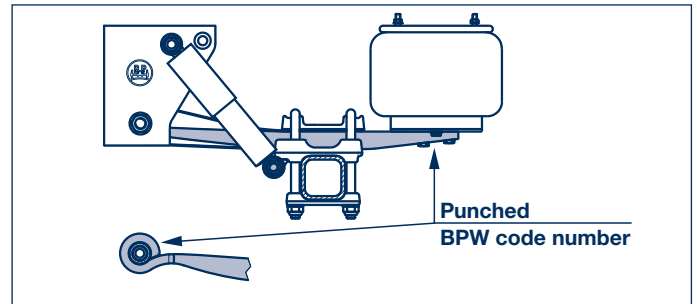
Trailing arms 1

General

Determining replacement trailing arms

The BPW code number is punched into the underside of the trailing arm (in the area of air bag) or in the area of the rolled-in eye of the trailing arm.

If this identification is missing or no longer legible, the particular type of trailing arm can be determined based on the shape and the dimensions.

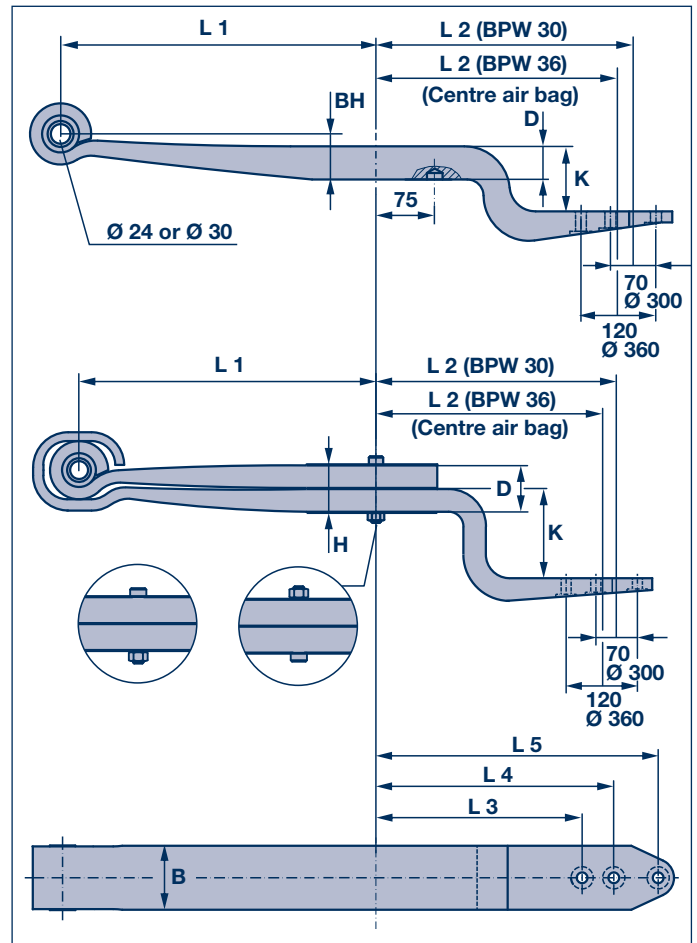


1. Clarifying design

- ⦿ Single layer, 3D trailing arm or two-layer trailing arm
- ⦿ Spring pivot bolt $\varnothing 24$ or $\varnothing 30$
- ⦿ Note the position of the spring bolt (centre bolt) in two-layer trailing arms
- ⦿ Measure the thickness (**D**) of the trailing arm and the width (**B**)
- ⦿ Determine the offset (**K**) and the shape (**BH**)
- ⦿ Measure dimension **L1** (middle of spring bolt to middle of axle)
- ⦿ Measure dimensions **L2** to **L5**

Trailing arms with rubber / steel bushes fitted are no longer available. If there is a requirement for replacing them, change to trailing arms with steel / rubber / steel bushes!

Rubber / steel bushes cannot be replaced by steel / rubber / steel bushes!



Single layer trailing arms with catch plate fitted (secured by a centre bolt) are replaced by trailing arms with a loose catch plate.



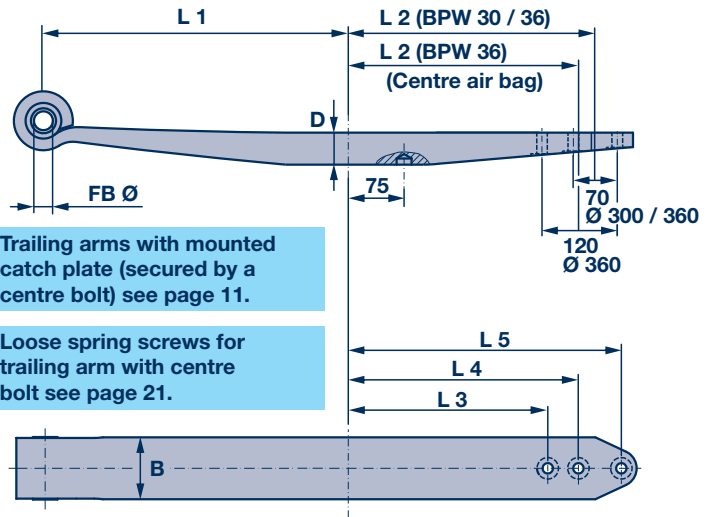
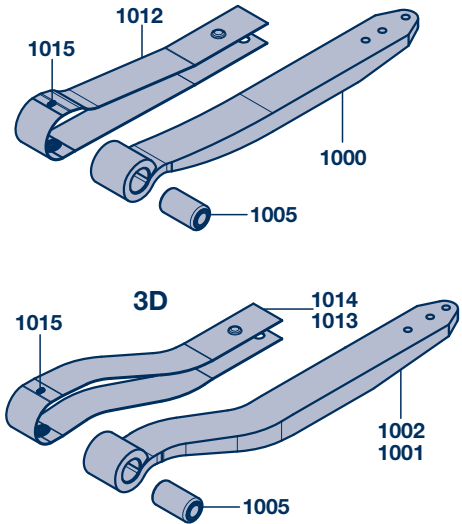
When changing to trailing arms with loose catch plate, use tracking plate or pin. See also page 45

1 Trailing arms

1.1 Straight single leaf trailing arms

O
SL
AL

Straight single leaf trailing arms



Trailing arms with mounted catch plate (secured by a centre bolt) see page 11.

Loose spring screws for trailing arm with centre bolt see page 21.

<p>A 1</p>	<p>A 2</p>
<p>A 3</p>	<p>A 4</p>
<p>A 5</p>	<p>A 6</p>
<p>A 7</p>	<p>A 8</p>

Trailing arms 1

Straight single leaf trailing arms 1.1

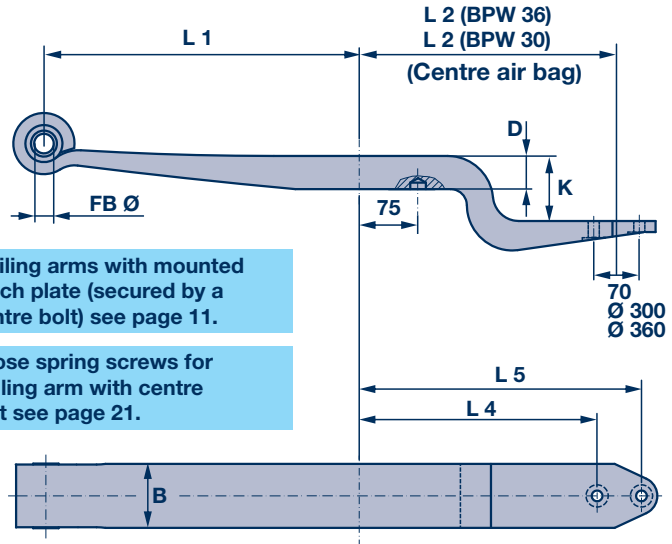
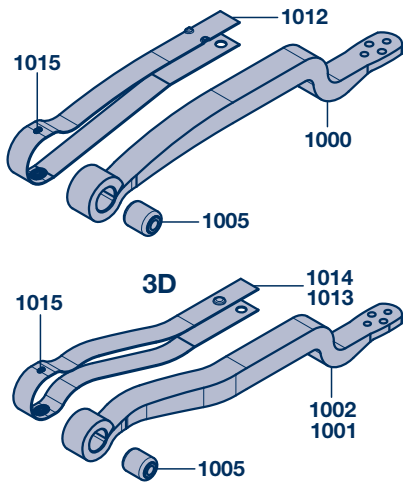
Straight single leaf trailing arms												
Fig.	Dimensiones									BPW Code no.		
	D	BH	L 1	BPW 36 BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	FB Ø	Trailing arm, item 1000 item 1001 / 1002 3D	Suitable catch strap, item 1012 item 1013 / 1014 3D	
70 mm wide (B)												
A 2	1 x 53	79	500	-	-	-	-	-	30	05.082.14.03.0	05.348.30.57.0	
									24	05.082.14.03.2		
A 3	1 x 62	80	550	310	-	-	275	345	30	05.082.14.22.0	05.348.30.54.0	
									24	05.082.14.22.2		
A 8	1 x 62	80	500	330	-	-	130	190	24	05.082.14.28.2	05.348.30.58.0	
70 mm wide (B) - 3D-Trailing arm												
A 7	1 x 56	79	500	-	-	-	-	-	30	05.082.14.11.0 L	05.348.30.51.0 L 05.348.30.50.0 R	
										05.082.14.10.0 R		
								24	05.082.14.11.2 L			
									05.082.14.10.2 R			
100 mm wide (B)												
A 1	1 x 48	70	500	-					30	05.082.13.85.0	05.348.30.05.0	
A 3				310	-	-	275	345		05.082.12.92.0		
A 4		23		380	355	295	345	415		05.082.13.71.0		
A 3	1 x 51	70	310	-	-	275	345	05.082.13.48.0				
A 3			380	355	295	345	415	05.082.13.37.0 *		05.348.30.14.0		
A 6	1 x 58	11	500	-	-	-	-	05.082.13.18.0		05.348.30.05.0		
A 4	1 x 60	90	690	310	-	-	275	345		05.082.13.99.1	05.348.30.05.0	
										05.082.13.32.0	05.348.30.11.0	
100 mm wide (B) - 3D-Trailing arm												
A 5	1 x 50	70	500	310	-	-	275	345	30	05.082.12.99.0 L	05.348.30.08.0 L	
										05.082.12.98.0 R	05.348.30.18.0 R	
Item	Designation			BPW Code no.		Dimension			Remark			
1005	Bush (steel / rubber / steel)			02.0315.98.00		Ø 30 / 60 x 72			for trailing arm width 70 mm			
				02.0314.24.00		Ø 24 / 60 x 72						
	Bush (steel / rubber / steel)			02.0316.90.00		Ø 30 / 57 x 102			for trailing arm width 100 mm			
	Bush (rubber / steel) ¹⁾			02.0316.06.00		Ø 30 / 60 x 102						
1015	Plug for catch strap			03.379.00.27.0								
* for steering axle												
¹⁾ for old trailing arms with rubber / steel bush												
Loose spring screws for trailing arms with centre bolt see page 21.												

1 Trailing arms

1.2 Cranked single leaf trailing arms, 70 mm wide

AL

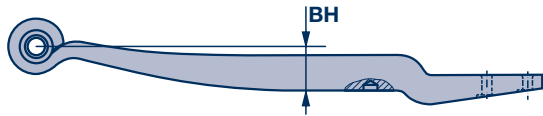
Cranked single leaf trailing arms, 70 mm wide



Trailing arms with mounted catch plate (secured by a centre bolt) see page 11.

Loose spring screws for trailing arm with centre bolt see page 21.

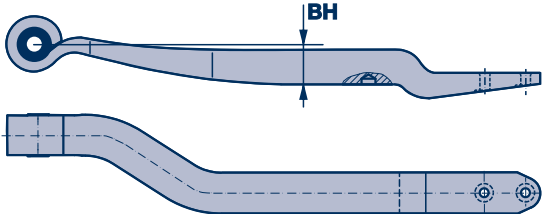
B 1



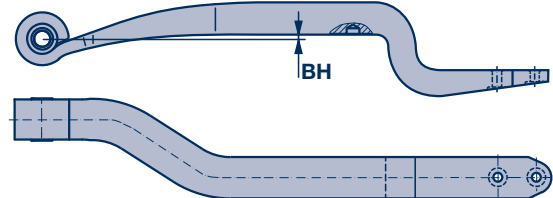
B 2



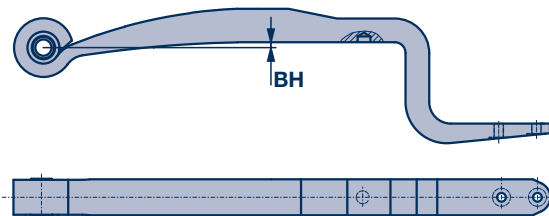
B 3



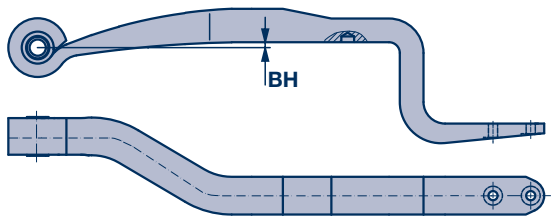
B 4



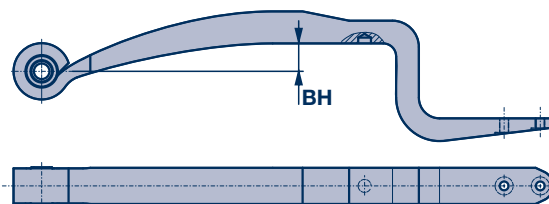
B 5



B 6



B 7



Trailing arms 1

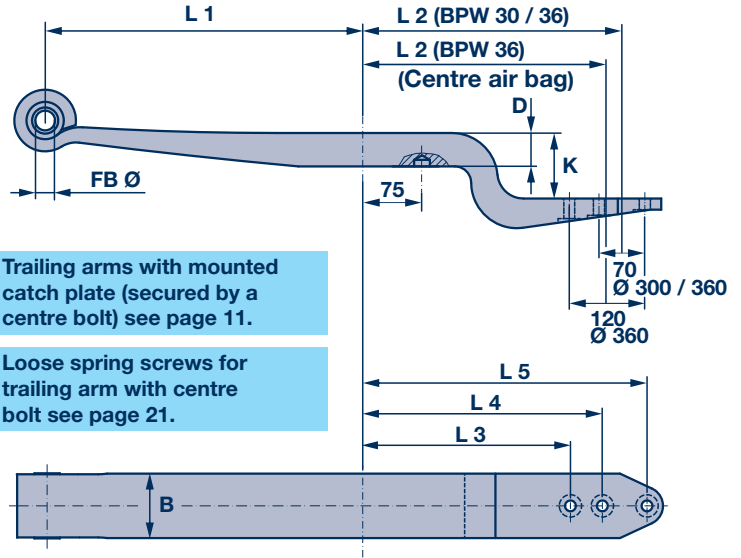
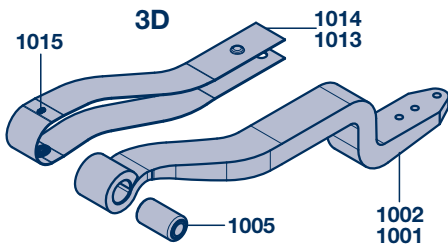
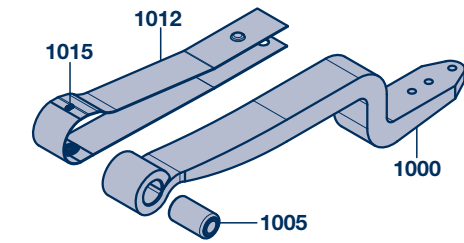
Cranked single leaf trailing arms, 70 mm wide 1.2

Cranked single leaf trailing arms, 70 mm wide												
Fig.	Dimensions								BPW Code no.			
	D	K	BH	L 1	BPW 36 BPW 30 L 2	L 4	L 5	FB Ø	Trailing arm, item 1000 item 1001 / 1002 3D	Suitable catch strap, item 1012 item 1013 / 1014 3D		
70 mm wide (B)												
B 1	1 x 56	30	80	500	310	275	345	30	05.082.13.90.0	05.348.30.36.0		
								24	05.082.13.90.2			
B 2		100	10		10	380	345	415	30		05.082.13.89.0	05.348.30.37.0
									24		05.082.13.89.2	
									30		05.082.13.88.0	
									24		05.082.13.88.2	
B 5		195	10		10	380	345	415	30	05.082.14.01.0	05.348.30.49.0	
									24	05.082.14.09.0		
									30	05.082.14.09.2		
									24	05.082.14.09.2		
B 5		170	10		10	380	345	415	30	05.082.14.17.0	05.348.30.49.0	
24									05.082.14.17.2			
~ B 7	1 x 58	110	62	520	365	330	400	30	05.082.14.26.0	05.348.30.35.0		
B 2	1 x 60	205	54	550	380	345	415	30	05.082.14.08.0	05.348.30.48.0		
B 1	1 x 62	30	80	500	310	275	345	30	05.082.14.02.0	05.348.30.36.0		
								24	05.082.14.02.2			
B 2		110	10		10	380	345	415	30		05.082.13.96.0	05.348.30.37.0
									24		05.082.13.96.2	
									30		05.082.13.95.0	
									24		05.082.13.95.2	
B 5		185	10		10	380	345	415	30	05.082.14.04.0	05.348.30.49.0	
									24	05.082.14.12.0		
B 7		189	54		54	380	345	415	30	05.082.14.12.0	05.348.30.49.0	
									24	05.082.14.12.2		
B 7		189	54		54	380	345	415	30	05.082.14.25.0	05.348.30.55.0	
									24	05.082.14.25.2		
70 mm wide (B) - 3D-Trailing arm												
B 3	1 x 62	30	80	500	310	275	345	30	05.082.14.23.0 L	05.348.30.40.0 R 05.348.30.41.0 L		
									05.082.14.24.0 R			
								24	05.082.14.23.2 L			
									05.082.14.24.2 R			
B 4		110	10		10	380	345	415	30		05.082.13.94.1 L	05.348.30.38.0 R 05.348.30.39.0 L
											05.082.13.93.1 R	
									24		05.082.13.94.2 L	
											05.082.13.93.2 R	
B 6	110	10	10	380	345	415	30	05.082.13.92.1 L	05.348.30.52.0 R 05.348.30.53.0 L			
								05.082.13.91.1 R				
							24	05.082.13.92.2 L				
								05.082.13.91.2 R				
B 6	110	10	10	380	345	415	30	05.082.14.13.0 L	05.348.30.52.0 R 05.348.30.53.0 L			
							24	05.082.14.13.2 L				
								05.082.14.14.0 R				
								05.082.14.14.2 R				
Item	Designation				BPW Code no.	Dimension		Remark				
1005	Bush (steel / rubber / steel)				02.0315.98.00 02.0314.24.00	Ø 30 / 60 x 72 Ø 24 / 60 x 72		for trailing arm width 70 mm				
1015	Plug for catch strap				03.379.00.27.0							
Loose spring screws for trailing arms with centre bolt see page 21.												

1 Trailing arms

1.3 Cranked single leaf trailing arms, 100 mm wide

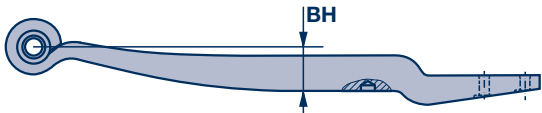
Cranked single leaf trailing arms, 100 mm wide



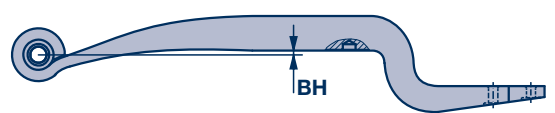
Trailing arms with mounted catch plate (secured by a centre bolt) see page 11.

Loose spring screws for trailing arm with centre bolt see page 21.

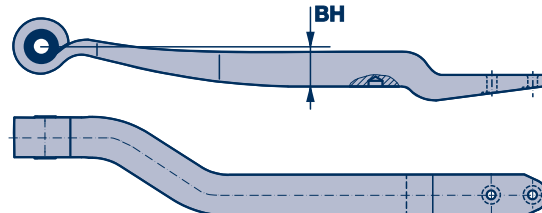
C 1



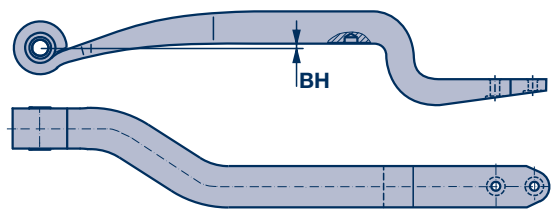
C 2



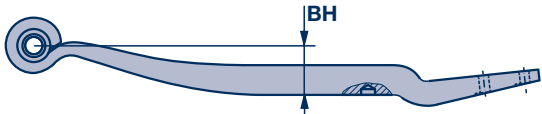
C 3



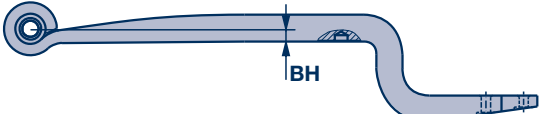
C 4



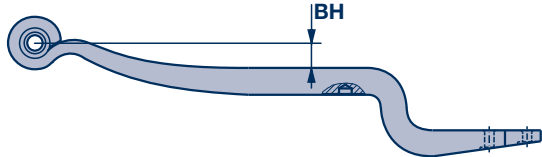
C 5



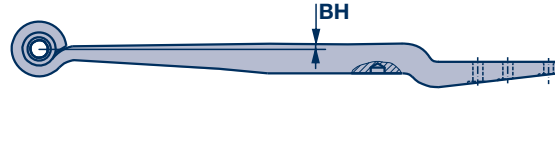
C 6



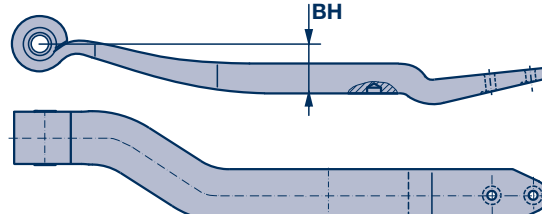
C 7



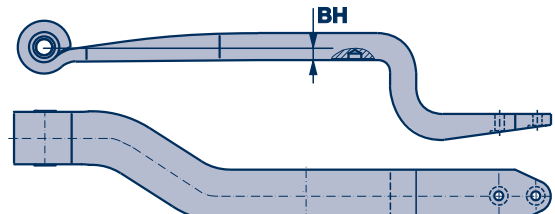
C 8



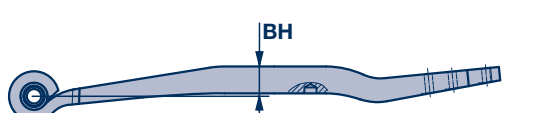
C 9



C 10



C 11



Trailing arms 1

Cranked single leaf trailing arms, 100 mm wide 1.3

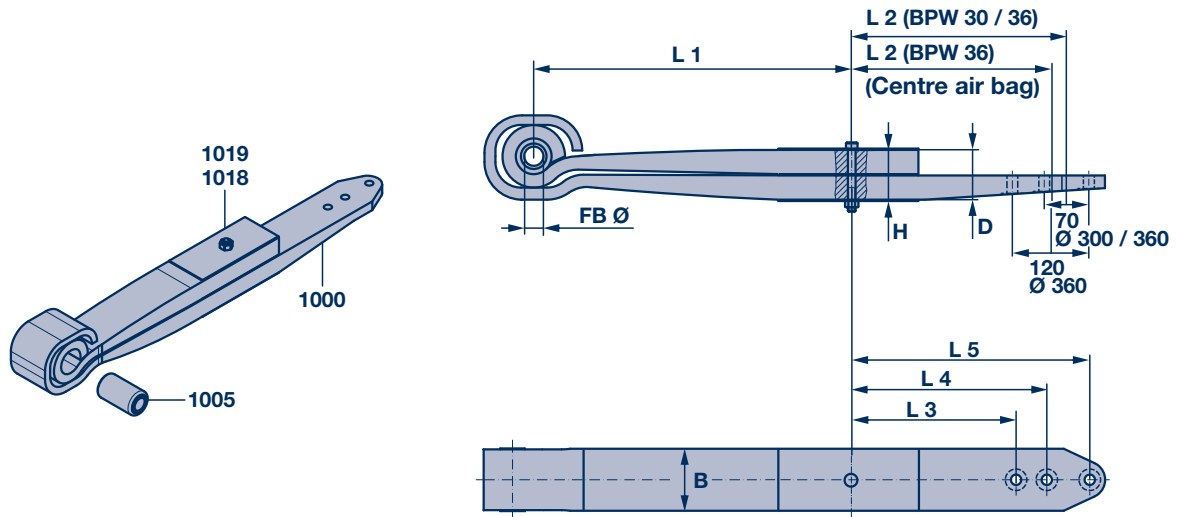
Cranked single leaf trailing arms, 100 mm wide																			
Fig.	Dimensions										BPW Code no.								
	D	K	BH	L 1	BPW 36 BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	FB Ø	Trailing arm, item 1000 item 1001 / 1002 3D	Suitable catch strap, item 1012 item 1013 / 1014 3D							
100 mm wide (B)																			
C 5	1 x 48	25	92	500	380	-	-	345	415	30	05.082.13.80.0	05.348.30.05.0							
C 1		30	70		310			275	345		05.082.13.51.0								
C 2		100	10		380			345	415		05.082.13.56.0								
C 6		150	22		405			380	320		370		440	05.082.12.93.0					
C 7			71											05.082.13.69.0					
C 6		205	22		380			-	-		345		415	05.082.13.70.0					
C 1		1 x 51	30		70			500	310		-		-	275	345	30	05.082.13.59.0	05.348.30.05.0	
								550	380					345	415		05.082.13.67.0		
C 2			100		10			500									380	-	345
C 1					70				05.082.13.68.0					05.348.30.23.0					
C 6	150		22	500	380	-	345	415	05.082.13.66.0	05.348.30.05.0									
									05.082.13.19.0										
C 1	1 x 54		30	70	550	380	-	345	415	05.082.13.86.0		05.348.30.33.0							
C 6			150	22	05.082.13.74.0														
C 8	1 x 56		30	11	500	335	-	-	300	370		05.082.14.07.0		05.348.30.45.0					
C 11	1 x 57		15	62	500	405	380	320	370	440		05.082.14.16.0		05.348.30.05.0					
C 8	1 x 58	45	11	500	380	405	345	415	465	05.082.14.30.0	05.348.30.88.0								
C 7		110	62	620	365	-	-	330	400	05.082.13.75.1	05.348.30.05.0								
C 1		163	66	500	405	380	320	370	440	05.082.13.78.0	05.348.30.35.0								
											05.082.13.83.1	05.348.30.05.0							
100 mm wide (B) - 3D-Trailing arm																			
C 9	1 x 50	25	92	500	380	-	-	345	415	30	05.082.13.81.0 L	05.348.30.08.0 L 05.348.30.18.0 R							
		30	70		310			275	345		05.082.13.82.0 R								
C 4		100	10		380			345	415		05.082.13.53.0 L		05.348.30.31.0 L 05.348.30.30.0 R						
C 10		150	22		405			380	320		370			440	05.082.13.54.0 R				
C 3			71										05.082.13.77.0 L						
~ C 10		1 x 56	45		11			500	380		405		345	415	465	30	05.082.13.76.0 R	05.348.30.08.0 L 05.348.30.18.0 R	
																	C 3		163
																	05.082.14.19.0 L 05.082.14.18.0 R		
																	05.082.14.21.0 L 05.082.14.20.0 R		
Item		Designation	BPW Code no.		Dimension			Remark											
1005	Bush (steel / rubber / steel) Bush (rubber / steel) ¹⁾	02.0316.90.00	02.0316.06.00	Ø 30 / 57 x 102 Ø 30 / 60 x 102	for trailing arm width 100 mm														
1015	Plug for catch strap	03.379.00.27.0																	

Loose spring screws for trailing arms see page 21.

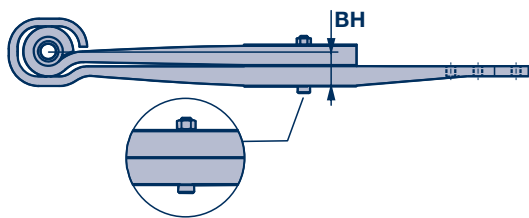
1 Trailing arms

1.4 Straight double leaf trailing arms, 100 mm wide

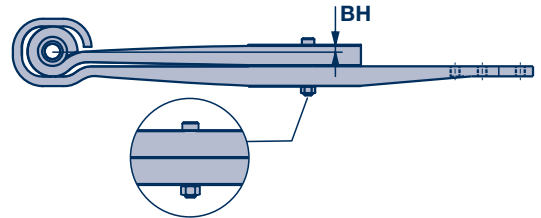
Straight double leaf trailing arms, 100 mm wide



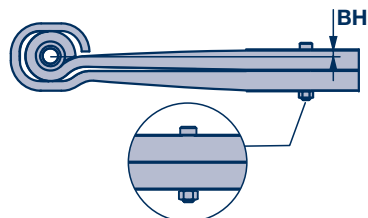
D 1



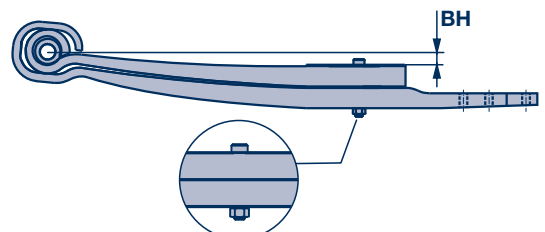
D 2



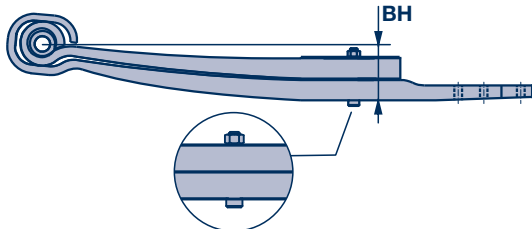
D 3



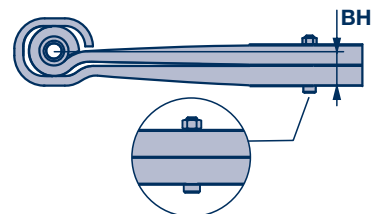
D 4



D 5



D 6



Trailing arms 1

Straight double leaf trailing arms, 100 mm wide 1.4

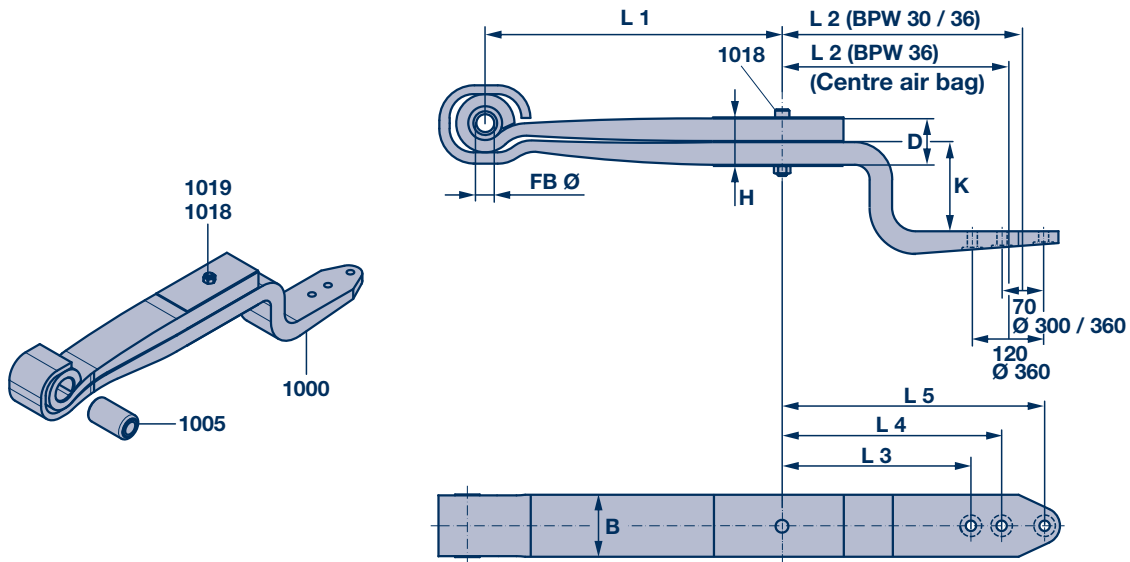
Straight double leaf trailing arms, 100 mm wide													
Fig.	Dimensions										BPW Code no.		
	D	H	BH	L 1	BPW 36 BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	FB Ø	Trailing arm, item 1000	Centre bolt, item 1018	
100 mm wide (B)													
D 1	2 x 33	72	69	500	335	310	250	300	370	30	05.082.02.51.0	03.341.02.02.0	
D 2			3								05.082.02.94.0		
D 1			59		380	355	295	345	415	05.082.12.66.0			
D 2			13							05.082.12.60.0			
D 2			6	550	335					05.082.02.74.0			
D 1	2 x 38	82	69	500	335	310	250	300	370	30	05.082.13.08.0		03.341.02.03.0
D 2			13		335/285						05.082.02.96.0		
D 2			13		335						05.082.02.95.0		
D 2			13								05.082.12.61.0		
D 1	69	380	355	295	345	415	05.082.12.67.0						
D 1													
D 2	2 x 40	86	12	550	335	310	250	300	370	05.082.02.99.0	03.341.02.17.0		
D 2		89	15		405	380	320	370	440	05.082.13.21.0			
D 3	2 x 43	92	13	500	-	-	-	-	-	05.082.13.46.0	03.341.02.18.0		
D 1			72		335	310	250	300	370	05.082.13.87.0			
D 2			20							05.082.12.11.0			
D 1			79		380	355	295	345	415	05.082.12.68.0			
D 2			13						05.082.13.36.0				
D 3			15	-	-	-	-	-	05.082.13.65.0				
D 1			72	335	310	250	300	370	05.082.02.62.0				
D 1			78	405	380	320	370	440	05.082.13.07.0				
D 2			14						05.082.12.83.0				
D 1			78	475	450	390	440	510	05.082.12.94.0				
D 2	14						05.082.12.85.0						
D 4	2 x 45	94	31	690	335	310	250	300	370	05.082.13.20.0	03.341.02.15.0		
D 6	2 x 51	108	86	550	-	-	-	-	-	05.082.14.15.0	03.341.02.04.0		
D 1			86		475	450	390	440	510	05.082.14.05.0			
D 2		22						05.082.14.06.0					
D 5		137	690	335	310	250	300	370	05.082.13.79.0				
D 4	106		31						05.082.13.63.0				
D 1	2 x 54	114	100	720	345	320	260	310	380	05.082.13.05.0	03.341.02.32.0		
D 2			14							05.082.13.10.0			
D 6			100	-	-	-	-	-	-	05.082.14.27.0			
Item	Designation		BPW Code no.	Dimension	Remark								
1005	Bush (steel / rubber / steel) Bush (rubber / steel) ¹⁾		02.0316.90.00 02.0316.06.00	Ø 30 / 57 x 102 Ø 30 / 60 x 102	for trailing arm width 100 mm								
1019	Hexagon nut (for centre bolt item 1018)		02.5202.20.80	M 16 / 934-8									
¹⁾ for old trailing arms with rubber / steel bush													

1 Trailing arms

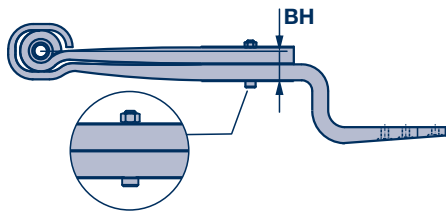
1.5 Cranked double leaf trailing arms, 100 mm wide

O
SL

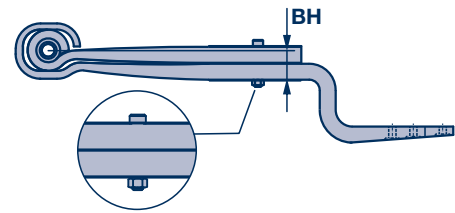
Cranked double leaf trailing arms, 100 mm wide



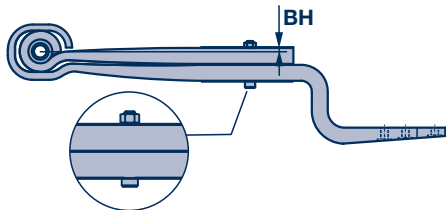
E 1



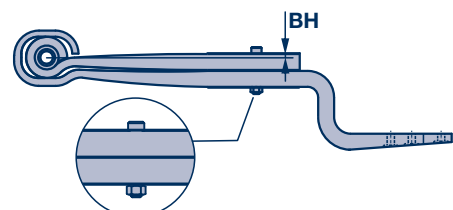
E 2



E 3



E 4



Trailing arms 1

Cranked double leaf trailing arms, 100 mm wide 1.5

Loose centre bolts 1.6

Cranked double leaf trailing arms, 100 mm wide

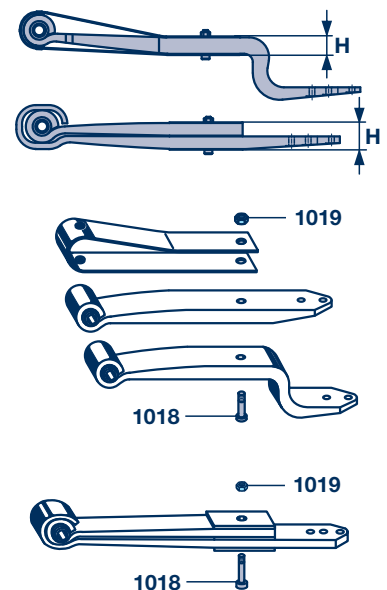
Fig.	Dimensions											BPW Code no.									
	D	H	K	BH	L 1	BPW 36 BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	FB Ø	Trailing arm, item 1000	Centre bolt, item 1018								
100 mm wide (B)																					
E 1	2 x 33	72	100	68	470	390	365	305	355	425	30	05.082.02.66.0	03.341.02.02.0								
E 2						340/390						05.082.02.97.0									
E 1			150	72	500	405	380	320	370	440		05.082.12.63.0									
E 1	2 x 38	82	100	68	470	390	365	305	355	425		05.082.13.26.0	03.341.02.03.0								
E 4				14								05.082.12.43.0									
E 1			150	72	500	405	380	320	370	440		05.082.12.64.0									
E 3	2 x 40	86	50	14	550	405	380	320	370	440		05.082.12.88.0	03.341.02.17.0								
E 1				72								05.082.12.77.0									
E 2				120								14		05.082.02.45.0							
E 2				89								15		720	05.082.13.23.0						
E 1			86	150	72	550						05.082.12.84.0									
E 4	2 x 43	95	120	74	550	405	380	320	370	440		05.082.13.60.0	03.341.02.18.0								
E 1				92								50		13	500	380	355	295	345	415	05.082.13.24.0
E 4				92								50		13	500	380	355	295	345	415	05.082.13.34.0
E 1				92							150	72		500						05.082.13.33.0	

Item	Designation	BPW Code no.	Dimension	Remark
1005	Bush (steel / rubber / steel) Bush (rubber / steel) ¹⁾	02.0316.90.00 02.0316.06.00	Ø 30 / 57 x 102 Ø 30 / 60 x 102	for trailing arm width 100 mm
1019	Hexagon nut (for centre bolt item 1018)	02.5202.20.80	M 16 / 934-8	

¹⁾ for old trailing arms with rubber / steel bush

Loose spring screws for trailing arms with centre bolt

Trailing arm thickness incl. catch strap H	Dimension	Centre bolt (item 1018) BPW Code no.
1 x 40	M 16 x 60-8.8	03.341.02.06.0
1 x 48	M 16 x 70-8.8	03.341.02.31.0
1 x 50	M 16 x 75-8.8	03.341.02.14.0
2 x 33	M 16 x 90-8.8	03.341.02.02.0
2 x 38	M 16 x 100-8.8	03.341.02.03.0
2 x 40	M 16 x 105-8.8	03.341.02.17.0
2 x 43	M 16 x 110-8.8	03.341.02.18.0
2 x 45	M 16 x 115-8.8	03.341.02.15.0
2 x 48	M 16 x 120-8.8	03.341.02.30.0
2 x 51	M 16 x 130-8.8	03.341.02.04.0
2 x 54	M 16 x 135-8.8	03.341.02.32.0
2 x 65	M 16 x 165-8.8	03.341.02.16.0
Hexagon nut (item 1019) for centre bolt		02.5202.20.80 M 16 / 934-8



2 Spring seats, axle clamping

General

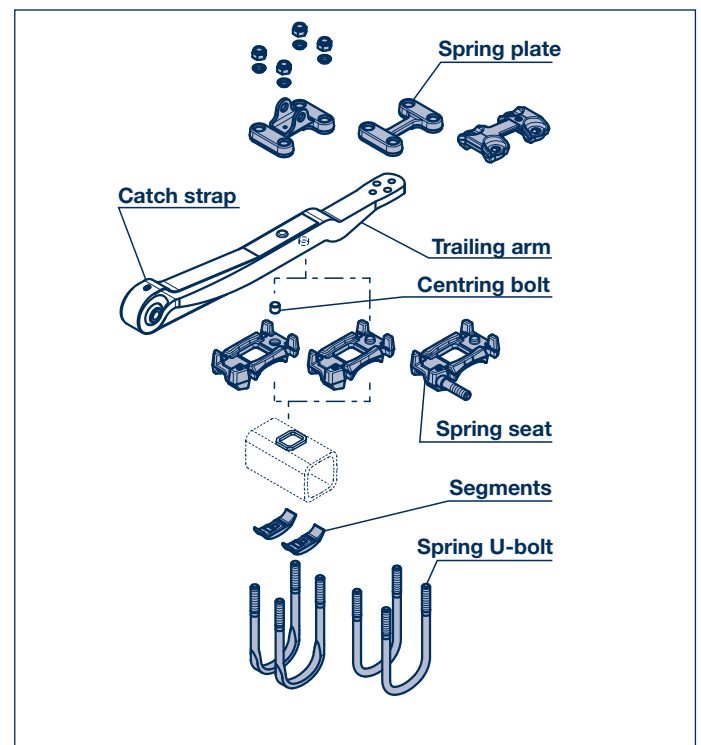
BPW Axle clamping

The axle is connected to the trailing arm using the axle connection comprising: spring plates, spring pads, segments and U-bolts.

SL Clamped, positive-locking axle connections ensure an even force transfer into the axle proportional to the degree of load. This is only possible with square axle beams which therefore offer a long service life.

The connection parts are attached at the reinforced corners of the axle beam (no welded connection).

Due to the modular construction a service-friendly repair is guaranteed.

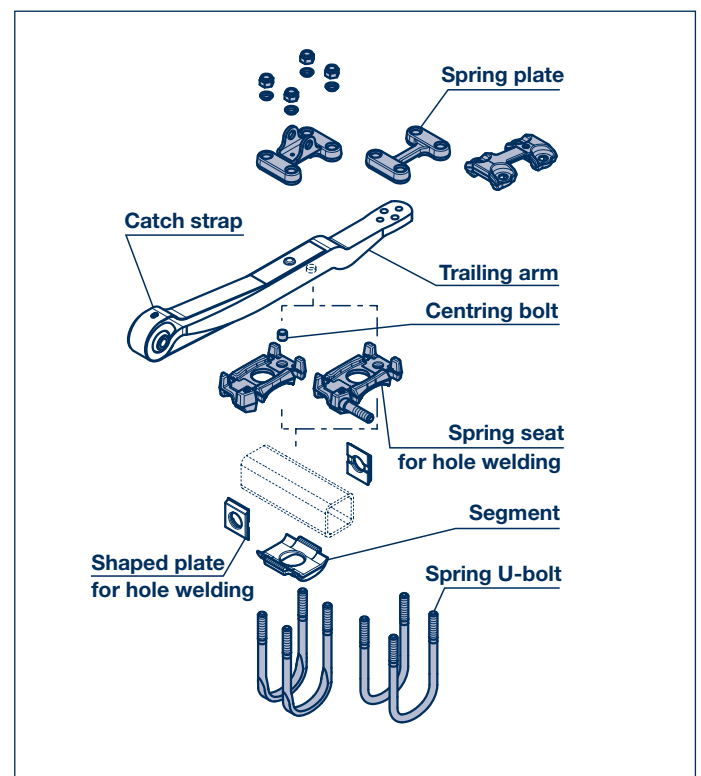


Welded axle mountings are mainly used with a round axle cross section, steering axles as well as heavy-duty air suspension systems.

As a load-bearing component of the suspension unit, the trailing arm requires particular attention.

The following instructions should be carefully adhered to during repair and maintenance work:

- ⊙ **Do not work on trailing arms with a hammer or any sharp objects.**
- ⊙ **Do not work on trailing arms with cutters or grinders.**
In the event that replacement trailing arms do not fit exactly into the seat of the spring seats, the mounting seat must always be widened.



Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

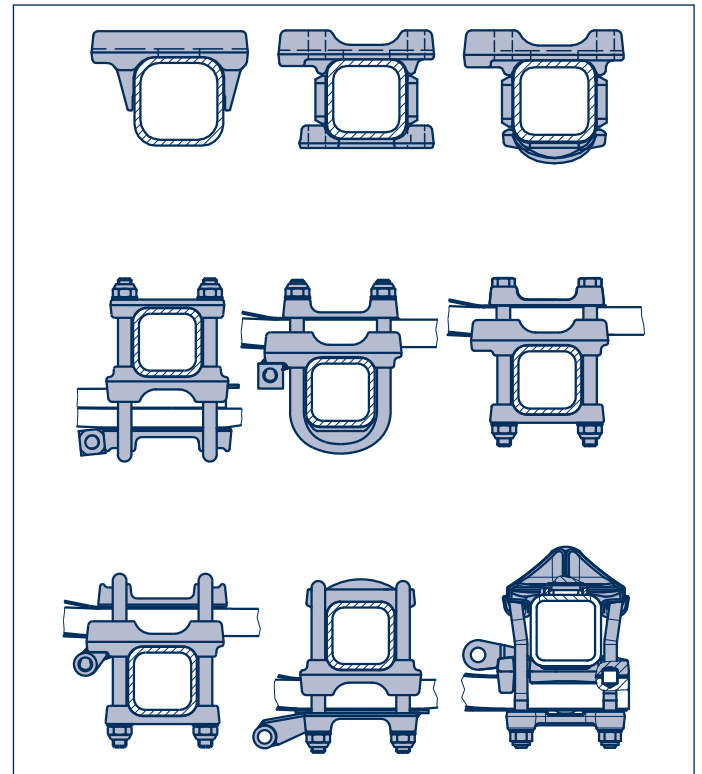
Spring seats, axle clamping 2

General

Determining axle mountings

Clarifying design

- ⊙ Trailing arm width 70 mm or 100 mm
- ⊙ Axle cross section \varnothing 127 / \square 120 / \square 150
- ⊙ Axle spring seat assembly clamped or welded
- ⊙ Round centring ring or square frame with clamped axle mounting
- ⊙ Spring seats with centring ring
- ⊙ Shock absorber attachment:
 - ⊙ Spring seats without shock absorber attachment
 - ⊙ Spring seat with welded pin for shock absorber mounting or spring seat for shock absorber mounting
- ⊙ Trailing arm mounted from above or from below
- ⊙ Spring U-bolts or screws
- ⊙ U-bolt encloses axle beam or is positioned to the side
- ⊙ Spring U-bolts or bolts fitted from the top or bottom
- ⊙ Single or double segments

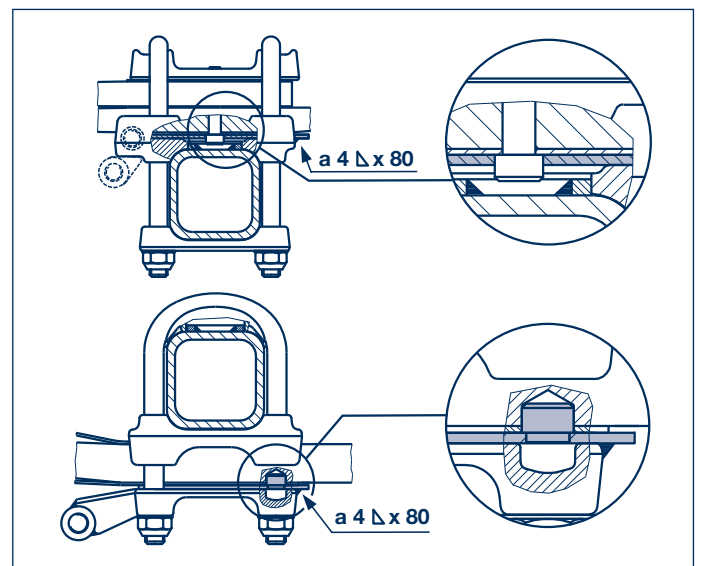


Tracking plates

Weld tracking plates after installation and tracking of the air suspension axles on the vehicle at the rear end of the spring seats or spring plates - Weld a 4 Δ x 80.

 **Do not weld the trailing arms !**

Follow the welding guidelines given in the BPW installation instructions!



 **Important for all welding work !**

The trailing arms, air bags and plastic pipes should be protected against sparks and weld splashes during all welding work.

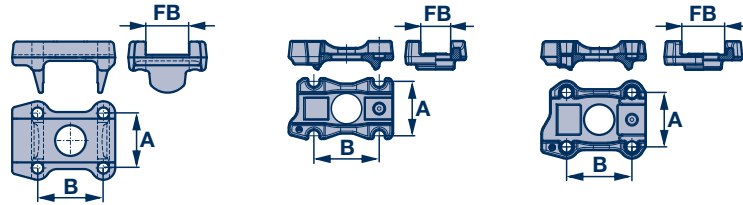
The earth terminal must not be attached to the trailing arm or hub under any circumstances.

2 Spring seats, axle clamping

2.1 Welded axle spring seat assembly

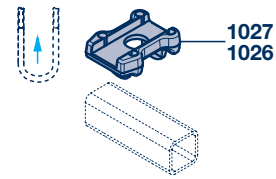
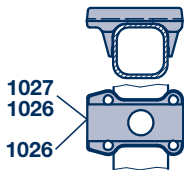
2.1.1 Trailing arms mounted above

Welded axle spring seat assembly

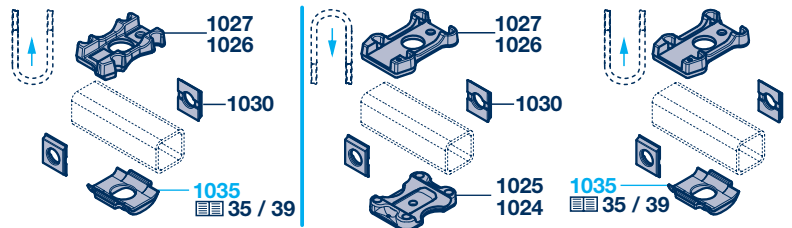
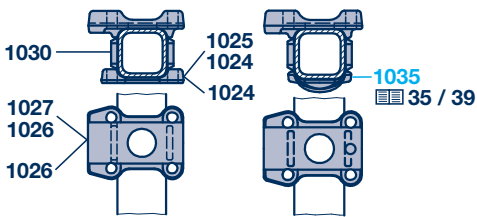


Spring seats without shock absorber attachment

A 1 Spring seats with welding lug

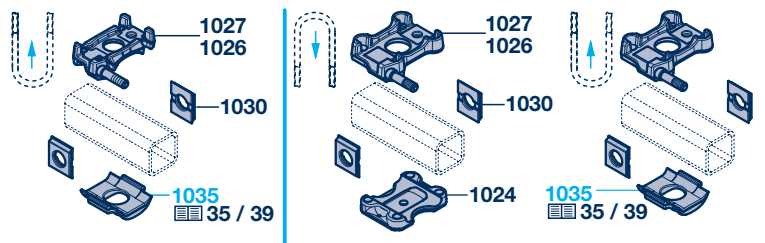
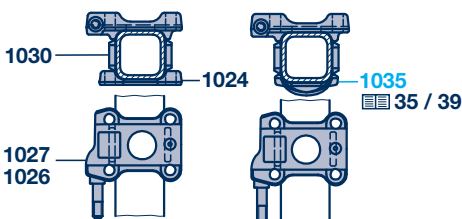


A 2 Spring seats without welding lug

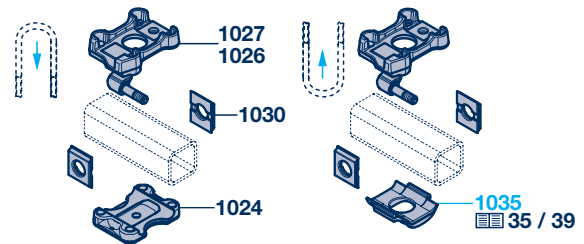
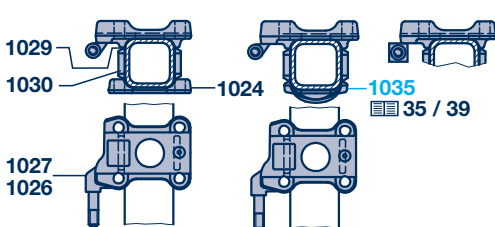


Spring seats with bolt for shock absorber attachment

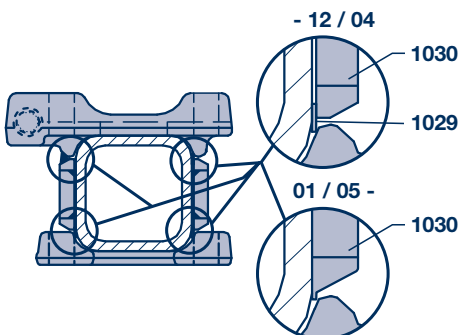
A 3 Spring seats without welding lug



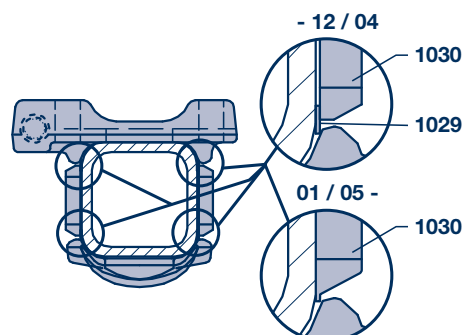
A 4 Spring seats without welding lug



Spring seats with counter-lugs







Spring seats with segments



Spring seats, axle clamping 2

Welded axle spring seat assembly 2.1

Trailing arms mounted above 2.1.1

Welded axle spring seat assembly										
Item	Designation	Dimension	Fig.	BPW Code no.						
				Trailing arm width (FB)		70 mm	100 mm			
				Axle beam	Rigid axle Steering axle LL □ 120	Rigid axle □ 120	Steering axle L/LS/LL □ 120 / ■ 120	Rigid axle Ø 127	Rigid axle Steering axle □ 150	
Spring seats without shock absorber attachment										
	Spring seats with welding lug, without counter-lug									
	Axle connection-Identification key			-	OM / VO					
1026	Spring seat, above	A 125 / B 150	A 1	-	03.032.18.76.0	03.032.18.99.0		-	-	
		A 125 / B 155		-	-	-	-	03.032.58.18.0	-	
		A 125 / B 180		-	-	-	-	-	03.032.19.87.0	
1026	Spring seat, above right	A 125 / B 150		-	-	03.032.18.54.0		-	-	
1027	Spring seat, above left	A 125 / B 150		-	-	03.032.18.53.0		-	-	
Spring seats with bolt for shock absorber attachment upon request.										
Spring seats without/with shock absorber attachment										
	Spring seats without shock absorber attachment									
	Axle connection-Identification key			7O1/7M2	OM / VO / VO13					
1026	Spring seat, above right	A 125 / B 150	A 2	03.032.21.10.8	03.032.21.46.8	03.032.21.46.8		-	-	
1027	Spring seat, above left	A 125 / B 150		03.032.21.09.8	03.032.21.45.8	03.032.21.45.8		-	-	
1026	Spring seat, above	A 125 / B 155		-	-	-	-	03.032.58.18.0	-	
		A 125 / B 180	-	-	-	-	-	03.032.10.43.0		
	Spring seats with bolt for shock absorber attachment									
	Axle connection-Identification key			7R1	OR / OR1 / OR13					
1026	Spring seat, above right	A 125 / B 150	A 3	05.032.21.36.8	05.032.21.50.8	05.032.21.50.8		-	-	
		A 125 / B 155		-	-	-	-	05.032.58.22.0	-	
		A 125 / B 180		-	-	-	-	-	05.032.10.48.0	
1027	Spring seat, above left	A 125 / B 150		05.032.21.37.8	05.032.21.49.8	05.032.21.49.8		-	-	
		A 125 / B 155		-	-	-	05.032.58.21.0	-		
		A 125 / B 180		-	-	-	-	05.032.10.47.0		
	Spring seats with bolt for shock absorber attachment									
	Axle connection-Identification key			-	OR23					
1026	Spring seat, above right	A 125 / B 150	A 4	-	05.032.21.52.8	05.032.27.64.0		-	-	
		A 125 / B 180		-	-	-	-	-	05.032.11.40.0	
1027	Spring seat, above left	A 125 / B 150		-	05.032.21.51.8	05.032.27.63.0		-	-	
		A 125 / B 180		-	-	-	-	-	05.032.11.41.0	
1024	Spring seat, below (counter-lug)	A 125 / B 150		-	03.032.17.05.1	03.032.17.05.1		-	-	
		A 125 / B 155		-	-	-	-	03.032.38.13.0	-	
		A 125 / B 180		-	-	-	-	-	03.032.19.26.0	
1024	Spring seat, below right (counter-lug)	A 125 / B 150		-	-	03.032.18.92.0		-	-	
1025	Spring seat, below left (counter-lug)	A 125 / B 150		-	-	03.032.18.93.0		-	-	
1029	Plate	20 x 75 x 8		-	-	03.283.53.12.0		-	-	
1030	Formed piece	82 x 84 x 15		03.001.14.97.0	03.001.14.97.0	03.001.14.97.0		-	-	
		88 x 108 x 15		-	-	-	-	-	03.001.35.10.0	
1035	Segment			see page 35 / 39						

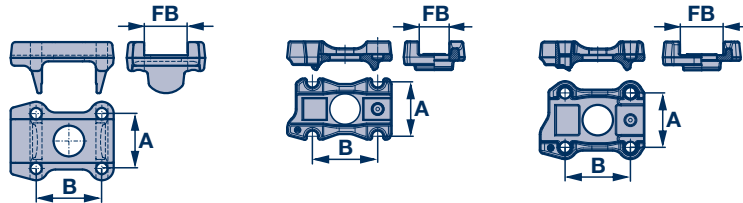
Further versions upon request.

