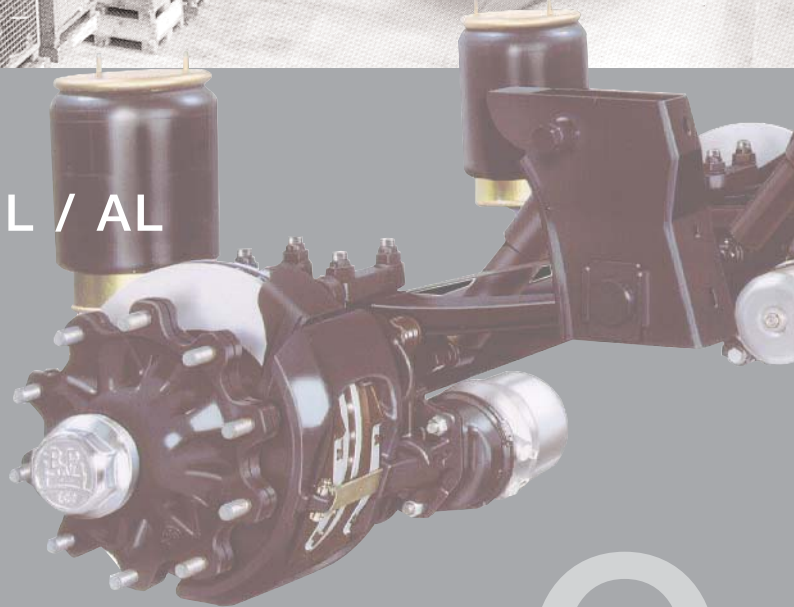




BPW Original spare parts
Air suspensions series O / SL / AL



O

SL

BPW ORIGINAL SPARE PARTS

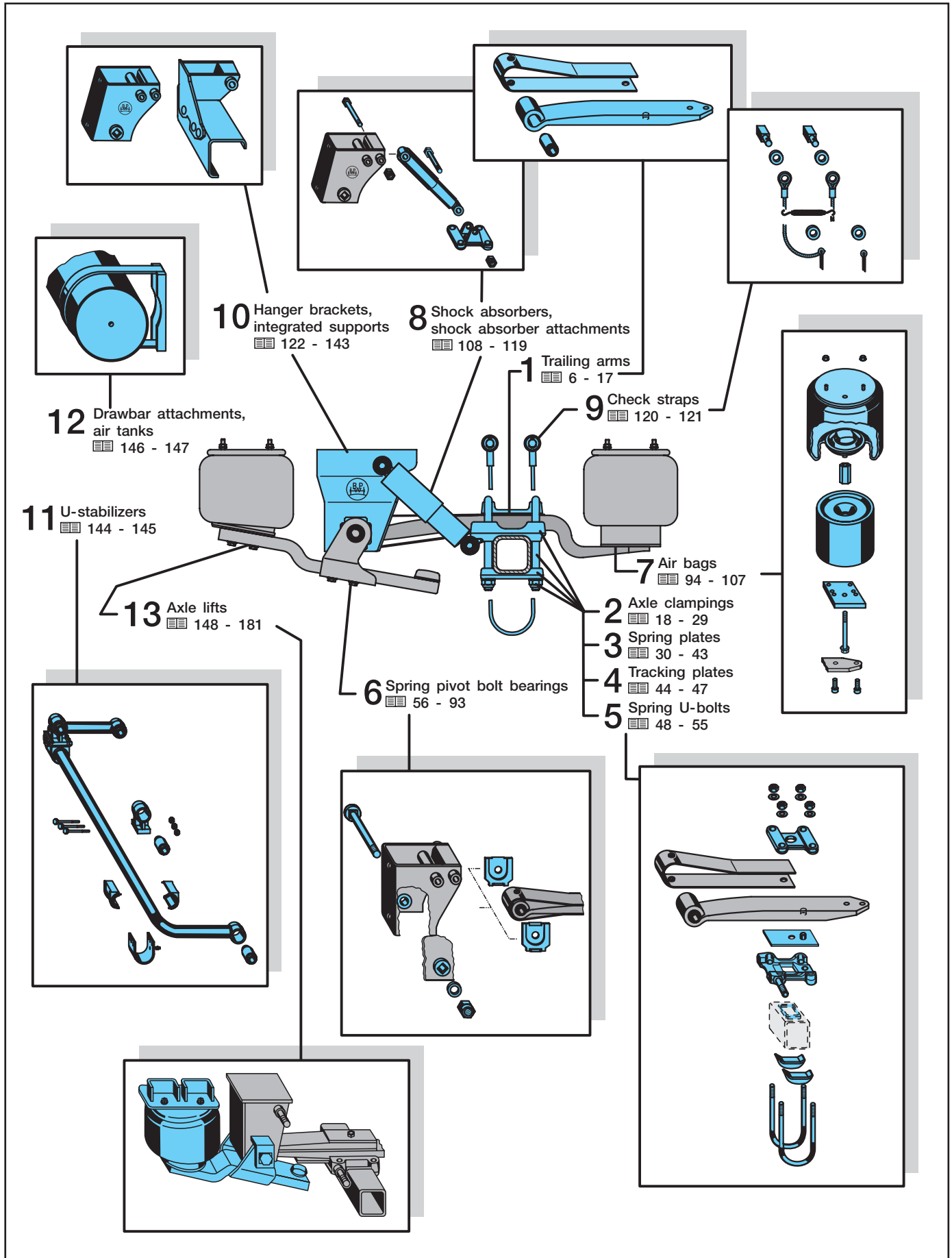
AL

BPW Original spare parts ● Air suspensions

O
SL
AL

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O
SL
AL




Explanation of BPW suspension type codes

Example:															
H	S	F	H	SLO	A	LL	3 /	9010	/12°	A	F30	ECO			
													Trailer axle	Brake	Tyre size
H													H..	SN 420	20" - 24"
K													K..	SN 360	19.5"
N													N..	SN 300	15" (12"-17.5")
B													For single wheels, wheels with offset		
S													For single wheels, wheels without offset		
Z													For twin wheels		
I													Wheel spiders for TRILEX wheel rims, single wheels		
IZ													Wheel spiders for TRILEX wheel rims, twin wheels		
F													Wheel studs M 22 x 1.5 without wheel nuts, order wheel nuts for stud or spigot alignment separately		
M													For spigot alignment		
H													For hanging boosters		
													Air suspension series		Ride height
													O	= straight overslung trailing arm	490 - 500
													OM	= cranked overslung trailing arm	370 - 470
													OMN	= cranked overslung trailing arm	355
													OMT	= cranked underslung trailing arm	290
													OT	= underslung trailing arm	220 - 360
													SLO	= straight overslung trailing arm	420 - 490
													SLM	= cranked overslung trailing arm	360 - 440
													SLU	= underslung trailing arm	220 - 330
													ALO	= straight overslung trailing arm	380 - 490
													ALM	= cranked overslung trailing arm	305 - 420
													ALU	= underslung trailing arm	175 - 300
													DLU	= Airlight ^{Direct}	260 - 330
													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. 20°
													-	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	
													A	Alloy hanger brackets	
													C	Integrated support	
													D	Hanger brackets with top plate	
													E	Hanger brackets without top plate	
													G	Air bags with split piston	
													S	Taper mounted hanger brackets (70 mm wide)	
													T	With support (trailing axle)	
													V	Adjustable hanger brackets	
													X	With stainless steel hanger brackets	
													Y	Without mounted hanger brackets, hanger brackets separate	
													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
													Z	Without mounted air bags, air bags separate	
													ECO	Single axle with BPW ECO hub system	
													ECO-MAXX	Weight-optimized ECO-axle built as from 1997	
													ECO ^{Plus}	Weight-optimized axle with BPW ECO ^{Plus} hub system	
													MAXX	Weight-optimized axle with conventional hub bearing system	

Valid: 1.5.2007

This spare parts list shows fast moving parts for air suspension bogies of the series O.. / SL.. / AL.. 6 - 13 to.

For further spare parts see BPW spare parts catalogue and / or spare parts lists of the corresponding single axles without bogie parts.

 -parts are embossed with BPW Code no.

Subject to change (without notice).

Explanation of BPW code numbers

Example:			
61.	38.	441.	001
1. + 2. digit			
21.		Air suspension single axle	
28.			
30.			
38.		Air suspension single axle without air bags, air bags loose, separate	
61.		Air suspension single axle	
64.			
67.			
22.		Tandem axle air suspension	
32.		Tandem axle air suspension / tri-axle air suspension	
62.		Tandem axle air suspension	
65.			
68.			
23.		Tri-axle air suspension	
29.			
39.			
63.		Tri-axle air suspension	
66.			
69.			
3. + 4. digit			
		Axle load	Roller bearing
			Bearing system
06.		6500 kg	33116 / 32310
08.		8000 - 9000 kg	33116 / 32310
10.		10000 - 12000 kg	33118 / 33213
14.		13000 - 14000 kg	32219 / 33215
36.		6500 kg	33116 / 32310
37.		8000 - 9000 kg	33116 / 32310
38.			
39.			
40.		10000 - 12000 kg	33118 / 33213
44.		13000 - 14000 kg	32219 / 33215
48.		8000 - 9000 kg	33118 / 33213
48.			ECO ^{Plus} hub bearing system
50.		10000 - 12000 kg	33118 / 33213
50.			ECO ^{Plus} hub bearing system
65.		6400 kg	33215 / 32310
65.			Conventional hub bearing system
5. - 7. digit			
001.	to	Premounted air suspension axle without hanger brackets and air bags	
	099.	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	Designation of ride height and air bag type 220 to 509	
	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	Designation of wheel bare in the case of ref. number 20... - 39...	
	839.	For explanation of code number, see EL-HKN / EL-SB	
8. - 10. digit			
		000	Consecutive number 000 - 999

1 Trailing arms

General

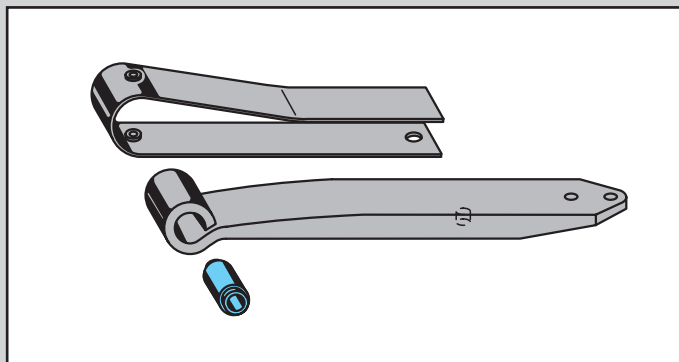
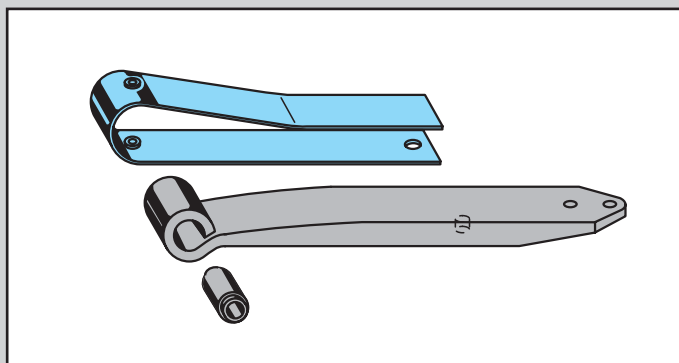
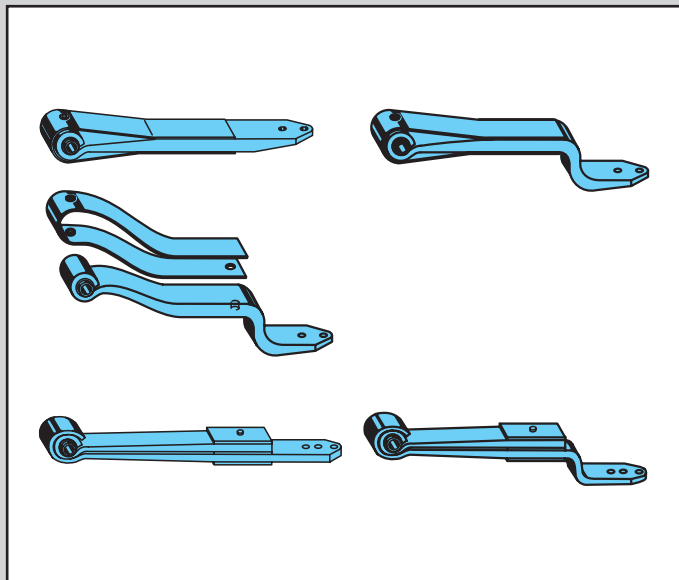
BPW Trailing arms

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, cataphoretic dip-coated and zinc-phosphated.

Trailing arms absorb much of the flexural forces and reduce the torsional forces input into the axle beam. Various trailing arm versions permit individual equalisation – for example for 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.

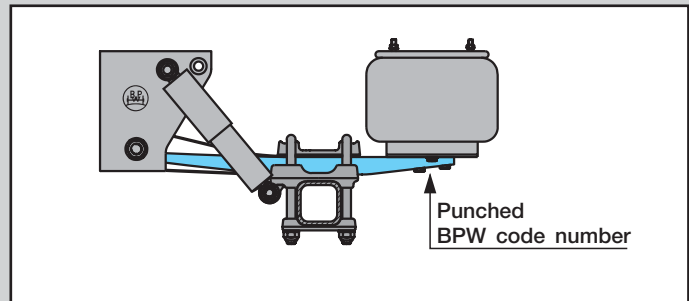
Long-life steel-rubber-steel bushes (up to 4 times the service life of rubber-steel bushes) offer maintenance-free mounting of the trailing arm. The axle is precisely located, and tyre wear and operating costs are both reduced.



Determining replacement trailing arms

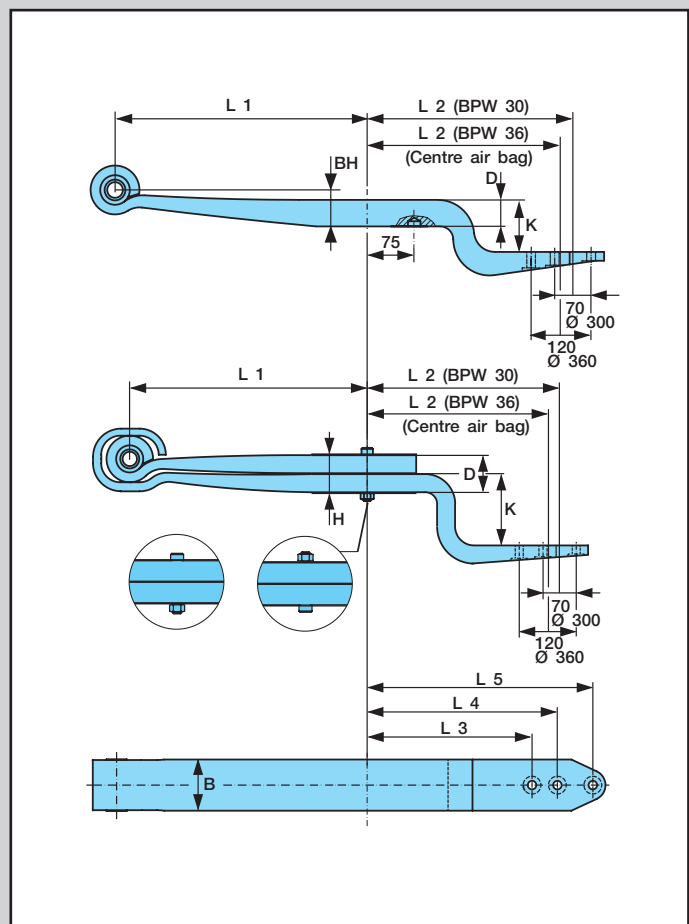
The BPW code number is punched into the underside of the trailing arm (in the area of air bag).

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 arms or two-layer trailing arms
- Note the position of the spring bolt (heart-shaped pin) 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



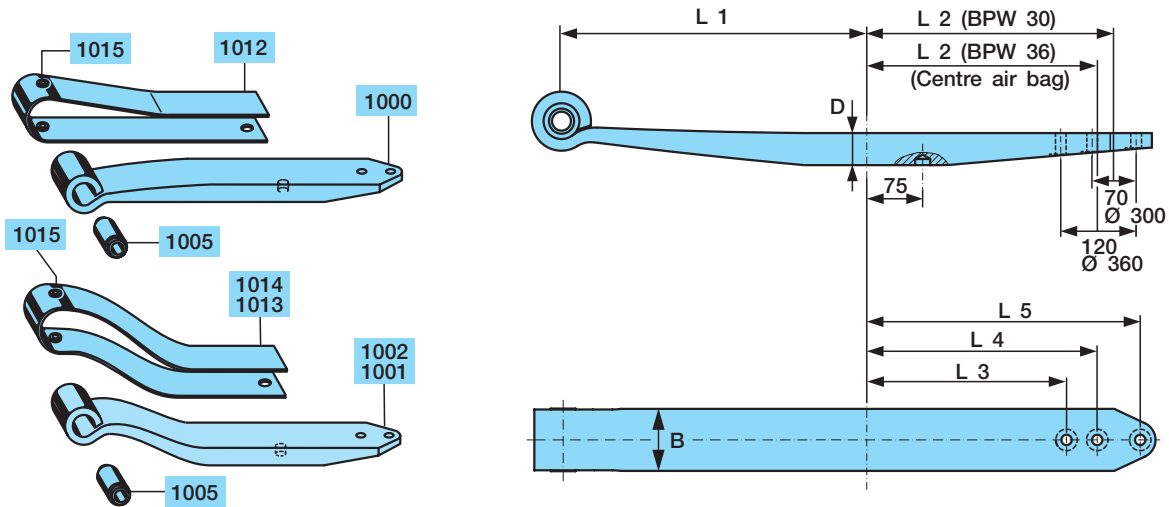
Single layer trailing arms with catch plate fitted (with spring screw fitted) are replaced by trailing arms with a loose catch plate.

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!

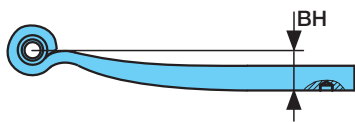
Rubber / steel bushes cannot be replaced by steel / rubber / steel bushes!

1.1 Trailing arms

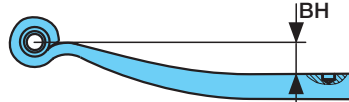
Straight single leaf trailing arms



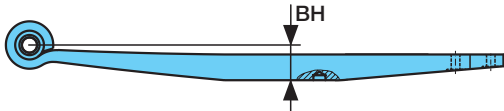
A 1



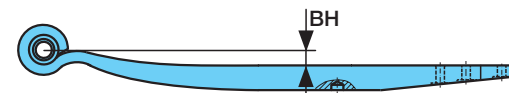
A 2



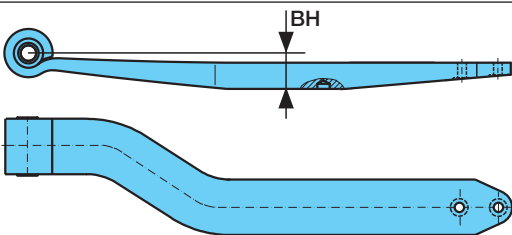
A 3



A 4

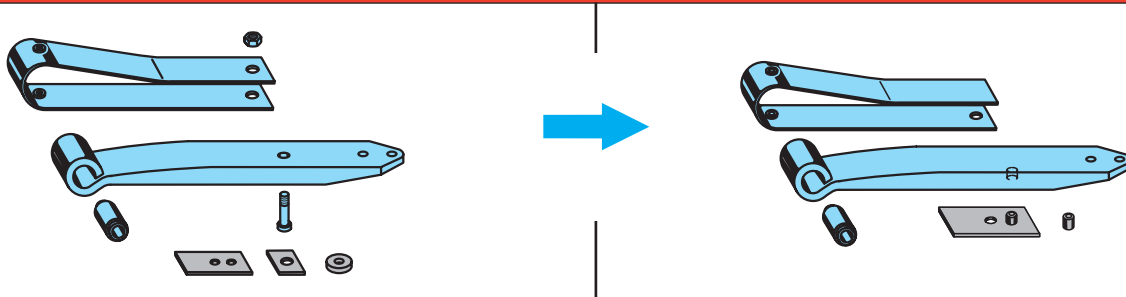


A 5



Straight single leaf trailing arms										
Dimensions									BPW Code no.	
Fig.	D	BH	L 1	BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	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	-	-	-	-	-	05.082.14.03.0	05.348.30.43.0
100 mm wide (B)										
A 1	1 x 48	70	500	-	-	-	-	-	05.082.13.85.0	05.348.30.05.0
A 3		70	500	310	310	-	275	345	05.082.12.92.0	05.348.30.05.0
A 4		23	500	380	355	295	345	415	05.082.13.71.0	05.348.30.05.0
A 3	1 x 51	70	500	310	310	-	275	345	05.082.13.48.0	05.348.30.05.0
A 3		70	500	380	355	295	345	415	05.082.13.37.0 *	05.348.30.14.0
A 3		70	500	380	355	295	345	415	05.082.13.18.0	05.348.30.05.0
A 4	1 x 60	90	690	310	310	-	275	345	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	310	-	275	345	05.082.12.99.0 L 05.082.12.98.0 R	05.348.30.08.0 L 05.348.30.18.0 R
1005	Bush (steel / rubber / steel)			02.0315.95.00		Ø 30 / 60 x 72			Leaf spring 70 mm wide	
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			Leaf spring 100 mm wide	
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 17.										

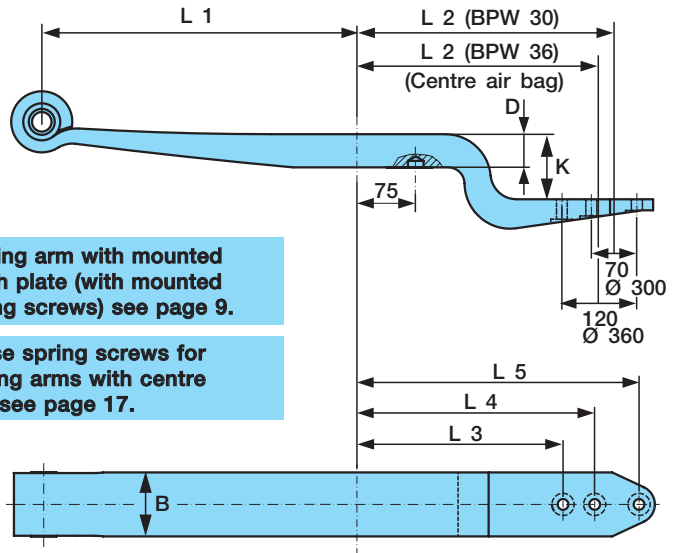
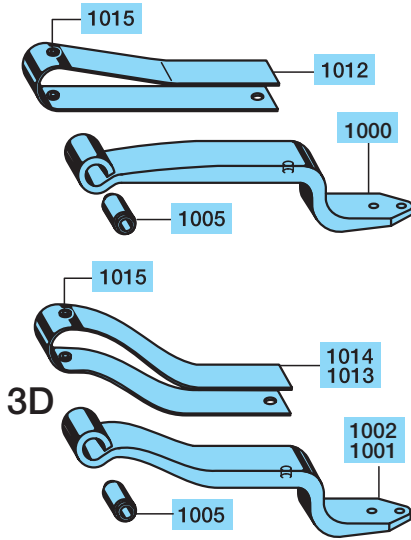
Trailing arms with catch plate fitted (with centre bolt fitted) are replaced by trailing arms with a loose catch plate.



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

1.2 Trailing arms

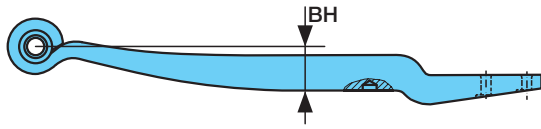
Cranked single leaf trailing arms, 70 mm wide



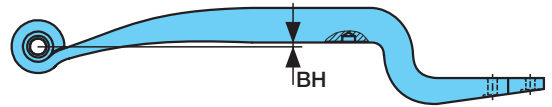
Trailing arm with mounted catch plate (with mounted spring screws) see page 9.

Loose spring screws for trailing arms with centre bolt see page 17.

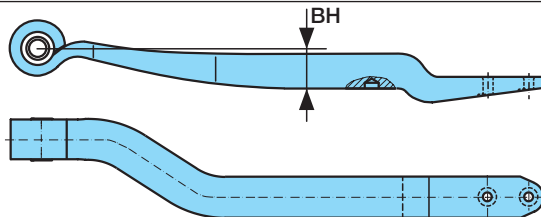
B 1



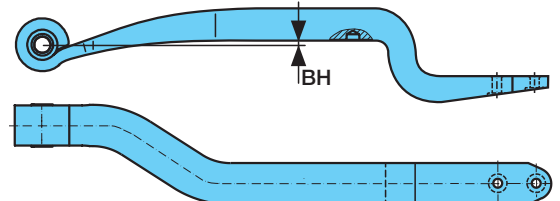
B 2



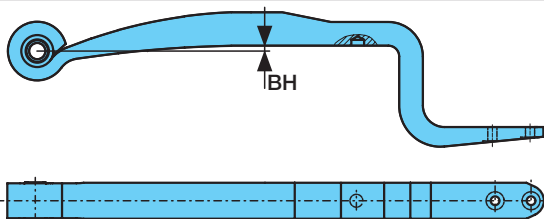
B 3



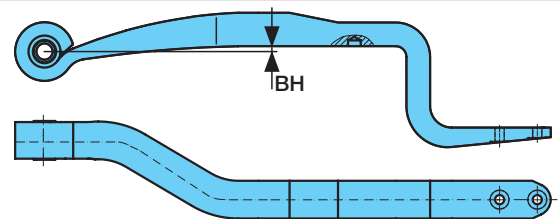
B 4



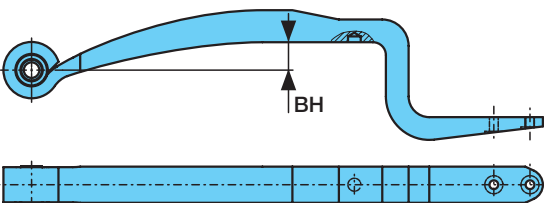
B 5



B 6



B 7



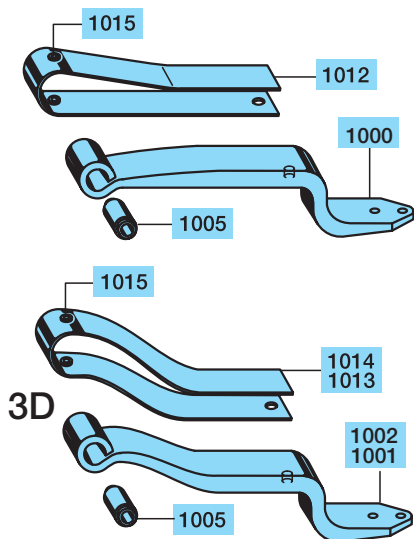
Cranked single leaf trailing arms, 70 mm wide

Dimensions										BPW Code no.	
Fig.	D	K	BH	L 1	BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	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	05.082.13.90.0	05.348.30.36.0
B 1		30	80	500	380	-	-	345	415	05.082.13.89.0	05.348.30.36.0
B 2		100	10	500	380	-	-	345	415	05.082.13.88.0	05.348.30.37.0
B 2		185	10	500	380	-	-	345	415	05.082.14.01.0	05.348.30.37.0
B 2		195	10	500	380	-	-	345	415	05.082.14.09.0	05.348.30.49.0
B 5	1 x 56	170	10	500	380	-	-	345	415	05.082.14.17.0	05.348.30.49.0
B 2	1 x 60	205	54	550	380	-	-	345	415	05.082.14.08.0	05.348.30.48.0
B 1	1 x 62	30	80	500	310	-	-	275	345	05.082.14.02.0	05.348.30.36.0
B 1		30	80	500	380	-	-	345	415	05.082.13.96.0	05.348.30.36.0
B 2		110	10	500	380	-	-	345	415	05.082.13.95.0	05.348.30.37.0
B 2		185	10	500	380	-	-	345	415	05.082.14.04.0	05.348.30.37.0
B 5		185	10	500	380	-	-	345	415	05.082.14.12.0	05.348.30.49.0
B 7		189	54	550	380	-	-	345	415	05.082.14.25.0	05.348.30.55.0
70 mm wide (B) - 3D-Trailing arm											
B 3	1 x 62	30	80	500	310	-	-	275	345	05.082.14.23.0 L	05.348.30.41.0 L
										05.082.14.24.0 R	05.348.30.40.0 R
B 3		110	10	500	380	-	-	345	415	05.082.13.94.1 L	05.348.30.41.0 L
										05.082.13.93.1 R	05.348.30.40.0 R
B 4	110	10	500	380	-	-	345	415	05.082.13.92.1 L	05.348.30.39.0 L	
									05.082.13.91.1 R	05.348.30.38.0 R	
B 6	110	10	500	380	-	-	345	415	05.082.14.13.0 L	05.348.30.53.0 L	
									05.082.14.14.0 R	05.348.30.52.0 R	
1005	Bush (steel / rubber / steel)				02.0315.98.00 Ø 30 / 60 x 72				Leaf spring 70 mm wide		
1015	Plug (for catch strap)				03.379.00.27.0						

Loose spring screws for trailing arms with centre bolt see page 17.

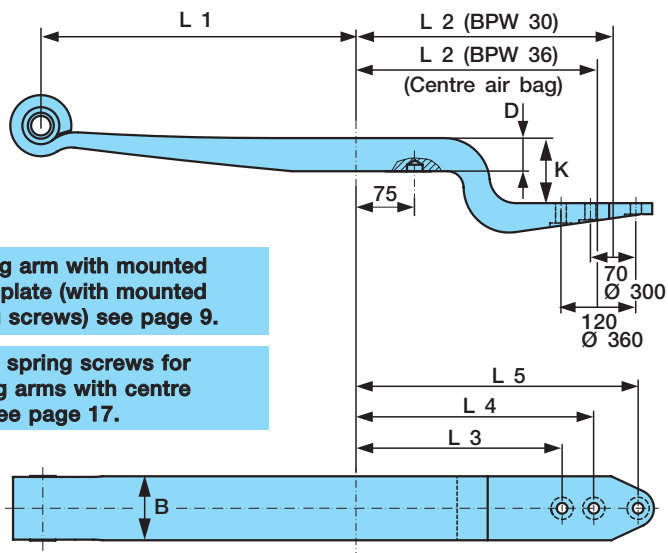
1.2 Trailing arms

Cranked single leaf trailing arms, 100 mm wide

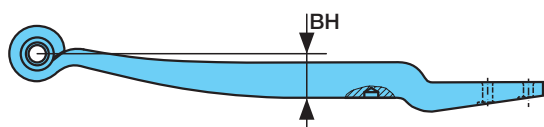


Trailing arm with mounted catch plate (with mounted spring screws) see page 9.

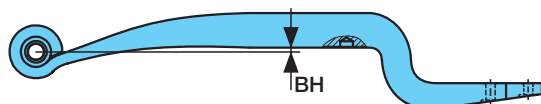
Loose spring screws for trailing arms with centre bolt see page 17.



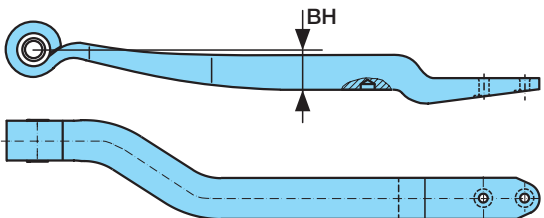
B 1



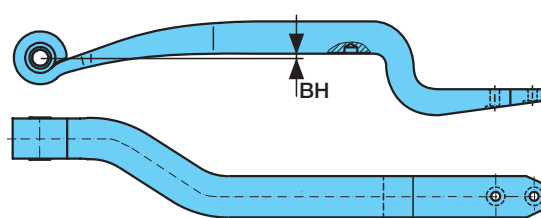
B 2



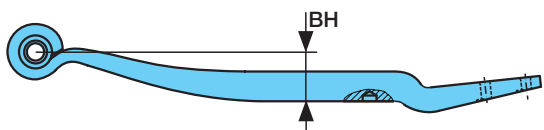
B 3



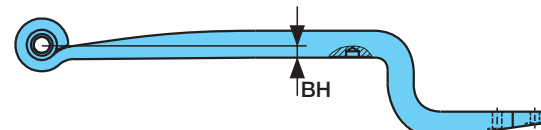
B 4



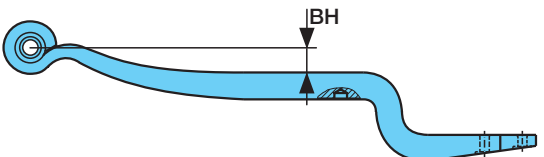
B 5



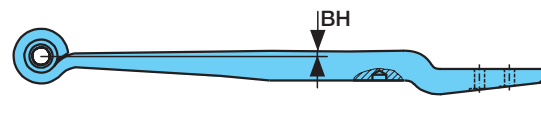
B 6



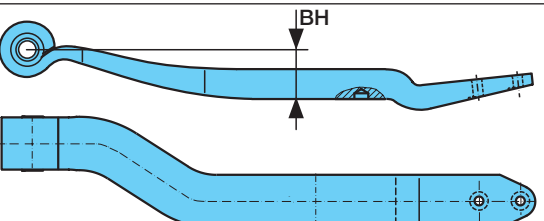
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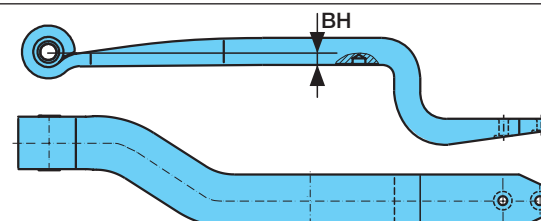
B 8



B 9



B 10



Cranked single leaf trailing arms, 100 mm wide

Dimensions										BPW Code no.	
Fig.	D	K	BH	L 1	BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	Trailing arm Item 1000 Item 1001 / 1002 3D	Suitable catch strap Item 1012 Item 1013 / 1014 3D
100 mm wide (B)											
B 5	1 x 48	25	92	500	380	-	-	345	415	05.082.13.80.0	05.348.30.05.0
B 1		30	70	500	310	-	-	275	345	05.082.13.51.0	05.348.30.05.0
B 1		30	70	500	380	-	-	345	415	05.082.13.56.0	05.348.30.05.0
B 2		100	10	500	380	-	-	345	415	05.082.13.52.0	05.348.30.23.0
B 6		150	22	500	380	380	-	345	415	05.082.12.93.0	05.348.30.05.0
B 1		150	71	500	405	380	320	370	440	05.082.13.69.0	05.348.30.05.0
B 6		205	22	500	380	-	-	345	415	05.082.13.70.0	05.348.30.05.0
B 1	1 x 51	30	70	500	310	-	-	275	345	05.082.13.59.0	05.348.30.05.0
B 1		30	70	500	380	-	-	345	415	05.082.13.67.0	05.348.30.05.0
B 1		30	70	550	380	380	-	345	415	05.082.13.84.0	05.348.30.33.0
B 2		100	10	500	380	-	-	345	415	05.082.13.68.0	05.348.30.23.0
B 1		100	70	500	380	-	-	345	415	05.082.13.66.0	05.348.30.05.0
B 6		150	22	500	380	-	-	345	415	05.082.13.19.0	05.348.30.05.0
B 6		150	22	550	380	-	-	345	415	05.082.13.86.0	05.348.30.33.0
B 1	1 x 54	30	70	550	380	380	-	345	415	05.082.13.74.0	05.348.30.33.0
B 6		150	22	550	380	-	-	345	415	05.082.14.07.0	05.348.30.45.0
B 8	1 x 56	30	11	500	335	-	-	300	370	05.082.14.16.0	05.348.30.05.0
B 8	1 x 58	45	11	500	380	405	295	345	415	05.082.13.75.1	05.348.30.05.0
B 7		110	62	620	365	-	-	330	400	05.082.13.78.0	05.348.30.05.0
B 1		163	66	500	405	380	320	370	440	05.082.13.83.1	05.348.30.05.0

100 mm wide (B) - 3D-Trailing arm

B 9	1 x 50	25	92	500	380	-	-	345	415	05.082.13.81.0 L 05.082.13.82.0 R	05.348.30.08.0 L 05.348.30.18.0 R
B 9		30	70	500	310	-	-	275	345	05.082.13.53.0 L 05.082.13.54.0 R	05.348.30.08.0 L 05.348.30.18.0 R
B 9		30	70	500	380	-	-	345	415	05.082.13.77.0 L 05.082.13.76.0 R	05.348.30.08.0 L 05.348.30.18.0 R
B 4		100	10	500	380	-	-	345	415	05.082.13.57.0 L 05.082.13.58.0 R	05.348.30.31.0 L 05.348.30.30.0 R
B 10		150	22	500	380	-	-	345	415	05.082.13.01.0 L 05.082.13.02.0 R	05.348.30.08.0 L 05.348.30.18.0 R
B 3		150	71	500	405	380	320	370	440	05.082.13.73.0 L 05.082.13.72.0 R	05.348.30.08.0 L 05.348.30.18.0 R
		1 x 56	45	11	500	380	405	345	415	465	05.082.14.19.0 L 05.082.14.18.0 R
B 3	163		66	500	405	380	320	370	440	05.082.14.21.0 L 05.082.14.20.0 R	05.348.30.08.0 L 05.348.30.18.0 R

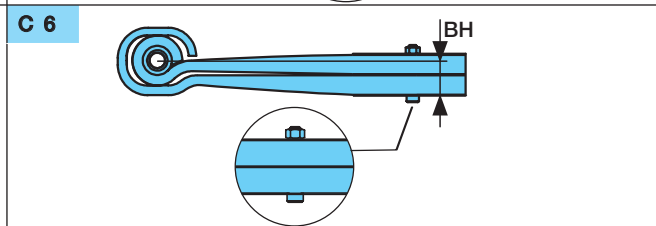
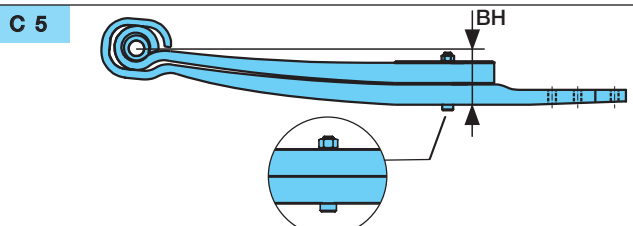
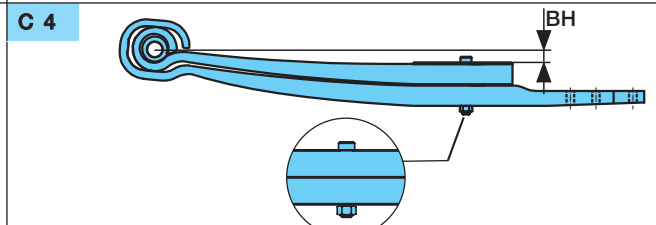
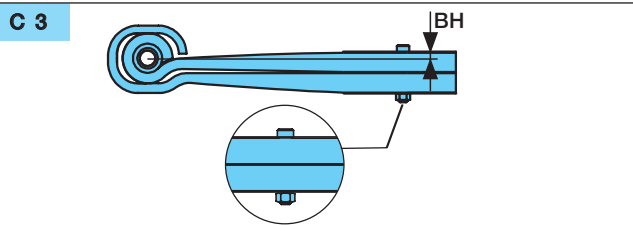
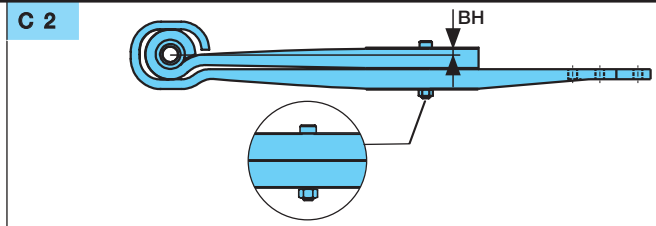
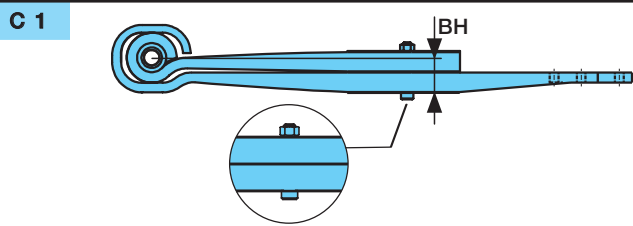
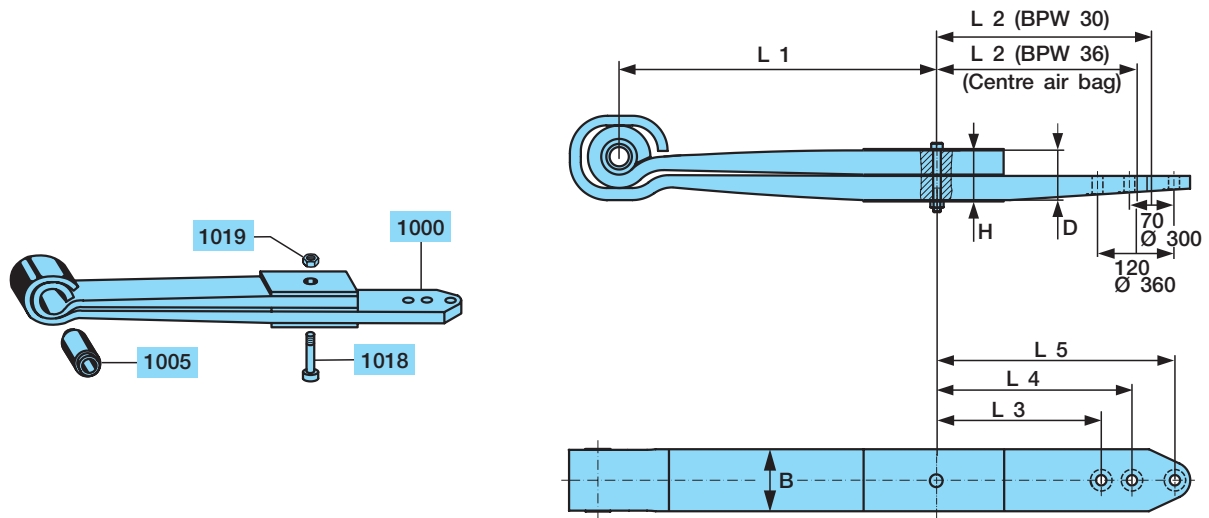
1005	Bush (steel / rubber / steel) Bush (rubber / steel) ¹⁾	02.0316.90.00 Ø 30 / 57 x 102 02.0316.06.00 Ø 30 / 60 x 102	Leaf spring 100 mm wide
1015	Plug (for catch strap)	03.379.00.27.0	

¹⁾ for old trailing arms with rubber / steel bush

Loose spring screws for trailing arms with centre bolt see page 17.

1.3 Trailing arms

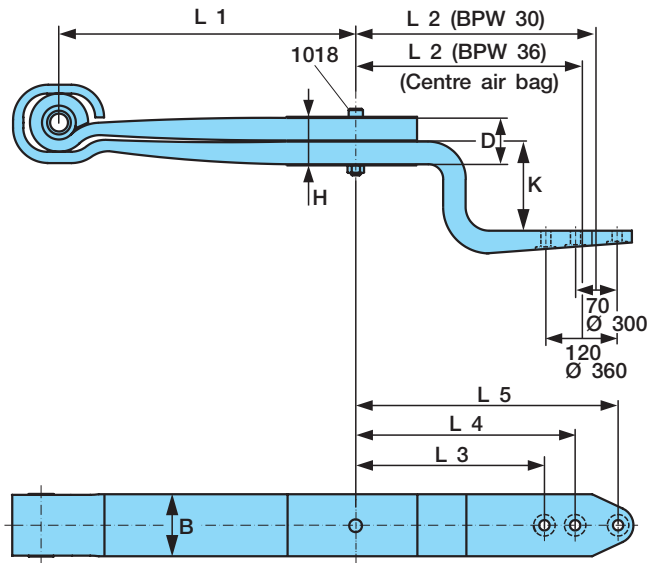
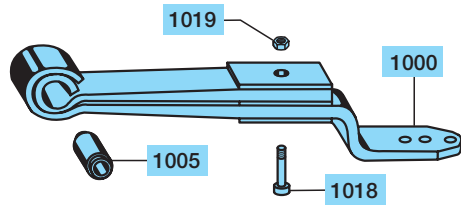
Straight double leaf trailing arms



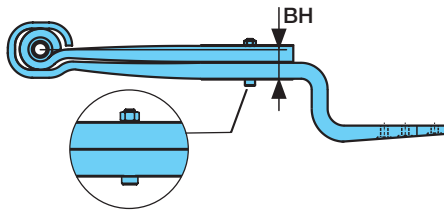
Straight double leaf trailing arms											
Dimensions										BPW Code no.	
Fig.	D	H	BH	L 1	BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	Trailing arm Item 1000	Centre bolt Item 1018
100 mm wide (B)											
C 1	2 x 33	72	69	500	335	310	250	300	370	05.082.02.51.0	03.341.02.02.0
C 2		72	3	500	335	310	250	300	370	05.082.02.94.0	03.341.02.02.0
C 1		72	59	500	380	355	295	345	415	05.082.12.66.0	03.341.02.02.0
C 2		72	13	500	380	355	295	345	415	05.082.12.60.0	03.341.02.02.0
C 2		72	6	550	335	310	250	300	370	05.082.02.74.0	03.341.02.02.0
C 1	2 x 38	82	69	500	335	310	250	300	370	05.082.13.08.0	03.341.02.03.0
C 2		82	13	500	335/285	310	250	300	370	05.082.02.96.0	03.341.02.03.0
C 2		82	13	500	335	310	250	300	370	05.082.02.95.0	03.341.02.03.0
C 2		82	13	500	380	355	295	345	415	05.082.12.61.0	03.341.02.03.0
C 1		82	69	500	380	355	295	345	415	05.082.12.67.0	03.341.02.03.0
C 2	2 x 40	86	12	550	335	310	250	300	370	05.082.02.99.0	03.341.02.17.0
C 2		89	15	550	405	380	320	370	440	05.082.13.21.0	03.341.02.17.0
C 3	2 x 43	92	13	500	-	-	-	-	-	05.082.13.46.0	03.341.02.18.0
C 1		92	72	500	335	310	250	300	370	05.082.13.87.0	03.341.02.18.0
C 2		92	20	500	335	310	250	300	370	05.082.12.11.0	03.341.02.18.0
C 1		92	79	500	380	355	295	345	415	05.082.12.68.0	03.341.02.18.0
C 2		92	13	500	380	355	295	345	415	05.082.13.36.0	03.341.02.18.0
C 3		95	15	550	-	-	-	-	-	05.082.13.65.0	03.341.02.18.0
C 1		92	78	550	405	380	320	370	440	05.082.13.07.0	03.341.02.18.0
C 2		92	14	550	405	380	320	370	440	05.082.12.83.0	03.341.02.18.0
C 1		92	78	550	475	450	390	440	510	05.082.12.94.0	03.341.02.18.0
C 2		92	14	550	475	450	390	440	510	05.082.12.85.0	03.341.02.18.0
C 4		2 x 45	94	31	690	335	310	250	300	370	05.082.13.20.0
C 6	2 x 51	108	86	550	-	-	-	-	-	05.082.14.15.0	03.341.02.04.0
C 1		108	86	550	475	450	390	440	510	05.082.14.05.0	03.341.02.04.0
C 2		108	22	550	475	450	390	440	510	05.082.14.06.0	03.341.02.04.0
C 5		106	137	690	335	310	250	300	370	05.082.13.79.0	03.341.02.04.0
C 4		106	31	690	335	310	250	300	370	05.082.13.63.0	03.341.02.04.0
C 1	2 x 54	114	100	720	345	320	260	310	380	05.082.13.05.0	03.341.02.32.0
C 2		114	14	720	345	320	260	310	380	05.082.13.10.0	03.341.02.32.0
1005	Bush (steel / rubber / steel) Bush (rubber / steel) ¹⁾					02.0316.90.00	Ø 30 / 57 x 102		Leaf spring 100 mm wide		
						02.0316.06.00	Ø 30 / 60 x 102				
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 see page 17.											