2 Spring seats, axle clamping

2.1 Welded axle spring seat assembly

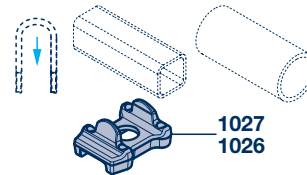
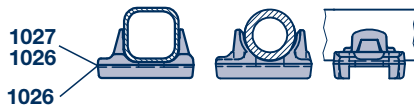
2.1.2 Trailing arms mounted below

Welded axle spring seat assembly

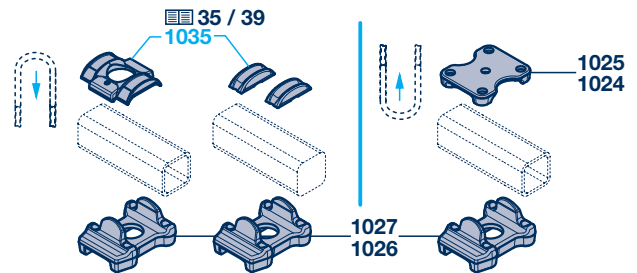
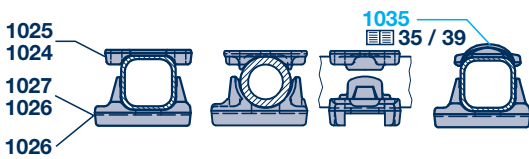


Spring seats without shock absorber attachment

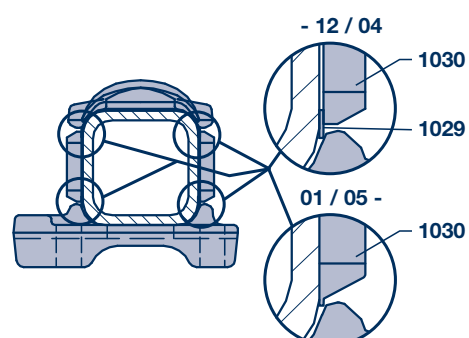
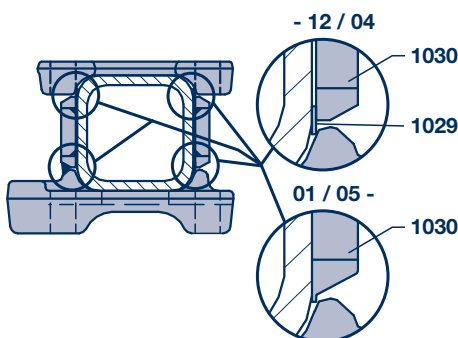
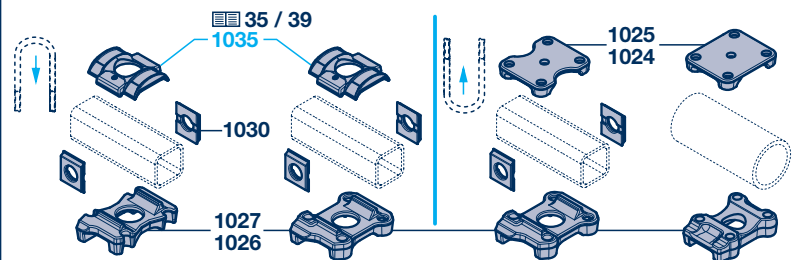
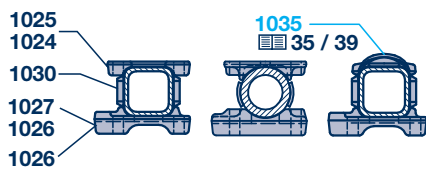
B 1 Spring seats with welding lug



B 2 Spring seats with welding lug






B 3 Spring seats without welding lug



Spring seats, axle clamping 2

Welded axle spring seat assembly 2.1

Trailing arms mounted below 2.1.2

Welded axle spring seat assembly										
Item	Designation	Dimension	Fig.	BPW Code no.						
				Trailing arm width (FB)		70 mm	100 mm			
							Rigid axle <input type="checkbox"/> 120 Rigid axle <input checked="" type="checkbox"/> 120 Steering axle LS / LL <input type="checkbox"/> 120 / <input checked="" type="checkbox"/> 120	Steering axle L <input checked="" type="checkbox"/> 120	Rigid axle Ø 127	Rigid axle Steering axle <input type="checkbox"/> 150
		Axle beam		Rigid axle <input type="checkbox"/> 120						
Spring seats without shock absorber attachment										
	Spring seats with welding lug, without counter-lug									
	Axle connection-Identification key			7T	OT..					
1026	Spring seat, below	A 125 / B 150	B 1	-	03.032.18.99.0	03.032.27.44.0	-	-		
		A 125 / B 155		-	-	-	03.032.38.75.0	-		
		A 125 / B 180		-	-	-	-	03.032.19.87.0		
1026	Spring seat, below right	A 125 / B 180		-	03.032.18.54.0		-	-		
1027	Spring seat, below left	A 125 / B 180		-	03.032.18.53.0					
	Spring seats with welding lug, with counter-lug / segment									
	Axle connection-Identification key			7T	OT.. / SLU.. / ALU..					
1026	Spring seat, below	A 125 / B 180	B 2	-	03.032.18.76.0					
		FB = 100.5		-	03.032.18.99.0	03.032.18.99.0	-	-		
		FB = 99.7		-	03.032.27.44.0	03.032.27.44.0	-	-		
1026	Spring seat, below right	A 125 / B 150		-	03.032.18.54.0	-	-	-		
1027	Spring seat, below left	A 125 / B 150		-	03.032.18.53.0					
	Spring seats without welding lug, with counter-lug / segment									
	Axle connection-Identification key			7T..	OT.. / SLU.. / ALU..					
1026	Spring seat, below right	A 125 / B 150	B 3	03.032.21.09.8	03.032.21.46.8	-	-	-		
1027	Spring seat, below left	A 125 / B 150		03.032.21.10.8	03.032.21.45.8					
1026	Spring seat, below	A 125 / B 155		-	-	-	03.032.58.18.0	-		
		A 125 / B 180	-	-	-	-	03.032.10.44.0			
1024	Spring seat, above (counter-lug)	A 125 / B 150			03.032.17.05.1	03.032.26.19.0	-	-		
		A 125 / B 155		-	-	-	03.032.38.13.0	-		
		A 125 / B 180		-	-	-	-	03.032.19.26.0		
1024	Spring seat, above right (counter-lug)	A 125 / B 150		-	03.032.17.84.0	-	-			
1025	Spring seat, above left (counter-lug)	A 125 / B 150		-	03.032.17.85.0	-	-			
1030	Formed piece	82 x 84 x 15		03.001.14.97.0		-	-			
		88 x 108 x 15						03.001.35.10.0		
1035	Segment			see page 35 / 39						

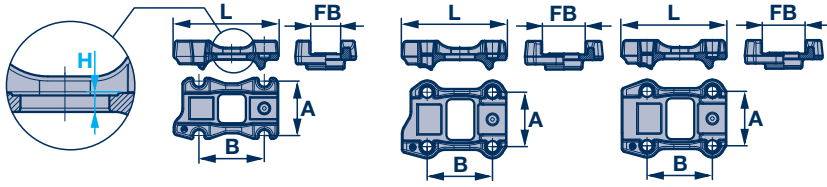
Further versions upon request.

2 Spring seats, axle clamping

2.2 Clamped axle spring seat assembly

2.2.1 Trailing arms mounted above

Clamped axle spring seat assembly

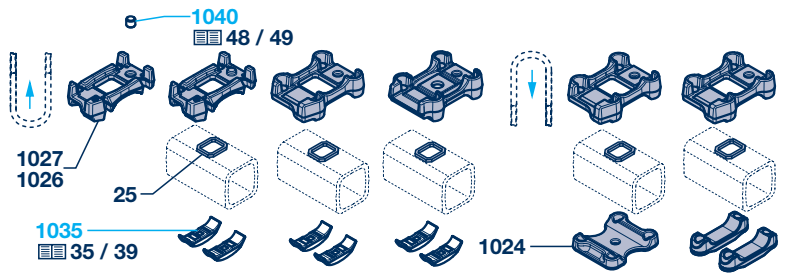
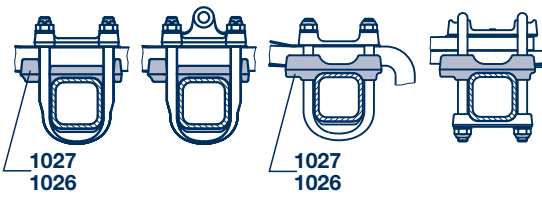


SL

AL

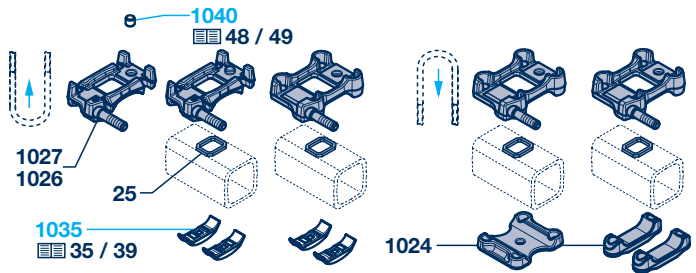
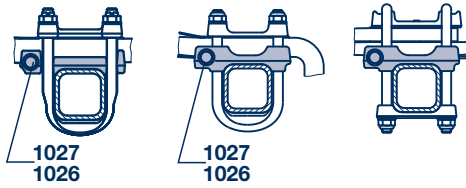
Spring seats without shock absorber attachment

C 1

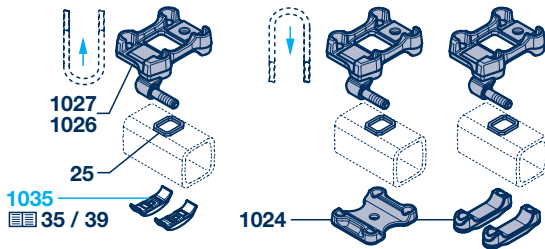
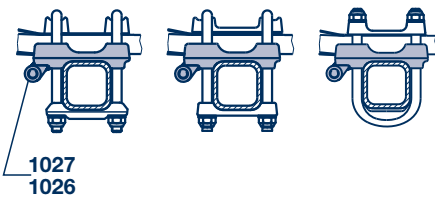


Spring seats with bolt for shock absorber attachment

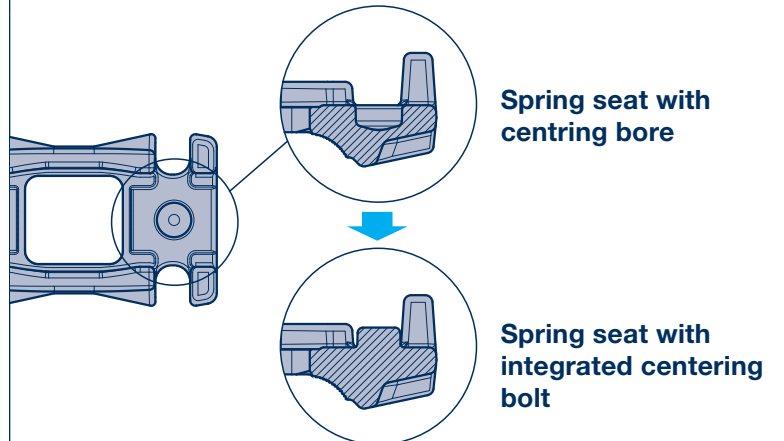
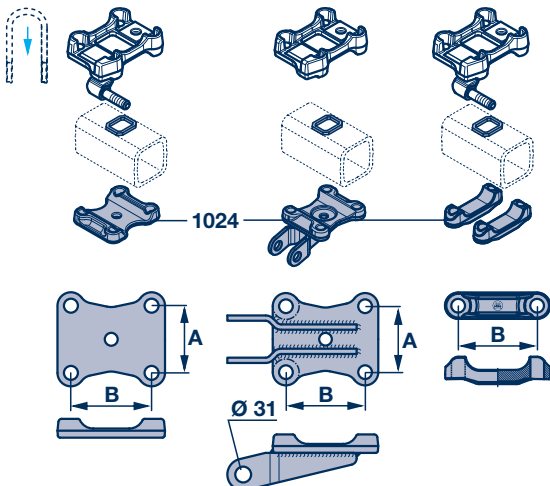
C 2



C 3






C 4



Spring seats, axle clamping 2

Clamped axle spring seat assembly 2.2

Trailing arms mounted above 2.2.1

Clamped axle spring seat assembly									
Item	Designation	Dimension	H	L	Fig.	BPW Code no.			
						Trailing arm width (FB) 70 mm 100 mm			
						Rigid axle Steering axle LL □ 120	Rigid axle Steering axle LL □ 120	Rigid axle Steering axle □ 150	
						Axle beam			
25	Profiled part (centring frame))	72.5 x 60 x 8				03.295.46.21.0 *			
Spring seats without/with shock absorber attachment									
	Spring seats without shock absorber attachment								
						Axle connection-Identification key	71../702..	L1.. / L2.. / L9.. / LG.. / LH.. / LO..	
						Spring seat with hole for centering bolt			
1026	Spring seat, above right	A 92 / B 148	14	240	C 1	03.032.21.14.0 ¹⁾	-	-	
		A 125 / B 150	13	240		-	03.032.21.58.0	-	
1027	Spring seat, above left	A 92 / B 148	14	240		03.032.21.15.0 ¹⁾	-	-	
		A 125 / B 150	13	240		-	03.032.21.59.0	-	
1026	Spring seat	A 125 / B 150	15	240		-	03.032.26.08.0	-	
		A 125 / B 150	23	235		-	03.032.21.55.0	-	
		A 125 / B 180	15	265		-	-	03.032.11.24.0	
						Spring seat with integrated centering bolt			
1026	Spring seat, above right	A 92 / B 148	14	240		03.032.22.06.0	-	-	
1027	Spring seat, above left	A 92 / B 148	14	240		03.032.22.05.0	-	-	
	Spring seats with bolt for shock absorber attachment								
						Axle connection-Identification key	711..	LI1..	
						Spring seat with hole for centering bolt			
1026	Spring seat, above right	A 92 / B 148	14	240	C 2	05.032.21.18.0 ¹⁾	-	-	
		A 125 / B 150	13	240		-	05.032.21.70.0	-	
1027	Spring seat, above left	A 92 / B 148	14	240		05.032.21.19.0 ¹⁾	-	-	
		A 125 / B 150	13	240		-	05.032.21.71.0	-	
						Spring seat with integrated centering bolt			
1026	Spring seat, above right	A 92 / B 148	14	240		05.032.22.10.0	-	-	
1027	Spring seat, above left	A 92 / B 148	14	240		05.032.22.09.0	-	-	
	Spring seats with bolt for shock absorber attachment								
						Axle connection-Identification key	-	LI2..	
1026	Spring seat, above right	A 125 / B 150	13	240	C 3	-	05.032.21.68.0	-	
		A 125 / B 180	15	265		-	-	05.032.11.32.0	
1027	Spring seat, above left	A 125 / B 150	13	240		-	05.032.21.69.0	-	
		A 125 / B 180	15	265		-	-	05.032.11.31.0	
1024	Spring seat, below	A 125 / B 150			C 4	-	03.032.27.67.2	-	
		A 125 / B 180				-	-	03.032.10.63.0	
	Lower spring seat for U-stabilizer								
1024	Support	A 125 / B 150			C 4	-	05.189.14.23.0	-	
		A 125 / B 180				-	-	05.189.13.10.0	
1024	Spring seat, below (double bar)	B 150			C 4	-	03.032.26.62.0	-	
		B 180				-	-	03.032.11.20.0	
1035	Segment					see page 35 / 39			

* Replacement for profile part (centering frame) 03.295.56.20.0

¹⁾ Replaced by spring seat with integrated centering bolt.

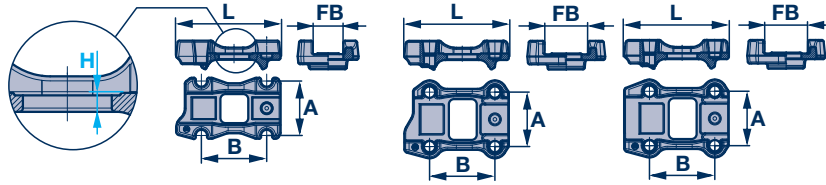
Further versions upon request.

2 Spring seats, axle clamping

2.2 Clamped axle spring seat assembly

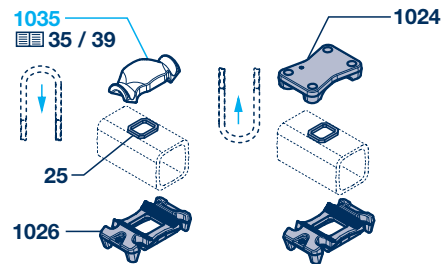
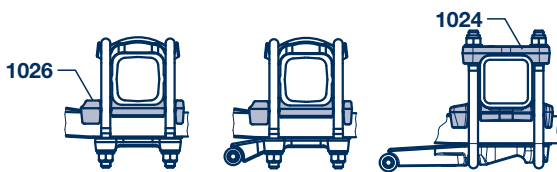
2.2.2 Trailing arms mounted below

Clamped axle spring seat assembly

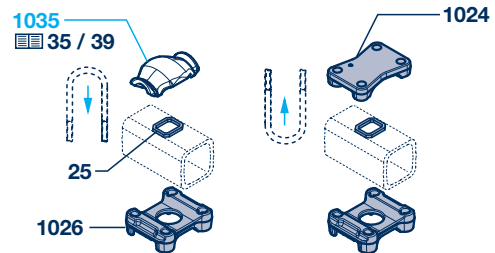
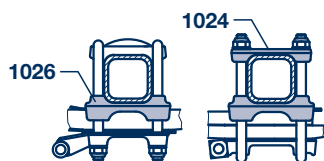


Spring seats without shock absorber attachment

D 1



D 2




SL

AL

Spring seats, axle clamping **2**

Clamped axle spring seat assembly **2.2**

Trailing arms mounted below **2.2.2**

Clamped axle spring seat assembly								
Item	Designation	Dimension	H	L	Fig.	BPW Code no.		
						Trailing arm width (FB) 70 mm		100 mm
						Rigid axle Steering axle LL <input type="checkbox"/> 120		Rigid axle Steering axle LL <input type="checkbox"/> 120
						Rigid axle Steering axle		Rigid axle Steering axle <input type="checkbox"/> 150
25	Profiled part (centring frame)	72.5 x 60 x 8				03.295.46.21.0 *		
	Spring seats without shock absorber attachment							
	Axle connection-Identification key					7U..	LU..	
1026	Spring seat, below	A 92 / B 148	15	222	D 1	03.032.22.01.0	-	-
1026	Spring seat, below	A 125 / B 150	15	214	D 2	-	03.032.27.62.0	-
		A 125 / B 150	23	235		-	03.032.21.55.0	-
		A 125 / B 150	14	240		-	03.032.26.61.0	-
		A 125 / B 180	15	240		-	-	03.032.10.77.0
1024	Spring seat, above	A 92 / B 148				03.032.21.99.0	-	-
		A 125 / B 150				-	05.032.21.44.0	-
		A 125 / B 180				-	-	03.032.11.16.0
1035	Segment					see page 35 - 39		

* Replacement for profile part (centering frame) 03.295.56.20.0 (72.5 x 60 x 12)

Further versions upon request.

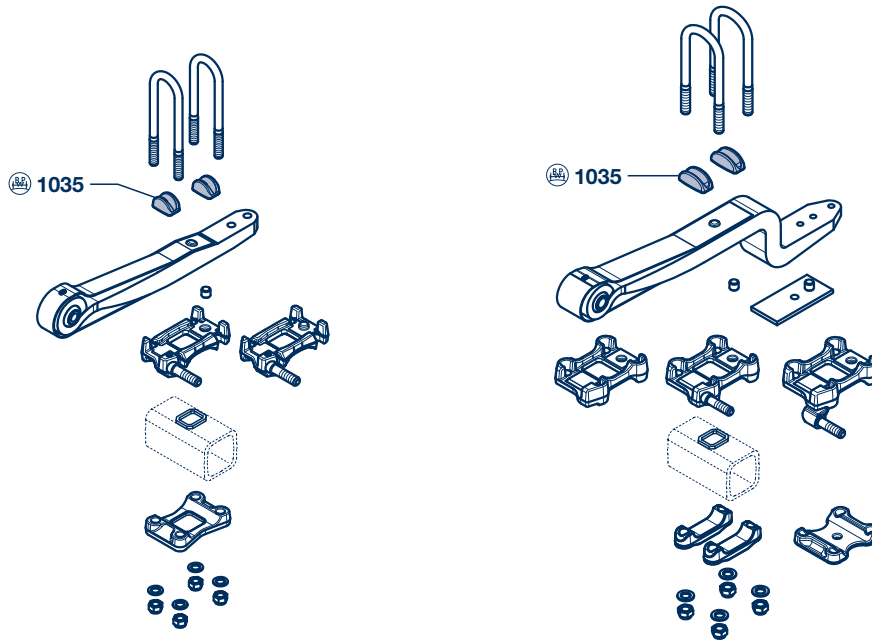
2 Axle clamping

2.3 Segments, spring plates

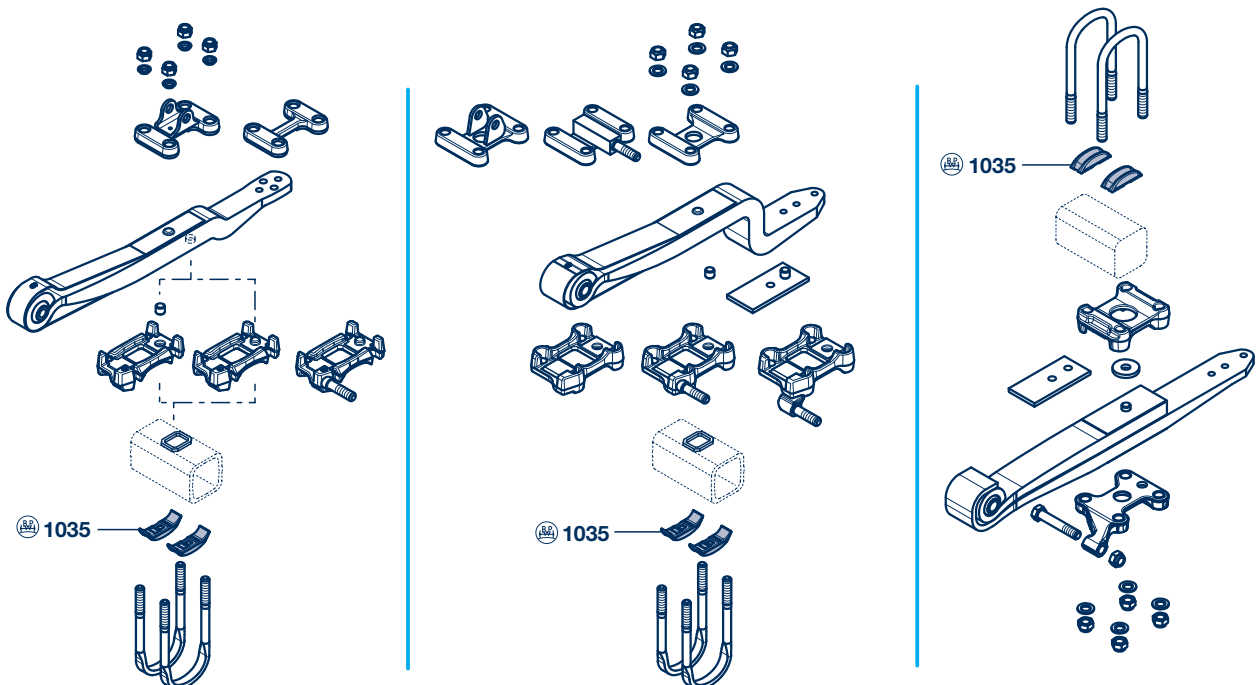
2.3.1 Single segments

Single segments

A Segment above the trailing arm



B Segment on the axle beam



O

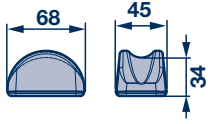
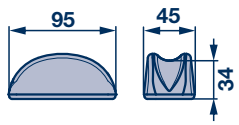
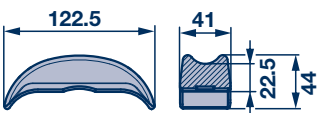
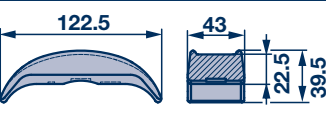
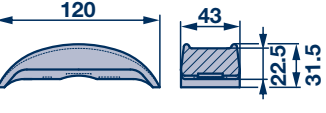
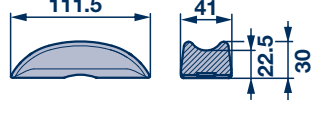
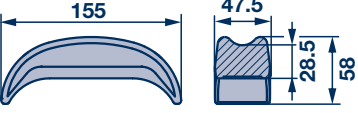
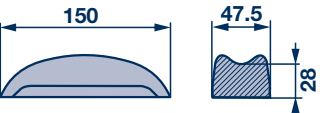
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Axle clamping 2

Segments, spring plates 2.3

Single segments 2.3.1

Single segments						
Item	Designation	Utilisation	Trailing arm width (FB)	Remark	BPW Code no.	
A Segment above the trailing arm						
1035	Segment	□ 120	70		03.345.22.02.0	
		□ 120 □ 150	100		03.345.21.01.0	
B Segment on the axle beam						
1035	Segment	□ 120	100		03.345.23.02.1	
				flattened spring U-bolts (disc brake)	03.345.23.09.0	
		■ 120 solid	100	flattened spring U-bolts (disc brake)	03.345.23.12.0	
		■ 120 solid	100		03.345.23.03.0 *	
		□ 150	100		03.345.25.01.1	
		■ 150 solid	100		03.345.25.04.0 *	

* welded on the axle beam
Further versions upon request.

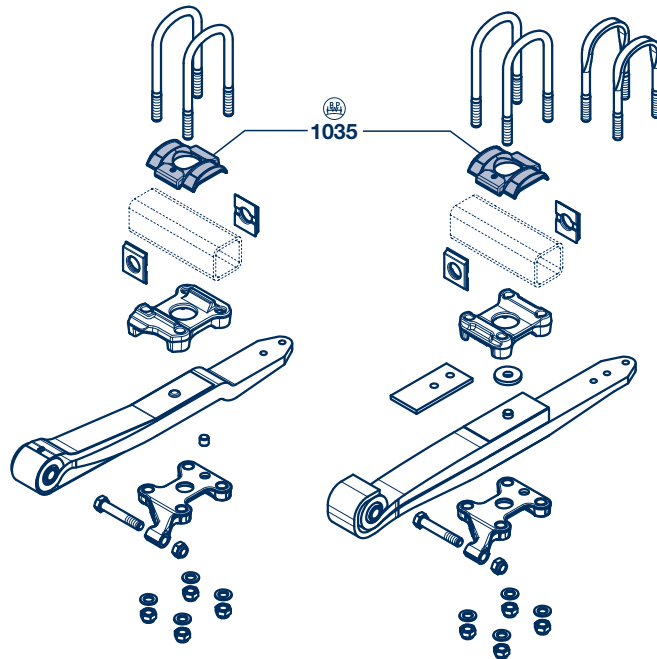
2 Axle clamping

2.3 Segments, spring plates

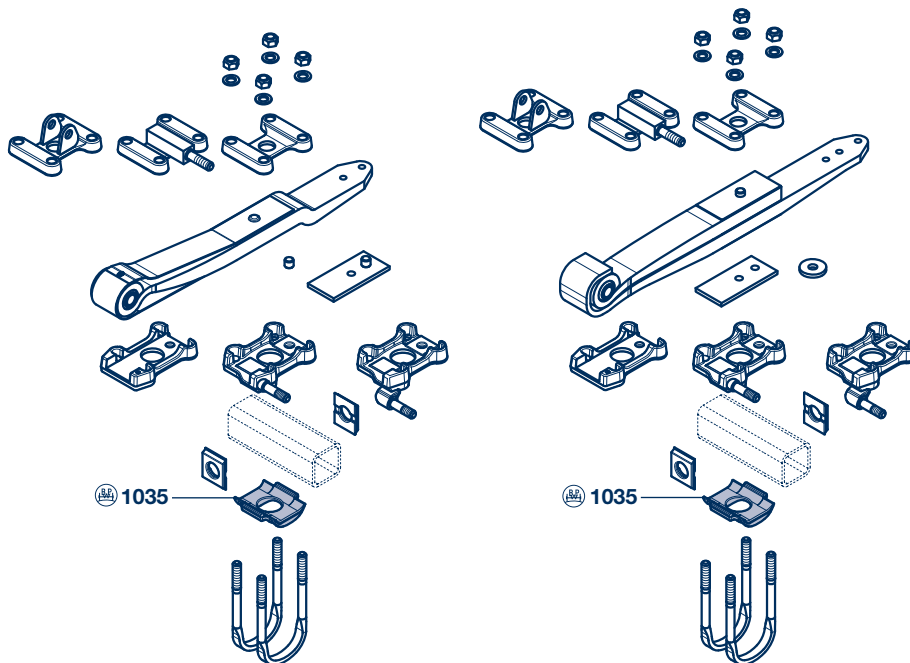
2.3.2 Double segments

Double segments

Double segment, spring U-bolt mounted from above



Double segment, spring U-bolt mounted from below



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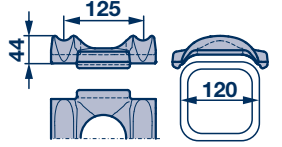
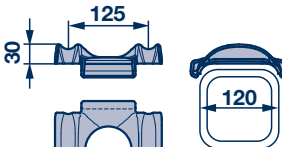
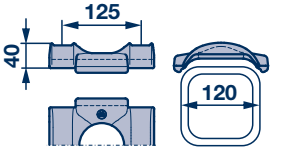
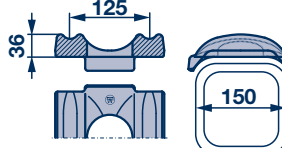
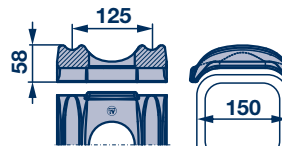
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Axle clamping 2

Segments, spring plates 2.3

Double segments 2.3.2

Double segments						
Item	Designation	Utilisation	Trailing arm width (FB)	Remark	BPW Code no.	
Double segment						
1035	Segment	<input type="checkbox"/> 120	100		03.345.23.15.1	
		<input type="checkbox"/> 120 LL	100		03.345.23.17.0	
		<input type="checkbox"/> 120	100	flattened spring U-bolts (disc brake)	03.345.23.16.1	
		<input type="checkbox"/> 150	100		03.345.25.06.0	
		<input type="checkbox"/> 150	100		03.345.25.05.1	

Further versions upon request.

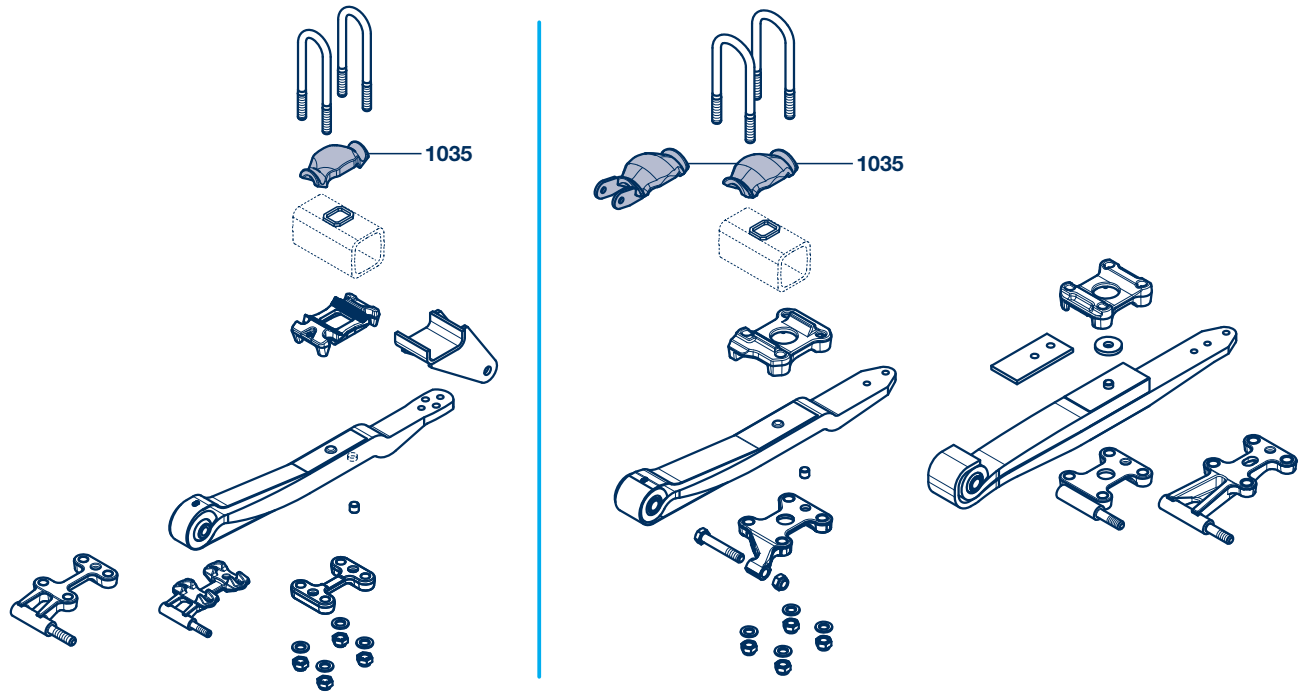
2 Axle clamping

2.3 Segments, spring plates

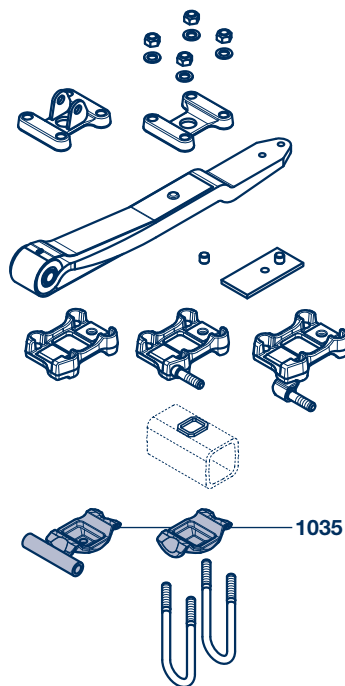
2.3.2 Segments

Segments (spring seats)

Spring U-bolts mounted from above, spring U-bolt next to the axle beam



Spring U-bolt mounted from below, spring U-bolt next to the axle beam

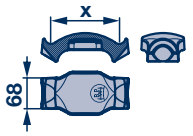
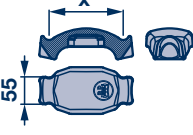
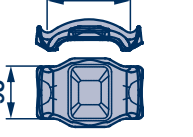
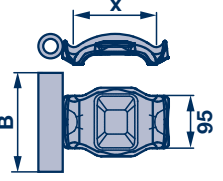


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Axle clamping 2

Segments, spring plates 2.3

Segments 2.3.2

Segments (spring seats)						
Item	Designation	Utilisation	Trailing arm width (FB)	Remark	BPW Code no.	
Spring U-bolt next to the axle beam						
Spring plate without shock absorber attachment						
1035	Spring seat	<input type="checkbox"/> 120	70	X = 150	03.032.21.63.0	
		<input type="checkbox"/> 120	70	X = 150	03.032.21.96.0	
		<input type="checkbox"/> 120	100	X = 150	03.032.21.53.0	
		<input type="checkbox"/> 150	100	X = 180	03.032.11.27.0	
				X = 180	03.032.11.28.0 *	
		* mit Bohrung Ø 20				
Spring plate for shock absorber attachment with screws						
1035	Spring seat	<input type="checkbox"/> 120	100	B = 144 / x = 150	05.032.21.73.0	
		<input type="checkbox"/> 120	100	B = 187 / x = 150	05.032.21.72.0	

Further versions upon request.

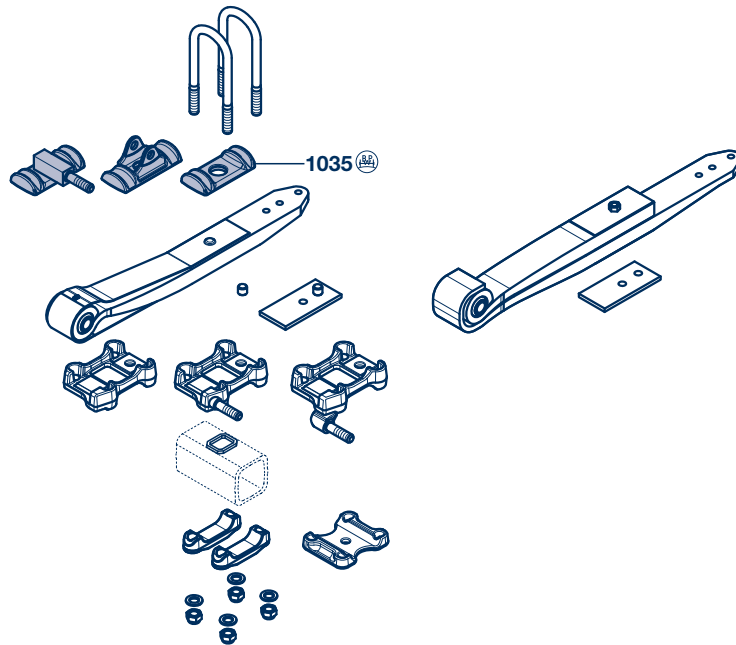
2 Axle clamping

2.3 Segments, spring plates

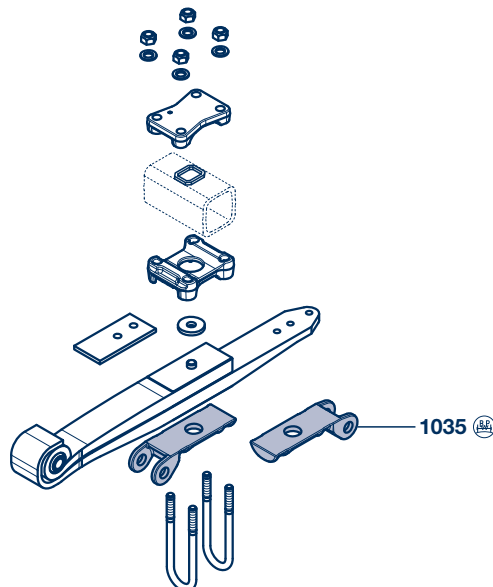
2.3.3 Double segment spring plates

Double segment spring plates, trailing arm width 100 mm

Double segment spring plate above the trailing arm



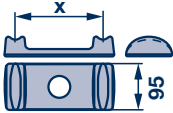
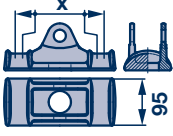
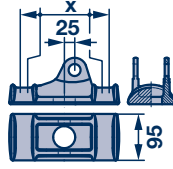
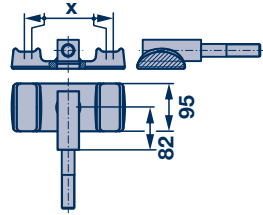
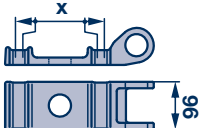
Double segment spring plate below the trailing arm for shock absorber attachment with threaded bolts / U-stabilizer



Axle clamping 2

Segments, spring plates 2.3

Double segment spring plates 2.3.3

Double segment spring plates, trailing arm width 100 mm					
Item	Designation	Utilisation	Remark	BPW Code no.	
1035	Double segment spring plate above the trailing arm				
	Spring plate	<input type="checkbox"/> 120 <input type="checkbox"/> 150	X = 150 X = 180	03.145.10.39.0 03.145.10.40.0	
1035	Double segment spring plate above the trailing arm for shock absorber attachment with screws				
	Spring plate	<input type="checkbox"/> 120 / <input type="checkbox"/> 150	x = 150 / 180	03.145.10.36.0	
				03.145.10.41.0	
1035	Double segment spring plate above the trailing arm for shock absorber attachment with threaded bolts				
Spring plate	<input type="checkbox"/> 120 / <input type="checkbox"/> 150	x = 150 / 180	05.145.10.42.0		
1035	Double segment spring plate below the trailing arm for shock absorber attachment with threaded bolts / U-stabilizer				
Spring plate	<input type="checkbox"/> 120 / <input type="checkbox"/> 150	x = 150 / 180	03.145.10.21.0		

Further versions upon request.

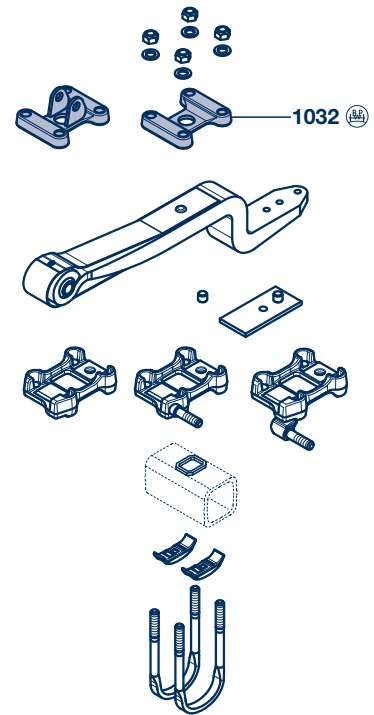
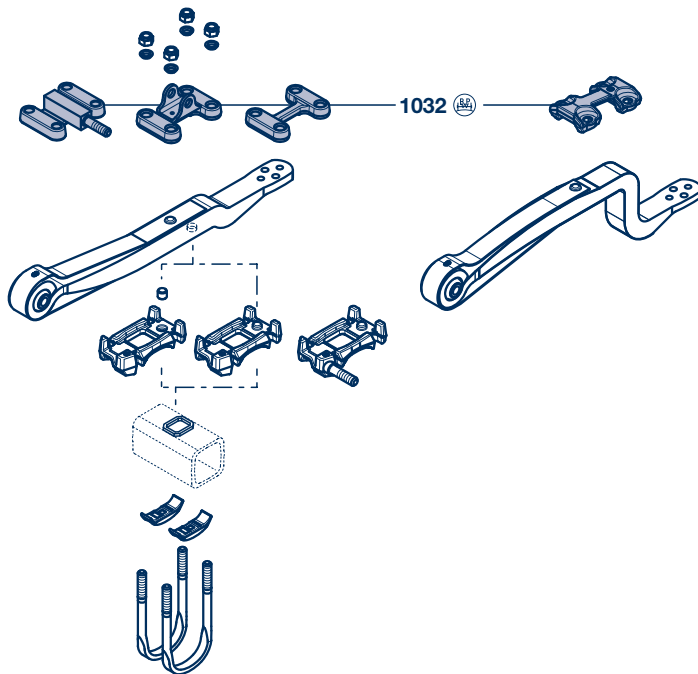
2 Axle clamping

2.3 Segments, spring plates

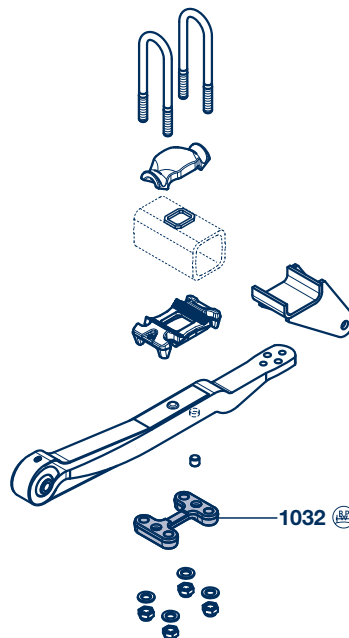
2.3.4 Spring plates

Spring plates

Spring U-bolt mounted from below, trailing arms mounted above



Spring U-bolt mounted from above, trailing arms mounted below

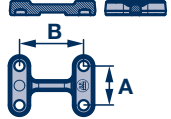
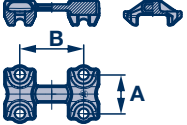
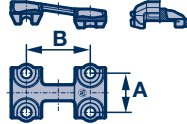
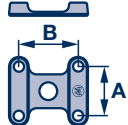
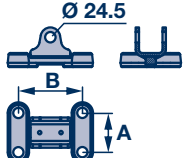
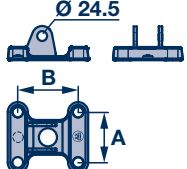
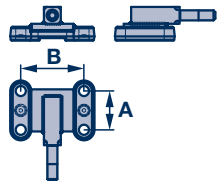
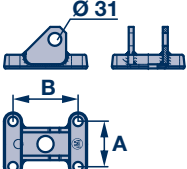


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Axle clamping 2

Segments, spring plates 2.3

Spring plates 2.3.4

Spring plates						
Item	Designation	Utilisation	Trailing arm width (FB)	Remark	BPW Code no.	
Spring U-bolt mounted from below, trailing arms mounted above / Spring U-bolt mounted from above, trailing arms mounted below						
Spring plate without shock absorber attachment						
1032	Spring plate	□ 120	70	A 92 / B 150	03.145.22.77.0 ¹⁾	
1032	Spring plate	□ 120	70	A 92 / B 150	03.145.25.04.0	
					A 125 / B 150	
1032	Spring plate	□ 120	70	A 92 / B 150	03.145.25.01.0 ¹⁾	
1032	Spring plate	□ 120	100	A 125 / B 150	03.145.22.01.0	
		Ø 127		A 125 / B 155	03.145.22.06.0	
		□ 150		A 125 / B 180	03.145.23.27.0	
Spring plate for shock absorber attachment with screws						
1032	Spring plate	□ 120	70	A 92 / B 150	05.145.22.84.0 ¹⁾	
1032	Spring plate	□ 120	100	A 125 / B 150	05.145.22.38.0	
		□ 150		A 125 / B 180	05.145.23.26.0	
Spring plate for shock absorber attachment with threaded bolts						
1032	Spring plate	□ 120	70	A 92 / B 150	05.145.22.92.0 ¹⁾	
Spring plate for U-stabilizer attachment with screws						
1032	Spring plate	□ 120	100	A 125 / B 150	05.145.22.05.0	
		Ø 127		A 125 / B 155	05.145.22.20.0	
		□ 150		A 125 / B 180	05.145.23.08.0 ¹⁾	
		¹⁾ with bore hole for centering bolt Ø 26				

¹⁾ No longer available, replaced by spring plates with spherical countersink (see also page 47).

Spring plates with weld-on bolt for shock absorber attachment see page 43.

2 Axle clamping

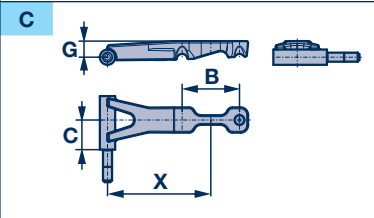
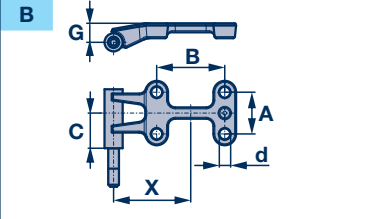
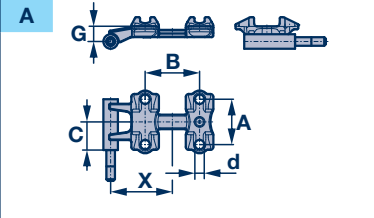
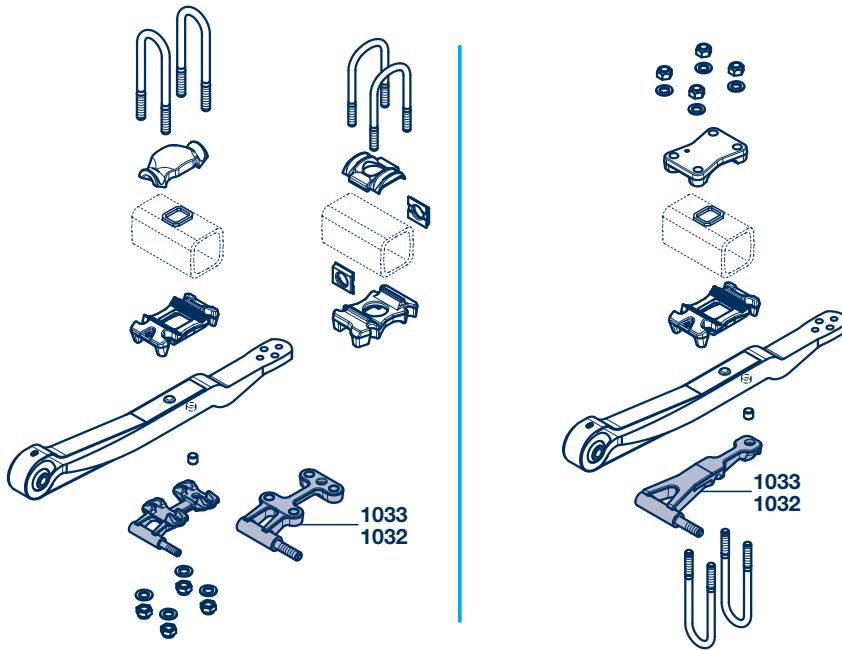
2.3 Segments, spring plates

2.3.4 Spring plates, trailing arms mounted below

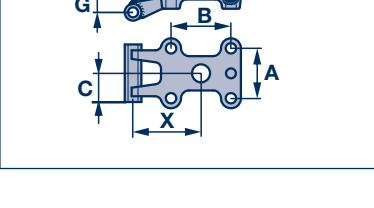
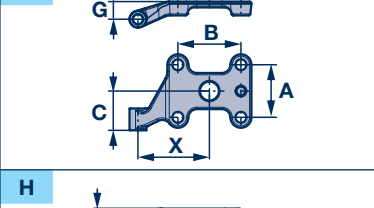
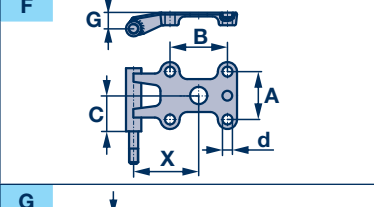
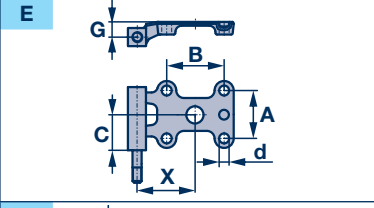
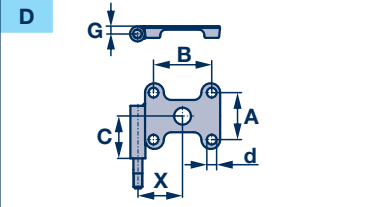
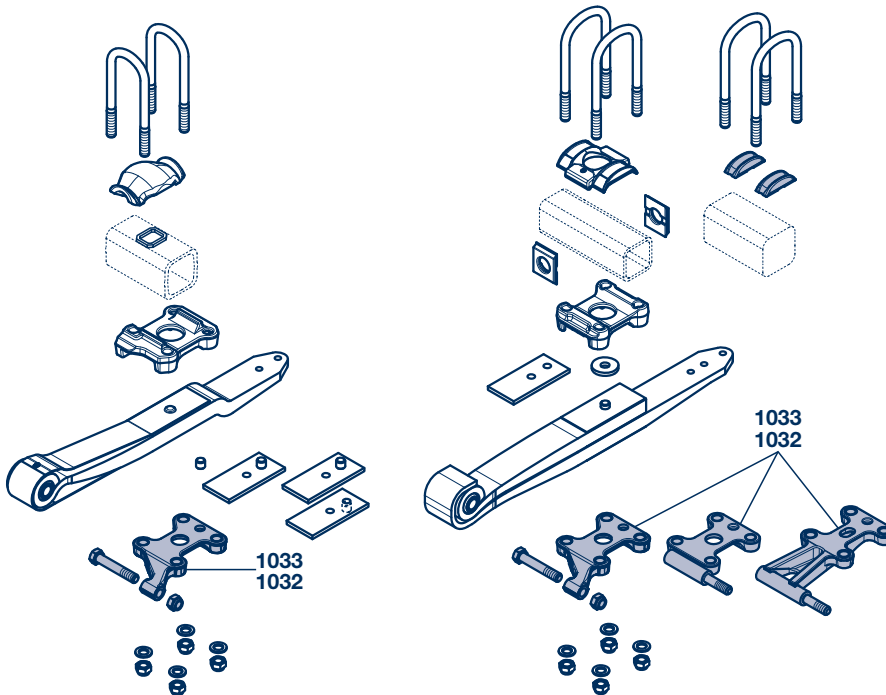
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Spring plates

Trailing arm width 70 mm



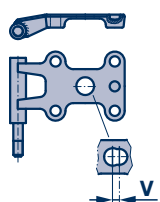
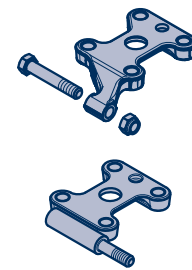
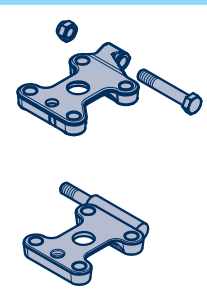
Trailing arm width 100 mm



Axle clamping 2

Segments, spring plates 2.3

Spring plates, trailing arms mounted below 2.3.4

Spring plates													
Item	Designation	Utilisation	FB	Fig.	Dimension							BPW Code no.	
					A	B	d	C	X	G	V		
Spring plate for shock absorber attachment													
1032 1033	Spring plate, right Spring plate, left	□ 120	70	A	125	150	∅ 26	77.5	170	42	-	05.145.25.06.0 05.145.25.07.0	
B	92			150	∅ 24	77.5	170	42	-	05.145.22.80.0 05.145.22.81.0			
B	92			150	∅ 24	77.5	260	51	-	05.145.22.86.0 05.145.22.85.0			
B	92			150	∅ 24	77.5	270	42	-	05.145.22.82.0 05.145.22.83.0			
C	-			150	-	77.5	270	42	-	05.145.25.18.0 05.145.25.19.0			
				D	125	150	∅ 26	93.5	119	21	-	05.145.22.08.0 05.145.22.09.0	
				E	125	150	∅ 26	93.5	146.5	38	-	05.145.22.50.0 05.145.22.49.0	
				F	125	150	∅ 26	72	170	42	-	05.145.22.68.0 * 05.145.22.69.0 *	
				F	125	150	∅ 26	93.5	170	42	-	05.145.22.44.0 ¹⁾ 05.145.22.43.0 ¹⁾	
				G	125	150	∅ 26	93.5	170	42	-	05.145.25.22.0 05.145.25.23.0	
				H	125	150	∅ 26	93.5	169	42	-	05.145.22.57.0	
				F	125	150	∅ 26	93.5	170	42	20	05.145.22.46.0 05.145.22.47.0	
				~ E	125	150	∅ 26	93.5	210	42	15	05.145.22.94.0 05.145.22.93.0	
				~ E	125	150	∅ 26	93.5	250	42	15	05.145.22.64.0 05.145.22.65.0	
				D	125	180	∅ 26	93.5	134	21	-	05.145.23.28.0 05.145.23.29.0	
				D	125	180	∅ 26	93.5	134	21	20	05.145.23.20.0 05.145.23.19.0	
				~ D	125	180	∅ 26	93.5	158.5	30	-	05.145.00.08.0 05.145.00.07.0	
* Shock absorber bolt ∅ 28 (standard ∅ 24) ¹⁾ Replaced by 05.145.25.22.0 / 23.0 (shock absorber attachment with screw and lock nut). Screw and lock nut are included in 05.145.....													
Attention !				Shock absorber front				Shock absorber rear					
Spring plates (exec. right or left) are changed if shock absorber is rear, this means spring plate right (shock absorber front) = spring plate left (shock absorber rear)													
				Front right				Rear left					