1.4 Trailing arms

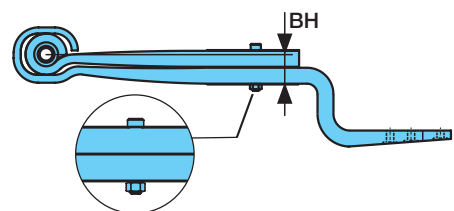
Cranked double leaf trailing arms



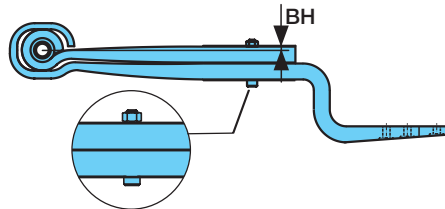
D 1



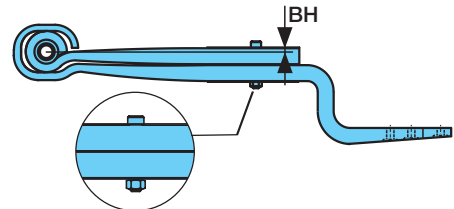
D 2



D 3



D 4



Cranked double leaf trailing arms												
Dimensions											BPW Code no.	
Fig.	D	H	K	BH	L 1	BPW 30 L 2	BPW 36 L 2	L 3	L 4	L 5	Trailing arm Item 1000	Centre bolt Item 1018
100 mm wide (B)												
D 1	2 x 33	72	100	68	470	390	365	305	355	425	05.082.02.66.0	03.341.02.02.0
D 2		72	100	68	470	340/390	365	305	355	425	05.082.02.97.0	03.341.02.02.0
D 1		72	150	72	500	405	380	320	370	440	05.082.12.63.0	03.341.02.02.0
D 1	2 x 38	82	100	68	470	390	365	305	355	425	05.082.13.26.0	03.341.02.03.0
D 4		82	100	14	470	390	365	305	355	425	05.082.12.43.0	03.341.02.03.0
D 1		82	150	72	500	405	380	320	370	440	05.082.12.64.0	03.341.02.03.0
D 3	2 x 40	86	50	14	550	405	380	320	370	440	05.082.12.88.0	03.341.02.17.0
D 1		86	120	72	550	405	380	320	370	440	05.082.12.77.0	03.341.02.17.0
D 2		86	120	14	550	405	380	320	370	440	05.082.02.45.0	03.341.02.17.0
D 2		89	120	15	720	405	380	320	370	440	05.082.13.23.0	03.341.02.17.0
D 1		86	150	72	550	405	380	320	370	440	05.082.12.84.0	03.341.02.17.0
D 2	2 x 43	92	50	13	500	380	355	295	345	415	05.082.13.60.0	03.341.02.18.0
D 1		95	120	74	550	405	380	320	370	440	05.082.13.24.0	03.341.02.18.0
D 4		95	120	21	550	405	380	320	370	440	05.082.13.34.0	03.341.02.18.0
D 1		92	150	72	500	405	380	320	370	440	05.082.13.33.0	03.341.02.18.0
1005	Bush (steel / rubber / steel) Bush (rubber / steel) ¹⁾					02.0316.90.00	Ø 30 / 57 x 102	Leaf spring 100 mm wide				
						02.0316.06.00	Ø 30 / 60 x 102					
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 see below.

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

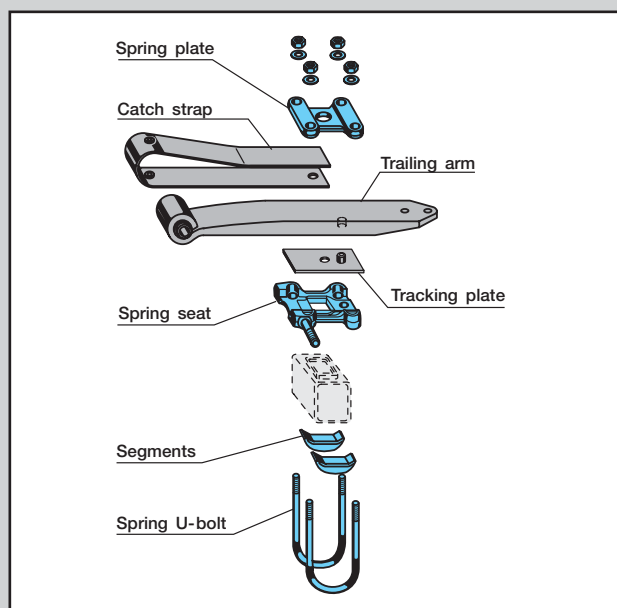
2 Spring seats, axle clampings

General

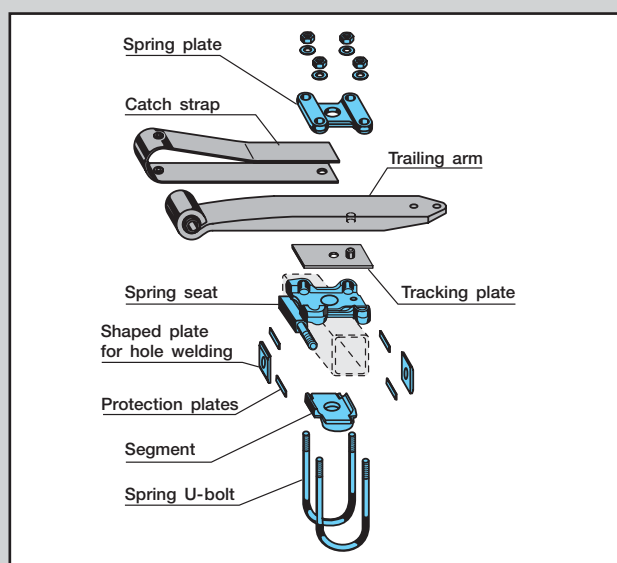
BPW Axle clampings

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

Clamped, positive-locking axle connections ensure an even force transfer into the axle appropriate 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.



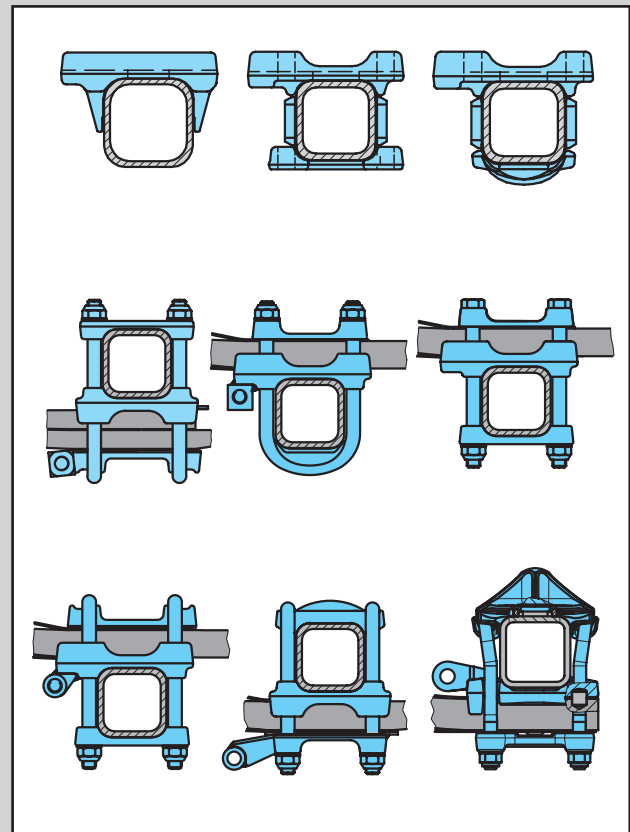
Welded axle mountings are mainly used with a round axle cross section, steering axles as well as heavy-duty air suspension systems.



Determining axle mountings

1. Clarifying design

- Trailing arm 70 mm or 100 mm wide
- 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 seat 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



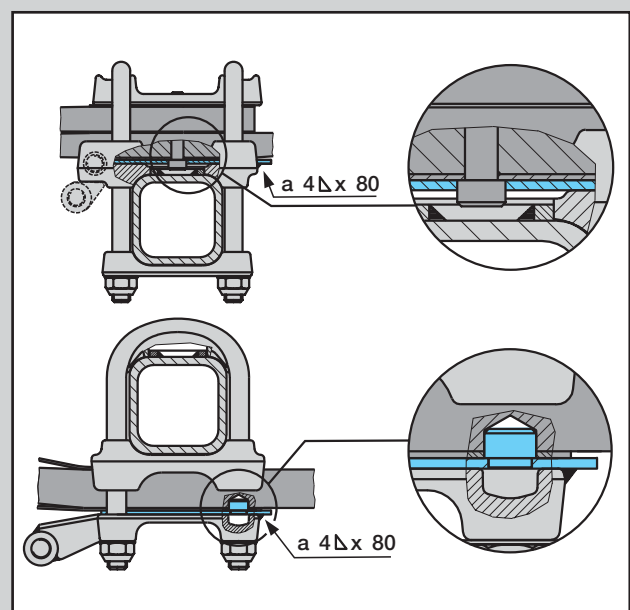
Tracking plates

Weld on 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 pipings 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.

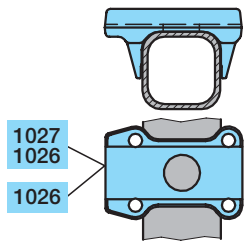


2.1 Welded axle spring seat assembly

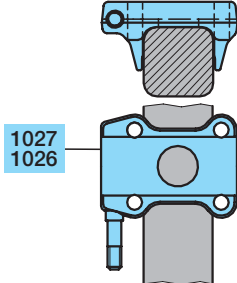
Spring seats for welded axle spring seat assembly

Spring seats with welding lug

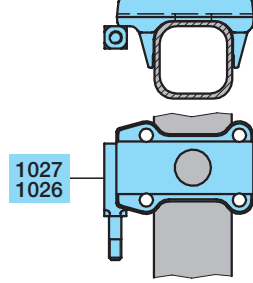
A 1



A 2

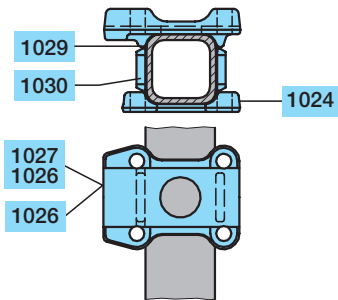


A 3

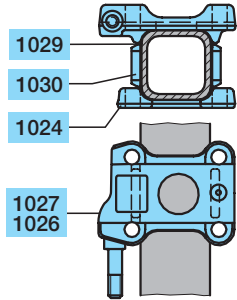


Spring seats with counter-lugs

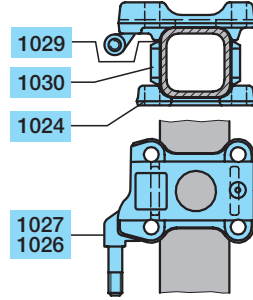
B 1



B 2

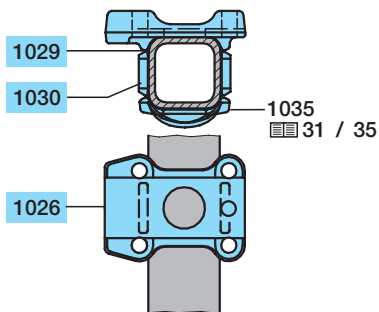


B 3

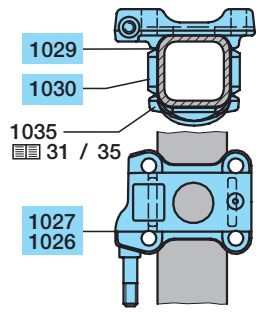


Spring seats with segments

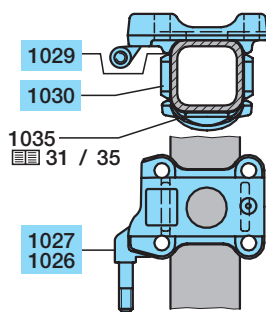
B 1



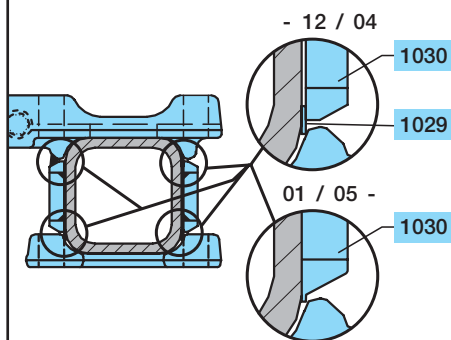
B 2



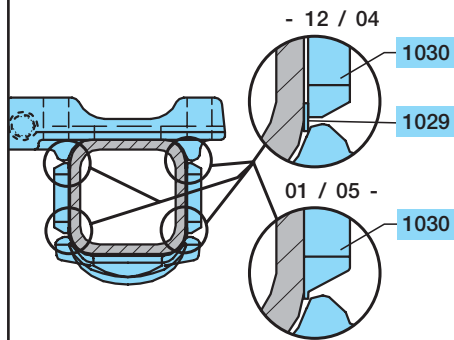
B 3



Spring seats with counter-lugs



Spring seats with segments



Welded axle spring seat assembly 2.1

Spring seats for welded axle spring seat assembly											
Spring seats, trailing arm 100 mm wide above mounted											
			Spring seat without shock absorber attachment Exec. A OM / VO ..			ASpring seat with shock absorber attachment Exec. B OR 1..			Spring seat with shock absorber attachment Exec. C OR 2..		
Item	Designation	AB	BPW Code no.	Fig.	BPW Code no.	Fig.	BPW Code no.	Fig.	BPW Code no.	Fig.	
			OM / VO 1 / VO 1F / VO 13			OR 1 / OR 13 / OR 14			OR 2 / OR 2 F / OR 23		
1026	Spring seat, above	<input type="checkbox"/> 120	03.032.18.76.0	2x	A 1						
1026	Spring seat, above	<input checked="" type="checkbox"/> 120	03.032.18.99.0	2x	A 1						
1026	Spring seat, above right	<input type="checkbox"/> 120			A 1	Steering axle		Steering axle			
1027	Spring seat, above left	<input checked="" type="checkbox"/> 120			A 1	05.032.27.14.0	1x	A 2	05.032.27.10.0	1x	
						05.032.27.15.0	1x		05.032.27.11.0	1x	
1026	Spring seat, above right	<input checked="" type="checkbox"/> 120	Steering axle			Steering axle			Steering axle		
1027	Spring seat, above left	<input checked="" type="checkbox"/> 120	03.032.18.54.0	1x	A 1				05.032.27.06.0	1x	
			03.032.18.53.0	1x	A 1				05.032.27.05.0	1x	
1026	Spring seat, above	<input type="checkbox"/> 150	03.032.19.87.0	2x	A 1						
1024	Spring seat, below (counter-lug)	<input type="checkbox"/> 120	03.032.17.05.1	2x		03.032.17.05.1	2x		03.032.17.05.1	2x	
		<input type="checkbox"/> 150	03.032.19.26.0	2x		03.032.19.26.0	2x		03.032.19.26.0	2x	
		Ø 127	03.032.38.13.0	2x		03.032.38.13.0	2x		03.032.38.13.0	2x	
1026	Spring seat, above right	<input checked="" type="checkbox"/> 120	Steering axle			Steering axle			Steering axle		
1027	Spring seat, above left	<input checked="" type="checkbox"/> 120	03.032.18.54.0	1x	B 1						
			03.032.18.53.0	1x	B 1						
1026	Spring seat, above right	<input type="checkbox"/> 120	03.032.21.46.8	1x	B 1	05.032.21.50.8	1x	B 2	05.032.21.52.0	1x	
1027	Spring seat, above left	<input checked="" type="checkbox"/> 120	03.032.21.45.8	1x	B 1	05.032.21.49.8	1x	B 2	05.032.21.51.0	1x	
1026	Spring seat, above	Ø 127	03.032.58.18.0	2x	~ B 1						
1026	Spring seat, above right	Ø 127				05.032.58.22.0	1x	~ B 2			
1027	Spring seat, above left	Ø 127				05.032.58.21.0	1x	~ B 2			
1026	Spring seat, above	<input type="checkbox"/> 150	03.032.10.43.0	2x	~ B 1						
1026	Spring seat, above right	<input type="checkbox"/> 150				05.032.10.48.0	1x	B 2	05.032.10.50.0	1x	
1027	Spring seat, above left	<input type="checkbox"/> 150				05.032.10.47.0	1x	B 2	05.032.10.49.0	1x	
1029	Plate *	<input type="checkbox"/> 120 <input type="checkbox"/> 150	03.283.14.03.0			03.283.14.03.0			03.283.14.03.0		
1030	Formed piece Shaped plate	<input type="checkbox"/> 120 <input type="checkbox"/> 150	03.001.14.97.0 03.161.84.05.0			03.001.14.97.0 03.161.84.05.0			03.001.14.97.0 03.161.84.05.0		
1035	Segment	<input type="checkbox"/> 120 <input type="checkbox"/> 150	see page 31 / 35			see page 31 / 35			see page 31 / 35		

* Deleted in 120 with shaped part 03.001.14.97.0 (introduced 01 / 05).
Further executions upon request.

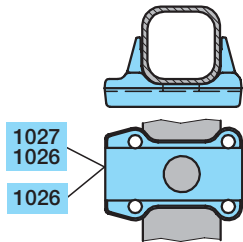
2.1 Welded axle spring seat assembly

Spring seats for welded axle spring seat assembly

□ 120 / □ 150

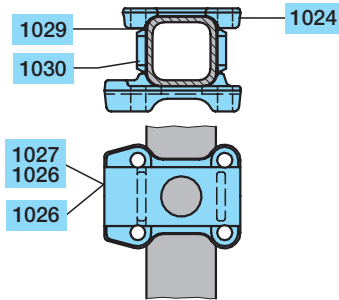
Spring seats with welding lug

A 1



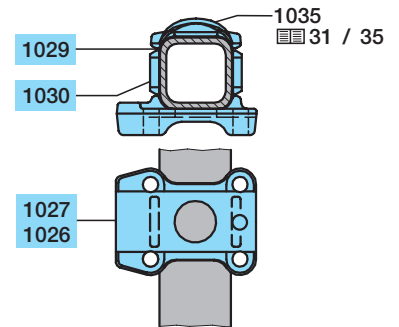
Spring seats with counter-lugs

A 2



Spring seats with segments

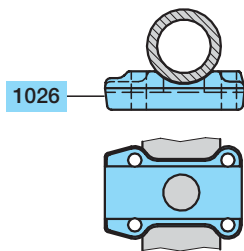
A 3



Ø 127

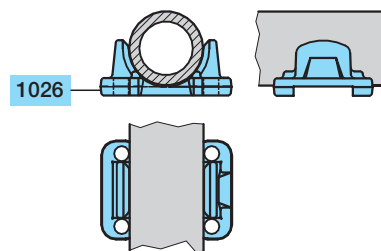
Spring seats without welding lug

B 1



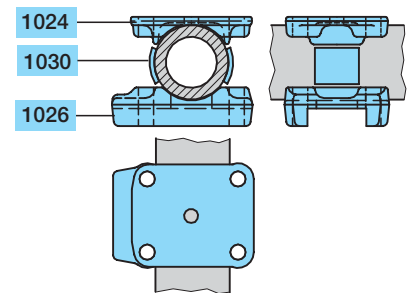
Spring seats with welding lug

B 2



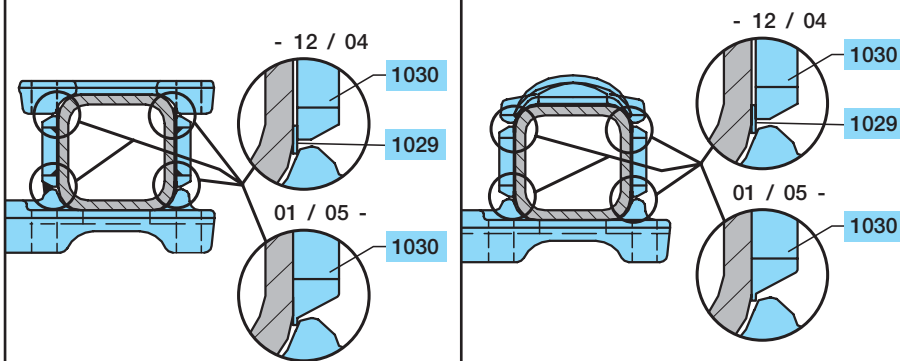
Spring seats with counter-lugs

B 3



Spring seats with counter-lugs

Spring seats with segments



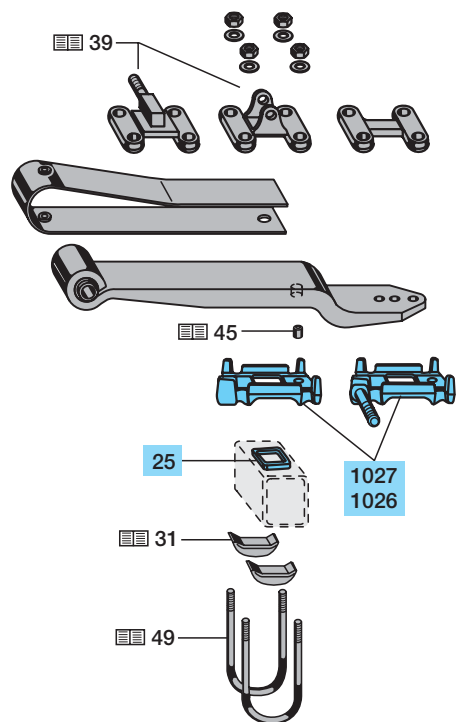
Welded axle spring seat assembly 2.1

Spring seats for welded axle spring seat assembly						
Spring seats, trailing arm 100 mm wide below mounted						
			Spring seat without shock absorber attachment OT.. / SLU.. / ALU..			
Item	Designation	AK	BPW Code no.	Fig.	BPW Code no.	Fig.
			OT.. / SLU.. / ALU..			
Spring seats with welding lug, without counter-lugs						
1026	Spring seat, below	□ 120	03.032.18.76.0	2x	A 1	
1026	Spring seat, below	■ 120	03.032.18.99.0	2x	A 1	
1026	Spring seat, below	∅ 127	03.032.38.75.0	2x	B 2	
1026	Spring seat, below	□ 150	03.032.19.87.0	2x	A 1	
			Steering axle			
1026	Spring seat, below left	■ 120	03.032.18.54.0	1x	A 1	
1027	Spring seat, below right		03.032.18.53.0	1x		
Spring seats without welding lug, with counter-lugs / segment						
1024	Spring seat, above (counter-lug)	□ 120 □ 150 ∅ 127		03.032.17.05.1 2x 03.032.19.26.0 2x 03.032.38.13.0 2x	A 2 A 2 B 3	
			Steering axle			
1026	Spring seat, below left	■ 120		03.032.18.54.0 1x	A 2 / A 3	
1027	Spring seat, below right			03.032.18.53.0 1x		
1026	Spring seat, below left	□ 120		03.032.21.06.0 1x	A 2 / A 3	
1027	Spring seat, below right	■ 120		03.032.21.05.0 1x		
1026	Spring seat, below	∅ 127		03.032.58.18.0 2x	B 1 / B 3	
1026	Spring seat, below	□ 150		03.032.10.44.0 2x	A 2 / A 3	
1029	Plate *	□ 120 □ 150		03.283.14.03.0		
1030	Formed piece Shaped plate	□ 120 □ 150 ∅ 127		03.001.14.97.0 03.161.84.05.0 03.163.53.01.0		
1035	Segment	□ 120 □ 150		see page 31 / 35		
<p>* Deleted in □ 120 with shaped part 03.001.14.97.0 (introduced 01 / 05). Further executions upon request.</p>						

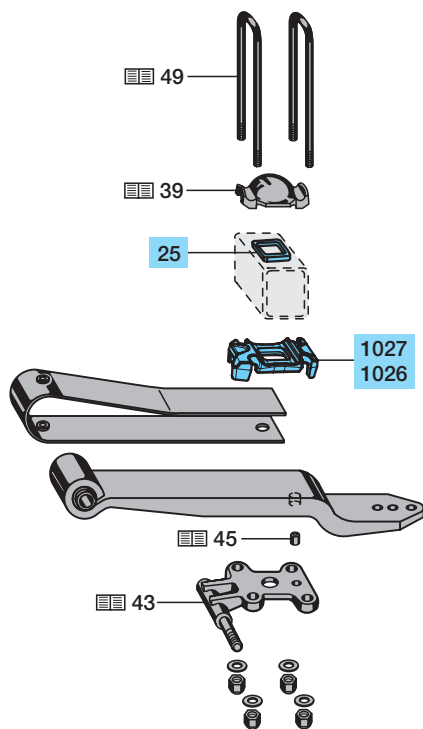
2.2 Clamped axle spring seat assembly

Spring seats for clamped axle spring seat assembly

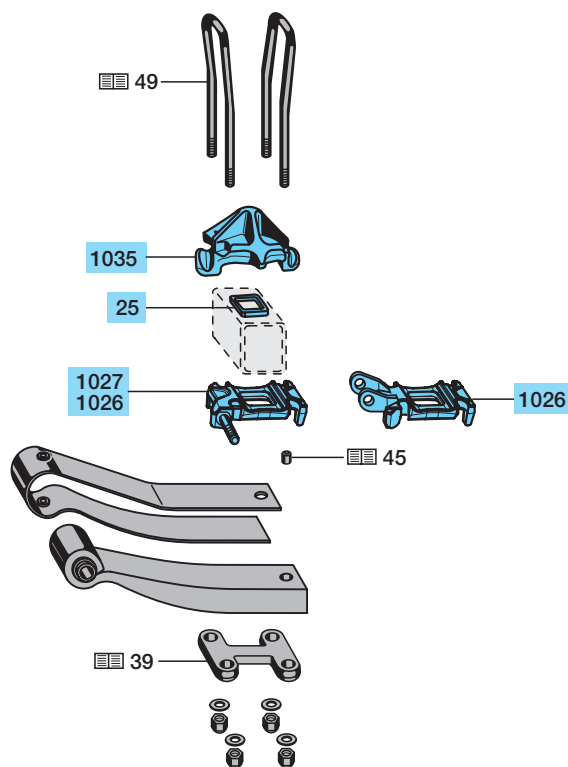
ALII
Trailing arms 70 mm wide, above mounted



ALII
Trailing arms 70 mm wide, below mounted

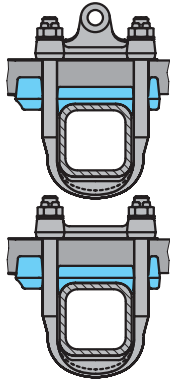
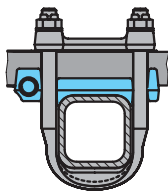
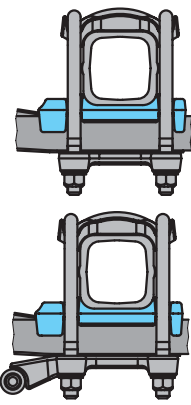
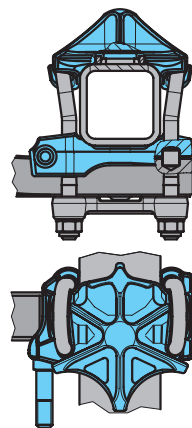
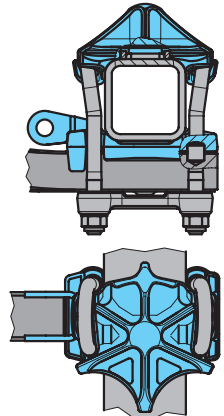


Trailing arms 70 mm wide, below mounted /
Direct air suspension (Airlight^{Direct})



Clamped axle spring seat assembly 2.2

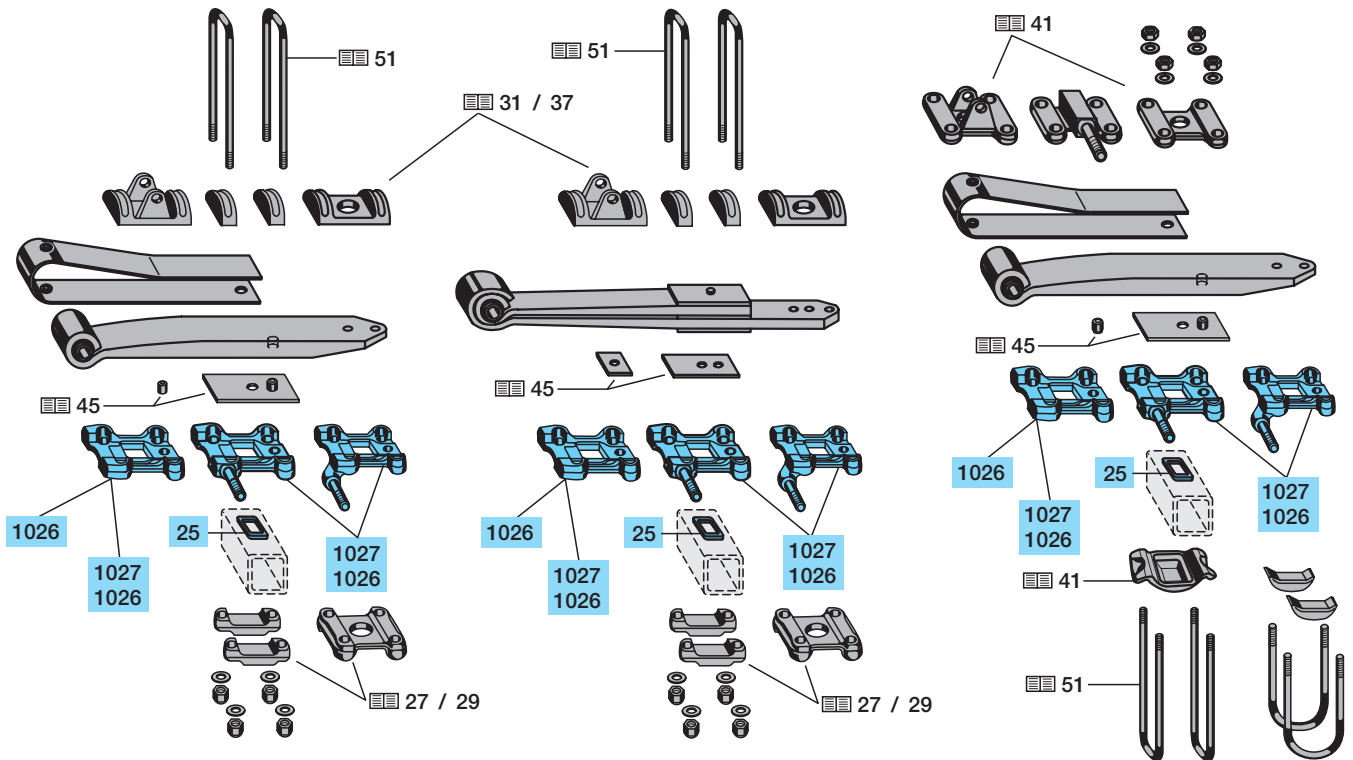
AL

Spring seats for clamped axle spring seat assembly					
Spring seats, trailing arms 70 mm wide					
Trailing arms 70 mm wide, above mounted					
		Spring seat without shock absorber attachment Exec. A L ..		Spring seats with shock absorber attachment Exec. B LI 1..	
					
Item	Designation	AK	BPW Code no.	BPW Code no.	
25	Profiled part (Centring frame)	<input type="checkbox"/> 120	03.295.46.21.0 *	03.295.46.21.0 *	
1026	Spring seat, above right	<input type="checkbox"/> 120	03.032.21.14.0 1x	05.032.21.18.0 1x	
1027	Spring seat, above left		03.032.21.15.0 1x	05.032.21.19.0 1x	
* Replacement for profile part (centering frame) 03.295.46.20.0					
Trailing arms 70 mm wide, below mounted					
		Spring seat without shock absorber attachment		Spring seats with threaded bolts for shock absorber attachment Direct air suspension (Airlight ^{Direct})	Spring seats with plates for shock absorber attachment Direct air suspension (Airlight ^{Direct})
					
Item	Designation	AK	BPW Code no.	BPW Code no.	BPW Code no.
25	Profiled part (Centring frame)	<input type="checkbox"/> 120	03.295.46.21.0 *	03.295.46.21.0 *	03.295.46.21.0 *
1026	Spring seat, below right	<input type="checkbox"/> 120	03.032.21.14.0 1x	05.032.21.22.0 1x	
1027	Spring seat, below left		03.032.21.15.0 1x	05.032.21.23.0 1x	
1026	Spring seat, below	<input type="checkbox"/> 120			05.032.21.41.0 2x
1035	Spring seat	<input type="checkbox"/> 120		03.032.21.38.0 2x	03.032.21.38.0 2x
* Replacement for profile part (centering frame) 03.295.46.20.0					

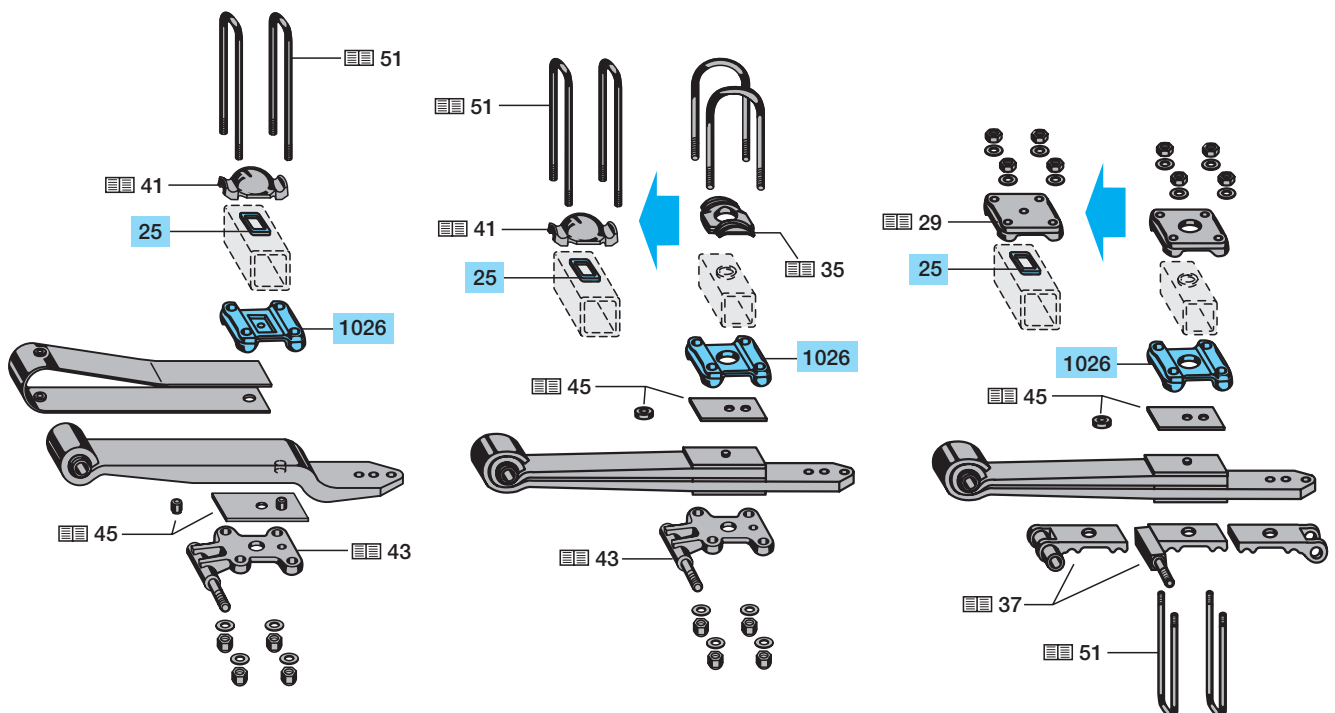
2.2 Clamped axle spring seat assembly

Spring seats for clamped axle spring seat assembly

Trailing arms 100 mm wide, above mounted



Trailing arms 100 mm wide, below mounted

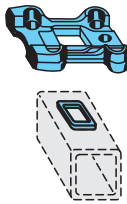

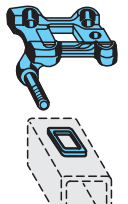


Clamped axle spring seat assembly 2.2

Spring seats for clamped axle spring seat assembly

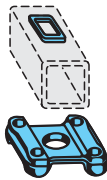
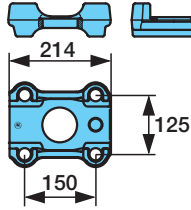
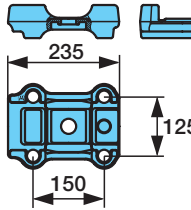
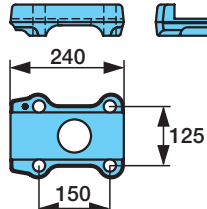
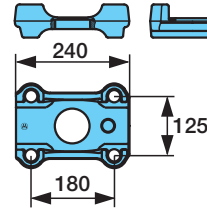
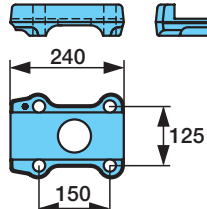
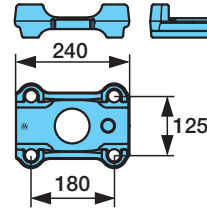
Spring seats, trailing arms 100 mm wide

Trailing arms 100 mm wide, above mounted

			Spring seat without shock absorber attachment L ..	Spring seat with shock absorber attachment LI 1..	Spring seat with shock absorber attachment LI 2..
					
Item	Designation	AK	BPW Code no.	BPW Code no.	BPW Code no.
25	Profiled part (Centring frame)	<input type="checkbox"/> 120 <input type="checkbox"/> 150	03.295.46.21.0 *	03.295.46.21.0 *	03.295.46.21.0 *
1026	Spring seat, above right	<input type="checkbox"/> 120	03.032.21.58.0 1x	05.032.21.70.0 1x	05.032.21.68.0 1x
1027	Spring seat, above left	<input type="checkbox"/> 120	03.032.21.59.0 1x	05.032.21.71.0 1x	05.032.21.69.0 1x
1026	Spring seat, above right	<input type="checkbox"/> 150	03.032.11.24.0 2x	05.032.11.30.0 1x	05.032.11.32.0 1x
1027	Spring seat, above left	<input type="checkbox"/> 150		05.032.11.29.0 1x	05.032.11.31.0 1x

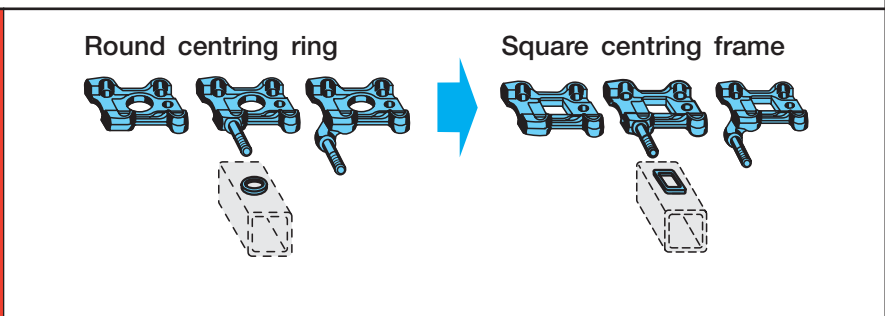
* Replacement for profile part (centering frame) 03.295.46.20.0

Trailing arms 100 mm wide, below mounted

			Spring seat without shock absorber attachment LU ...		
					
Item	Designation	AK	BPW Code no.	Fig.	
25	Profiled part (Centering frame)	<input type="checkbox"/> 120 <input type="checkbox"/> 150	03.295.46.21.0 *		
1026	Spring seat, below	<input type="checkbox"/> 120	03.032.27.62.0 2x	a	
1026	Spring seat, below	<input type="checkbox"/> 120	03.032.21.55.0 2x	b	
1026	Spring seat, below	<input type="checkbox"/> 120	03.032.26.61.0 2x	c	
1026	Spring seat, below	<input type="checkbox"/> 150	03.032.10.77.0 2x	d	

* Replacement for profile part (centering frame) 03.295.46.20.0

Axle mountings with round centring ring are replaced by axle mountings with square centring frame.
Change over if replacement is required.
Weld new square centring frame onto the axle beam and use spring seats for square centring.
Follow the BPW welding guidelines!



2.2 Clamped axle spring seat assembly

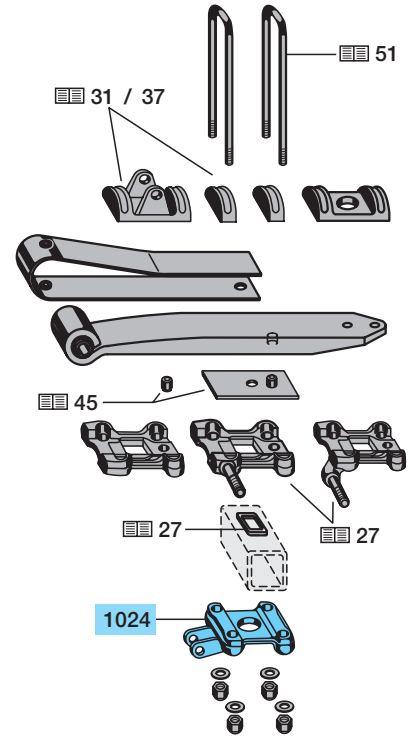
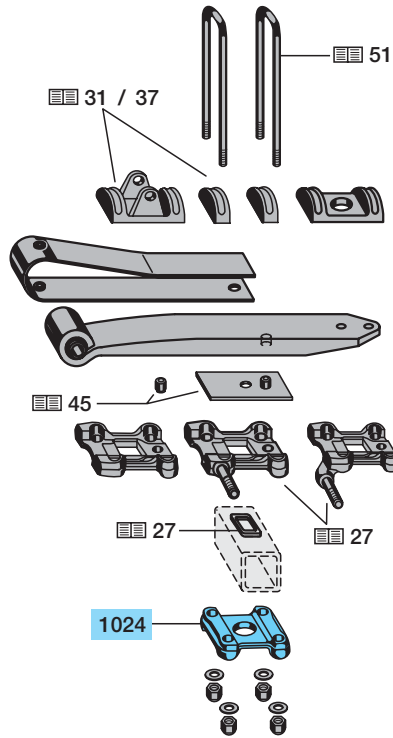
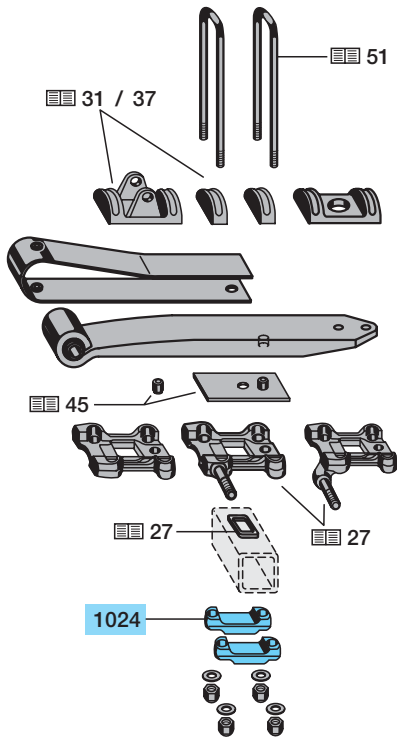
Spring seats for clamped axle spring seat assembly

Trailing arms 100 mm wide above mounted

Double bar

Spring seat

Support for U-stabilizer



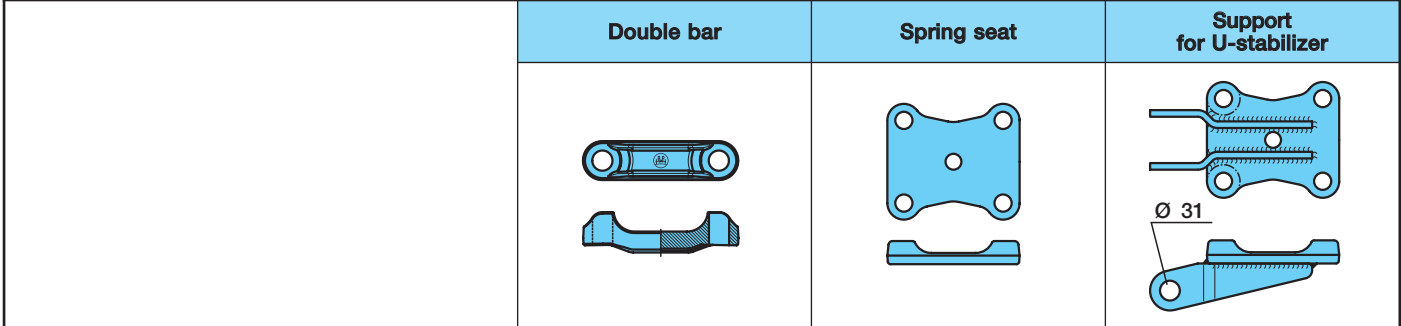
SL

AL

Spring seats for clamped axle spring seat assembly

Lower spring seats, trailing arms 100 mm wide

Trailing arms above mounted



Item	Designation	AK	BPW Code no.	BPW Code no.	BPW Code no.
1024	Spring seat	<input type="checkbox"/> 120	03.032.26.62.0 4x	03.032.27.67.2 2x	
		<input type="checkbox"/> 150	03.032.11.20.0 4x	03.032.10.63.0 2x	
			Steering axle	Steering axle	
		<input type="checkbox"/> 120	03.032.26.74.0 4x	03.032.27.87.0 2x	
1024	Support	<input type="checkbox"/> 120			05.189.14.23.0 2x
		<input type="checkbox"/> 150			05.189.13.10.0 2x

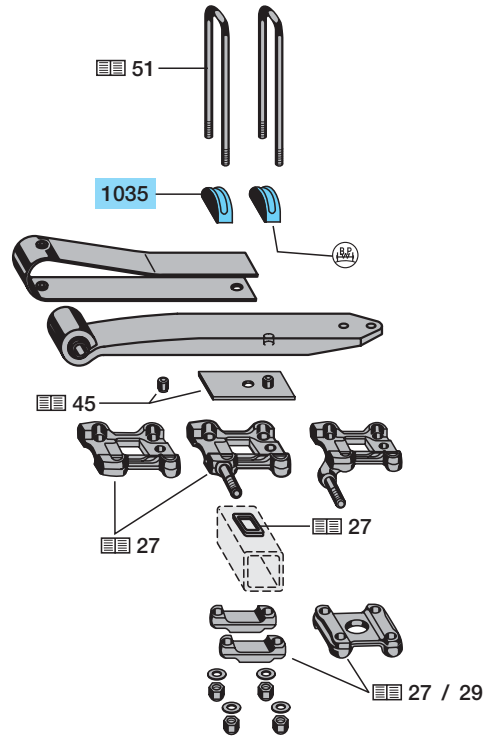
Further executions upon request.

SL
AL

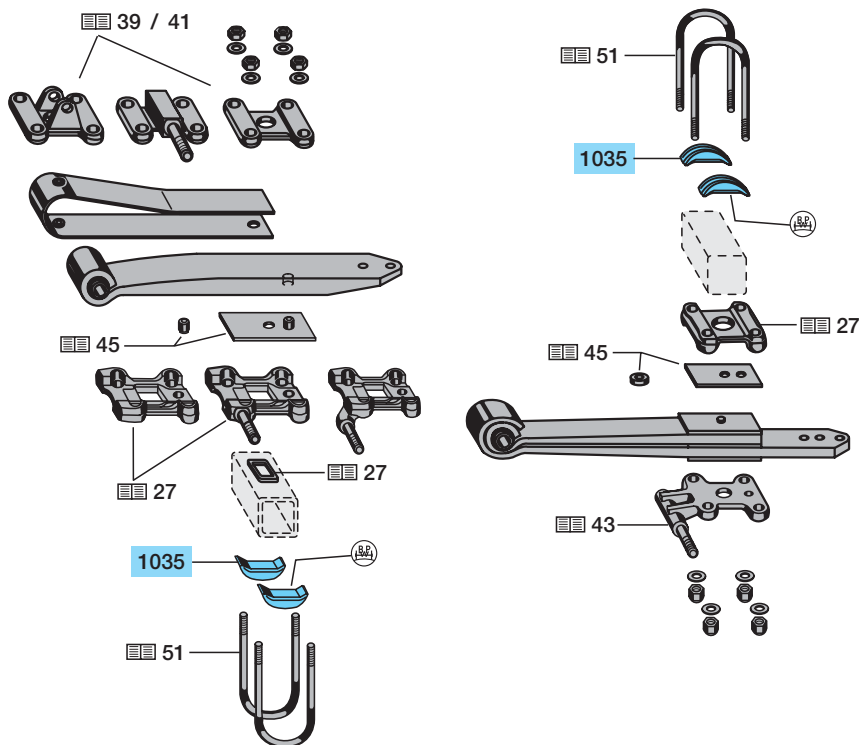
3 Segments, spring plates

Segments

Segment above the trailing arm



Segment on the axle beam

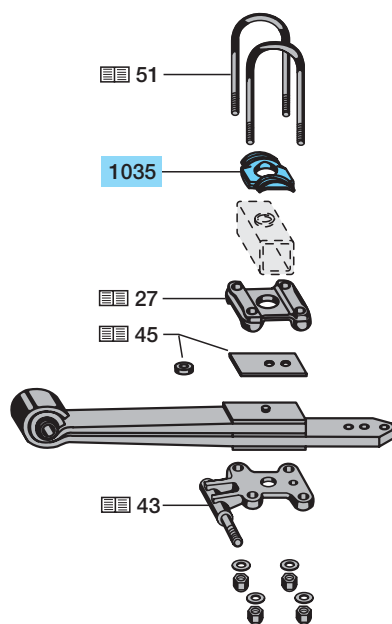


Segments					
Item	Designation	Dimension	BPW Code no.	Application	Fig.
Single segments					
Segment above the trailing arm					
1035	Segment		03.345.21.01.0	<input type="checkbox"/> 120 <input type="checkbox"/> 150	
Segment on the axle beam					
1035	Segment		03.345.23.02.1	<input type="checkbox"/> 120	
			03.345.25.01.1	<input type="checkbox"/> 150	
			03.345.23.09.0 ¹⁾	<input type="checkbox"/> 120	
			03.345.23.12.0 ¹⁾	<input checked="" type="checkbox"/> 120 solid	
			03.345.23.03.0 *	<input checked="" type="checkbox"/> 120 solid	
			03.345.25.04.0 *	<input checked="" type="checkbox"/> 150 solid	
¹⁾ for flattened spring U-bolts (disc brake) * welded on the axle beam					

3 Segments, spring plates

Segments

Double segment, round centring ring, clamped axle spring seat assembly

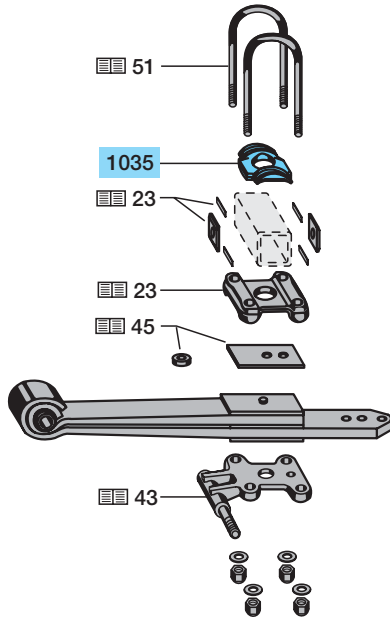


Segments					
Item	Designation	Dimension	BPW Code no.	Application	Fig.
Double segments					
Double segment, round centring ring, clamped axle spring seat assembly					
1035	Segment		03.345.23.05.1	□ 120	
			03.345.23.10.1 ¹⁾	□ 120	
			03.345.25.05.1	□ 150	
¹⁾ for flattened spring U-bolts (disc brake)					

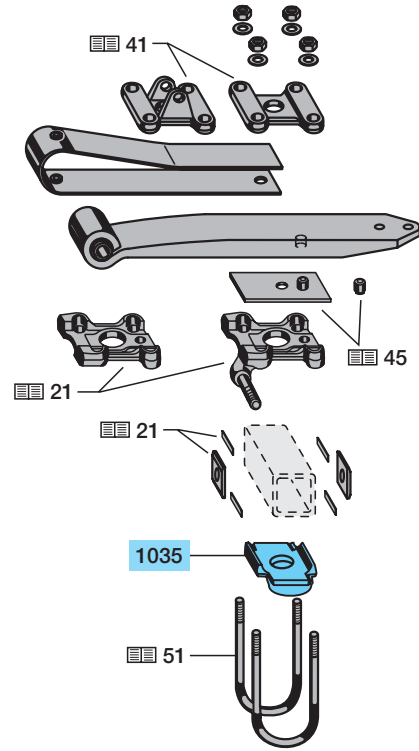
3 Segments, spring plates

Segments

Double segment on axle beam, trailing arm mounted from below, welded axle spring seat assembly



Double segment on axle beam, trailing arm mounted from above, welded axle spring seat assembly

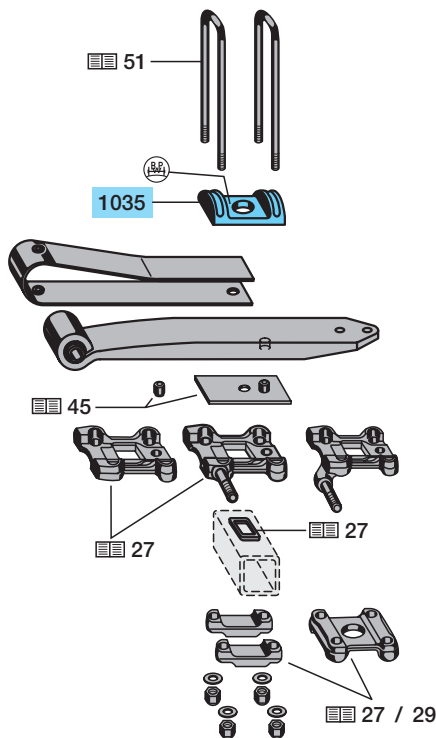


Segments					
Item	Designation	Dimension	BPW Code no.	Application	Fig.
Double segments					
Double segment, welded axle spring seat assembly					
1035	Segment		03.345.23.05.0	□ 120	
			03.345.23.15.1	□ 120	
			03.345.23.13.0 ¹⁾	□ 120	
			03.345.23.16.1 ¹⁾	□ 120	
			03.345.25.06.0	□ 150	
¹⁾ for flattened spring U-bolts (disc brake)					

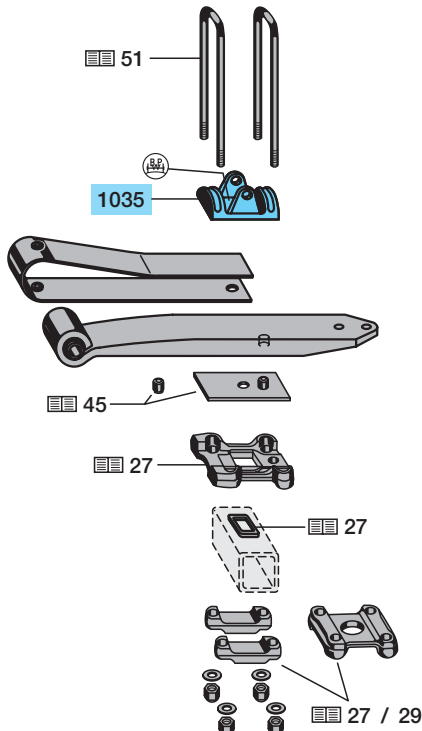
3 Segments, spring plates

Segments, spring plates

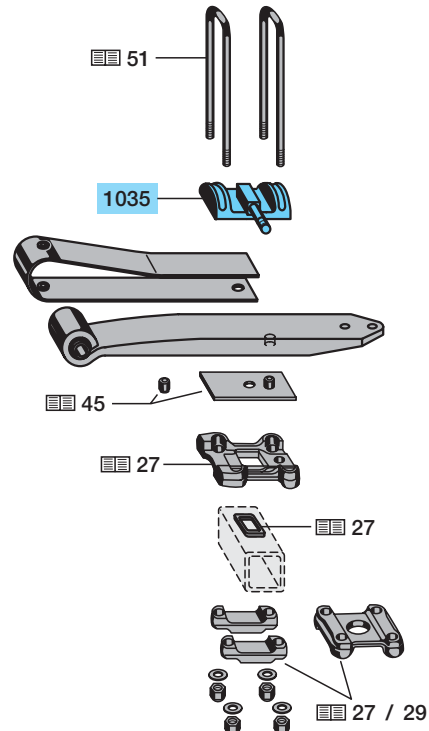
Double segment above the trailing arm



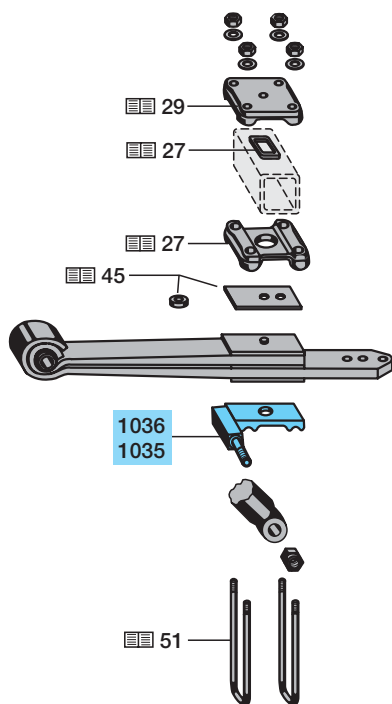
Double segment above the trailing arm for shock absorber attachment with screws



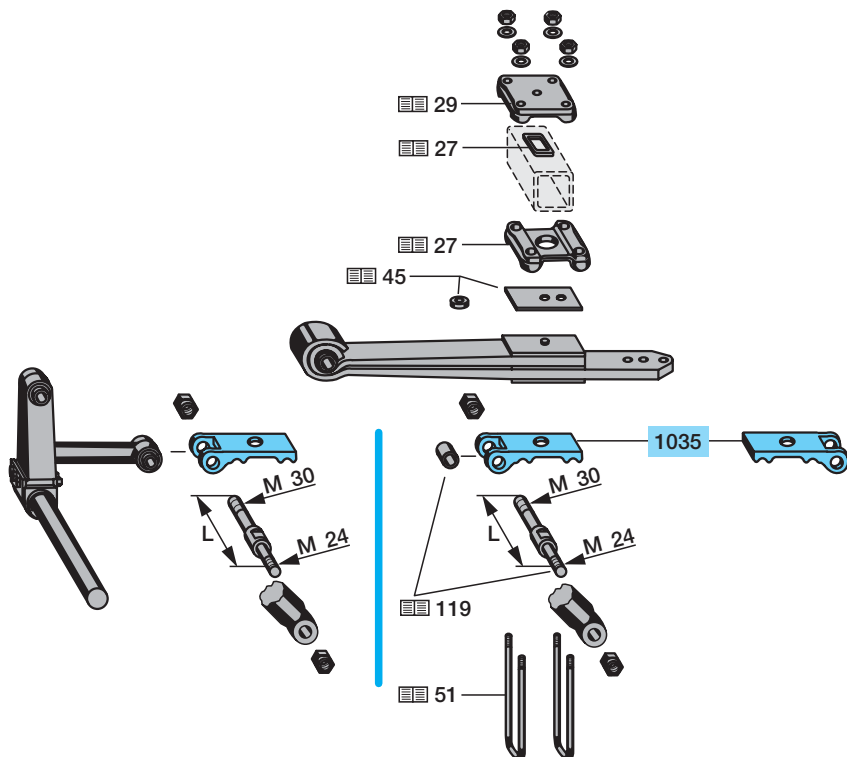
Double segment above the trailing arm for shock absorber attachment with threaded bolts



Double segment above / below the trailing arm for shock absorber attachment with threaded bolts



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



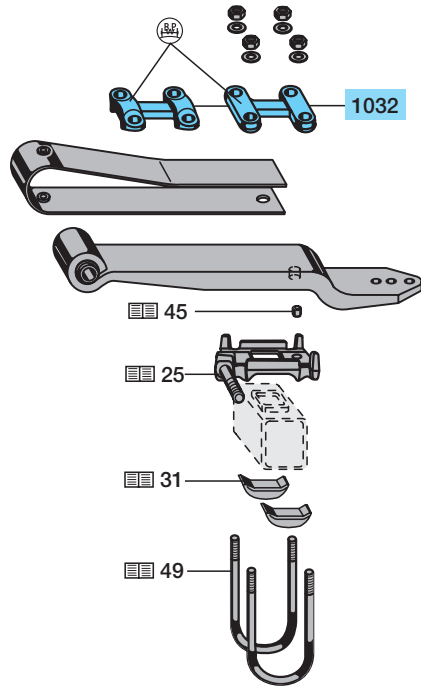
Segments, spring plates					
Item	Designation	BPW Code no.	Application	Dimension	Fig.
Double segments, spring U-bolt next to the axle beam, trailing arms 100 mm wide					
Double segment above the trailing arm					
1035	Spring plate	03.145.10.39.0	□ 120	x = 150	
		03.145.10.40.0	□ 150	x = 180	
Double segment above the trailing arm for shock absorber attachment with screws					
1035	Spring plate	03.145.10.36.0	□ 120 / □ 150	x = 150 / 180	
		03.145.10.41.0	□ 120 / □ 150	x = 150 / 180	
Double segment above the trailing arm for shock absorber attachment with threaded bolts					
1035	Spring plate	05.145.10.42.0	□ 120 / □ 150	x = 150 / 180	
Double segment above / below the trailing arm for shock absorber attachment with threaded bolts					
1035 1036	Spring plate, left Spring plate, right	05.145.10.23.0 05.145.10.22.0	□ 120 / □ 150	x = 150 / 180	
			No longer available. Use spring plate without thread bolt and weld on thread bolt (see page 110).		
Double segment below the trailing arm for shock absorber attachment with threaded bolts / U-stabilizer					
1035	Spring plate	03.145.10.21.0	□ 120 / □ 150	x = 150 / 180	
Further executions upon request.					

3 Segments, spring plates

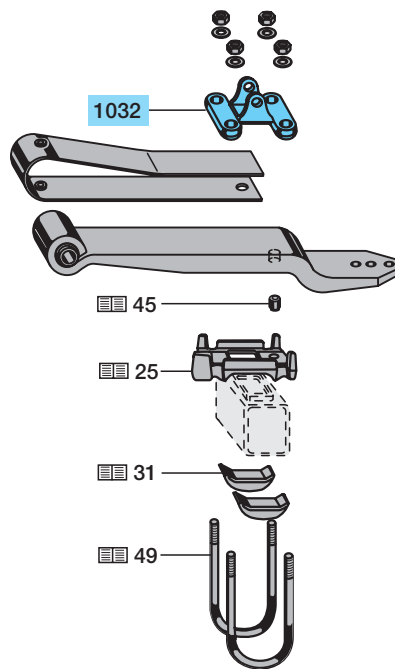
Spring plates

Spring U-bolts mounted from below, trailing arms 70 mm wide (AL II) mounted from above

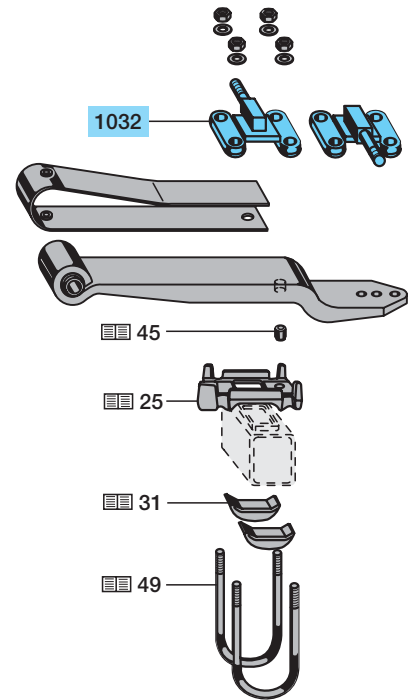
Spring U-bolts mounted from below



Spring U-bolts mounted from below, spring plate for shock absorber attachment with screws

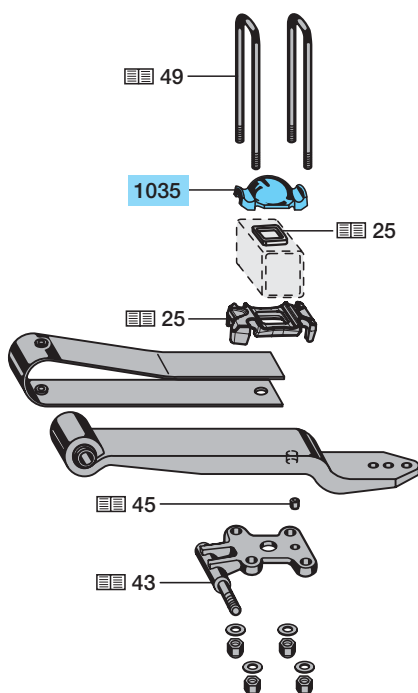


Spring U-bolts mounted from below, spring plate for shock absorber attachment with threaded bolts



Spring U-bolts mounted from above, trailing arms 70 mm wide (AL II) mounted from below

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



Spring plates					
Item	Designation	BPW Code no.	Application	Dimension	Fig.
Spring U-bolts mounted from below, trailing arms 70 mm wide (AL II) from above mounted					
Spring plate without shock absorber attachment					
1032	Spring plate	03.145.22.77.0	□ 120	A 92 / B 150	
1032	Spring plate	03.145.25.04.0	□ 120	A 92 / B 150	
1032	Spring plate	03.145.25.01.0	□ 120	A 92 / B 150	
Spring plate for shock absorber attachment with screws					
1032	Spring plate	05.145.22.84.0	□ 120	A 92 / B 150	
Spring plate for shock absorber attachment with threaded bolts					
1032	Spring plate	05.145.22.92.0	□ 120	A 92 / B 150	
Spring U-bolts mounted from above, trailing arms 70 mm wide (AL II) mounted from below					
Spring U-bolt next to the axle beam					
1035	Spring plate	03.032.21.63.0	□ 120	x = 150	

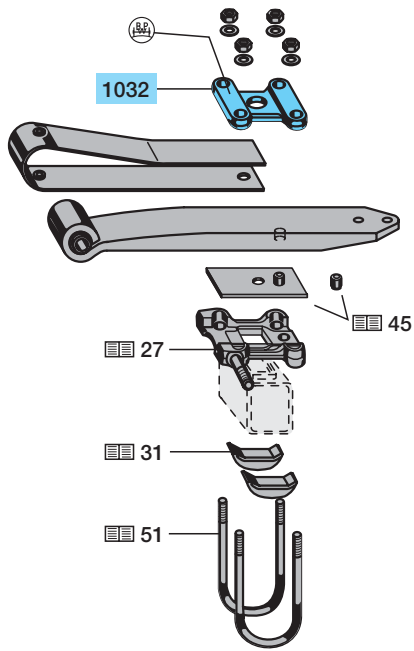
AL

3 Segments, spring plates

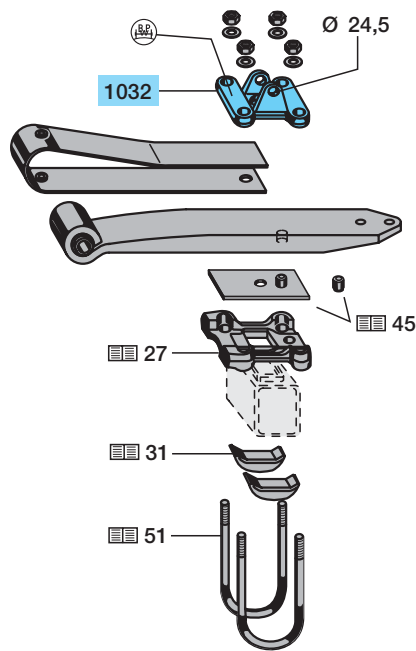
Spring plates

Spring U-bolt encloses the axle beam, trailing arms 100 mm wide

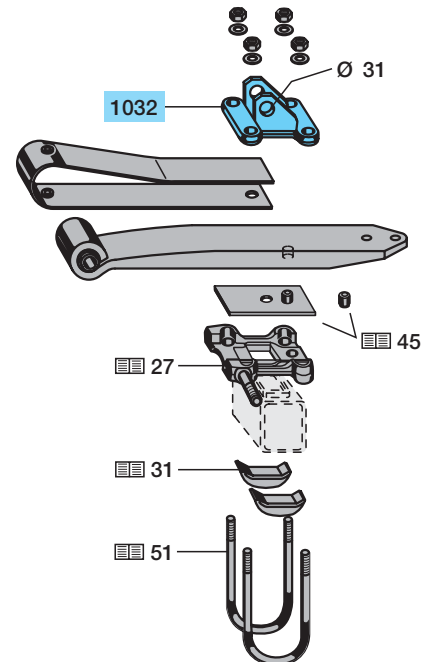
Spring U-bolts mounted from below, spring plate without shock absorber attachment / without U-stabilizer



Spring U-bolts mounted from below, spring plate for shock absorber attachment with screws

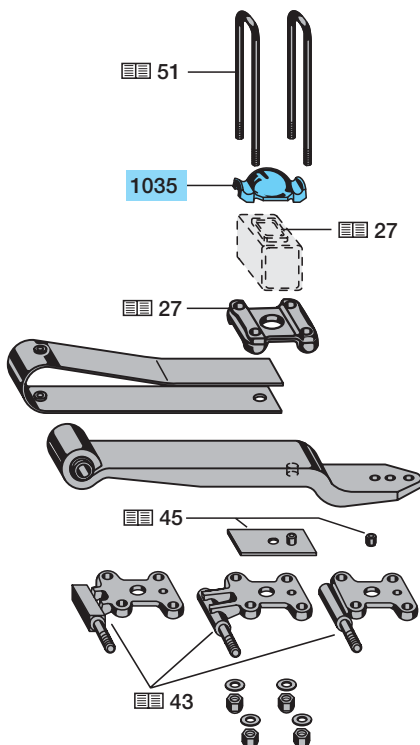


Spring U-bolts mounted from below, spring plate for U-stabilizer attachment with screws

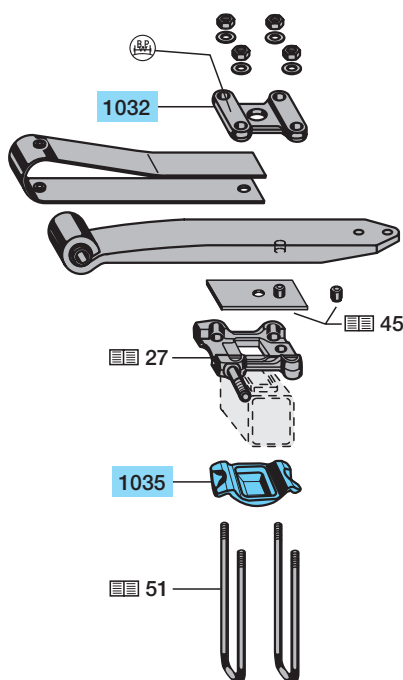


Spring U-bolt next to the axle beam, trailing arms 100 mm wide

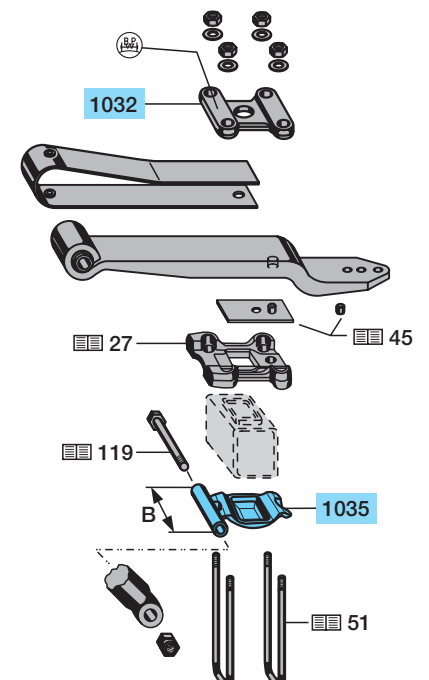
Spring U-bolts mounted from above, spring U-bolt next to the axle beam



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



Spring U-bolts mounted from below, spring U-bolt next to the axle beam, spring plate for shock absorber attachment with screws



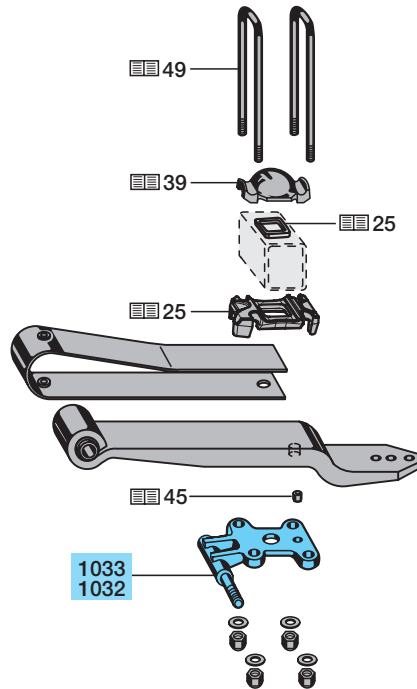
Spring plates					
Item	Designation	BPW Code no.	Application	Dimension	Fig.
Spring U-bolt encloses the axle beam, trailing arms 100 mm wide					
Spring plate without shock absorber attachment / without U-stabilizer attachment					
1032	Spring plate	03.145.22.01.0	□ 120	A 125 / B 150	
		03.145.22.06.0	∅ 127	A 125 / B 155	
		03.145.23.27.0	□ 150	A 125 / B 180	
Spring plate for shock absorber attachment with screws					
1032	Spring plate H 60	05.145.22.38.0	□ 120	A 125 / B 150	
		05.145.23.26.0	□ 150	A 125 / B 180	
Spring plate for U-stabilizer attachment with screws					
1032	Spring plate	05.145.22.05.0	□ 120	A 125 / B 150	
		05.145.22.20.0	∅ 127	A 125 / B 155	
		05.145.23.08.0 ¹⁾	□ 150	A 125 / B 180	
		¹⁾ with bore hole for centering bolt ∅ 26			
Spring U-bolt next to the axle beam, trailing arms 100 mm wide					
Spring plate without shock absorber attachment					
1035	Spring plate	03.032.21.53.0	□ 120	x = 150	
		03.032.21.56.0 *	□ 120	x = 150	
		03.032.11.27.0	□ 150	x = 180	
		03.032.11.28.0 *	□ 150	x = 180	
		* with bore hole ∅ 20			
Spring plate for shock absorber attachment with screws					
1035	Spring plate	05.032.21.73.0	□ 120	B = 144 / x = 150	
		05.032.21.72.0	□ 120	B = 187 / x = 150	
1035	Spring plate	05.032.21.78.0	□ 120	x = 150	

3 Segments, spring plates

Spring plates

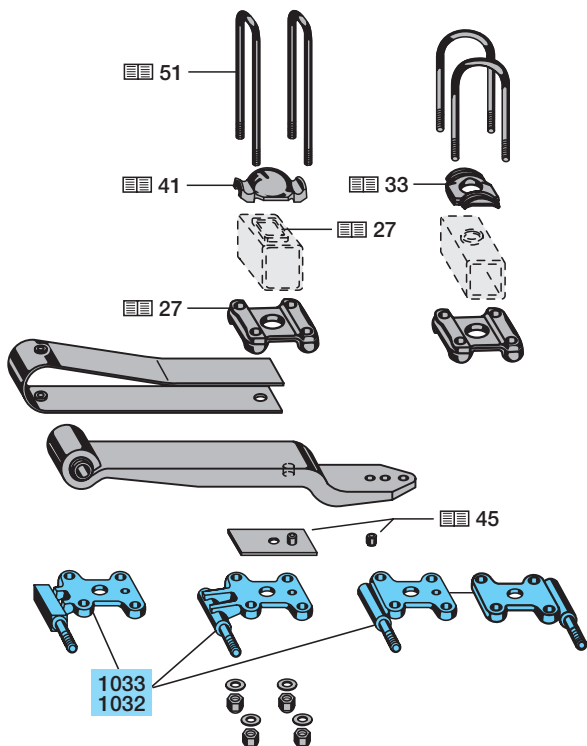
Trailing arms 70 mm wide

Spring U-bolts mounted from above,
spring plate for shock absorber attachment with threaded bolts

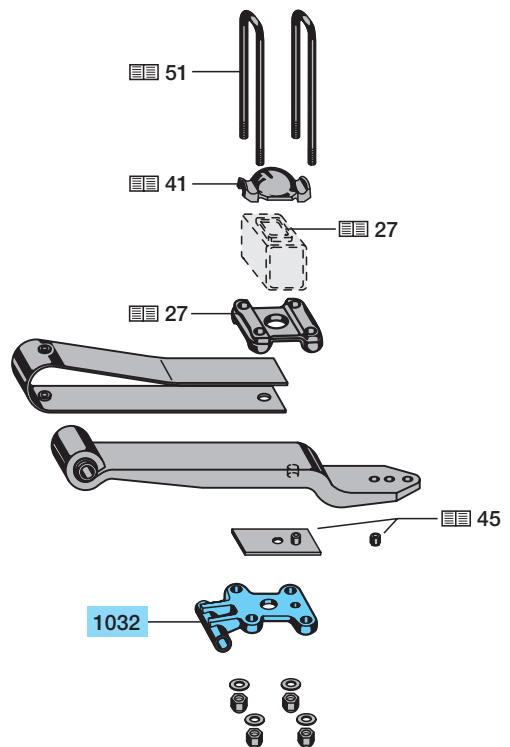


Trailing arms 100 mm wide

Spring U-bolts mounted from above,
spring plate for shock absorber attachment with threaded bolts



Spring U-bolts mounted from above,
spring plate for shock absorber attachment with screws



Spring plates

Item	Designation	BPW Code no.	Application	Dimension						Fig.	
Spring U-bolts mounted from above											
Spring plate for shock absorber attachment with threaded bolts											
				A	B	C	X	H	V		
Trailing arms 70 mm wide											
1032	Spring plate, right	05.145.22.80.0	□ 120	92	150	77.5	170	42	-		
1033	Spring plate, left	05.145.22.81.0		92	150	77.5	260	51	-		
		05.145.22.86.0		92	150	77.5	260	51	-		
		05.145.22.85.0		92	150	77.5	270	42	-		
		05.145.22.82.0 05.145.22.83.0		92	150	77.5	270	42	-		
Trailing arms 100 mm wide											
		05.145.22.18.0 05.145.22.17.0	□ 120	125	150	112.5	30	30	-		
		05.145.22.08.0 05.145.22.09.0		125	150	93.5	119	21	-		
		05.145.22.50.0 05.145.22.49.0		125	150	93.5	146.5	38	-		
		05.145.22.68.0 * 05.145.22.69.0 *		125	150	72	170	42	-		
		05.145.22.44.0 05.145.22.43.0		125	150	93.5	170	42	-		
		05.145.22.46.0 05.145.22.47.0		125	150	93.5	170	42	20		
		05.145.22.74.0 05.145.22.75.0		125	150	93.5	195	60	15		
		05.145.22.94.0 05.145.22.93.0		125	150	93.5	210	42	15		
		05.145.22.64.0 05.145.22.65.0		125	150	93.5	250	42	15		
		05.145.23.28.0 05.145.23.29.0		□ 150	125	180	93.5	134	21		-
		05.145.23.20.0 05.145.23.19.0			125	180	93.5	134	21		20
		05.145.00.08.0 05.145.00.07.0			125	180	93.5	158.5	30		-

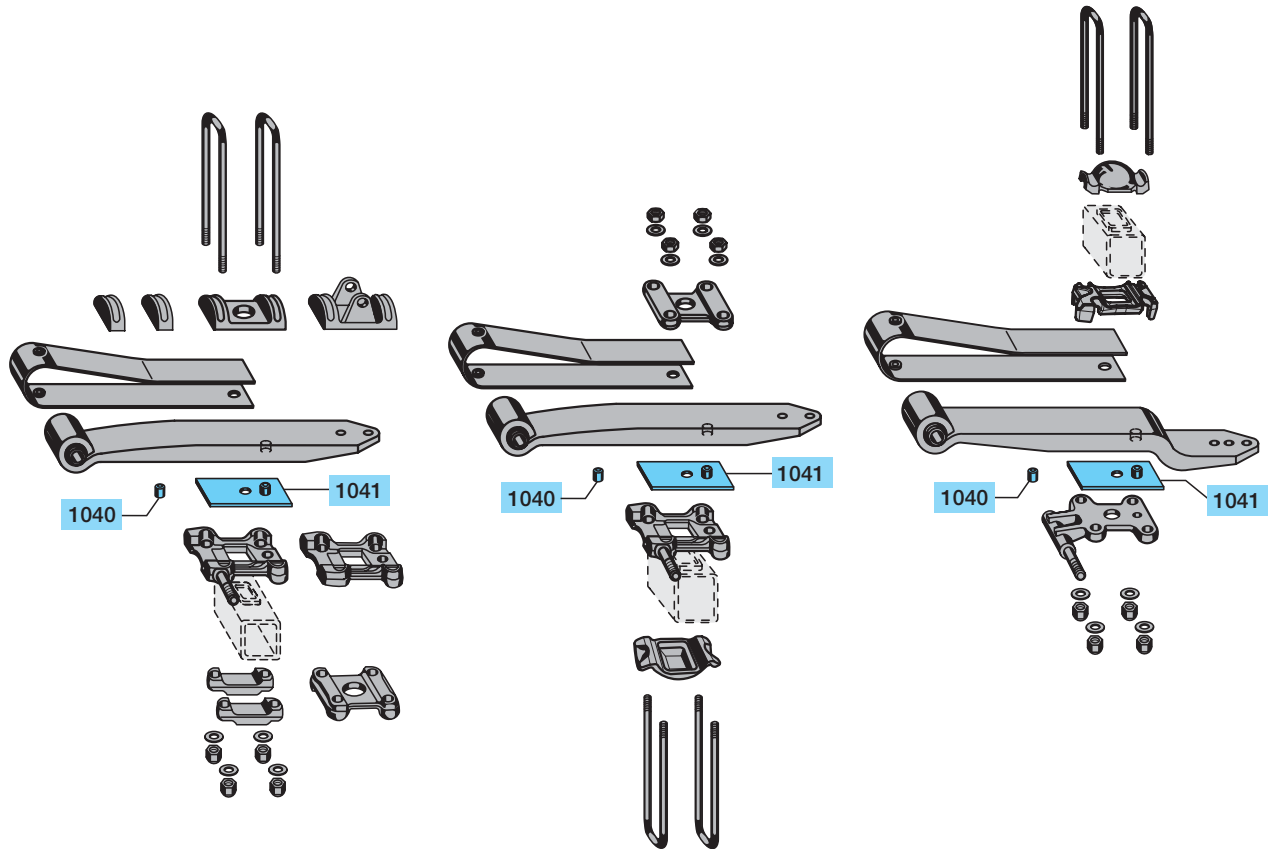
* Shock absorber attachment bolt Ø 28 (standard Ø 24)

Spring plate for shock absorber attachment with screws										
1032	Spring plate	05.145.22.57.0	□ 120	125	150	72	170	42	-	

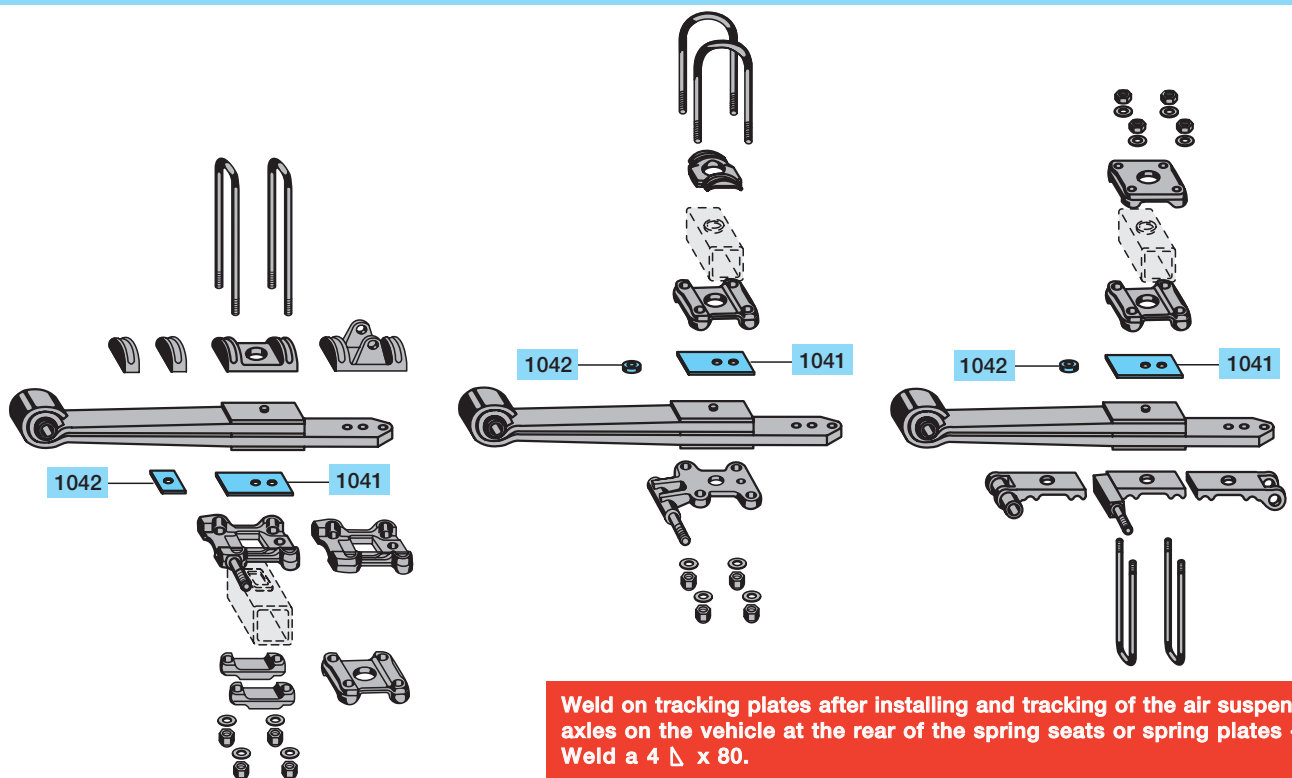
4 Centring bolts, tracking plates

Centring bolts, tracking plates

Single leaf trailing arm without centre bolt



Double or sing leaf trailing arm with centre bolt



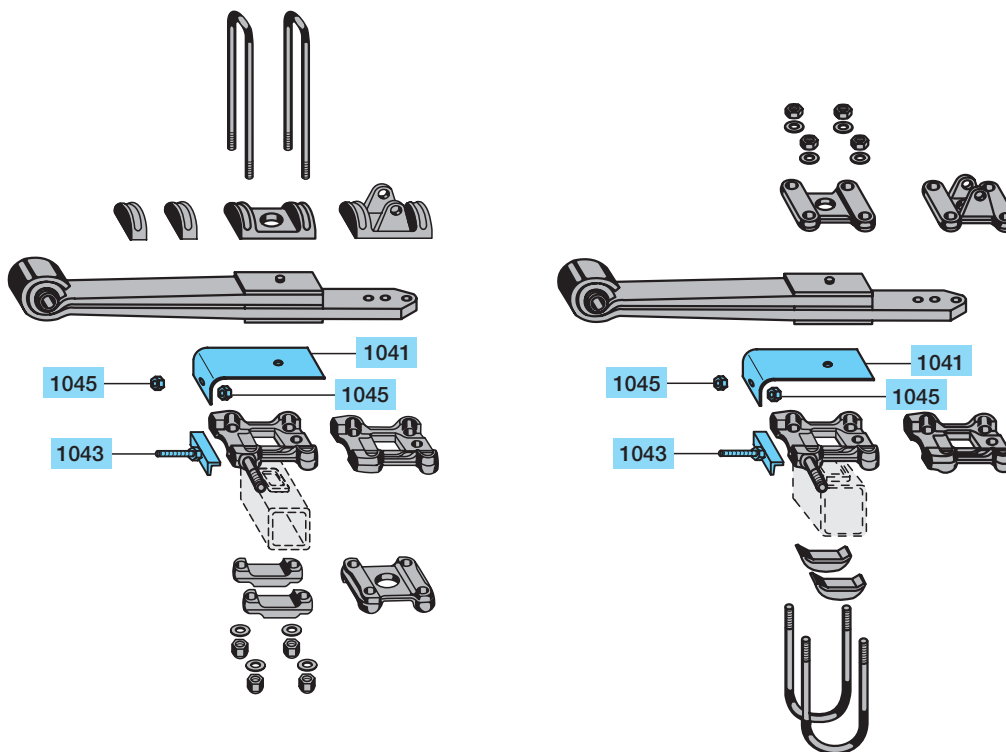
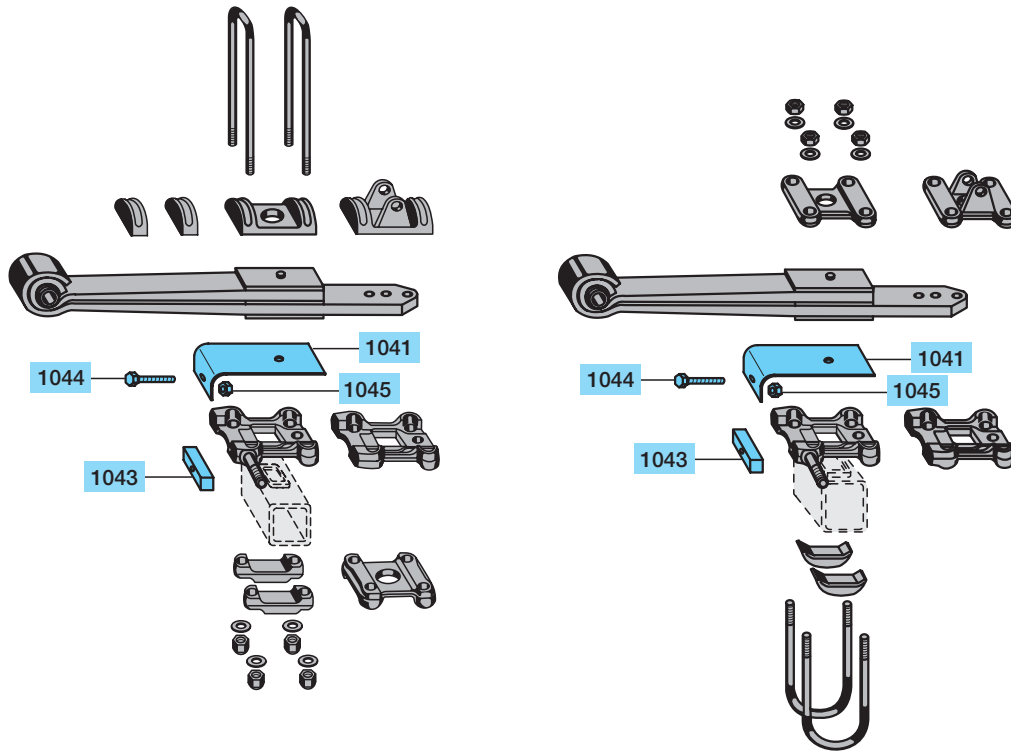
Weld on tracking plates after installing and tracking of the air suspension axles on the vehicle at the rear of the spring seats or spring plates - Weld a 4 ∇ x 80.