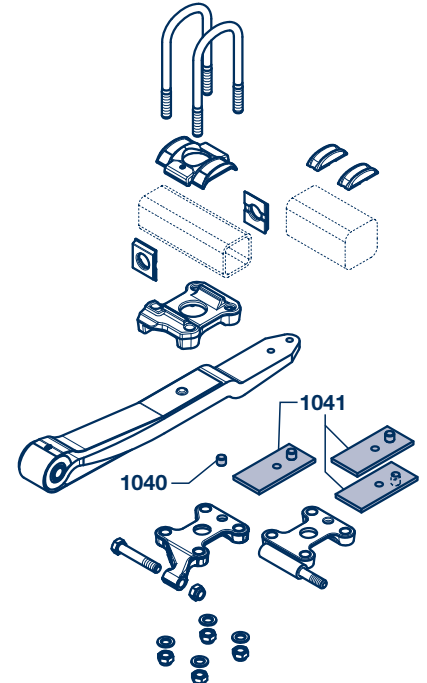
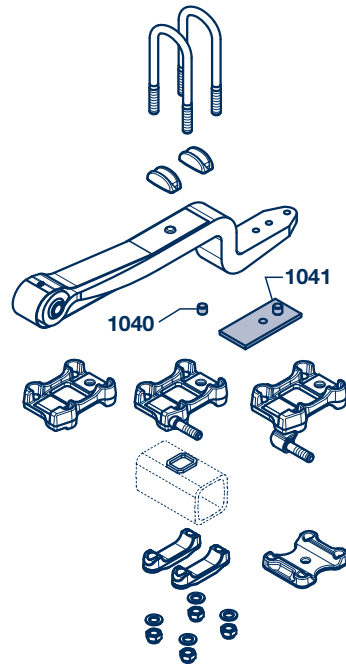
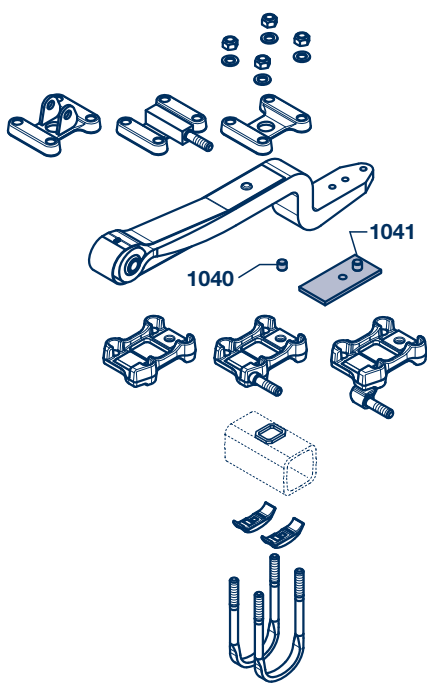
2 Axle clamping

2.4 Centring bolts, tracking plates

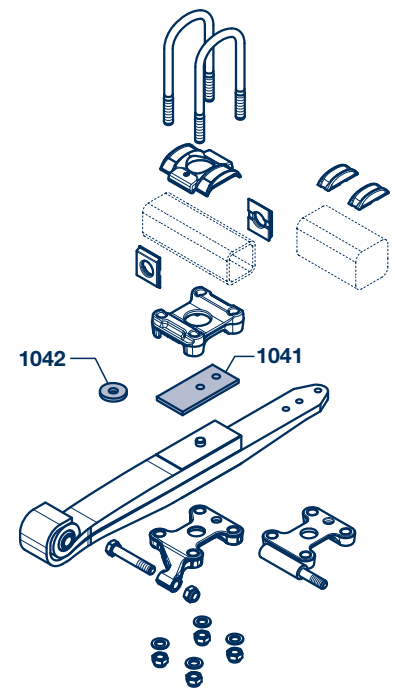
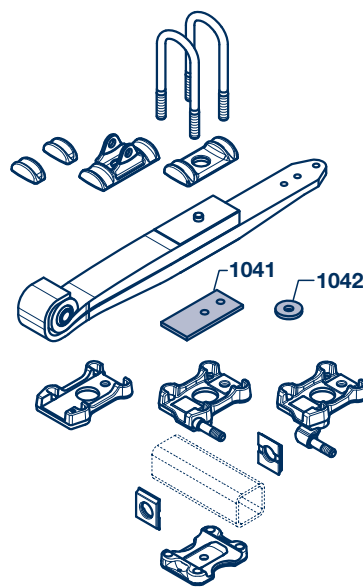
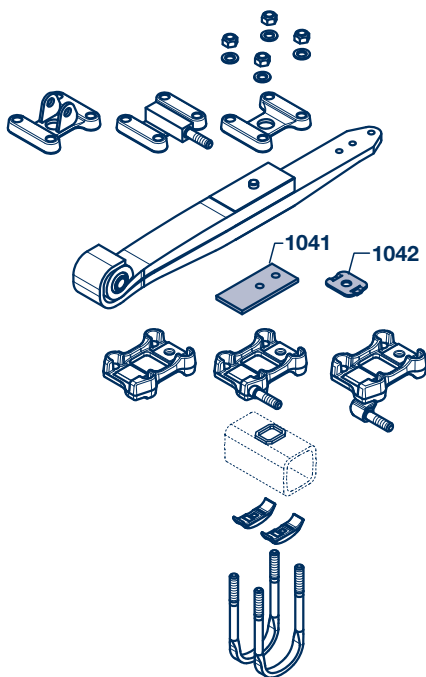
O
SL
AL

Centring bolts, tracking plates

Single leaf trailing arm without centre bolt (SLO / SLM / SLU / ALO / ALM / ALU)

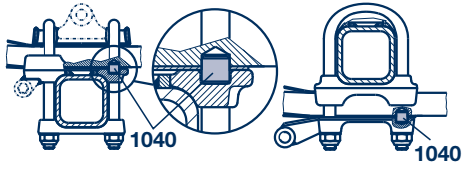

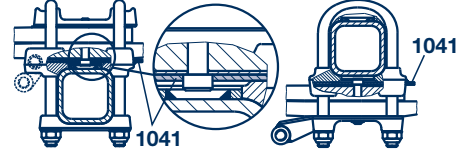
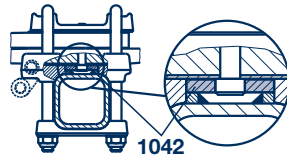
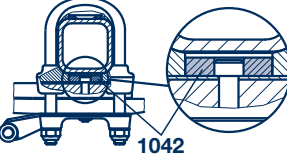
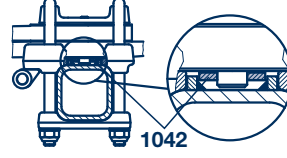


Double or single leaf trailing arm with centre bolt (O / OM / OT / SLO / SLM / SLU / ALO / ALM / ALU)



Axle clamping 2

Centring bolts, tracking plates 2.4

Centring bolts, tracking plates					
Item	Designation	Utilisation	Dimension	BPW Code no.	
Single leaf trailing arm without centre bolt (SLO / SLM / SLU / ALO / ALM / ALU)					
Centring bolt					
1040	Bolt (centring bolt)		Ø 24 x 23	03.084.74.43.0	
Tracking plates					
1041	Plate (tracking plate)	<input type="checkbox"/> 120	218 x 98 x 5	05.281.36.20.0	
		<input checked="" type="checkbox"/> 120	235 x 98 x 5	05.281.36.15.0	
		<input type="checkbox"/> 120	235 x 98 x 5	05.281.36.18.0	
		<input type="checkbox"/> 150	260 x 98 x 5	05.281.37.16.0	
		<input type="checkbox"/> 150	265 x 98 x 5	05.281.37.19.0	
Double or single leaf trailing arm with centre bolt (O / OM / OT / SLO / SLM / SLU / ALO / ALM / ALU)					
Tracking plates					
1041	Plate (tracking plate)	<input type="checkbox"/> 120	235 x 98 x 5	03.281.36.14.0	
		<input checked="" type="checkbox"/> 120	235 x 98 x 5	03.281.36.16.0	
		<input type="checkbox"/> 150	260 x 98 x 5	03.281.37.15.0	
		<input type="checkbox"/> 150	275 x 98 x 5	03.281.37.18.0	
		<input type="checkbox"/> 150	290 x 98 x 5	03.281.37.08.0	
Centring ring, trailing arm mounted above, trailing arms mounted below, spring seat with round hole, round centring ring					
1042	Washer (centring ring)		Ø 24 / 69 x 4	03.320.33.22.0	
			Ø 24 / 71 x 4	03.320.34.49.0	
Centring ring, trailing arms mounted below, spring seat with round hole					
1042	Washer (centring ring)		Ø 24 / 69 x 10	03.320.33.25.0	
			Ø 24 / 71 x 10	03.320.34.50.0	
Centring plate, trailing arm mounted from above, spring seat with square hole, axle with square centring ring					
1042	Plate (centring plate)		Ø 24 / 73 / 60 x 5	03.281.33.07.0	
			Ø 24 / 90 / 55 x 5	03.281.34.10.0	
			Ø 24 / 90 / 72 x 5	03.001.35.04.0	

2 Axle clamping

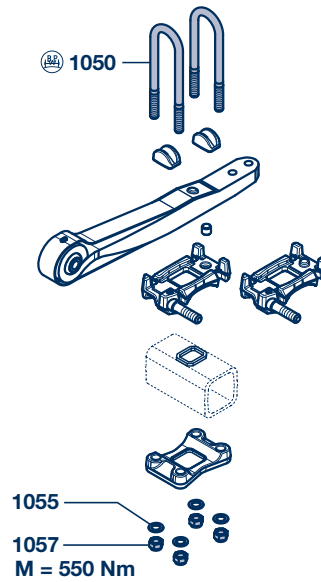
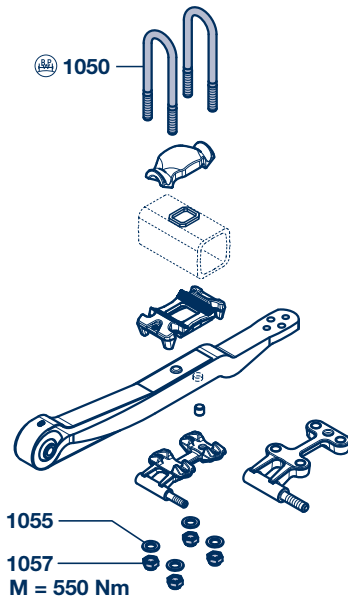
2.5 Spring U-bolts

2.5.1 Spring U-bolts, trailing arm width 70 mm

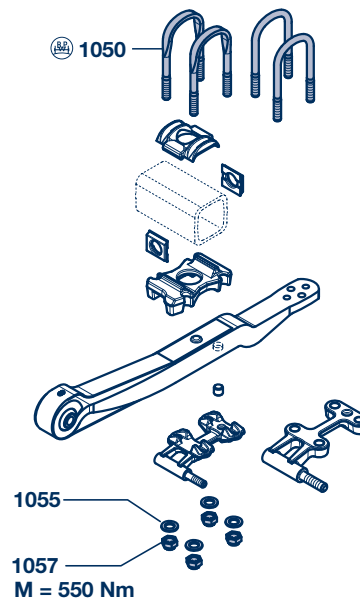
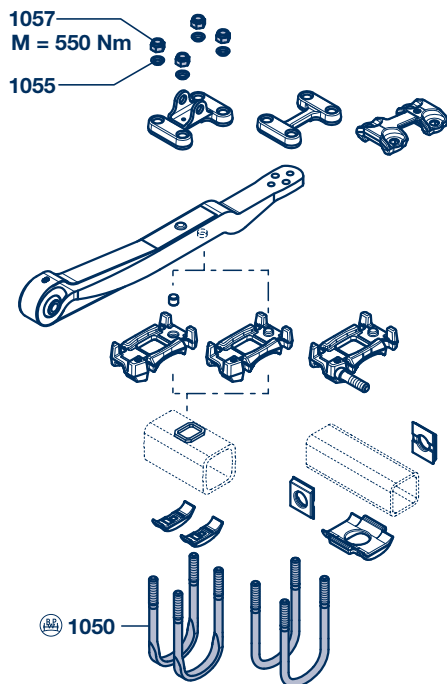
AL

Spring U-bolts, trailing arm width 70 mm

Spring U-bolt next to the axle beam



Spring U-bolt encloses the axle beam



Axle clamping 2

Spring U-bolts 2.5

Spring U-bolts, trailing arm width 70 mm 2.5.1

Spring U-bolts, trailing arm width 70 mm											
		Spring U-bolt next to the axle beam		Spring U-bolt encloses the axle beam							
		A = 92 □ 120		A = 92 □ 120		A = 150 □ 120					
Item	Designation	BPW Code no.	L	Remark							
1050	Spring U-bolt	M 22		03.138.30.07.4	280	03.138.30.19.4	282	03.138.37.05.4	256	flattened	
		03.138.30.08.4	295			03.138.37.04.4	260	flattened			
						03.138.37.06.4	264	flattened			
						03.138.37.03.4	280	flattened			
						03.138.37.11.4	283	round			
						03.138.37.10.4	289	round			
						03.138.37.02.4	290	flattened			
		M 24		-	-	03.138.41.38.4	277	flattened			
						03.138.41.33.4	285	flattened			
						03.138.41.34.4	300	flattened			
						03.138.41.35.4	325	flattened			
										Spring plate without spherical countersink (with disc)	
										Spring plate with spherical countersink (with spherical disc)	
				A = 92 □ 120		A = 150 □ 120		L		Remark	
		03.138.30.18.4	252	03.138.37.09.4	240	03.138.37.17.4	262	flattened			
								round			
Item	Designation	Dimension		BPW Code no.		* Spherical disc for spring plates with spherical countersink					
1055	Washer	Ø 23 / 125		02.5401.23.07							
1055	Disc (spherical disc)	Ø 23 / 34 x 7.5		03.310.10.28.0 *							
1057	Lock nut	M 22 / SW 32 / H 22		03.260.04.19.0							

2 Axle clamping

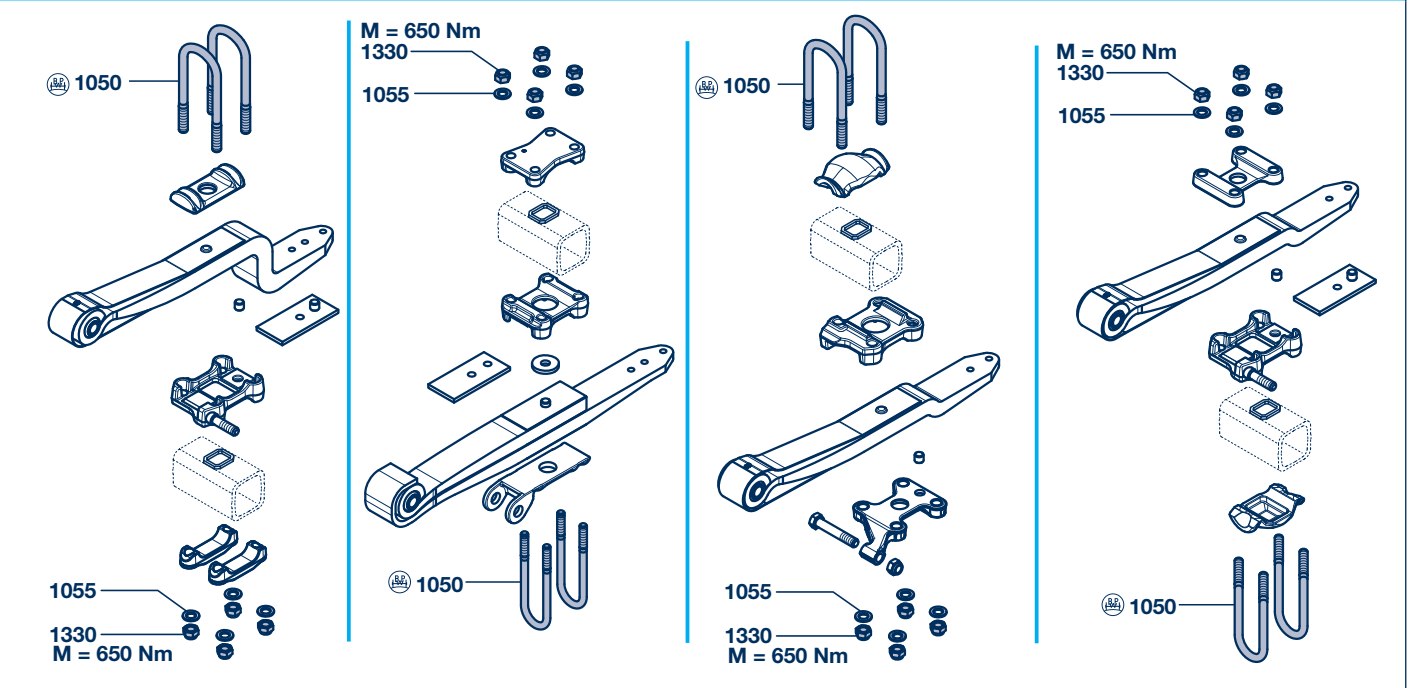
2.5 Spring U-bolts

2.5.2 Spring U-bolts, trailing arm width 100 mm

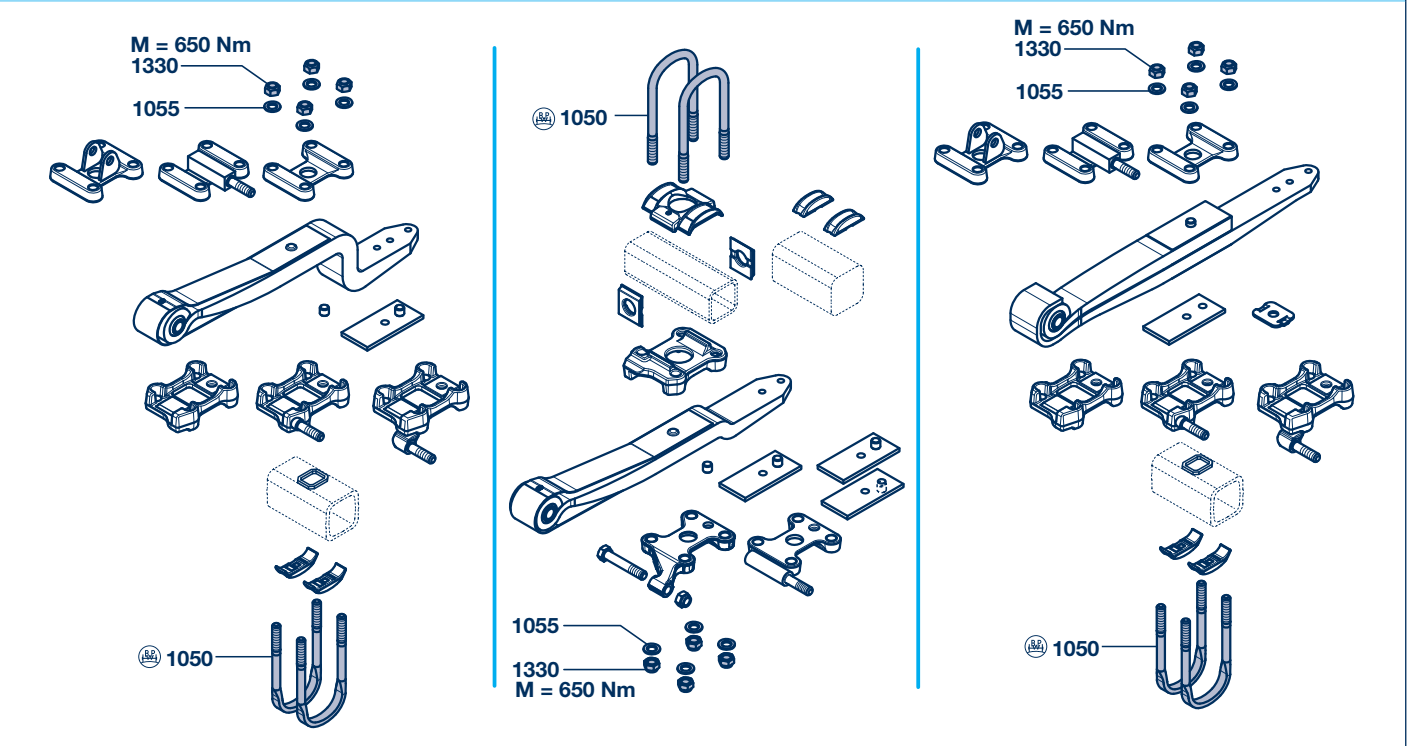
O
SL
AL

Spring U-bolts M 24, trailing arm width 100 mm

Spring U-bolt next to the axle beam



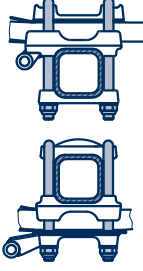
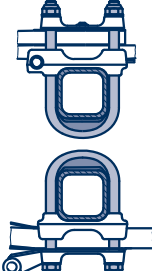
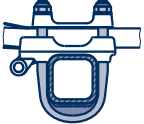
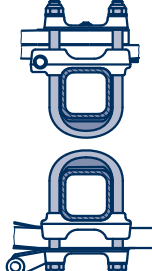

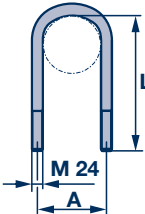
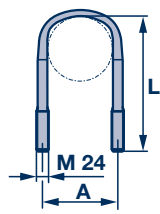
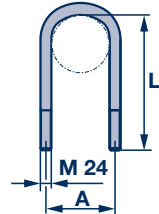
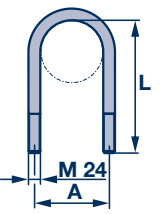
Spring U-bolt encloses the axle beam



Axle clamping 2

Spring U-bolts 2.5

Spring U-bolts, trailing arm width 100 mm 2.5.2

Spring U-bolts M 24, trailing arm width 100 mm									
Spring U-bolt next to the axle beam		Spring U-bolt encloses the axle beam							
									
									
A = 125 □ 120 / □ 150		A = 152 □ 120		A = 152 Disc brake □ 120		A = 180 □ 150		A = 152 Ø 127	
L	BPW Code no.	L							
190	-		03.138.41.31.4	190	-	-	-	-	-
210	03.138.44.17.4	210	03.138.41.32.4	210	-	-	-	-	-
230	03.138.44.21.4	230	-	-	-	-	-	-	-
250 - 255	03.138.44.14.4	255	-	-	-	-	03.138.45.20.4	250	-
260 - 277	03.138.44.19.4	270	03.138.41.01.4	268	03.138.41.38.4	277	-	-	03.138.41.21.4 275
280 - 285	03.138.44.08.4	280	03.138.41.19.4	280	03.138.41.33.4	285	-	-	03.138.41.18.4 280
	03.138.44.40.4 *	280	-	-	-	-	-	-	-
290 - 295	03.138.44.16.4	292	03.138.41.17.4	290	-	-	-	-	03.138.41.14.4 290
	03.138.44.44.4 *	292	-	-	-	-	-	-	-
300 - 305	03.138.44.04.4	301	03.138.41.13.4	300	03.138.41.34.4	300	-	-	-
308 - 310	03.138.44.09.4	308	03.138.41.16.4	310	-	-	-	-	03.138.41.11.4 310
	03.138.44.41.4 *	308	-	-	-	-	-	-	-
315 - 320	03.138.44.15.4	320	03.138.41.08.4	320	03.138.41.37.4	315	03.138.45.11.4	320	-
	03.138.44.42.4 *	320	-	-	-	-	-	-	-
325 - 335	03.138.44.02.4	331	03.138.41.26.4	330	03.138.41.35.4	325	03.138.45.09.4	330	03.138.41.10.4 335
	03.138.44.43.4 *	331	-	-	-	-	-	-	-
340 - 345	03.138.44.18.4	340	03.138.41.05.4	345	03.138.41.36.4	345	03.138.45.19.4	340	-
350 - 356	03.138.44.01.4	356	03.138.41.23.4	355	-	-	03.138.45.08.4	350	03.138.41.09.4 355
360 - 365	-		03.138.41.06.4	365	-	-	03.138.45.07.4	360	-
370	03.138.44.12.4	370	-	-	-	-	03.138.45.22.4	370	-
380	-		-	-	-	-	03.138.45.06.4	380	-
400	03.138.44.25.4	400	-	-	-	-	-	-	-
415	-		03.138.41.29.4	415	-	-	-	-	-

Item	Designation	Dimension	BPW Code no.
1055	Washer	Ø 25 / 127	02.5401.25.07
1330	Lock nut	M 24 / 980-10	02.5220.74.12

* SLU with TSB 3709

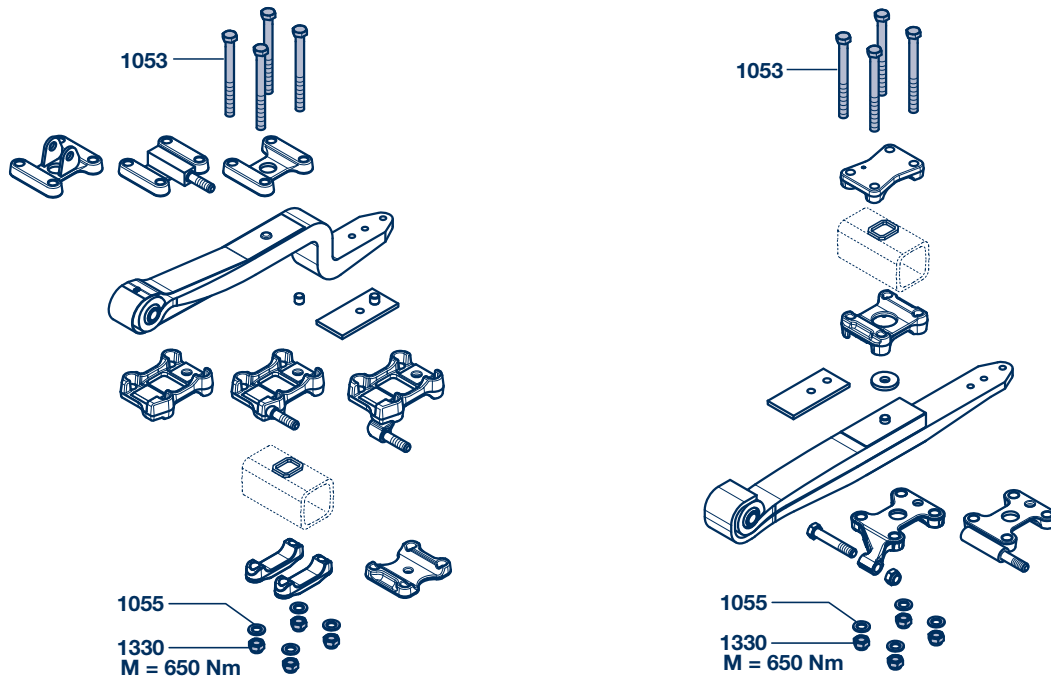
Further versions upon request.

2 Axle clamping

2.5 Spring U-bolts

2.5.3 Spring U-bolts, hexagon screws

Hexagon screws M 24



Item	Designation	Utilisation X	Dimension	BPW Code no.		
1053	Hexagon screw	□ 120	38 - 45	M 24 x 270	02.5023.45.11	
			43 - 54	M 24 x 280	02.5023.89.10	
			65 - 79	M 24 x 300	02.5023.95.10	
			80 - 99	M 24 x 320	02.5023.88.10	
			100 - 13	M 24 x 350	02.5023.94.10	
		□ 150	50 - 69	M 24 x 320	02.5023.88.10	
			60 - 95	M 24 x 340	02.5023.99.11	
			70 - 104	M 24 x 350	02.5023.94.10	
			100 - 135	M 24 x 380	02.5023.98.10	
1055	Washer		Ø 25 / 127	02.5401.25.07		
1330	Lock nut		M 24 / 980-10	02.5220.74.12		

Notes

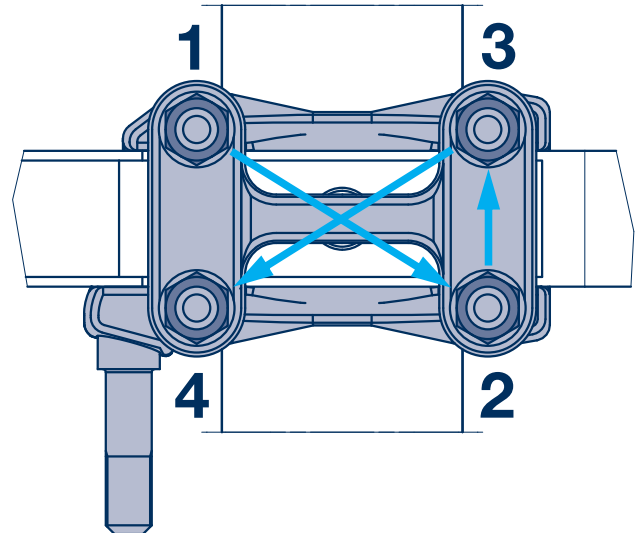
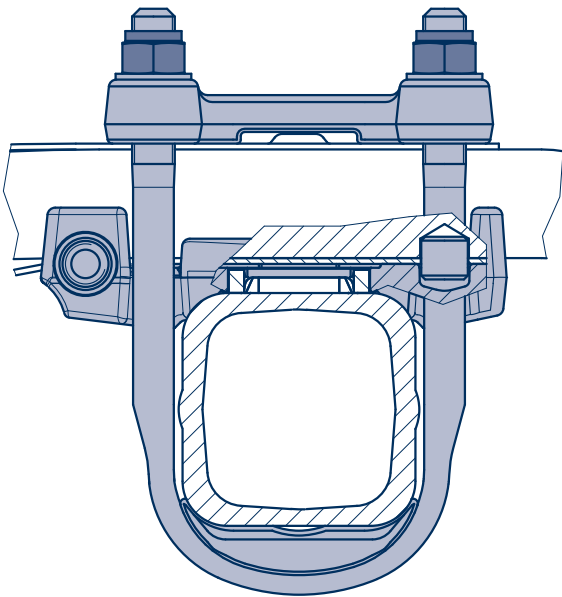
2 Axle clamping

2.6 Assembly instructions for clamped axle spring seat assemblies

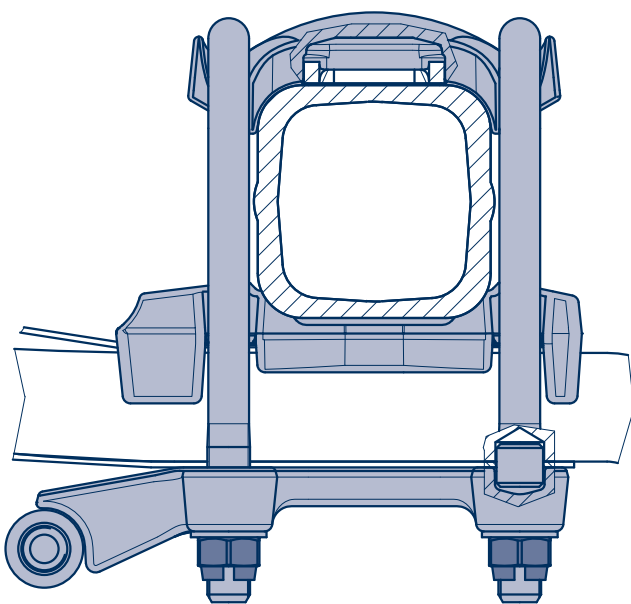
Trailing arm width 70 mm (AL II), spring U-bolts M 22

Series ALO / ALM

AL



Series ALU



Assembly instructions:

- ⦿ Spring seats and trailing arms are to be aligned parallel to the axle beam and the self locking nuts are to be tightened down diagonally and equally until they contact the spring plate.
- ⦿ Control parallel position of spring seats and trailing arm towards axle beam and hereafter tighten self-locking nuts diagonally in a.m. sequence 1-2-3-4 until all have achieved a tightening torque of 200 Nm.
Using a torque wrench tighten self-locking nuts diagonally in following steps to the tightening torque of 550 Nm:
 - 1) 200 Nm s.a.
 - 2) 300 Nm
 - 3) 450 Nm
 - 4) 550 Nm
- ⦿ Hereafter tighten the nuts by another 90° turning angle.

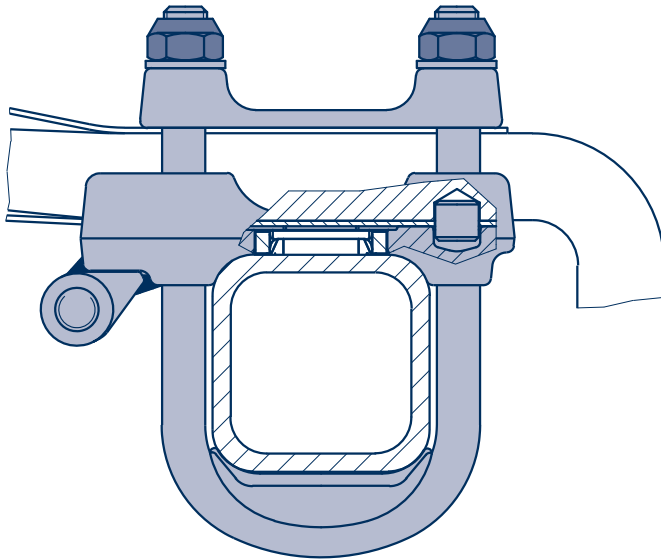
M = 550 Nm + 90°

Axle clamping 2

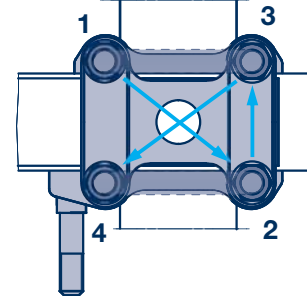
Assembly instructions for clamped axle spring seat assemblies 2.6

Trailing arm width 100 mm (SL / AL), spring U-bolts M 24

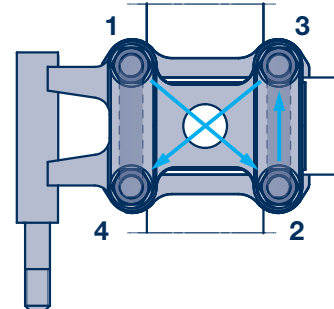
Series ALO / ALM



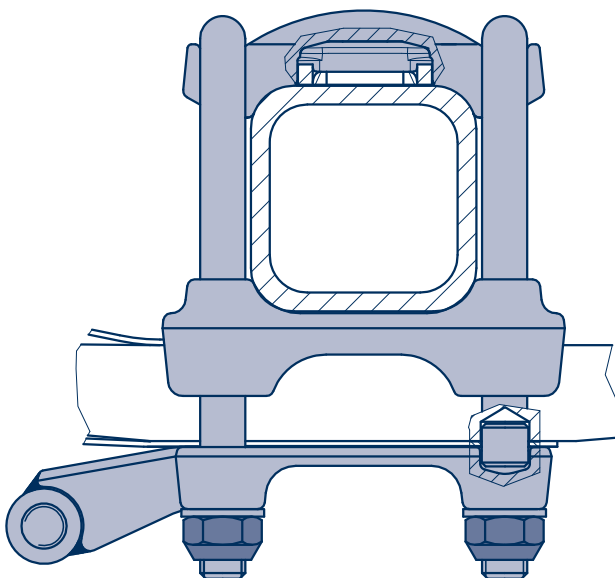
Spring U-bolt encloses the axle beam



U-bolt next to the axle beam



Series SLU / ALU



Assembly instructions:

- ⊙ Spring seats and trailing arms are to be aligned parallel to the axle beam and the self locking nuts are to be tightened down diagonally and equally until all components are in uniform contact. (The spring seats are only in contact with the radii of the axle beam.) No uneven tightening is allowed due to single-sided tightening of the lock nuts.
- ⊙ Using a torque wrench, tighten the lock nuts in several stages diagonally until the specified tightening torque has been reached.

M = 650 Nm (605-715 Nm)

3 Spring pivot bolt bearings

General

Spring pivot bolt bearings

BPW spring bolt mountings connect the trailing arms to the supports / frame.

The maintenance-free steel / rubber / steel bushes guarantee that the axles are guided securely and with a stable track under all conditions.

In axle lift devices, the mounting of the lift arm is integrated into the spring bolt mounting, thereby ensuring a safe and long-life function.

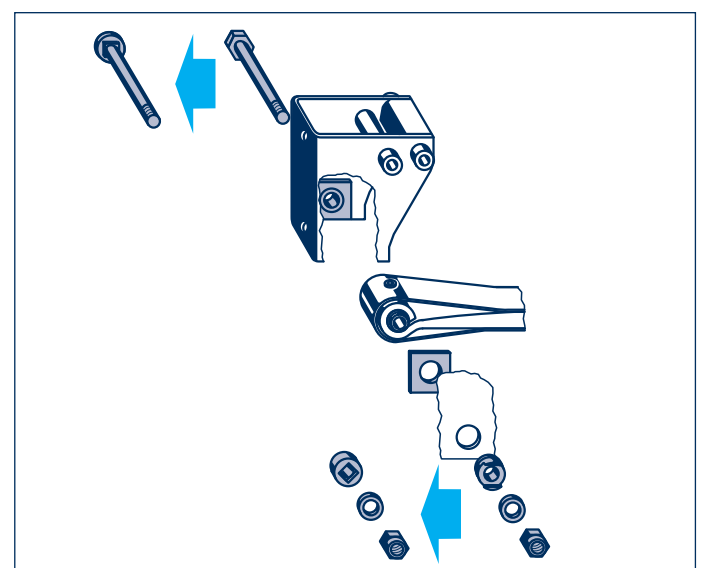
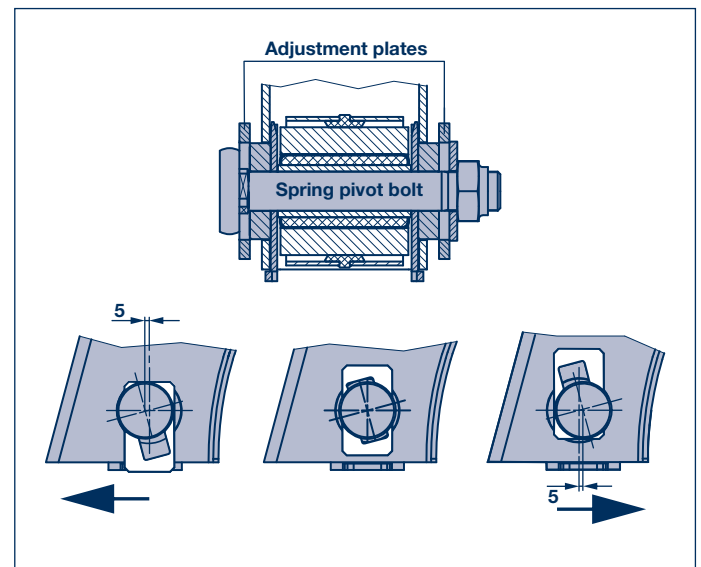
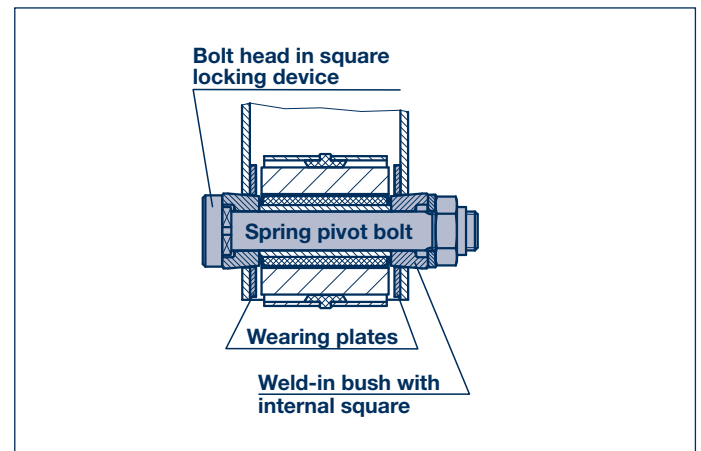
Rapid axle alignment is possible using BPW hanger brackets with integrated track adjustment. Production tolerances can be settled and the axle tracking can be corrected on the vehicle without unfastening the U-bolts (axle tracking).

Spring bolt with square anti-rotation lock

Since 1995, BPW has been using spring bolts and weld-in bushes with square anti-rotation lock on rigid steel supports.

In case of wear on bushes with a slot for the hexagon head of the spring bolt that are welded into older supports, change over to the new technology with square anti-rotation lock (see pages 110 / 111).

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.



Spring pivot bolt bearings 3

General

Spring pivot bolt bearing from week 18/2004 onwards

From week 18/2004 onwards, the functional principle of the loose wear plates familiar in Airlight II hanger brackets was also be carried across to the rigid air suspension hanger brackets for 100 mm wide trailing arms.

Loose wear plates offer the following advantages:

- ◎ Simplified mounting, because the wear plates are not inserted in the bracket until the trailing arm has been positioned in the bracket.
 This means there is significantly more installation space available at the start of the installation procedure.
 Preinstalled air suspension modules can therefore be installed in the vehicle frame much easier thanks to the brackets which are already welded on.
- ◎ A practical design of the wear plates thanks to the insertion offset and height limitation ensures that the installation proceeds smoothly
- ◎ Mixed installation is technically possible (brackets with loose wear plates or with welded wear plates).

Wear plates

BPW uses two different versions of wear plates.

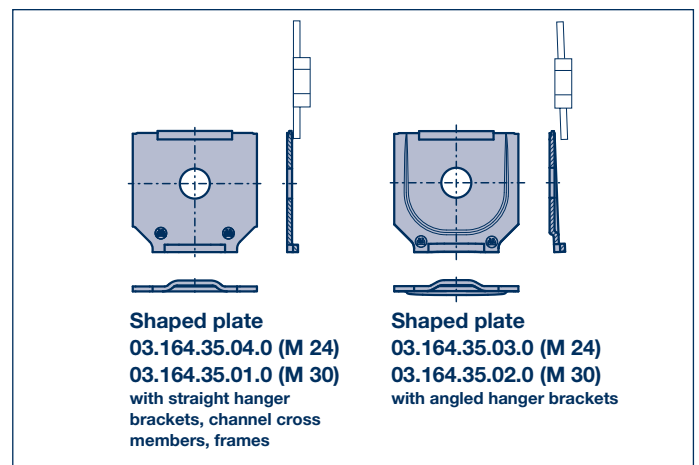
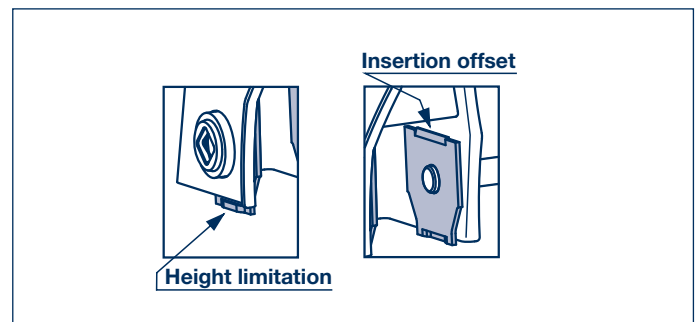
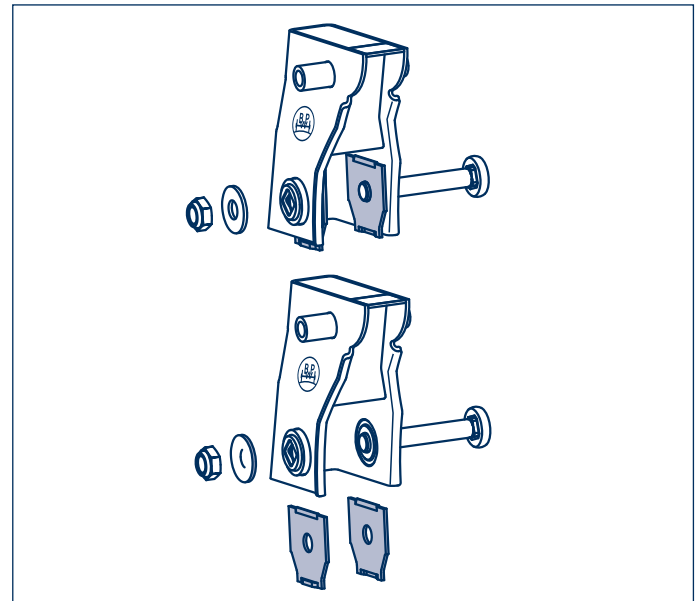
1. A straight shaped plate for straight hanger brackets, integrated supports and frames
 BPW Code no.: 03.164.35.04.0 - M 24
 03.164.35.01.0 - M 30
2. An offset shaped plate for angled hanger brackets
 BPW Code no.: 03.164.35.03.0 - M 24
 03.164.35.02.0 - M 30

Spring pivot bolt Ø 24

Since week 30/2007 air suspension modules (Airlight II) was only available with Ø 24 mm trailing arm bushes and spring pivot bolts.

Introducing an **M 24** spring pivot bolt provides greater security due to higher bolt tension being achieved. In addition the surface area of the clamped interfaces is increased. This means the bolted connection has been made even less susceptible to settling.

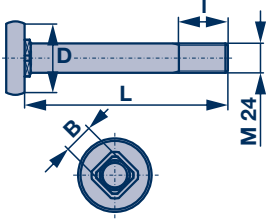
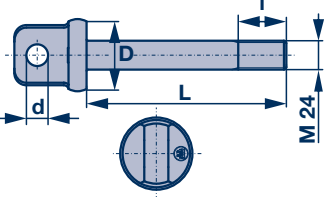
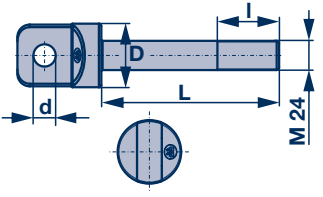
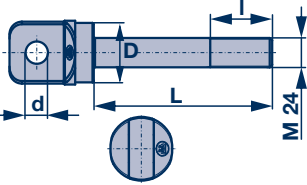
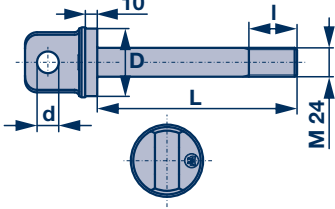
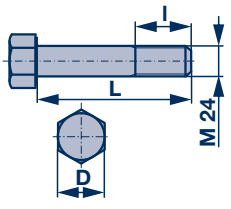
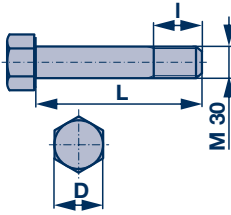
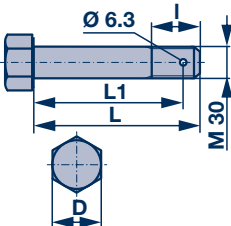
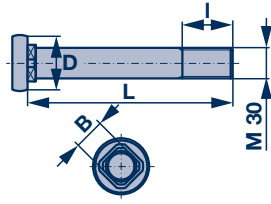
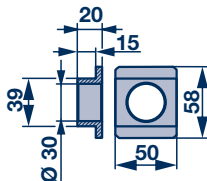
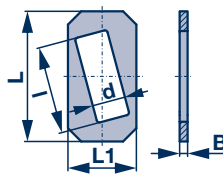
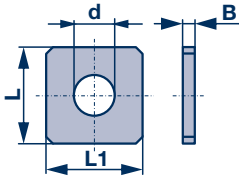
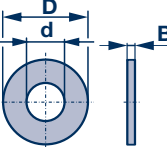
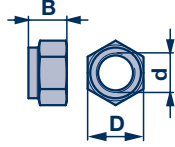
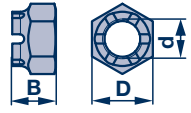
The tightening torque (with torque wrench!) for Airlight II integrated supports and air suspension hanger brackets is reduced from **900 Nm** (840 - 990 Nm) for the **M 30** spring bolt to **650 Nm** (605 - 715 Nm) for the **M 24** spring bolt.



3 Spring pivot bolt bearings

3.1 Spare parts for spring pivot bolt bearings

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Spare parts for spring pivot bolt bearings		
A 	B 	C 
D 	E 	F 
G 	H 	I 
J 	K 	L 
M 	N 	O 

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3.1

Spring pivot bolt bearings

Spare parts for spring pivot bolt bearings

Spare parts for spring pivot bolt bearings													
Item	Designation	Fig.	Dimension							BPW Code no.			
				L	L1	I	D	d	B				
1154 1155	Screw (spring pivot bolt)	C	M 24 x 144	144	-	50	Ø 51.5	Ø 18	-	03.340.14.30.0			
		D	M 24 x 144	144	-		Ø 48		-	03.340.14.31.0			
		A	M 24 x 166	166	-		Ø 56	-	□ 24	03.340.14.20.0			
		B	M 24 x 166	166	-	40	Ø 56	Ø 18	-	03.340.14.24.0			
		E	M 24 x 166	166	-		Ø 54		-	03.340.14.28.0			
		A	M 24 x 180	180	-		56	-	□ 24	03.340.14.23.0			
			M 24 x 200	200	-	-		03.340.14.27.0					
		F	M 24 x 210	210	-	45	SW 36	-	-	03.340.14.29.0			
			M 24 x 235	235	-	65		-	-	03.340.14.26.0			
			M 24 x 260	260	-	60		-	-	03.340.14.25.0			
		G	M 30 x 190	190	-	45	SW 46	-	-	03.340.15.27.0			
			M 30 x 210	210	-			-	-	03.340.15.23.0			
			M 30 x 235	235	-			-	-	02.5023.70.88			
			M 30 x 255	255	-	50		-	-	03.340.15.39.0			
			M 30 x 265	265	-			-	-	03.340.15.37.0			
		H	M 30 x 265	265	251	45	-	-	03.340.15.40.0				
			M 30 x 290	290	281		-	-	03.340.15.33.0				
		I	M 30 x 170	170	-	40	Ø 62	-	□ 30	03.341.05.05.0			
			M 30 x 180	180	-			-		03.341.05.02.0			
M 30 x 200	200		-	Ø 52	-			03.341.05.03.0					
M 30 x 200	200		-	Ø 62	-			03.341.05.04.0					
1160	Slider	J	Ø 30 / 50 x 58 x 20	58	50	-	-	Ø 30	20	03.181.20.08.0			
1161	Plate (adjusting plate)	K	Ø 24	98	51	66	-	25	6	03.281.44.25.0			
			Ø 24						10	03.281.54.21.0			
			Ø 24						8	03.281.54.20.0			
			Ø 30	86	65	03.281.54.19.0							
			Ø 30	104	57	72		03.281.54.18.0					
			Ø 30		72	03.281.54.14.0							
1162	Plate	L	Ø 31 / □ 72 x 10	72	72	-	-	Ø 31	10	03.281.63.11.0			
1165	Washer	M	Ø 25 / 36 x 6	-	-	-	Ø 36	Ø 25	6	03.320.30.41.0			
			Ø 26 / 60 x 6							03.320.33.28.0			
			Ø 25 / 60 x 8							8	03.320.33.29.0		
			Ø 25 / 62 x 10				10	03.320.32.42.0					
			Ø 25 / 70 x 12				12	03.005.31.38.0					
			Ø 31 / 45.5 x 5				-	-	-	Ø 45.5	Ø 31	5	03.320.31.24.0
			Ø 31 / 45.5 x 6									6	03.320.31.27.0
			A 31				Ø 56	4	02.5401.31.01				
			Ø 31 / 57 x 6				Ø 57	5	03.320.32.38.0				
			Ø 31 / 62 x 5				Ø 62		03.320.34.51.0				
			Ø 31 / 71 x 6				Ø 71		03.320.34.53.0				
			Ø 31 / 71 x 6					6	03.320.34.54.0 *				
			1168				Lock nut	N	M 24 / SW 36	-	-	-	SW 36
M 30 / SW 46	SW 46	M 30		03.260.15.01.0									
1169	Castle nut	O	M 30 / 935-8	-	-	-	SW 46	M 30	33	02.5204.35.60			
1170	Split pin	-	6.3 x 50 / 94	-	-	-	-	-	-	02.6201.62.01			

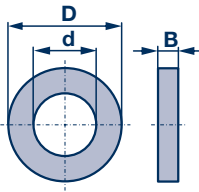
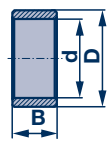
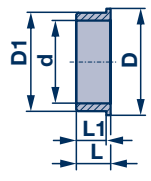
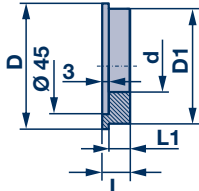
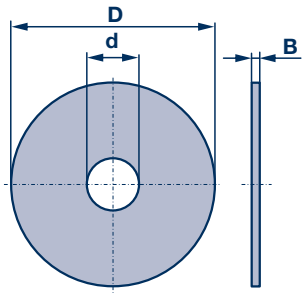
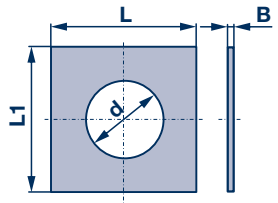
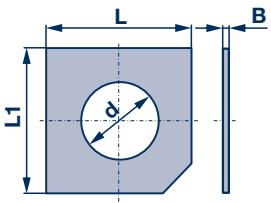
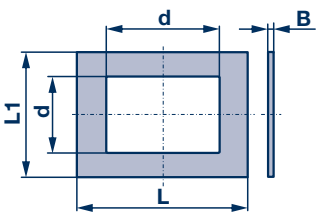
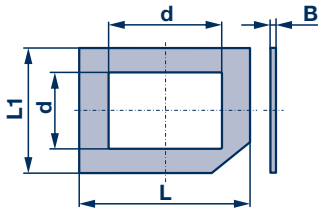
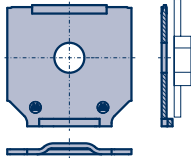
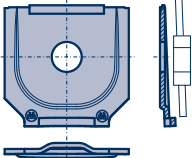
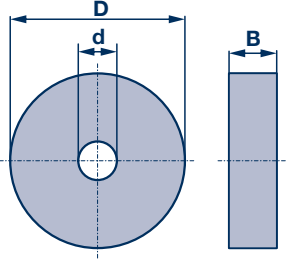
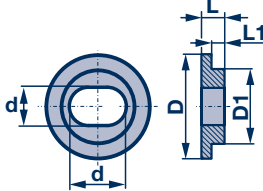
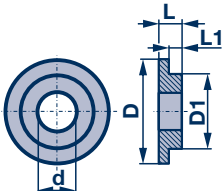
* hardened

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

3 Spring pivot bolt bearings

3.1 Spare parts for spring pivot bolt bearings

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Spare parts for spring pivot bolt bearings		
<p>A</p> 	<p>B</p> 	<p>C</p> 
<p>D</p> 	<p>E</p> 	<p>F</p> 
<p>G</p> 	<p>H</p> 	<p>I</p> 
<p>J</p>  <p>03.164.35.04.0 (M 24) 03.164.35.01.0 (M 30) with straight hanger brackets, channel cross members, frames</p>  <p>03.164.35.03.0 (M 24) 03.164.35.02.0 (M 30) with angled hanger brackets</p>		<p>K</p> 
<p>L</p> 	<p>M</p> 	

Spring pivot bolt bearings 3

Spare parts for spring pivot bolt bearings 3.1

Spare parts for spring pivot bolt bearings										
Item	Designation	Fig.	Dimension							BPW Code no.
			L	L1	D	D1	d	B		
1173	Washer	A	Ø 31 / 56 x 10	-	-	Ø 56	-	Ø 31	10	03.320.32.41.0
1175	Bush (Polyamid)	B	Ø 41 / 50 x 23	-	-	Ø 50	-	Ø 41	23	03.113.94.10.0
		C	Ø 42 / 50 / 54 x 17.5	17	15	Ø 54	Ø 50	Ø 42	-	03.113.04.11.0
			Ø 54 / 62 / 58 x 9	9	7	Ø 62	Ø 58	Ø 54	-	03.113.06.16.0
	Ring	B	Ø 42 / 50 x 15.5	-	-	Ø 50	-	Ø 42	10	03.310.92.09.0
1180	Graduated bush	C	Ø 24 / 62 / 42 x 20.5	20.5	15.7	Ø 62	Ø 42	Ø 24	-	03.113.00.58.0
			Ø 24 / 62 / 42 x 22	22	18					03.113.00.28.0
			Ø 24 / 62 / 42 x 24	24	20					03.113.00.51.0
			Ø 24 / 62 / 40 x 24	33.5	27.5					Ø 40
	Ring	B	Ø 24 / 42 x 24	-	-	Ø 42	-	-	16	03.310.31.63.0
		A	Ø 30 / 39 x 25	-	-	Ø 39	-	-	25	03.310.30.49.0
	Bush	B	Ø 30 / 42 x 18	-	-	Ø 42	-	-	16	03.112.13.12.0
	Graduated bush	C	Ø 30 / 45 / 40 x 31	31	25	Ø 45	Ø 40	Ø 30	-	03.113.01.29.0
			Ø 30 / 62 / 42 x 22	22	18	Ø 62	Ø 42			03.113.01.37.0
			Ø 30 / 62 / 40 x 31	31	25	Ø 62	Ø 40			03.113.01.47.0
Round wearing plate										
1520	Washer	E	Ø 30 / 121 x 5	-	-	Ø 121	-	Ø 30	4.75	03.320.36.08.0
Square wearing plate										
1520	Plate	F	Ø 56 / □ 105 x 4.5	105	105	-	-	Ø 56	4.5	03.281.15.03.0
		G	Ø 56 / □ 105 x 4.5							03.281.24.17.0
		F	Ø 56 / □ 101/140 x 4.5	101	140					03.281.35.16.0
			Ø 56 / □ 101/140 x 5							03.281.25.07.0 V2A
1525	Plate	H	□ 62/92 / □ 101/140 x 4.5	140	101	-	-	□ 62/92	4.5	03.281.25.04.0
		I	□ 62/92 / □ 101/130 x 4.5	130						03.281.25.06.0
			□ 62/92 / □ 101/140 x 4.5	140						03.285.25.34.0
1525	Shaped plate	J	Ø 24 / angled bracket	121	125	-	-	Ø 24	5	03.164.35.03.0
			Ø 24 / straight bracket							03.164.35.04.0
			Ø 30 / straight bracket							03.164.35.01.0
			Ø 30 / angled bracket							03.164.35.02.0
1528	Washer	K	Ø 24 / 110 x 15	-	-	Ø 110	-	Ø 24	15	03.320.36.25.0
			Ø 24 / 110 x 30						30	03.320.36.24.0
			Ø 24 / 110 x 33						33	03.320.36.26.0
			Ø 30 / 110 x 30						30	03.005.01.46.0
1530	Washer	L	Ø 24/36 / 50/70 x 15	15.6	9.8	Ø 70	Ø 50	Ø 24/36	-	03.320.14.09.0
	Bush		Ø 24/36 / 55/90 x 20	20	14	Ø 90	Ø 55			03.113.00.50.1
			Ø 30/42 / 55/90 x 20							Ø 30/42
	Washer	M	Ø 24 / 50 / 110 x 20	19.5	9.8	Ø 110	Ø 50	Ø 24	03.320.16.09.0	
			Ø 30 / 50 / 110 x 18	18.5				Ø 30	03.320.16.03.0	
			Ø 30 / 50 / 110 x 20	19.5				03.320.16.04.0		
1531	Washer	M	Ø 24 / 50 / 70 x 15	15.5	9.8	Ø 70	Ø 50	Ø 24	03.320.14.08.0	
			Ø 30 / 50 / 70 x 16	15.5				Ø 30	03.320.14.07.0	
			Ø 30 / 50 / 70 x 18	18.5				03.320.15.10.0		

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

3 Spring pivot bolt bearings

3.1 Spare parts for spring pivot bolt bearings

Spare parts for spring pivot bolt bearings

A		
Torsion protection with slotted bush, round wearing plate	Torsion protection with slotted bush, square wearing plate, pivot bush	Torsion protection with square internal lock bush, pivot bush

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Spring pivot bolt bearings 3

Spare parts for spring pivot bolt bearings 3.1

Spare parts for spring pivot bolt bearings											
Item	Designation	Fig.	Dimension							BPW Code no.	
			L	L1	D	D1	d	B			
1535	Bush ¹⁾ (Weld-in bush)	A								Torsion protection with slotted bush. No longer available. Conversion to torsion protection with square internal lock bush.	03.113.02.06.0 03.113.02.09.0
		B	∅ 30 / 51 / 56 x 29	29			56	51	∅ 30.5	□ 30	03.113.01.34.0
		C	∅ 24 / 55 / 67.6 x 22	22			68	55	∅ 24.1	□ 24	03.113.00.56.0
		D	∅ 30 / 55 / 73.6 x 24	24			74	55	∅ 30.5	□ 30	03.113.01.46.0
1536	Ring	E	∅ 30 / 55 x 25					∅ 30.5	25	03.310.32.45.0 V2A	
	Bush with welded on torsion protection	F	∅ 30 / 55 / 63 x 31				63	∅ 30.5	31	05.113.01.40.0 V2A	
1540	Bush ¹⁾ (Weld-in bush)	G	∅ 24 / 36 / 67 x 21	52			62	∅ 24/36	21	03.113.03.10.0	
		H	∅ 24 / 36 / 67 x 21		68	03.113.03.09.0 V2A					
		G	∅ 30 / 42 / 74 x 23	58			74	∅ 30/42	23	03.113.23.01.0	
		H	∅ 30 / 42 / 74 x 23		92	03.113.01.45.0 V2A					
	Formed piece	I	92 x 62 x 29	72				70	29	03.001.14.86.0	
1560	Shaped plate (welded on torsion protection)	J		110	90			47/60	6	03.161.35.07.0	
	Adjusting plate with welded on torsion protection	K a		135	72			31	8	05.001.32.01.0	
		K a			58	05.001.32.02.0					
		K b				05.001.32.05.0					
Formed piece (screwed on torsion protection)	L		142	78			∅ 31	5	03.001.14.88.0		
1631	Hexagon screw	-	M 8 x 45							02.5071.37.00	
1570	Hexagon screw	M	M 18 x 1.5 x 60 - 10.9							02.5030.03.11	
1571	Hexagon nut		M 18 x 1.5 / SW 27							05.260.53.07.0	

¹⁾ Changing the weld-in bushes see pages 110 / 111.