 Do not weld the trailing arms !

Centring bolts, tracking plates				
Item	Designation	Remark	BPW Code no.	Dimension
Single leaf trailing arm without centre bolt (SLO / SLM / SLU / ALO / ALM / ALU)				
Centring bolt				
1040	Bolt (Centring bolt)		03.084.74.43.0	Ø 24 x 23
Tracking plate				
1041	Plate (Tracking plate)	<input type="checkbox"/> 120 <input type="checkbox"/> 150 <input type="checkbox"/> 150	05.281.36.15.0 05.281.37.16.0 05.281.37.19.0	235 x 98 x 5 260 x 98 x 5 265 x 98 x 5
Double or single leaf trailing arm with centre bolt (O / OM / OT / SLO / SLM / SLU / ALO / ALM / ALU)				
Tracking plate				
1041	Plate (Tracking plate)	<input type="checkbox"/> 120 <input type="checkbox"/> 150 <input type="checkbox"/> 150 <input type="checkbox"/> 150	03.281.36.14.0 03.281.37.15.0 03.281.37.18.0 03.281.37.08.0	235 x 98 x 5 260 x 98 x 5 275 x 98 x 5 290 x 98 x 5
Centring ring, trailing arm mounted from above, trailing arm mounted from below, spring seat with round hole, axle with round centring ring				
1042	Washer (Centring ring)		03.320.33.22.0 03.320.34.49.0	Ø 24 / 69 x 4 Ø 24 / 71 x 4
Centring ring, trailing arm mounted from below, spring seat with round hole				
1042	Washer (Centring ring)		03.320.34.50.0	Ø 24 / 71 x 10
Centring plate, trailing arm mounted from above, spring seat with square hole, axle with square centring ring				
1042	Plate (Centring plate)		03.281.33.07.0 03.281.34.10.0 03.001.35.04.0	Ø 24 / 73/60x5 Ø 24 / 90/55x5 Ø 24 / 92/72x5

4 Centring bolts, tracking plates

Adjustable tracking plates (Tracking aid)



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

 Do not weld the trailing arms !

Adjustable tracking plates (Tracking aid)

Item	Designation	Remark	BPW Code no.	Dimension
Double or sing leaf trailing arm with centre bolt (O / OM / OT / SLO / SLM / SLU)				
Adjustable tracking plates				
1041	Shaped plate	□ 120	03.161.57.05.0	
	(Tracking plate)	□ 150	03.161.57.04.0	
1043	Block		03.221.77.15.0	
1044	Locking screw		02.5070.96.00	M 16 x 75
1045	Hexagon nut		02.5202.20.80	M 16 / 934
Adjustable tracking plates				
1041	Shaped plate	□ 120 / Ø 127	03.161.57.04.0	
1043	Support		05.189.10.20.0	
1045	Hexagon nut		02.5202.20.80	M 16 / 934

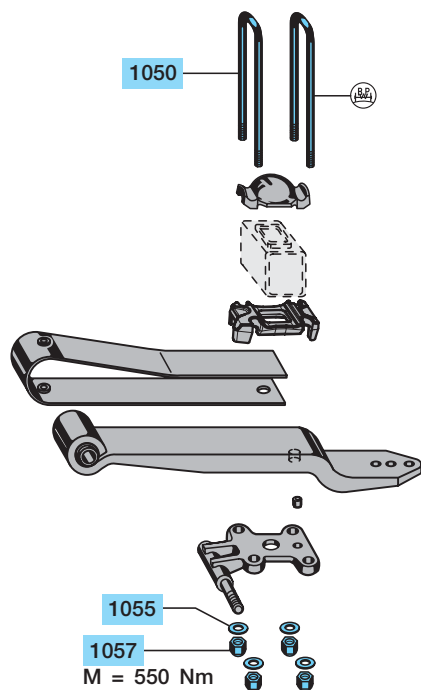
O

SL

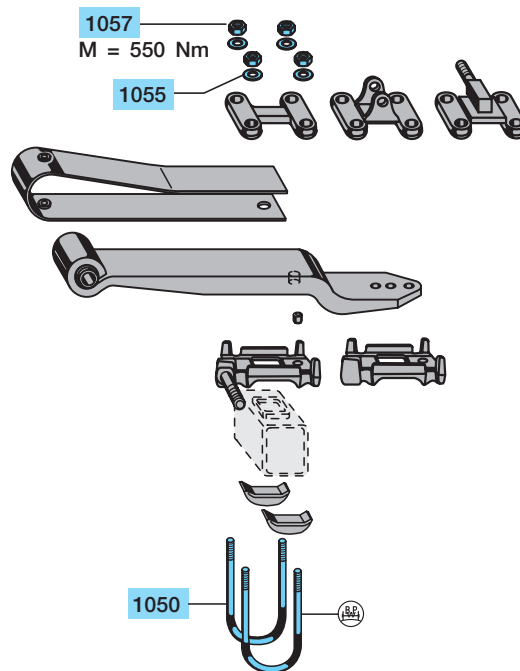
5 Spring U-bolts

Spring U-bolts, trailing arms 70 mm wide

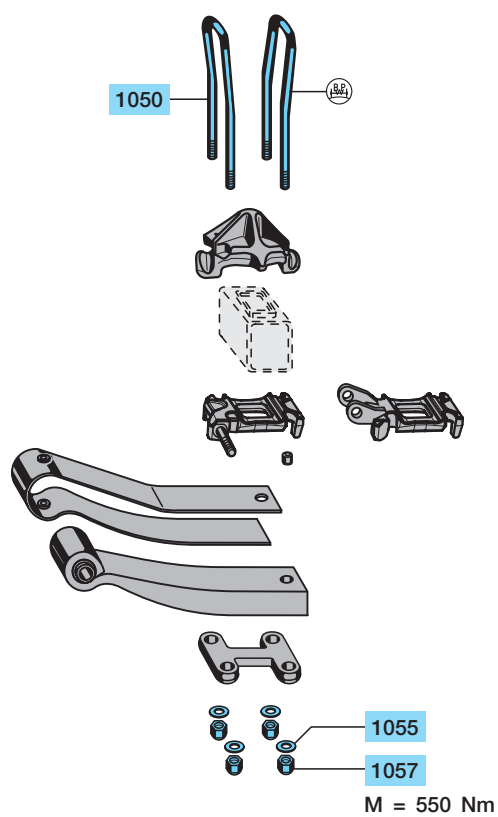
Spring U-bolt next to the axle beam



Spring U-bolt encloses the axle beam



Spring U-bolt next to the axle beam
AirlightDirect



AL

Spring U-bolts, trailing arms 70 mm wide

Spring U-bolts for series AL II, trailing arms 70 mm wide		
	Spring U-bolt front next to axle beam	Spring U-bolt encloses the axle beam
L	□ 120 A = 92	□ 120 A = 150
	Item 1050 BPW Code no.	
237	-	03.138.37.09.4 flattened
256	-	03.138.37.05.4 flattened
260	-	03.138.37.04.4 flattened
264	-	03.138.37.06.4 flattened
280	03.138.30.07.4	03.138.37.03.4 flattened
290	-	03.138.37.02.4 flattened
289	-	03.138.37.10.4 round

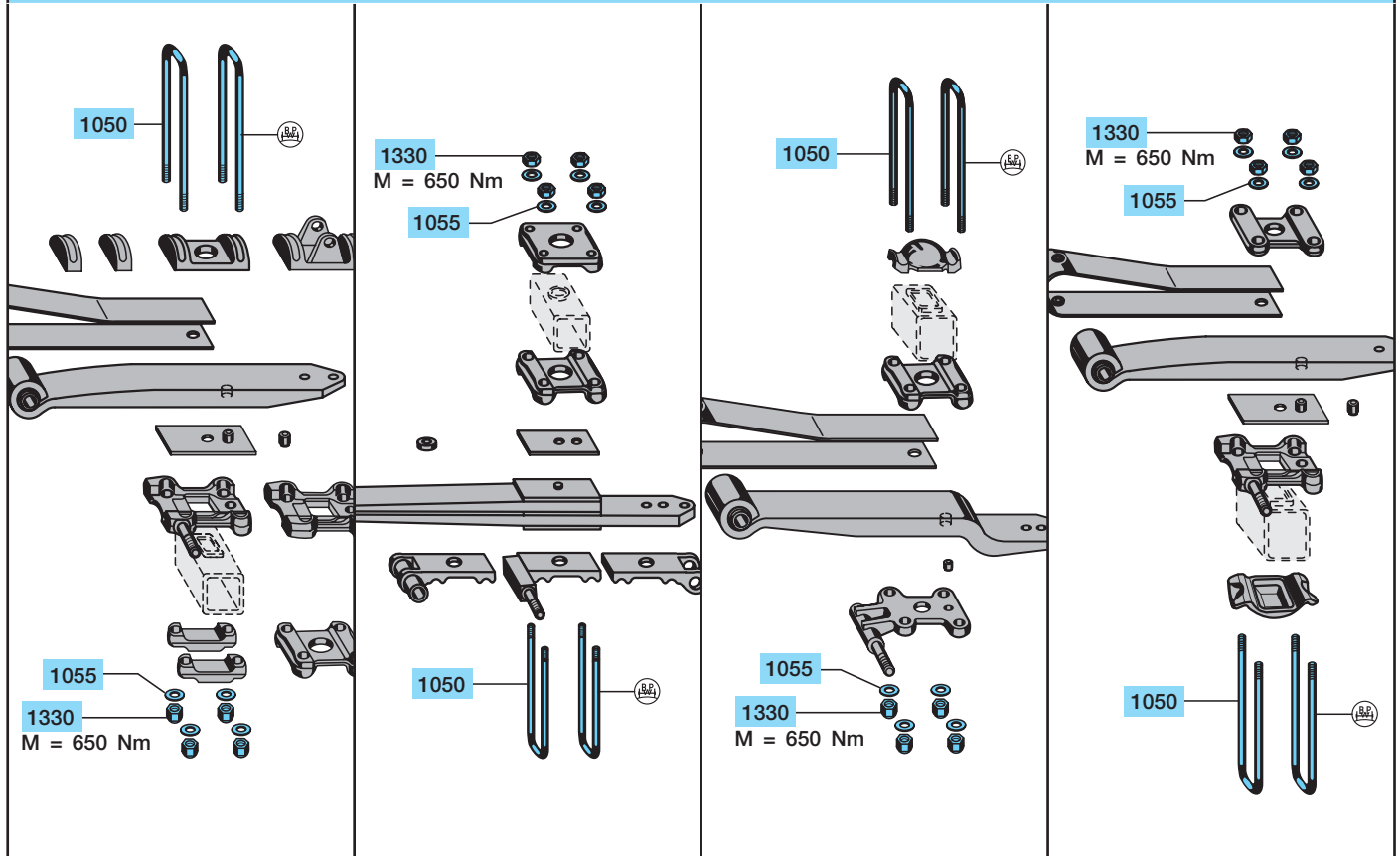
Spring U-bolts for Airlight^{Direct}, trailing arms 70 mm wide

	Spring U-bolt front next to axle beam	
L	□ 120 A = 92	
	Item 1050 BPW Code no.	
252	03.138.30.18.4	
1055	Washer	02.5401.23.07 Ø 23 / 125
1057	Lock nut	03.260.04.19.0 M 22 / SW 32 / H 22

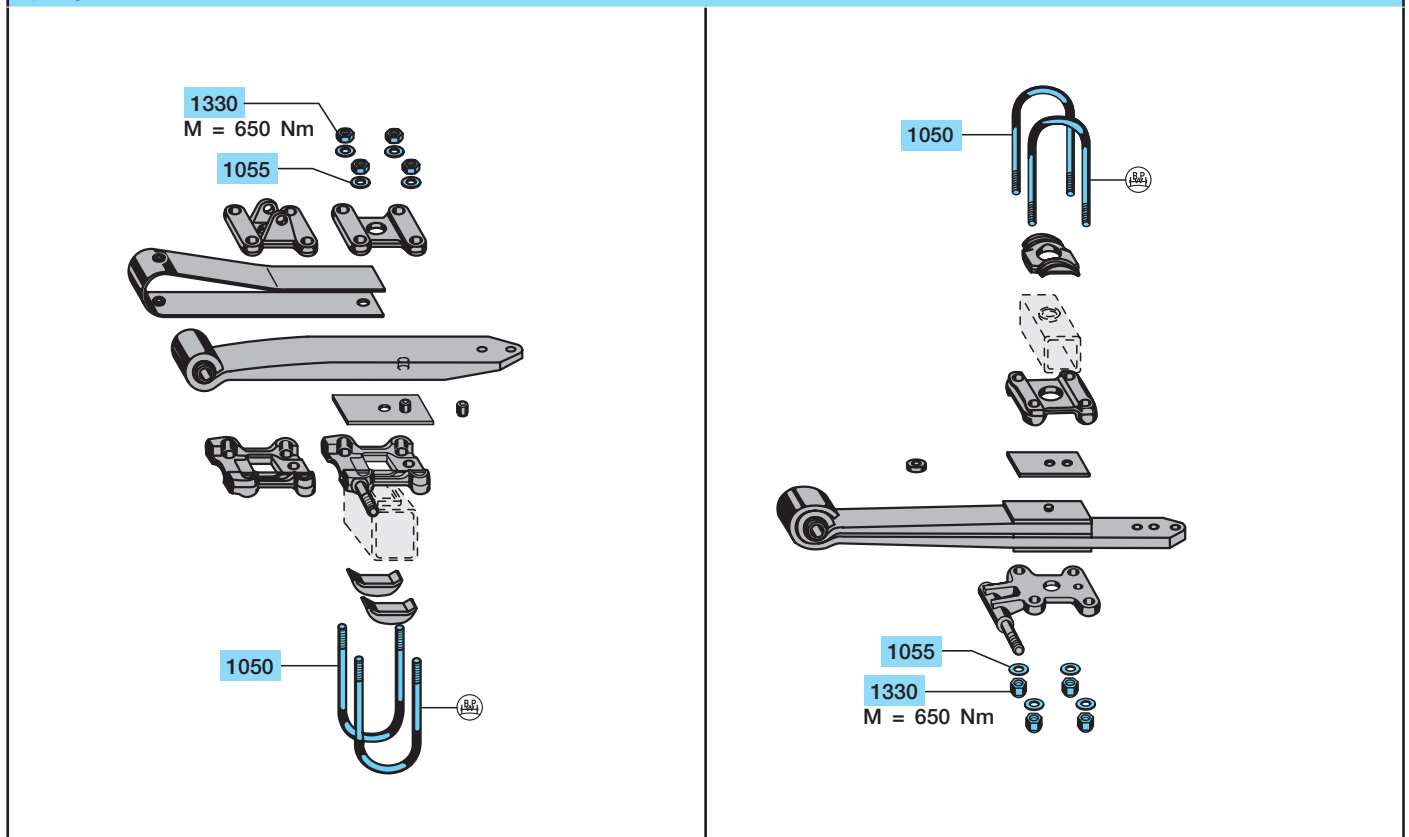
5 Spring U-bolts

Spring U-bolts, trailing arms 100 mm wide

Spring U-bolt next to the axle beam



Spring U-bolt encloses the axle beam



Spring U-bolts, trailing arms 100 mm wide

Spring U-bolts for series O / SL / AL, trailing arms 100 mm wide

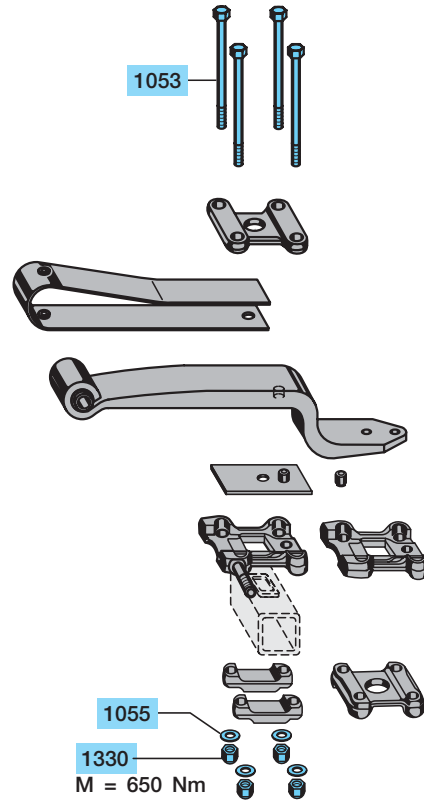
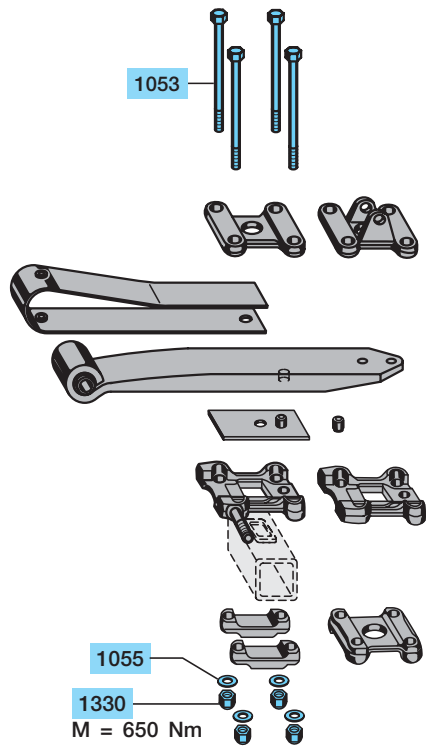
	Spring U-bolt front next to axle beam	Spring U-bolt encloses the axle beam			
L	□ 120 / □ 150 A = 125 (L)	□ 120 A = 152 (L)	□ 120 Disc brakes A = 152 (L)	□ 150 A = 180 (L)	∅ 127 A = 152 (L)
	Item 1050 BPW Code no.				
190	-	03.138.41.31.4 (190)	-	-	-
210	-	03.138.41.32.4 (210)	-	-	-
230	03.138.44.21.4 (230)	-	-	-	-
250	-	-	-	03.138.45.20.4 (250)	-
270 - 277	03.138.44.19.4 (270)	-	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)
290 - 295	03.138.44.16.4 (292)	03.138.41.17.4 (290)	-	-	03.138.41.14.4 (290)
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)
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)	-
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)
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)	-
415	-	03.138.41.29.4 (415)	-	-	-
1055	Washer	02.5401.25.07	∅ 25 / 127		
1330	Lock nut	02.5220.74.12	VM 24 / 980-10		

5 Spring U-bolts / hexagon screws

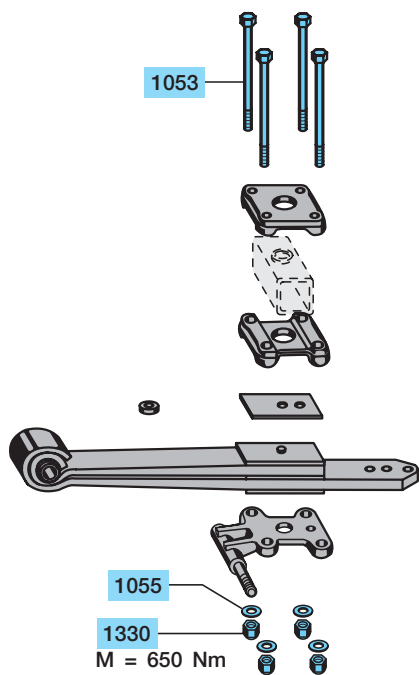
Hexagon screws

SLO / ALO

SLM / ALM



SLU / ALU



Hexagon screws						
Item	Designation	Remark	BPW Code no.	Dimension	Application X	
			□ 120			
1053	Hexagon screw		02.5023.89.10	M 24 x 280		43 - 54
			02.5023.95.10	M 24 x 300		65 - 79
			02.5023.88.10	M 24 x 320		80 - 99
			02.5023.94.10	M 24 x 350		100 - 134
			□ 150			
1053	Hexagon screw		02.5023.88.10	M 24 x 320		50 - 69
			02.5023.94.10	M 24 x 350		70 - 104
			02.5023.98.10	M 24 x 380		100 - 135
1055	Washer		02.5401.25.07	Ø 25 / 127		
1330	Lock nut		02.5220.74.12	M 24 / 980-10		

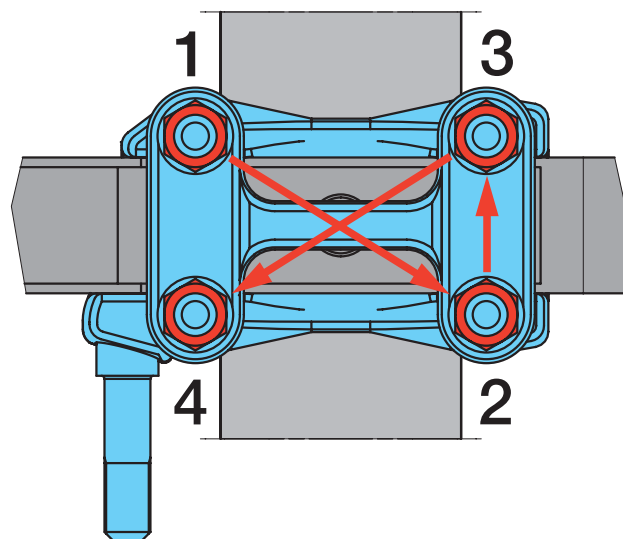
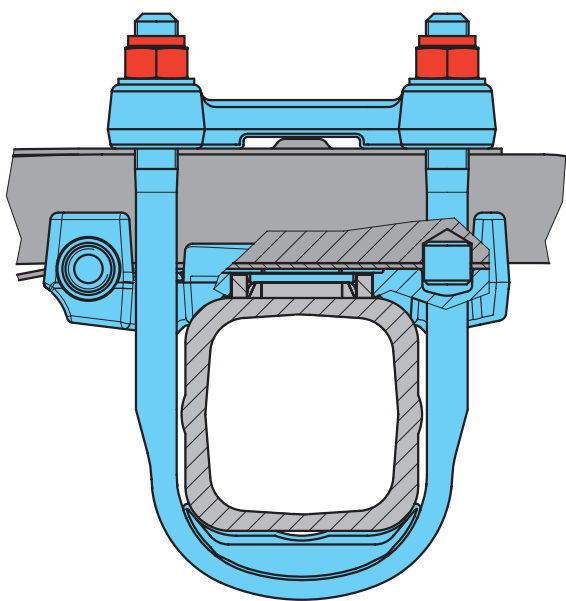
O
SL
AL

5.1 Assembly instructions for clamped axle spring seat assemblies

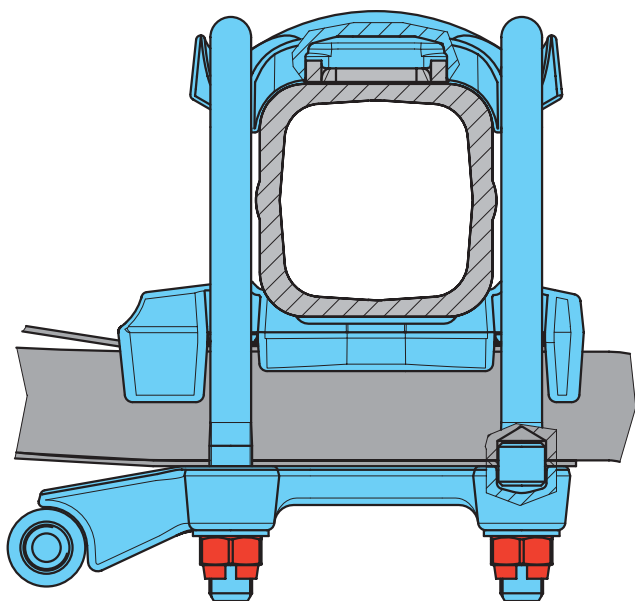
Trailing arms 70 mm wide (AL II)

Series ALO / ALM

AL



Series ALU



Assembly instructions:

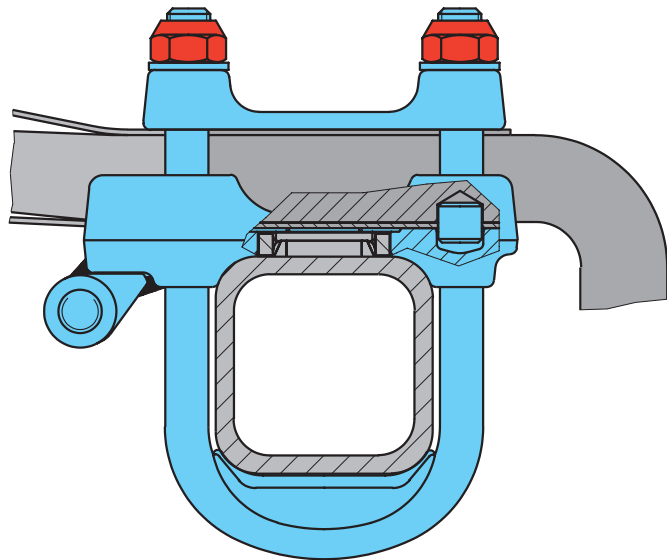
- Parts are to be assembled in line with opposite illustration, further grease spring U-bolts thread.
 - Spring seats and trailing arm are to be aligned parallel to the axle beam and self-locking nuts are to be equally cross-wise tightened until contact to spring plate.
 - Control parallel position of spring seats and trailing arm towards axle beam and hereafter tighten self-locking nuts cross-wise 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 cross-wise 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.

$$M = 550 \text{ Nm} + 90^\circ$$

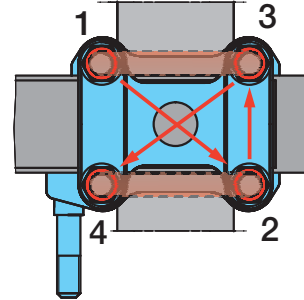
Assembly instructions for clamped axle spring seat assemblies 5 .1

Trailing arms 100 mm wide (SL / AL)

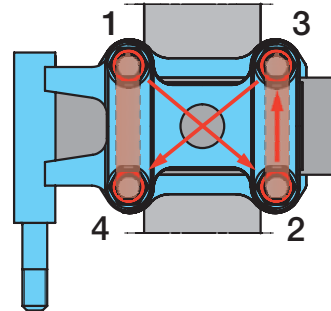
Series SLO / SLM / ALO / ALM



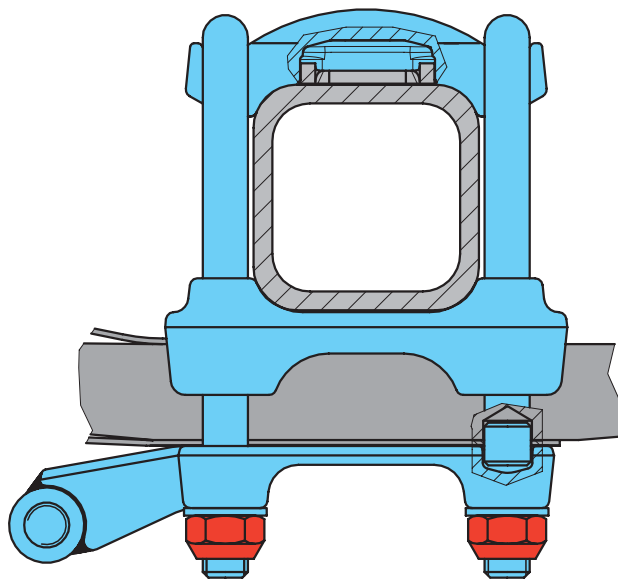
Spring U-bolt encloses the axle beam



U-bolt next to the axle beam



Series SLU / ALU



Assembly instructions:

- Parts are to be assembled in line with opposite illustration, further grease spring U-bolts thread.
- Spring seats and trailing arm are to be aligned parallel to the axle beam and self-locking nuts are to be equally cross-wise tightened 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 cross-wise until the specified tightening torque has been reached.

M = 650 Nm (605-715 Nm)

6 Spring pivot bolt bearings

General

Spring pivot bolt bearing

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 in any circumstances.

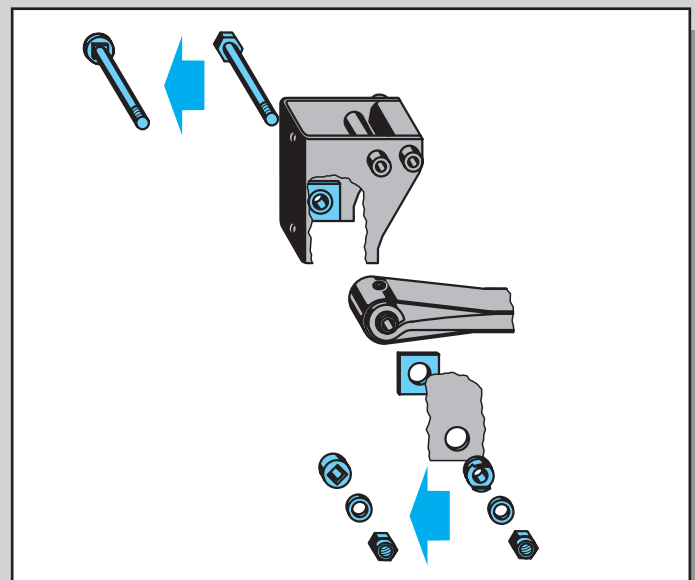
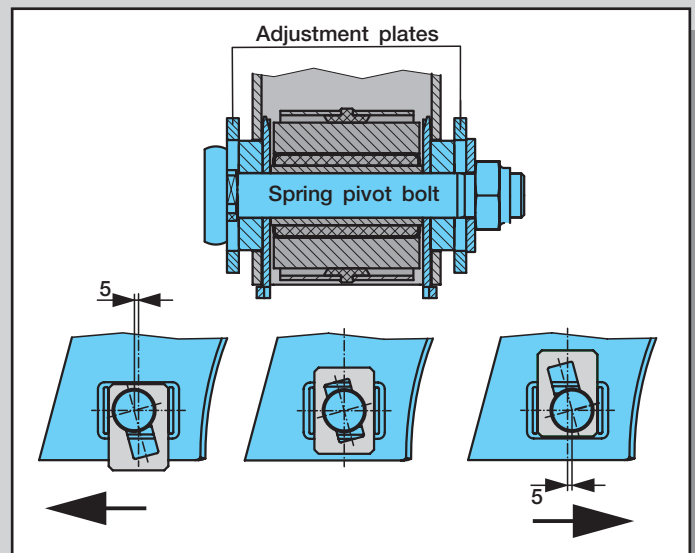
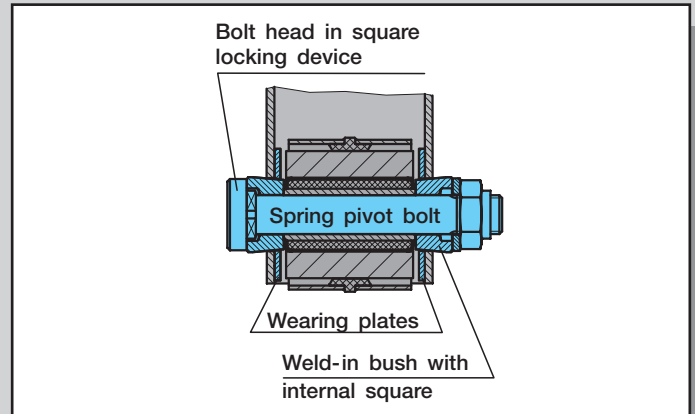
In axle lift devices, the mounting of the lift arm is integrated into the spring bolt mounting, thereby ensuring a safe and long-life function.

Rapid axle alignment is possible using BPW hanger brackets with integrated track adjustment. Production tolerances on the vehicle can be counteracted or tracking corrected without the need to unfasten the spring 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.

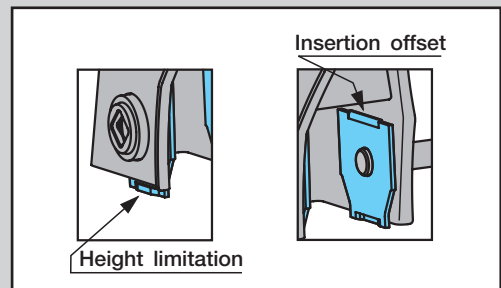
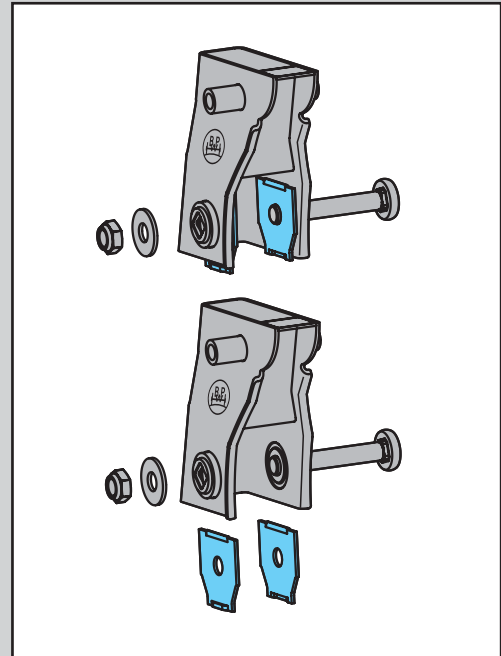


New spring pivot bolt bearing from week 18/2004 onwards

From week **18/2004 onwards**, the functional principle of the loose wear plates (registered utility model DE-GM 201 04 753 U1) familiar in Airlight II hanger brackets will also be carried across to the rigid air suspension hanger brackets for 100 mm wide trailing arms.

Loose wear plates offer the following advantages:

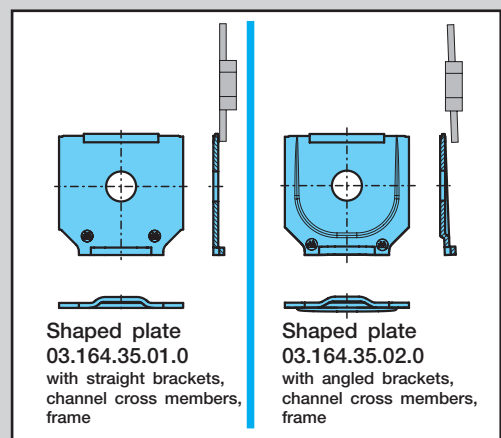
- Simplified mounting, because the wear plates are not inserted in the bracket until the trailing arm has been positioned in the bracket. This means there is significantly more installation space available at the start of the installation procedure. Preinstalled air suspension modules can therefore be installed in the vehicle frame much more easily 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 functions smoothly.
- Mixed installation is technically possible (brackets with loose wear plates or with welded wear plates).



Wearing plates

BPW uses two different versions of wearing plates.

1. A straight shaped plate for straight brackets, channel crossmember and frame (BPW code no. 03.164.35.01.0).
2. An offset shaped plate for angled brackets, channel crossmember and frame (BPW code no. 03.164.35.02.0).



6.1 Spring pivot bolt bearings, unadjustable

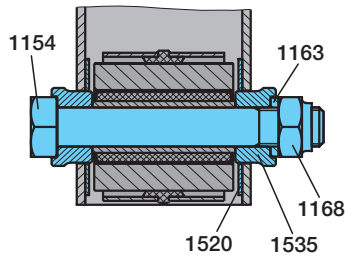
Overview

Spring pivot bolt bearings, unadjustable, steel hanger brackets / integrated supports

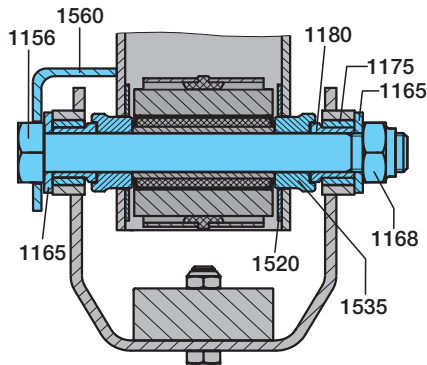
Trailing arms 100 mm wide

Torsion protection with slotted bush

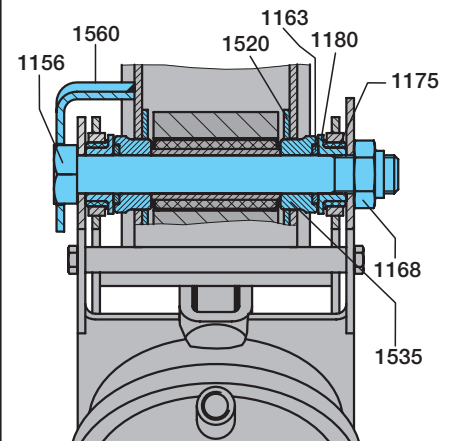
Standard



Sidewise mounted axle lift

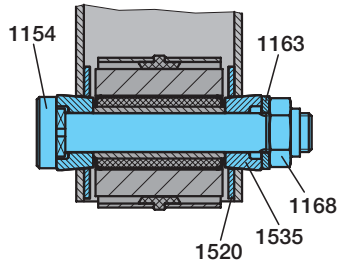


Two-side axle lift

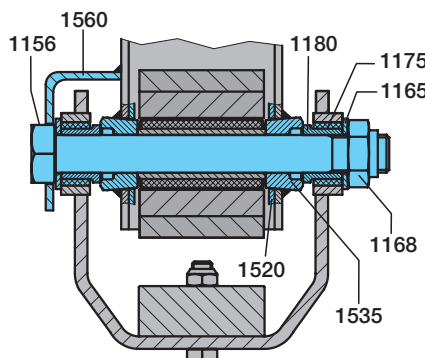


Torsion protection with square internal lock bush, welded on wear plates

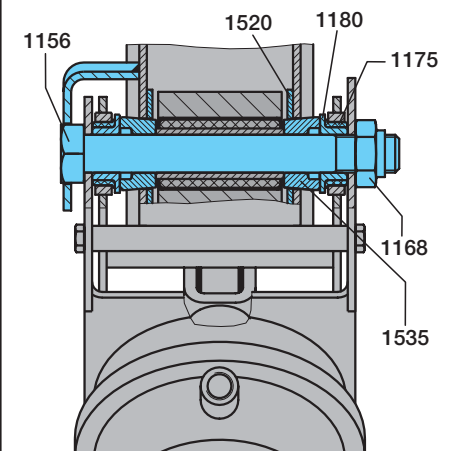
Standard



Sidewise mounted axle lift

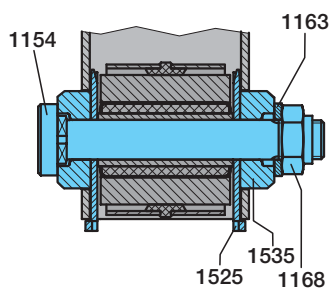


Two-side axle lift

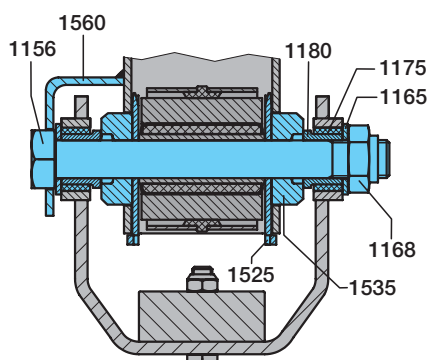


Torsion protection with square internal lock bush, loose wear plates

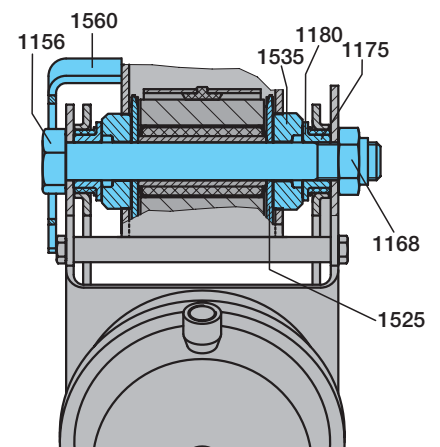
Standard



Sidewise mounted axle lift



Two-side axle lift



Spring pivot bolt bearings, unadjustable, steel hanger brackets / integrated supports												
Trailing arms 100 mm wide				Torsion protection with slotted bush			Torsion protection with square internal lock bush					
Item	Designation	Dimension	BPW Code no.	Standard	Sidewise mounted axle lift device	Two-side axle lift	Standard	Sidewise mounted axle lift device	Two-side axle lift	Loose wear plates	Loose wear plates, sidewise mounted axle lift device	Loose wear plates, two-side axle lift
Further details - Page				61	63	67	61	63	67	61	65	69
1150	Repair kit spring pivot bolt (incl. steel / rubber / steel bush) (Item 1005, 1154, 1163, 1168, 1520, 1535)		09.801.06.28.0				●					
	Repair kit spring pivot bolt (incl. rubber / steel bush) (Item 1005, 1154, 1163, 1168, 1520, 1535)		09.801.06.29.0				●					
1152	Spring bolt assembly (Item 1154, 1163, 1168)		05.857.00.03.0	●								
	(Item 1154, 1163, 1168)		05.857.00.12.0				●					
	(Item 1154, 1163, 1168, 1525)		05.857.00.24.0							●		
1153	Spring bolt assembly (Item 1156, 1165, 1168)		05.857.00.07.0		●							
	(Item 1156, 1165, 1168, 1175, 1180, 1560)		05.857.00.13.0					●				
1154	Screw (Spring bolt)	M 30 x 190	03.340.15.27.0	●								
		M 30 x 200	03.341.05.03.0				●			●		
1156	Screw (Spring bolt)	M 30 x 265	03.340.15.37.0		●			●			●	
		M 30 x 255	03.340.15.39.0			●			●			●
1163	Washer	Ø 31 / 46 x 6	03.320.31.27.0	●		●						●
		Ø 30 / 57 x 6	03.320.32.38.0				●			●		
1165	Washer	Ø 31 / 62 x 5	03.320.34.51.0		●						●	
		A 31	02.5401.31.01					●				
1168	Lock nut	M 30 / SW 46	03.260.15.01.0	●	●	●	●	●	●	●	●	●
1175	Bush (Polyamid)	Ø 41 / 50 x 23	03.113.94.10.0		●			●			●	
		Ø 42/50/54 x 17.5	03.113.04.11.0			●			●			●
1180	Bush	Ø 30/40/46 x 25/31	03.113.01.29.0		●			●			●	
		Ø 30/42/62 x 22	03.113.01.37.0			●			●			●
Round wearing plate												
1520	Washer	Ø 30 / 121 x 5	03.320.36.08.0	●	●	●						
Square wearing plate												
1520	Plate	Ø 56 / □ 105 x 3	03.281.15.03.0	●	●	●	●	●	●			
		Ø 56 / □ 101/140x4.5	03.281.35.16.0	●	●	●	●	●	●			
1525	Shaped plate		03.164.35.01.0							●	●	●
1535	Bush		03.113.02.06.0	no longer available								
			03.113.02.09.0	no longer available								
		Ø 30/51/56 x 29	03.113.01.34.0				●	●	●			
		Ø 30.5/55/73.6 x 24	03.113.01.46.0						●	●	●	
1560	Shaped plate (welded on torsion protection)		03.164.35.07.0		●	●		●	●		●	●
1560	Shaped part (screwed on torsion protection)		03.001.14.88.0		●	●		●	●		●	●

Spring pivot bolt bearings for alloy hanger brackets see page 82 - 87.

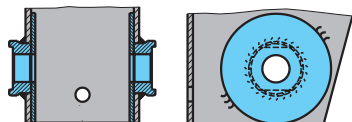
Spring pivot bolt bearings for stainless steel hanger brackets see page 88 - 93.

6.1.1 Spring pivot bolt bearings, unadjustable

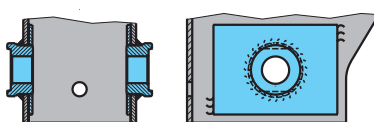
Spring pivot bolt bearings, unadjustable

Steel hanger bracket / integrated support / frames, trailing arms 100 mm wide

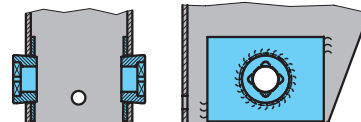
Torsion protection with slotted bush, round wearing plate



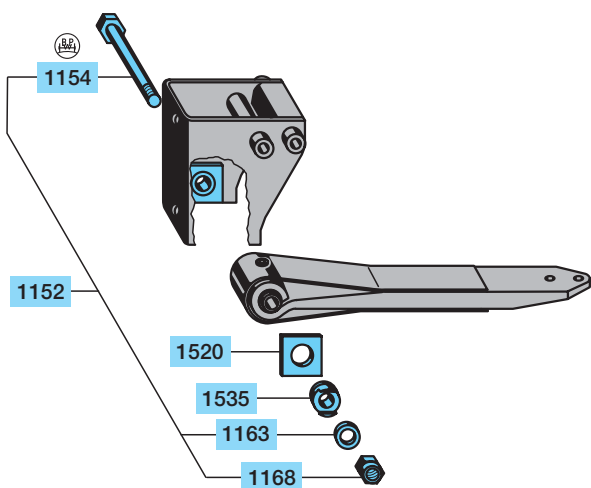
Torsion protection with slotted bush, square wearing plate, pivot bush



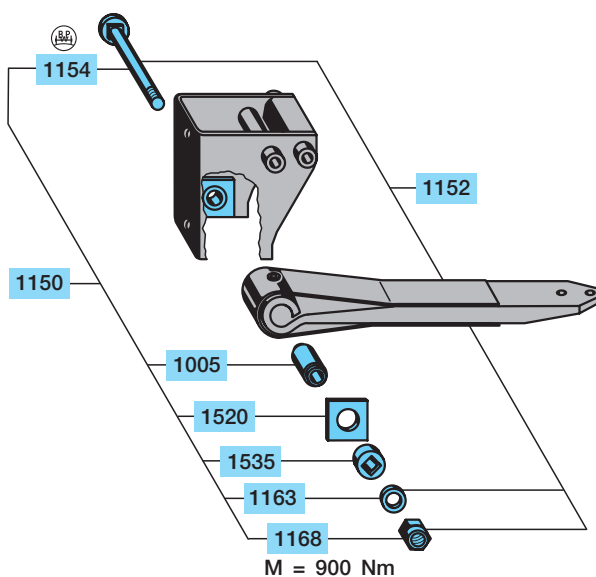
Torsion protection with square internal lock bush, pivot bush



Torsion protection with slotted bush, welded on wear plates (Item 1520)

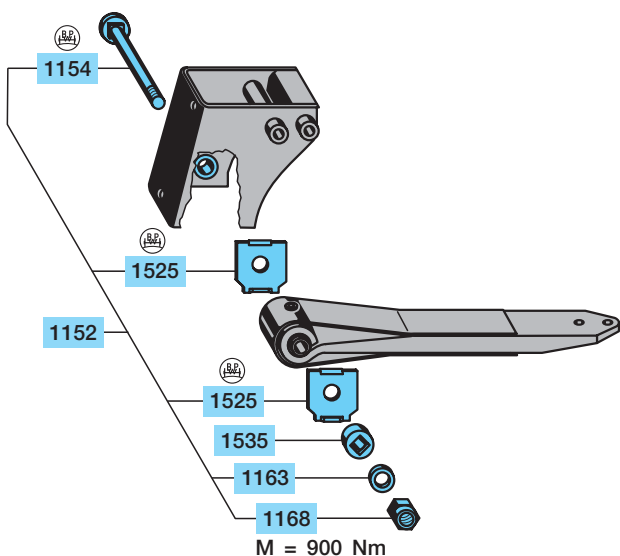


Torsion protection with square internal lock bush, welded on wear plates (Item 1520)



Weld-in bushes (Item 1535) no longer available.
Conversion to torsion protection with square internal lock bush.

Torsion protection with square internal lock bush, loose wear plates (shaped parts item 1525)



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / frame:

until 07 / 2001 M 30 M = 750 (700 - 825) Nm

from 08 / 2001 M 30 M = 900 (840 - 990) Nm

Integrated support:

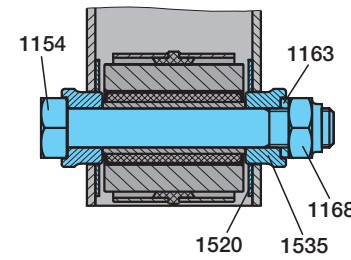
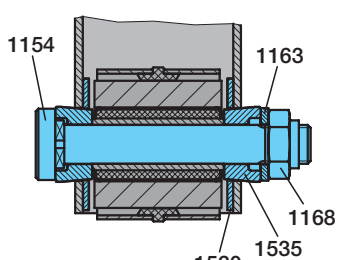
until 10 / 1998 M 30 M = 1025 - 1210 Nm

from 10 / 1998 M 30 M = 900 (840 - 990) Nm

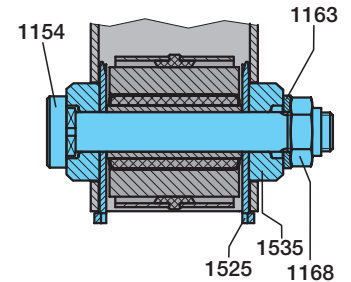
Spring pivot bolt bearings, unadjustable 6.1.1

Spring pivot bolt bearings, unadjustable

Steel hanger bracket / integrated support / frames, trailing arms 100 mm wide

	Torsion protection with slotted bush, welded on wear plates	Torsion protection with square internal lock bush, welded on wear plates
		
	Weld-in bushes (Item 1535) no longer available. Conversion to torsion protection with square internal lock bush.	

Item	Designation	Remark	BPW Code no. Dimension
1150	Repair kit spring bolt (Item 1005, 1154 - 1168, 1520, 1535)		- -
1152	Spring bolt assembly (Item 1154 - 1168)		05.857.00.03.0
1154	Screw (Spring bolt)		03.340.15.27.0 M 30 x 190
1163	Washer		03.320.31.27.0 Ø 31 / 46 x 6
1168	Lock nut		03.260.15.01.0 M 30 / SW 46
Round wearing plate			
1520	Washer		03.320.36.08.0 Ø 30 / 121 x 5
1535	Bush		03.113.02.06.0 no longer available
Square wearing plate, pivot bush			
1520	Plate		03.281.15.03.0 Ø 56 / □ 105 x 3
			03.281.35.16.0 Ø 56 / □ 101 / 140 x 4.5
1535	Bush		03.113.02.09.0 no longer available
			03.281.15.03.0 Ø 56 / □ 105 x 3
			03.281.35.16.0 Ø 56 / □ 101 / 140 x 4.5
			03.113.01.34.0 Ø 30 / 51 / 56 x 29

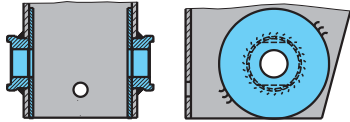
	Torsion protection with square internal lock bush, loose wear plates (shaped parts item 1525)		
			
1152	Spring bolt assembly (Item 1154 - 1168, 1525)		05.857.00.24.0
1154	Screw (Spring bolt)		03.341.05.03.0 M 30 x 200
1163	Washer		03.320.32.38.0 Ø 30 / 57 x 6
1168	Lock nut		03.260.15.01.0 M 30 / SW 46
1525	Shaped plate		03.164.35.01.0
1535	Bush		03.113.01.46.0 Ø 30.5 / 55 / 73.6 x 24

6.1.2 Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift

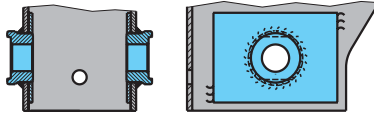
Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift

Steel hanger bracket / integrated support / frames, trailing arms 100 mm wide

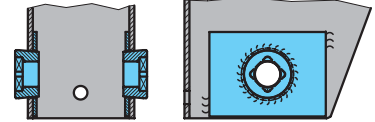
Torsion protection with slotted bush, round wearing plate



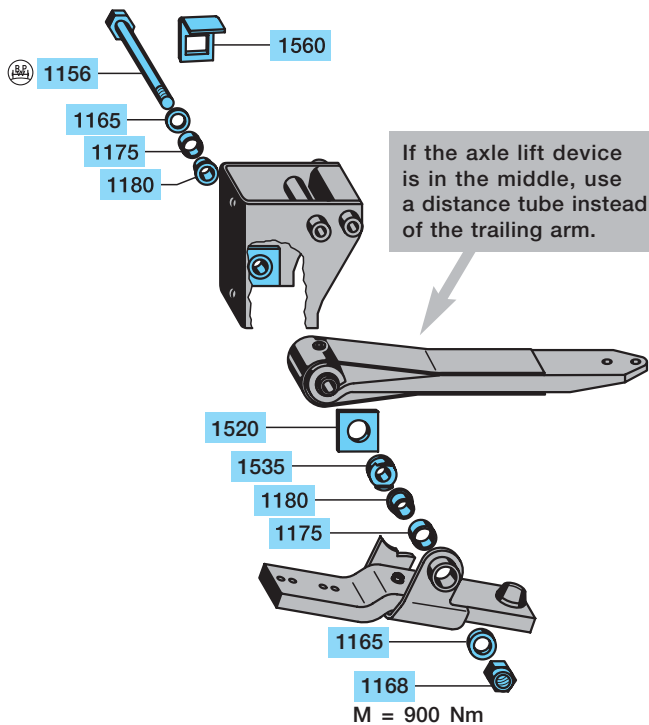
Torsion protection with slotted bush, square wearing plate, pivot bush



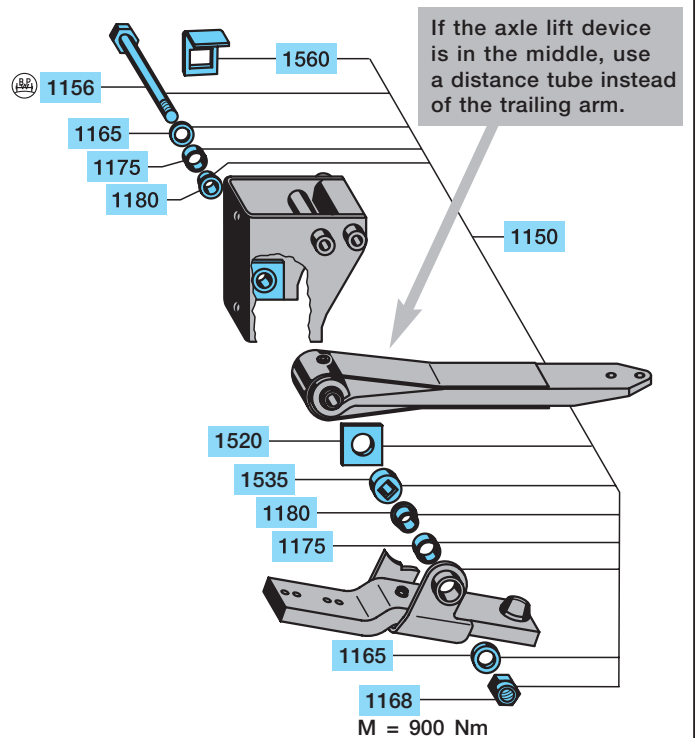
Torsion protection with square internal lock bush, pivot bush



Torsion protection with slotted bush, sidewise mounted axle lift



Torsion protection with square internal lock bush, sidewise mounted axle lift



Weld-in bushes (Item 1535) no longer available. Conversion to torsion protection with square internal lock bush.

Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / frame:

until 07 / 2001 M 30 M = 750 (700 - 825) Nm
 from 08 / 2001 M 30 M = 900 (840 - 990) Nm

Integrated support:

until 10 / 1998 M 30 M = 1025 - 1210 Nm
 from 10 / 1998 M 30 M = 900 (840 - 990) Nm

Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift 6.1.2

Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift			
Steel hanger bracket / integrated support / frames, trailing arms 100 mm wide			
		Torsion protection with slotted bush	Torsion protection with square internal lock bush
		Weld-in bushes (Item 1535) no longer available. Conversion to torsion protection with square internal lock bush.	
Item	Designation	Remark	BPW Code no. Dimension
1150	Repair kit spring bolt (Item 1156 - 1180, 1520, 1535, 1560, 1615)		-
1153	Spring bolt assembly (Item 1156 - 1180, 1560)		09.801.06.77.0 05.857.00.07.0 05.857.00.13.0
1156	Screw (Spring bolt)		03.340.15.37.0 M 30 x 265
1165	Washer		03.320.34.51.0 Ø 31 / 62 x 5 02.5401.31.01 A 31
1168	Lock nut		03.260.15.01.0 M 30 / SW 46 03.260.15.01.0 M 30 / SW 46
1175	Bush (Polyamid)		03.113.94.10.0 Ø 41 / 50 x 23 03.113.94.10.0 Ø 41 / 50 x 23
1180	Bush		03.113.01.29.0 Ø 30 / 40 / 46 x 31 03.113.01.29.0 Ø 30 / 40 / 46 x 25 / 31
		Round wearing plate	
1520	Washer		03.320.36.08.0 Ø 30 / 121 x 5
1535	Bush		03.113.02.06.0 no longer available
		Square wearing plate, pivot bush	
1520	Plate		03.281.15.03.0 Ø 56 / □ 105 x 3 03.281.15.03.0 Ø 56 / □ 105 x 3
1535	Bush		03.281.35.16.0 Ø 56 / □ 101 / 140 x 4.5 03.281.35.16.0 Ø 56 / □ 101 / 140 x 4.5 03.113.02.09.0 no longer available 03.113.01.34.0 Ø 30 / 51 / 56 x 29
1560	Shaped plate (welded on torsion protection)		03.161.35.07.0 03.161.35.07.0

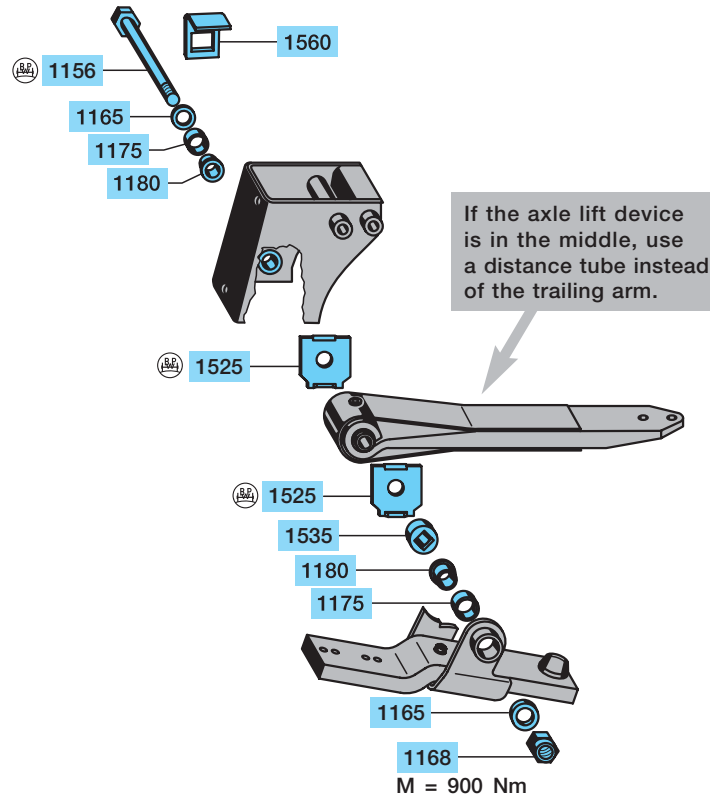
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6.1.2 Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift

Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift

Steel hanger bracket / integrated support

Torsion protection with square internal lock bush, loose wear plates (shaped plates item 1525)



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / integrated support:

M 30 M = 900 (840 - 990) Nm

Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift 6.1.2

Spring pivot bolt bearings, unadjustable, sidewise mounted axle lift			
Steel hanger bracket / integrated support, trailing arm 100 mm wide			
		Torsion protection with square internal lock bush, loose wear plates (shaped plates item 1525)	
Item	Designation	Remark	BPW Code no. Dimension
1156	Screw (Spring bolt)		03.340.15.37.0 M 30 x 265
1165	Washer		03.320.34.51.0 Ø 31 / 62 x 5
1168	Lock nut		03.260.15.01.0 M 30 / SW 46
1175	Bush (Polyamid)		03.113.94.10.0 Ø 41 / 50 x 23
1180	Bush		03.113.01.29.0 Ø 30 / 40 / 46 x 25 / 31
1525	Shaped plate		03.164.35.01.0
1535	Bush		03.113.01.46.0 Ø 30.5 / 55 / 73.6 x 24
1560	Shaped plate (welded on torsion protection)		03.161.35.07.0

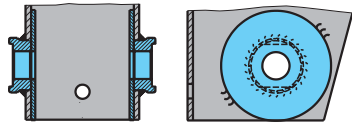
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6.1.3 Spring pivot bolt bearings, unadjustable, two-side axle lift

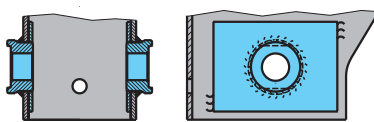
Spring pivot bolt bearings, unadjustable, two-side axle lift

Steel hanger bracket / integrated support / frame, trailing arms 100 mm wide

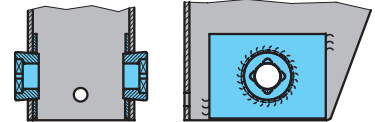
Torsion protection with slotted bush, round wearing plate



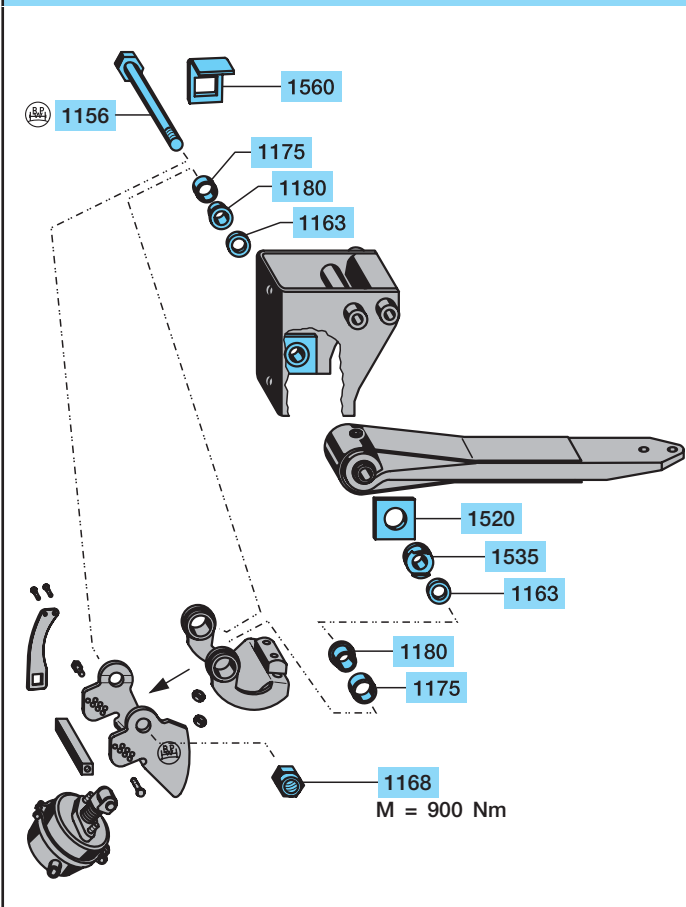
Torsion protection with slotted bush, square wearing plate, pivot bush



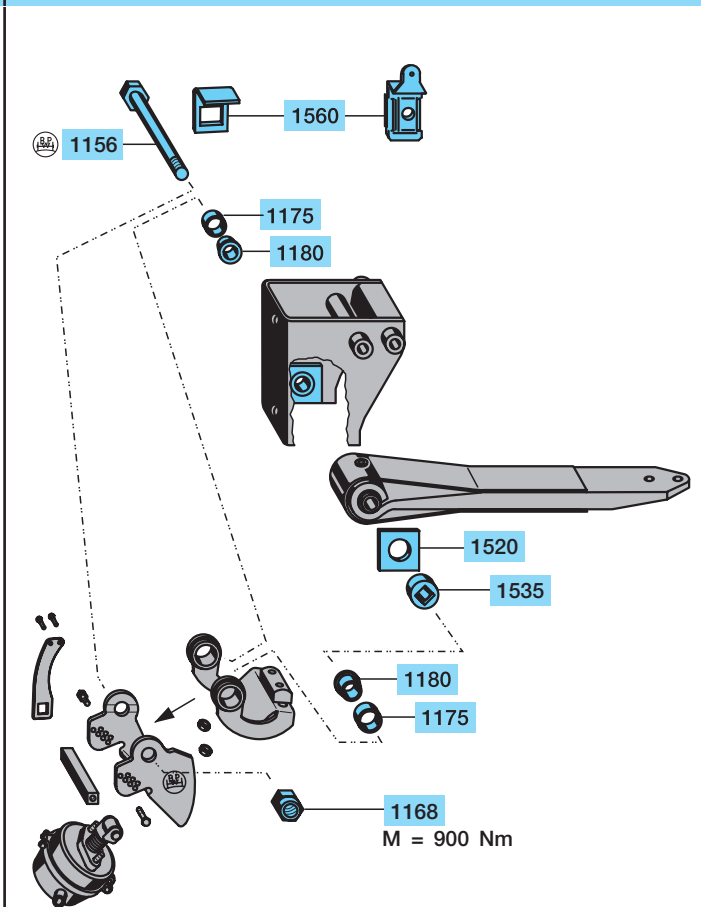
Torsion protection with square internal lock bush, pivot bush



Torsion protection with slotted bush, two-side axle lift



Torsion protection with square internal lock bush, two-side axle lift



**Weld-in bushes (Item 1535) no longer available.
Conversion to torsion protection with square internal lock bush.**

Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / frame:

until 07 / 2001 M 30 M = 750 (700 - 825) Nm
from 08 / 2001 M 30 M = 900 (840 - 990) Nm

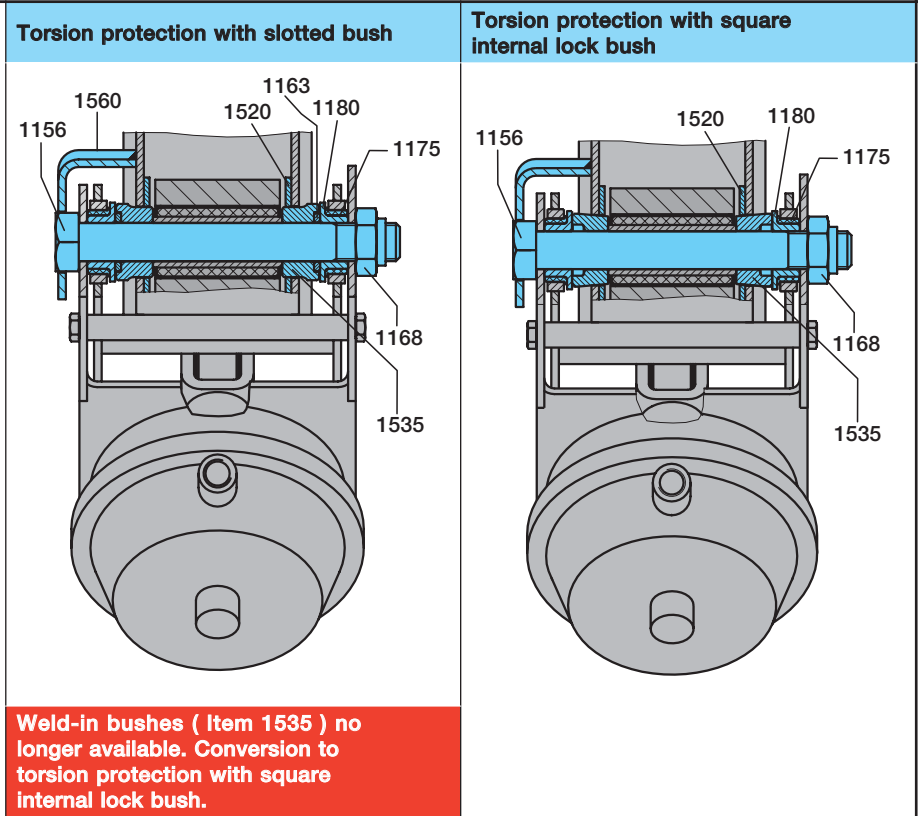
Integrated support:

until 10 / 1998 M 30 M = 1025 - 1210 Nm
from 10 / 1998 M 30 M = 900 (840 - 990) Nm

Spring pivot bolt bearings, unadjustable, two-side axle lift 6.1.3

Spring pivot bolt bearings, unadjustable, two-side axle lift

Steel hanger bracket / integrated support / frame, trailing arms 100 mm wide



Item	Designation	Remark	BPW Code no.	Dimension
1156	Screw (Spring bolt)		03.340.15.39.0	M 30 x 255
1163	Washer		03.320.31.27.0	Ø 31 / 45.5 x 6
1168	Lock nut		03.260.15.01.0	M 30 / SW 46
1175	Bush (Polyamid)		03.113.04.11.0	Ø 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0	Ø 30 / 42 / 62 x 22
Round wearing plate				
1520	Washer		03.320.36.08.0	Ø 30 / 121 x 5
1535	Bush		03.113.02.06.0	no longer available
Square wearing plate, pivot bush				
1520	Plate		03.281.15.03.0	Ø 56 / □ 105 x 3
			03.281.35.16.0	Ø 56 / □ 101 / 140 x 4.5
1535	Bush		03.113.02.09.0	no longer available
			03.113.01.34.0	Ø 30 / 51 / 56 x 29
1560	Shaped plate (welded on torsion protection)		03.161.35.07.0	
	Shaped part (screwed on torsion protection)		-	
			03.001.14.88.0	

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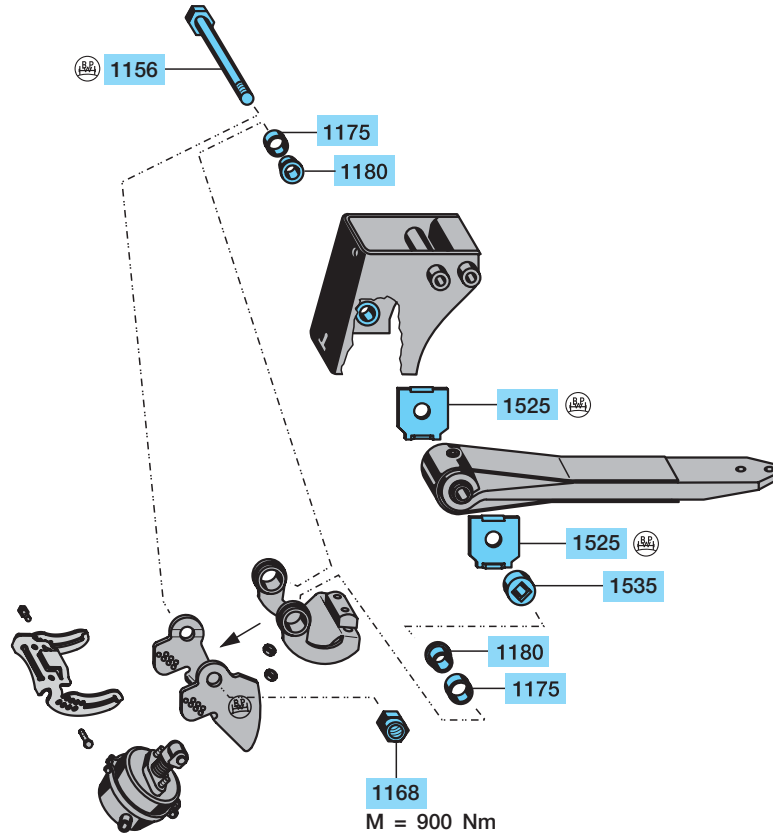
AL

6.1.3 Spring pivot bolt bearings, unadjustable, two-side axle lift

Spring pivot bolt bearings, unadjustable, two-side axle lift

Steel hanger bracket / integrated support, trailing arms 100 mm wide

Torsion protection with square internal lock bush, loose wear plates (shaped plates, item 1525)



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / integrated support:

M 30 M = 900 (840 - 990) Nm

Spring pivot bolt bearings, unadjustable, two-side axle lift 6.1.3

Spring pivot bolt bearings, unadjustable, two-side axle lift			
Steel hanger bracket / integrated support, trailing arms 100 mm wide			
		Torsion protection with square internal lock bush, loose wear plates (shaped plates, item 1525)	
Item	Designation	Remark	BPW Code no. Dimension
1156	Screw (Spring bolt)		03.340.15.39.0 M 30 x 255
1168	Lock nut		03.260.15.01.0 M 30 / SW 46
1175	Bush (Polyamid)		03.113.04.11.0 Ø 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0 Ø 30 / 42 / 62 x 22
1525	Shaped plate		03.164.35.01.0
1535	Bush		03.113.01.46.0 Ø 30.5 / 55 / 73.6 x 24
1560	Shaped plate (welded on torsion protection)		03.161.35.07.0
	Shaped part (screwed on torsion protection)		03.001.14.88.0

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6.2 Spring pivot bolt bearings, adjustable

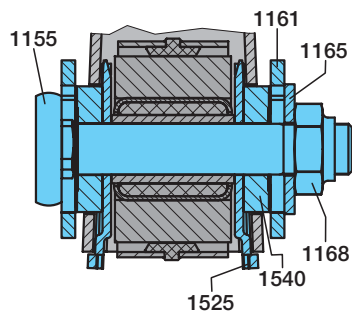
Overview

Spring pivot bolt bearings, adjustable, steel hanger brackets / integrated supports

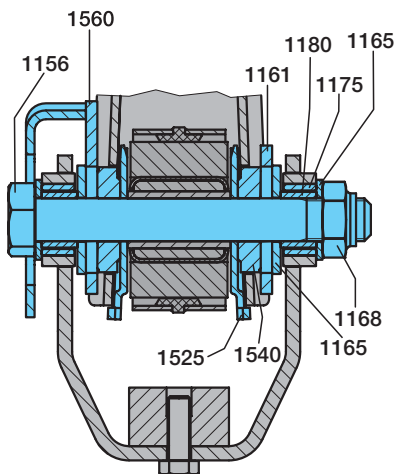
Trailing arms 70 / 100 mm wide

Hanger bracket with elongated bush, trailing arm 70 mm wide

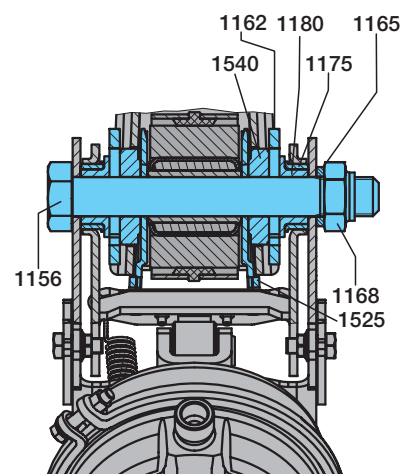
Standard



Sidewise mounted axle lift

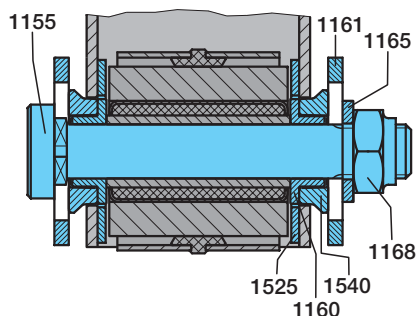


Two-side axle lift

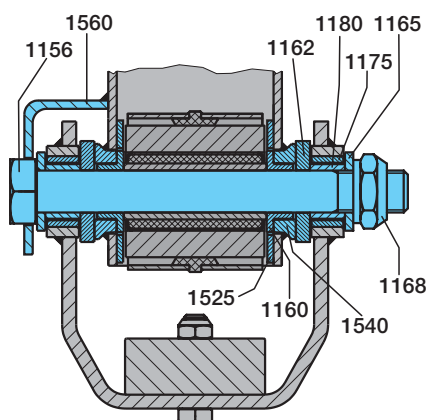


Hanger bracket with square profile, trailing arm 100 mm wide

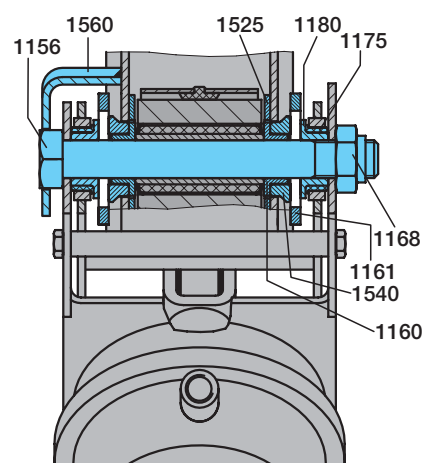
Standard



Sidewise mounted axle lift

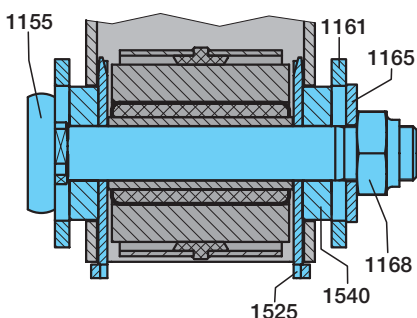


Two-side axle lift

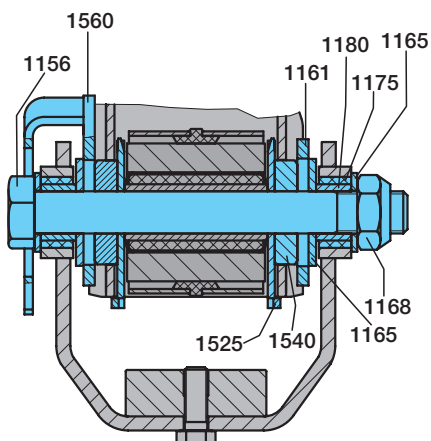


Hanger bracket with elongated bush, trailing arm 100 mm wide

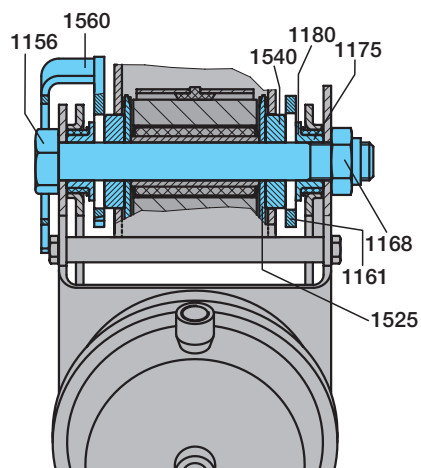
Standard



Sidewise mounted axle lift



Two-side axle lift



Spring pivot bolt bearings, adjustable, steel hanger brackets / integrated supports												
				Trailing arm								
				70 mm wide			100 mm wide					
				Steel hanger bracket with elongated hole			Steel hanger bracket with shaped piece			Steel hanger bracket with elongated hole		
Item	Designation	Dimension	BPW Code no.	Standard	Sidewise mounted axle lift device	Two-side axle lift	Standard	Sidewise mounted axle lift device	Two-side axle lift	Standard	Sidewise mounted axle lift device	Two-side axle lift
Further details - Page				67	69	73	67	71	75	67	71	75
1150	Repair kit spring bolt (Item 1005, 1152, 1540)	09.801.06.87.0					●					
		09.801.06.92.0								●		
		09.801.07.19.0		●								
1152	Spring bolt assembly (Item 1155, 1160, 1161, 1163, 1168)	05.857.00.09.0					●					
		05.857.00.15.0								●		
		05.857.00.18.0		●								
1153	Spring bolt assembly (Item 1156, 1160, 1161, 1165, 1168, 1175, 1180)	05.857.00.07.0						●				
		05.857.00.13.0									●	
1155	Screw (Spring bolt)	M 30 x 200	03.341.05.04.0				●			●		
		M 30 x 170	03.341.05.05.0	●								
1156	Screw (Spring bolt)	M 30 x 265	03.340.15.37.0					●			●	
		M 30 x 255	03.340.15.39.0						●			●
		M 30 x 235	02.5023.70.88		●	●						
1160	Slider	03.181.20.08.0					●	●	●			
1161	Plate (fit connecting link disc)	104 x 72 x 8	03.281.54.14.0				●	●	●			
		104 x 57.5 x 8	03.281.54.18.0	●	●	●				●	●	●
1165	Washer	Ø 31 / 46 x 6	03.320.34.53.0	●			●			●		
		Ø 31 / 62 x 5	03.320.34.51.0		●			●			●	
1168	Lock nut	M 30 / SW 46	03.260.15.01.0	●	●	●	●	●	●	●	●	●
1175	Bush (Polyamid)	Ø 41 / 50 x 23	03.113.94.10.0		●			●			●	
		Ø 42/50/54 x 17.5	03.113.04.11.0						●			●
1180	Ring	Ø 30 / 39 x 25		03.310.30.49.0		●		●				
		Ø 30/42/62 x 22		03.113.01.37.0			●					●
		Ø 30/40/46 x 25/31		03.113.01.29.0							●	
1525	Plate	03.281.25.04.0					●	●	●			
1525	Shaped plate	03.164.35.01.0								●	●	●
		03.164.35.02.0		● ¹⁾	● ¹⁾	● ¹⁾						
1540	Shaped part	92 x 62 x 29		03.001.14.86.0				●	●	●		
		Ø 30.3/42.6/74 x 23		03.113.23.01.0	●	●	●				●	●
1560	Shaped plate (welded on torsion protection)	03.164.35.07.0						●	●		●	●
1560	Connecting link disc with welded on torsion protection	05.001.32.01.0						●	●			
		05.001.32.02.0			●	●					●	●

¹⁾ Use shaped plate 03.164.35.01.0 with channel crossmember.

Spring pivot bolt bearings for alloy hanger brackets see page 82 - 87.

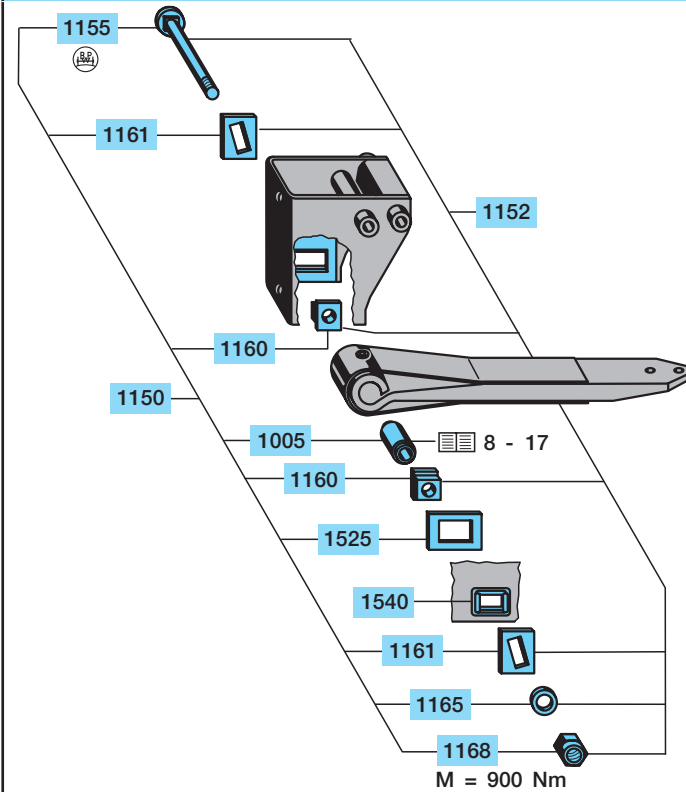
Spring pivot bolt bearings for stainless steel hanger brackets see page 88 - 93.

6.2.1 Spring pivot bolt bearings, adjustable

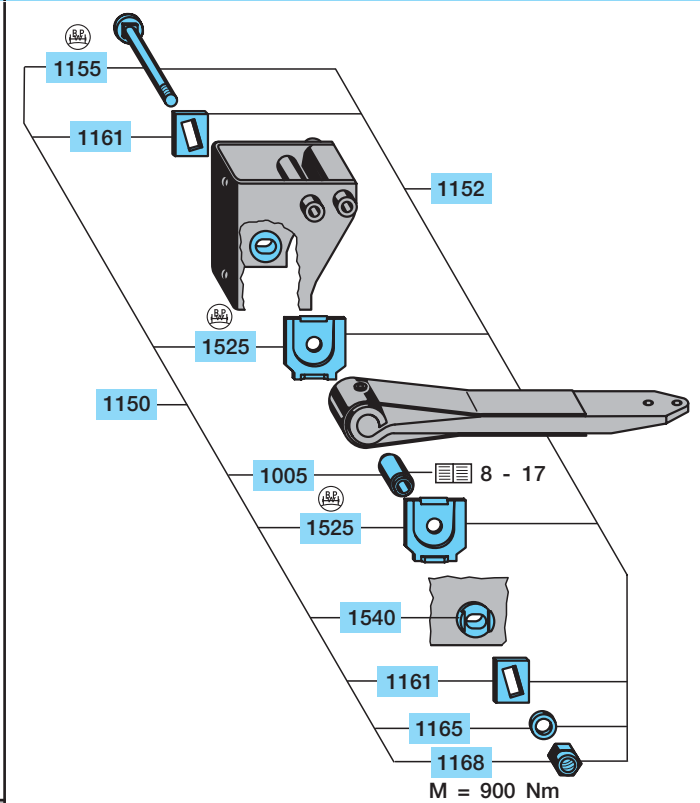
Spring pivot bolt bearings, adjustable

Steel hanger bracket / integrated support / frame trailing arms 100 mm wide

Adjustable spring pivot bolt bearing,
hanger bracket with square profile



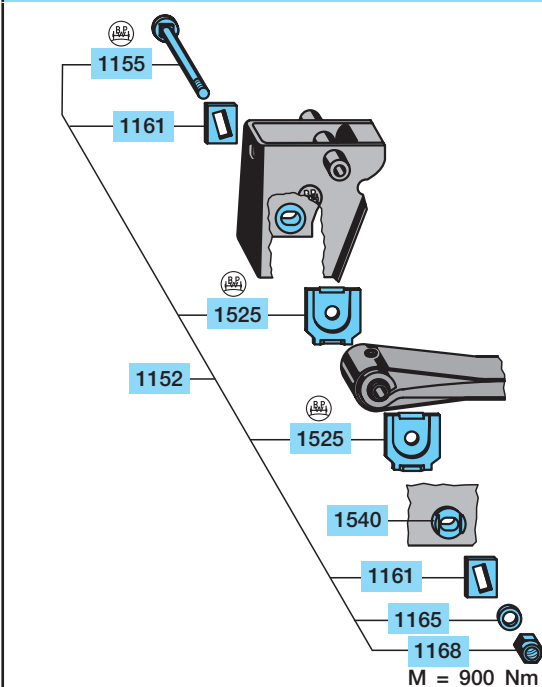
Adjustable spring pivot bolt bearing,
hanger bracket with elongated bush



Steel hanger bracket, trailing arms 70 mm wide

Adjustable spring pivot bolt bearing,
hanger bracket with elongated bush

AL II



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / frame:

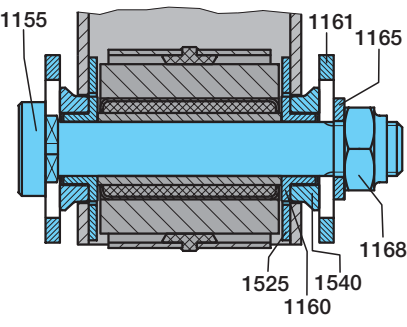
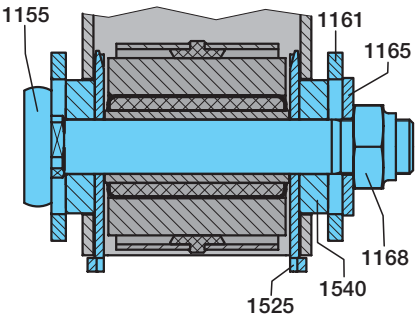
until 07 / 2001	M 30	M = 750 (700 - 825) Nm
from 08 / 2001	M 30	M = 900 (840 - 990) Nm

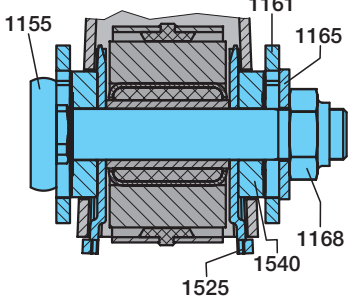
Integrated support:

until 10 / 1998	M 30	M = 1025 - 1210 Nm
from 10 / 1998	M 30	M = 900 (840 - 990) Nm

Spring pivot bolt bearings, adjustable 6.2.1

Spring pivot bolt bearings, adjustable

Steel hanger bracket / integrated support / frame, trailing arms 100 mm wide			
		Adjustable spring pivot bolt bearing, hanger bracket with square profile	Adjustable spring pivot bolt bearing, hanger bracket with elongated bush
			
Item	Designation	Remark	BPW Code no. Dimension
1150	Repair kit spring bolt (Item 1005, 1152, 1540)		09.801.06.87.0 (incl. steel / rubber / steel bush)
1152	Spring bolt assembly (Item 1155 - 1168, 1525)		05.857.00.09.0
1155	Screw (Spring bolt)		03.341.05.04.0 M 30 x 200
1160	Slider		03.181.20.08.0
1161	Plate (fit connecting link disc)		03.281.54.14.0 104 x 72 x 8
1165	Washer		03.320.34.53.0 Ø 31 / 76 x 6
1168	Lock nut		03.260.15.01.0 M 30 / SW 46
1525	Plate		03.281.25.04.0 140 x 101 x 4.5
	Shaped plate		-
1540	Shaped part		03.001.14.86.0 92 x 62 x 29
	Bush		-
			09.801.06.92.0 (incl. steel / rubber / steel bush)
			05.857.00.15.0
			03.341.05.04.0 M 30 x 200
			-
			03.281.54.18.0 104 x 57.5 x 8
			03.320.34.53.0 Ø 31 / 76 x 6
			03.260.15.01.0 M 30 / SW 46
			-
			03.164.35.01.0 Ø 30.2 / 120 x 125 x 5
			-
			03.113.23.01.0 Ø 30.3/42.6 / 74 x 23

Steel hanger bracket / integrated support, trailing arms 70 mm wide			
		Adjustable spring pivot bolt bearing, hanger bracket with elongated bush AL II	
			
Item	Designation	Remark	BPW Code no. Dimension
1150	Repair kit spring bolt (Item 1005, 1152, 1540)		09.801.07.19.0 (incl. steel / rubber / steel bush)
1152	Spring bolt assembly (Item 1155 - 1168, 1525)		05.857.00.18.0
1155	Screw (Spring bolt)		03.341.05.05.0 M 30 x 170
1161	Plate (fit connecting link disc)		03.281.54.18.0 104 x 57.5 x 8
1165	Washer		03.320.34.53.0 Ø 31 / 76 x 6
1168	Lock nut		03.260.15.01.0 M 30 / SW 46
1525	Shaped plate		03.164.35.02.0 ¹⁾
1540	Bush		03.113.23.01.0 Ø 30.3/42.6 / 74 x 23
			¹⁾ Use shaped plate 03.164.35.01.0 with channel crossmember.