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

3 Spring pivot bolt bearings

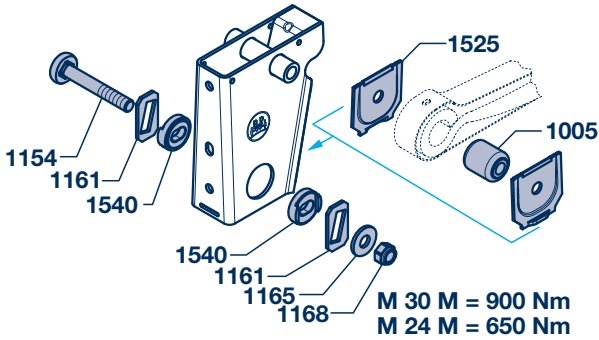
3.2 Repair kits for spring pivot bolt bearings

3.2.1 Trailing arm width 70 mm

Repair kits for spring pivot bolt bearings, trailing arm width 70 mm

AL

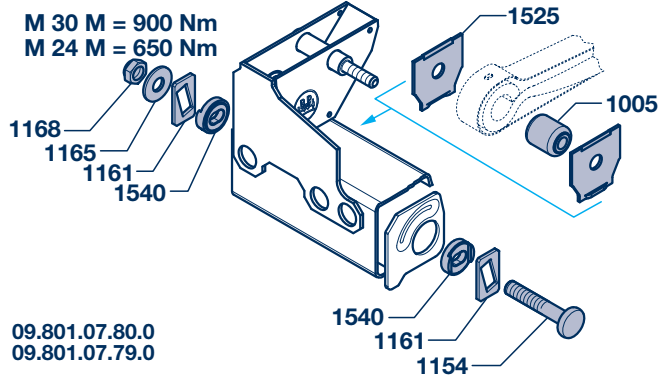
Angled hanger bracket



09.801.07.38.0
09.801.07.19.0

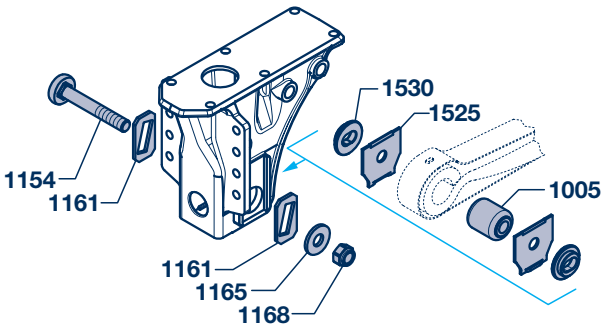
Straight hanger bracket C-Member

M 30 M = 900 Nm
M 24 M = 650 Nm



09.801.07.80.0
09.801.07.79.0

Adjustable cast alloy hanger bracket

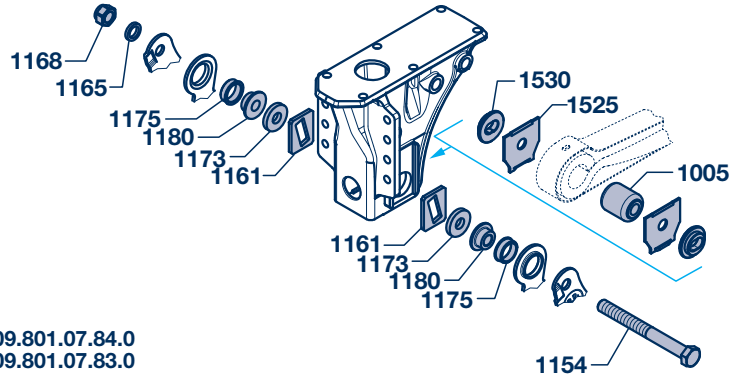


09.801.07.82.0
09.801.07.81.0

M 30 M = 900 Nm
M 24 M = 650 Nm

Adjustable cast alloy hanger bracket Axle lift device

M 30 M = 900 Nm
M 24 M = 650 Nm



09.801.07.84.0
09.801.07.83.0

Spring pivot bolt bearings 3

Repair kits for spring pivot bolt bearings 3.2

Trailing arm width 70 mm 3.2.1

Repair kits for spring pivot bolt bearings, trailing arm width 70 mm											
Spare parts see pages 56 - 61		Thread		M 24				M 30			
				S	S	A	A	S	S	A	A
				X	V	V	V	X	V	V	V
				V			AV	V			AV
				BPW Repair kit				BPW - item 1150			
Item	Designation	Dimension	BPW Code no.	09.801.07.38.0	09.801.07.79.0	09.801.07.81.0	09.801.07.84.0	09.801.07.19.0	09.801.07.80.0	09.801.07.82.0	09.801.07.83.0
1152	Spring pivot bolt assembly, item 1154, 1161, 1165, 1168, 1525		05.857.00.28.0	⊙							
			05.857.00.29.0		⊙						
			05.857.00.30.0			⊙					
			05.857.00.31.0					⊙			
			05.857.00.18.0						⊙		
			05.857.00.19.0							⊙	
		05.857.00.20.0								⊙	
1005	Bush	Ø 24 / 60 x 72	02.0314.24.00	⊙	⊙	⊙	⊙				
		Ø 30 / 60 x 72	02.0315.98.00					⊙	⊙	⊙	⊙
1154	Screw (Spring pivot bolt)	M 24 x 166 / Ø 56	03.340.14.20.0	⊙	⊙						
1155		M 24 x 180 / Ø 56	03.340.14.23.0			⊙					
		M 24 x 260 / SW 36	03.340.14.25.0				⊙				
		M 30 x 170 / Ø 62	03.341.05.05.0					⊙	⊙		
		M 30 x 180 / Ø 62	03.341.05.02.0								⊙
		M 30 x 265 / SW 46	03.340.15.40.0								
1161	Plate (Adjusting plate)	Ø 24 / 98 x 51.5 x 6	03.281.44.25.0	⊙	⊙						
		Ø 24 / 86 x 65 x 8	03.281.54.20.0			⊙	⊙				
		Ø 30 / 104 x 57.5 x 8	03.281.54.18.0					⊙	⊙		
		Ø 30 / 86 x 65 x 8	03.281.54.19.0								⊙
1165	Washer	Ø 26 / 60 x 6	03.320.33.28.0	⊙	⊙						
		Ø 25 / 70 x 12	03.005.31.38.0			⊙					
		Ø 25 / 36 x 6	03.320.30.41.0				⊙				
		Ø 31 / 71 x 6	03.320.34.53.0					⊙	⊙	⊙	
		Ø 31 / 57 x 6	03.320.32.38.0								⊙
1168	Lock nut	M 24 / SW 36	03.260.14.13.0	⊙	⊙	⊙	⊙				
		M 30 / SW 46	03.260.15.01.0					⊙	⊙	⊙	
	Castle nut	M 30 / 935-8	02.5204.35.60								⊙
1169	Split pin	6.3 x 50 / 94	02.6201.62.01								⊙
1173	Washer	Ø 25 / 62 x 10	03.320.32.42.0				⊙				
		Ø 31 / 56 x 10	03.320.32.41.0								⊙
1175	Bush	Ø 42 / 50 / 64 x 17.5	03.113.04.11.0				⊙				⊙
1180	Graduated bush	Ø 24 / 62 / 42 x 22	03.112.00.28.0				⊙				
		Ø 30 / 62 / 42 x 22	03.113.01.37.0								⊙
1525	Shaped plate	Ø 24 / angled bracket	03.164.35.03.0	⊙							
		Ø 24 / straight bracket	03.164.35.04.0		⊙	⊙	⊙				
		Ø 30 / angled bracket	03.164.35.02.0					⊙			
		Ø 30 / straight bracket	03.164.35.01.0						⊙	⊙	⊙
1530	Bush	Ø 24 / 36.6 / 55/90 x 20	03.113.00.50.1			⊙	⊙				
		Ø 30 / 42.6 / 55/90 x 20	03.113.01.43.1							⊙	⊙
1540	Bush	Ø 24 / 36 / 67 x 21	03.113.03.10.0	⊙	⊙						
		Ø 30 / 42 / 74 x 23	03.113.23.01.0					⊙	⊙		

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

3 Spring pivot bolt bearings

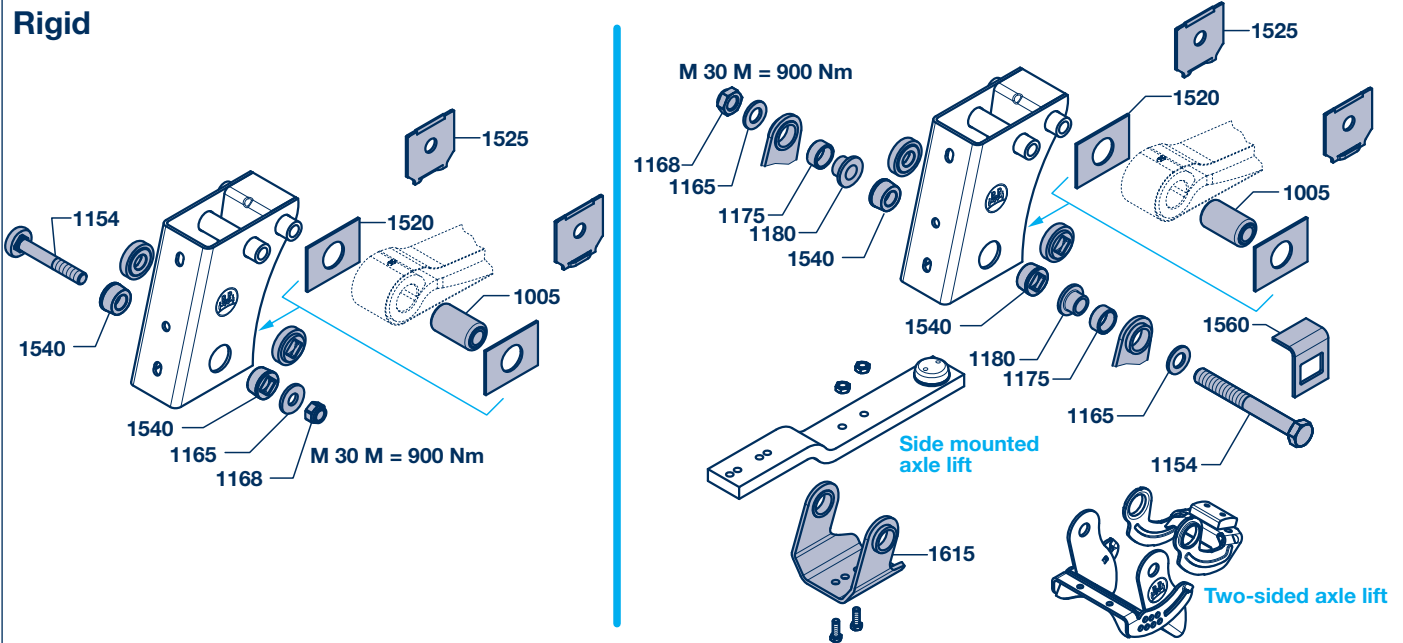
3.2 Repair kits for spring pivot bolt bearings

3.2.2 Trailing arm width 100 mm

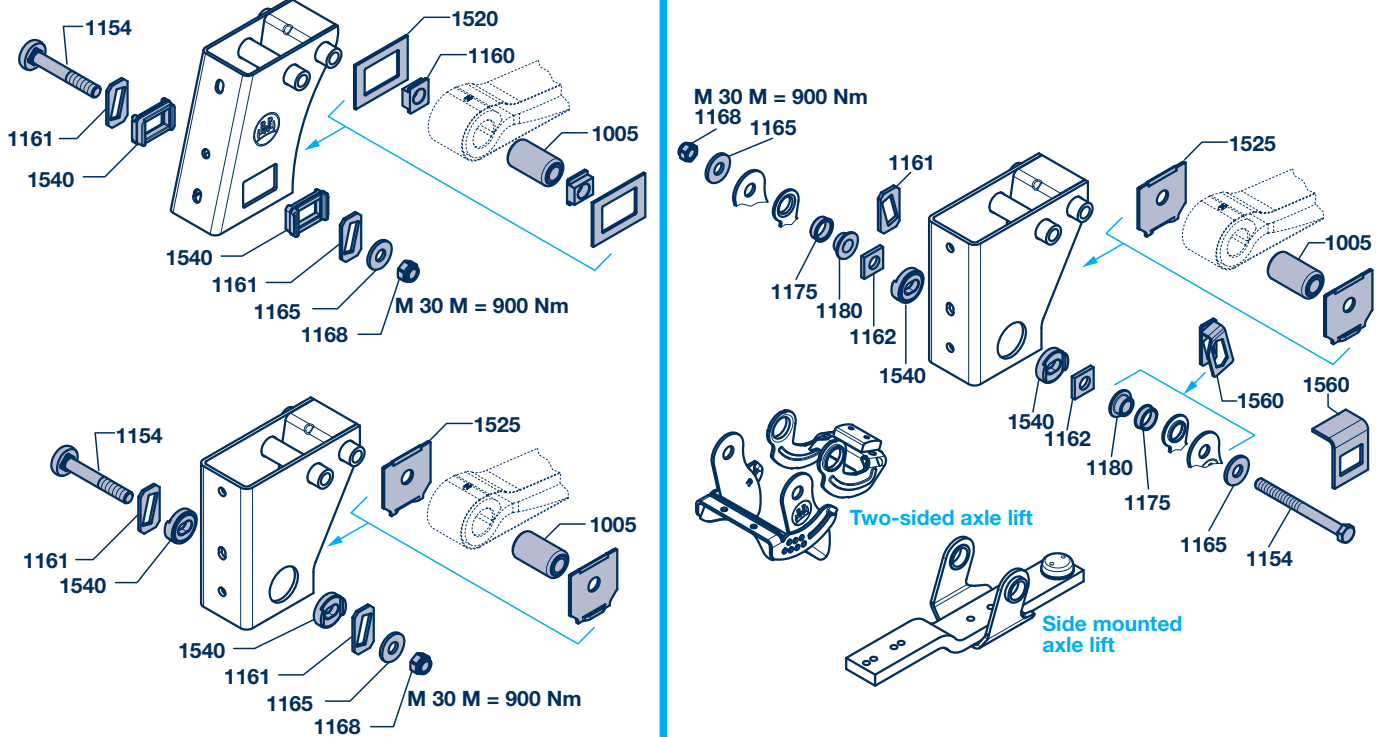
O
SL
AL

Repair kits for spring pivot bolt bearings, trailing arm width 100 mm

Rigid



Adjustable



Spring pivot bolt bearings 3

Repair kits for spring pivot bolt bearings 3.2

Trailing arm width 100 mm 3.2.2

Repair kits for spring pivot bolt bearings, trailing arm width 100 mm																
Spare parts see pages 56 - 61		Thread	M 30													
			S = Steel hanger bracket V = adjustable AV = Axle lift device													
			S	S	S	S	S	S	S	S	S	S				
Item	Designation	Dimension	BPW Code no.	BPW Repair kit					BPW - item 1150							
				09.801.06.28.0	09.801.06.29.0	09.801.07.02.0	09.801.06.77.0	09.801.07.03.0	09.801.06.87.0	09.801.06.92.0	09.801.07.75.0	09.801.07.77.0	09.801.07.78.0	09.801.07.76.0		
1152	Spring pivot bolt assembly, item 1154, 1160, 1161, 1165, 1168, 1525		05.857.00.12.0	⊙	⊙											
			05.857.00.24.0			⊙										
			05.857.00.09.0						⊙							
			05.857.00.15.0							⊙						
1005	Bush	∅ 30 / 57 x 102 SGS	02.0316.90.00	⊙		⊙	⊙	⊙	⊙		⊙				⊙	
		∅ 30 / 60 x 102 SG	02.0316.06.00		⊙											
1154	Screw (spring pivot bolt)	M 30 x 200 / ∅ 52	03.341.05.03.0	⊙	⊙	⊙										
1155		M 30 x 200 / ∅ 62	03.341.05.04.0						⊙	⊙						
		M 30 x 265 / SW 46	03.340.15.37.0				⊙	⊙				⊙	⊙	⊙	⊙	
1160	Slider	∅ 30 / 50 x 58 x 20	03.181.20.08.0						⊙		⊙					
1161	Plate (adjusting plate)	∅ 30 / 104 x 57.5 x 8	03.281.54.18.0							⊙				⊙	⊙	
		∅ 30 / 104 x 72 x 8	03.281.54.14.0							⊙						
1162	Plate	∅ 31 / □ 72 x 10	03.281.63.11.0								⊙	⊙				
1165	Washer	∅ 31 / 71 x 6	03.320.34.53.0						⊙	⊙						
		∅ 31 / 57 x 6	03.320.32.38.0	⊙	⊙	⊙					⊙	⊙				
		A 31	02.5401.31.01				⊙	⊙								
		∅ 31 / 62 x 5	03.320.34.51.0											⊙	⊙	
1168	Lock nut	M 30 / SW 46	03.260.15.01.0	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙		
1175	Bush	∅ 41 / 50 x 23	03.113.94.10.0				⊙	⊙			⊙			⊙		
1180	Ring	∅ 30 / 39 x 25	03.310.30.49.0								⊙					
	Graduated bush	∅ 30 / 62 / 40 x 31	03.113.01.47.0				⊙	⊙								
1520	Plate	∅ 56 / □ 101/140 x 4.5	03.281.35.16.0	⊙	⊙		⊙									
		∅ 56 / □ 105 x 4.5	03.281.15.03.0	⊙	⊙		⊙									
		□ 62/92 / □ 101/130 x 4.5	03.281.25.06.0							⊙		⊙				
		□ 62/92 / □ 101/140 x 4.5	03.281.25.04.0							⊙		⊙				
1525	Shaped plate	∅ 30 / straight bracket	03.164.35.01.0			⊙		⊙		⊙				⊙		
1535	Bush	∅ 30 / 51 / 56 x 29	03.113.01.34.0	⊙	⊙		⊙									
		∅ 30 / 55 / 73.6 x 24	03.113.01.46.0			⊙		⊙								
1540	Formed piece	92 x 62 x 29	03.001.14.86.0						⊙		⊙					
	Bush	∅ 30 / 42 / 74 x 23	03.113.23.01.0							⊙					⊙	
1560	Anti-rotation device		03.161.35.07.0				⊙	⊙			⊙	⊙				
	Adjusting plate with anti-rotation device		05.001.32.02.0										⊙	⊙		
1615	Support		05.189.13.19.0				⊙									

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

4 BPW Air bags

General

Standard air bag

O BPW Air bags are firmly rolled into the top air bag cover and are bonded onto the clamping plate at the bottom by vulcanisation.

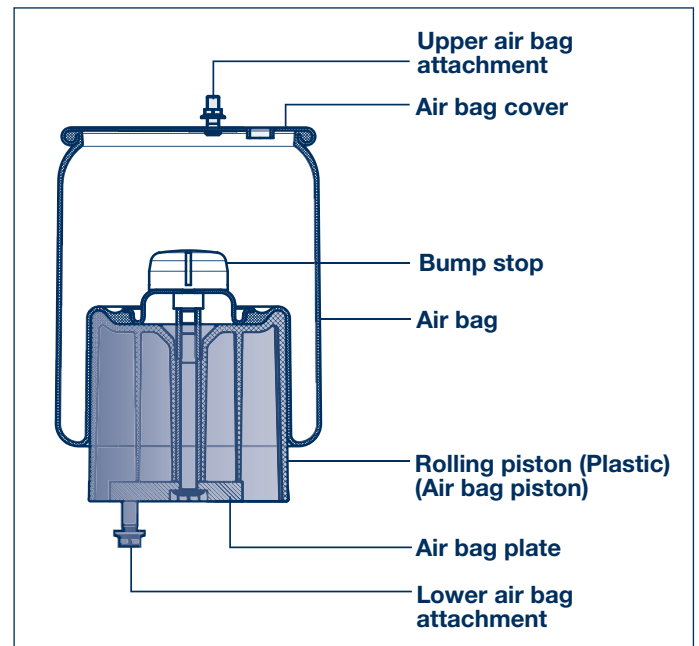
SL The top air bag cover is either bolted directly to the vehicle frame or to a plate/packer that is welded to the frame.

The top air bag cover plate is secured by two M12 nuts

AL The rolling piston is made from glass-fibre reinforced plastic with a steel support to give reduced weight and resistance to corrosion.

AC The integrated bump stop protects against damage when the bags are vented.

The air bag plate at the bottom is bolted onto the trailing arm using two M 16 securing bolts.



BPW Air bags 4

General

Reduced weight of the Airlight II air suspension with the new air bag 30 / 30 K

Within the scope of a further development of the Airlight II air suspension, BPW introduced new optimised trailing arms from 1 July 2010 as well as a centrally bolted air bag BPW 30 / 30 K for offset $V = 20$ mm.

Currently, the air bag is fastened to the trailing arm by means of a universal steel plate inserted into the base of the air bag piston with possible offsets 0 / 20 / 60. This steel plate is attached to the trailing arm with two bolts.

Later versions of the air bag with the most frequently used standard offset of $V = 20$ mm will be bolted directly onto the trailing arm with a single bolt. A four-hole pattern is drilled into the new trailing arm. In addition to the new centrally bolted air bag, the familiar air bags BPW 30 / 30 K and BPW 36 / 36 K / 36-1 can continue to be attached using a steel plate and different offsets.

When using the new centrally bolted air bag, 15 kg are saved on a 3-axle suspension compared to the old version (5 kg per module).

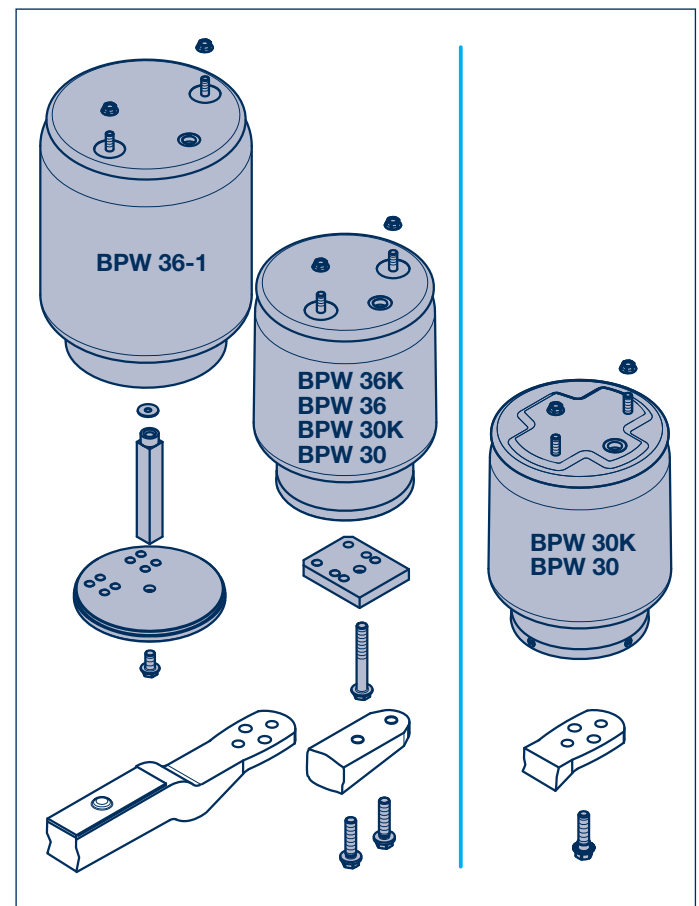
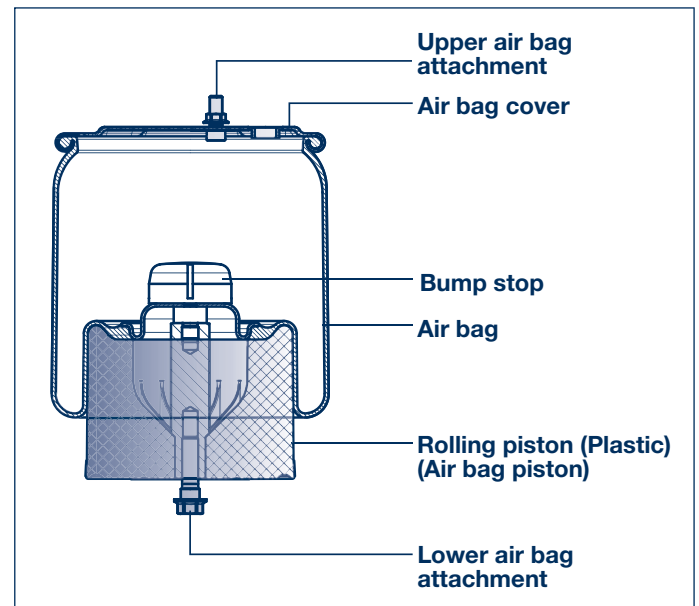
Note: Please note that the new air bag can only be combined with the new trailing arm.

It is impossible to mount a new air bag onto an old trailing arm by mistake due to the bolt / hole diameters.

The old air bag with the steel plate can, however, continue to be used for all versions with old or new trailing arm.

From a technical point of view, there are no restrictions to using both versions on the same axle or vehicle.

Your contact in our sales department will be pleased to assist you with planning the changeover.



4 BPW Air bags

General

Air bag with splitted piston (Combi-Air bag)

A combination air bag is divided into two parts: The air bag is bolted onto the vehicle frame with the rolling piston while the centring cone is connected to the trailing arm or integrated to the spring seats.

When the trailer is lifted, the axle and the cone move downwards. The movement is restricted by the shock absorbers.

However, the air bag remains in its rest position. When the trailer is lowered to the ground, the air bag and centring cone once more come together.

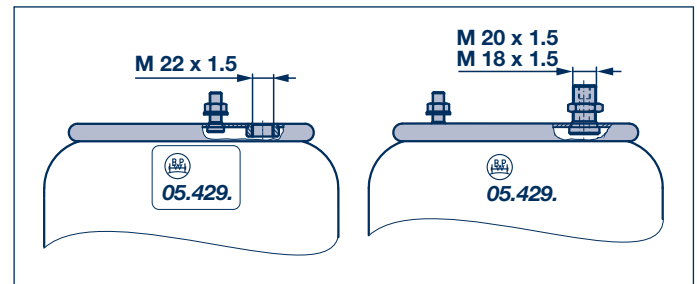
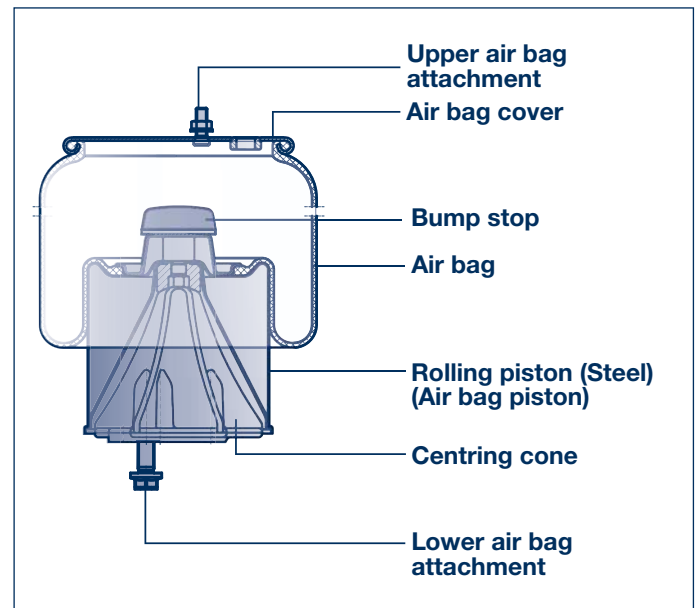
The bag can neither fold nor crease.

Stroke limiting

The upward travel is restricted by a bump stop inside the air bag. The downward travel must be restricted under certain application conditions.

Air supply

The pressure needed during driving is applied via a compressed air line that is connected to the air bag via the threaded sleeve (M 22 x 1.5) welded into the air bag cover or via a hollow stud (M 18 x 1.5 / M 20 x 1.5).



BPW Air bags 4

General

Determining replacement air bags

1. Clarifying design

- Standard air bag or split air bag (combination air bag)

Ø 300 **BPW 30** for stroke 200 mm
 BPW 30 K for stroke 180 mm

Ø 360 **BPW 36** for stroke 200 mm
 BPW 36 K for stroke 180 mm
 BPW 36-1 for stroke up to 340 mm
 BPW 36-2 for stroke up to 450 mm
 BPW 36-5 for stroke up to 380 mm

The air bag design type and BPW code no. are moulded into the rubber component of the assembly.

2. Determining the type of air connection

- Air connection formed into the top cover plate or the hollow stud bolt.

3. Air bag attachment

- Top air bag attachment in middle of bag or offset to the side?

- Measure the position of the top bag attachment on the frame in relation to the bottom bag attachment on the trailing arm (the maximum lateral offset between the top and bottom bag attachment is not allowed to exceed 10 mm).

The top and bottom bag attachments must not be installed with any rotational misalignment!

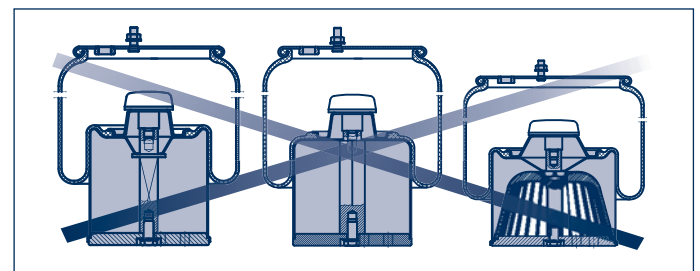
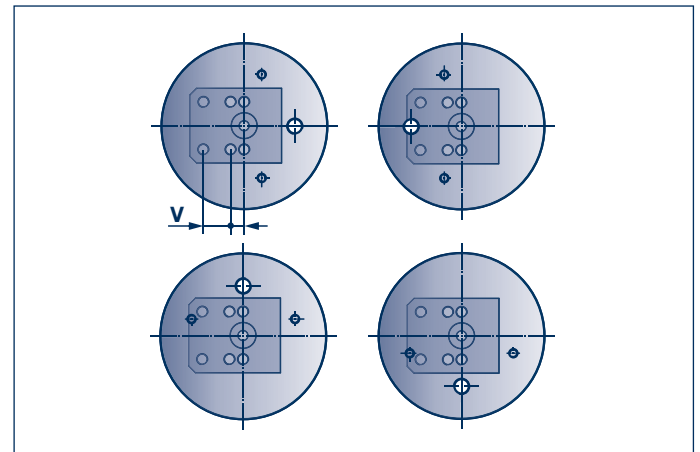
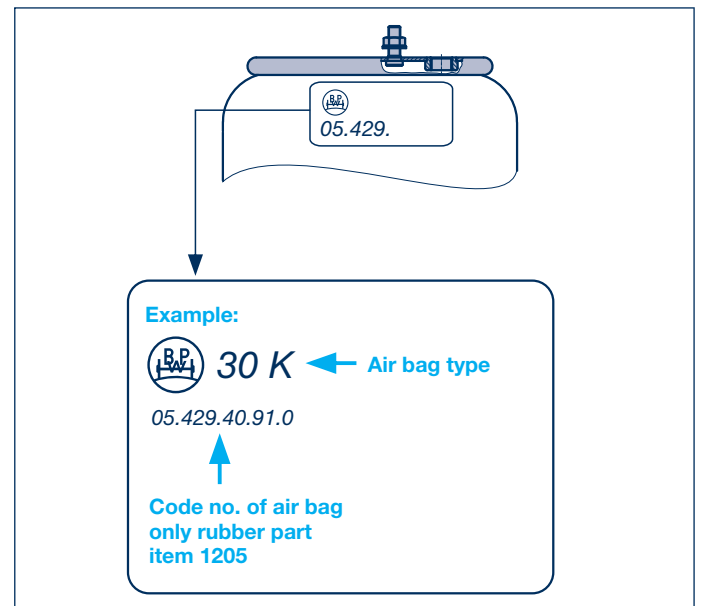
- Bottom attachment with 2 locking screws or one central screw?

4. Old version of air bags

Complete air bags of the older version, air bags with aluminium pistons and internal aluminium support as well as split bags with glass fibre-reinforced plastic taper (BPW 36) are no longer available.

If replacement is required, change over to BPW air bags with glass fibre-reinforced plastic piston.

The most common spare parts for older air bags with steel piston are still available.



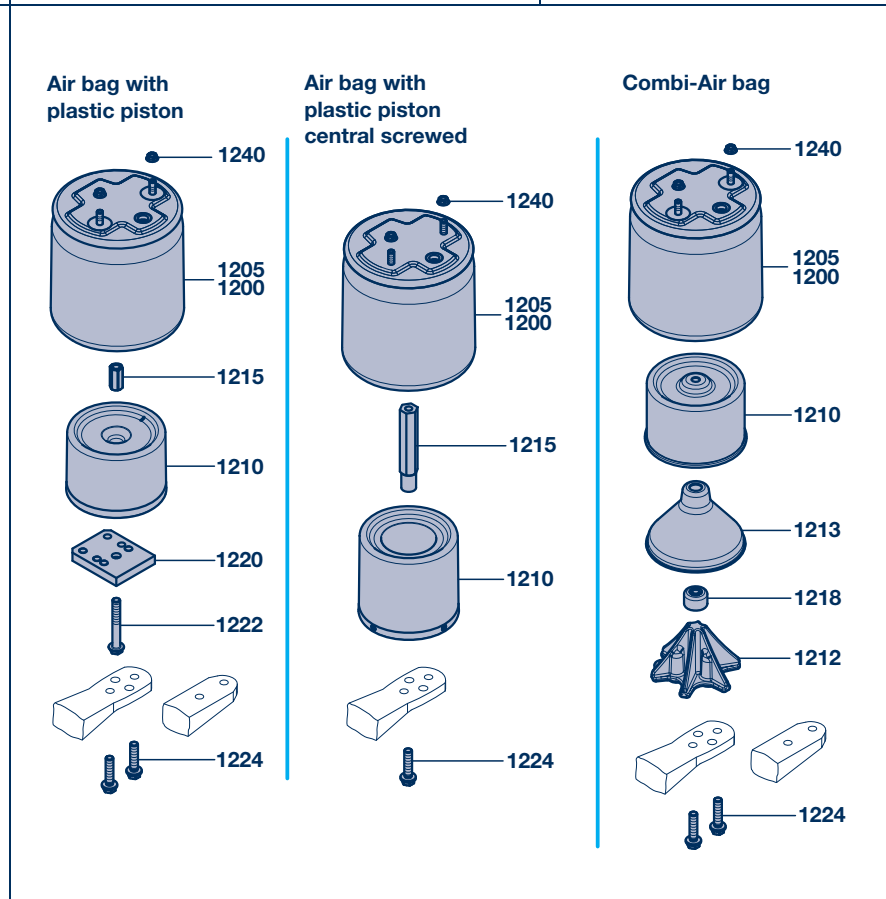
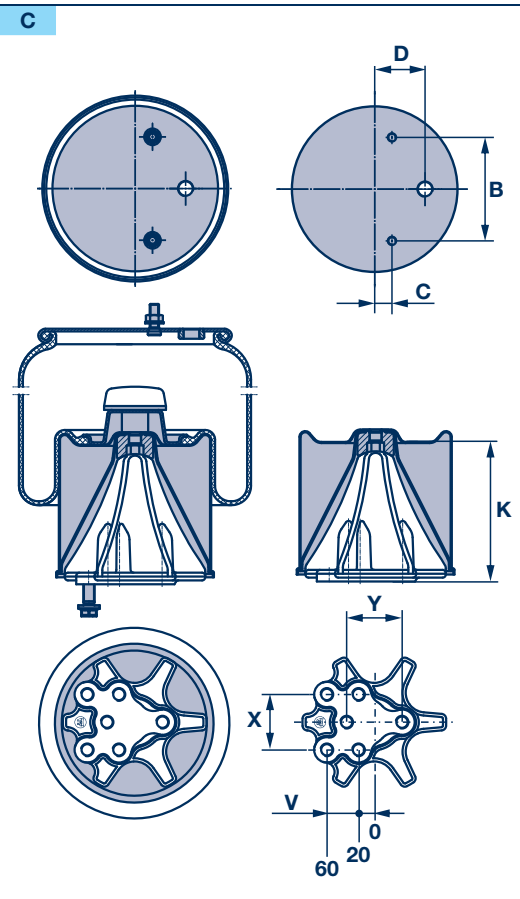
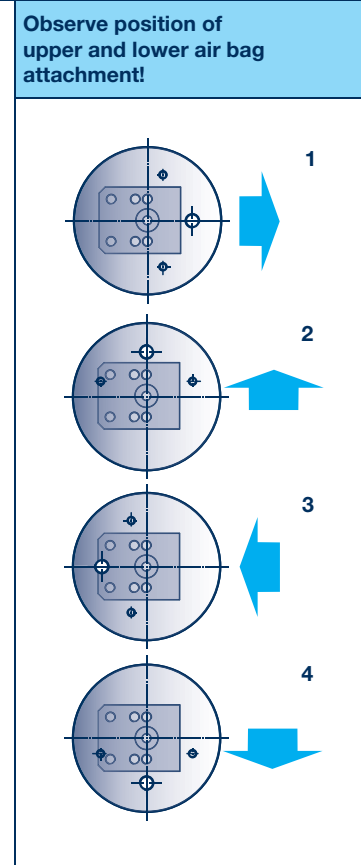
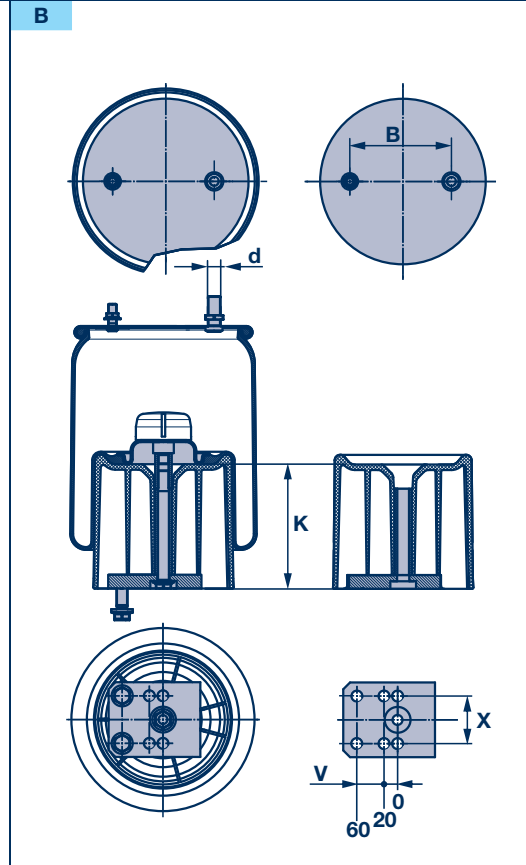
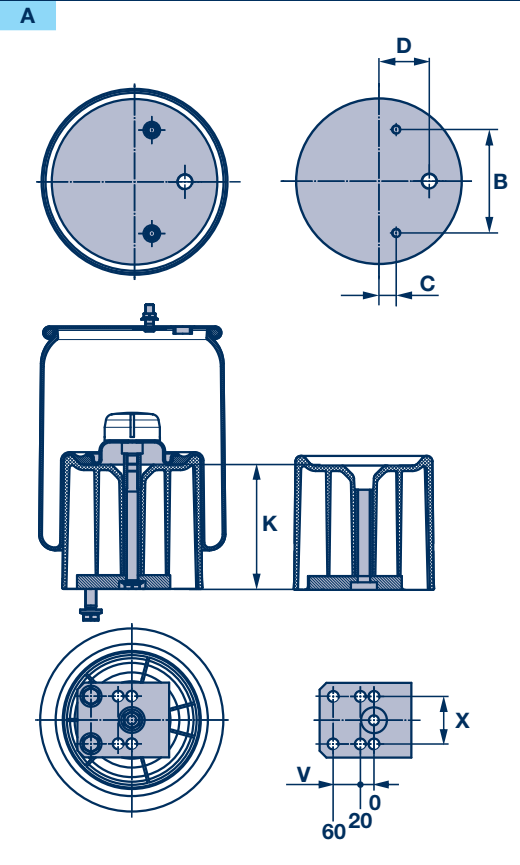
4 BPW Air bags

4.1 Air bags complete

4.1.1 Air bags Ø 300

O
SL
AL
AC

Air bags Ø 300



BPW Air bags 4

Air bags complete 4.1

Air bags Ø 300 4.1.1

Air bags Ø 300												
Fig.	Dimension								BPW Code no.			
	V	X	K	Y	B	C	D	d	BPW Air bag cpl., item 1200	BPW Code no. only, item 1205	Air bag piston, item 1210 item 1210 / 1213	Lower plate, item 1220 Centring cone (Combi-Air bag), item 1212
BPW 30												
Air bag standard												
A 1	0 / 20 / 60	70	180	-	150	25	73	-	05.429.43.29.0	05.429.42.03.0	05.139.39.50.0	03.280.95.02.0
A 3									05.429.43.30.0			
A 1									05.429.43.20.0	05.429.40.03.0		
A 2									05.429.43.34.0			
A 3									05.429.43.56.0			
-									0			
Air bag with integrated air connection in stud bolt												
B 2	0 / 20 / 60	70	180	-	170	0	0	M 18x1.5	05.429.43.25.0	05.429.41.25.0	05.139.39.50.0	03.280.95.02.0
-	0	-			157			M 20x1.5	05.429.43.88.0 *	05.429.42.54.0	03.138.39.56.0	-
Air bag with split piston (Combi-Air bag)												
C 1	0 / 20 / 60	70	180	70	150	25	73	-	05.429.41.91.1	05.429.40.03.0	03.139.00.22.0 03.139.00.23.0	03.375.09.37.0
BPW 30 K												
Air bag standard												
A 1	0 / 20 / 60	70	135	-	150	25	73	-	05.429.43.27.0	05.429.42.04.0	05.139.39.51.0	03.280.95.02.0
A 3									05.429.43.28.0			
A 1									05.429.43.21.0	05.429.40.91.0		
A 3									05.429.43.37.0			
A 1									05.429.43.22.0			
A 3									05.429.43.31.0			
-	0	-	135					05.429.43.86.0 *	03.139.39.57.0	-		
Air bag with integrated air connection in stud bolt												
B 1	0 / 20 / 60	70	135	-	157	0	0	M 20x1.5	05.429.43.23.0	05.429.41.77.0	05.139.39.51.0	03.280.95.02.0
B 1					170			M 18x1.5	05.429.43.24.0	05.429.41.56.0		
B 3					180			05.429.43.32.0				
B 1					157			M 20x1.5	05.429.43.26.0	05.429.41.77.0		
-					0			-	135			
Air bag with split piston (Combi-Air bag)												
C 1	0 / 20 / 60	70	136	70	150	0	73	-	05.429.42.13.1	05.429.42.04.0	03.139.00.25.0 03.139.00.24.0	03.375.09.38.0
C 1			180			25			05.429.42.05.1	05.429.40.91.0	03.139.00.22.0 03.139.00.23.0	
C 1												

* Air bag with central attachment

Air bags with steel or aluminium pistons are no longer available.

Conversion from steel or alloy piston to plastic piston

BPW 30 Conversion kit **05.801.09.73.0** for 1 air bag

BPW 30 K Conversion kit **05.801.09.74.0** for 1 air bag

consisting of rolling piston (plastic), air bag plate, and attachment parts.

Conversion see page 74 / 75.

Further versions upon request.

4 BPW Air bags

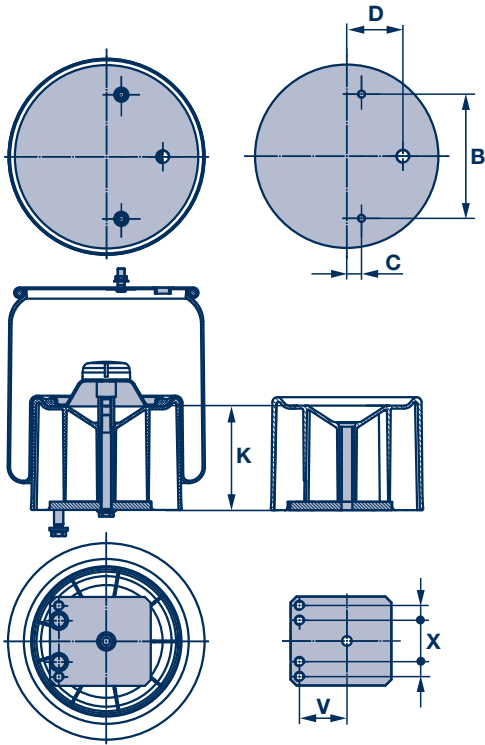
4.1 Air bags complete

4.1.2 Air bags Ø 360

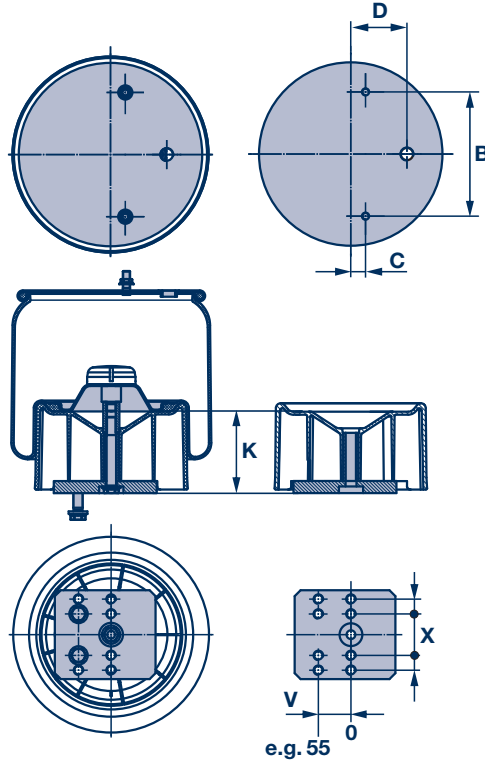
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Air bags Ø 360

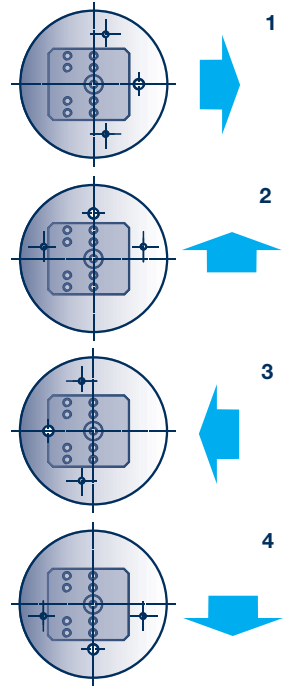
A BPW 36 / BPW 36-1



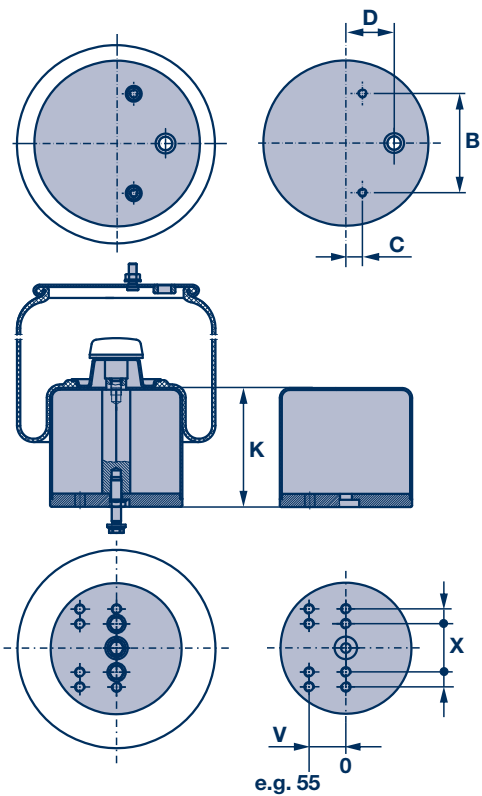
B BPW 36 K



Observe position of upper and lower air bag attachment!

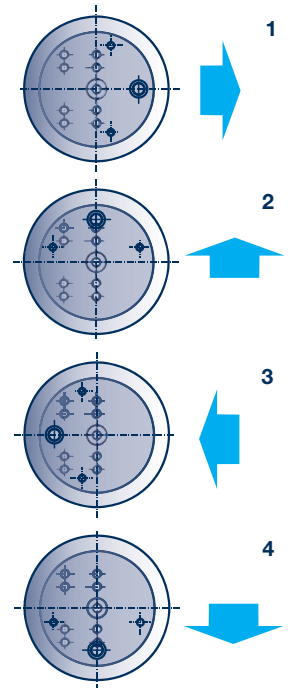
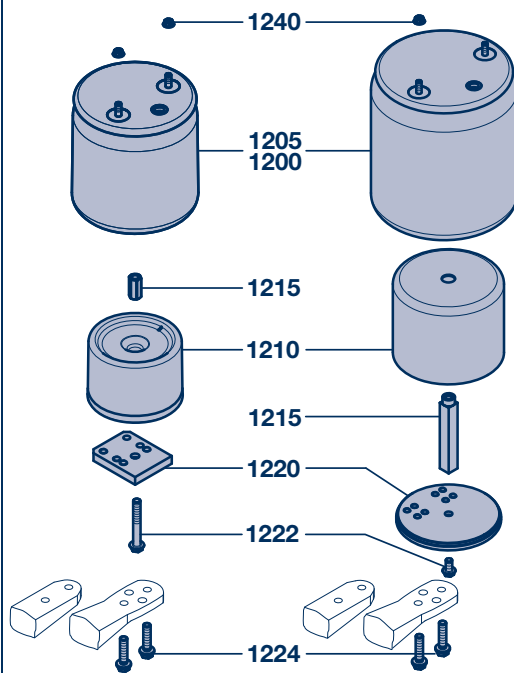


C BPW 36-1 (steel piston)



Air bag with plastic piston

Air bag with steel piston



BPW Air bags 4

Air bags complete 4.1

Air bags Ø 360 4.1.2

Air bags Ø 360														
Fig.	Dimension							BPW Code no.						
	V	X	K	B	C	D	Remark	BPW Air bag cpl., item 1200	BPW Code no. only, item 1205	Air bag piston, item 1210 item 1210 / 1213	Lower plate, item 1220			
BPW 36														
Air bag standard														
A 1	0 / 55	70 / 120	180	210	25	95	Plastic piston (GFK)	05.429.43.48.0	05.429.40.01.0	05.139.39.52.0	03.280.95.04.0			
A 1	45 / 80		05.429.43.51.0					03.280.95.03.0						
A 3	80		174					05.429.43.50.0			03.280.75.04.0			
A 1			05.429.43.38.0											
C 1	0 / 55		215					05.429.41.84.0			03.139.00.04.0	03.320.09.46.0		
C 1	45 / 80		05.429.41.54.0					03.320.09.35.0						
C 1	32 / 90		180					05.429.40.61.1			03.139.39.43.0	03.320.09.23.0		
BPW 30 K														
Air bag standard														
B 1	0 / 55	70 / 120	135	210	25	95	Plastic piston (GFK)	05.429.43.46.0	05.429.41.01.0	05.139.39.53.0	03.280.95.04.0			
B 3			180					05.429.43.49.0				05.139.39.52.0		
B 3			135					05.429.43.47.0						
B 1			45 / 80					180				05.429.43.41.0	05.139.39.53.0	03.280.95.03.0
B 3			180					05.429.43.44.0				05.139.39.52.0		
B 3			129					05.429.43.58.0				05.139.39.53.0	03.280.75.04.0	
B 1			80					05.429.43.39.0				03.139.39.48.0	03.320.09.23.0	
C 1			32 / 90					135				Steel piston	05.429.41.04.1	
BPW 36-1														
Air bag standard														
A 1	45 / 80	70 / 120	180	210	25	95	Plastic piston (GFK)	05.429.43.45.0	05.429.40.05.0	05.139.39.52.0	03.280.95.03.0			
C 1	0 / 55		215					05.429.42.01.0				03.320.09.46.0		
C 3			05.429.41.83.0											
C 1	45 / 80		210					05.429.41.69.0				03.139.00.04.0	03.320.09.35.0	
C 1	80		210					05.429.41.38.0				03.320.09.33.0		
C 1	32 / 90		215					05.429.41.59.0				03.320.09.23.0		
BPW 36 Airlight^{Direct}														
-	-	-	210	190	25	50	-	05.429.42.52.0	05.429.42.51.0	03.139.38.01.0 03.139.00.27.0	-			

Types **BPW 36** and **BPW 36 K** air bags with steel or aluminium pistons are no longer available in some cases.

Conversion from steel or alloy piston to plastic piston

BPW 36	Conversion kit 05.801.21.33.0	V = 0 / 55	for 1 air bag	consisting of rolling piston (plastic), air bag plate and attachment parts.
	Conversion kit 05.801.21.32.0	V = 45 / 80		
	Conversion kit 05.801.21.31.0	V = 80		
BPW 36 K	Conversion kit 05.801.21.30.0	V = 0 / 55	for 1 air bag	
	Conversion kit 05.801.21.29.0	V = 45 / 80		
	Conversion kit 05.801.21.28.0	V = 80		

Conversion see page 74 / 75.

Further versions upon request.