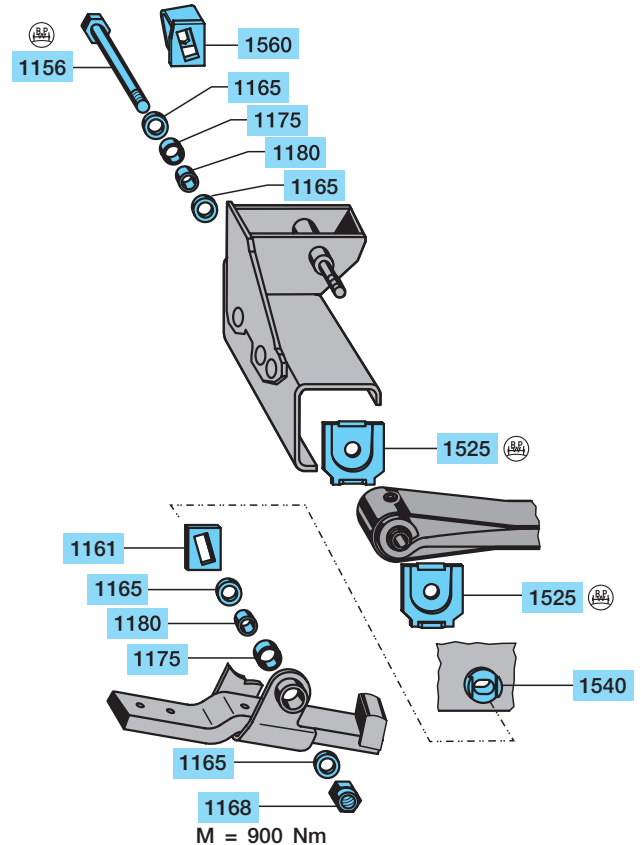
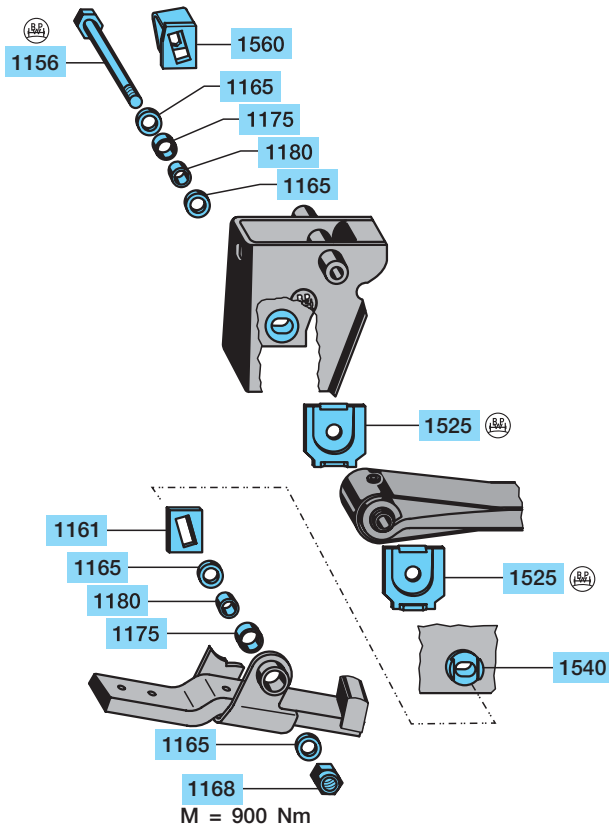
6.2.2 Spring pivot bolt bearings, adjustable, sidewise mounted axle lift

Spring pivot bolt bearings, adjustable, sidewise mounted axle lift

Steel hanger bracket / integrated support, trailing arms 70 mm wide

Adjustable spring pivot bolt bearing,
hanger bracket with elongated bush,
connecting link disc with welded on torsion protection

Adjustable spring pivot bolt bearing,
integrated support with elongated bush,
connecting link disc with welded on torsion protection



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / integrated support:

M 30 M = 900 (840 - 990) Nm

AL

Spring pivot bolt bearings, adjustable, sidewise mounted axle lift 6.2.2

Spring pivot bolt bearings, adjustable, sidewise mounted axle lift						
Steel hanger bracket / integrated support, trailing arms 70 mm wide						
			Adjustable spring pivot bolt bearing, hanger bracket with elongated bush, connecting link disc with welded on torsion protection			
Item	Designation	Remark	BPW Code no.	Dimension	BPW Code no.	Dimension
1156	Screw (Spring bolt)		02.5023.70.88	M 30 x 235	02.5023.70.88	M 30 x 235
1161	Plate (fit connecting link disc)		03.281.54.18.0	104 x 57.5 x 8	03.281.54.18.0	104 x 57.5 x 8
1165	Washer		03.320.34.51.0	Ø 31 / 62 x 6	03.320.34.53.0	Ø 31 / 76 x 6
1168	Lock nut		03.260.15.01.0	M 30 / SW 46	03.260.15.01.0	M 30 / SW 46
1175	Bush		03.113.94.10.0	Ø 41 / 50 x 23	03.113.94.10.0	Ø 41 / 50 x 23
1180	Ring		03.310.30.49.0	Ø 30 / 39 x 25	03.310.30.49.0	Ø 30 / 39 x 25
1525	Shaped plate		03.164.35.01.0		03.164.35.02.0	
1540	Bush		03.113.23.01.0	Ø 30.3/42.6 / 74 x 23	03.113.23.01.0	Ø 30.3/42.6 / 74 x 23
1560	Connecting link disc with welded on torsion protection		05.001.32.02.0		05.001.32.02.0	

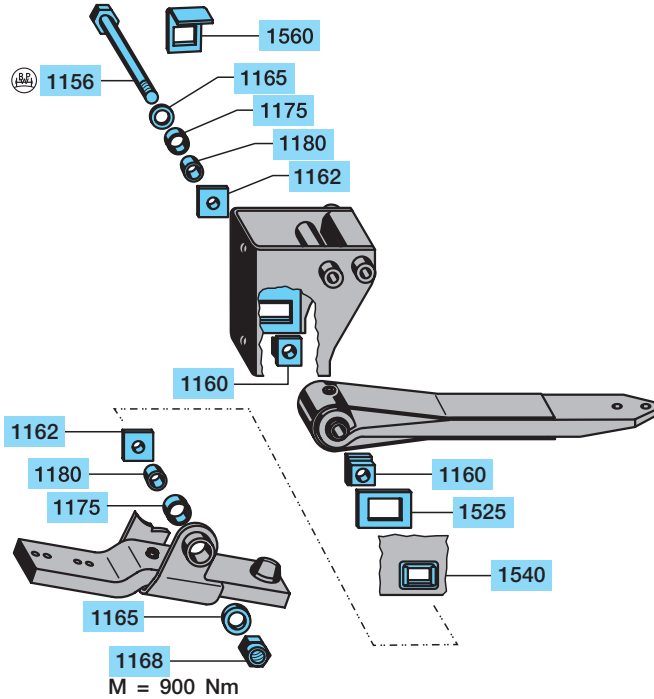
AL

6.2.2 Spring pivot bolt bearings, adjustable, sidewise mounted axle lift

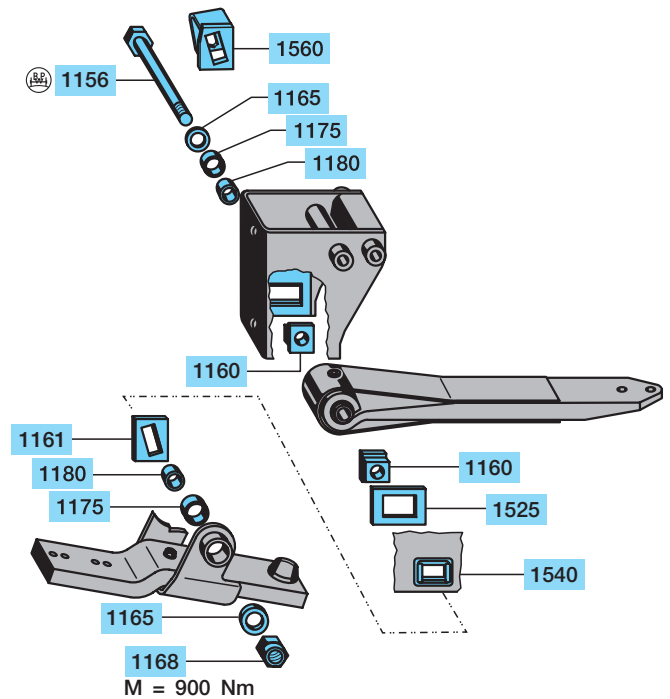
Spring pivot bolt bearings, adjustable, sidewise mounted axle lift

Steel hanger bracket / integrated support / frame, trailing arms 100 mm wide

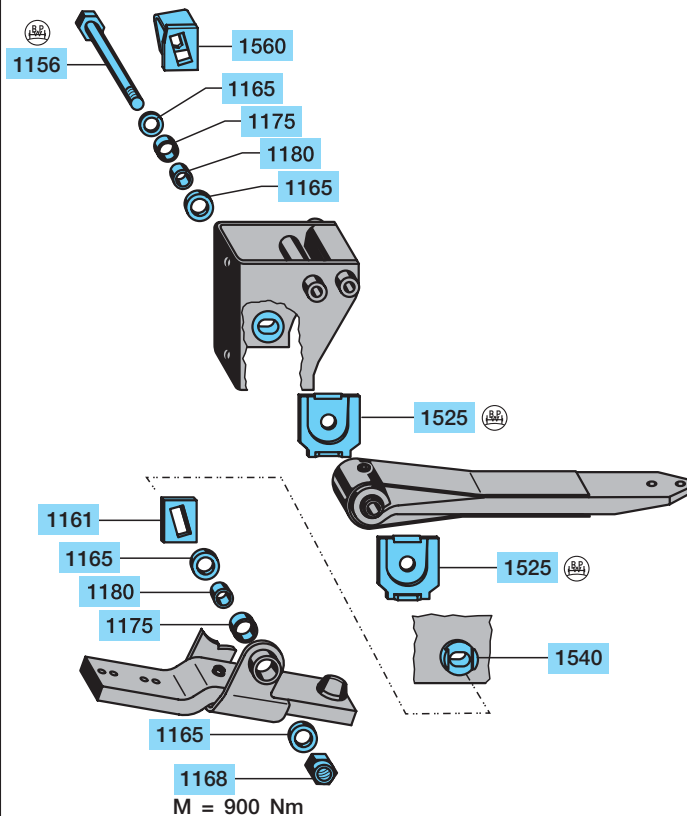
Adjustable spring pivot bolt bearing, hanger bracket with square profile, torsion protection welded on the hanger bracket



Adjustable spring pivot bolt bearing, hanger bracket with square profile, connecting link disc with welded on torsion protection



Adjustable spring pivot bolt bearing, hanger bracket with elongated bush, connecting link disc with welded on torsion protection



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / frame:

until 07 / 2001	M 30	M = 750 (700 - 825) Nm
from 08 / 2001	M 30	M = 900 (840 - 990) Nm

Integrated support:

until 10 / 1998	M 30	M = 1025 - 1210 Nm
from 10 / 1998	M 30	M = 900 (840 - 990) Nm

Spring pivot bolt bearings, adjustable, sidewise mounted axle lift 6.2.2

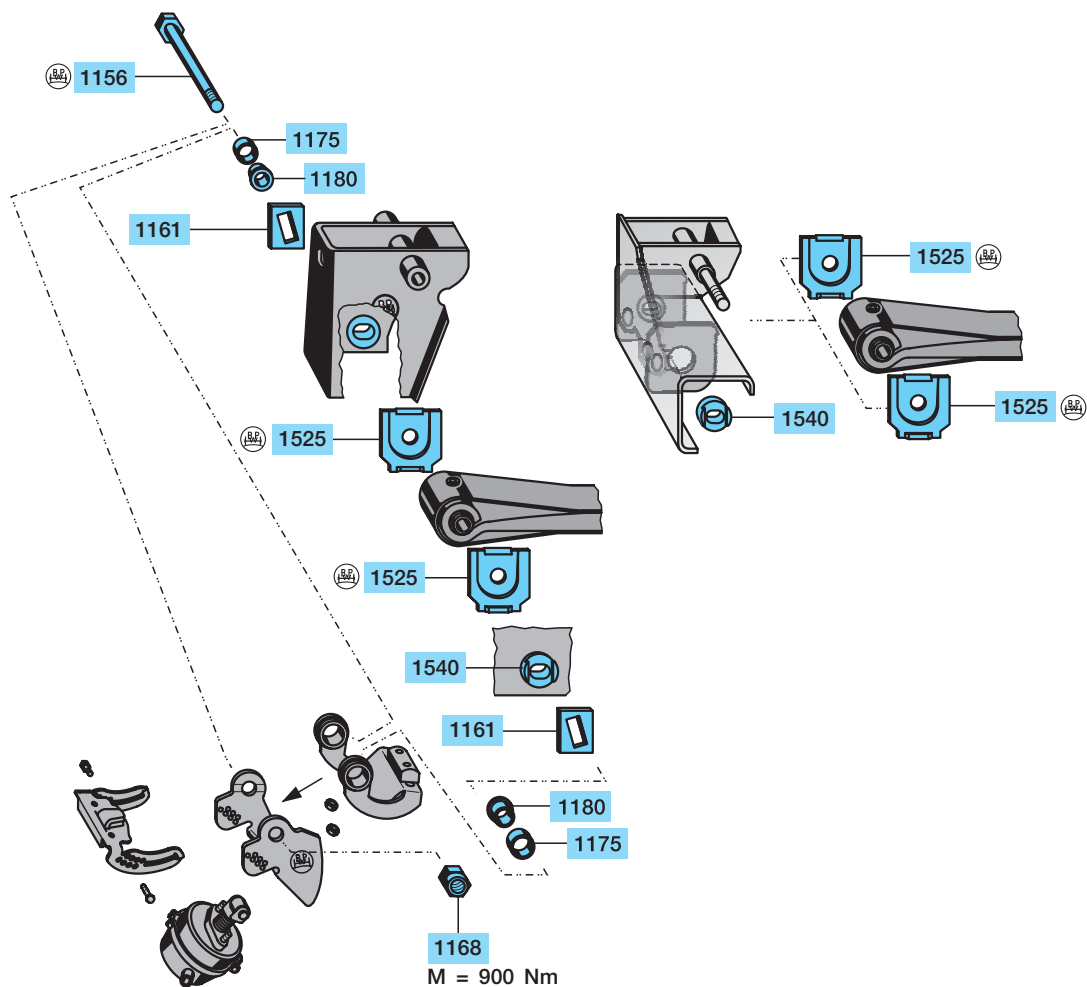
Spring pivot bolt bearings, adjustable, sidewise mounted axle lift				
Steel hanger bracket / integrated support / frame, trailing arms 100 mm wide				
Adjustable spring pivot bolt bearing, hanger bracket with square profile, torsion protection welded on the hanger bracket	Adjustable spring pivot bolt bearing, hanger bracket with square profile, connecting link disc with welded on torsion protection	Adjustable spring pivot bolt bearing, hanger bracket with elongated bush, connecting link disc with welded on torsion protection		
Item	Designation	Remark	BPW Code no.	Dimension
1156	Screw (Spring bolt)		03.340.15.37.0	M 30 x 265
1160	Slider		03.181.20.08.0	-
1161	Plate (fit connecting link disc)		03.281.54.14.0	104 x 72 x 8
1162	Plate		03.281.63.11.0	∅ 31 / □ 72 x 10
	Washer		03.320.34.51.0	∅ 31 / 62 x 5
1168	Lock nut		03.260.15.01.0	M 30 / SW 46
1175	Bush		03.113.94.10.0	∅ 41 / 50 x 23
1180	Ring		03.310.30.49.0	∅ 30 / 39 x 25
1525	Plate		03.281.25.04.0	140 x 101 x 4.5
	Shaped plate		-	03.164.35.01.0
1540	Shaped part		03.001.14.86.0	92 x 62 x 29
	Bush		-	03.113.23.01.0
1560	Shaped plate (torsion protection)		03.161.35.07.0	-
	Connecting link disc with welded on torsion protection		05.001.32.01.0	05.001.32.02.0

6.2.3 Spring pivot bolt bearings, adjustable, two-side axle lift

Spring pivot bolt bearings, adjustable, two-side axle lift

Steel hanger bracket / integrated support, trailing arms 70 mm wide

Adjustable spring pivot bolt bearing, hanger bracket with elongated bush



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / integrated support:

M 30 M = 900 (840 - 990) Nm

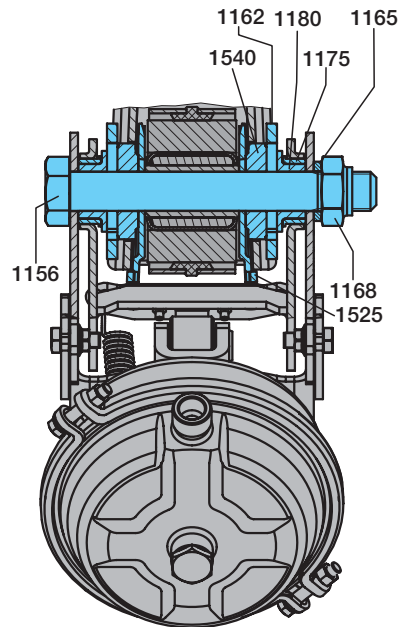
AL

Spring pivot bolt bearings, adjustable, two-side axle lift 6.2.3

Spring pivot bolt bearings, adjustable, two-side axle lift

Steel hanger bracket / integrated support, trailing arms 70 mm wide

Adjustable spring pivot bolt bearing, hanger bracket with elongated bush



Item	Designation	Remark	BPW Code no.	Dimension
1156	Screw (Spring bolt)		02.5023.70.88	M 30 x 235
1161	Plate (fit connecting link disc)		03.281.54.18.0	104 x 57.5 x 8
1168	Lock nut		03.260.15.01.0	M 30 / SW 46
1175	Bush		03.113.04.11.0	∅ 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0	∅ 30 / 42 / 62 x 22
1525	Shaped plate		03.164.35.02.0 ¹⁾	
1540	Bush		03.113.23.01.0	∅ 30.3/42.6 / 74 x 23

¹⁾ Use shaped plate 03.164.35.01.0 with channel crossmember.

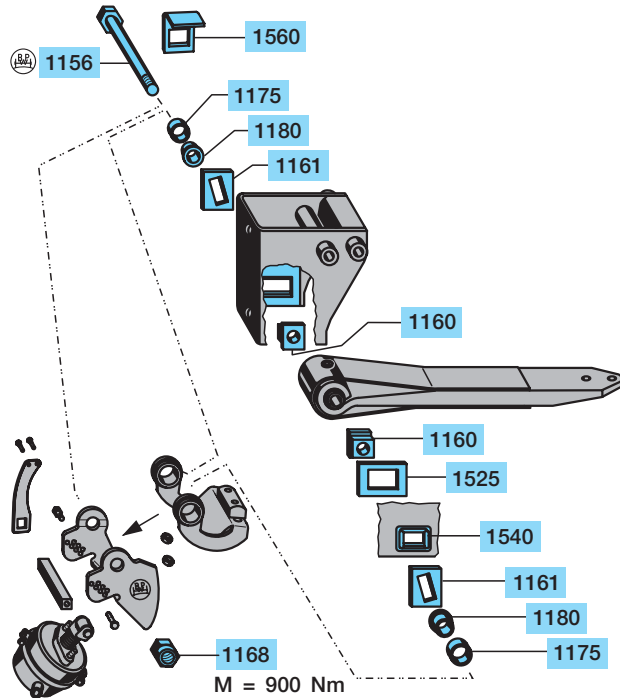
AL

6.2.3 Spring pivot bolt bearings, adjustable, two-side axle lift

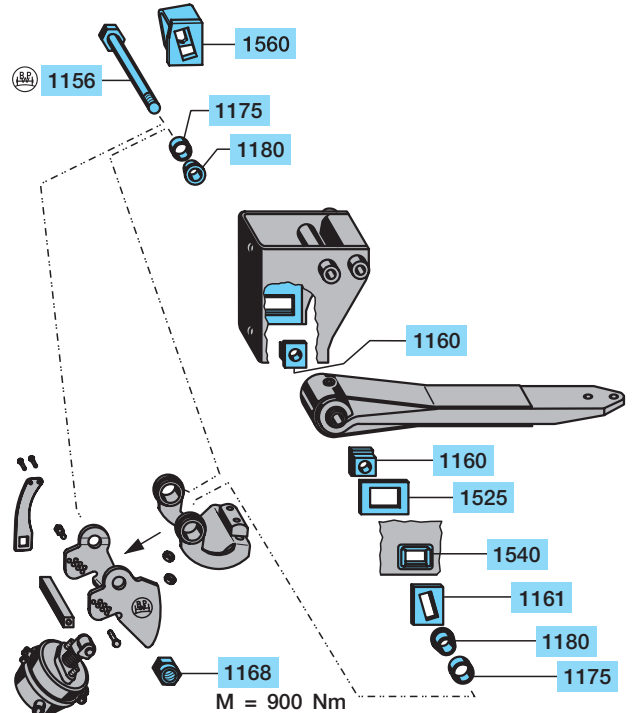
Spring pivot bolt bearings, adjustable, two-side axle lift

Steel hanger bracket / integrated support / frame, trailing arms 100 mm wide

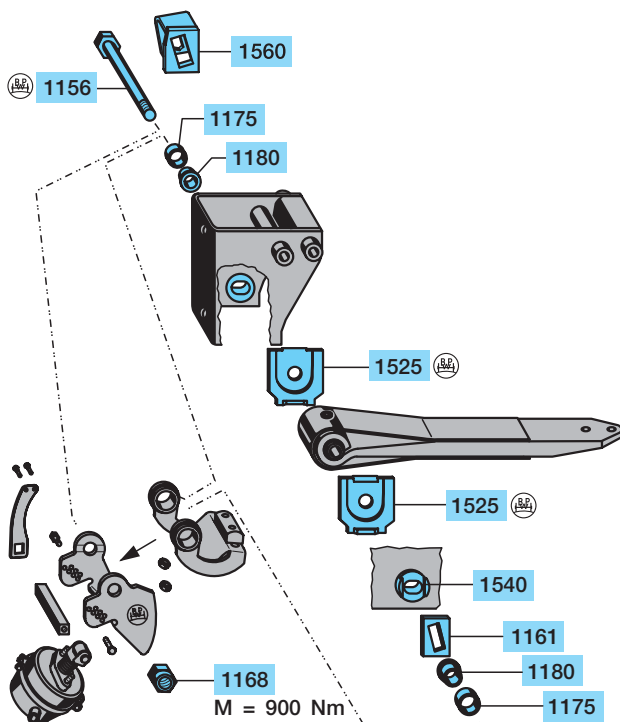
Adjustable spring pivot bolt bearing, hanger bracket with square profile, torsion protection welded on the hanger bracket



Adjustable spring pivot bolt bearing, hanger bracket with square profile, connecting link disc with welded on torsion protection



Adjustable spring pivot bolt bearing, hanger bracket with elongated bush, connecting link disc with welded on torsion protection



Tightening torques

Spring pivot bolt bearing:

Steel hanger bracket / frame:

M 30 M = 900 (840 - 990) Nm

Integrated support:

M 30 M = 900 (840 - 990) Nm

Spring pivot bolt bearings, adjustable, two-side axle lift 6.2.3

Spring pivot bolt bearings, adjustable, two-side axle lift				
Steel hanger bracket / integrated support / frame, trailing arms 100 mm wide				
Adjustable spring pivot bolt bearing, hanger bracket with square profile, torsion protection welded on the hanger bracket		Adjustable spring pivot bolt bearing, hanger bracket with square profile, connecting link disc with welded on torsion protection		Adjustable spring pivot bolt bearing, hanger bracket with elongated bush, connecting link disc with welded on torsion protection
Item	Designation	Remark	BPW Code no.	Dimension
1156	Screw (Spring bolt)		03.340.15.39.0	M 30 x 265
1160	Slider		03.181.20.08.0	-
1161	Plate (fit connecting link disc)		03.281.54.14.0	104 x 72 x 8
1168	Lock nut		03.260.15.01.0	M 30 / SW 46
1175	Bush		03.113.04.11.0	∅ 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0	∅ 30 / 42 / 62 x 22
1525	Plate		03.281.25.04.0	140 x 101 x 4.5
	Shaped plate		-	03.164.35.01.0
1540	Shaped part		03.001.14.86.0	92 x 62 x 29
	Bush		-	03.113.23.01.0
1560	Shaped plate (torsion protection)		03.161.35.07.0	-
	Connecting link disc with welded on torsion protection		05.001.32.01.0	05.001.32.02.0

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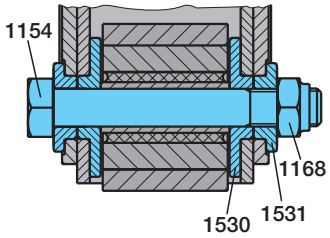
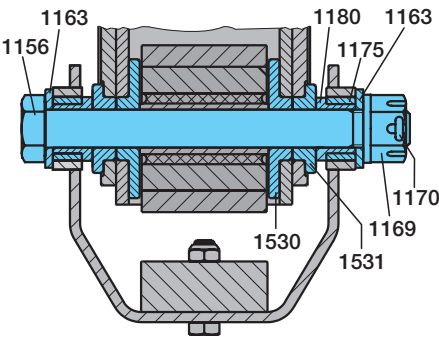
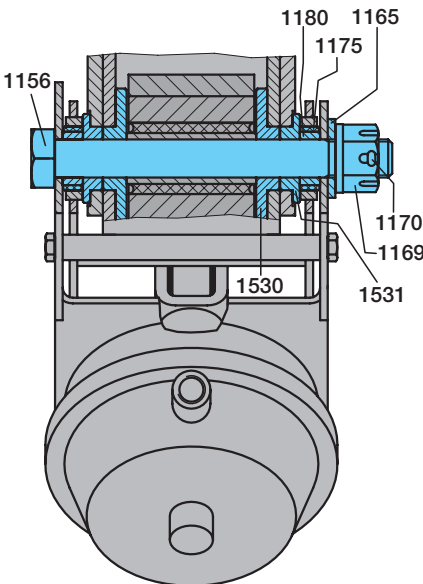
6.3 Spring pivot bolt bearings, alloy hanger bracket

Overview

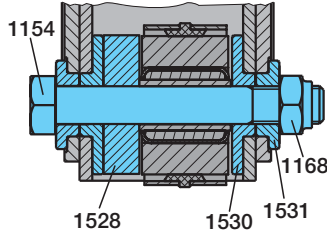
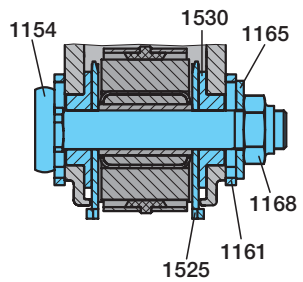
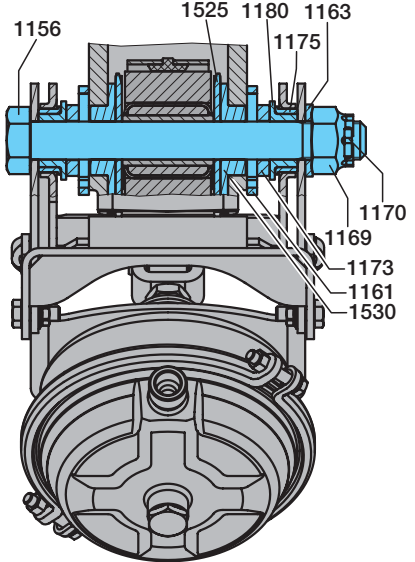
Spring pivot bolt bearings, alloy hanger bracket

Trailing arms 70 / 100 mm wide

Alloy hanger bracket, trailing arm 100 mm wide

Standard	Sidewise mounted axle lift	Two-side axle lift
		

Alloy hanger bracket, trailing arm 70 mm wide

Unadjustable spring pivot bolt bearing, inside dimension of the hanger bracket 100 mm	Adjustable spring pivot bolt bearing, inside dimension of the hanger bracket 83 mm	Adjustable spring pivot bolt bearing, inside dimension of the hanger bracket 83 mm, two-side axle lift
		

Spring pivot bolt bearings, alloy hanger bracket				Trailing arm					
				70 mm wide			100 mm wide		
				Alloy hanger bracket			Alloy hanger bracket		
Item	Designation	Dimension	BPW Code no.	Unadjustable, inside dimension of the hanger bracket 100 mm	Adjustable, inside dimension of the hanger bracket 83 mm	Adjustable, inside dimension of the hanger bracket 83 mm, two-side axle lift	Standard	Sidewise mounted axle lift device	Two-side axle lift
Further details - Page				85	85	85	87	87	87
1152	Spring bolt assembly (Item 1154, 1168)		05.857.00.06.0				•		
	(Item 1155, 1168, 1528)		05.857.00.21.0	•					
	(Item 1156, 1161, 1165, 1168, 1525)		05.857.00.20.0		•				
1154	Screw (Spring bolt)	M 30 x 210	03.340.15.23.0	•			•		
		M 30 x 180	03.341.05.02.0		•				
		M 30 x 265	03.340.15.40.0			•			•
1156	Screw (Spring bolt)	M 30 x 290	03.340.15.33.0					•	
1161	Plate (fit connecting link disc)	104 x 57.5 x 8	03.281.54.18.0		•				
		86 x 65 x 8	03.281.54.19.0			•			
1163	Washer	Ø 31 / 57 x 6	03.320.32.38.0			•		•	•
1165	Washer	Ø 31 / 46 x 6	03.320.34.53.0		•				
1168	Lock nut	M 30 / SW 46	03.260.15.01.0	•	•		•		
1169	Castle nut	M 30 / 935-8	02.5204.35.80			•		•	•
1170	Split pin	6.3 x 50 / 94	02.6201.62.01			•		•	•
1173	Washer	Ø 31 / 56 x 10	03.320.32.41.0			•			
1175	Bush (Polyamid)	Ø 41 / 50 x 23	03.113.94.10.0			•		•	
		Ø 42/50/54 x 17.5	03.113.04.11.0			•			
		Ring	Ø 42/50 x 15.5	03.310.32.09.0					
1180	Bush	Ø 30/40/46 x 25/31	03.113.01.29.0					•	
		Ø 30/42/62 x 22	03.113.01.37.0			•			
		Ø 30 / 42 x 16	03.112.13.12.0						•
1525	Shaped plate		03.164.35.01.0		•	•			
1528	Washer	Ø 30.5 / 110 x 30	03.005.01.46.0	•					
1530	Washer	Ø 30/50/110 x 20	03.320.16.04.0	•			•	•	•
	Bush	Ø 30.3/42.5/55	03.113.01.43.1		•	•			
1531	Washer	Ø 30/50/70 x 16	03.320.14.07.0	•			•	•	•

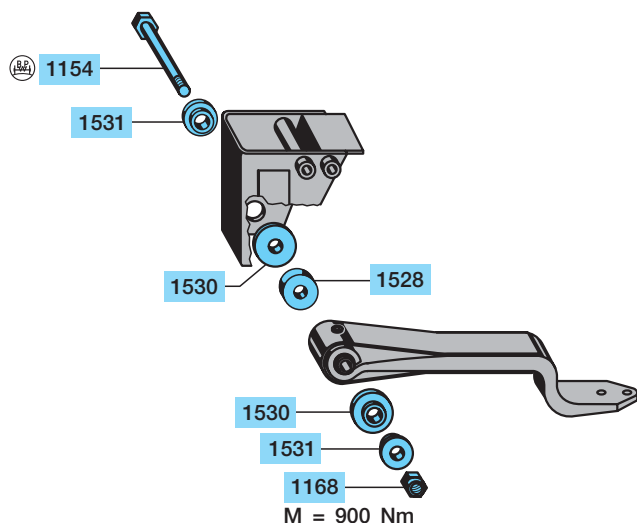


6.3.1 Spring pivot bolt bearings, alloy hanger bracket

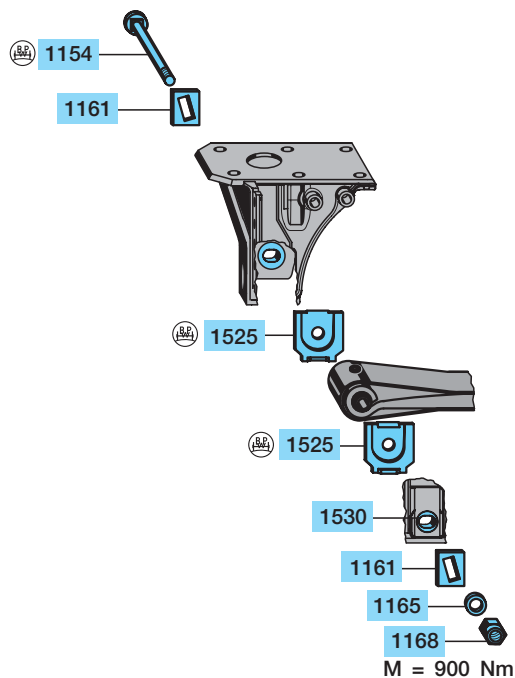
Spring pivot bolt bearings, alloy hanger bracket

Alloy hanger bracket, trailing arms 70 mm wide

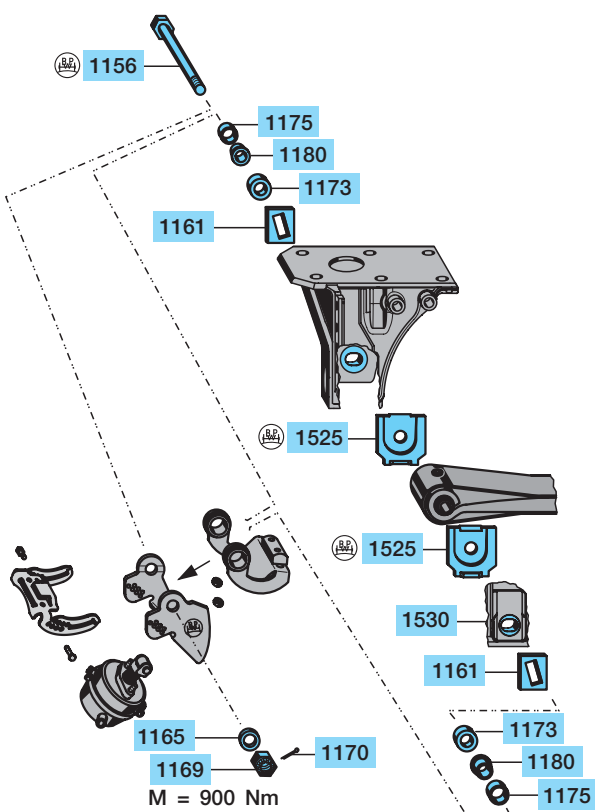
Unadjustable spring pivot bolt bearing, inside dimension of the hanger bracket 100 mm



Adjustable spring pivot bolt bearing, inside dimension of the hanger bracket 83 mm



Adjustable spring pivot bolt bearing, inside dimension of the hanger bracket 83 mm, two-side axle lift



Tightening torques

Spring pivot bolt bearing:

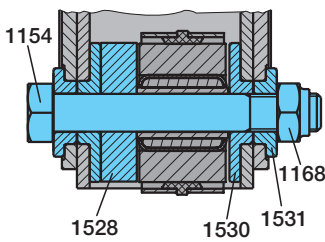
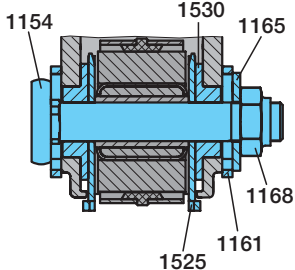
Alloy hanger bracket:

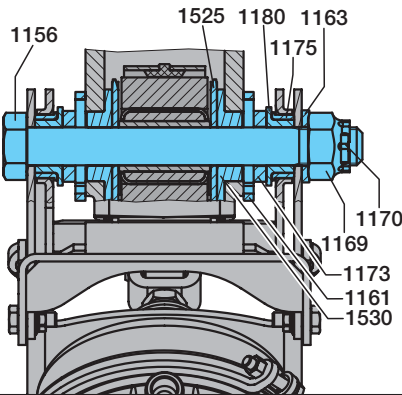
M 30 M = 900 (840 - 990) Nm

AL

Spring pivot bolt bearings, alloy hanger bracket 6.3.1

Spring pivot bolt bearings, alloy hanger bracket

Alloy hanger bracket, trailing arms 70 mm wide				
			Unadjustable spring pivot bolt bearing, inside dimension of the hanger bracket 100 mm	Adjustable spring pivot bolt bearing, inside dimension of the hanger bracket 83 mm
				
Item	Designation	Remark	BPW Code no. Dimension	BPW Code no. Dimension
1152	Spring bolt assembly (Item 1154, 1168, 1528)		05.857.00.21.0	05.857.00.20.0
1154	Screw (Spring bolt)		03.340.15.23.0 M 30 x 210	03.341.05.02.0 M 30 x 180
1161	Plate (fit connecting link disc)		-	03.161.54.18.0 104 x 57.5 x 8
1165	Washer		-	03.320.34.53.0 Ø 31 / 46 x 6
1168	Lock nut		03.260.15.01.0 M 30 / SW 46	03.260.15.01.0 M 30 / SW 46
1525	Shaped plate		-	03.164.35.01.0 Ø 30.2 / 120 x 125 x 5
1528	Washer		03.005.01.46.0 Ø 30.5 / 110 x 30	-
1530	Washer Bush		03.320.16.04.0 Ø 30 / 50 / 110 x 20 -	- 03.113.01.43.1 Ø 30.3/42.6 / 55/90 x 20
1531	Washer		03.320.14.07.0 Ø 30 / 50 / 70 x 16	-

Adjustable spring pivot bolt bearing, inside dimension of the hanger bracket 83 mm, two-side axle lift					
					
1156	Screw (Spring bolt)		03.340.15.40.0 M 30 x 265		
1161	Plate (fit connecting link disc)		03.281.54.19.0 86 x 65 x 8		
1163	Washer		03.320.32.38.0 Ø 31 / 57 x 6		
1169	Castle nut		02.5204.35.80 M 30		
1170	Split pin		02.6201.62.01 6.3 x 50		
1173	Washer		03.320.32.41.0 Ø 31 / 56 x 10		
1175	Bush		03.113.04.11.0 Ø 42 / 50 / 54 x 17.5		
1180	Bush		03.113.01.37.0 Ø 30 / 42 / 62 x 22		
1525	Shaped plate		03.164.35.01.0 Ø 30.2 / 120 x 125 x 5		
1530	Bush		03.113.01.43.1 Ø 30.3/42.6 / 55/90 x 20		

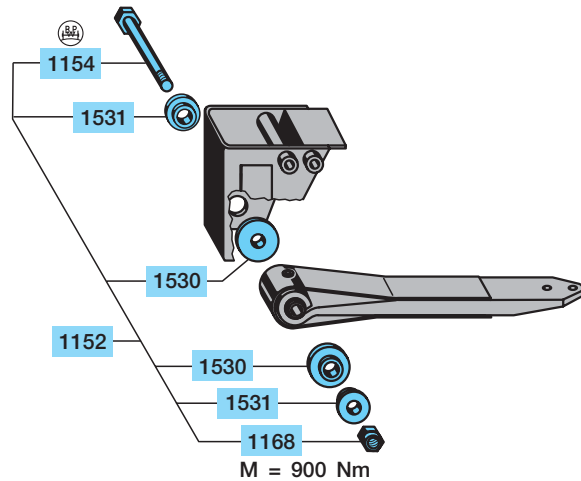
AL

6.3.2 Spring pivot bolt bearings, alloy hanger bracket

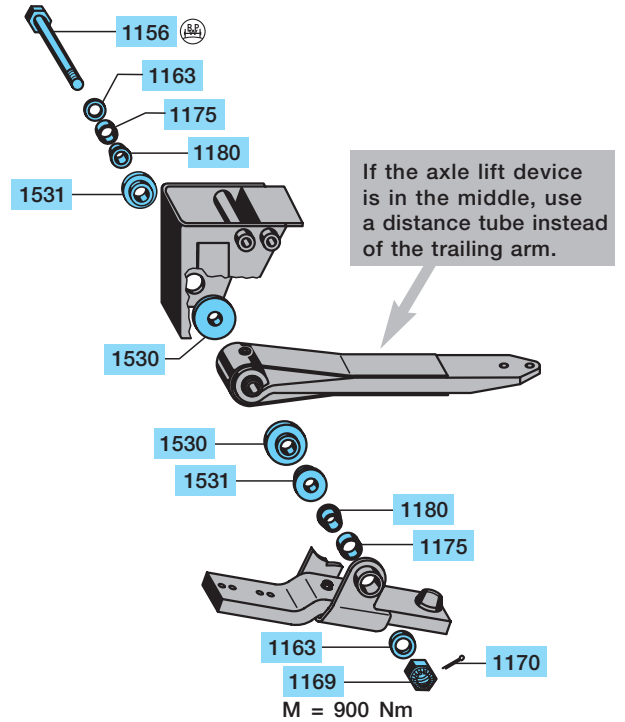
Spring pivot bolt bearings, alloy hanger bracket

Alloy hanger bracket, trailing arms 100 mm wide

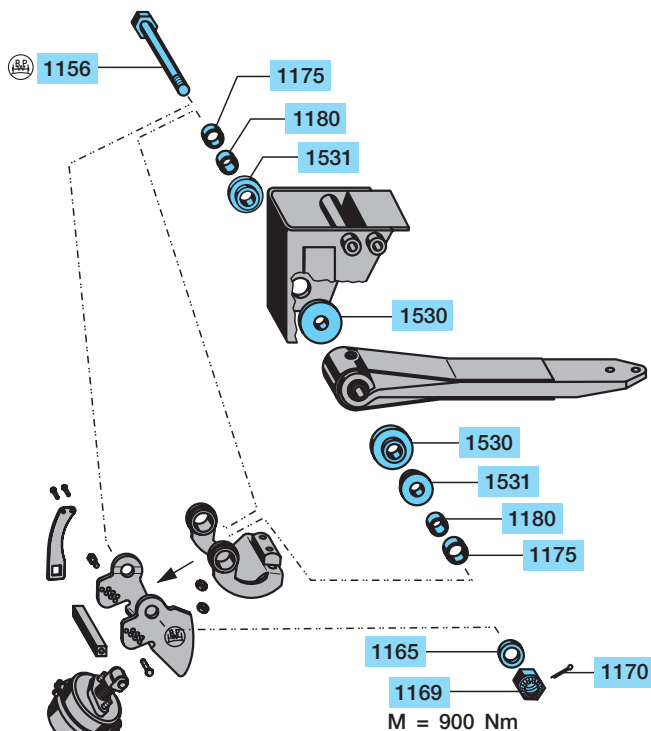
Unadjustable spring pivot bolt bearing



Unadjustable spring pivot bolt bearing, sidewise mounted axle lift



Unadjustable spring pivot bolt bearing, two-side axle lift



Tightening torques

Spring pivot bolt bearing:

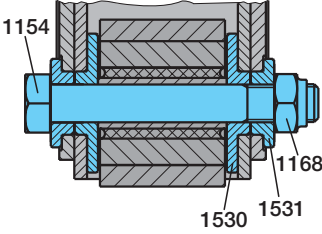
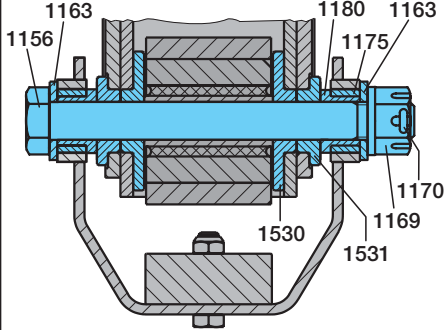
Alloy hanger bracket:

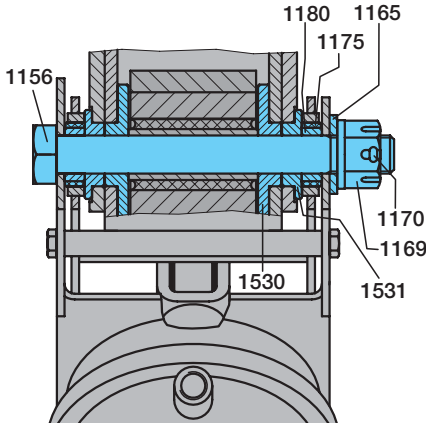
until 07 / 2001	M 30	M = 750 (700 - 825) Nm
from 08 / 2001	M 30	M = 900 (840 - 990) Nm

Spring pivot bolt bearings, alloy hanger bracket 6.3.2

Spring pivot bolt bearings, alloy hanger bracket

Alloy hanger bracket, trailing arms 100 mm wide

			Unadjustable spring pivot bolt bearing	Unadjustable spring pivot bolt bearing, sidewise mounted axle lift
				
Item	Designation	Remark	BPW Code no. Dimension	BPW Code no. Dimension
1152	Spring bolt assembly (Item 1154, 1168, 1530, 1531)		05.857.00.06.0	-
1154	Screw (Spring bolt)		03.340.15.23.0 M 30 x 210	-
1156	Screw (Spring bolt)		-	03.340.15.33.0 M 30 x 290
1163	Washer		-	03.320.32.38.0 Ø 31 / 57 x 6
1168	Lock nut		03.260.15.01.0 M 30 / SW 46	-
1169	Castle nut		-	02.5204.35.60 M 30 / 935-8
1170	Split pin		-	02.6201.62.01 6.3 x 50 / 94
1175	Bush		-	03.113.94.10.0 Ø 41 / 50 x 23
1180	Bush		-	03.113.01.29.0 Ø 30 / 39 x 25/31
1530	Washer		03.320.16.04.0 Ø 30 / 50 / 110 x 20	03.320.16.04.0 Ø 30 / 50 / 110 x 20
1531	Washer		03.320.14.07.0 Ø 30 / 50 / 70 x 16	03.320.14.07.0 Ø 30 / 50 / 70 x 16

			Unadjustable spring pivot bolt bearing, two-side axle lift
			
1156	Screw (Spring bolt)		03.340.15.40.0 M 30 x 265
1165	Washer		03.320.32.38.0 Ø 31 / 57 x 6
1169	Castle nut		02.5204.35.60 M 30 / 935-8
1170	Split pin		02.6201.62.01 6.3 x 50 7 94
1175	Ring		03.310.92.09.0 Ø 42 / 50 x 15.5
1180	Bush		03.112.13.12.0 Ø 30 / 42 x 16
1530	Washer		03.320.16.04.0 Ø 30 / 50 / 110 x 20
1531	Washer		03.320.14.07.0 Ø 30 / 50 / 70 x 16

6.4 Spring pivot bolt bearings, stainless steel hanger bracket

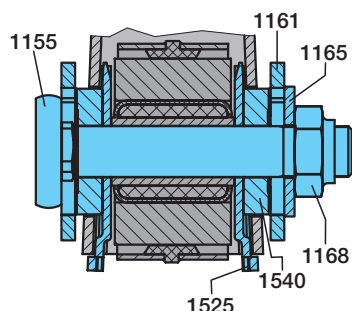
Overview

Spring pivot bolt bearings, stainless steel hanger bracket

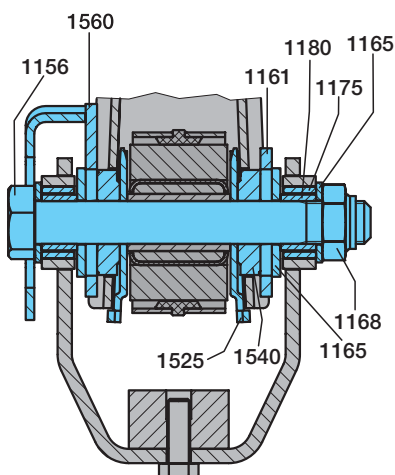
Trailing arms 70 / 100 mm wide

Stainless steel hanger bracket, trailing arm 70 mm wide

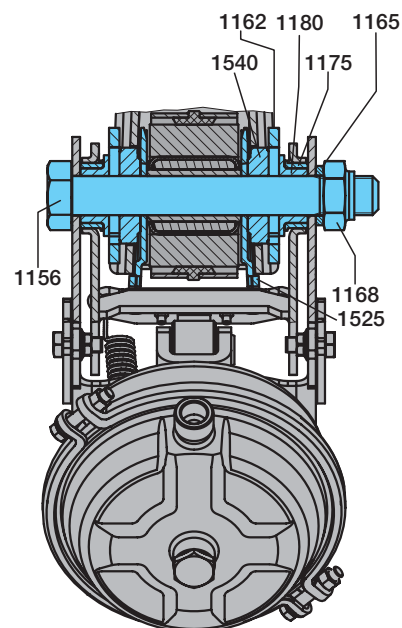
Adjustable spring pivot bolt bearing



Adjustable spring pivot bolt bearing, sidewise mounted axle lift

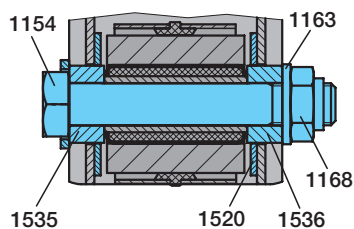


Adjustable spring pivot bolt bearing, two-side axle lift

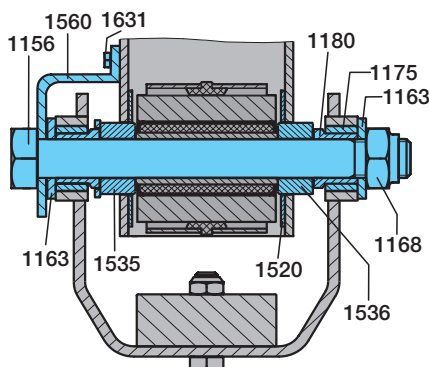


Stainless steel hanger bracket, trailing arm 100 mm wide

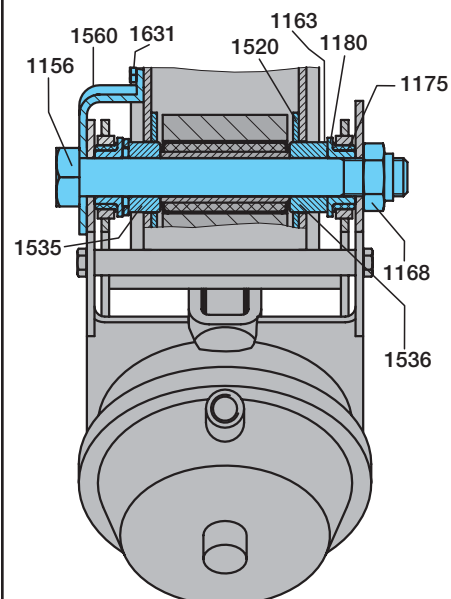
Unadjustable spring pivot bolt bearing



Unadjustable spring pivot bolt bearing, sidewise mounted axle lift



Unadjustable spring pivot bolt bearing, two-side axle lift



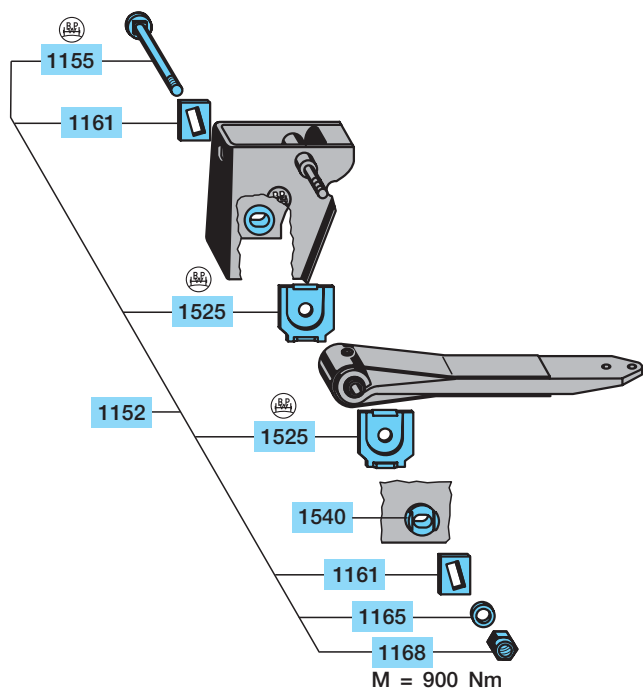
Spring pivot bolt bearings, stainless steel hanger bracket				Trailing arm					
				70 mm wide		100 mm wide			
				Stainless steel hanger bracket		Stainless steel hanger bracket			
Item	Designation	Dimension	BPW Code no.	Adjustable spring pivot bolt bearing	Adjustable spring pivot bolt bearing, sidewise mounted axle lift device	Adjustable spring pivot bolt bearing, two-side axle lift	Unadjustable spring pivot bolt bearing	Unadjustable spring pivot bolt bearing, sidewise mounted axle lift device	Unadjustable spring pivot bolt bearing, two-side axle lift
			Further details - Page	91	91	91	93	93	93
1152	Spring bolt assembly (Item 1155, 1161, 1165, 1168, 1560)		05.857.00.18.0	●					
	(Item 1154, 1163, 1168)		05.857.00.16.0				●		
1154	Screw (Spring bolt)	M 30 x 190	03.340.15.27.0				●		
1155	Screw (Spring bolt)	M 30 x 170	03.341.05.05.0	●					
1156	Screw (Spring bolt)	M 30 x 235	02.5023.70.88		●	●			
		M 30 x 265	03.340.15.37.0					●	
		M 30 x 255	03.340.15.39.0						●
1161	Plate (fit connecting link disc)	104 x 57.5 x 8	03.281.54.18.0	●	●	●			
1163	Washer	Ø 31 / 57 x 6	02.5401.31.01		●			●	
		Ø 31 / 57 x 6	03.320.32.38.0				●		
1165	Washer	Ø 31 / 76 x 5	03.320.34.53.0	●	●				
1168	Lock nut	M 30 / SW 46	03.260.15.01.0	●	●	●	●	●	●
1175	Bush (Polyamid)	Ø 41 / 50 x 23	03.113.94.10.0		●			●	
		Ø 42/50/54 x 17.5	03.113.04.11.0			●			●
1180	Ring	Ø 30 / 39 x 25	03.310.30.49.0		●				
	Bush	Ø 30/42/62 x 22	03.113.01.37.0			●			●
		Ø 30 / 39 x 25/31	03.113.01.29.0					●	
1520	Plate	Ø 56 / □ 101/140 x 5	03.281.25.07.0				●	●	●
1525	Shaped plate		03.164.35.02.0	●		●			
			03.164.35.01.0		●				
1535	Bush with torsion protection	Ø 30.5 / 55 x 31	05.113.01.40.0					●	●
1536	Ring	Ø 30.5 / 55 x 25	03.310.32.45.0				●	●	●
1540	Bush	Ø 30.5/42.6/74x23	03.113.01.45.0	●	●	●			
1560	Connecting link disc with welded on torsion protection		05.001.32.02.0		●				
	Shaped part (screwed on torsion protection)		03.001.14.88.0					●	●
1631	Locking screw	M 8 x 45	02.5071.37.00					●	●

6.4.1 Spring pivot bolt bearings, stainless steel hanger bracket

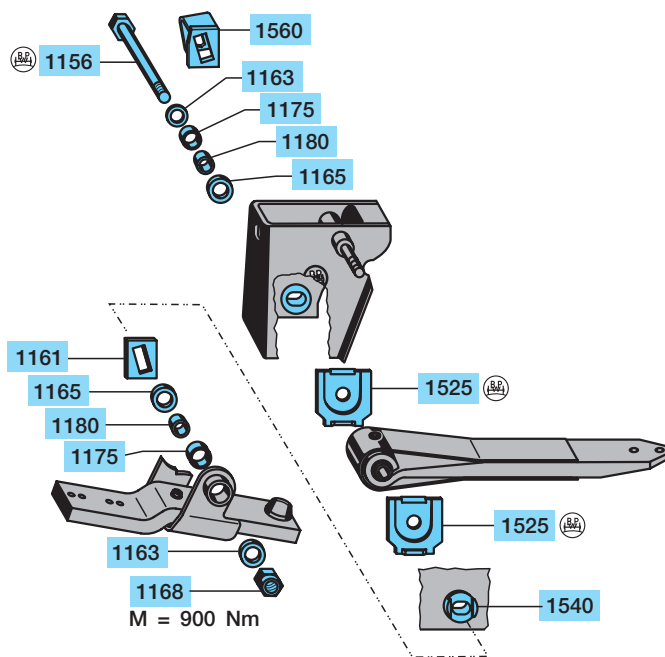
Spring pivot bolt bearings, adjustable, stainless steel hanger bracket

Stainless steel hanger bracket, trailing arms 70 mm wide

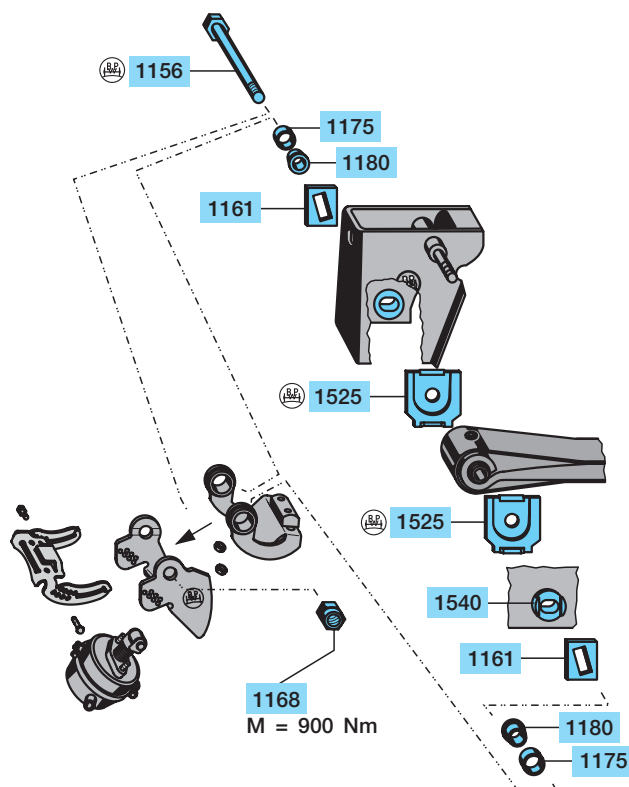
Adjustable spring pivot bolt bearing



Adjustable spring pivot bolt bearing, sidewise mounted axle lift



Adjustable spring pivot bolt bearing, two-side axle lift

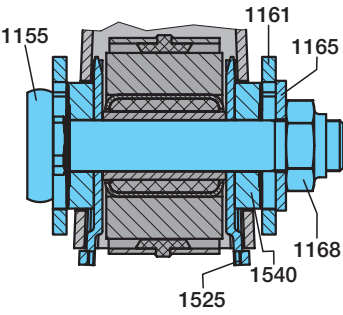
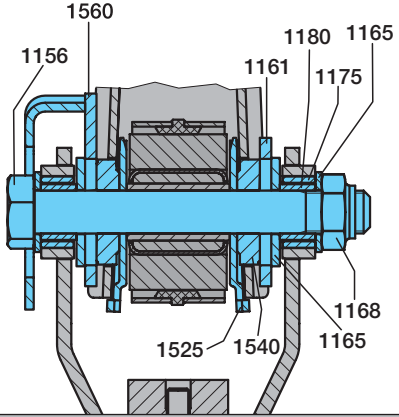
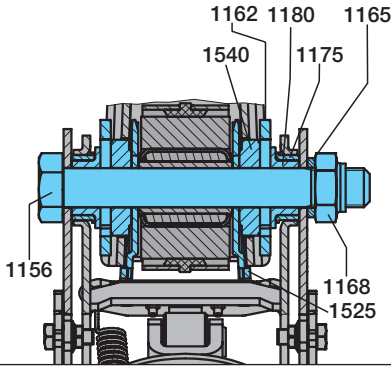


Tightening torques

Spring pivot bolt bearing:
Stainless steel hanger bracket:
M 30 M = 900 (840 - 990) Nm

AL

Spring pivot bolt bearings, stainless steel hanger bracket 6.4.1

Spring pivot bolt bearings, ajustable, stainless steel hanger bracket				
Stainless steel hanger bracket, trailing arms 70 mm wide				
		Adjustable spring pivot bolt bearing, hanger bracket with elongated bush		
				
Item	Designation	Remark	BPW Code no.	Dimension
1152	Spring bolt assembly (Item 1155 - 1168, 1525)		05.857.00.18.0	-
1155	Screw (Spring bolt)		03.341.05.05.0	M 30 x 170
1156	Screw (Spring bolt)		-	02.5023.70.88 M 30 x 235
1161	Plate (fit connecting link disc)		03.281.54.18.0	104 x 57.5 x 8
1163	Washer		-	02.5401.31.01 A 31 / 125
1165	Washer		03.320.34.53.0	Ø 31 / 76 x 6
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	Ring		-	03.310.30.49.0 Ø 30 / 39 x 25
1525	Shaped plate		03.164.35.02.0	03.164.35.01.0
1540	Bush		03.113.01.45.0	Ø 30.3/42.6 / 74 x 23
1560	Connecting link disc with welded on torsion protection		-	05.001.32.02.0
		Adjustable spring pivot bolt bearing, hanger bracket with elongated bush, two-side axle lift		
				
1156	Screw (Spring bolt)		02.5023.70.88	M 30 x 235
1161	Plate (fit connecting link disc)		03.281.54.18.0	104 x 57.5 x 8
1168	Lock nut		03.260.15.01.0	M 30 / SW 46
1175	Bush		03.113.04.11.0	Ø 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0	Ø 30 / 42 / 62 x 22
1525	Shaped plate		03.164.35.02.0	
1540	Bush		03.113.01.45.0	Ø 30.3/42.6 / 74 x 23

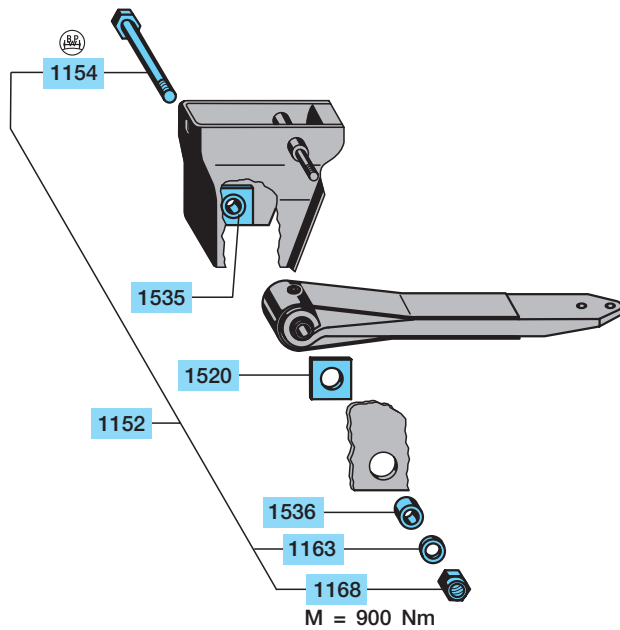
AL

6.4.2 Spring pivot bolt bearings, stainless steel hanger bracket

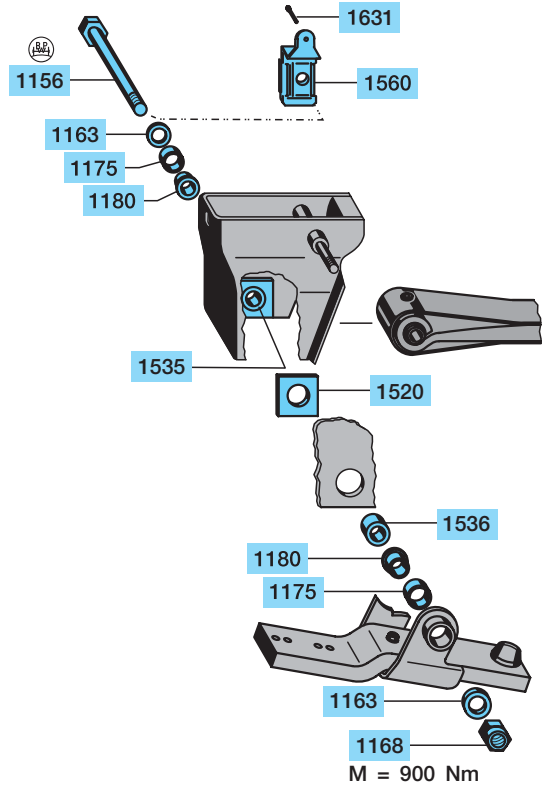
Spring pivot bolt bearings, unadjustable, stainless steel hanger bracket

Stainless steel hanger bracket, trailing arms 100 mm wide

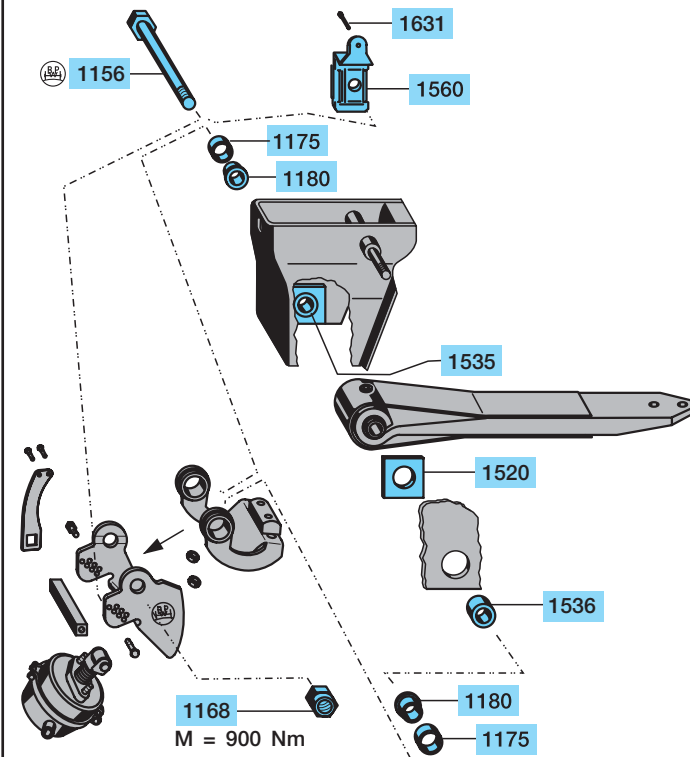
Unadjustable spring pivot bolt bearing



Unadjustable spring pivot bolt bearing, sidewise mounted axle lift



Unadjustable spring pivot bolt bearing, two-side axle lift

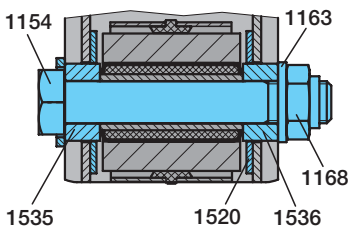
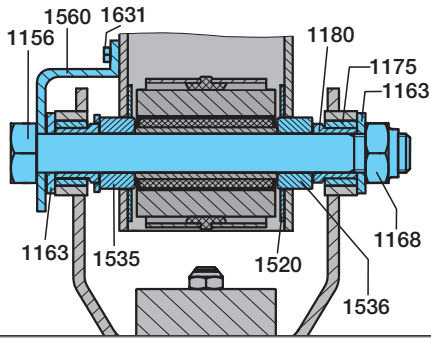


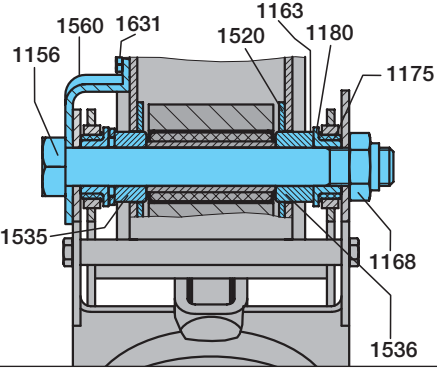
Tightening torques

Spring pivot bolt bearing:
Stainless steel hanger bracket:
M 30 M = 900 (840 - 990) Nm

Spring pivot bolt bearings, stainless steel hanger bracket 6.4.2

Spring pivot bolt bearings, unadjustable, stainless steel hanger bracket

Stainless steel hanger bracket, trailing arms 100 mm wide				
			Unadjustable spring pivot bolt bearing, stainless steel hanger bracket	Unadjustable spring pivot bolt bearing, stainless steel hanger bracket sidewise mounted axle lift
				
Item	Designation	Remark	BPW Code no.	Dimension
1152	Spring bolt assembly (Item 1154, 1163, 1168)		05.857.00.16.0	-
1154	Screw (Spring bolt)		03.340.15.27.0	M 30 x 190
1156	Screw (Spring bolt)		-	03.340.15.37.0 M 30 x 265
1163	Washer		03.320.32.38.0	Ø 31 / 57 x 6
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	Bush		-	03.113.01.29.0 Ø 30 / 39 x 25/31
1520	Plate		03.281.25.07.0	Ø 56 / □ 101 / 140 x 5
1535	Bush with torsion protection		05.113.01.40.0	Ø 30.5 / 55 x 31
1536	Ring		03.310.32.45.0	Ø 30.5 / 55 x 25
1560	Shaped part (screwed on torsion protection)		-	03.001.14.88.0
1631	Hexagon screw		-	02.5071.37.00 M 8 x 45

			Unadjustable spring pivot bolt bearing, stainless steel hanger bracket, two-side axle lift	
				
1156	Screw (Spring bolt)		03.340.15.39.0	M 30 x 265
1168	Lock nut		03.260.15.01.0	M 30 / SW 46
1175	Bush		03.113.04.11.0	Ø 41 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0	Ø 30 / 42 / 62 x 22
1520	Plate		03.281.25.07.0	Ø 56 / □ 101 / 140 x 5
1535	Bush with torsion protection		05.113.01.40.0	Ø 30.5 / 55 x 31
1536	Ring		03.310.32.45.0	Ø 30.5 / 55 x 25
1560	Shaped part (screwed on torsion protection)		03.001.14.88.0	
1631	Hexagon screw		02.5071.37.00	M 8 x 45

7 BPW Air bags

General

Standard air bag

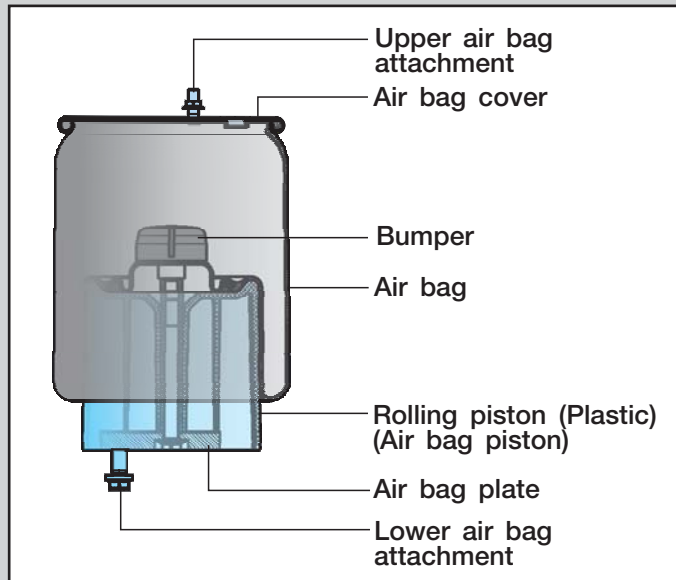
BPW Air bags are firmly rolled into the top air bag cover and are bonded onto the clamping plate at the bottom by vulcanisation.

The top air bag cover is either bolted onto the frame trussing or else a plate or bracket is welded onto the vehicle frame to attach the bag, depending on the bag version. The air bag cover is bolted onto it using two M 12 securing nuts.

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

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.



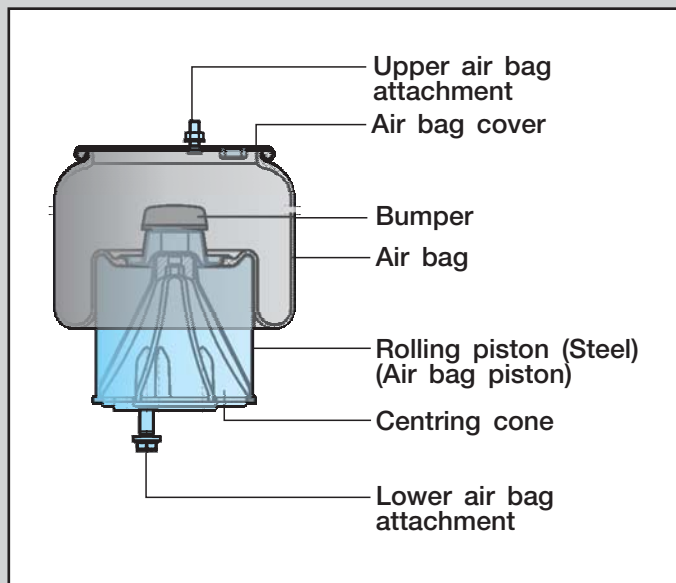
Air bag with splitted piston (Kombi-Air bag)

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. A long air bag service life is assured.

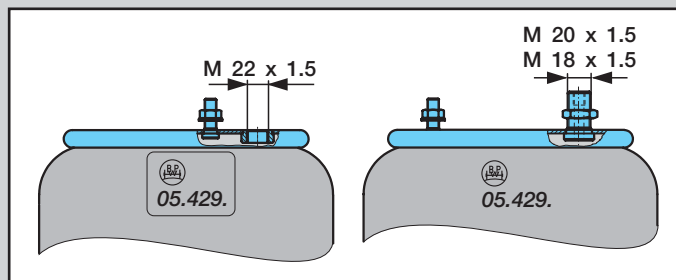


Stroke limiting

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 stay bolt (M 18 x 1.5 / M20 x 1.5).



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 540 mm

The bag design as well as the BPW code no. of the bare air bag can be read off from every air bag.

2. Determining the type of air connection.

- Air connection to welded-in threaded sleeve in the air bag cover or to hollow stay bolt.

3. Air bag attachment

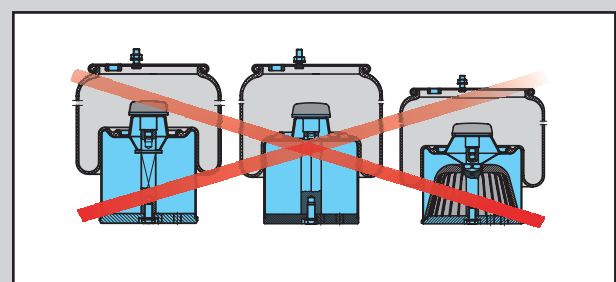
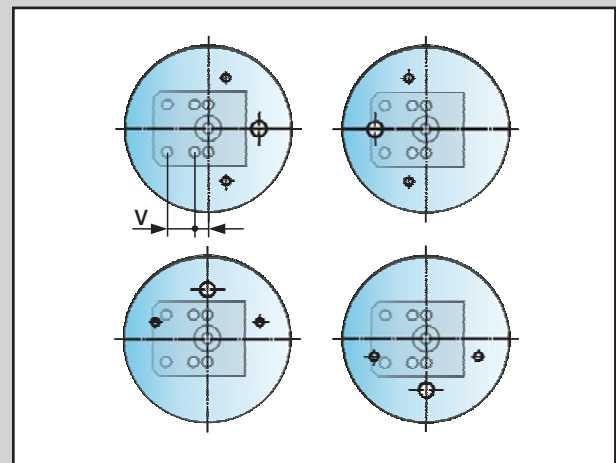
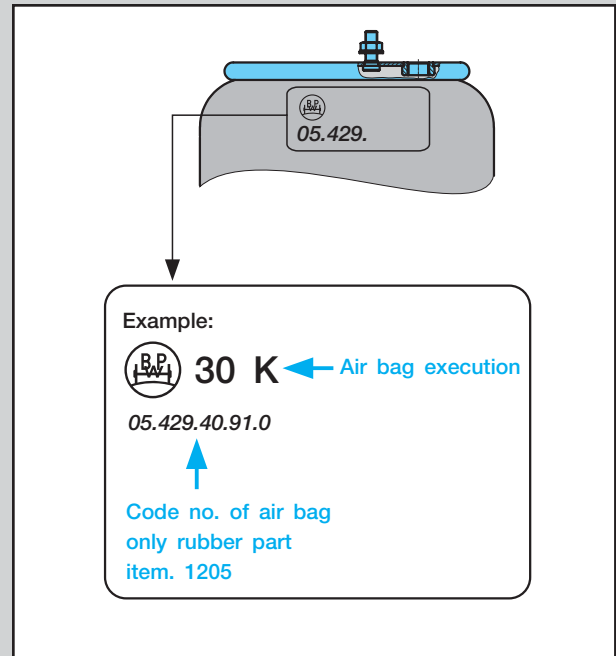
- Top air bag attachment in middle of bag or offset to the side?
- Measure the position of the top bag attachment on the frame in relation to the bottom bag attachment on the trailing arm (the maximum lateral offset between the top and bottom bag attachment is not allowed to exceed 10 mm). The top and bottom bag attachments must not be installed with any rotational misalignment!

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.



7.1 Air bags Ø 300

Air bags Ø 300

Fig. A

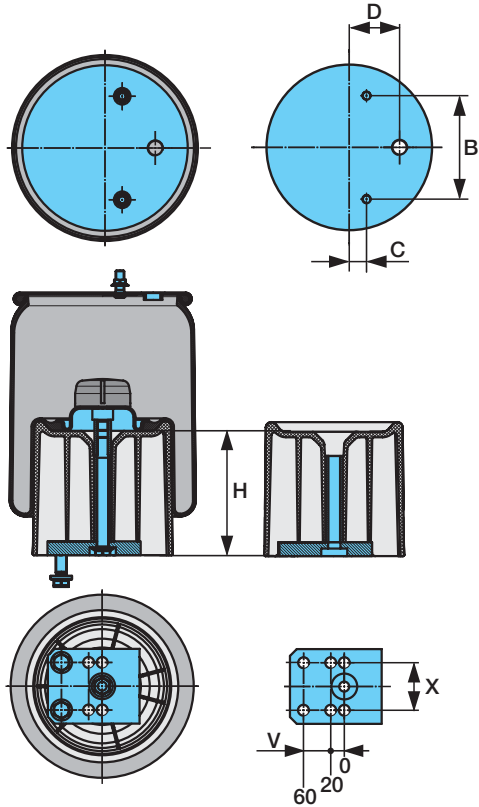
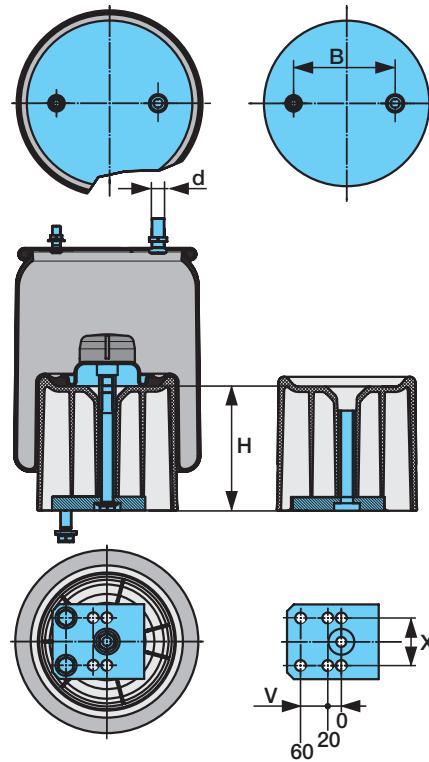


Fig. B



Observe position of upper and lower air bag attachment!

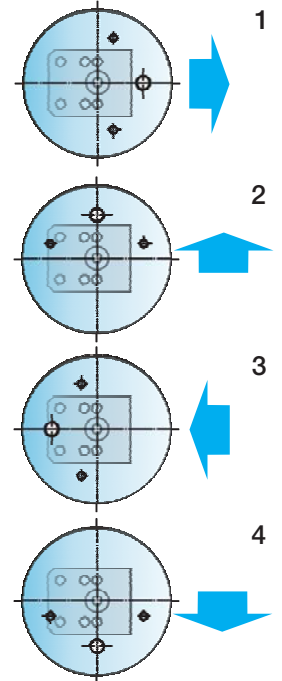
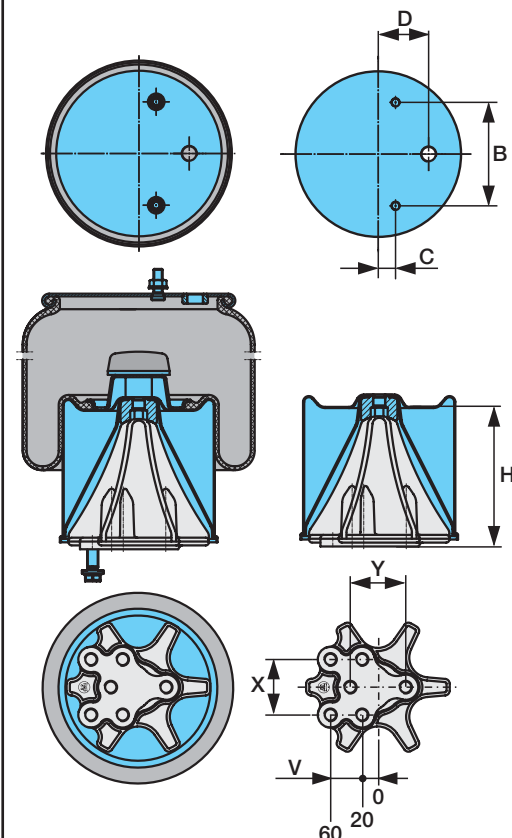
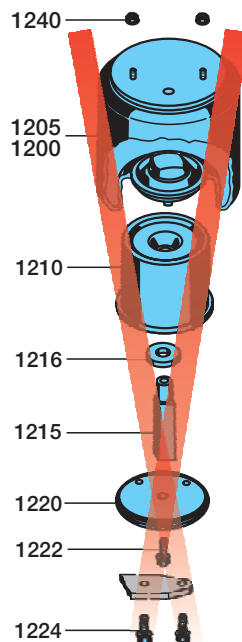


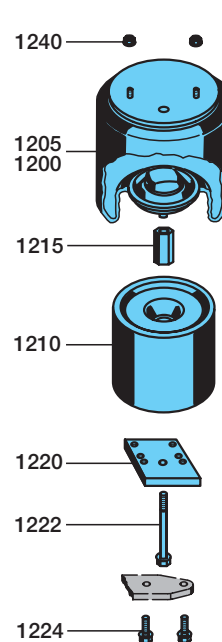
Fig. C



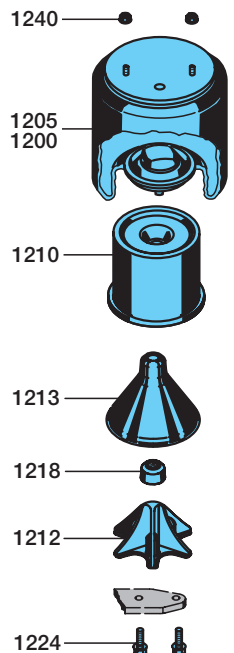
Air bag with steel piston



Air bag with plastic piston



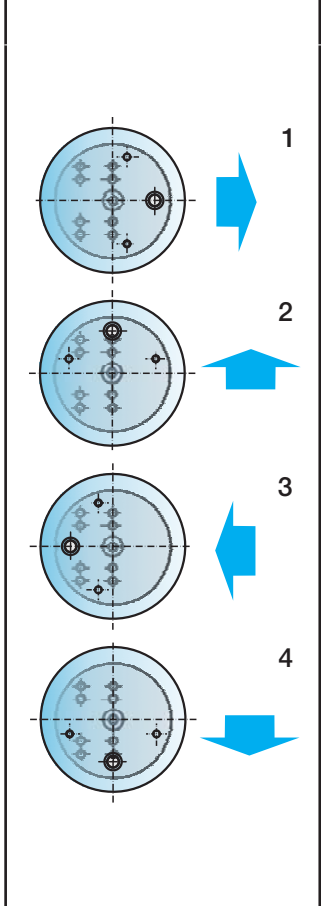
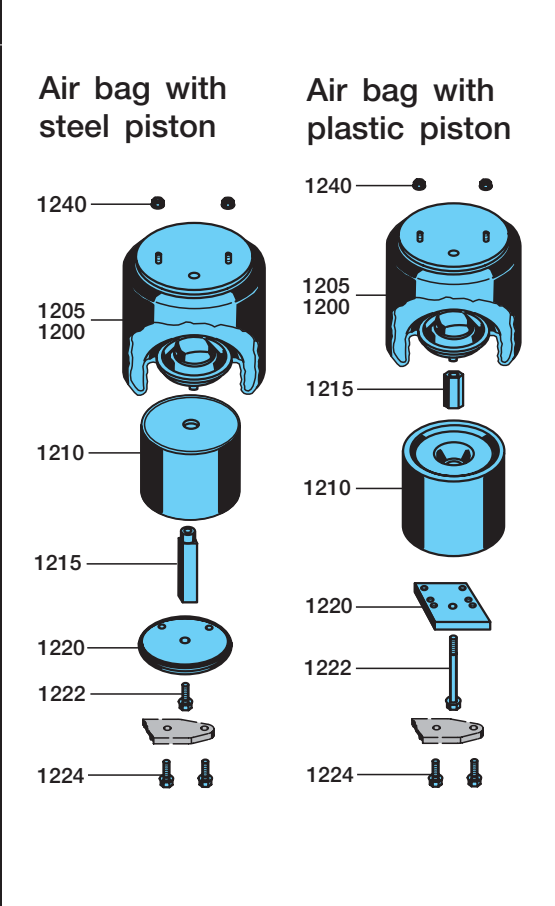
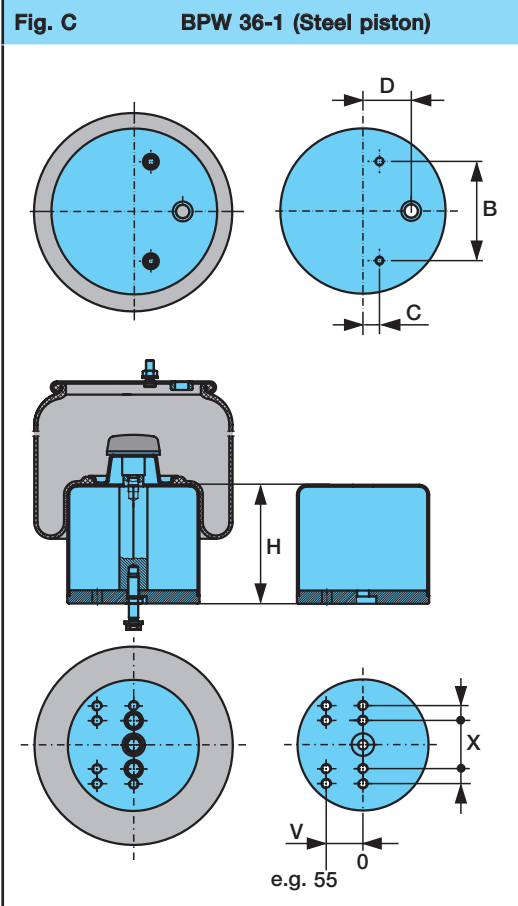
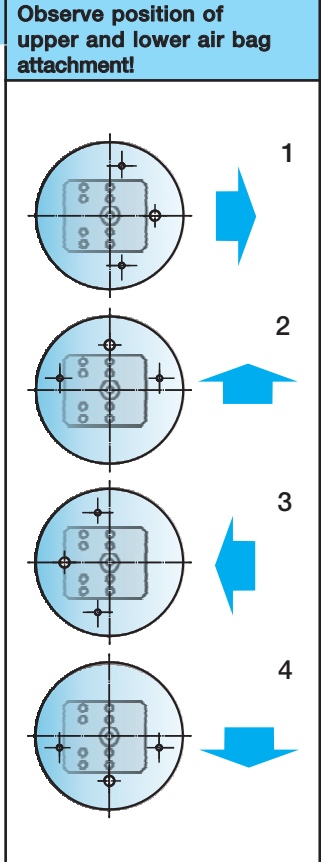
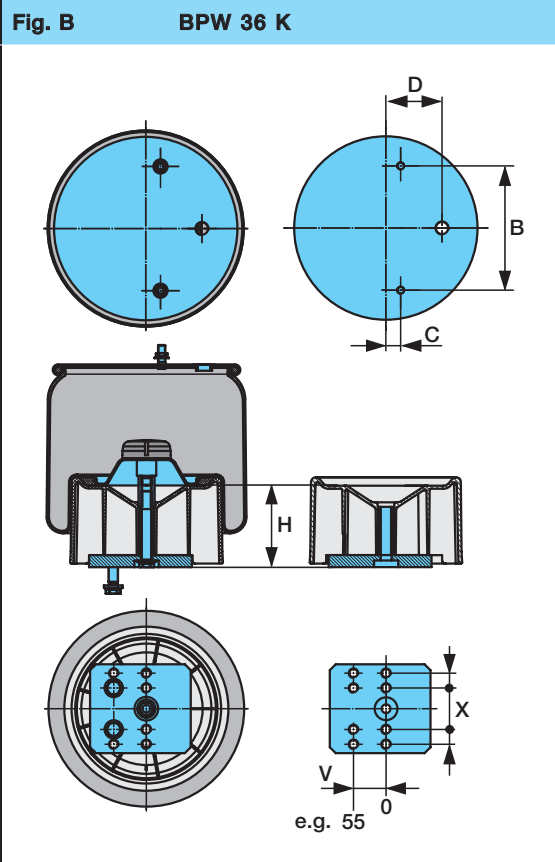
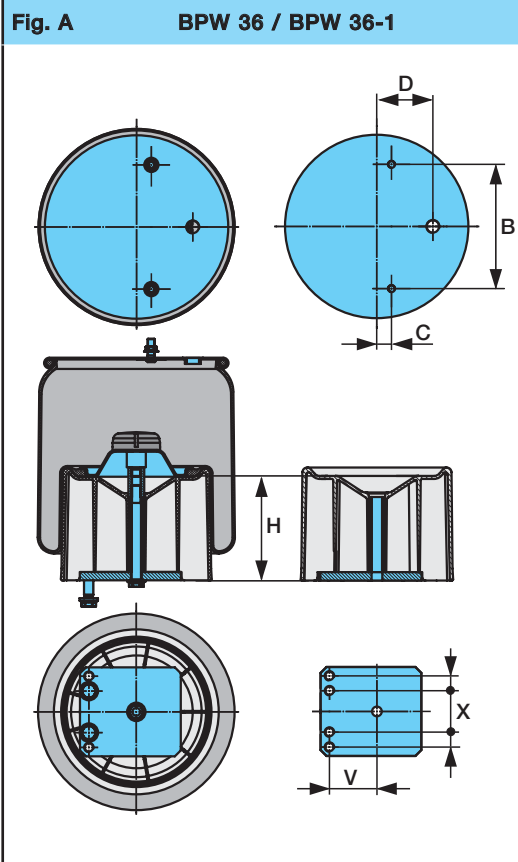
Kombi-Air bag



Air bags Ø 300													
Fig.	Dimensions									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 (Kombi-Air bag) item 1212
	V	X	H	Y	B	C	D	d					
BPW 30													
Air bag standard													
A 1	0 / 20 / 60	70	180	-	150	0	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						25				05.429.43.20.0	05.429.40.03.0		
A 2										05.429.43.34.0			
A 3										05.429.43.56.0			
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	
Air bag with split piston (Kombi-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	0	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						25				05.429.43.21.0	05.429.40.91.0		
A 3										05.429.43.37.0			
A 1						180				05.429.43.22.0			
A 3										05.429.43.31.0			
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					170			M 18x1.5	05.429.43.32.0	05.429.41.56.0			
B 1					180			157	M 20x1.5	05.429.43.26.0			05.429.41.25.0
Air bag with split piston (Kombi-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	03.375.09.38.0
C 1			25			05.429.42.05.1				03.139.00.24.0			
C 1			180			05.429.42.11.1				05.429.40.91.0	03.139.00.22.0 03.139.00.23.0	03.375.09.37.0	
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 1004 / 101. Further executions upon request.													

7.2 Air bags Ø 360

Air bags Ø 360

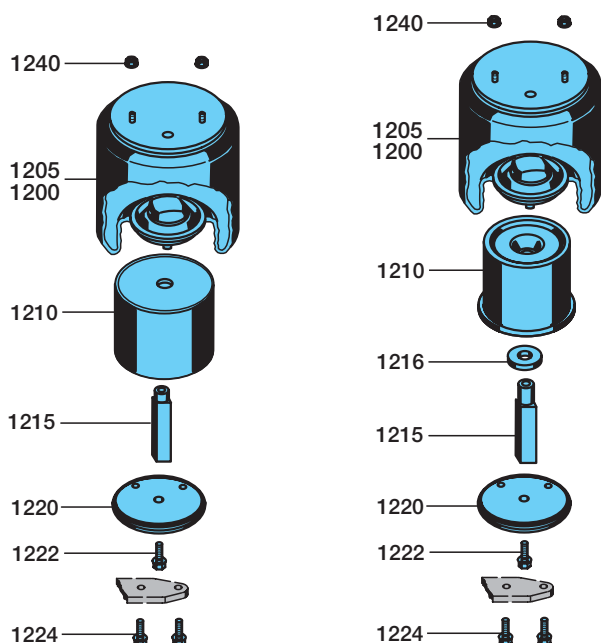


Air bags Ø 360												
Fig.	Dimensions						Remark	BPW Air bag cpl. Item 1200	BPW Code no. only Item 1205	Air bag piston Item 1210	Lower plate Item 1220	
	V	X	H	B	C	D						
BPW 36												
Air bag standard												
A 1	0 / 55	70 / 120	180	210	25	95	Plastic piston	05.429.43.48.0	05.429.40.01.0	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	80		05.429.43.38.0									
C 1	0 / 55	70 / 120	215	210	25	95	Steel piston	05.429.41.84.0	05.429.40.01.0	03.139.00.04.0	03.320.09.46.0	
C 1	45 / 80		180					05.429.41.54.0			03.320.09.35.0	
C 1	32 / 90		05.429.40.61.1					03.139.39.43.0			03.320.09.23.0	
BPW 36 K												
Air bag standard												
B 1	0 / 55	70 / 120	135	210	25	95	Plastic piston	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		
B 3			135					05.429.43.44.0		03.280.95.03.0		
B 3			180					05.429.43.58.0		05.139.39.52.0		
B 1	80	129	05.429.43.39.0	05.139.39.53.0	03.280.75.04.0							
C 1	32 / 90	70 / 120	135	210	25	95	Steel piston	05.429.41.04.1	05.429.41.01.0	03.139.39.48.0	03.320.09.23.0	
BPW 36-1												
Air bag standard												
A 1	45 / 80	70 / 120	180	210	25	95	Plastic piston	05.429.43.45.0	05.429.40.05.0	05.139.39.52.0	03.280.95.03.0	
C 1	0 / 55	70 / 120	215	210	25	95	Steel piston	05.429.42.01.0	05.429.40.05.0	03.139.00.04.0	03.320.09.46.0	
C 3								05.429.41.83.0				
C 1								45 / 80				210
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	95	-	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 100 / 101. Further executions upon request.												