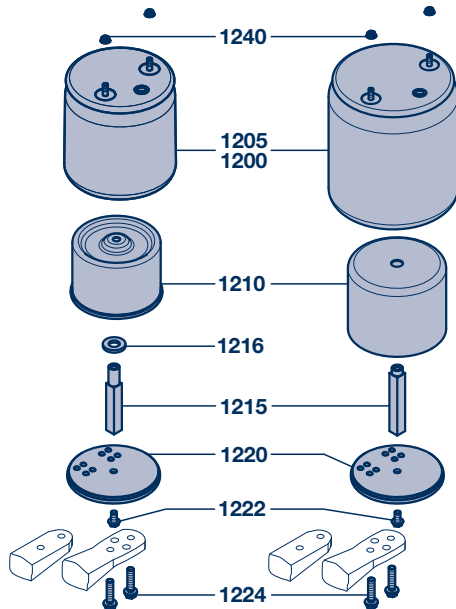
4 BPW Air bags

4.2 Conversion from steel piston to plastic piston (GFK)

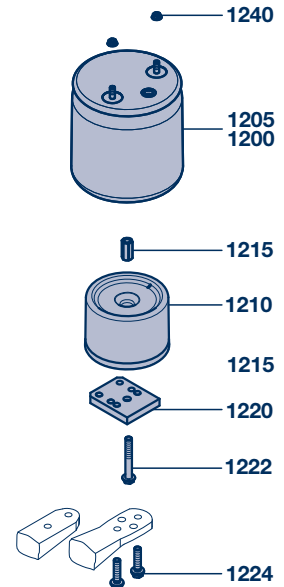
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Conversion from steel or alloy piston to plastic piston (GFK)

Air bag with steel or aluminium piston



Air bag with glass fibre-reinforced plastic piston



Types BPW 30 / 30 K / 36 and 36 K air bags with steel or aluminium pistons are no longer available in some cases. If replacement is required, change over to the air bag with glass fibre-reinforced plastic piston.

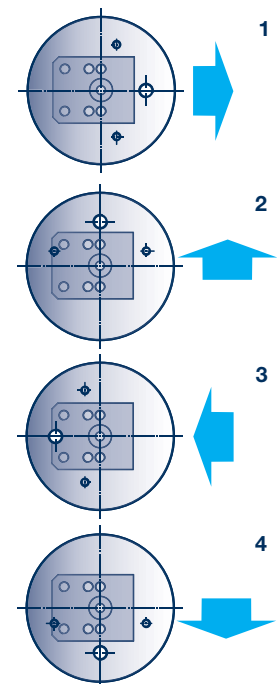
Observe position of upper and lower air bag attachment!

Dismantling:

- ⊙ Admit as much air into the air bag as possible through the air suspension or rotary disc valve / switching valve.
- ⊙ Support the vehicle safely so there is no risk of accident, e.g. place a suitable spacer between the vehicle frame and the trailing arm.
- ⊙ Vent the air bag.
- ⊙ Remove the compressed air connection.
- ⊙ Unscrew top (1240) and bottom (1224) bag attachments and remove the air bag.
- ⊙ Apply compressed air into the hole for the air connection until the bag is completely unrolled.
- ⊙ Unscrew and remove locking screw (1222) and take off bottom washer (1220).
- ⊙ Unscrew and remove square bolt (1215) using an impact driver and remove piston (1210) from the air bag.

Assembly:

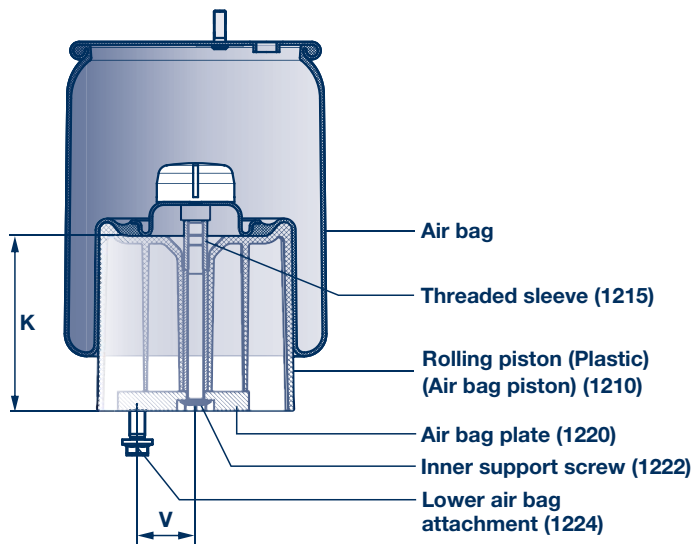
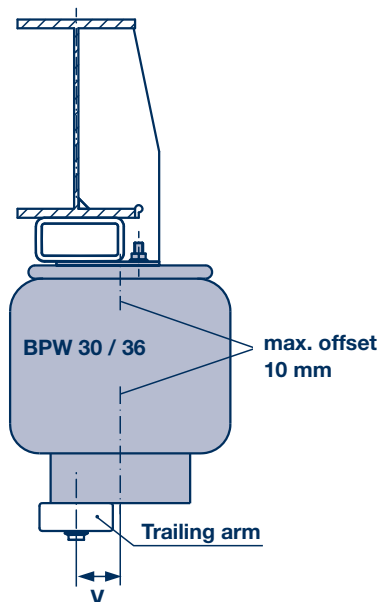
- ⊙ Screw threaded sleeve (1215) onto the air bag to a tightening torque of 130 Nm.
- ⊙ Place bottom base plate (1220) into glass fibre-reinforced plastic piston (1210) and screw on loosely using locking screw (1222).
- ⊙ Align the top and bottom bag attachment points in relation to one another and tighten locking screw (1222) to a tightening torque of 230 Nm (The air bag must not be twisted after installation in the vehicle!)
- ⊙ Install the air bag into the vehicle, tighten the top and bottom attachments to the corresponding tightening torque. Connect the air connections. Check for leaks.
- ⊙ Apply air into the air bag, remove the support.



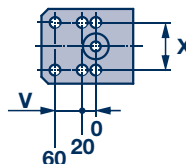
BPW Air bags 4

Conversion from steel piston to plastic piston (GFK) 4.2

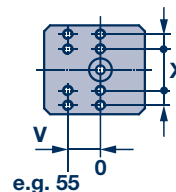
Conversion from steel or alloy piston to plastic piston (GFK)



BPW 30
BPW 30 K



BPW 36
BPW 36 K
BPW 36-1



The maximum lateral offset between the upper and lower attachments must not exceed 10 mm.

Item	Designation	BPW Code no.	Dimension			Utilisation
			V	X	K	
1248	Conversion kit cpl.	BPW 30				
		05.801.09.73.0	0 / 20 / 60	70	180	BPW 30
		05.801.09.74.0			135	BPW 30 K
		BPW 36				
		05.801.21.33.0	0 / 55	70 / 120	180	BPW 36
		05.801.21.32.0	45 / 80			BPW 36
		05.801.21.31.0	80			BPW 36
		05.801.21.30.0	0 / 55		135	BPW 36 K
		05.801.21.29.0	45 / 80			BPW 36 K
		05.801.21.28.0	80	BPW 36 K		

Conversion kit cpl. consisting of:

- Rolling piston (Air bag piston) (item 1210)
- Lower air bag plate (item 1220)
- Threaded sleeve (item 1215)
- Inner support screw (item 1222)
- Lower attachment screws (item 1224)

4 BPW Air bags

4.3 Spare parts for air bags

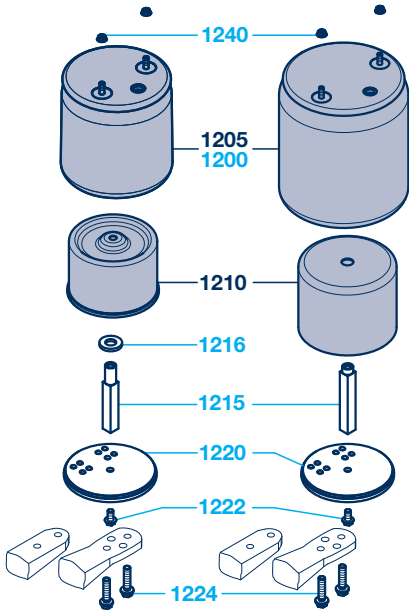
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Spare parts for air bags

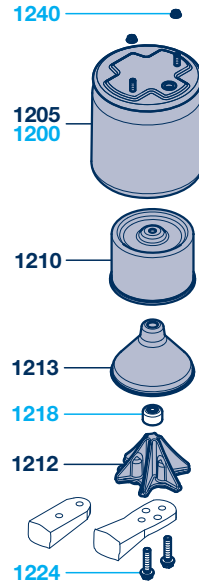
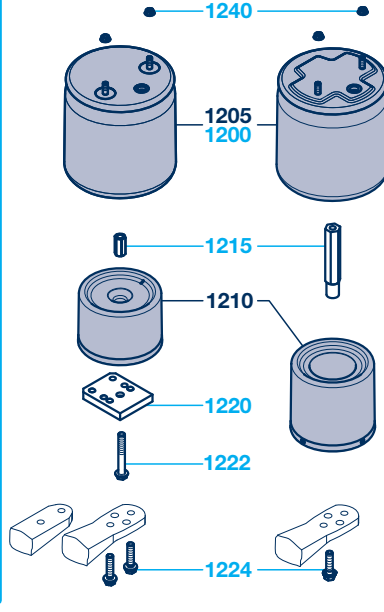
Air bag standard

Air bag with split piston (Combi-Air bag)

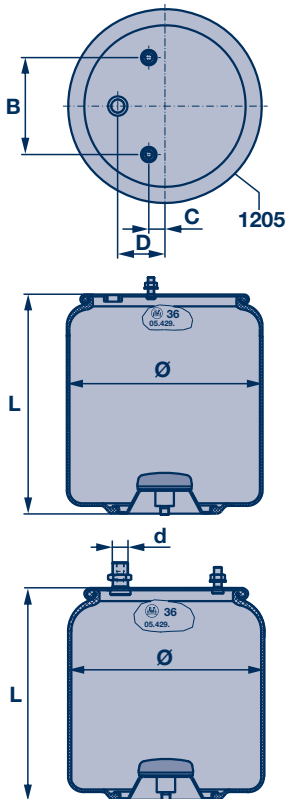
Air bag with steel piston



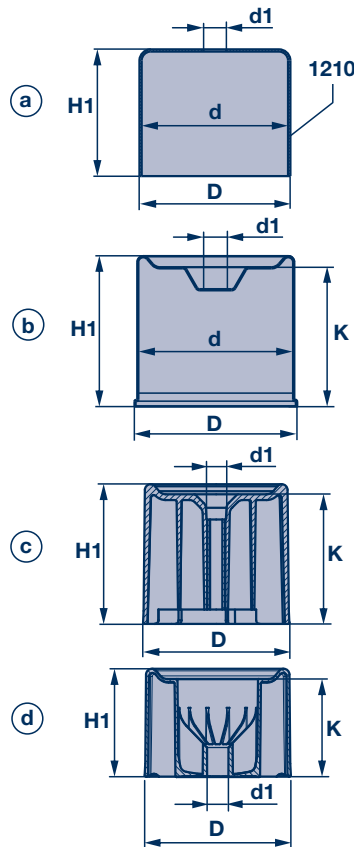
Air bag with plastic piston



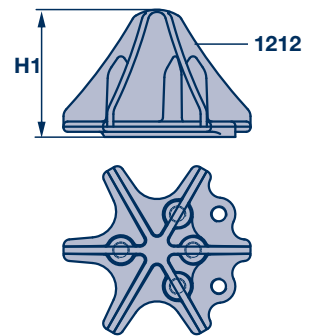
A



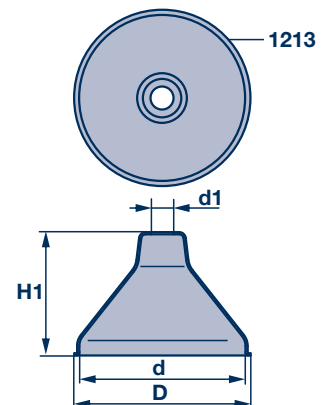
B



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BPW Air bags 4

Spare parts for air bags 4.3

Spare parts for air bags													
Item	Designation	Fig.	Designation of air bag	Dimension						BPW Code no.			
				Ø	L	d	B	C	D				
BPW 30..													
1205	Air bag, only	A	BPW 30	941 MB	300	520	-	150	25	73	05.429.40.03.0		
				4941 N			M 18	170	0	0	05.429.41.25.0		
				4962 N			-	150	25	73	05.429.42.03.0		
			BPW 30 K	940 MB		423	M 18	170	0	0	05.429.41.56.0		
				4940 N			M 20	158			05.429.41.77.0		
				4960 N			-	150			25	73	05.429.42.04.0
		BPW 30-1	951 MB	610	-	150	25	73	05.429.40.72.0				
		BPW 36..											
		A	BPW 36	881 MB	360	530	-	210	25	95	05.429.40.01.0		
				4881 MB		430					05.429.41.01.0		
BPW 36-1	942 MB			610		05.429.40.05.0							
BPW 36-2	4942 MB			789		05.429.41.09.0							
Item	Designation	Fig.	Utilisation	Dimension					BPW Code no.				
BPW 30..													
1210	Air bag piston	B b	Steel piston	201	194	143	16	139		03.139.00.25.0			
						186		172		03.139.00.22.0			
		B c	Plastic piston (GFK)	203	-	149	27	135	05.139.39.51.0				
						202	29	03.139.39.57.0 *					
		B d	Plastic piston (GFK)	203	-	194	27	180	05.139.39.50.0				
						29	03.139.39.56.0 *						
		BPW 36..											
		B a	Steel piston	250	244	203	30	-		03.139.00.04.0			
						293				03.139.00.17.0			
		B b	Plastic piston (GFK)	251	-	143	27	129		03.139.39.48.0			
188	174					05.139.39.53.0							
B c	Plastic piston (GFK)	253	-	188	27	174		05.139.39.52.0					
										* piston for central screwed air bag			
Item	Designation	Fig.	Utilisation	Dimension				BPW Code no.					
BPW 30 Combi-Air bag													
1212	Support	C	Cat iron	-		123	-			03.375.09.38.0			
						168				03.375.09.37.0			
1213	Air bag piston	D	Steel piston	200	193	140	25			03.139.00.24.0			
						181				03.139.00.23.0			

Further versions upon request.

4 BPW Air bags

4.3 Spare parts for air bags

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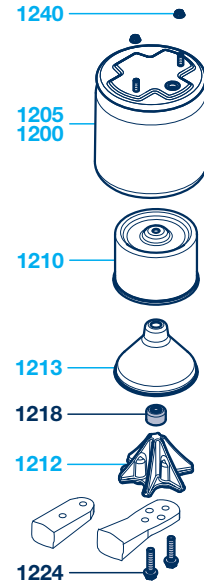
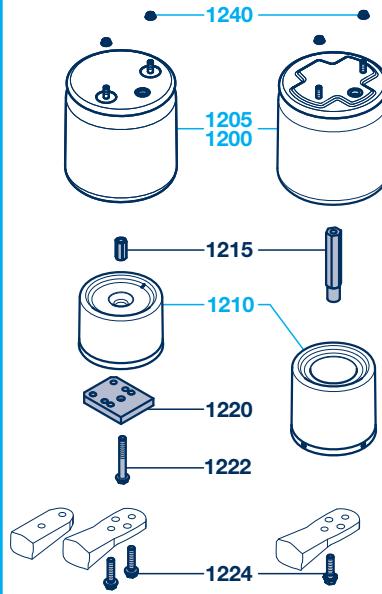
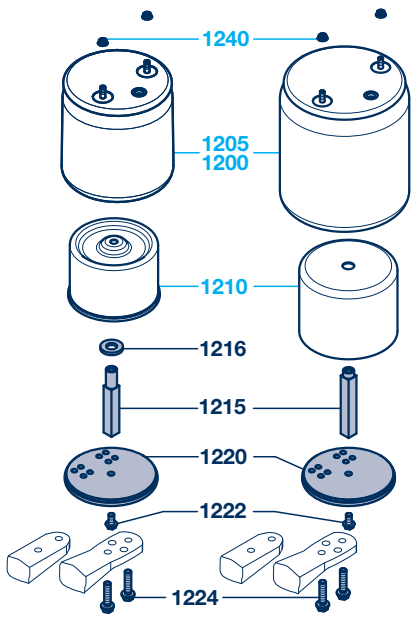
Spare parts for air bags

Standarder Air bag

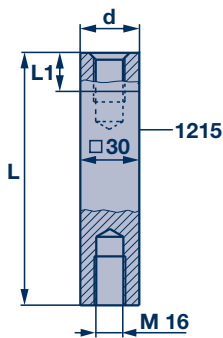
Air bag with split piston (Combi-Air bag)

Air bag with steel piston

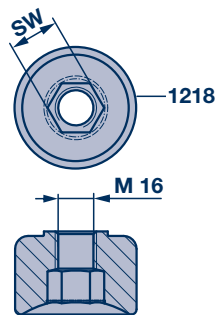
Air bag with plastic piston



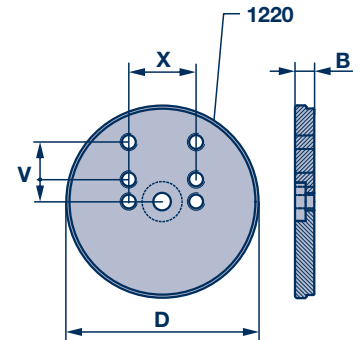
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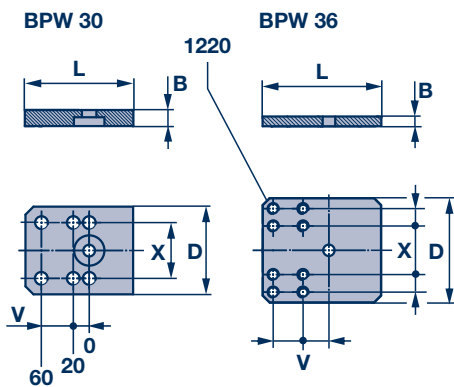
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BPW Air bags 4

Spare parts for air bags 4.3

Spare parts for air bags									
Item	Designation	Fig.	Utilisation	Dimension				BPW Code no.	
				L	L1	d			
Steel piston									
1215	Bolt	A	BPW 30 K	124	48	30		03.084.46.41.0	
			BPW 30 K	129	17			03.084.66.36.0	
			BPW 30 K / 36 K		48			03.084.46.31.0	
			BPW 30 / 30 K	169				03.084.46.40.0	
			BPW 36	174	17			03.084.66.30.0	
			BPW 30 / 30 K / 36 / 36 K		48			03.084.46.28.0	
			BPW 30 / 36 / 36-1	209	17			03.084.66.31.0	
			BPW 36-2	299				03.084.66.37.0	
1216	Ring	-	for Bolt L1 = 48	Ø 30 / 55 x 5			03.310.31.43.0		
Plastic piston (GFK)									
1215	Threaded sleeve	-	BPW 30 / BPW 36	M 16 x 51 / SW 24			03.179.03.08.0		
	Bolt		BPW 30 K	Air bag with central screw	M 16 / Ø 30 x 40 / 150 / SW32			03.084.46.43.0	
			BPW 30		M 16 / Ø 30 x 40 / 195 / SW32			03.084.46.42.0	
Air bag with split piston (Combi-Air bag)									
1218	Nut	B	BPW 30 / BPW 30 K	M 16 / SW 19			03.266.02.02.0		
Item	Designation	Fig.	Utilisation	Dimension					BPW Code no.
				V	X	B	D	L	
BPW 30..									
1220	Plate	D	BPW 30 / BPW 30 K GFK	0 / 20 / 60	70	20	110	135	03.280.95.02.0
	Washer	C	BPW 30 / BPW 30 K	20			200	-	03.320.09.22.0
BPW 36..									
1220	Plate	D	BPW 36 / BPW 36 K GFK	0 / 55	70 / 120	20	150	170	03.280.95.04.0
				45 / 80					03.280.95.03.0
				80					14
	Washer	C		45 / 80	70	20	249	-	03.320.09.49.0
					70 / 120				03.320.09.35.0
				80	70	14	250		03.320.09.33.0
90	120	20		03.320.09.23.0					
Attachment central bolt with steel piston									
1222	Locking screw	-		M 16 x 30			02.5070.98.91		
				M 16 x 35			02.5070.94.91		
Central screw with plastic piston									
1222	Screw	-	Piston height < 150 mm	M 16 x 115			03.340.12.24.0		
			Piston height > 180 mm	M 16 x 160			03.340.12.23.0		
Attachment trailing arm - air bag									
1224	Locking screw	-		M 16 x 55			02.5070.97.00		
				M 16 x 65			02.5070.95.00		
				M 16 x 75			02.5070.96.00		
				Air bag with central screw			M 16 x 61 / SW 22		

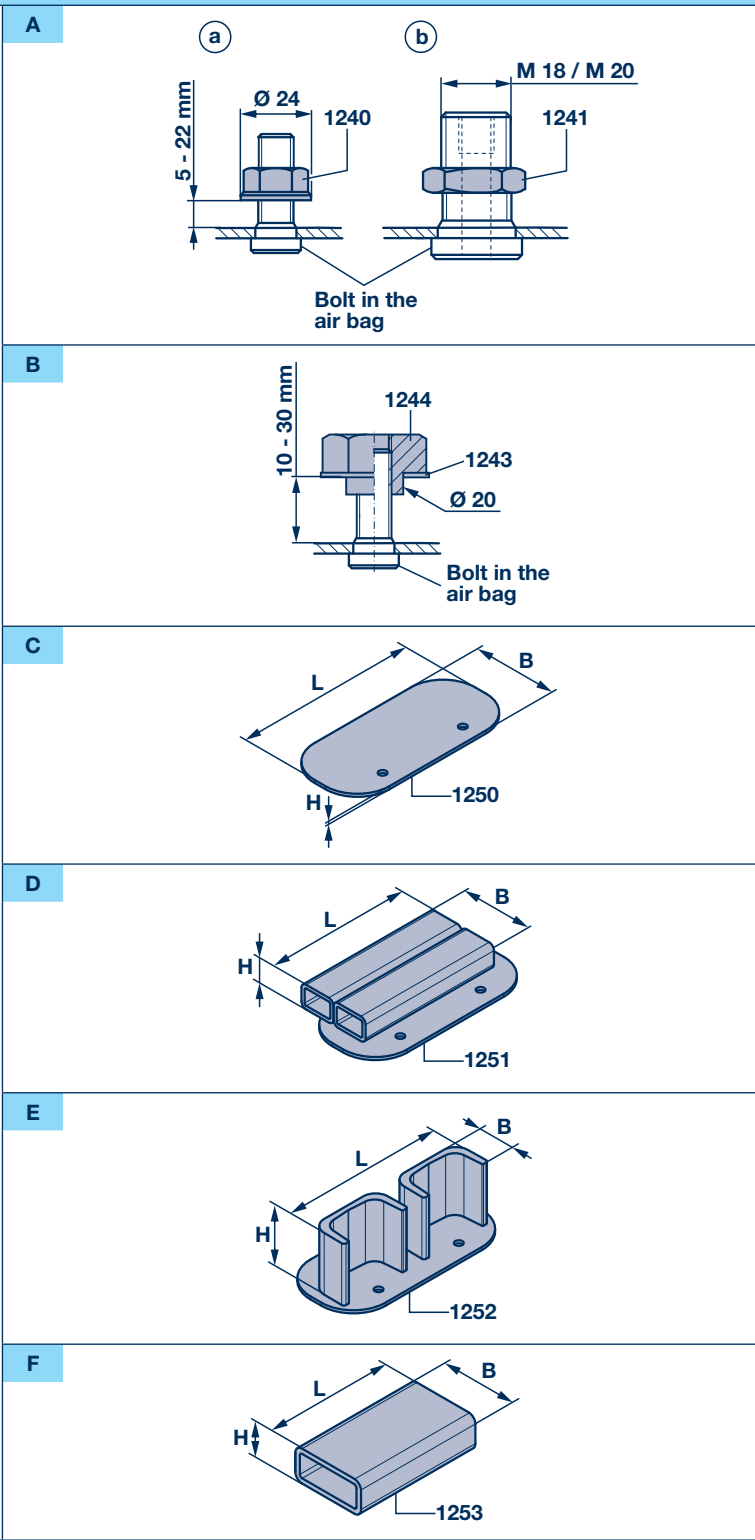
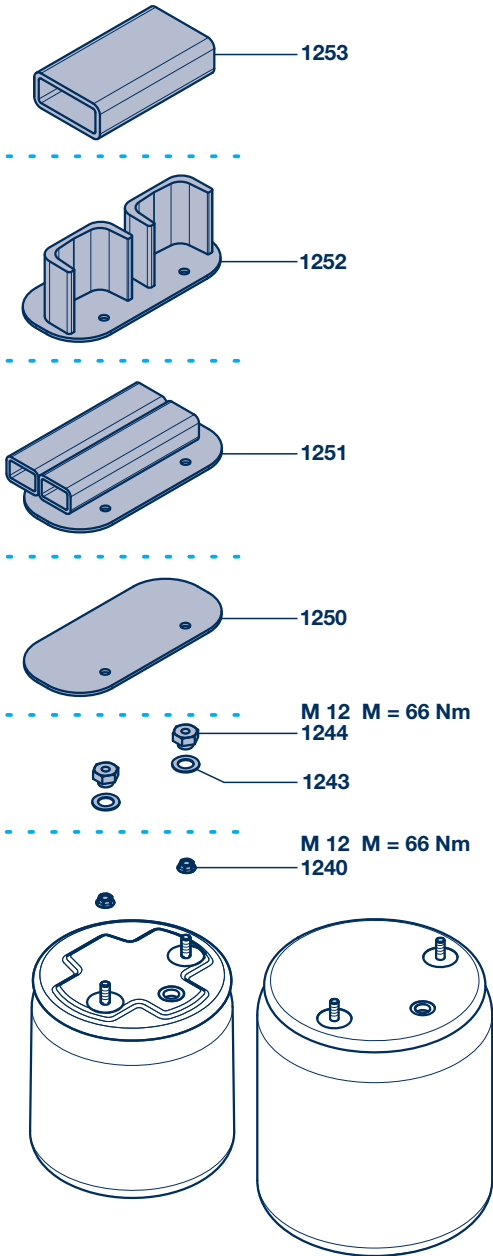
Further versions upon request.

4 BPW Air bags

4.4 Upper air bag attachment / spacers

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Upper air bag attachment / spacers



BPW Air bags 4

Upper air bag attachment / spacers 4.4

Upper air bag attachment							
Item	Designation	Fig.	Utilisation	Dimension			BPW Code no.
Steel frame							
1240	Lock nut	A a	Steel frame 5 - 22 mm	M 12 / SW 17			02.5273.33.80
Steel frame / integrated air connection in stud bolt							
1241	Hexagon nut	A b	Steel frame 5 - 22 mm	M 18 / SW 24			02.5230.18.00
				M 20 / SW 30			02.5201.76.06
Alloy frame							
1243	Spring washer	B	Alloy frame 10 - 30 mm	B 20 / 137			02.5403.20.90
1244	Hexagon nut			M 12 / Ø 20 / SW 30			03.260.11.01.0
Spacers							
Item	Designation	Fig.	Utilisation	Dimensions			BPW Code no.
				H	B	L	
1250	Plate	C	BPW 30	5	140	300	03.281.47.12.0
			BPW 36	5	200	360	03.285.47.24.0
1251	Support	D	BPW 30	40	120	240	05.189.07.33.0
				60			05.189.06.93.0
				100			05.189.07.34.0
			BPW 36	40	120	300	05.189.07.11.0
				60			05.189.06.57.0
				100			05.189.07.02.0
1252	Support	E	BPW 30	40	60	270	05.189.07.29.0
				60			05.189.07.30.0
				100			05.189.07.28.0
			BPW 36	40	60	300	05.189.07.88.0
				60			05.189.07.89.0
				100			05.189.07.90.0
1253	Square tube	F	BPW 30	60	120	200	03.391.69.24.0
				60			03.391.69.42.0
				100			03.391.53.72.0
			BPW 30 / BPW 36	80	140	120	03.391.69.18.0
				100			03.391.52.80.0

5 BPW Shock absorber

General

BPW Shock absorber

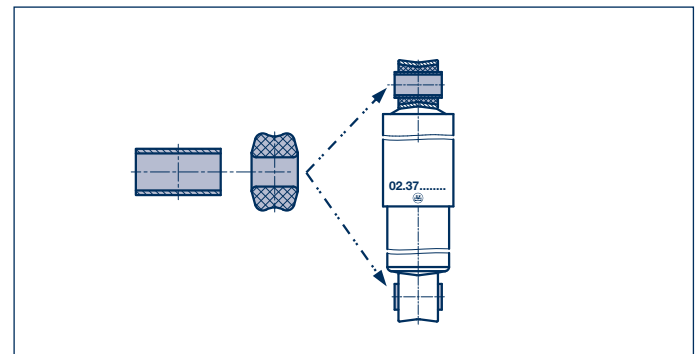
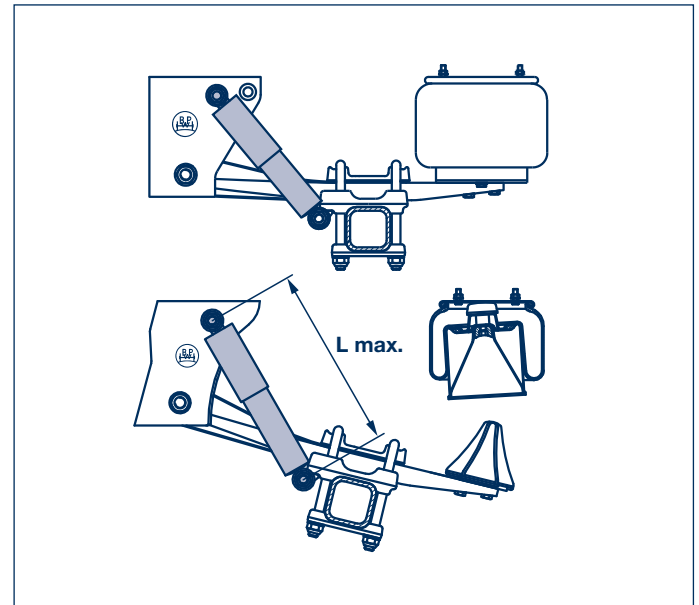
The shock absorber reduces vibration in the vehicle body and ensures greater driving comfort and road safety. This is because the wheels stay in contact with the road and dynamic wheel load fluctuations are reduced.

BPW uses various types of shock absorber to guarantee the best possible damping in each case. In turn, this ground contact is responsible for the tracking stability and braking properties of the vehicle.

High-volume BPW shock absorbers are adapted to the vehicle, the overall height and the range of applications. Using the split air bag (Combi-Air bag + Airlight^{Direct}) with air suspensions, the shock absorber is fitted with an end stop in order to avoid any further axle travel.

The rubber bushes of BPW shock absorbers can be replaced (see page 85).

Shock absorbers should only be built in and changed per axle. Individual axles can be equipped in different ways within a multi-axle vehicle.



BPW Shock absorber 5

General

PDC

The BPW PDC (Pneumatic Damping Control) shock absorber improves driving properties and comfort – whatever the load.

The best damping, better road safety, lower maintenance costs – given all these reasons, you don't need to think long and hard before fitting or retrofitting BPW air suspension systems with PDC.

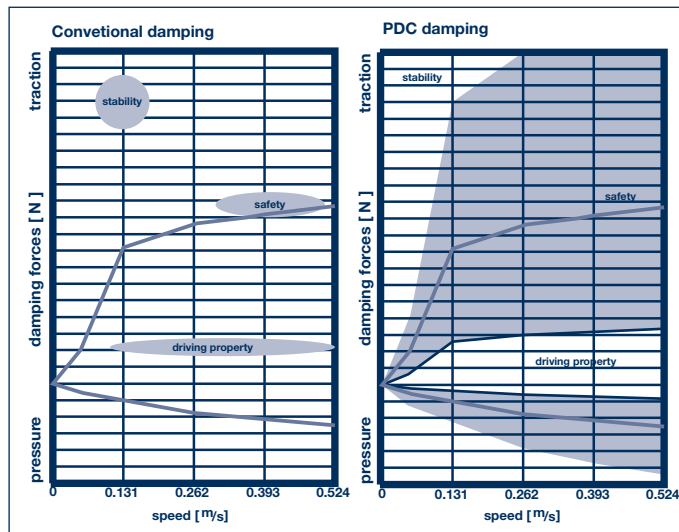
Function

The disadvantage with conventional shock absorbers is that their characteristics can only be optimally adapted to one loading condition (usually fully laden). PDC detects the actual loading condition via the air suspension and adapts itself smoothly. This improves driving safety at the same time as reducing the strain on the chassis and the vehicle, in particular when the trailer is empty or only partly laden.

PDC is virtually essential in high-value vehicles and when carrying sensitive cargoes. Vehicle maintenance costs are reduced.

The cargo and the carriageway are also subjected to fewer shock loads.

PDC is connected to the BPW air suspension system and does not require any electronic control systems.



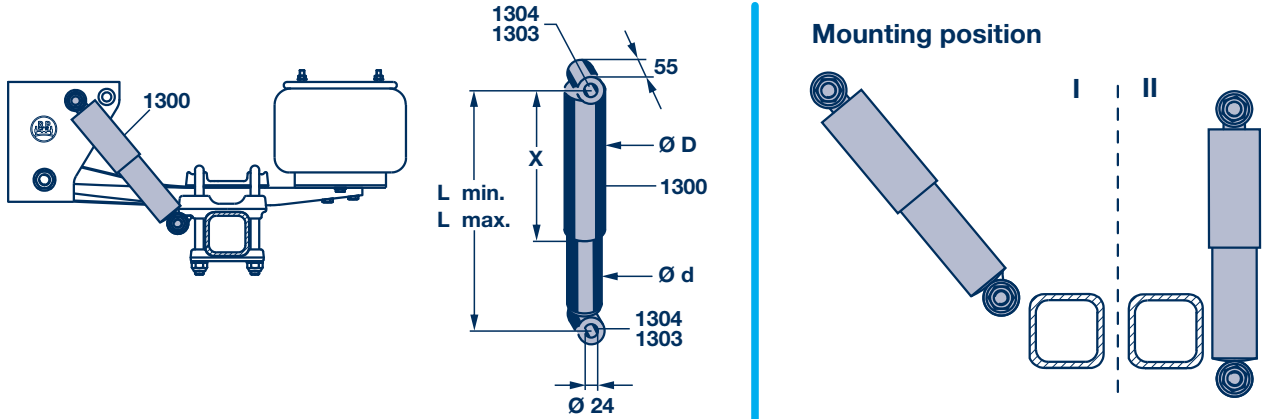
 **When using PDC shock absorbers, a washer must be installed between the support or spring seats and each PDC, also shorter lock nuts must be used.**

5 BPW Shock absorber

5.1 Shock absorber

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Shock absorber (item 1300)



Mounting position	BPW Code no.		Dimension					N = Newton at 13 cm/s	N = Newton at 52 cm/s	Remark
	Shock absorber old with steel and rubber bushes Ø 24 / 30	Shock absorber new with steel and rubber bushes Ø 24 / 32	L min.	L max.	X	D	d			
Standard shock absorber (item 1300)										
I	02.3722.79.00	02.3722.79.02	287	412	204	75	65	13280 / 2930	15250 / 5010	
I	02.3702.70.00 ¹⁾	-	292	432	214	82	72	6300 / 1600	17000 / 3000	rep. by 02.3722.89.02
I	02.3722.89.00	02.3722.89.02	292	432	204	75	65	13280 / 2930	15250 / 5010	
I	02.3702.52.00	-	326	496	225	82	72	6300 / 1740	17000 / 3000	rep. by 02.3722.88.02
I	02.3722.14.00	-	326	496	235	82	72	10500 / 2500	22500 / 4500	rep. by 02.3722.83.02
I	02.3722.04.00	02.3722.04.02	326	496	235	82	72	6300 / 1740	17000 / 3000	
I	02.3722.83.00	02.3722.83.02	326	496	235	75	65	13280 / 2930	15250 / 5010	
I	02.3702.92.00	-	351	541	250	82	72	8000 / 2500	18000 / 5000	rep. by 02.3722.88.02
I	02.3722.88.00	02.3722.88.02	351	541	250	75	65	13280 / 2930	15250 / 5010	
I	02.3702.20.00	02.3702.20.02	426	696	325	82	72	8000 / 1290	16000 / 2150	
I II	02.3702.51.00	02.3702.51.02	430	700	320	75	66	3800 / 500	8000 / 800	
II	02.3702.67.00	02.3702.67.02	466	766	380	75	66	3750 / 540	10500 / 1000	
I II	02.3702.60.00 ²⁾	02.3702.60.02 ²⁾	475	795	390	82	72	6300 / 1600	17000 / 3000	
II	02.3702.18.00	02.3702.18.02	475	800	390	82	72	4100 / 400	9000 / 900	
II	02.3722.62.00	02.3722.62.02	536	906	440	75	66	3750 / 540	10500 / 1000	

PDC Shock absorber (Pneumatic Damping Control) (item 1300/1301)

I	02.3722.63.00	02.3722.63.02	336	501	210	92	80			
I	02.3722.93.00 L 02.3722.94.00 R	-	300	430	180	92	80	for air bag BPW 30		
I	02.3722.64.00	02.3722.64.02	336	501	210	92	80	for air bag BPW 36		
	Shock absorber with last digit ..0 are replaced by shock absorber with last digit ..2. Observe the modified bushes (page 85).		¹⁾ Special version ²⁾ reinforced							

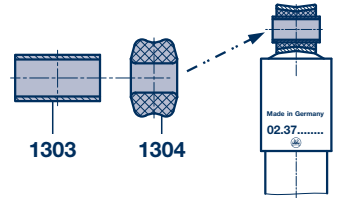
Further versions upon request.

BPW Shock absorber 5

Spare parts for shock absorbers 5.2

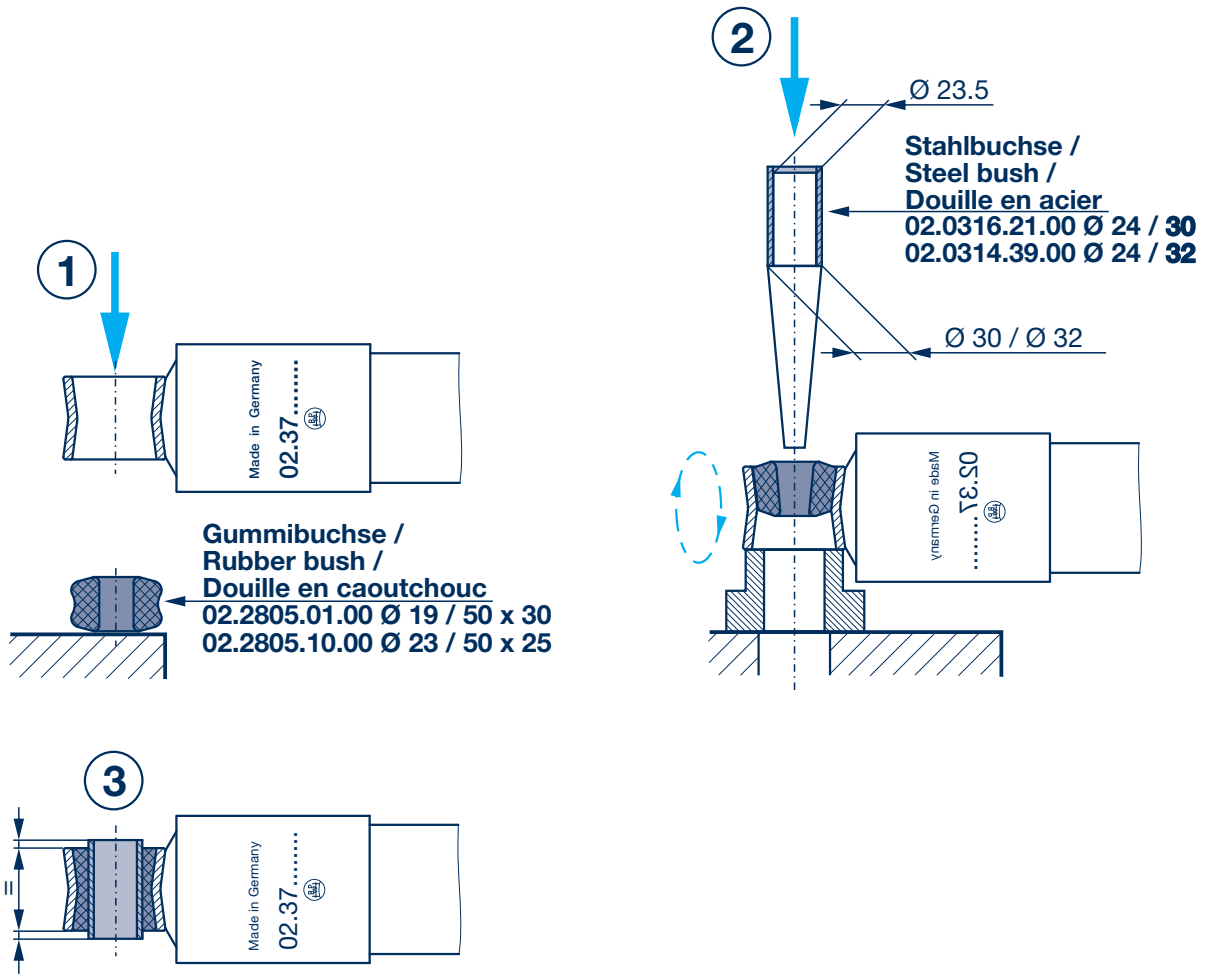
Bushes for shock absorbers

Execution	Item	Designation	BPW Code no.	Dimension
Shock absorber with last digit .0	1303	Steel bush	02.0316.21.00	Ø 24 / 30 x 55
	1304	Rubber bush	02.2805.01.00	Ø 19 / 50 x 30
Shock absorber with last digit .2	1302	Repair kit bush for shock absorber, item 1303 + 1304	09.801.08.18.0	
	1303	Steel bush *	02.0314.39.00	Ø 24 / 32 x 55
	1304	Rubber bush *	02.2805.10.00	Ø 23 / 50 x 25



Steel and rubber bushes with Ø 24 / 30 mm are no longer available - convert to steel and rubber bushes with Ø 24 / 32 mm.
 * Only available as set (09.801.08.18.0)!

Changing the bushes



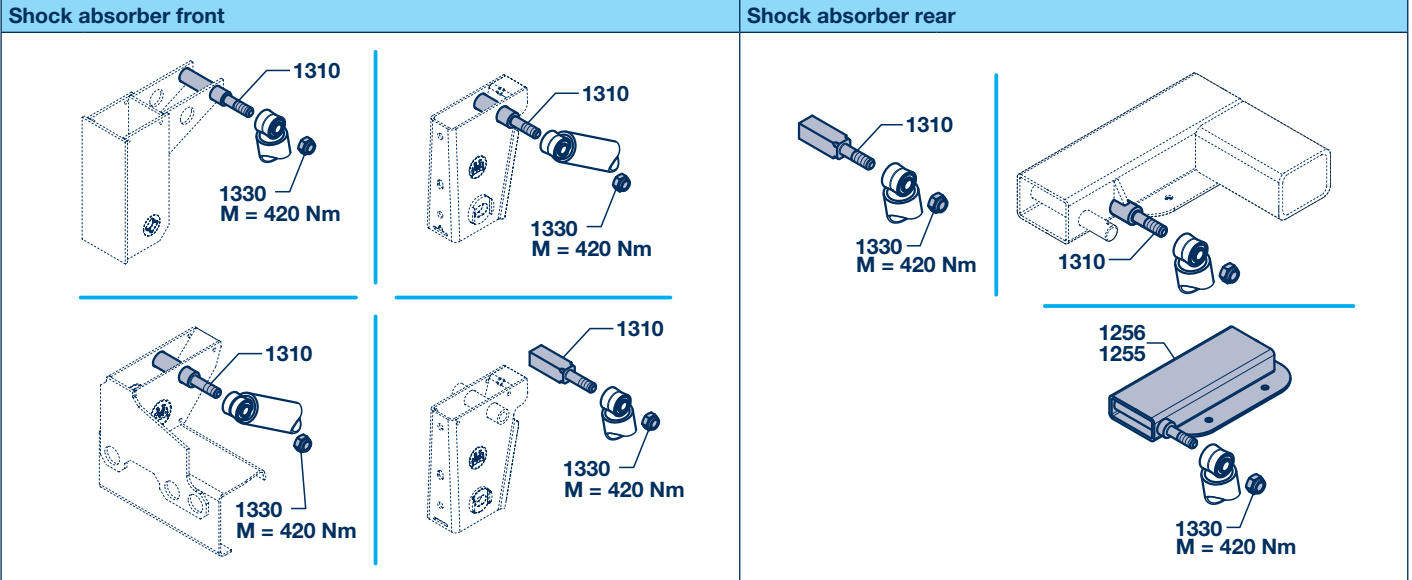
Lubricate the rubber and steel bush with a 50% soap solution prior to assembly!

5 BPW Shock absorber

5.3 Upper shock absorber attachments

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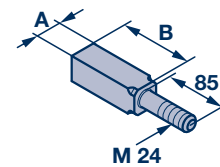
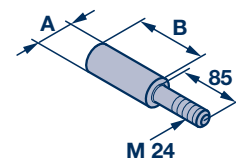
Upper shock absorber attachment with threaded bolts



		Dimension		
Item	Designation	A	B	BPW Code no.

Shock absorber attachment on threaded bolts, steel hanger brackets / integrated supports / frames

1310	Threaded bolt (steel) (welded to hanger bracket, integrated support or frame)	● 36	165	03.177.24.36.0
		● 40	140	03.177.24.30.0
		● 40	147	03.177.24.53.0
		● 40	165	03.177.24.29.0
		● 40	188	03.177.24.31.0
		■ 40	82	03.177.24.37.0
		■ 40	115	03.177.24.38.0
		■ 40	140	03.177.24.17.0
		■ 40	167	03.177.24.52.0
		■ 40	207	03.177.24.49.0



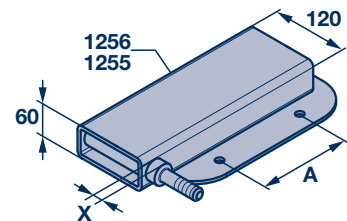
Shock absorber attachment on threaded bolts, stainless steel hanger brackets

1310	Threaded bolt (stainless steel) (welded to hanger bracket)	● 40	130	03.177.24.64.0
		● 40	145	03.177.24.61.0
		● 50	130	03.177.24.65.0

		Dimension		
Item	Designation	A	X	BPW Code no.

Shock absorber attachment on threaded bolts, shock absorber rear, attachment to spacer for air bag

1255	Support, left	150	57	05.189.06.35.0
		210	37	05.189.06.25.0
1256	Support, right	150	57	05.189.06.34.0
		210	37	05.189.06.26.0



1329	Washer	A 25		02.5401.25.07
1330	Lock nut	VM 24 / 980-10		02.5220.74.12 *
		VM 24 / 980-10 short		02.5220.76.12

* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07

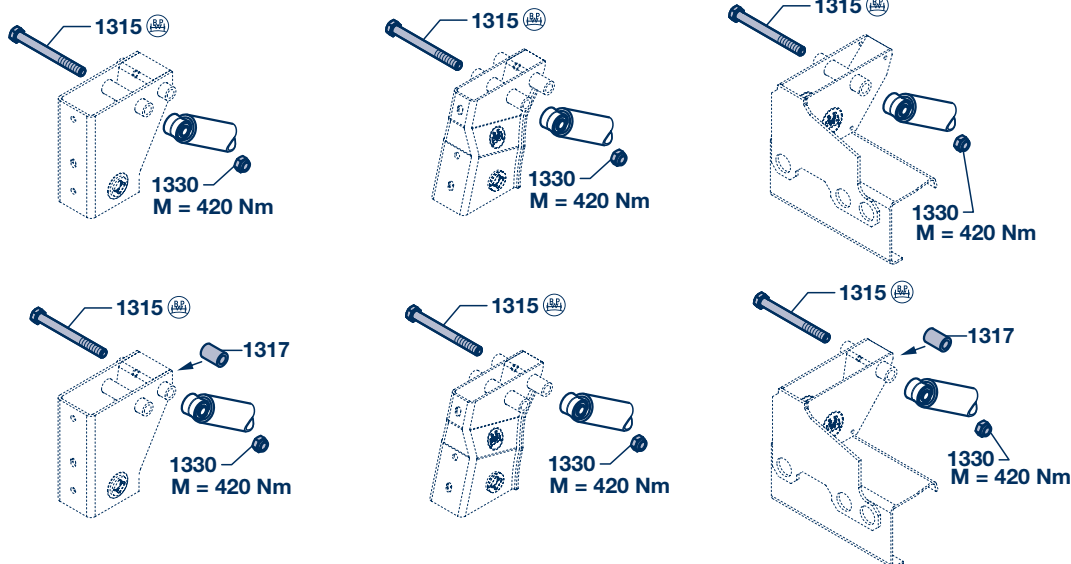
Further versions upon request.

BPW Shock absorber 5

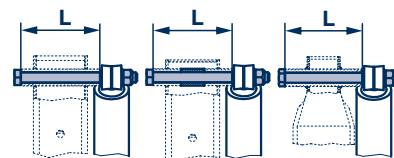
Upper shock absorber attachments 5.3

Upper shock absorber attachment with screws

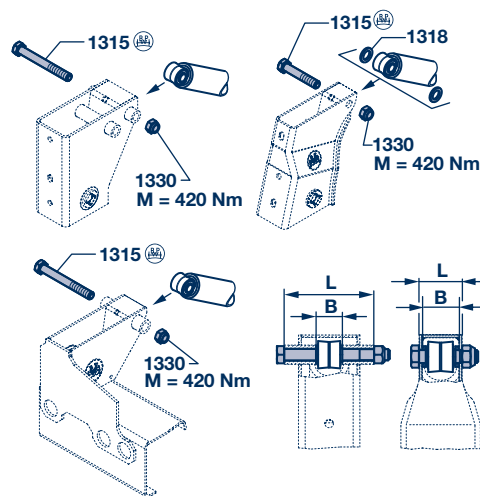
Shock absorbers next to hanger bracket, steel hanger bracket / integrated support / frame



		Dimension		BPW Code no.
Item	Designation	L		
Shock absorbers next to hanger bracket, steel hanger bracket				
1315	Hexagon screw	L = 144	M 24 x 230	02.5023.41.82
		L = 155	M 24 x 240	03.340.14.19.0
		L = 187	M 24 x 275	03.340.14.12.0
1317	Sleeve e.g.		Ø 25 / 40 x 55 ¹⁾	03.200.75.62.0
	Bush		Ø 25 / 40 x 67 ²⁾	03.112.03.06.0
Shock absorber above the trailing arm, shock absorber at hanger bracket centre				
1315	Hexagon screw	L = 72	M 24 x 100	03.340.14.15.0
		L = 80	M 24 x 110	03.340.14.16.0
		L = 110	M 24 x 140	03.340.14.24.0
		L = 125	M 24 x 160	03.340.14.22.0
		L = 157	M 24 x 200	02.5023.39.82
		L = 177	M 24 x 220	02.5023.36.82
		L = 187	M 24 x 230	03.340.14.23.0
1318	Ring (2x)	B = 67	Ø 25 / 50 x 6	03.310.30.60.0
		B = 90	Ø 25 / 42 x 17.5	03.310.31.38.0
1330	Lock nut	VM 24 / 980-10		02.5220.74.12 *



1) inside dimension of the hanger bracket = 55 mm
2) inside dimension of the hanger bracket = 67 mm



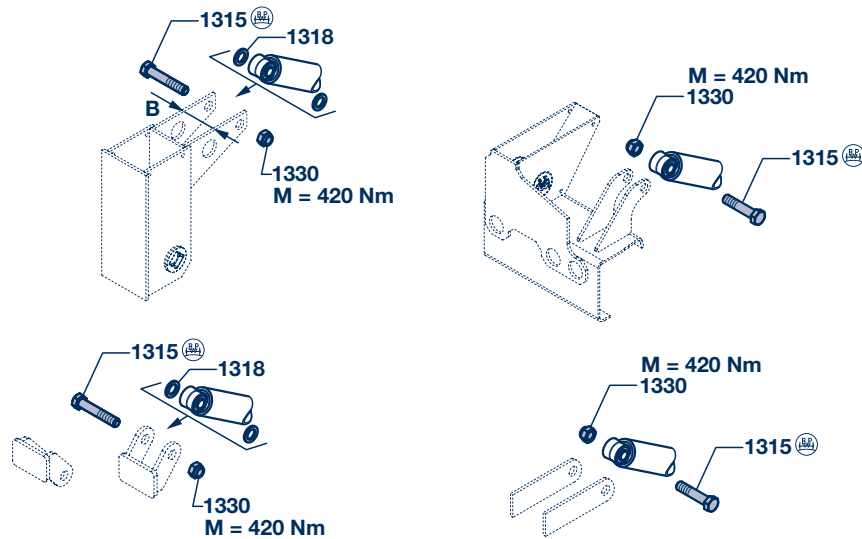
* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07

5 BPW Shock absorber

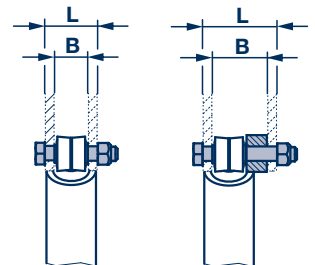
5.3 Upper shock absorber attachments

Upper shock absorber attachment with screws

Shock absorber attachment between plates, steel hanger bracket / integrated support / frame



Item	Designation	Dimension			BPW Code no.
		B	L		
Shock absorber attachment between plates, steel hanger bracket / integrated support / frame					
1315	Hexagon screw	55	75	M 24 x 100	03.340.14.15.0
		70	90	M 24 x 120	02.5023.29.80
		76	96	M 24 x 130	02.5023.47.82
1318	Ring (1x)	70	90	Ø 25 / 42 x 15	03.310.31.21.0
	Ring (2x)	76	96	Ø 25 / 42 x 10	03.310.31.40.0
1330	Lock nut	VM 24 / 980-10			02.5220.74.12



Further versions upon request.

BPW Shock absorber 5

Upper shock absorber attachments 5.3

Upper shock absorber attachment with screws			
Item	Designation	Dimension	BPW Code no.
Shock absorbers next to hanger bracket, alloy hanger bracket			
1315	Hexagon screw	M 24 x 270-8.8 M 24 x 275-8.8	02.5023.45.82 03.340.14.12.0
1317	Sleeve	Ø 25 / 40 x 55 ¹⁾	03.200.75.62.0
	Bush	Ø 25 / 40 x 67 ²⁾	03.112.03.06.0
1318	Ring (2x)	Ø 25 / 42 x 15	03.310.31.21.0
¹⁾ inside dimension of the hanger bracket = 55 mm ²⁾ inside dimension of the hanger bracket = 67 mm			
Shock absorber above the trailing arm, shock absorber at hanger bracket centre, alloy hanger bracket			
1315	Hexagon screw	M 24 x 200	03.340.14.21.0 02.5023.35.82
1318	Ring (2x)	Ø 25 / 50 x 6	03.310.30.60.0
1329	Washer (2x)	Ø 25 / 125	02.5401.25.07
Shock absorbers next to hanger bracket, cast alloy hanger bracket			
1315	Hexagon screw	M 24 x 240-8.8 M 24 x 275-8.8	03.340.14.19.0 03.340.14.12.0
1317	Bush	Ø 25 / 40 x 67 ²⁾	03.112.03.06.0
1318	Ring	Ø 25 / 42 x 15	03.310.31.21.0
1329	Washer	Ø 25 / 125	02.5401.25.07
	Ring	Ø 25 / 50 x 6	03.310.30.60.0
		Ø 25 / 42 x 10	03.310.31.40.0
Shock absorber above the trailing arm, shock absorber at hanger bracket centre, cast alloy hanger bracket			
1315	Hexagon screw	M 24 x 200	03.340.14.21.0
1318	Ring	Ø 25 / 50 x 6	03.310.30.60.0
1329	Washer	Ø 25 / 125	02.5401.25.07
1330	Lock nut	VM 24 / 980-10	02.5220.74.12

5 BPW Shock absorber

5.4 Lower shock absorber attachments

Lower shock absorber attachment

Item	Designation	Dimension	BPW Code no.	
O / SL / AL attachment to spring seats with threaded bolt, shock absorber front				
1026	Spring seat, right		see page 25 - 31	
1027	Spring seat, left		see page 25 - 31	
OM / SLM Shock absorber rear				
1320	Support, right	X = 150	05.189.05.66.0	
1321	Support, left	X = 150	05.189.05.67.0	
1322	Spring U-bolts		03.138.29.02.0	
1323	Lock nut	VM 16 x 1.5 / 980-10	02.5220.31.12	
OM / SLM / ALM Shock absorber rear, attachment to support with threaded bolt				
1320	Support, right	X = 44.5 / B = 150	05.189.13.16.0	
		X = 44.5 / B = 180	05.189.13.18.0	
		X = 92 / B = 180	05.189.13.30.0	
		X = 126 / B = 150	05.189.13.20.0	
1321	Support, left	X = 150 / B = 150	05.189.13.15.0	
		X = 44.5 / B = 180	05.189.13.17.0	
		X = 92 / B = 180	05.189.13.29.0	
		X = 126 / B = 150	05.189.13.21.0	
1329	Washer	A 25	02.5401.25.07	* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07
1330	Lock nut	VM 24 / 980-10 VM 24 / 980-10 short	02.5220.74.12 * 02.5220.76.12	

BPW Shock absorber 5

Lower shock absorber attachments 5.4

Lower shock absorber attachment					
Item	Designation	Utilisation	Dimension	BPW Code no.	
Lower shock absorber attachment between plates					
B = 56					
1324	Hexagon screw		M 24 x 110	02.5023.46.80	
B = 76					
1318	Ring		Ø 25 / 42 x 10	03.310.31.40.0	
1320	Support	□ / ■ 120	H 51 / V 66	05.189.15.17.0	
		■ 120	H 125 / V 60	05.189.10.51.0	
		■ 120	H 157 / V 65	05.189.10.92.0	
		■ 120	H 185 / V 60	05.189.10.44.0	
1324	Hexagon screw		M 24 x 130	02.5023.47.82	
B = 90					
1311	Repair kit cpl., item 1318 - 1330	□ / ■ 120		09.829.00.02.0	
1318	Ring		Ø 25 / 42 x 17.5	03.310.31.38.0	
1320	Support	□ / ■ 120	H 140 / V 100	05.189.07.15.0	
		□ / ■ 150	H 110 / V 85	05.189.07.16.0	
1324	Hexagon screw		M 24 x 140	02.5023.49.80	
B = 100					
1318	Sleeve		Ø 25 / 42 x 22	03.200.74.44.0	
1324	Hexagon screw		M 24 x 150	02.5023.91.80	
1330	Lock nut		VM 24 / 980-10	02.5220.74.12	

5 BPW Shock absorber

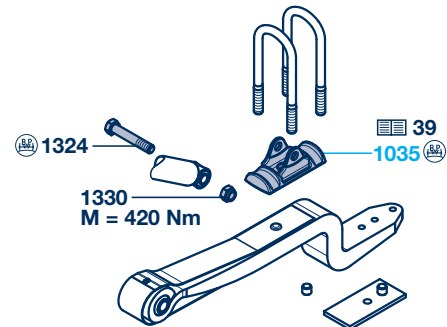
5.4 Lower shock absorber attachments

Lower shock absorber attachment

Item	Designation	Dimension	BPW Code no.
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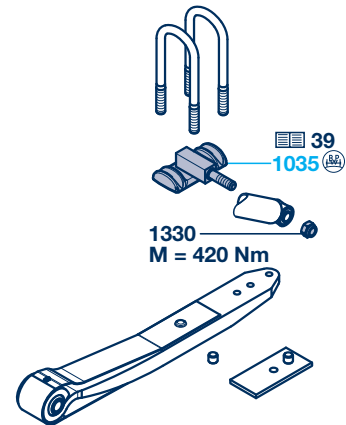
O / SL / AL
Attachment to spring plate above the trailing arm, spring U-bolts mounted from above

1035	Spring plate		see page 39
1324	Hexagon screw	M 24 x 100-8.8	03.340.14.15.0



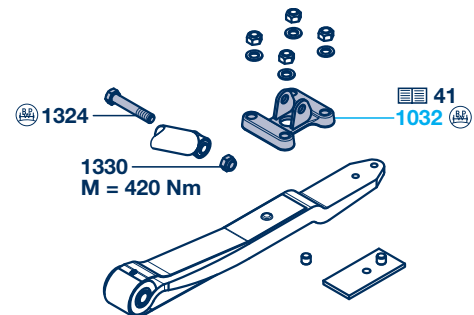
O / SL / AL
Attachment to spring plate with threaded bolt welded on, spring U-bolts mounted from above

1035	Spring plate		see page 39
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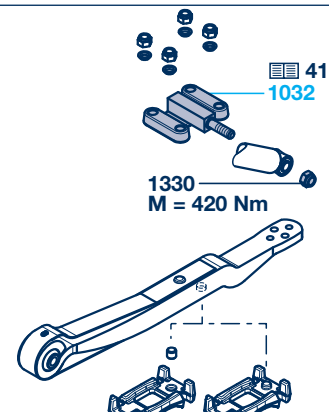
O / SL / AL
Attachment to spring plate above the trailing arm, spring U-bolts mounted from below

1032	Spring plate		see page 41
1324	Hexagon screw	M 24 x 100-8.8	03.340.14.15.0



O / SL / AL
Attachment to spring plate with threaded bolt welded on, spring U-bolts mounted from below

1032	Spring plate		see page 41
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1329	Washer	A 25	02.5401.25.07
1330	Lock nut	VM 24 / 980-10	02.5220.74.12 *
		VM 24 / 980-10 short	02.5220.76.12

* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07

O
SL
AL

BPW Shock absorber 5

Lower shock absorber attachments 5.4

Lower shock absorber attachment			
Item	Designation	Dimension	BPW Code no.
OT / SLU / ALU Attachment to spring plate with threaded bolt welded on, spring U-bolts mounted from above			
1032	Spring plate, right		see page 43
1033	Spring plate, left		see page 43
OT / SLU / ALU Attachment to spring plate with threaded bolt, spring U-bolts mounted from below			
1032	Spring plate, right		see page 43
1033	Spring plate, left		see page 43
OT / SLU / ALU Attachment to spring plate with screw, spring U-bolts mounted from above			
1032	Spring plate, right		see page 43
1033	Spring plate, left		see page 43
1315	Hexagon screw	M 24 x 140-8.8	02.5023.49.80
Screw (item 1315) and lock nut (item 1330) are included in 05.145.....			
1329	Washer	A 25	02.5401.25.07
1330	Lock nut	VM 24 / 980-10	02.5220.74.12 *
		VM 24 / 980-10 short	02.5220.76.12
* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07			

5 BPW Shock absorber

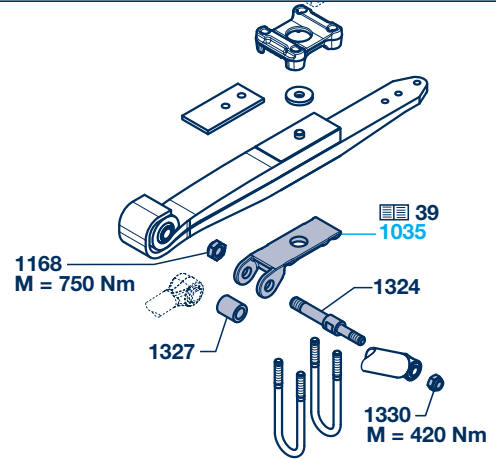
5.4 Lower shock absorber attachments

O
SL
AL

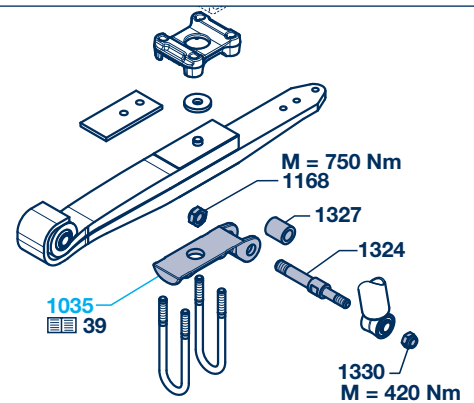
Lower shock absorber attachment

Item	Designation	Dimension	BPW Code no.
OT / SLU / ALU Attachment to spring plate with threaded bolt screwed on, spring U-bolts mounted from below, shock absorber front			
1035	Spring plate		see page 39
1168	Lock nut	M 30	03.260.15.01.0
1324	Threaded bolt	M 24 / M 30 / L = 260	03.177.24.22.0
1327	Sleeve *	Ø 32 / 38 x 68	03.200.73.53.0

* not applicable with U-stabilizer

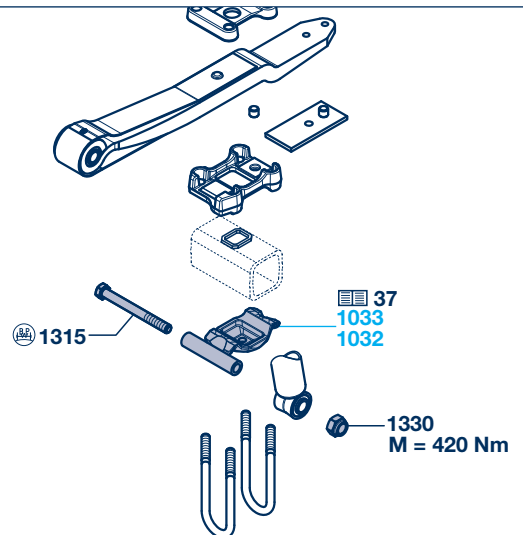


Item	Designation	Dimension	BPW Code no.
OT / SLU / ALU Attachment to spring plate with threaded bolt screwed on, spring U-bolts mounted from below, shock absorber rear			
1035	Spring plate		see page 39
1168	Lock nut	M 30	03.260.15.01.0
1324	Threaded bolt	M 24 / M 30 / L = 260	03.177.24.22.0
1327	Sleeve *	Ø 32 / 38 x 68	03.200.73.53.0



Item	Designation	Dimension	BPW Code no.
SL / AL Attachment to spring plate with screw, spring U-bolts mounted from below			
1032	Spring plate, right		see page 37
1033	Spring plate, left		see page 37
1315	Hexagon screw	M 24 x 140-8.8	02.5023.49.80

Screw (item 1315) and lock nut (item 1330) are included in 05.145.....



1329	Washer	A 25	02.5401.25.07
1330	Lock nut	VM 24 / 980-10	02.5220.74.12 *
		VM 24 / 980-10 short	02.5220.76.12

* With PDC-shock absorber
^use lock nut 02.5220.76.12 +
^washer 02.5401.25.07

Notes

O

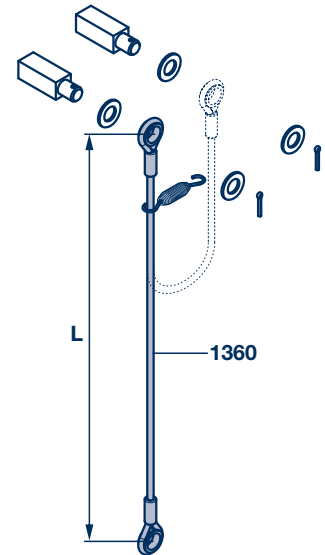
SL

AL

6 BPW Check straps

6.1 Check straps

Check straps				
Item	Designation	Dimension	BPW Code no.	
			Check strap, standard	Check strap, PVC coated
		L		
1360	Check strap	730	05.327.14.15.0	-
		865	05.327.14.13.0	-
		940	05.327.14.04.0	05.327.14.37.0
		1010	05.327.14.05.0	05.327.14.30.0
		1060	05.327.14.06.0	05.327.14.31.0
		1120	05.327.14.03.0	05.327.14.25.0
		1160	05.327.14.02.0	05.327.14.24.0
		1220	05.327.14.01.0	05.327.14.23.0
		1270	05.327.14.09.0	05.327.14.26.0
		1330	05.327.14.08.0	05.327.14.29.0
		1350	05.327.14.19.0	05.327.14.32.0
		1390	05.327.14.14.0	05.327.14.28.0
		1415	05.327.14.10.0	05.327.14.35.0
		1455	05.327.14.07.0	05.327.14.27.0
		1500	05.327.14.11.0	05.327.14.36.0
		1550	05.327.14.12.0	-
		1570	05.327.14.18.0	05.327.14.33.0
		1685	05.327.14.20.0	05.327.14.34.0
		1775	05.327.14.21.0	-



BPW Check straps 6

Check strap attachments 6.2

Check strap attachments						
Item	Designation	Remark	BPW Code no.	Dimension		
Check strap attachment with threaded bolt						
			O / SL / AL		OR / SLR / ALR (with frame)	
1362	Threaded bolt		03.177.25.05.0	M 30 / ■ 40 x 70/110	-	
			03.177.25.06.0	M 30 / ■ 40 x 110/150	-	
	Screw	FM 900 - 980	-		03.340.75.21.0	M 30 x 210
		FM 1100 - 1300	-		03.340.75.22.0	M 30 x 165
1365	Sleeve	FM 900 - 980	-		03.200.74.38.0	Ø 34 / 54 x 48
1368	Shaped plate		03.161.16.01.0 *		03.161.16.01.0 *	
1370	Hexagon nut		02.5205.17.04	M 30 / 936-04	02.5205.17.04	M 30 / 936-04
1375	Return spring ¹⁾		05.397.26.03.0	Ø 26 / 2.6 x 148	05.397.26.03.0	Ø 26 / 2.6 x 148
* no longer available						
Check strap attachment with bolt for split pin						
1362	Bolt		03.084.47.11.0	Ø 30 / ■ 40 x 70/112	-	
		FM 900 - 980	-		03.084.76.37.0	Ø 30 x 218
		FM 1100 - 1300	-		03.084.76.36.0	Ø 30 x 170
1365	Sleeve	FM 900 - 980	-		03.200.74.38.0	Ø 34 / 54 x 48
1368	Washer		02.5401.31.01	31 / 125	02.5401.31.01	31 / 125
1371	Split pin		02.6201.61.01	6.3 x 45 / 94	02.6201.61.01	6.3 x 45 / 94
1375	Return spring ¹⁾		05.397.26.03.0	Ø 26 / 2.6 x 148	05.397.26.03.0	Ø 26 / 2.6 x 148

7 BPW Hanger brackets

General

O
SL
AL

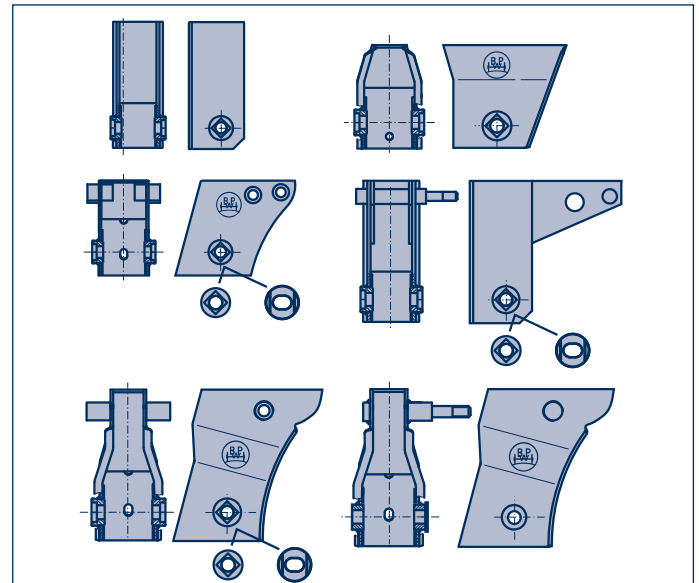
BPW Hanger brackets

Air suspension hanger brackets transfer all control, braking and acceleration forces from the axle to the vehicle frame.

Short, adjustable BPW air suspension hanger brackets with integrated shock absorber mounts make installation easier, reduces weight and reduces the lateral forces on the vehicle's frame.

The vehicle manufacturer benefits from straightforward crossbracing options at the interface between the frame and the hanger bracket.

BPW air suspension hanger brackets are available in steel as well as in high-grade steel and aluminium if required. Complete frames are no longer available.



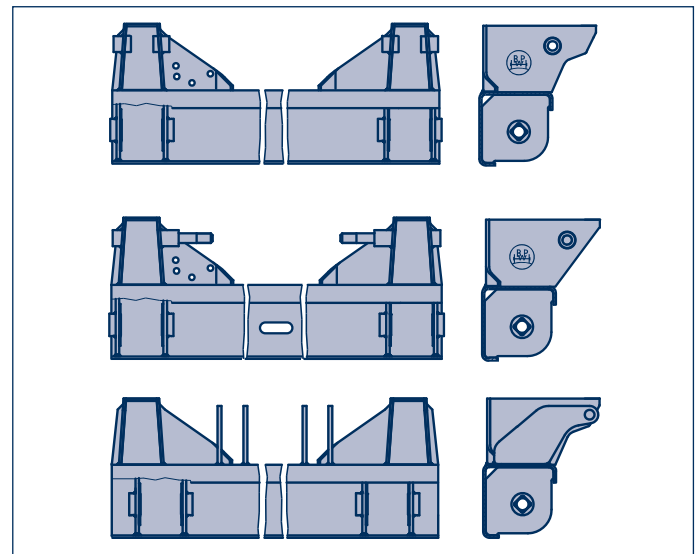
BPW Integrated support

Vehicle manufacturers all over the world quickly appreciate the assembly benefits of this module. Whether it's the hanger brackets, the shock absorber attachments or the cross-braces, everything is integrated to save space. Even steering axles can be connected to it without additional preparation.

The integrated support is available in two versions – with an open, narrow hanger bracket for welding or with a cover plate for bolting/riveting onto the vehicle frame.

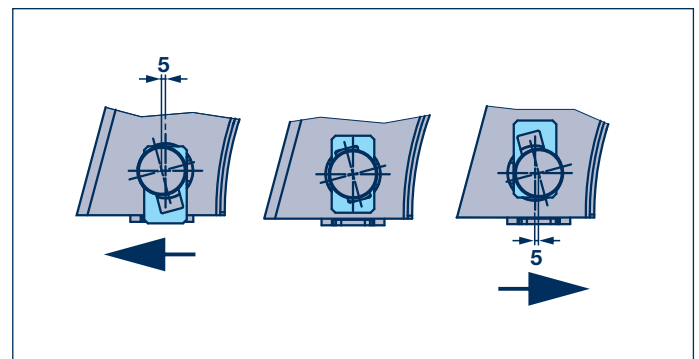
The integrated support can even make additional crossmembers unnecessary, depending on the frame design.

BPW Code numbers for integrated supports upon request!



Track alignment

Rapid axle alignment is possible using BPW hanger brackets with integrated track adjustment. Production tolerances can be settled and the axle tracking can be corrected on the vehicle without unfastening the U-bolts (axle tracking).



Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

BPW Hanger brackets 7

General

Greater flexibility for vehicle manufacturers - the bolted Airlight II air suspension hanger bracket from BPW

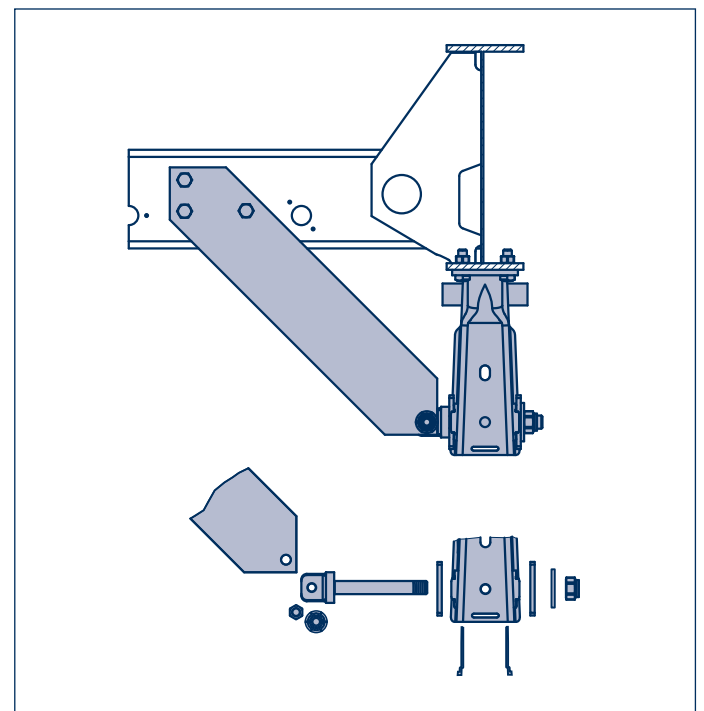
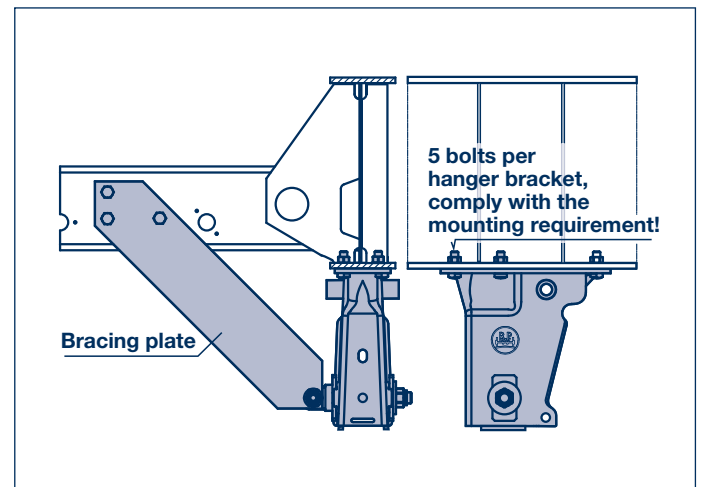
With the new, innovative bolted Airlight II air suspension hanger bracket, BPW is offering the opportunity of prefabricating compact vehicle frames without air suspension hanger brackets, coating them but not attaching the axle and suspension unit until the final assembly stage.

By expanding the Airlight II range, BPW is offering vehicle manufacturers an attractive alternative to the conventional, fully welded chassis. This is because the bolted system offers clear logistical and cost advantages, in particular for off-site frame production and surface coating. Production is made more flexible.

The air suspension hanger brackets were be available from week 36/2007 onwards. Like all other Airlight II air suspension hanger brackets and channel cross members, they are designed for use with M 24 trailing arm spring bolts from the start of series production (see also BPW News Luft 7122702e).

Customer advantages:

- ⊙ Installation of the entire chassis (incl. bracket struts) by cold-joining technology
- ⊙ Significant cost and logistical advantages with off-site frame production and surface coating (it is easier to transport the vehicle frame without hanger brackets)
- ⊙ Expansion of production flexibility
- ⊙ For mounting on standard frames with bottom flange width as little as 120 mm
- ⊙ No changes to the frame required, except for the hole pattern
- ⊙ Suitable for aluminium frame
- ⊙ Improved repair capability



7 BPW Hanger brackets

General

Shock absorber attachment

Hanger brackets with welded bolts for shock absorber attachment (100 mm wide trailing arm) replaced by hanger brackets with hexagon bolts and nuts.

SL Adjustable hanger brackets

Adjustable hanger brackets and integrated supports with weld-in square frame for spring bolt mounting have been replaced by hanger brackets and integrated supports with weld-in slot bush.

AL

If replacement is required, change over to this new version.

From week 18/2004 onwards, the functional principle of the loose wear plates familiar in Airlight II brackets was carried across to the rigid air suspension hanger brackets for 100 mm wide trailing arms.

Wear plates

BPW uses two different versions of wear plates.

1. A straight shaped plate for straight hanger brackets, integrated supports and frames

BPW Code no.: 03.164.35.04.0 - M 24
03.164.35.01.0 - M 30

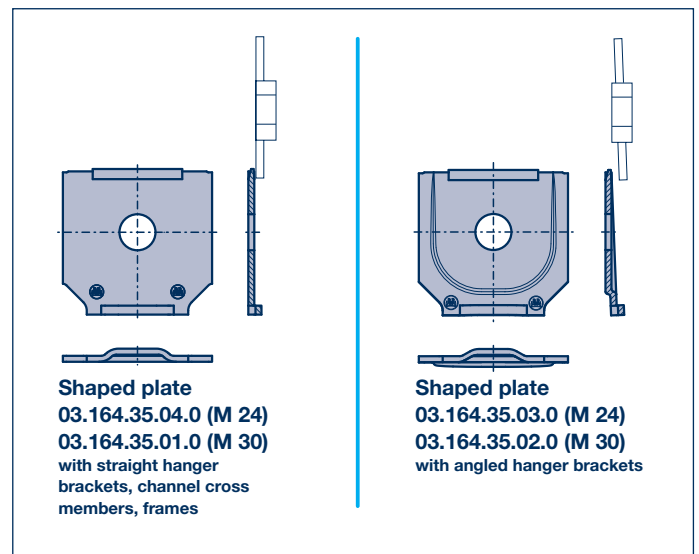
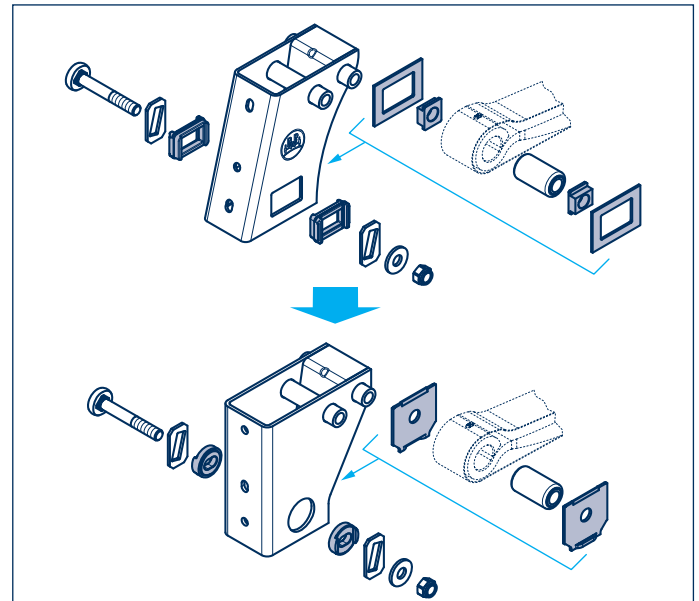
2. An offset shaped plate for angled hanger brackets

BPW Code no.: 03.164.35.03.0 - M 24
03.164.35.02.0 - M 30

It is essential to use new spring pivot bolts when the hanger bracket / integrated support is replaced!

Observe modified spring pivot bolt bearing!

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.



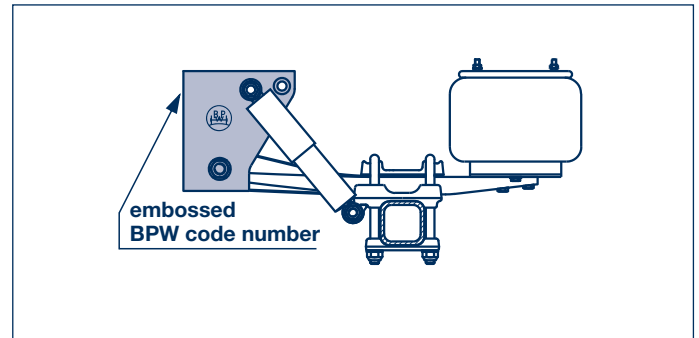
BPW Hanger brackets 7

General

Determining replacement air suspension hanger brackets

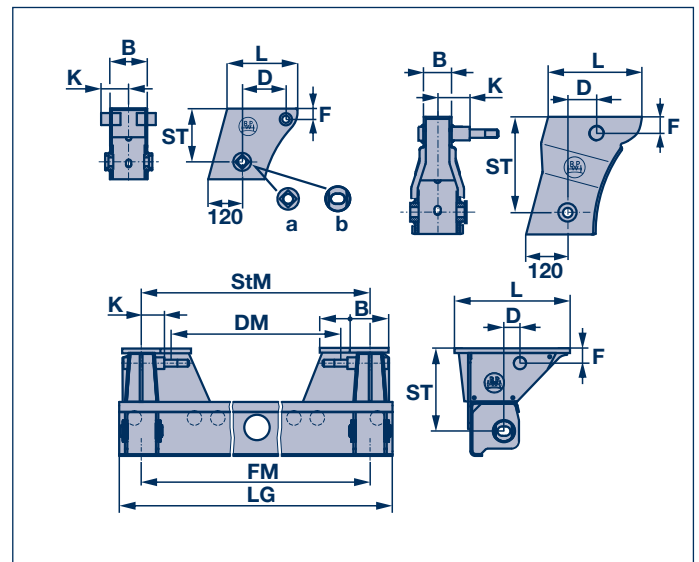
The BPW code number is embossed into the end of the hanger bracket.

If this identification is missing or no longer legible, the particular type of hanger bracket can be determined based on the shape and the dimensions.



Clarifying design

- ⊙ Hanger bracket / integrated support / frame
- ⊙ Steel, aluminium or stainless steel hanger bracket
- ⊙ Straight box-section hanger bracket / Best-Design hanger bracket / retracted hanger bracket
- ⊙ Rigid or adjustable spring pivot bolt mounting
- ⊙ Spring pivot bolt $\varnothing 24$ or $\varnothing 30$
- ⊙ Trailing arm 70 or 100 mm wide
- ⊙ Tall hanger bracket (ST)
- ⊙ Hanger bracket with shock absorber attachment (screw / bolt)
- ⊙ Position of shock absorber attachment (D / F)

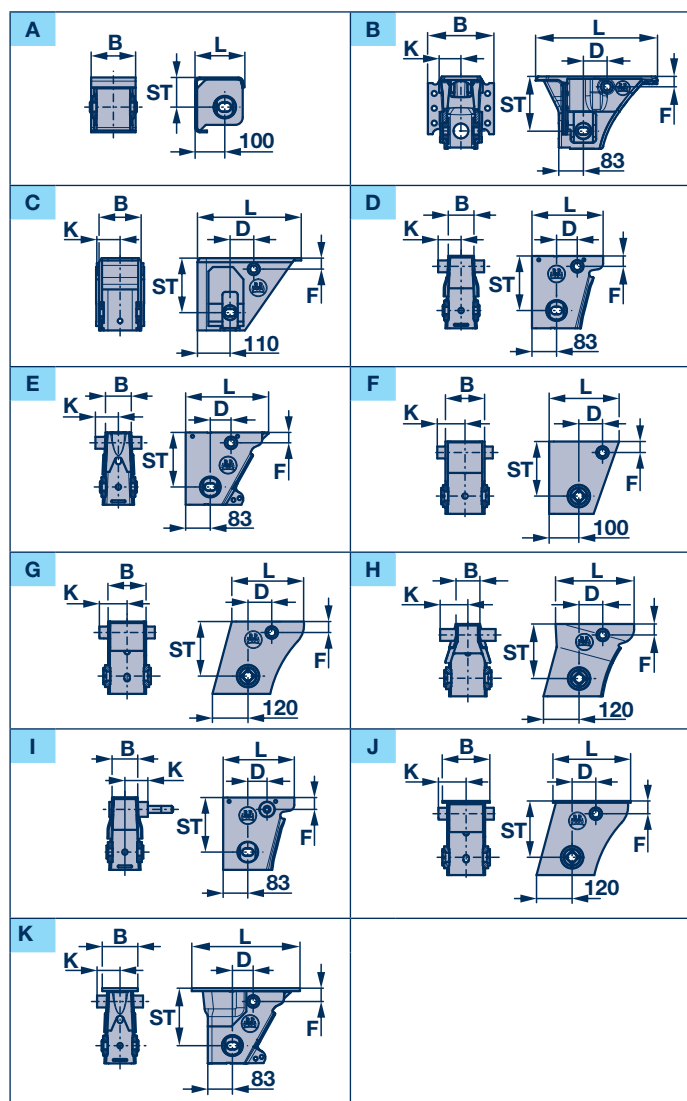


7 BPW Hanger brackets

7.1 Hanger brackets

Hanger bracket height (ST) 100 - 194 mm

O
SL
AL








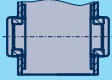
ST Hanger bracket height up to centre spring pivot bolt									
FB Trailing arm width									
Ø Ø Spring pivot bolt (Ø 24 or Ø 30)									
ST	Exec.	Fig.	FB	Ø	B	D	F	K	L
100	D	A	100	30	150	-	-	-	167
184	A	B	70	24	223	80	35	73.5	410
		C	70	30	223	80	35	73.5	410
		D	100	30	142	80	37	78.5	350
	E	D	70	24	87	70	35	77.5	240
		D	70	30	87	70	35	77.5	240
		D	70	24	91	70	35	77.5	241
		D	70	30	91	70	35	77.5	241
		E	70	24	87	70	35	77.5	258
		F	100	30	132	80	37	93.5	236
	S	G	100	30	128	80	37	93.5	243
		G	100	30	128	130	35	93.5	242
		H	100	30	80	80	37	93.5	265
	X	H	100	30	80	130	35	93.5	265
		H	100	30	80	150	35	93.5	265
I		70	24	87	65	40	77.5	240	
190	D	J	70	30	87	65	40	77.5	240
			70	30	87	65	40	77.5	240
192	D	J	100	30	160	80	43	93.5	262
194	K	K	70	24	110	70	43	77.5	260
			70	30	110	70	43	77.5	260

- A Alloy hanger bracket
 - D Steel hanger bracket with top plate
 - E Straight hanger bracket without top plate
 - K Bolted on hanger bracket with top plate
 - S Taper mounted steel hanger bracket
 - X Stainless steel hanger bracket
- Further versions upon request.

BPW Hanger brackets 7

Hanger brackets 7.1

Hanger bracket height (ST) 100 - 194 mm

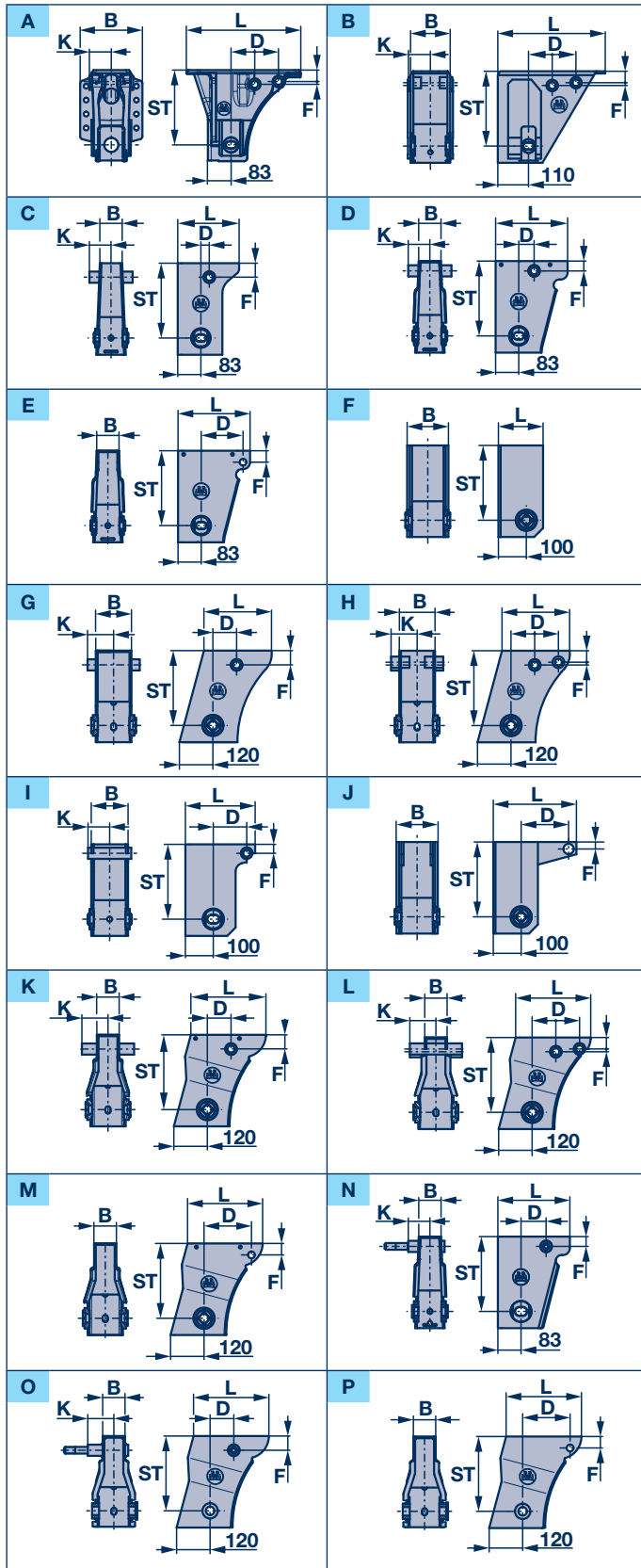
Rigid			Adjustable		
Standard	Reinforced		Standard	Reinforced	
					
Loose wear plates		Welded on wear plates	Loose wear plates		Square frame
			05.375.68.62.0		
			05.375.44.36.0		
			05.375.44.14.0 *		
			05.375.69.11.0		
			05.375.44.23.0		
			05.375.44.03.0 *		
			05.375.44.30.0		
			05.375.44.16.0 *		
			05.375.44.51.0		
	05.375.68.88.0			05.375.68.52.0	
05.375.40.73.0		↔ 05.375.40.20.0	05.375.40.55.0		↔ 05.375.40.22.0
05.375.40.76.0		↔ 05.375.40.29.0	05.375.40.58.0		
05.375.40.72.0		↔ 05.375.40.17.0	05.375.40.54.0		↔ 05.375.40.19.0
05.375.40.75.0		↔ 05.375.40.27.0	05.375.40.57.0		↔ 05.375.40.18.0
			05.375.44.39.0 L 05.375.44.40.0 R		
			05.375.44.37.0 L * 05.375.44.38.0 R *		
05.375.40.74.0		↔ 05.375.40.24.0	05.375.40.60.0		
			05.375.44.26.0		
			05.375.44.11.0 *		
			05.375.44.43.0		
	↳ No longer available - Change to loose wear plates. * No longer available - Change to spring pivot bolt Ø 24.				

7 BPW Hanger brackets

7.1 Hanger brackets

Hanger bracket height (ST) 268 mm

O
SL
AL







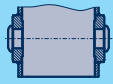
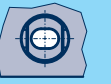

		ST Hanger bracket height up to centre spring pivot bolt						
		FB Trailing arm width						
		Ø Ø Spring pivot bolt (Ø 24 or Ø 30)						
ST	Exec.	Fig.	FB	Ø	B	D	F	K
268	A	A	70	24	223	85 / 170	51 / 41	78.5
				30	223	85 / 170	51 / 41	78.5
	B	B	70	24	142	85 / 170	51 / 41	78.5
	C	C	70	24	80	30	50	77.5
					30	80	30	50
	D	70		24	80	55	35	77.5
				30	80	55	35	77.5
		70		24	80	90	35	77.5
				30	80	90	35	77.5
	70		24	84	90	35	77.5	
	E	E	70	24	80	150	41	-
					30	80	150	41
	F	F	100	30	148	-	-	-
	G	G	100	30	128	85	51	93.5
	H	H	100	30	125	85 / 170	51 / 41	93.5
I	I	100	30	132	120	32	77.5	
J	J	100	30	148	170	25	-	
G	G	100	30	128	170	41	93.5	
H	H	100	30	125	85 / 170	51 / 41	93.5	
K	K	100	30	80	85	51	93.5	
L	L	100	30	80	85 / 170	51 / 41	93.5	
M	M	100	30	80	170	41	-	
K	K	100	30	80	170	41	93.5	
100								
N	N	70	24	80	83	40	77.5	
				30	80	83	40	77.5
X	O	O	100	30	80	85	51	93.5
			100	30	80	170	41	93.5
P	P	100	30	80	170	41	-	

- A Alloy hanger bracket
 - D Steel hanger bracket with top plate
 - E Straight hanger bracket without top plate
 - K Bolted on hanger bracket with top plate
 - S Taper mounted steel hanger bracket
 - X Stainless steel hanger bracket
- Further versions upon request.

BPW Hanger brackets 7

Hanger brackets 7.1

Hanger bracket height (ST) 268 mm

L	Rigid				Adjustable		
	Standard	Reinforced	Standard	Reinforced	Standard	Reinforced	Standard
							
Loose wear plates		Welded on wear plates		Loose wear plates		Square frame	
410					05.375.44.35.0		
410					05.375.44.04.0 *		
268					05.375.69.12.0		
220					05.375.44.29.0		
220					05.375.44.15.0 *		
258					05.375.44.21.0		
258					05.375.44.01.0 *		
258					05.375.44.22.0		
258					05.375.44.02.0 *		
258						05.375.44.32.0	
258					05.375.44.24.0		
258					05.375.44.05.0 *		
160		05.375.68.85.0		⇐ 05.375.67.88.0			
242	05.375.40.65.0		⇐ 05.375.40.03.0		05.375.40.56.0		⇐ 05.375.40.26.0
305			↻ 05.375.67.05.0			05.375.68.63.0	
242	05.375.40.63.0		⇐ 05.375.40.01.0		05.375.40.49.0		⇐ 05.375.40.06.0
305			↻ 05.375.67.03.0				↻ 05.375.63.44.0
250						05.375.69.08.0	
298		05.375.68.84.0		⇐ 05.375.67.86.0			
242	05.375.40.66.0		⇐ 05.375.40.05.0				
305		05.375.68.89.0		⇐ 05.375.68.23.0		05.375.68.51.0	
270	05.375.40.68.0		⇐ 05.375.40.10.0		05.375.40.51.0		⇐ 05.375.40.09.0
319		05.375.68.98.0	↻ 05.375.67.13.0	⇐ 05.375.68.43.0			↻ 05.375.63.79.0
270	05.375.40.70.0		⇐ 05.375.40.14.0		05.375.40.53.0		⇐ 05.375.40.13.0
319			↻ 05.375.68.07.0				↻ 05.375.68.08.0
270	05.375.40.69.0		⇐ 05.375.40.11.0		05.375.40.52.0		⇐ 05.375.40.12.0
319		05.375.68.99.0	↻ 05.375.67.07.0	⇐ 05.375.68.44.0			↻ 05.375.63.53.0
270	05.375.40.67.0		⇐ 05.375.40.08.0		05.375.40.48.0		⇐ 05.375.40.04.0
319		05.375.68.97.0	↻ 05.375.67.12.0	⇐ 05.375.68.42.0		05.375.69.01.0	↻ 05.375.63.77.0
270					05.375.40.61.0		⇐ 05.375.63.80.0
258					05.375.44.27.0 L 05.375.44.28.0 R		
258					05.375.44.12.0 R * 05.375.44.13.0 L *		
269			05.375.40.38.0 R 05.375.40.39.0 L				
269			05.375.40.40.0 R 05.375.40.41.0 L				
269			05.375.40.42.0 R 05.375.40.47.0 L				

⇐ No longer available -
Change to loose wear plates.

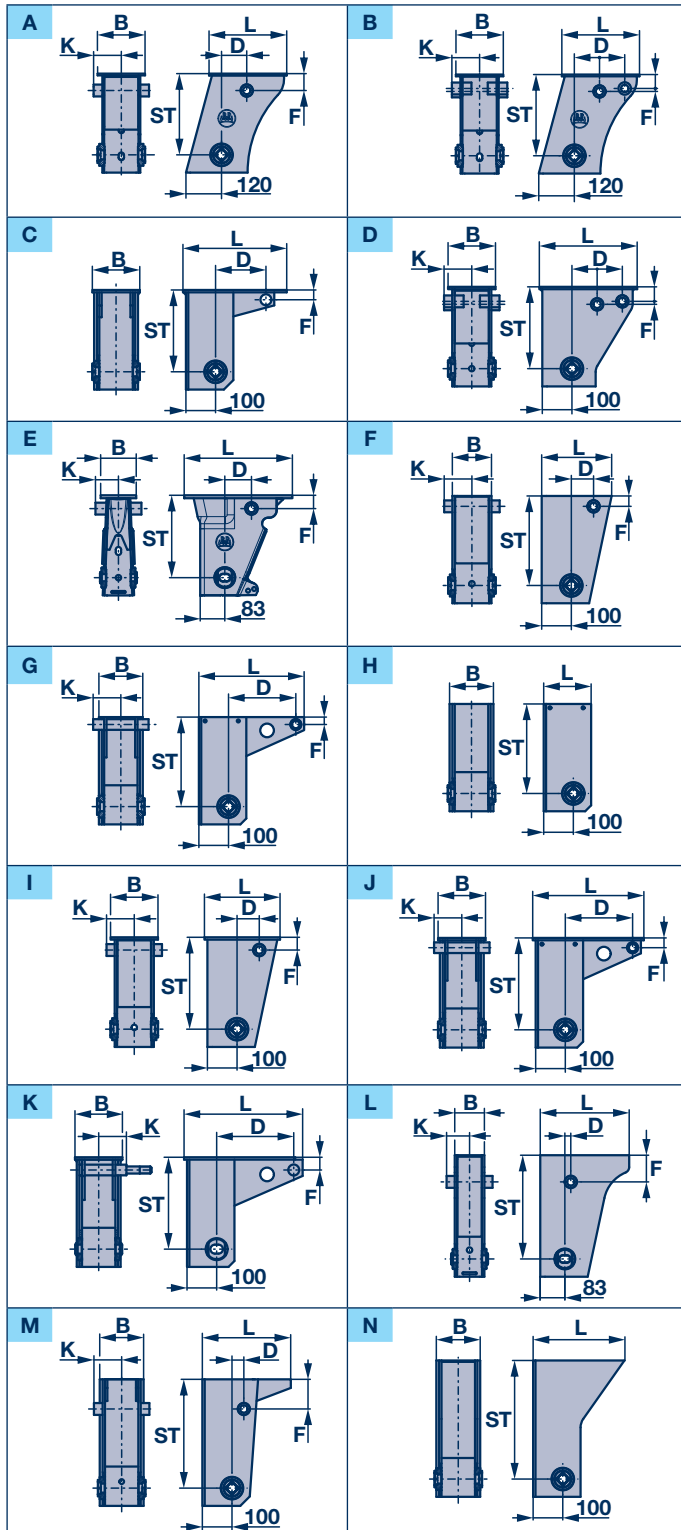
* No longer available -
Change to spring pivot bolt Ø 24.

7 BPW Hanger brackets

7.1 Hanger brackets

Hanger bracket height (ST) 274 - 430 mm

O
SL
AL







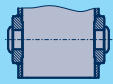
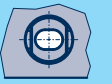
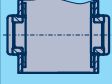
		ST Hanger bracket height up to centre spring pivot bolt						
		FB Trailing arm width		Ø Ø Spring pivot bolt (Ø 24 or Ø 30)				
ST	Exec.	Fig.	FB	Ø	B	D	F	K
274	D	A	100	30	160	85	57	93.5
		B	100	30	160	85 / 170	57 / 47	93.5
276	D	C	100	30	160	170	33	-
		D	100	30	160	85 / 170	57 / 47	93.5
278	K	E	70	24	120	55	35	77.5
		F	70	24	120	90	35	77.5
302	E	F	100	30	132	75	35	93.5
		G	100	30	148	75	35	93.5
		H	100	30	148	227	25	93.5
		I	100	30	148	-	-	-
310	D	J	100	30	160	75	43	93.5
		K	100	30	160	227	33	93.5
		L	100	30	160	227	33	-
	E	M	100	30	160	260	33	93.5
		N	100	30	160	260	43	93.5
		O	100	30	160	260	43	93.5
350	E	P	70	24	100	20	90	77.5
		Q	70	30	100	20	90	77.5
		R	70	24	100	100	150	77.5
		S	70	30	100	100	150	77.5
367	E	T	100	30	148	40	100	-
		U	100	30	148	170	25	-
370	E	V	100	30	132	40	100	93.5
		W	100	30	132	140	90	93.5
378	D	X	100	30	160	40	108	93.5
		Y	100	30	160	140	98	93.5
400	E	Z	100	30	148	-	-	-
408	D	AA	100	30	160	130	58	93.5
430	D	AB	100	30	160	140	110	93.5

- A Alloy hanger bracket
 - D Steel hanger bracket with top plate
 - E Straight hanger bracket without top plate
 - K Bolted on hanger bracket with top plate
 - S Taper mounted steel hanger bracket
 - X Stainless steel hanger bracket
- Further versions upon request.

BPW Hanger brackets 7

Hanger brackets 7.1

Hanger bracket height (ST) 274 - 430 mm

L	Rigid				Adjustable		
	Standard	Reinforced	Standard	Reinforced	Standard	Reinforced	Standard
							
Loose wear plates		Welded on wear plates		Loose wear plates		Square frame	
262	05.375.40.71.0		↔ 05.375.40.15.0				
330			↔ 05.375.67.06.0				
262	05.375.40.64.0		↔ 05.375.40.02.0		05.375.40.50.0		↔ 05.375.40.07.0
330			↔ 05.375.67.04.0				↔ 05.375.63.91.0
350		05.375.68.78.0		↔ 05.375.67.27.0			
330		05.375.68.92.0		↔ 05.375.68.34.0			
365					05.375.44.42.0		
365					05.375.44.41.0		
236		05.375.68.91.0		↔ 05.375.68.29.0		05.375.68.53.0	↔ 05.375.68.30.0
236			↔ 05.375.67.38.0				
355		05.375.68.67.0				05.375.68.76.0	
160	05.375.68.81.0						
255		05.375.68.93.0		↔ 05.375.68.35.0			
375	05.375.68.66.0						
375	05.375.68.82.0						
375	05.375.68.68.0						
400					05.375.68.49.0 L 05.375.68.50.0 R		
400	05.375.68.65.0				05.375.68.77.0		
180	05.375.68.80.0		↔ 05.375.68.03.0	05.375.67.48.0.0			
180(230)	05.375.68.87.0						
300						05.375.44.34.0	
300						05.375.44.20.0 *	
300						05.375.44.33.0	
300						05.375.44.19.0 *	
298	05.375.69.02.0		↔ 05.375.67.99.0		05.375.69.03.0		
298	05.375.68.86.0						
328		05.375.68.94.0				05.375.68.55.0	
328		05.375.68.90.0		↔ 05.375.68.24.0		05.375.68.54.0	↔ 05.375.68.31.0
350		05.375.68.95.0		↔ 05.375.68.37.0			
350		05.375.68.96.0		↔ 05.375.68.39.0			
308	05.375.68.79.0						
350	05.375.68.74.0						
350			05.375.68.40.0			05.375.68.56.0	
<p>↔ No longer available - Change to loose wear plates.</p> <p>* No longer available - Change to Spring pivot bolt Ø 24.</p>							

7 BPW Hanger brackets

7.2 Spare parts for hanger brackets, integrated supports, frames

Spare parts for hanger brackets, integrated supports, frames

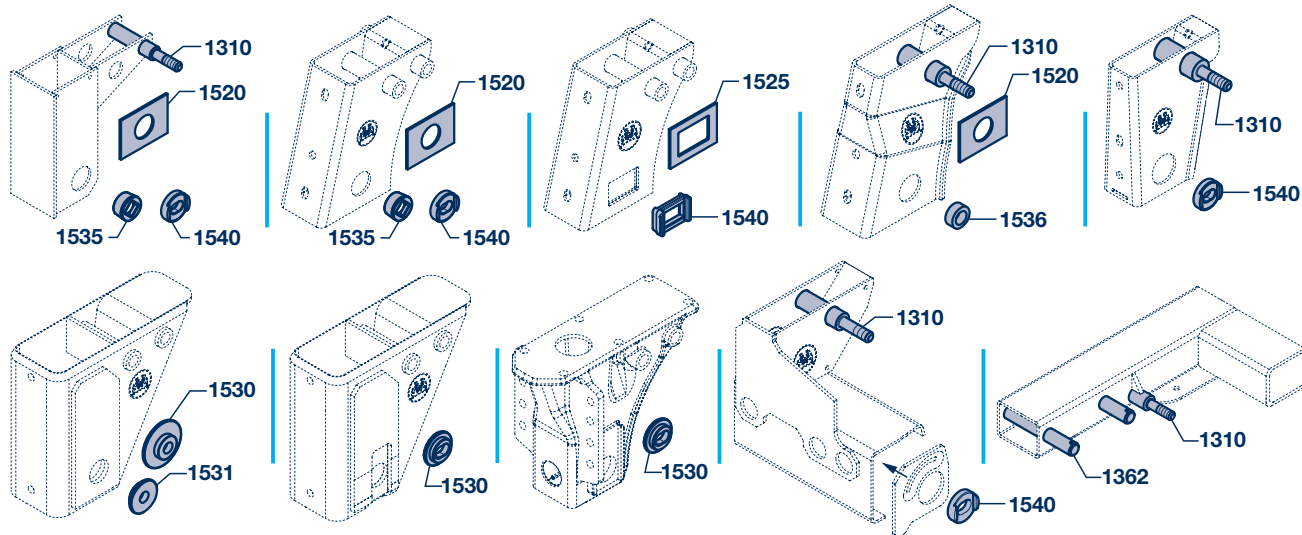
A		
Spring pivot bolt bearing for steel hanger bracket with slotted bushes (torsion protection), welded on wear plates	Spring pivot bolt bearing for steel hanger bracket with square internal lock bushes (torsion protection), welded on wear plates	Spring pivot bolt bearing for steel hanger bracket with square internal lock bushes (torsion protection), loose wear plates
<p>A</p>	<p>B</p>	<p>C</p>
<p>D</p>	<p>E</p>	<p>F</p>
<p>G</p>	<p>H</p>	<p>I</p>
<p>J</p>	<p>K</p>	<p>L</p>
<p>M</p>	<p>N</p>	<p>O</p>

¹⁾ Changing the weld-in bushes see pages 110 / 111.
 Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

BPW Hanger brackets 7

Spare parts for hanger brackets, integrated supports, frames 7.2

Spare parts for hanger brackets, integrated supports, frames



Item	Designation	Fig.	Dimension								BPW Code no.		
			L	L1	D	D1	d	B					
Shock absorber attachment													
1310	Threaded bolt		see upper shock absorber attachment page 86										
Check strap attachment													
1363	Threaded bolt		see check strap attachment page 97										
Round wearing plate													
1520	Washer	A	Ø 30 / 121 x 5	-	-	Ø 121	-	Ø 30	4.75	03.320.36.08.0			
Square wearing plate													
1520	Plate	B	Ø 56 / □ 105 x 4.5	105	105	-	-	Ø 56	4.5	03.281.15.03.0			
		C	Ø 56 / □ 105 x 4.5							03.281.24.17.0			
		B	Ø 56 / □ 101/140 x 4.5	101	140					03.281.35.16.0			
			Ø 56 / □ 101/140 x 5							03.281.25.07.0 V2A			
1525	Plate	D	□ 62/92 / □ 101/140 x 4.5	140	101	-	-	□ 62/92	4.5	03.281.25.04.0			
		E	□ 62/92 / □ 101/130 x 4.5	130						03.281.25.06.0			
			□ 62/92 / □ 101/140 x 4.5	140						03.285.25.34.0			
1530	Washer	F	Ø 24 / 36.6 / 50/70 x 15	15.6	9.8	Ø 70	Ø 50	-	-	03.320.14.09.0			
	Bush		Ø 24 / 36.6 / 55/90 x 20	20						14	Ø 90	Ø 55	03.113.00.50.1
			Ø 30 / 42.6 / 55/90 x 20										Ø 30/42
	Washer	G	Ø 24 / 50 / 110 x 20	19.5	9.8	Ø 110	Ø 50			Ø 24	03.320.16.09.0		
			Ø 30 / 50 / 110 x 18	18.5						Ø 30	03.320.16.03.0		
			Ø 30 / 50 / 110 x 20	19.5						Ø 30	03.320.16.04.0		
1531	Washer	G	Ø 24 / 50 / 70 x 15	15.5	9.8	Ø 70	Ø 50	Ø 24	03.320.14.08.0				
			Ø 30 / 50 / 70 x 16	15.5				Ø 30	03.320.14.07.0				
			Ø 30 / 50 / 70 x 18	18.5				Ø 30	03.320.15.10.0				
1535	Bush ¹⁾ (weld-in bush)	A		Torsion protection with slotted bush. No longer available. Conversion to torsion protection with square internal lock bush.						03.113.02.06.0 03.113.02.09.0			
		H	Ø 30 / 51 / 56 x 29	29		Ø 56	Ø 51	Ø 30.5	□ 30	03.113.01.34.0			
		I	Ø 24 / 55 / 67.6 x 22	22		Ø 68	Ø 55	Ø 24.1	□ 24	03.113.00.56.0			
		J	Ø 30 / 55 / 73.6 x 24	24		Ø 74	Ø 55	Ø 30.5	□ 30	03.113.01.46.0			
		1536	Ring	K	Ø 30 / 55 x 25			Ø 55		Ø 30.5	25	03.310.32.45.0 V2A	
Bush with welded on torsion protection	L		Ø 30 / 55 / 63 x 31			Ø 55	Ø 63	Ø 30.5	31	05.113.01.40.0 V2A			
1540	Bush ¹⁾ (weld-in bush)	M	Ø 24 / 36 / 67 x 21	52		Ø 62		Ø 24/36	21	03.113.03.10.0			
		N	Ø 24 / 36 / 67 x 21		03.113.03.09.0 V2A								
		M	Ø 30 / 42 / 74 x 23	58	Ø 74					Ø 30/42	23	03.113.23.01.0	
		N	Ø 30 / 42 / 74 x 23									03.113.01.45.0 V2A	
	Formed piece	O	92 x 62 x 29	72		92		70	29	03.001.14.86.0			

7 BPW Hanger brackets

7.2 Spare parts for hanger brackets, integrated supports, frames

7.2.1 Changing the weld-in bushes (spring bolt assembly) in BPW hanger brackets

Changing the weld-in bushes (spring bolt assembly) in BPW air suspension hanger brackets for 100 mm wide trailing arms and loose wear plates

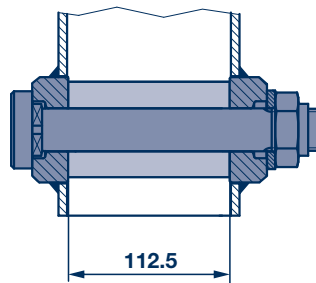
Perform the following work if the mounting bushes are worn out:

1. Remove the worn-out bushes from the side plates
2. Insert new bushes and use spacer sleeve* (112.5) or trailing arm bush (102.5 +0.5) plus mounted wear plates to preload, align centrally and with adjustable hanger brackets horizontally and tack-weld

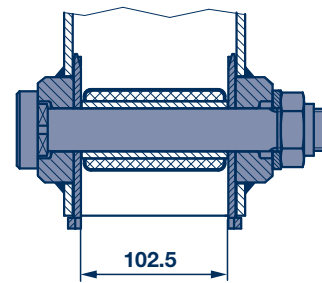
with mounted spacer sleeve*

* No BPW tool

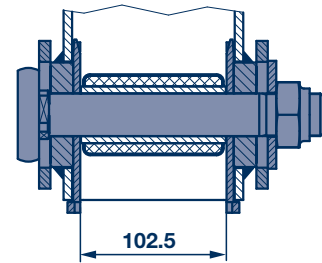
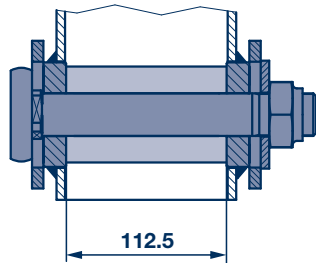
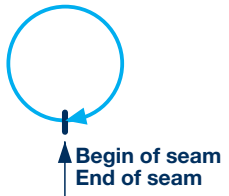
Rigid hanger bracket



with mounted trailing arm bush and wear plates



Adjustable hanger bracket



3. Weld the bushes
4. When mounting the trailing arms:
 - Lightly grease the stud thread and nut contact surface
 - Mount wear plates
 - Tighten lock nut M 30 to M = 900 (840 - 990) Nm



Important for all welding work!

The trailing arms, air bags and plastic pipes should be protected against sparks and weld splashes during all welding work. The earth terminal must under no circumstances be attached to the trailing arm or hub.

Welding method:

- ☉ Inert gas welding
Weld wire quality G 4 Si 1 (DIN EN 440)
- ☉ Manual arc welding
Rod electrodes E 46 2 (DIN EN 499)

Mechanical quality values must be equivalent to basic material S 355 J 2 or S 420.

Weld thickness a 4 Δ up to a 5 Δ (DIN EN ISO 25817)

Avoid end cavities and undercutting!

BPW Hanger brackets 7

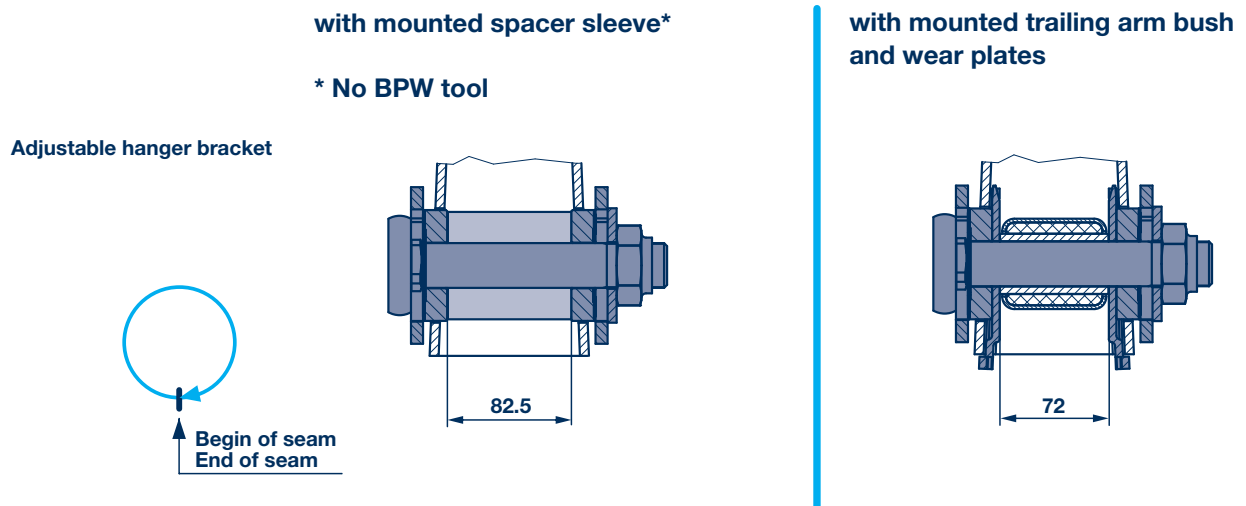
Spare parts for hanger brackets, integrated supports, frames 7.2

Changing the weld-in bushes (spring bolt assembly) in BPW hanger brackets 7.2.1

Changing the weld-in bushes (spring bolt assembly) in BPW air suspension hanger brackets for 70 mm wide trailing arms and loose wear plates

Perform the following work if the mounting bushes are worn out:

1. Remove the worn-out bushes from the side plates
2. Insert new bushes and use spacer sleeve* (82.5) or trailing arm bush (72+0.5) plus mounted wear plates to preload, align centrally and with adjustable hanger brackets horizontally and tack-weld



3. Weld the bushes
4. When mounting the trailing arms:
 - Lightly grease the stud thread and nut contact surface
 - Mount wear plates
 - Tighten lock nut M 24 to M = 650 (605 - 715) Nm
M 30 to M = 900 (840 - 990) Nm



Important for all welding work!

The trailing arms, air bags and plastic pipes should be protected against sparks and weld splashes during all welding work. The earth terminal must under no circumstances be attached to the trailing arm or hub.

Welding method:

- ☉ Inert gas welding
Weld wire quality G 4 Si 1 (DIN EN 440)
- ☉ Manual arc welding
Rod electrodes E 46 2 (DIN EN 499)

Mechanical quality values must be equivalent to basic material S 355 J 2 or S 420.

Weld thickness a 4 Δ up to a 5 Δ (DIN EN ISO 25817)

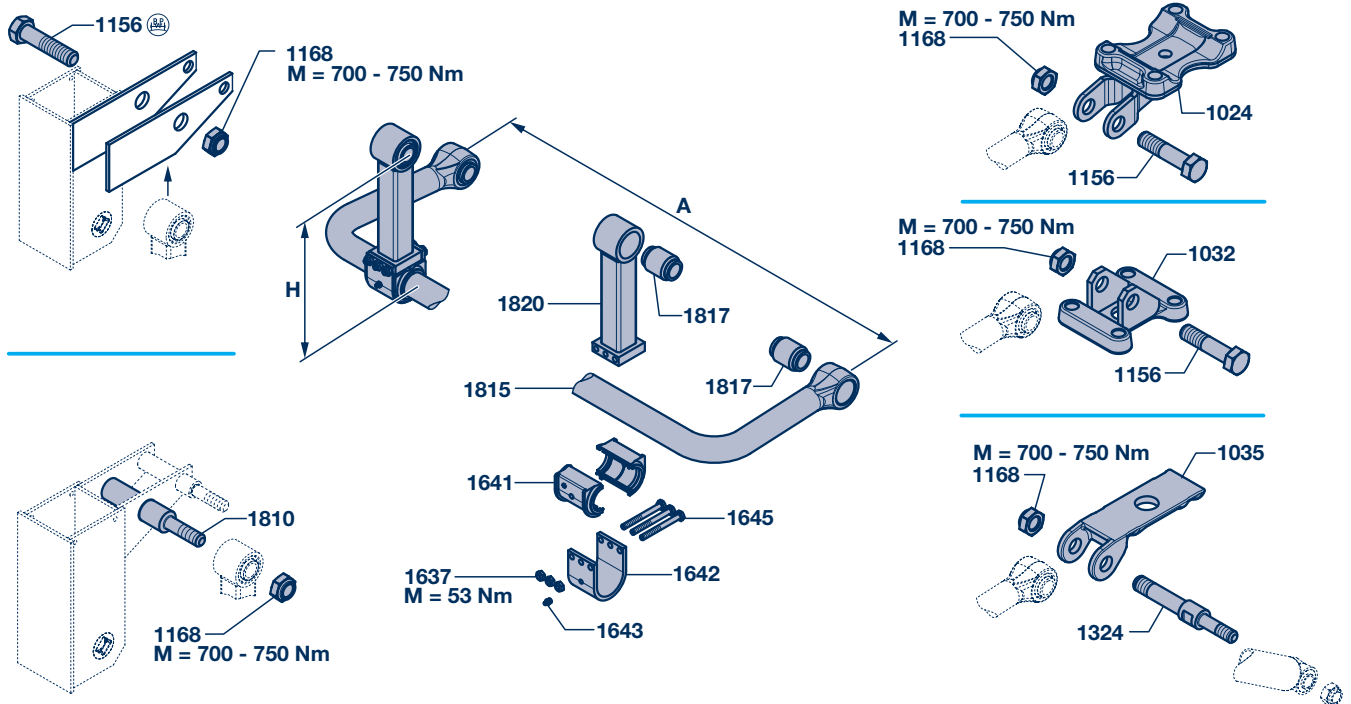
Avoid end cavities and undercutting!

8 U-stabilisers

U-stabilisers, attachments

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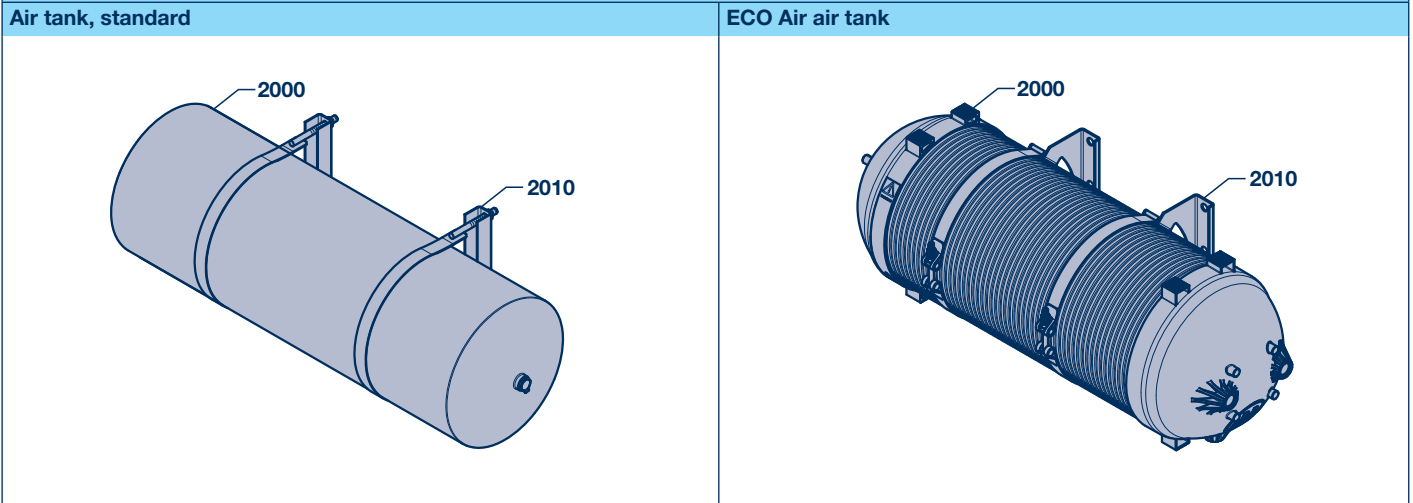
U-stabilisers, attachments



Item	Designation	Dimension	BPW Code no.	
			Lower stabilisers attachment between plates	Lower stabilisers attachment with threaded bolts
1024	Spring seat		see page 29	-
1032 1035	Spring plate		see page 39 / 41	see page 39 / 41
1156	Hexagon screw	M 30 x 130 - 8.8	03.340.15.26.0	-
1168	Lock nut	M 30 / SW 46	03.260.15.01.0	03.260.15.01.0
1324	Threaded bolt	M 24 / M 30 / L = 260	-	03.177.24.22.0
			Upper stabilisers attachment between plates	Upper stabilisers attachment with threaded bolts
1156	Hexagon screw	M 30 x 130 - 8.8	03.340.15.26.0	-
1168	Lock nut	M 30 / SW 46	03.260.15.01.0	03.260.15.01.0
1810	Threaded bolt	M 30 / Ø 45 x 144	-	03.177.35.08.0
1637	Lock nut	VM 10 / 980	02.5220.10.82	
1641	Bush	Ø 50 / 70 x 94	03.113.98.06.0	
1642	Shaped plate		03.160.56.01.0	
1643	Grease nipple	AM 10 x 1 / 71412	02.6802.03.50	
1645	Hexagon screw	M 10 x 110 - 10.9	02.5021.54.11	
			Bush (item 1817)	
1815	U-Bolt, incl. item 1817	A = 900	05.114.98.18.0	
		A = 980	05.114.98.19.0	
		A = 1100	05.114.98.20.0	05.113.96.06.0 Ø 30 / 52.6 x 68
		A = 1200	05.114.98.21.0	
		A = 1300	05.114.98.22.0	
1820	Support, incl. item 1817	H = 120	05.189.01.78.0	05.113.96.06.0 Ø 30 / 52.6 x 68
		H = 180	05.189.03.97.0	
		H = 275	05.189.02.16.0	05.113.96.05.0 Ø 30 / 60 x 68
		H = 395	05.189.03.99.0	

Air tanks 9

Air tanks



Item	Designation	Remark	Dimension	BPW Code no.
------	-------------	--------	-----------	--------------

Air tank, standard							
			Capacity Litre	Ø	L	Air tank	Attachment, item 2010
2000	Air tank		10	206	355	02.2004.09.00	05.189.15.21.0
			40	276	745	02.2004.01.00	02.0328.10.00
			60	310	850	02.2004.05.00	05.189.14.68.0
		Alloy	60	310	850	02.2004.11.00	05.189.14.68.0
			60	396	565	02.2004.02.00	02.0326.13.00
		Alloy	60	396	565	02.2004.10.00	02.0326.13.00

ECO Air air tank

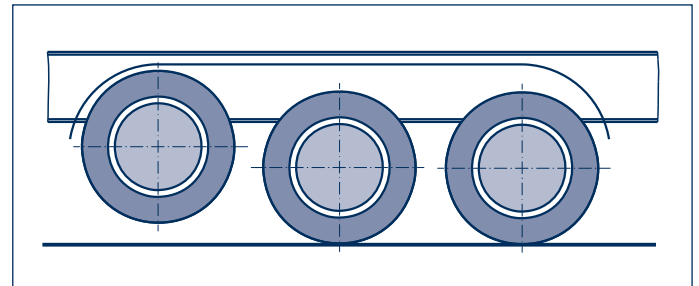
			Capacity Litre	Ø	L	Air tank, item 2000	Attachment, item 2010	BPW Code no. cpl. with attachment
in preparation	2000	Air tank	30	276	652	02.2004.36.00	05.189.16.25.0	05.824.00.10.0
			40	276	832	02.2004.35.00	05.189.16.25.0	05.824.00.09.0
			60	276	1190	02.2004.34.00	05.189.16.25.0	05.824.00.08.0
			60	310	988	02.2004.33.00	05.189.16.26.0	05.824.00.07.0
			60	396	683	02.2004.30.00	05.189.16.27.0	05.824.00.04.0
			80	310	1275	02.2004.38.00	05.189.16.26.0	05.824.00.14.0
			80	396	859	02.2004.31.00	05.189.16.27.0	05.824.00.05.0
			100	396	1035	02.2004.32.00	05.189.16.27.0	05.824.00.06.0
			120	396	1212	02.2004.37.00	05.189.16.27.0	05.824.00.13.0

10 BPW Axle lift devices

General

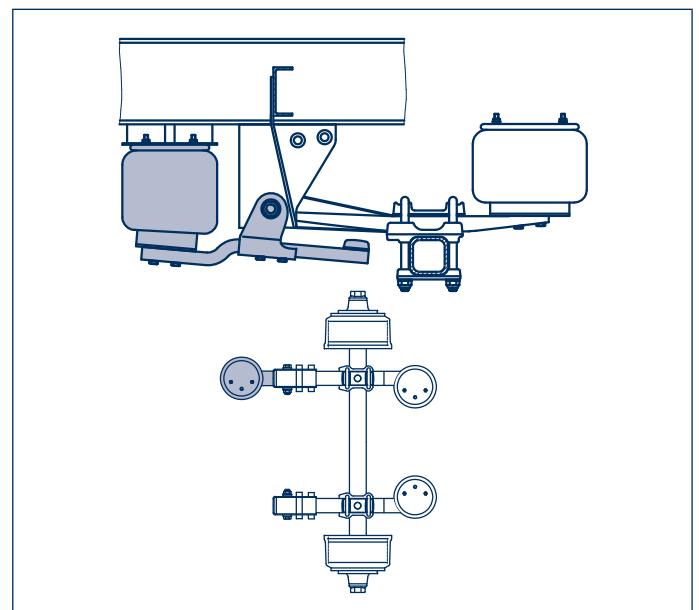
BPW Axle lift devices

As an option, multi-axle vehicles can be equipped with an axle lift to reduce the wear on the tyres when driving unladen or with a light cargo. BPW offers axle lifts for positioning in the middle or at the sides of the axle.



Side mounted axle lift

A side mounted lift is recommended for lifting the first axle and in vehicles with limited ground clearance, high axle loads or long suspension travel.

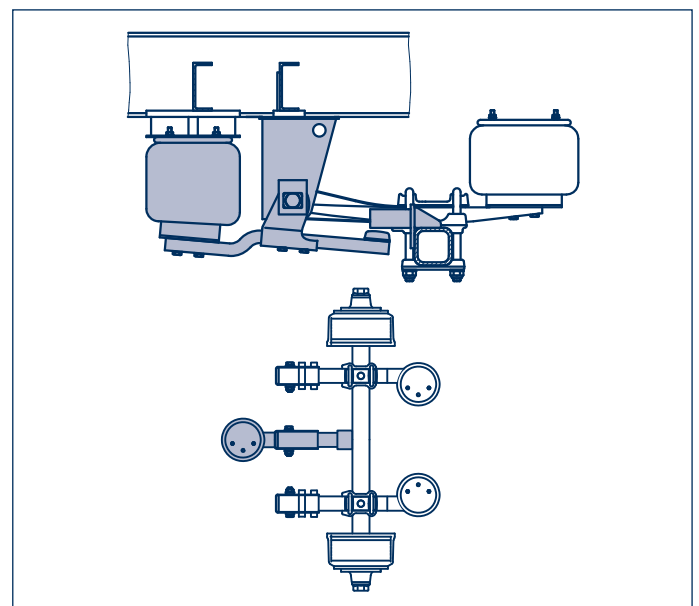


Central mounted axle lift

The lifting device can be arranged in the centre of the axle for lifting the middle (rear) suspension axle or if space is limited.

This axle lift device is attached to the frame by crossmembers in the middle of the vehicle. The lift bag forces must also be absorbed by a crossmember.

Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.



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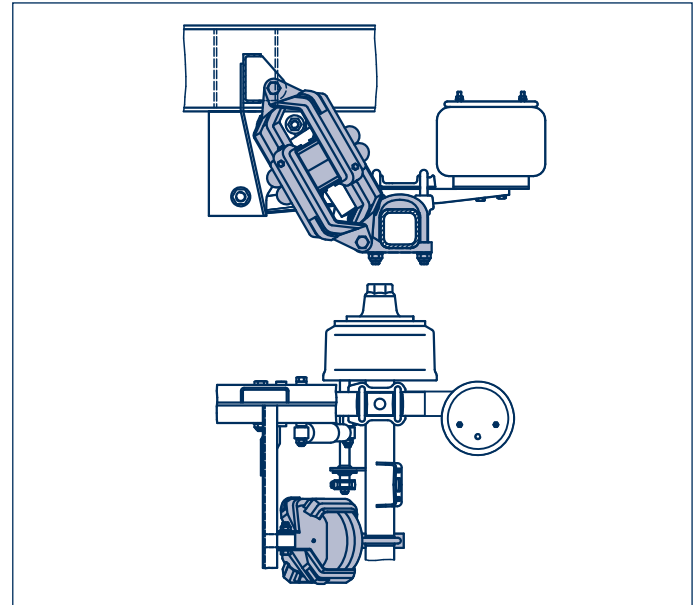
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BPW Axle lift devices 10

General

Central lift

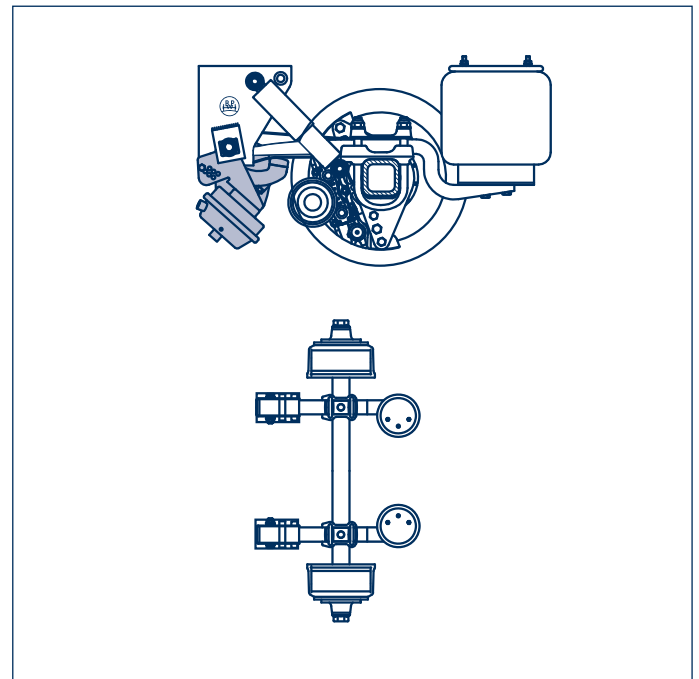
Both the central axle lift device using a lifting bag and the BPW central lift with bellows fitted in the middle of the vehicle can lift one or more suspension axles and are integrated within the space of the axle unit. Their compact design means they are preferred for use in vehicles with limited ground clearance and small tyres (e.g. pallet box trailers with single tyres).



Two-sided axle lift

The two-sided lift (for air-sprung axles up to 10 tonnes) does not need any space in front of the air suspension hanger brackets or in the middle of the vehicle.

It can be retrofitted at any time to offer the convincing benefits of low weight and good ground clearance.



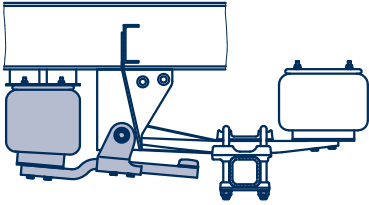
Spare parts for ECO Air COMPACT air suspensions see pages 132 - 138.

10 BPW Axle lift devices

10.1 Side mounted axle lifts

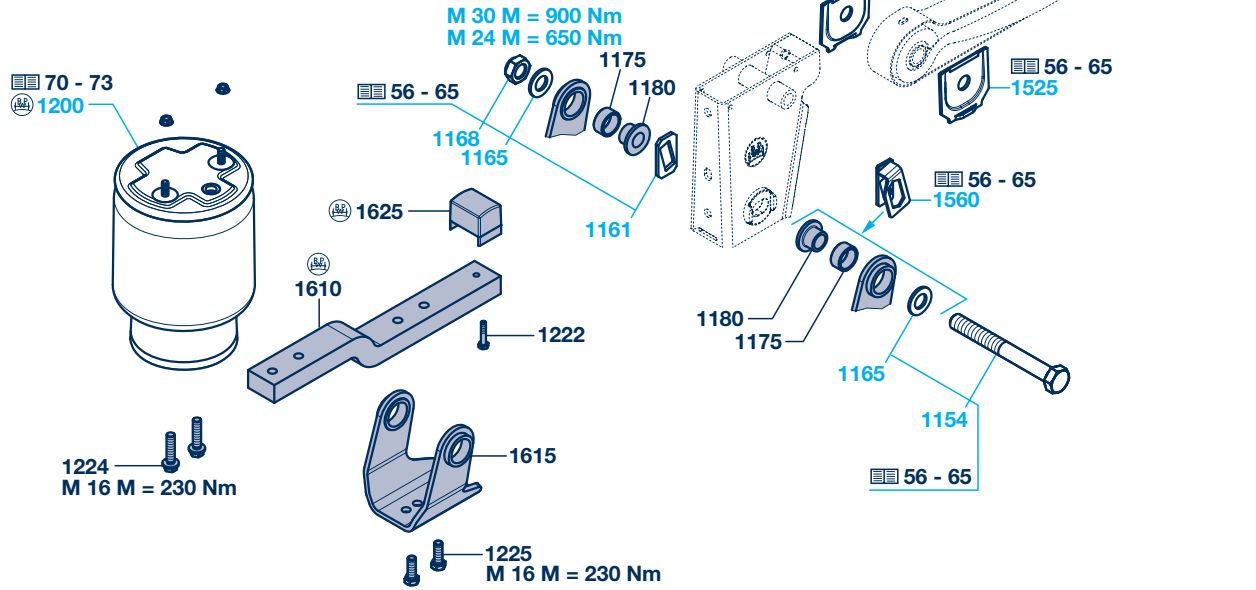
10.1.1 Trailing arm width 70 mm

Side mounted axle lifts, trailing arm width 70 mm

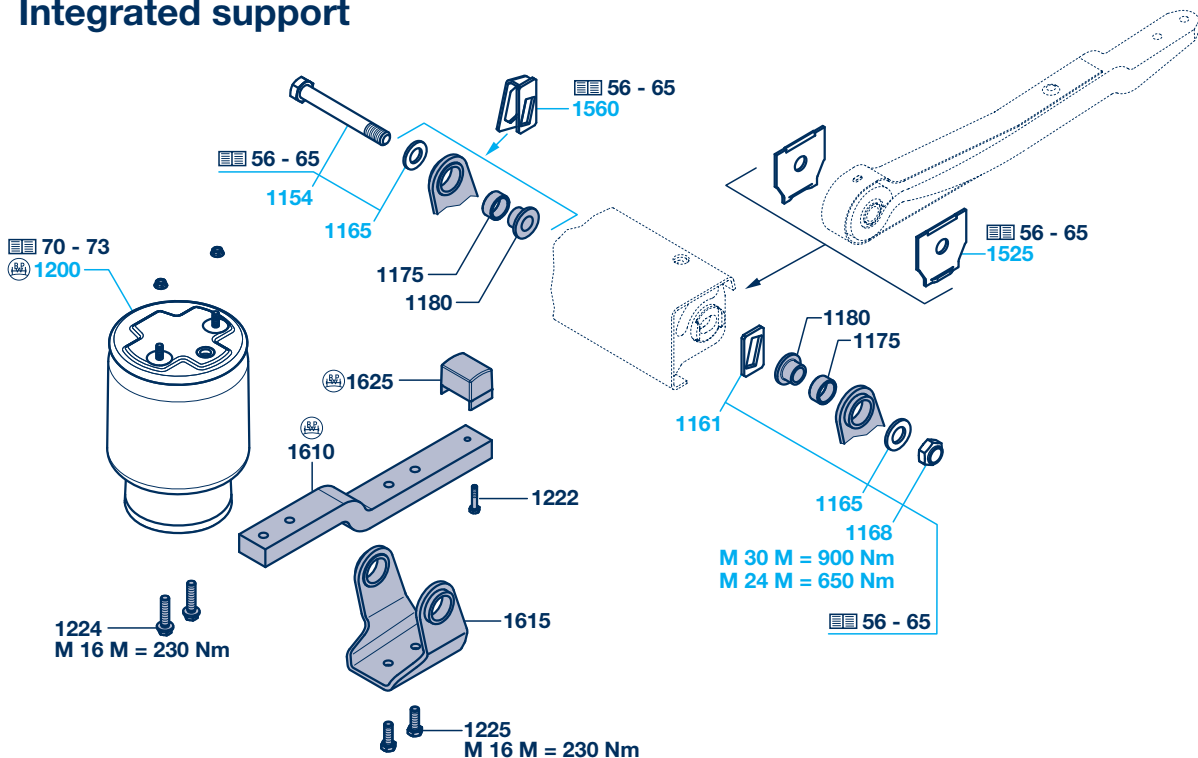


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Standard hanger bracket



Integrated support



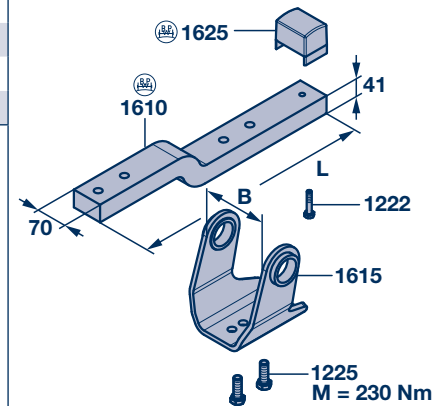
BPW Axle lift devices 10

Side mounted axle lifts 10.1

Trailing arm width 70 mm 10.1.1

Side mounted axle lifts, trailing arm width 70 mm

Item	Designation	Remark	BPW Code no.	Dimension
1154 / 1156	Screw (spring pivot bolt)			
1161	Plate (adjusting plate)		see page 56 - 65	
1165	Washer			
1168	Lock nut			
			Spring pivot bolt M 24	Spring pivot bolt M 30
1175	Bush		03.113.94.10.0	Ø 41 / 50 x 23
1180	Bush (graduated bush)		03.113.00.54.0	Ø 24 / 40 / 62 x 33.5
			03.113.01.47.0	Ø 30 / 40 / 62 x 31
1200	Air bag		see page 70 - 73	
1222	Locking screw		02.5025.56.11	M 10 x 50
1224	Locking screw		02.5070.95.00	M 16 x 65
1225	Locking screw		02.5026.35.12	M 16 x 45
1525	Shaped plate			
1560	Adjusting plate with welded on torsion protection		see page 56 - 65	
1610	Lifting arm		03.195.01.01.0	L = 605
1615	Support		05.189.15.15.0	B = 146
1222	Locking screw		02.5025.56.11	M 10 x 50
1625	Bump stop		02.3506.07.00	80 x 61 x 70
Fig. for spare parts see pages 56 - 65.				

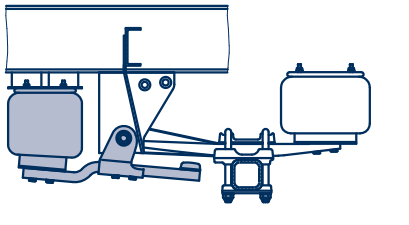


10 BPW Axle lift devices

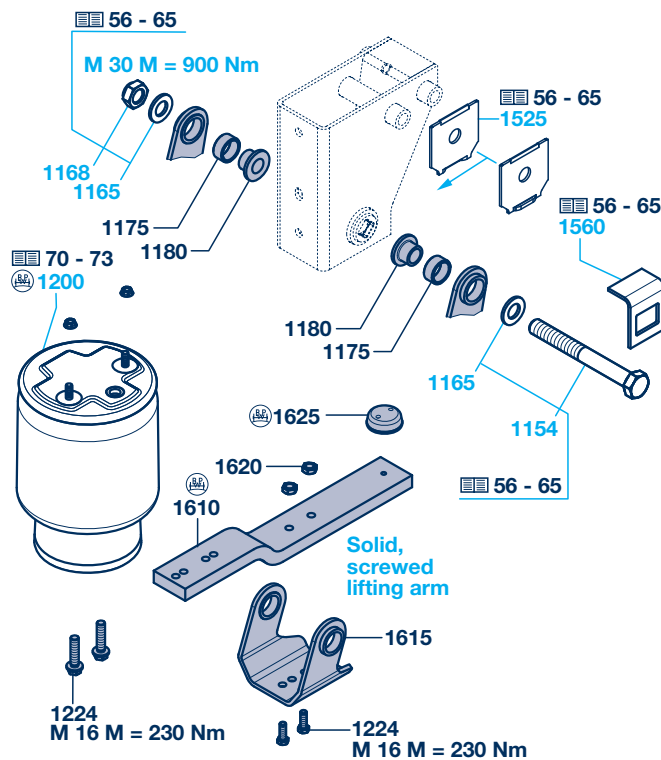
10.1 Side mounted axle lifts

10.1.2 Trailing arm width 100 mm

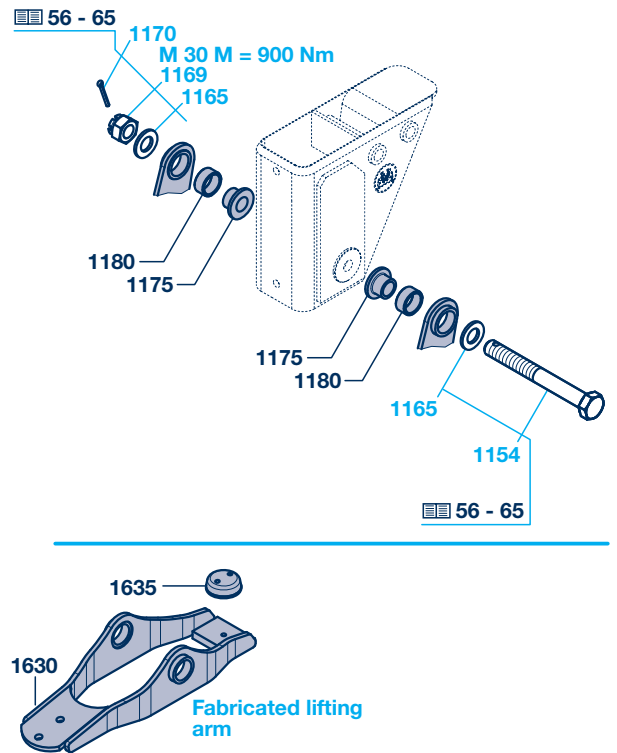
Side mounted axle lifts, trailing arm width 100 mm



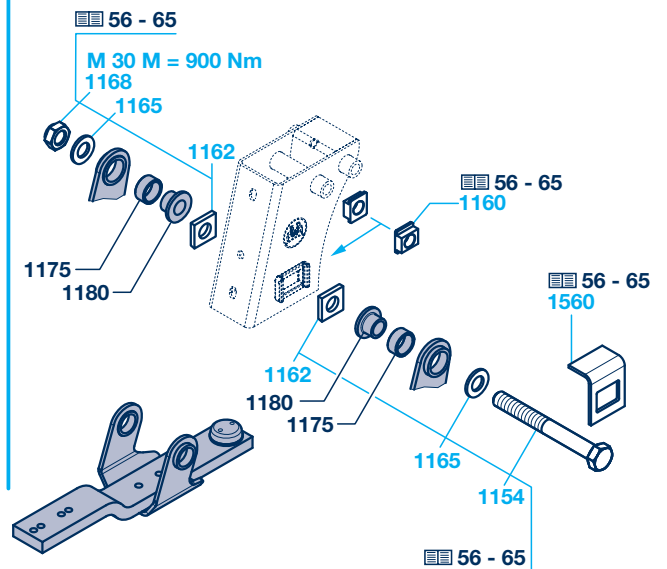
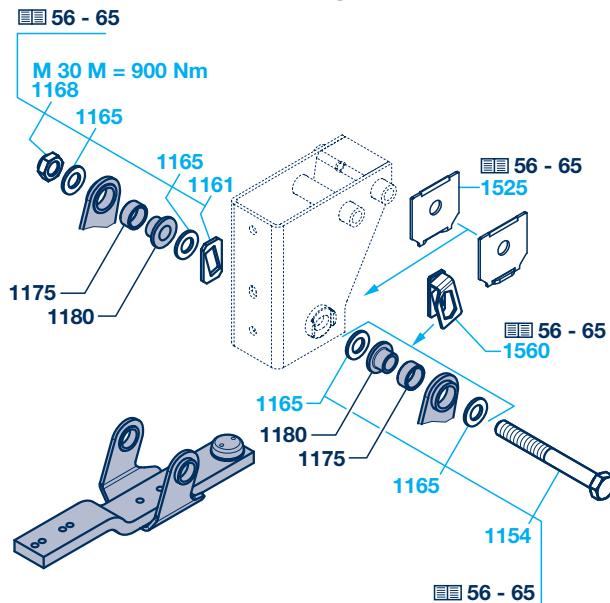
Rigid steel hanger bracket



Rigid alloy hanger bracket



Adjustable steel hanger bracket



BPW Axle lift devices 10

Side mounted axle lifts 10.1

Trailing arm width 100 mm 10.1.2

Side mounted axle lifts, trailing arm width 100 mm				
Item	Designation	Remark	BPW Code no.	Dimension
1154 / 1156	Screw (spring pivot bolt)			
1160	Slider			
1161	Plate (adjusting plate)			
1162	Plate		see page 56 - 65	
1165	Washer			
1168	Lock nut			
1169	Castle nut	for alloy bracket		
1170	Split pin	for alloy bracket		
1175	Bush		03.113.94.10.0	Ø 41 / 50 x 23
1180	Bush (graduated bush)		03.113.01.29.0	Ø 30 / 40 / 46 x 31
			03.113.01.47.0	Ø 30 / 40 / 62 x 31
			03.310.30.49.0	Ø 30 / 39 x 25
1200	Air bag		see page 70 - 73	
1224	Locking screw		03.340.12.21.0	M 16 x 30
	Locking screw		02.5070.95.00	M 16 x 65
1525	Shaped plate			
1560	Shaped plate (welded on torsion protection with steel hanger brackets)		see page 56 - 65	
	Adjusting plate with welded on torsion protection			
Solid, screwed lifting arm				
1610	Lifting arm		03.195.00.97.0	L = 680
1615	Support	for steel bracket	05.189.12.38.0	B = 166
		for steel bracket	05.189.13.19.0	B = 176
		for alloy bracket	05.189.07.38.0	B = 193
1224	Locking screw		02.5070.95.00	M 16 x 65
1620	Lock nut *		02.5220.23.82	VM 16 / 980-8
1625	Bump stop		02.3506.02.00	Ø 80 / M 12
* for lifting arm without threaded holes				
Fabricated lifting arm				
1630	Support		05.189.14.65.0	L = 656, H = 87
Further versions upon request.				
1224	Locking screw		02.5071.06.10	M 16 x 40
1635	Bump stop		02.3506.02.00	Ø 80 / M 12

for fabricated lifting arm
for solid lifting arm

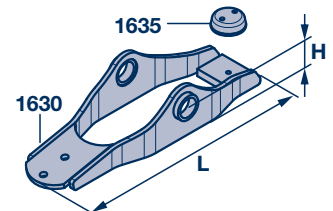
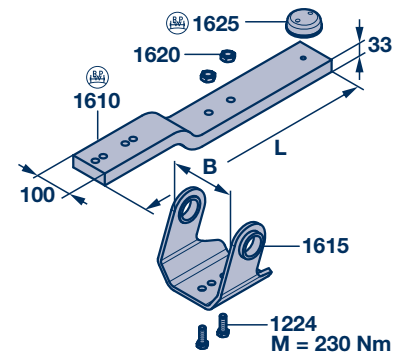
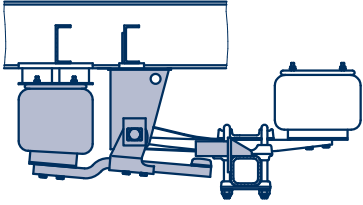


Fig. for spare parts see pages 56 - 65.

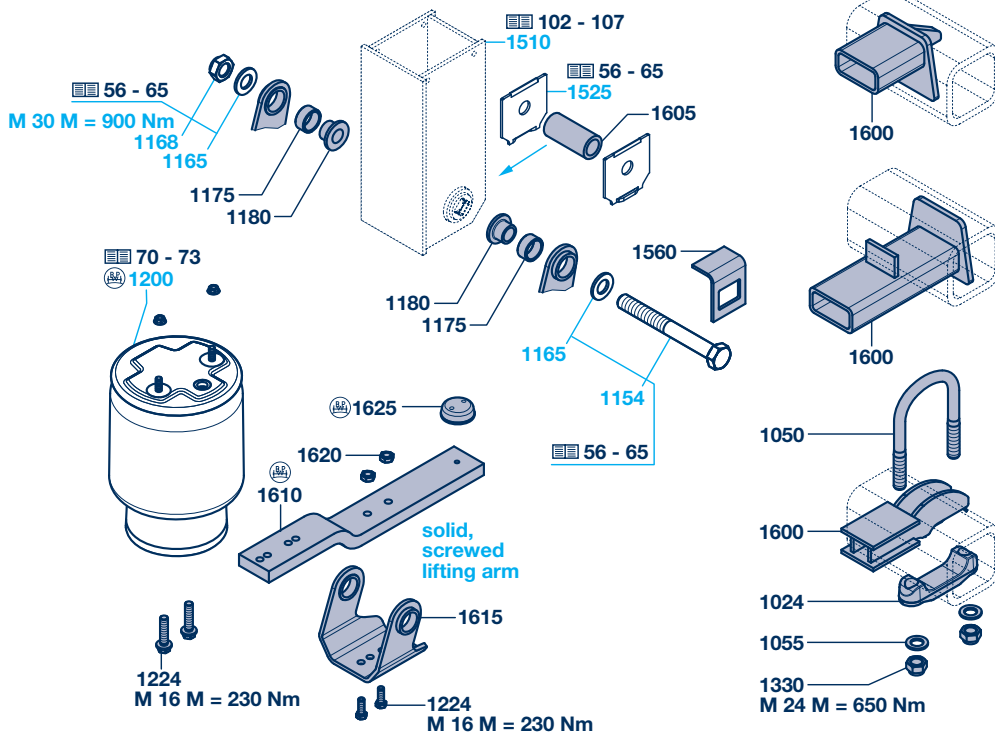
10 BPW Axle lift devices

10.2 Central axle lifts

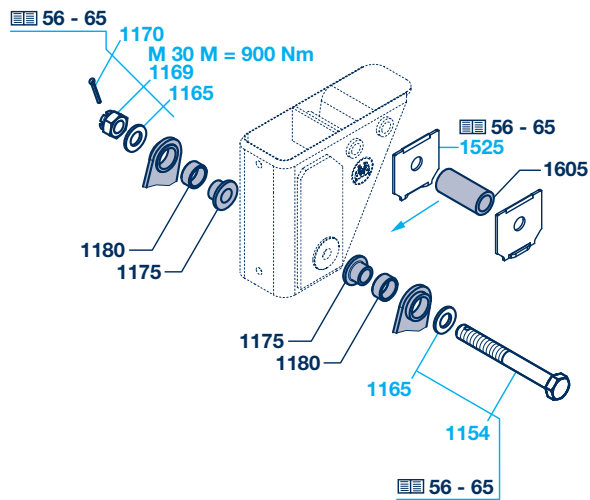
Central axle lifts



Rigid steel hanger bracket



Rigid alloy hanger bracket



BPW Axle lift devices 10

Central axle lifts 10.2

Central axle lifts					
Item	Designation	Remark	BPW Code no.	Dimension	
1154 / 1156	Screw (spring pivot bolt)		see page 56 - 65		
1165	Washer				
1168	Lock nut				
1169	Castle nut	for alloy bracket			
1170	Split pin	for alloy bracket			
1175	Bush		03.113.94.10.0	∅ 41 / 50 x 23	
1180	Bush (graduated bush)		03.113.01.29.0	∅ 30 / 40 / 46 x 31	
			03.113.01.47.0	∅ 30 / 40 / 62 x 31	
1200	Air bag		see page 70 - 73		
1224	Locking screw		02.5070.95.00	M 16 x 65	
1510	Hanger bracket		see page 102 - 107		
1525	Shaped plate		see page 56 - 65		
1560	Shaped plate (welded on torsion protection with steel hanger brackets)		03.161.35.07.0		
Support above the axle					
1600	Support	welded	05.189.06.53.0	□ 120/150, ∅ 127	
			Support underneath the axle		
			05.189.07.31.0	□ 120, ∅ 127	
			05.189.07.32.0	□ 150	
Support above the axle					
1600	Support	clamped	05.189.15.50.0		
1024	Spring seat		03.032.26.62.0		
1050	Spring U-bolts		03.138.41.32.4	M 24 / 152 x 210	
1055	Washer		02.5401.25.07	A 25	
1330	Lock nut		02.5220.74.12	VM 24-10	
Solid, screwed lifting arm					
1605	Tube		03.301.74.04.0	∅ 35 / 51 x 102	
1610	Lifting arm		03.195.00.96.0	L = 720	
1615	Support	for steel bracket	05.189.12.38.0	B = 166	
		for steel bracket	05.189.13.19.0	B = 176	
		for alloy bracket	05.189.07.38.0	B = 193	
1224	Locking screw		02.5070.95.00	M 16 x 65	
1620	Lock nut *		02.5220.23.82	VM 16 / 980-8	
1625	Bump stop		02.3506.02.00	∅ 80 / M 12	
* for lifting arm without threaded holes					

for solid lifting arm

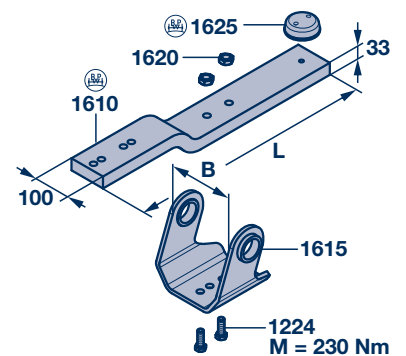
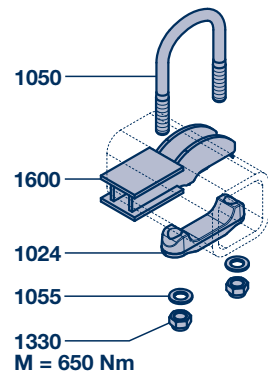
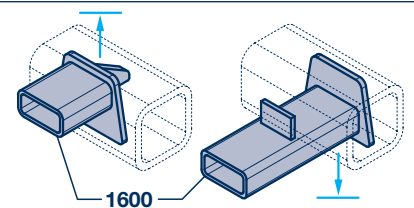


Fig. for spare parts see pages 56 - 65.

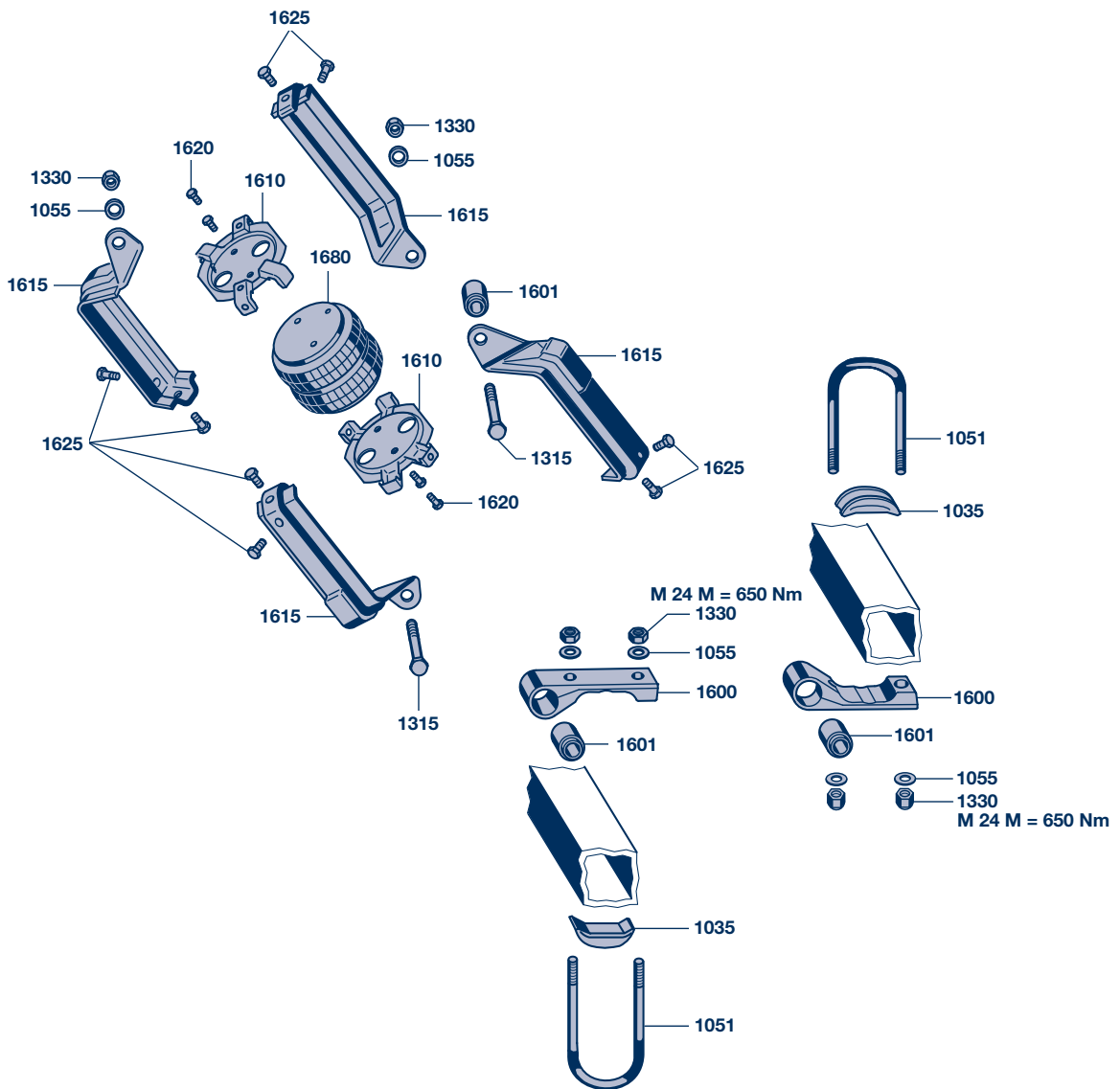
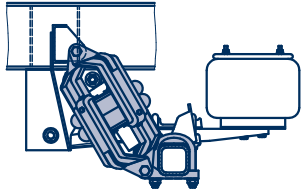
10 BPW Axle lift devices

10.2 Central axle lifts

10.2.1 Central axle lift

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Central axle lift



BPW Axle lift devices 10

Central axle lifts 10.2

Central axle lift 10.2.1

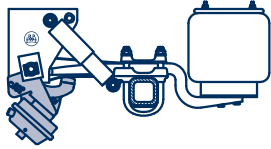
Central axle lift				
Item	Designation	Remark	BPW Code no.	Dimension
1035	Segment	for □ 120	03.345.23.02.1	41 x 122.5
1051	Spring U-bolts	for □ 120	03.138.41.31.4	M 24 / 152 x 190
1055	Washer		02.5401.25.07	Ø 25 / 125
1315	Hexagon screw		02.5023.29.82	M 24 x 120 / 931
1330	Lock nut		02.5220.74.12	VM 24 / 980-10
1600	Support, incl. item 1601	for □ 120	05.189.13.28.0	
1601	Bush		05.113.90.06.0	Ø 24 / 50 x 68
1610	Shaped plate		05.165.37.45.0	
1615	Shaped plate		05.165.49.44.0	
1620	Locking screw		02.5070.93.02	M 8 x 12 (4x)
1625	Locking screw		02.5070.63.02	M 10 x 25 (8x)
1680	Air bag		02.2002.19.00	

10 BPW Axle lift devices

10.3 Two-sided axle lifts

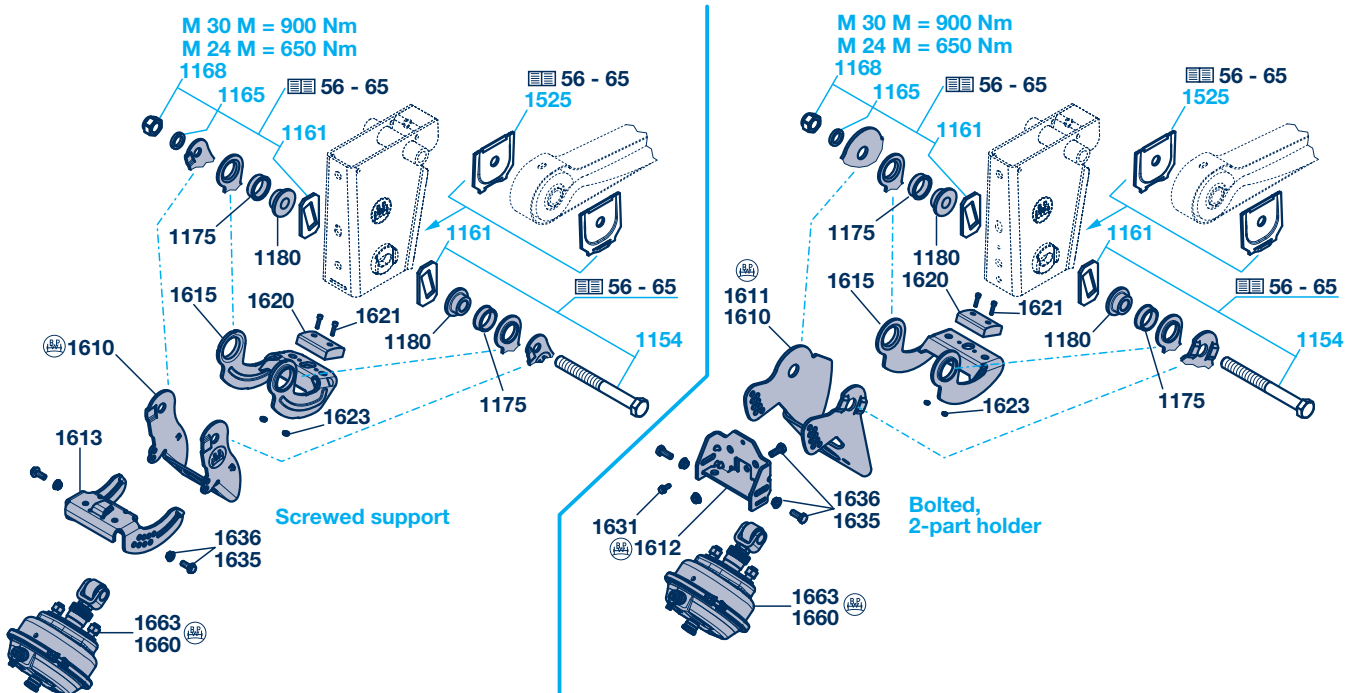
10.3.1 Trailing arm width 70 mm

Two-sided axle lift, steel hanger brackets

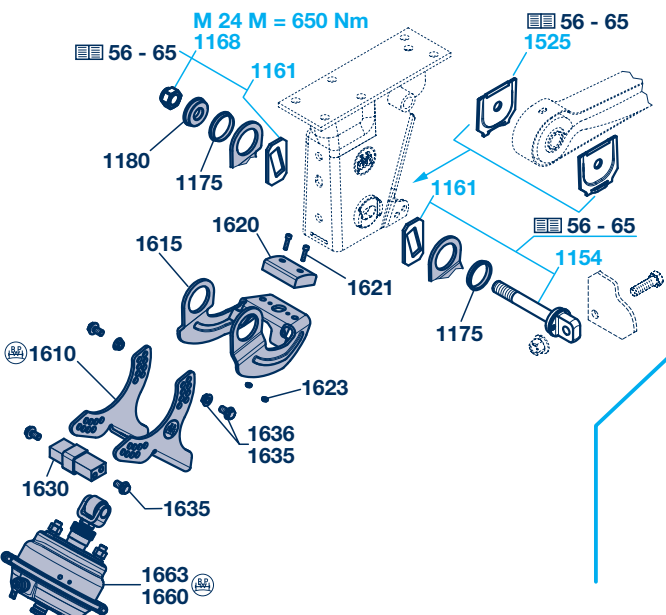


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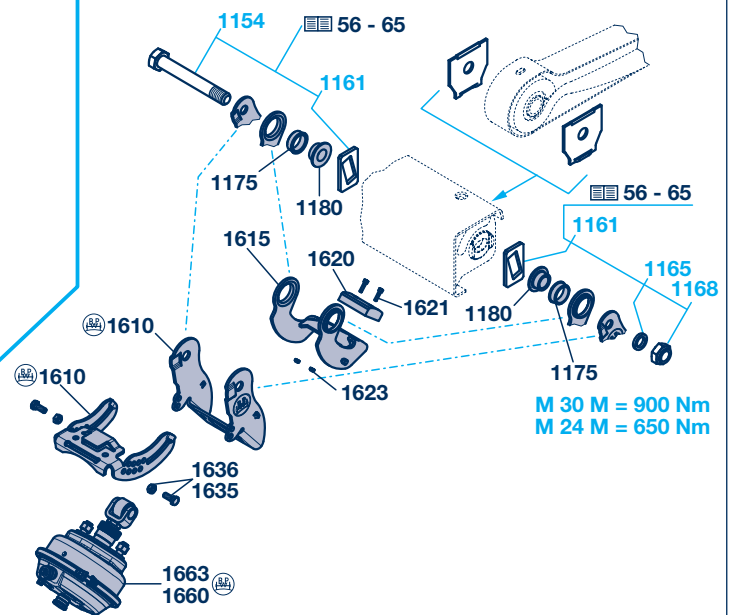
Standard hanger bracket



Bolted hanger bracket, bolted-on bracing plate



Integrated support



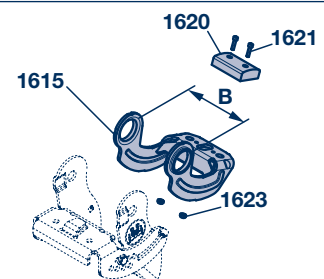
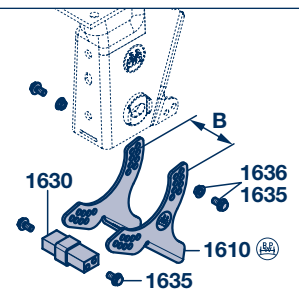
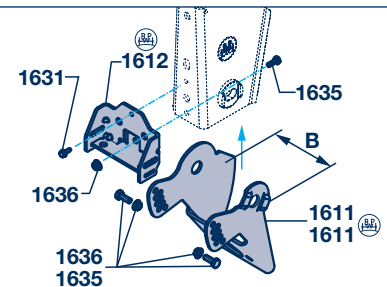
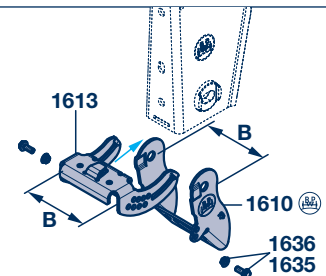
BPW Axle lift devices 10

Two-sided axle lifts 10.3

Trailing arm width 70 mm 10.3.1

Two-sided axle lift, steel hanger brackets				
Item	Designation	Remark	BPW Code no.	Dimension
1154 - 1156	Screw (spring pivot bolt)			
1161	Plate (adjusting plate)		see page 56 - 65	
1165	Washer			
1168	Lock nut			
1175	Bush		03.113.04.11.0	Ø 42 / 50 / 54 x 17.5
			03.113.06.16.0	Ø 54 / 58 / 62 x 9
1180	Bush (graduated bush)	Ø 24	03.113.00.28.0	Ø 24 / 42 / 62 x 22
		Ø 24	03.113.00.51.0	Ø 24 / 42 / 62 x 24
		Ø 24	03.112.05.03.0	Ø 24 / 54 / 59 x 13
		Ø 30	03.113.01.37.0	Ø 30 / 42 / 62 x 22
1525	Shaped plate		see page 56 - 65	
Screwed support				
1610	Shaped plate	Ø 30	03.165.46.52.0	B = 175
		Ø 24	03.165.40.48.0	B = 175
1613	Shaped plate	Steel hanger bracket	05.165.46.57.0	B = 189
		Integrated support	03.165.46.53.0	B = 189
1635	Locking screw		02.5071.53.11	M 12 x 30 / SW 17
1636	Lock nut		02.5273.33.80	M 12-10 / SW 17
Further versions upon request.				
Bolted, 2-part holder				
1610	Support, right		03.189.14.98.0	B = 175
1611	Support, left		03.189.14.97.0	B = 175
1612	Support		03.189.14.96.0	
1631	Locking screw		02.5071.37.00	M 8 x 45
1635	Locking screw		02.5071.53.11	M 12 x 30 / SW 17
1636	Lock nut		02.5220.14.82	VM 12 / 980-8
Screwed support with square bar				
1610	Shaped plate		03.165.40.54.0	B = 129
1630	Square bare		05.441.01.21.0	□ 25 / 40 x 117
1635	Locking screw		02.5071.53.11	M 12 x 30 / SW 17
1636	Lock nut		02.5273.33.80	M 12-10 / SW 17
1615	Lever		05.190.44.12.0	B = 146
			05.190.44.15.0	B = 170
1620	Bump stop		02.3506.06.00	90 x 60 x 25
1621	Cylinder head screw		02.5015.04.80	M 6 x 25
1623	Lock nut		02.5220.07.82	VM 6 / 980-8
1660	Diaphragm cylinder for axle lift, incl. item 1663		05.444.10.37.0	Typ 36, stroke > 90 mm
1663	Hexagon nut		02.5202.21.80	M 16 x 1.5

Fig. for spare parts see pages 56 - 65.

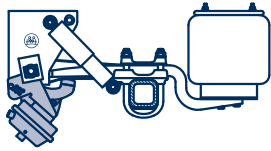


10 BPW Axle lift devices

10.3 Two-sided axle lifts

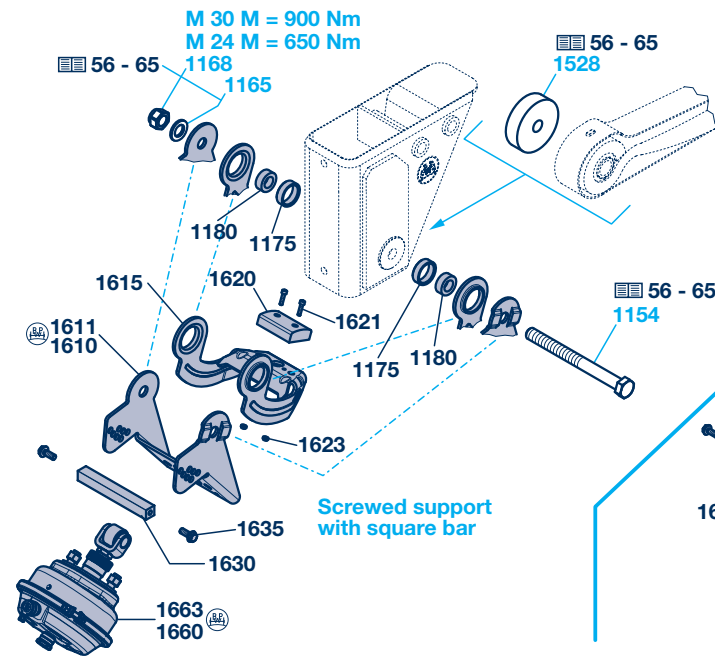
10.3.2 Trailing arm width 70 mm

Two-sided axle lift, alloy hanger bracket

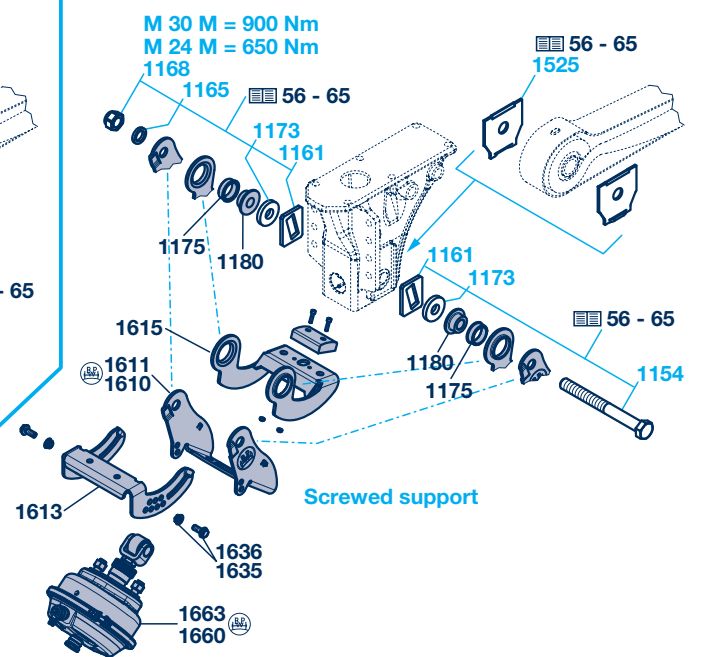


AL

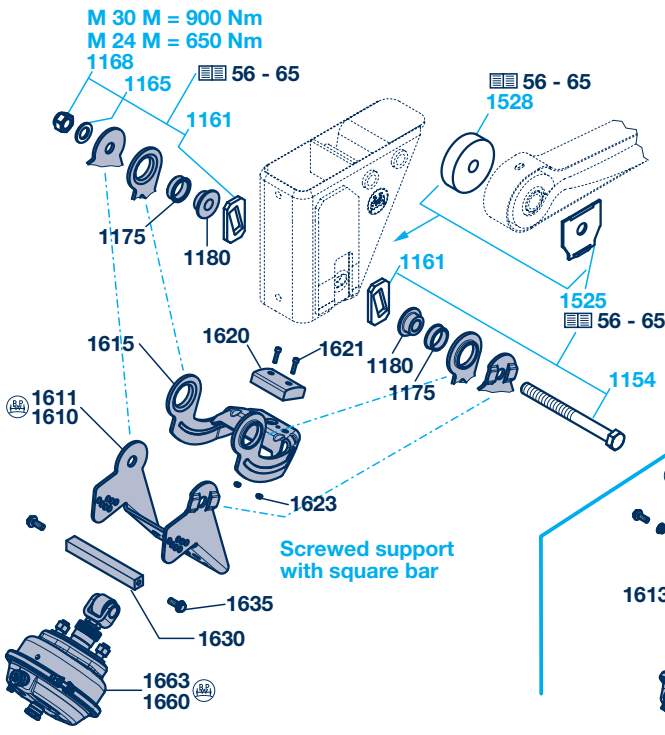
Rigid alloy hanger bracket



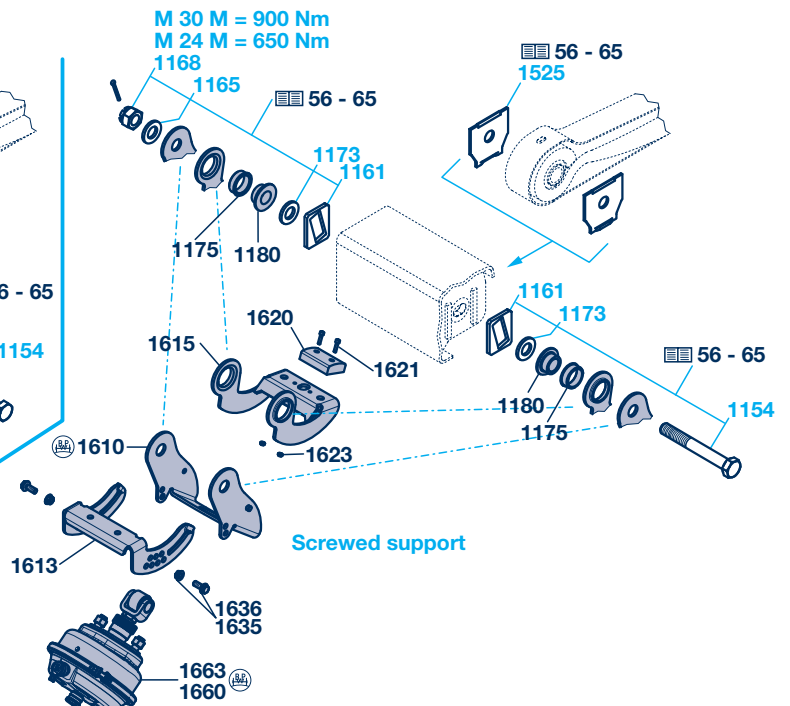
Adjustable cast alloy hanger bracket



Adjustable alloy hanger bracket



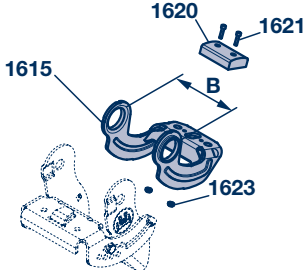
Adjustable integrated support



BPW Axle lift devices 10

Two-sided axle lifts 10.3

Trailing arm width 70 mm 10.3.2

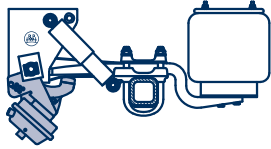
Two-sided axle lift, alloy hanger bracket				
Item	Designation	Remark	BPW Code no.	Dimension
1154 - 1156	Screw (spring pivot bolt)			
1161	Plate (adjusting plate)			
1165	Washer		see page 56 - 65	
1168	Lock nut			
1169	Castle nut			
1170	Split pin			
1173	Washer			
1175	Bush			03.113.04.11.0
	Ring	Alloy hanger bracket	03.310.92.09.0	Ø 42 / 50 x 15
1180	Bush (graduated bush)	Ø 24	03.113.00.58.0	Ø 24 / 42 / 62 x 20.5
		Ø 24	03.113.00.28.0	Ø 24 / 42 / 62 x 22
		Ø 30	03.113.01.37.00	Ø 30 / 42 / 62 x 22
1525	Shaped plate			
1528	Washer (distance washer)		see page 56 - 65	
Screwed support				
1610	Shaped plate	Ø 24	03.165.40.48.0	B = 175
		Ø 30	03.165.46.52.0	B = 175
		Ø 24	03.165.46.59.0	B = 205
		Ø 30	03.165.46.54.0	B = 205
1613	Support		05.189.15.88.0	B = 189
			05.189.14.25.0	B = 219
		Alloy hanger bracket	05.189.15.34.0	B = 219
1635	Locking screw		02.5071.53.11	M 12 x 30 / SW 17
1636	Lock nut		02.5273.33.80	M 12-10 / SW 17
Screwed support with square bar				
1610	Support, right		03.189.15.68.0	B = 205
1611	Support, left		03.189.15.69.0	B = 205
1630	Square bar		05.441.01.18.0	□ 25 x 205
1635	Locking screw		02.5071.53.11	M 12 x 30 / SW 17
1615	Lever		05.190.44.12.0	B = 146
			05.190.44.14.0	B = 176
1620	Bump stop		02.3506.06.00	90 x 60 x 25
1621	Cylinder head screw		02.5015.04.80	M 6 x 25
1623	Lock nut		02.5220.07.82	VM 6 / 980-8
				
1660	Diaphragm cylinder for axle lift, incl. item 1663		05.444.10.37.0	Typ 36, Stroke > 90 mm
1663	Hexagon nut		02.5202.21.80	M 16 x 1.5
Fig. for spare parts see pages 56 - 65.				

10 BPW Axle lift devices

10.3 Two-sided axle lifts

10.3.3 Trailing arm width 100 mm

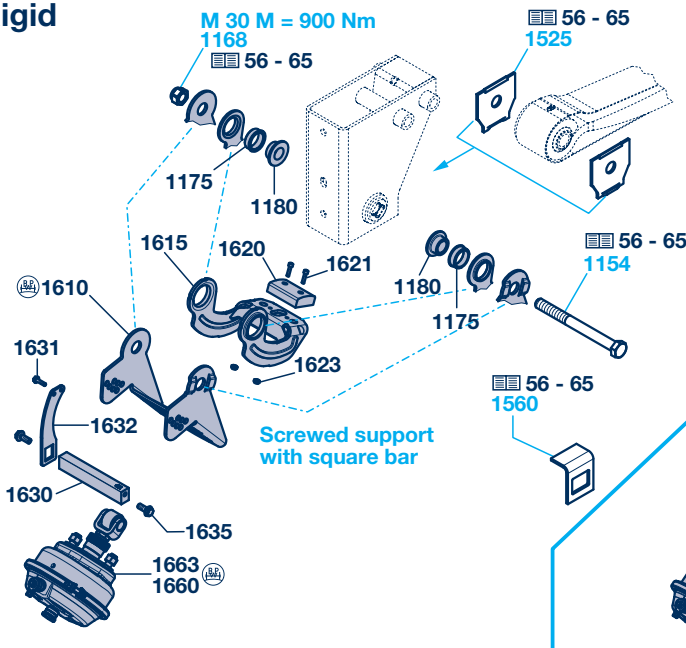
Two-sided axle lift, steel and alloy hanger bracket



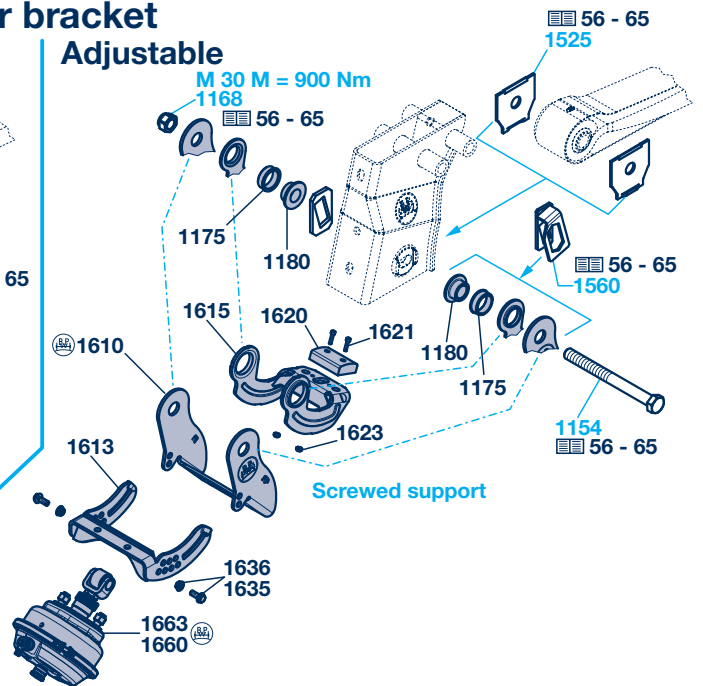
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Standard / taper mounted steel hanger bracket

Rigid

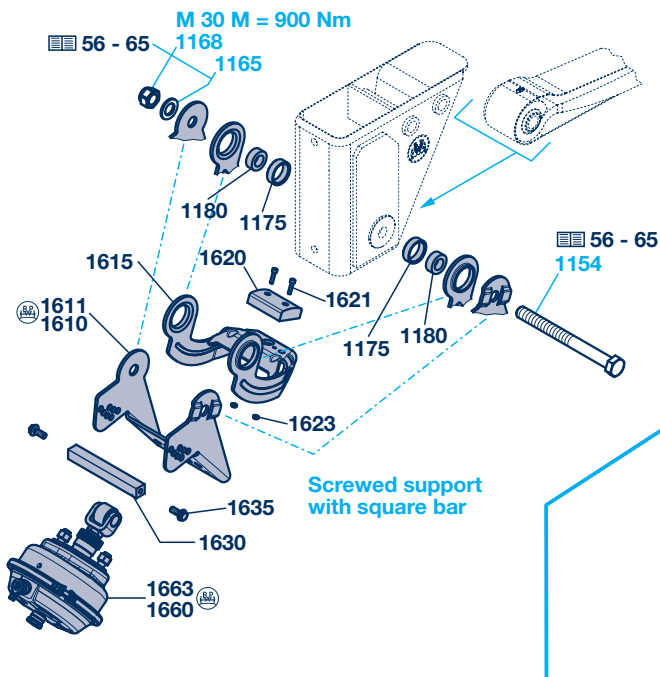


Adjustable

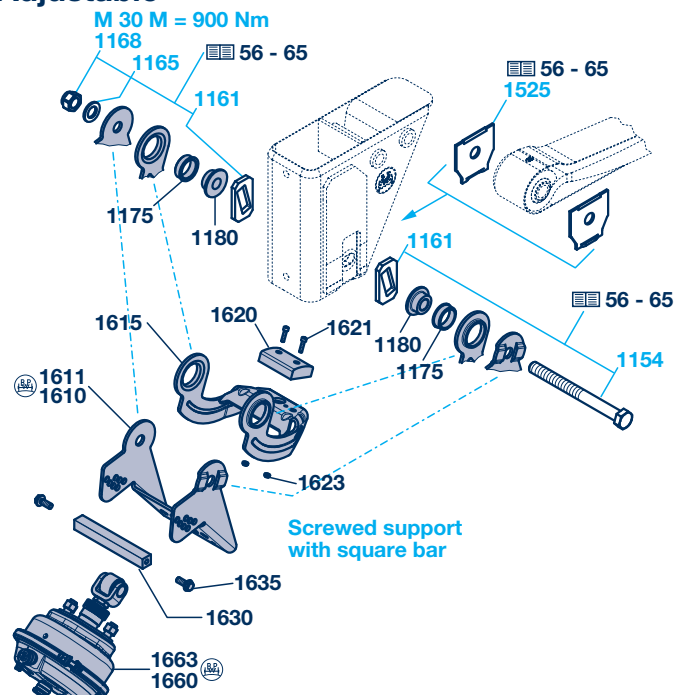


Alloy hanger bracket

Rigid



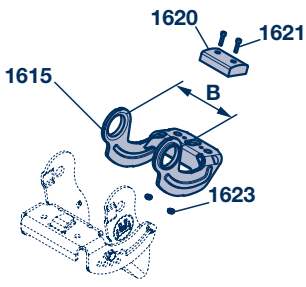
Adjustable



BPW Axle lift devices 10

Two-sided axle lifts 10.3

Trailing arm width 100 mm 10.3.3

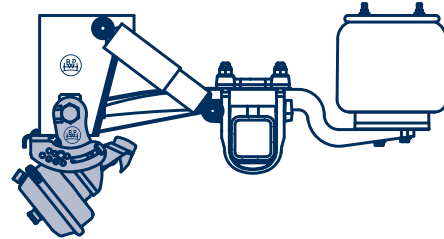
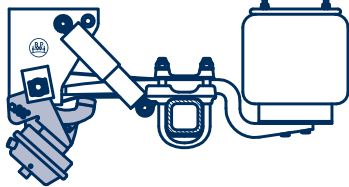
Two-sided axle lift, steel and alloy hanger bracket					
Item	Designation	Remark	BPW Code no.	Dimension	
1154 - 1156	Screw (spring pivot bolt)				
1161	Plate (adjusting plate)				
1165	Washer		see page 56 - 65		
1168	Lock nut				
1169	Castle nut				
1170	Split pin				
1175	Bush		03.113.04.11.0	Ø 42 / 50 / 54 x 17.5	
1180	Bush (graduated bush)		03.113.01.37.0	Ø 30 / 42 / 62 x 22	
1525	Shaped plate				
1560	Adjusting plate with welded on torsion protection				
	Shaped plate (welded on torsion protection with steel hanger brackets)		see page 56 - 65		
	Formed piece (screwed on torsion protection)				
			Screwed support		
1610	Shaped plate		03.165.46.54.0	B = 205	
	reinforced		03.165.46.58.0	B = 205	
1613	Support		05.189.14.25.0	B = 219	
1635	Locking screw		02.5071.53.11	M 12 x 30 / SW 17	
1636	Lock nut		02.5273.33.80	M 12-10 / SW 17	
Further versions upon request.					
			Screwed support with square bar		
1610	Support, right		03.189.14.22.0	B = 205	
	reinforced		03.189.15.36.0	B = 205	
			03.189.15.24.0	B = 205	
1611	Support, left		03.189.14.21.0	B = 205	
	reinforced		03.189.15.37.0	B = 205	
			03.189.15.25.0	B = 205	
1630	Square bar		03.441.01.18.0	□ 25 x 205	
	reinforced		03.441.01.19.0	□ 25 / 35 x 205	
1631	Locking screw		02.5071.23.00	M 8 x 20 / SW 13	
1632	Plate		03.285.46.26.0	46 x 188 x 5	
			03.285.36.07.0	46 x 198 x 5	
1635	Locking screw		02.5071.53.11	M 12 x 30 / SW 17	
1615	Lever		05.190.44.14.0	B = 146	
1620	Bump stop		02.3506.06.00	90 x 60 x 25	
1621	Cylinder head screw		02.5015.04.80	M 6 x 25	
1623	Lock nut		02.5220.07.82	VM 6 / 980-8	
					
1660	Diaphragm cylinder for axle lift incl. item 1663	standard	05.444.10.37.0	Typ 36, Stroke > 90 mm	M 16 x 1.5
		reinforced	05.444.10.38.0	Typ 44, Stroke > 90 mm	M 20 x 2.5
1663	Hexagon nut		02.5202.21.80	M 16 x 1.5	
Fig. for spare parts see pages 56 - 65.					

10 BPW Axle lift devices

10.3 Two-sided axle lifts

10.3.4 Installation notes

Two-sided axle lift, installation notes



General

The BPW two-sided axle lift is suitable for the following axles and air suspension systems:

- ⊙ 9 tonnes air-suspension axles for single and twin wheels
- ⊙ 10 tonnes air-suspension axles with single wheels,
not however for axles with greater permitted axle loads or for steering axles
- ⊙ Air suspension systems with air bag types 30K, 30, 36K, 36 for spring deflections up to 220 mm,
not however for long-travel air suspension systems with bag types 30-1, 36-1, 36-2, 36-5

The two-sided axle lift is fitted underneath the air suspension hanger brackets of the axle to be lifted. Please bear in mind the following points when using them:

- ⊙ In air suspension systems with raising and lowering, the downward travel of the axles must be limited. The travel limitation can take the form of an air suspension valve with integrated level restriction, a separate shut-off valve or of catch straps.
The stroke limiting function must be set so that the axle lift cannot be overloaded at maximum lift.
- ⊙ The ride height of the air suspension must be set to a min. upward travel of 100 mm.
When the axle is lifted, the tyre damping results in a clearance of approx. 60 mm under the tyres.
- ⊙ Make sure there is adequate ground clearance below the axle lift, in particular in air suspension systems with trailing arms located underneath to give a low vehicle height.
- ⊙ Make sure the right and left sides of one hanger bracket have a symmetrical setting of the sliding blocks.
- ⊙ After mounting the axle lift, check it functions correctly and that there is adequate clearance from the adjacent components.
- ⊙ An air pressure of at least 6 Bar is required to lift the axle.
- ⊙ The permitted operating pressure is 8.5 Bar.
There is no need for a pressure control valve or a residual pressure holding feature.
Free cylinder venting through cross sections without throttle points in the valve installation must be ensured in order to avoid impermissibly high pressure values.
- ⊙ Comply with the appropriate statutory regulations when retrofitting an axle lift (e.g. overload protection, German „BO-Kraftkreis“, etc.).

BPW Axle lift devices 10

Two-sided axle lifts 10.3

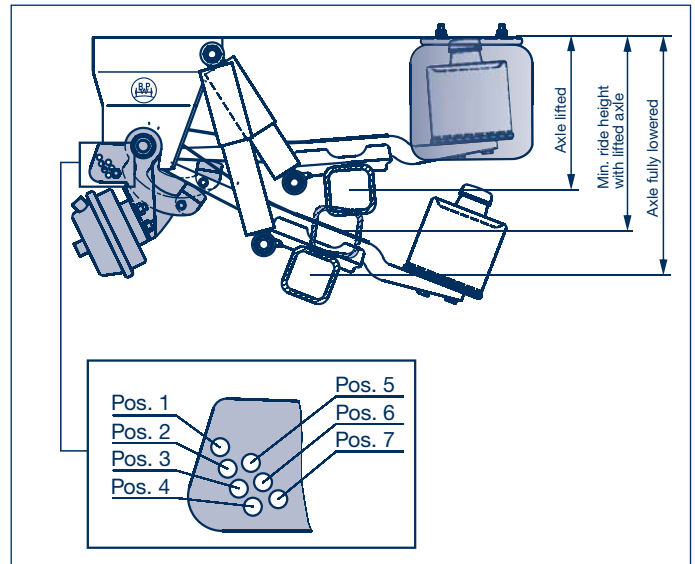
Installation notes 10.3.4

Two-sided axle lift, installation notes

Perform the following installation steps when retrofitting the two-sided axle lift:

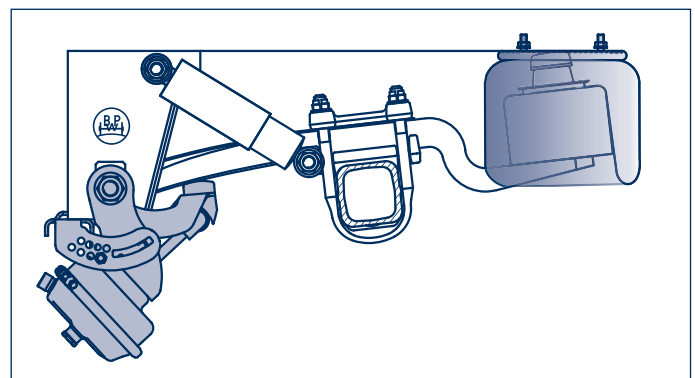
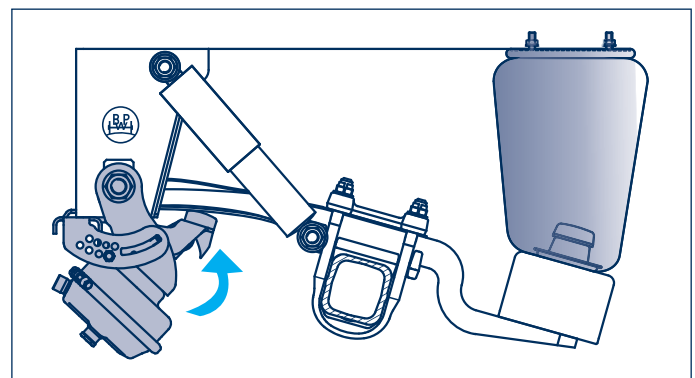
- ⊙ Take the load off the lifting axle.
- ⊙ Unscrew the spring bolt (M 30) and remove it.
- ⊙ Install the two-sided axle lift as described in the supplied installation instructions. When doing this, only fit the spring bolts loose and do not tighten them yet.
- ⊙ Install the diaphragm cylinder with the air connection upwards (M = 180 Nm).
- ⊙ Fit plastic plugs into the diaphragm cylinder so the bottom hole is open whilst the top hole is tightly closed.
- ⊙ Install the bump stop under the air suspension hanger bracket (integrated support) in the position provided for the air suspension (M = 66 Nm).

Refer to the technical documents for the corresponding position.



Proceed as follows if you do not have the corresponding technical documents:

- ⊙ Raise the air suspension using the rotary disc valve or by disconnecting the air suspension linkage. Raise it until the air bags are fully extended.
- ⊙ Pivot the axle lift towards the trailing arm by hand, until the plastic buffer makes contact with the trailing arm (the catch plate must be in contact with the trailing arm).
- ⊙ In this position, fit the bump stop so it is in contact with the air suspension hanger bracket (integrated support).
- ⊙ Adjust the air suspension to the nominal ride height with the rotary disc in the „driving“ position.
- ⊙ Fit the spring pivot bolt anti-rotation lock.
- ⊙ Tighten the spring pivot bolt screw connection to the prescribed tightening torque (M = 650 / 900 Nm).
- ⊙ Refer to the appropriate installation guidelines for the air suspension installation and valve connection.
- ⊙ Perform a trial actuation to test that it is functioning reliably. Do not touch any moving parts of the axle lift when doing this.
DANGER OF ACCIDENTS!
- ⊙ Check the spring bolt screw connection is firmly seated after the first drive under load.

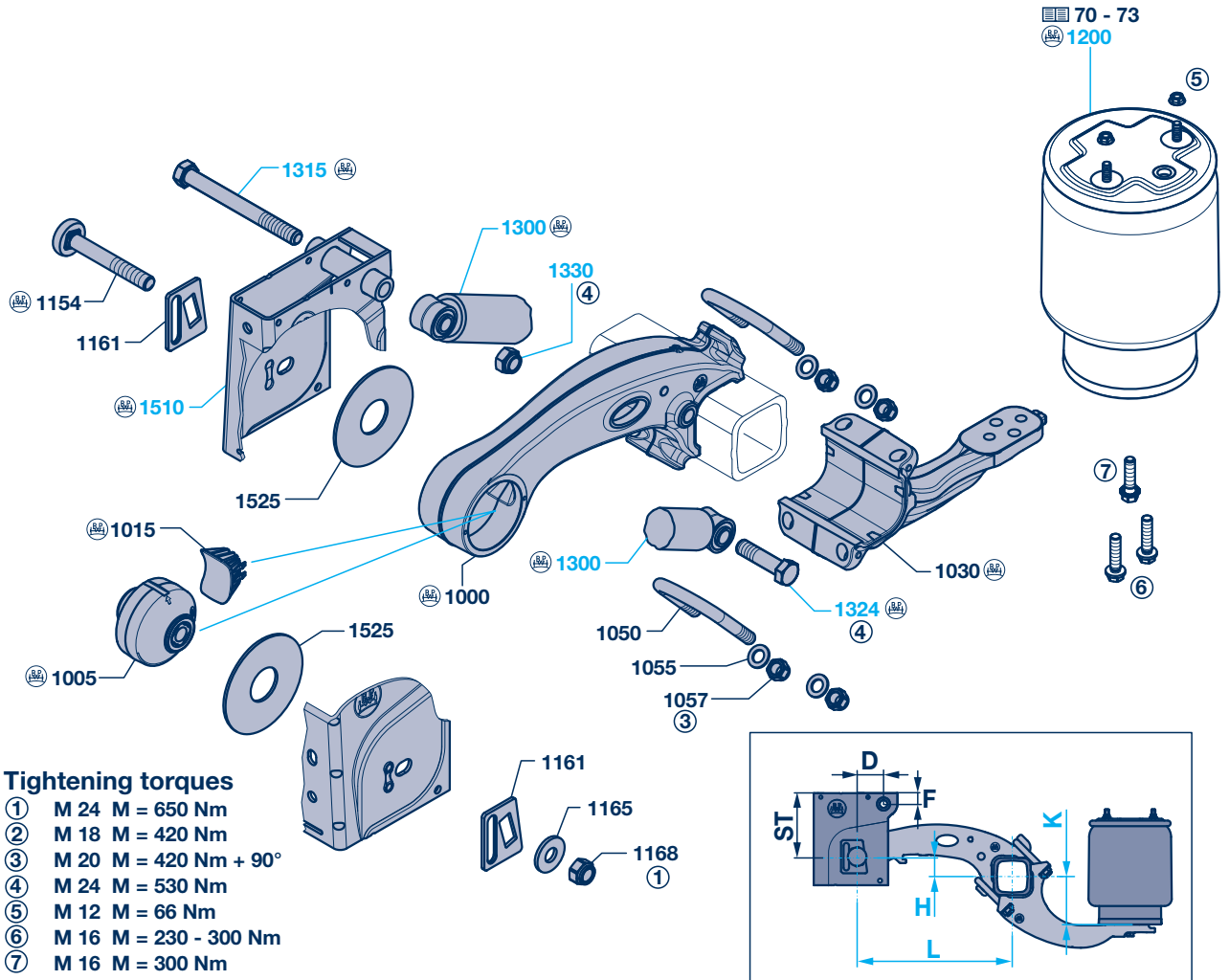


11 BPW ECO Air COMPACT running gear systems

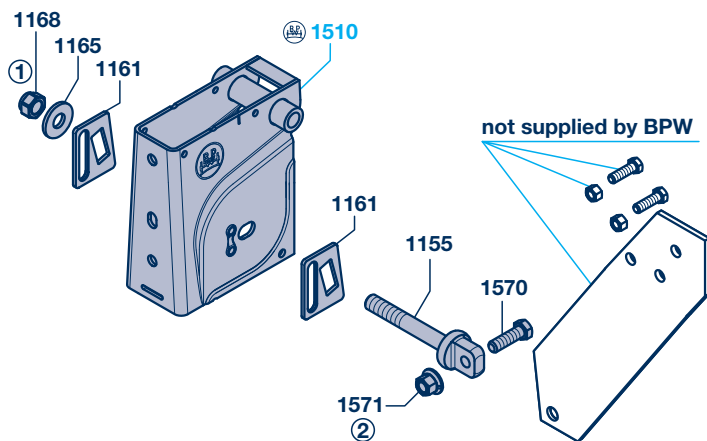
11.1 Spare parts

Spare parts for ECO Air COMPACT running gear systems

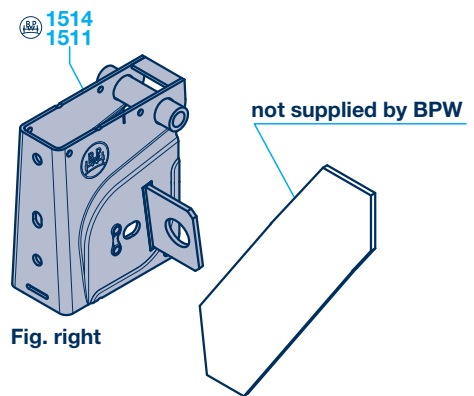
AC



Spring pivot bolt bearing for screwed-on gusset plates



Hanger bracket with welding lug for gusset plate

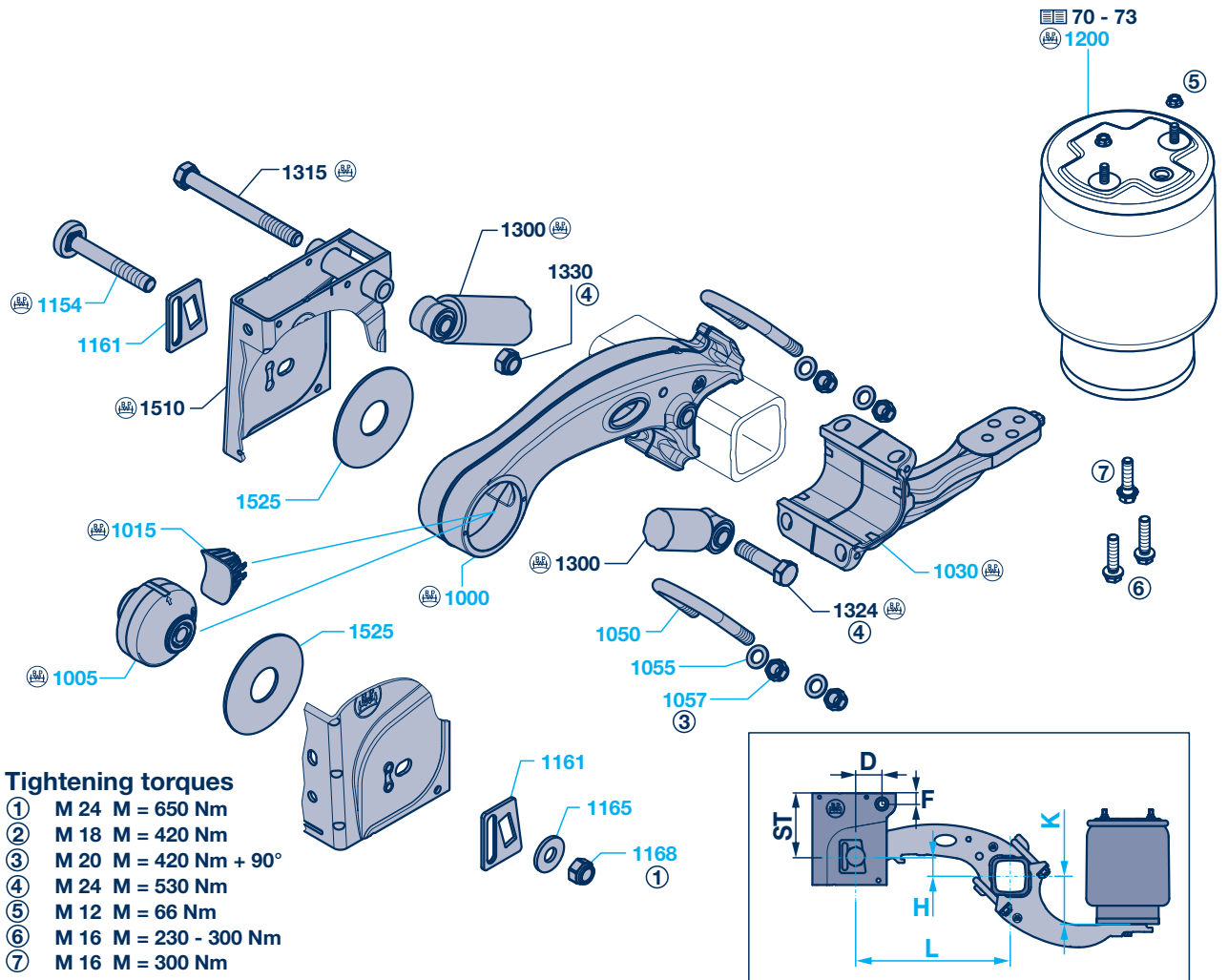


11 BPW ECO Air COMPACT running gear systems

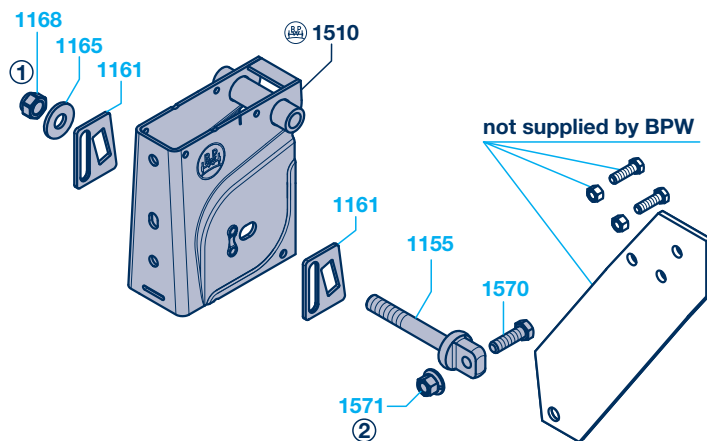
11.1 Spare parts

Spare parts for ECO Air COMPACT running gear systems

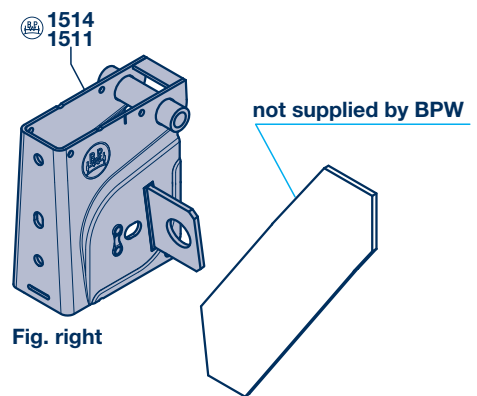
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Spring pivot bolt bearing for screwed-on gusset plates

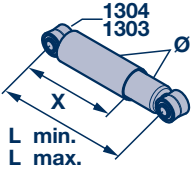
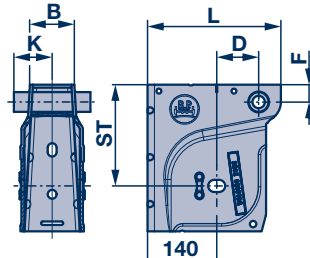


Hanger bracket with welding lug for gusset plate



BPW ECO Air COMPACT running gear systems 11

Spare parts 11.1

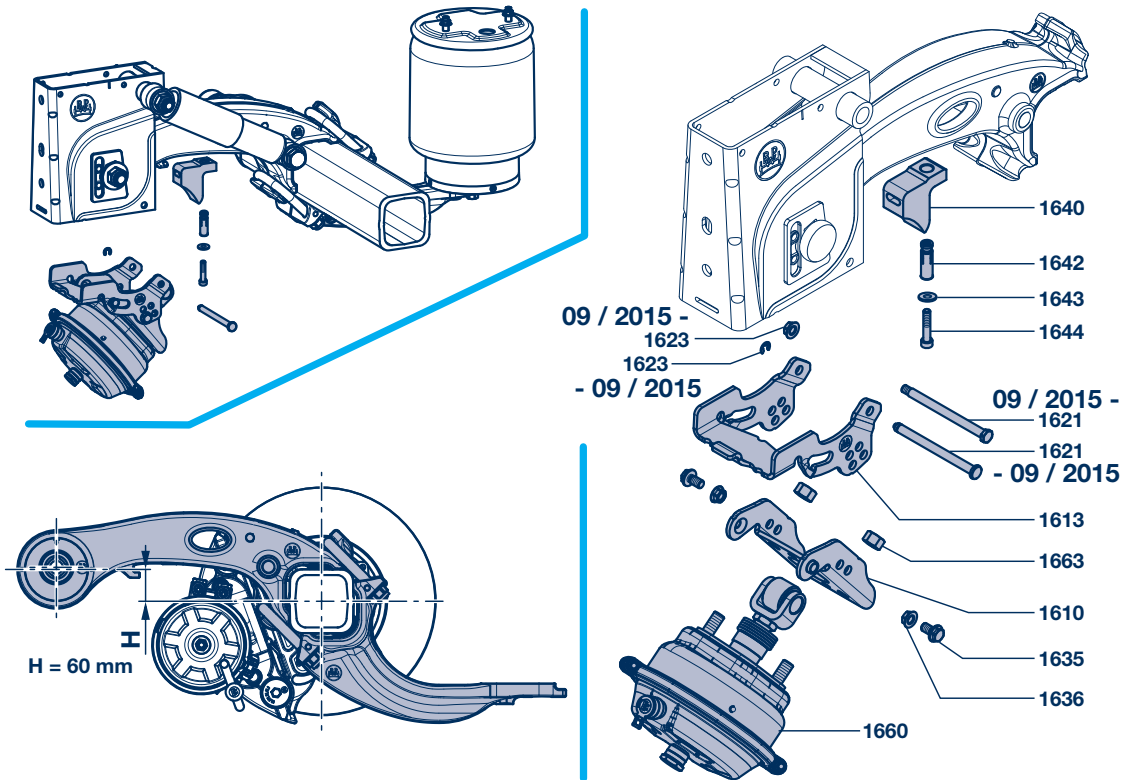
Spare parts for ECO Air COMPACT running gear systems										
Item	Designation	Dimension	BPW Code no.	Stück / Achse	ACAU	ACAM	ACAO	ACBU	ACBM	ACBO
1300	Shock absorber, incl. item 1302 	Ø 65 / 75 mm, L min. 287 mm, L max. 412 mm, X = 204 mm	02.3722.79.02	2	⊙	⊙				
		Ø 65 / 75 mm, L min. 292 mm, L max. 432 mm, X = 204 mm	02.3722.89.02	2	⊙	⊙	⊙		⊙	
		Ø 65 / 75 mm, L min. 326 mm, L max. 496 mm, X = 235 mm	02.3722.83.02	2				⊙	⊙	⊙
		Ø 65 / 75 mm, L min. 351 mm, L max. 541 mm, X = 250 mm	02.3722.88.02	2						⊙
1302	Repair kit bush for shock absorber, item 1303 + 1304		09.801.08.18.0	4			⊙			
1303	Bush *	Ø 24 / 32 x 55	02.0314.39.00	4			⊙			
1304	Rubber bush *	Ø 23 / 50 x 25	02.2805.10.00	4			⊙			
* only available as kit (09.801.08.18.0)!										
1315	Hexagon screw	M 24 x 240 - 8.8 / SW 36	03.340.14.19.0	2			⊙			
1323	Repair kit shock absorber attachment, item 1324		09.801.08.11.0	2			⊙			
1324	Hexagon screw	M 24 x 95 - 8.8 / SW 36	03.340.14.32.0	2			⊙			
1330	Lock nut	VM 24 - 10 / SW 36	02.5220.74.12	2			⊙			
Standard hanger bracket										
1510	Hanger bracket	Ø 24 / ST 205 / B 90 / D 85 F 35 / K 77.5 / L 270	05.375.50.01.0	2	⊙	⊙	⊙	⊙	⊙	⊙
		Ø 24 / ST 290 / B 90 / D 85 F 67 / K 77.5 / L 270	05.375.50.02.0	2	⊙	⊙				⊙
Hanger bracket with welding lug for gusset plate										
1511	Hanger bracket, left	Ø 24 / ST 205 / B 90 / D 85 F 35 / K 77.5 / L 270	05.375.50.03.0	1	⊙	⊙	⊙	⊙	⊙	⊙
		Ø 24 / ST 290 / B 90 / D 85 F 67 / K 77.5 / L 270	05.375.50.05.0	1	⊙	⊙				⊙
1514	Hanger bracket, right	Ø 24 / ST 205 / B 90 / D 85 F 35 / K 77.5 / L 270	05.375.50.04.0	1	⊙	⊙	⊙	⊙	⊙	⊙
		Ø 24 / ST 290 / B 90 / D 85 F 67 / K 77.5 / L 270	05.375.50.06.0	1	⊙	⊙				⊙
										

11 BPW ECO Air COMPACT running gear systems

11.2 Two-sided axle lift, ECO Air COMPACT

AC

Two-sided axle lift, ECO Air COMPACT



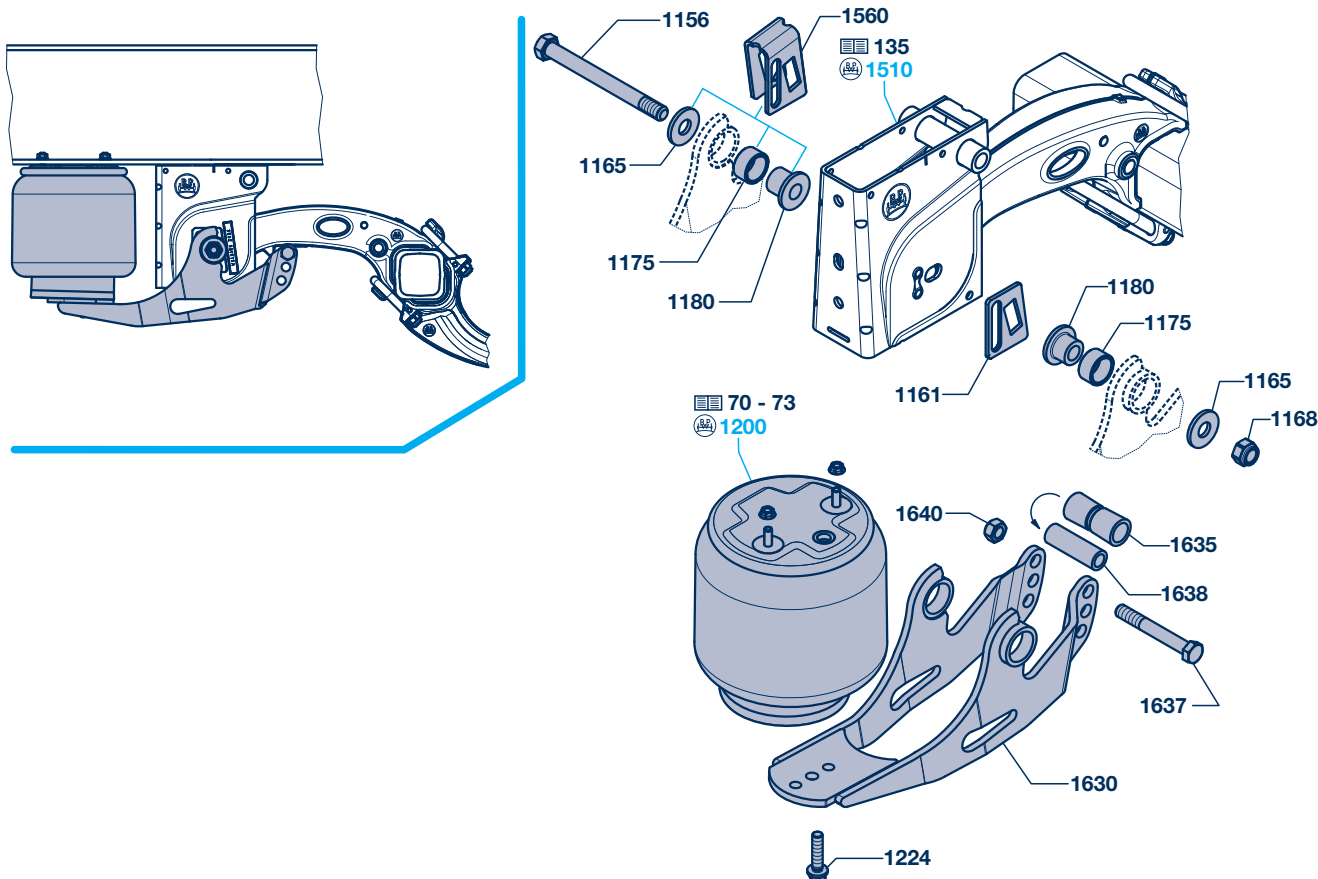
Item	Designation	Remark	BPW Code no.	Dimension
			H = 60 mm	H = 130 mm
1600	Two-sided axle lift cpl., item 1610 - 1660		05.828.32.05.0	H = 60
1610	Support		03.189.15.98.0	
1613	Shaped plate		03.165.46.62.0	
			- 09 / 2015	
1621	Bolt *		03.084.12.05.0	Ø 12 / Ø 20 x 155
1623	Locking disc		02.5413.10.93	
			09 / 2015 -	
1621	Bolt		03.084.12.06.0	Ø 12 / M 10 x 163 / SW 16
1623	Lock nut		02.5273.28.87	M 10
1635	Locking screw		02.5071.59.11	M 12 x 22 / SW 17
1636	Lock nut		02.5273.33.80	M 12 - 10 / SW 17
1639	Repair kit formed part, item 1640 - 1644		09.801.08.13.0	for 1 axle side
				09.801.08.24.0 for 1 axle side
1640	Formed piece		03.001.35.17.0	for H = 60
				03.001.35.19.0 for H = 130
1642	Dowel		02.0130.87.10	M 10
1643	Washer		02.5401.10.11	A 10
1644	Cylinder head screw		02.5015.27.82	M 10 x 50 / SW 8
1660	Diaphragm cylinder for axle lift, incl. item 1663		05.444.10.41.0	
1663	Hexagon nut		02.5202.21.80	M 16 x 1.5 / SW 24

* Replaced by bolt with lock nut

BPW ECO Air COMPACT running gear systems 11

Side mounted axle lift, ECO Air COMPACT 11.3

Side mounted axle lift, ECO Air COMPACT



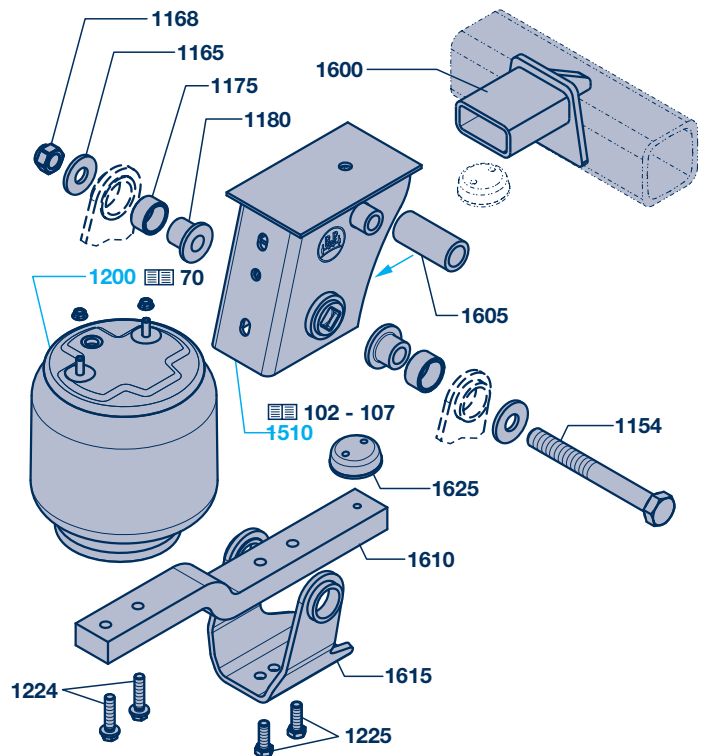
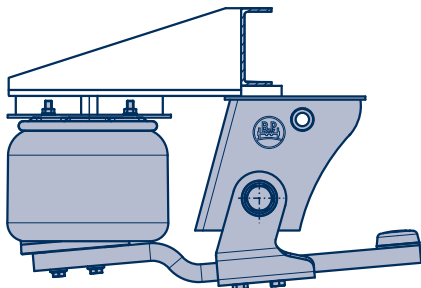
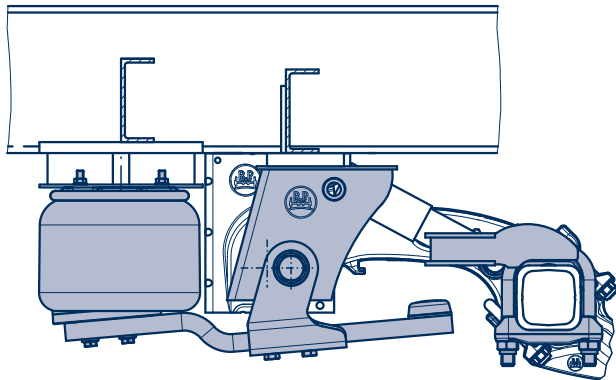
Item	Designation	Remark	BPW Code no.	Dimension
1156	Screw (spring pivot bolt)		02.5030.63.13	M 24 x 2 x 250 / SW 36
1161	Plate (adjusting plate)		03.281.34.12.0	
1165	Washer		03.320.33.28.0	Ø 25 / 60 x 6
1168	Lock nut		03.260.14.13.0	M 24 / SW 36
1175	Bush		03.112.45.13.0	Ø 40.5 / 50 x 26
1180	Graduated bush		03.113.00.54.0	Ø 24 / 40 / 62 x 33.5
1200	Air bag, incl. item 1224		05.429.43.86.0	see page 70 - 73
1224	Locking screw		02.5071.61.16	M 16 x 61
1510	Hanger bracket		see page 135	
1560	Adjusting plate with anti-rotation device		03.001.32.07.0	
1630	Lifting arm		05.189.15.99.0	
1635	Bush		03.112.43.13.0	Ø 32 / 41 x 98
1637	Hexagon screw		02.5023.14.80	M 20 x 150
1638	Tube		03.300.73.54.0	Ø 21 / 31 x 100
1640	Lock nut		02.5220.50.82	M 20

11 BPW ECO Air COMPACT running gear systems

11.4 Central axle lift, ECO Air COMPACT

Central axle lift, ECO Air COMPACT

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Item	Designation	Remark	BPW Code no.	Dimension
1154	Screw (spring pivot bolt)		03.340.15.37.0	M 30 x 265 - 8.8 / SW 46
1165	Washer		02.5401.31.01	A 31 / 125
1168	Lock nut		03.260.15.01.0	M 30 / SW 46
1175	Bush		03.113.94.10.0	Ø 41 / 50 x 23
1180	Graduated bush		03.113.01.47.0	Ø 30 / 40 / 62 x 31
1200	Air bag, incl. item 1224		see page 70 - 73	
1224	Locking screw		02.5070.95.00	M 16 x 65
1225	Hexagon screw		02.5026.35.12	M 16 x 45 - 10.9
1510	Hanger bracket		see page 102 - 107	
1600	Support		05.189.10.31.0	
1605	Tube		03.310.74.22.0	Ø 35 / 51 x 112
1610	Lifting arm		03.195.00.96.0	L = 720 mm
1615	Support		05.189.13.19.0	146 x 176
1625	Bump stop		02.3506.02.00	Ø 80 / M 12

Notes