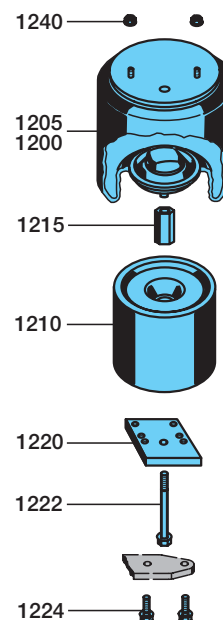
7.3 Conversion from steel piston to plastic piston

Conversion from steel or alloy piston to plastic piston

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.

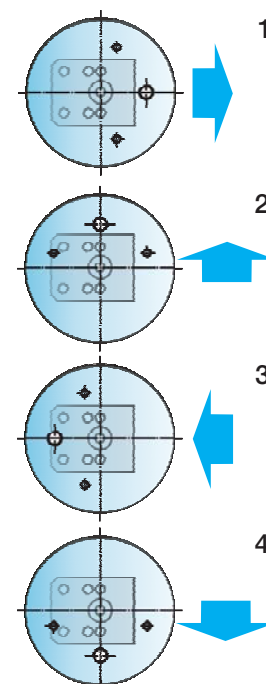
Observe position of upper and lower air bag attachment!

Dismantling:

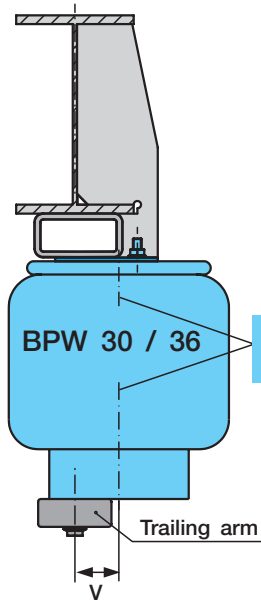
- Admit as much air into the air bag as possible through the air suspension or rotary disc valve / switching valve. Support the vehicle safely so there is no risk of accident, e.g. place a suitable spacer between the vehicle frame and the trailing arm.
- Vent the air bag.
- Remove the compressed air connection.
- Unscrew top (1240) and bottom (1224) bag attachments and remove the air bag.
- Blow 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:

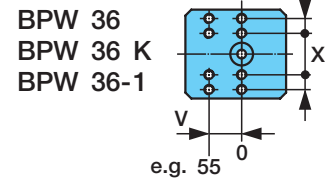
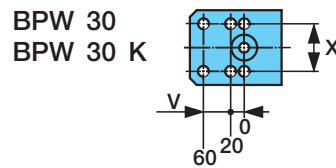
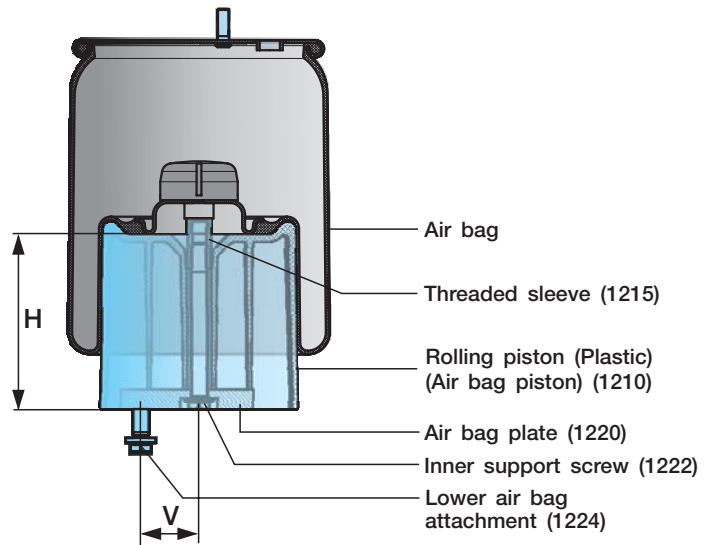
- Screw threaded sleeve (1215) onto the air bag to a tightening torque of 130 Nm.
- Place bottom base plate (1220) into glass fibre-reinforced plastic piston (1210) and screw on loosely using locking screw (1222).
- Align the top and bottom bag attachment points in relation to one another and tighten 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.
- Admit air into the air bag, remove the support.



Conversion from steel or alloy piston to plastic piston



max. offset
10 mm



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

Item	Designation	Remark	BPW Code no.	Dimension			Application			
				V	X	H				
BPW 30										
1248	Conversion kit cpl.		05.801.09.73.0	0 / 20 / 60	70	194	BPW 30			
			05.801.09.74.0				BPW 30 K			
			BPW 36							
			05.801.21.33.0	0 / 55	70 / 120	188	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	143	143	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)

O
SL
AL

7.4 Spare parts for air bags

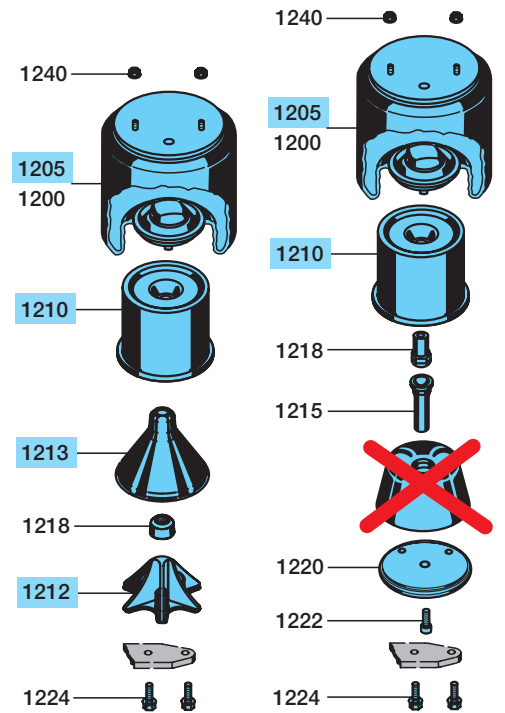
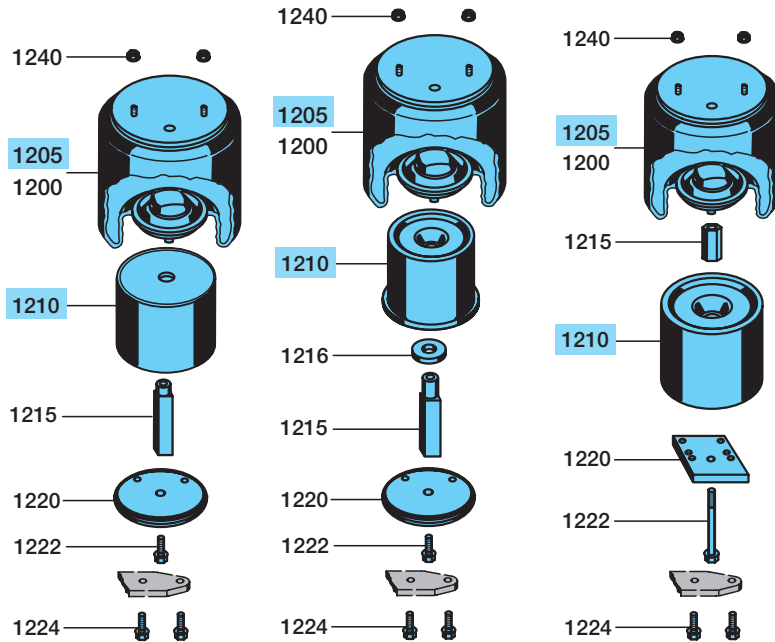
Spare parts for air bags

Air bag standard

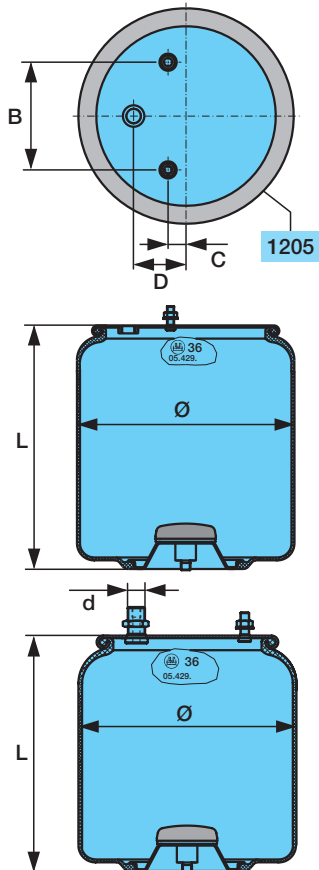
Air bag with split piston (Kombi-Air bag)

Air bag with steel piston

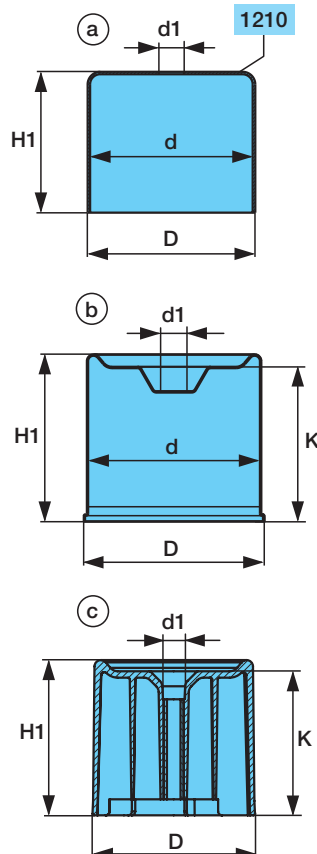
Air bag with plastic piston



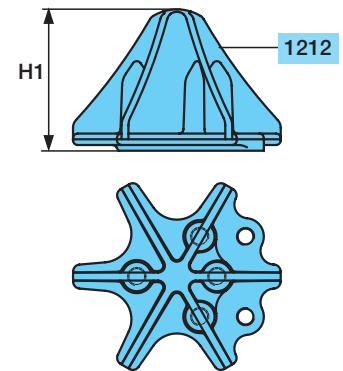
A



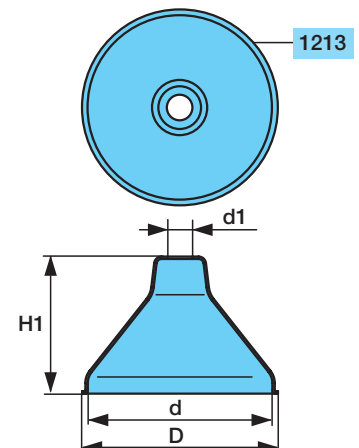
B



C



D



Spare parts for air bags												
Item	Designation	Remark	BPW Code no.	Fig.	Dimension						Designation of air bag	
					Ø	L	d	B	C	D		
BPW 30..												
1205	Air bag, only		05.429.40.03.0	A	300	520	-	150	25	73	BPW 30	941 MB
			05.429.41.25.0				M 18	170	0	0		4941 N
			05.429.42.03.0				-	150		73		4962 N
			05.429.40.91.0				-	150	25	73		BPW 30 K
			05.429.41.56.0			M 18	170		0	4940 N		
			05.429.41.77.0			M 20	158		0	4960 N		
			05.429.42.04.0			-	150		73	4961 N		
			05.429.40.72.0				610	-	150	25	73	BPW 30-1
BPW 36..												
			05.429.40.01.0	A	360	530	-	210	25	95	BPW 36	881 MB
			05.429.41.01.0			430					BPW 36 K	4881 MB
			05.429.40.05.0			610					BPW 36-1	942 MB
			05.429.41.09.0			789					BPW 36-2	4942 MB
BPW 36 Airlight^{Direct}												
			05.429.42.51.0	-	360	300	-	210	25	95	BPW 36 N	1 DK 32 S

Item	Designation	Remark	BPW Code no.	Fig.	Dimension					Remark
					D	d	H1	d1	K	
BPW 30										
1210	Piston		03.139.00.25.0	B b	201	194	143	16	139	Steel piston
			03.139.00.22.0	B b	201	194	186	16	172	
			05.139.39.51.0	B c	203	-	149	27	135	Plastic piston
			05.139.39.50.0	B c	203	-	194	27	180	
BPW 36										
1210	Piston		03.139.00.04.0	B a	250	244	203	30	-	Steel piston
			03.139.00.17.0	B a	250	244	293	30	-	
			03.139.39.48.0	B b	251	244	143	30	129	
			05.139.39.53.0	B c	253	-	143	27	129	Plastic piston
			05.139.39.52.0	B c	253	-	188	27	174	
			BPW 36 Airlight^{Direct}							
			03.139.38.01.0	-	256	-	91	68	91	Plastic piston

Glass fibre-reinforced plastic tapers for split air bags D 36 are no longer available.
If replacement is required, change over to the BPW 30 combination air bag or the normal air bag!

Item	Designation	Remark	BPW Code no.	Fig.	Dimension			
					D	d	H1	d1
BPW 30 Kombi-Air bag								
1212	Centring cone		03.375.09.38.0	C	-	123	-	
			03.375.09.37.0			168		
1213	Piston		03.139.00.24.0	D	200	193	140	25
			03.139.00.23.0		200	193	181	25
			BPW 36 Airlight^{Direct}					
			03.139.00.27.0	~ D	246	-	86	32

7.4 Spare parts for air bags

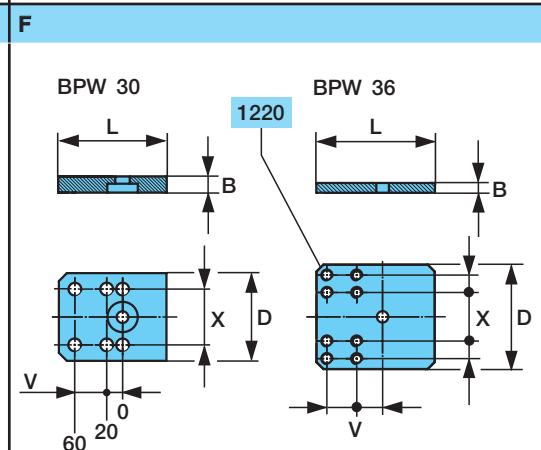
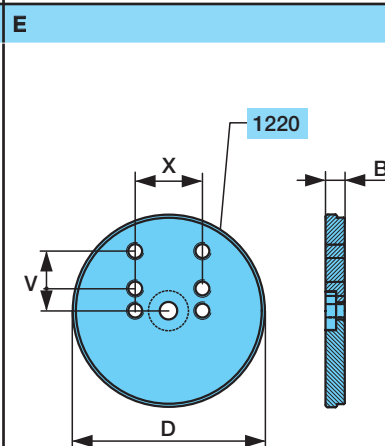
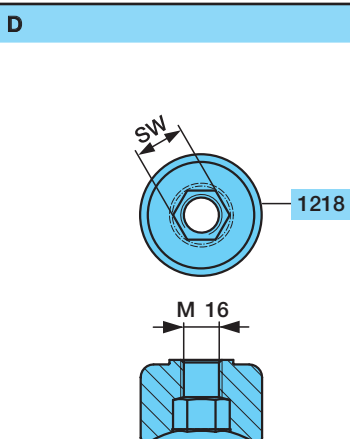
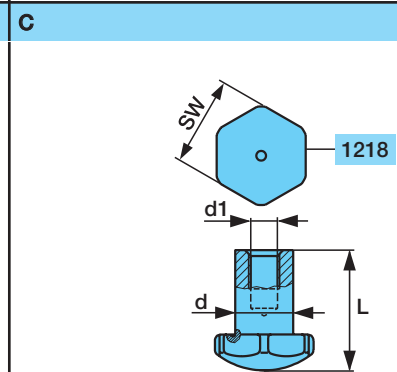
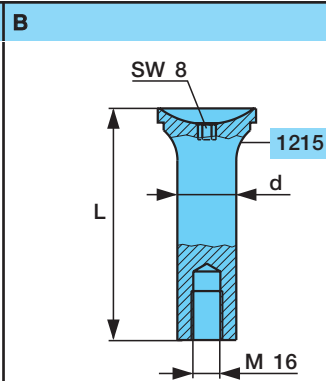
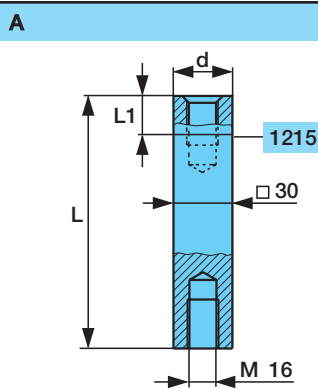
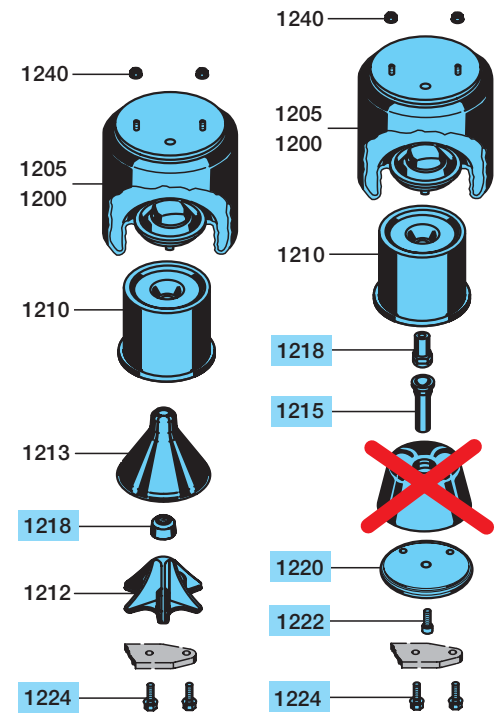
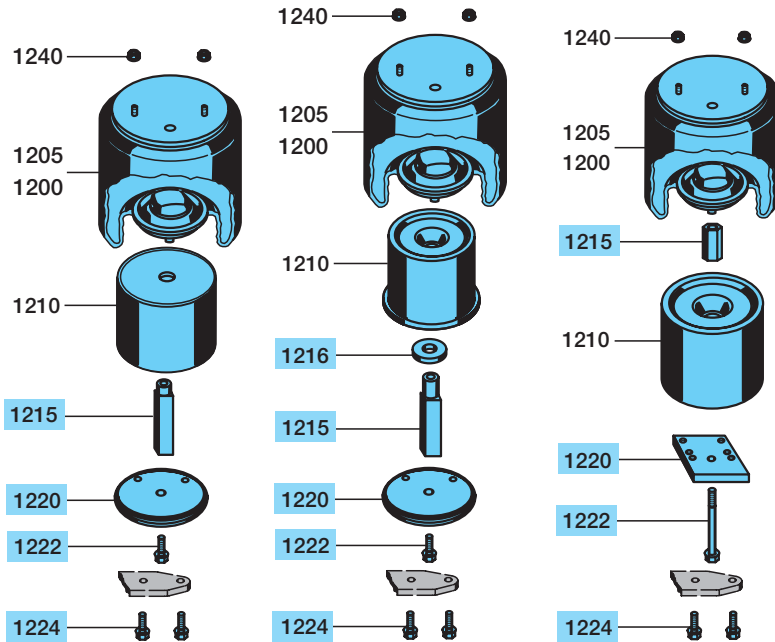
Spare parts for air bags

Air bag standard

Air bag with split piston (Kombi-Air bag)

Air bag with steel piston

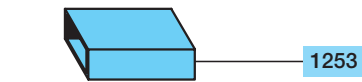
Air bag with plastic piston



Spare parts for air bags										
Item	Designation	Remark	BPW Code no.	Fig.	Dimension			Application		
					L	L1	d			
Steel piston										
1215	Bolt		03.084.46.41.0	A	124	48	30	BPW 30 K		
			03.084.66.36.0		129	17	30	BPW 30 K		
			03.084.46.31.0		129	48	30	BPW 30 K / 36 K		
			03.084.46.40.0		169	48	30	BPW 30 / 30 K		
			03.084.66.30.0		174	17	30	BPW 36		
			03.084.46.28.0		174	48	30	BPW 30 / 30 K / 36 / 36 K		
			03.084.66.31.0		209	17	30	BPW 30 / 36 / 36-1		
			03.084.66.37.0		299	17	30	BPW 36-2		
1216	Ring		03.310.31.43.0	-	Ø 30 / 55 x 5			for bolt L1 = 48		
Plastic piston										
1215	Threaded sleeve		03.179.03.08.0	-	M 16 x 51 / SW 24			BPW 30 / BPW 36		
Air bag with split piston (Kombi-Air bag)										
1215	Bolt		03.084.37.09.0	B	73				BPW 36 K	
			03.084.37.07.0		118				BPW 36	
1218	Bolt		03.084.27.09.0	C	Ø 30 x 62 / SW 46			BPW 36 / BPW 36 K		
1218	Nut		03.266.02.02.0	D	M 16 / SW 19			BPW 30 / BPW 30 K		
BPW 36 Airlight^{Direct}										
1218	Shaped part		03.001.35.01.0	-	Ø 13 / 20 / 59 x 25			BPW 36 N		
1219	Screw		03.340.11.19.0	-	M 12 x 23-8.8					
Item	Designation	Remark	BPW Code no.	Fig.	Dimension					Application
					V	X	B	D	L	
BPW 30										
1220	Plate		03.280.95.02.0	F	0/20/60	70	20	110	135	BPW 30 / BPW 30 K GFK
1220	Washer		03.320.09.22.0	E	20	70	20	200	-	BPW 30 / BPW 30 K
BPW 36										
1220	Plate		03.280.95.04.0	F	0/55	70/120	20	150	170	BPW 36 / BPW 36 K GFK
			03.280.95.03.0		45/80		20	150	170	
			03.280.75.04.0		80		14	150	170	
1220	Washer		03.320.09.49.0	E	45/80	70	20	249	-	BPW 36 / BPW 36 K
			03.320.09.35.0		45/80	70/120	20	250	-	
			03.320.09.33.0		80	70	14	250	-	
			03.320.09.23.0		90	120	20	250	-	
Attachment central bolt with steel piston										
1222	Locking screw		02.5070.98.91	M 16 x 30						
			02.5070.94.91	M 16 x 35						
Central screw with plastic piston										
1222	Screw		03.340.12.24.0	M 16 x 115			BPW 30 K / BPW 36 K			
			03.340.12.23.0	M 16 x 160			BPW 30 / BPW 36			
Attachment trailing arm - air bag										
1224	Locking screw		02.5070.97.00	M 16 x 55						
			02.5070.95.00	M 16 x 65						
			02.5070.96.00	M 16 x 75						

7.5 Upper air bag attachment / spacers

Upper air bag attachment / spacers



1253



1252



1251



1250



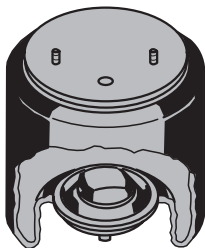
1244



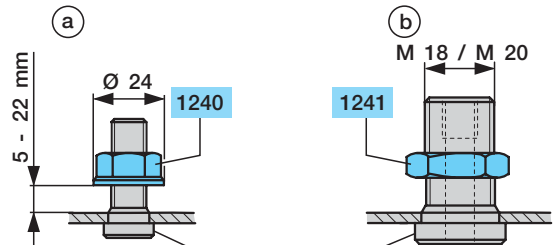
1243



1240

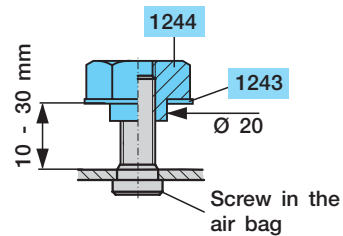


A



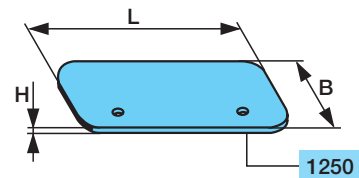
Screw in the air bag

B



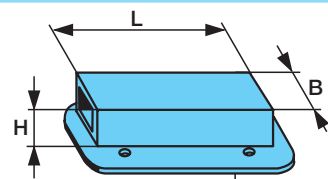
Screw in the air bag

C



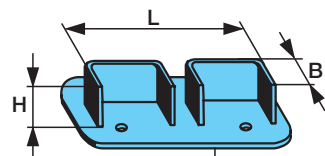
1250

D



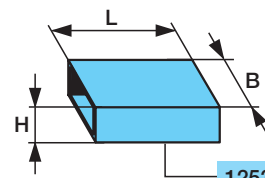
1251

E



1252

F



1253

Upper air bag attachment / spacers 7.5

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

8 Shock absorbers

General

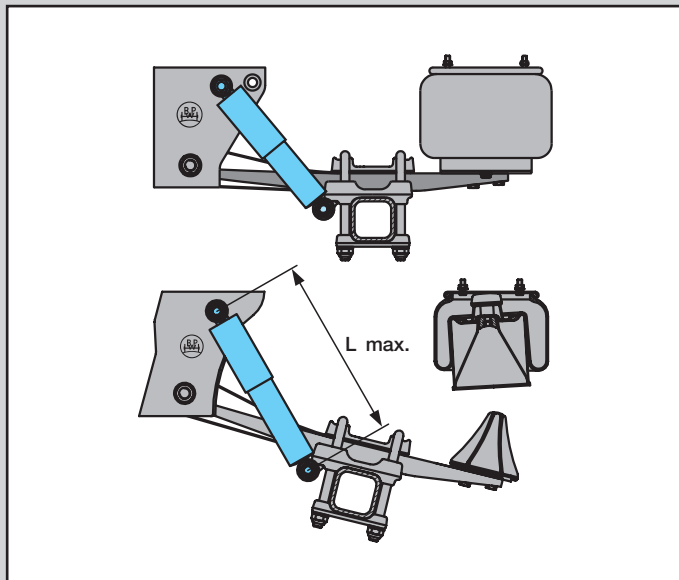
BPW Shock absorber

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.

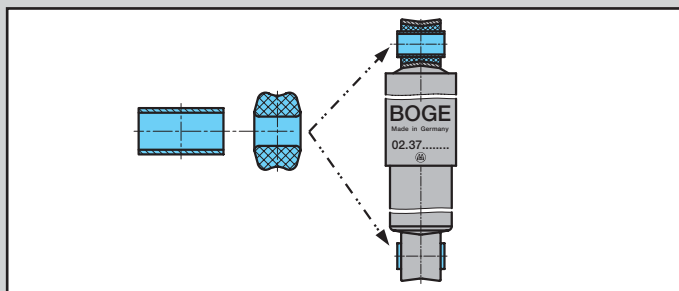
BPW uses various types of shock absorber to guarantee the best possible damping in each case.

High-volume BPW shock absorbers are adapted to the vehicle, the overall height and the range of applications.

Using the split air bag (Kombi-Air bag + AirlightDirect) 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 (BOGE-Shock absorber) can be replaced.

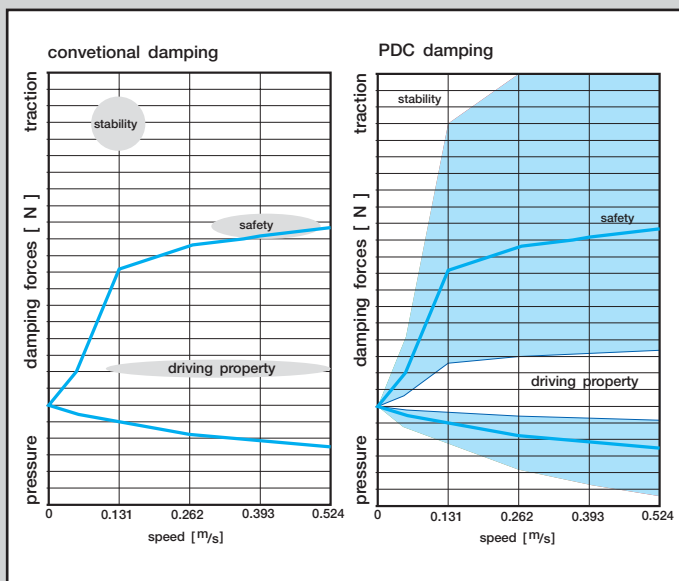


PDC

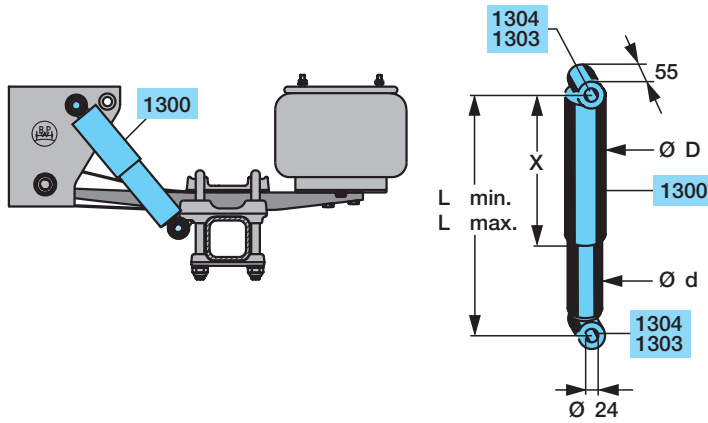
The BPW PDC (Pneumatic Damping Control) shock absorber improves driving properties and comfort – whatever the load.

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.

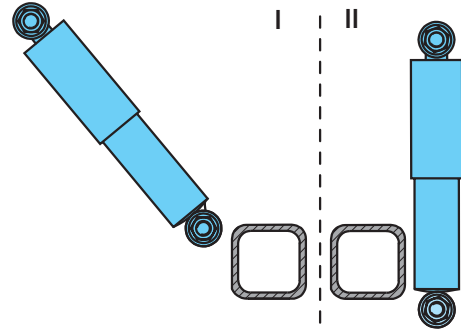
 When using PDC shock absorbers, a shim must be installed between the support or spring seats and each PDC, also shorter lock nuts must be used.



Shock absorbers



Mounting position



Item	Designation	Mounting position	BPW Code no.	Dimensions					N = Newton at 13 cm/s	N = Newton at 52 cm/s
				L min.	L max.	X	D	d	$\updownarrow N / \updownarrow N$	$\updownarrow N / \updownarrow N$
Shock absorber standard										
1300	Shock absorber	I	02.3722.79.00	287	412	204	75	65	6300 / 1740	17000 / 3000
		I	02.3702.70.00 ¹⁾	292	432	214	82	72	6300 / 1600	17000 / 3000
		I	02.3702.52.00	326	496	225	82	72	6300 / 1740	17000 / 3000
		I	02.3722.14.00	326	496	235	83	73	10500 / 2500	22500 / 4500
		I	02.3722.04.00	326	496	235	82	72	6300 / 1740	17000 / 3000
		I	02.3722.83.00	326	496	235	75	65	1330 / 2930	15250 / 5010
		I	02.3702.92.00	351	541	335	82	72	8000 / 2500	18000 / 5000
		I	02.3702.20.00	426	696	325	82	72	8000 / 1290	16000 / 2150
		I II	02.3702.51.00	430	700	320	75	66	3800 / 500	8000 / 800
		II	02.3702.67.00	466	766	380	75	66	3750 / 540	10500 / 1000
		I II	02.3702.60.00 ²⁾	475	795	390	82	72	6300 / 1600	17000 / 3000
		II	02.3702.18.00	475	800	390	82	72	-	10200 / 780
		II	02.3722.62.00	536	906	440	75	66	3750 / 540	10500 / 1000
			¹⁾ Special design							
			²⁾ Reinforced							

PDC Shock absorber (Pneumatic Damping Control)

1300	Shock absorber	I	02.3722.63.00	336	501	210	92	80	for air bag BPW 30	
		I	02.3722.64.00	336	501	210	92	80	for air bag BPW 36	

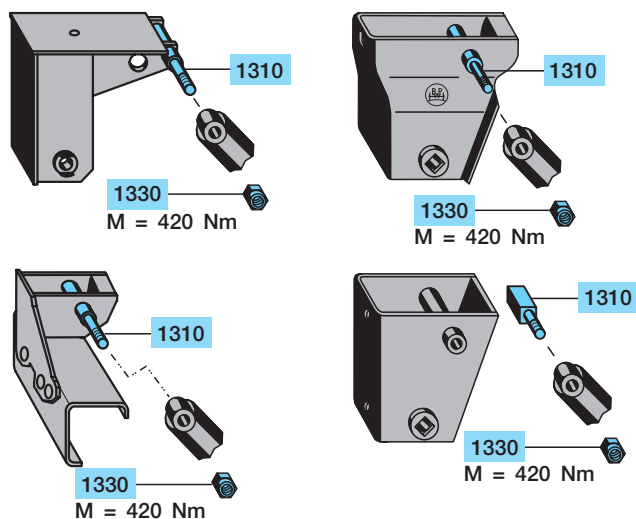
Rubber bushes for BOGE-shock absorber

1303	Bush		02.0316.21.00	only for BOGE-shock absorber						
1304	Rubber		02.2805.01.00							

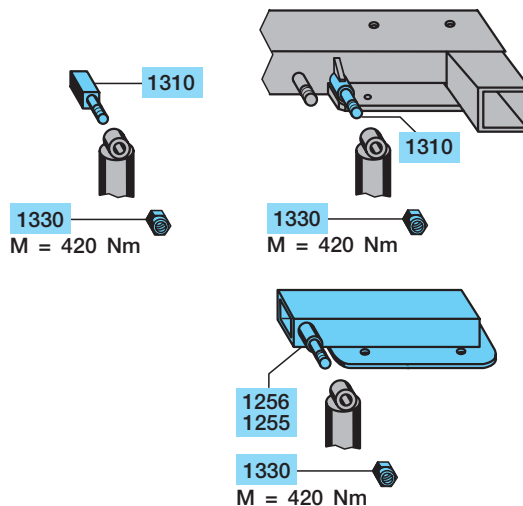
8.2 Upper shock absorber attachments

Upper shock absorber attachment with threaded bolts

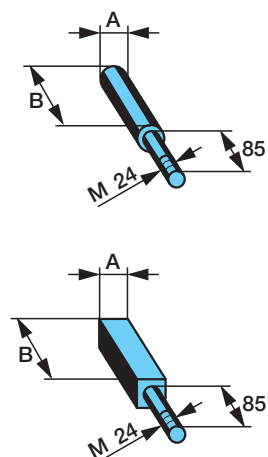
Shock absorber front



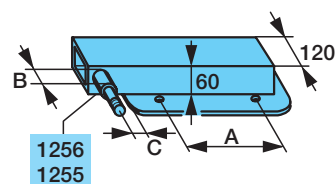
Shock absorber rear



Item	Designation	Remark	BPW Code no.	Dimension	A	B
			Shock absorber attachment on threaded bolts, steel hanger bracket / integrated support / frame			
1310	Threaded bolt (steel) (welded to hanger bracket, integrated support or frame)		03.177.24.36.0	● 36	165	
			03.177.24.30.0	● 40	140	
			03.177.24.53.0	● 40	147	
			03.177.24.29.0	● 40	165	
			03.177.24.31.0	● 40	188	
			03.177.24.37.0	■ 40	82	
			03.177.24.38.0	■ 40	115	
			03.177.24.17.0	■ 40	140	
			03.177.24.52.0	■ 40	167	
			03.177.24.49.0	■ 40	207	
			Shock absorber attachment on threaded bolts, stainless steel hanger bracket			
1310	Threaded bolt (stainless steel) (welded to hanger bracket)		03.177.24.64.0	● 40	130	
			03.177.24.61.0	● 40	145	
			03.177.24.65.0	● 50	130	
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10			

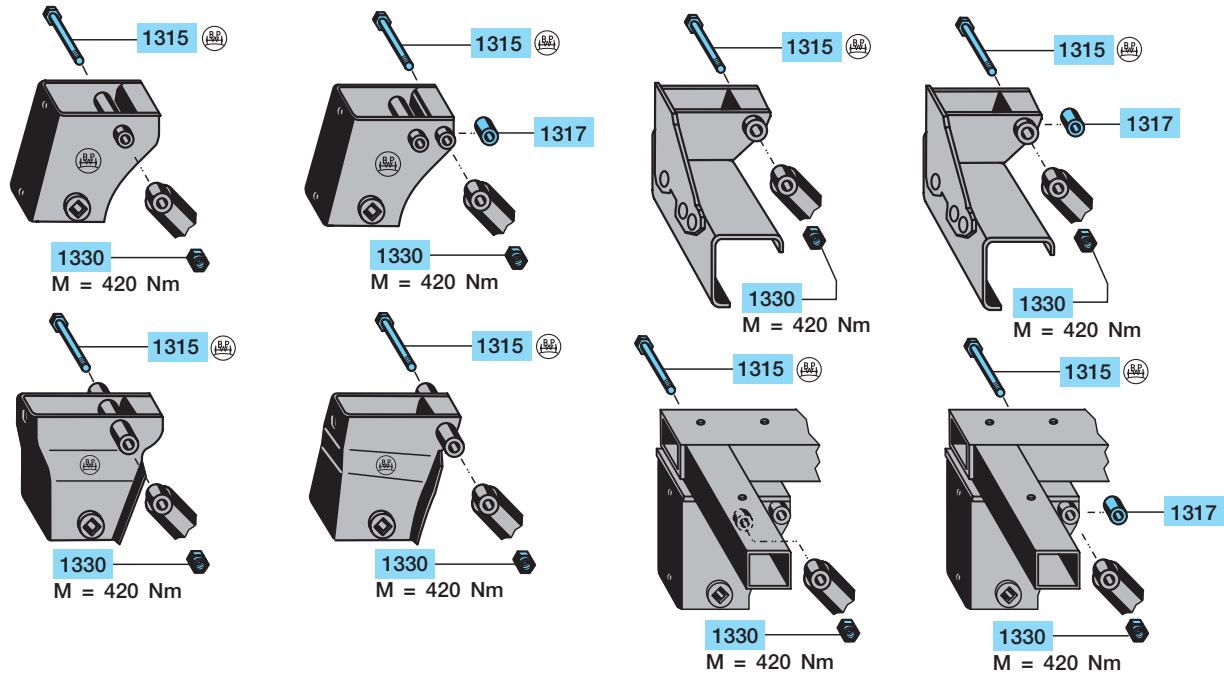


		Shock absorber attachment on threaded bolts, shock absorber rear, attachment to spacer for air bag				
		Item 1255 left	Item 1256 right	A	B	C
1255	Support, left	05.189.06.35.0	05.189.06.34.0	150	57	100
1256	Support, right	05.189.06.25.0	05.189.06.26.0	210	37	45
		05.189.12.55.0	05.189.12.56.0	210	37	45
		05.189.07.97.0	05.189.07.96.0	210	37	70
		05.189.05.55.0	05.189.05.54.0	290	12	-
1330	Lock nut	02.5220.74.12 * VM 24 / 980-10				
* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07						



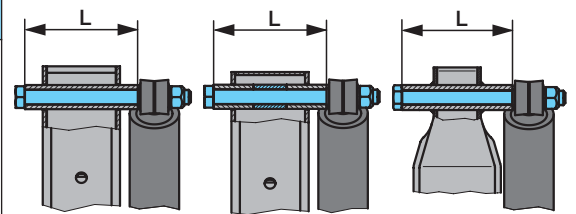
Upper shock absorber attachment with screws

Shock absorbers next to hanger bracket
Steel hanger bracket / integrated support / frame

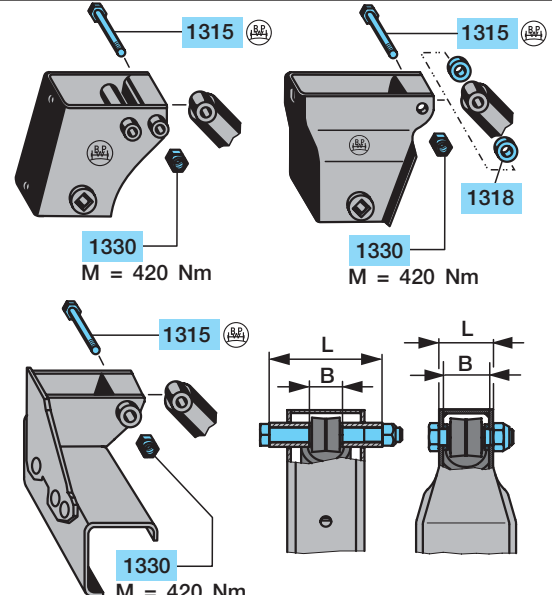


Item	Designation	Remark	BPW Code no.	Dimension
Shock absorbers next to hanger bracket, steel hanger bracket				
1315	Hexagon screw		03.340.14.23.0	M 24 x 230
		L = 155	03.340.14.19.0	M 24 x 240
		L = 187	03.340.14.12.0	M 24 x 275
1317	Spacer	e.g.	03.200.75.62.0	Ø 25 / 40 x 55 ¹⁾
	Bush		03.112.03.06.0	Ø 25 / 40 x 67 ²⁾
1330	Lock nut		02.5220.74.12	* VM 24 / 980-10

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				
1315	Hexagon screw		03.340.14.15.0	M 24 x 100
		L = 80	03.340.14.16.0	M 24 x 110
		L = 84	03.340.14.20.0	M 24 x 120
		L = 110	03.340.14.24.0	M 24 x 140
		L = 125	03.340.14.22.0	M 24 x 160
		L = 157	02.5023.35.82	M 24 x 200
		L = 187	03.340.14.23.0	M 24 x 230
1318	Ring (2x)	B = 67	03.310.30.60.0	Ø 25 / 50 x 6
		B = 90	03.310.31.38.0	Ø 25 / 42 x 17.5
1330	Lock nut		02.5220.74.12	* VM 24 / 980-10

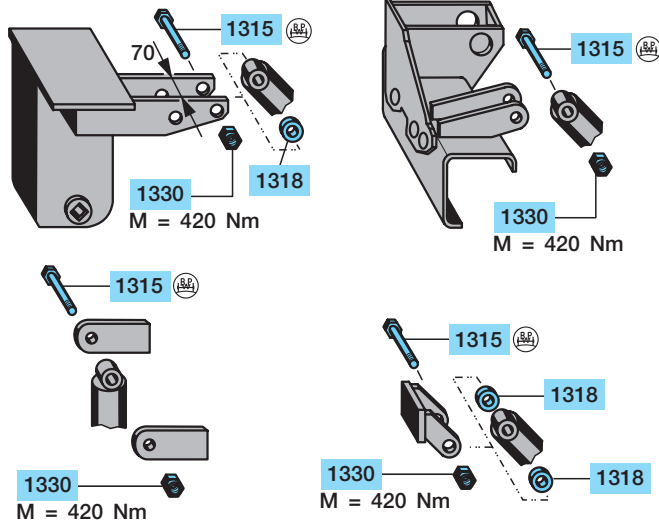


* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07

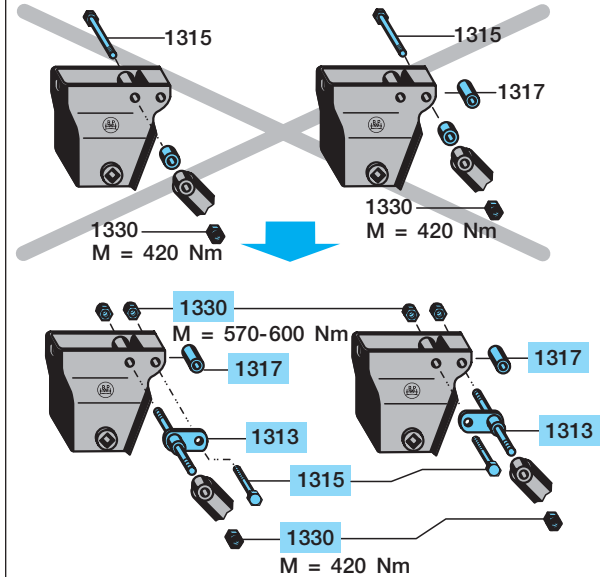
8.2 Upper shock absorber attachments

Upper shock absorber attachment with screws

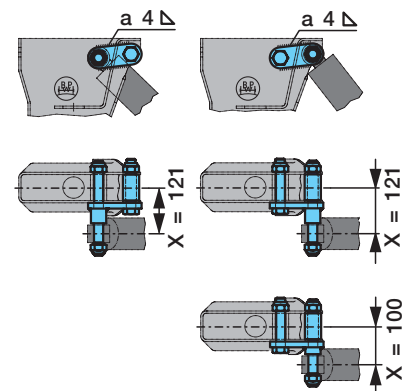
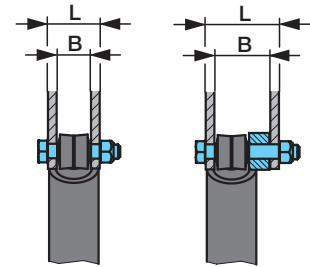
Shock absorber attachment between plates, steel hanger bracket / integrated support / frame



Repair solution for shock absorber attachment with retracted supports

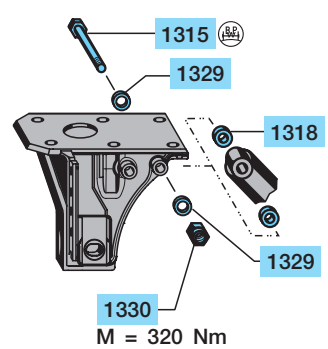
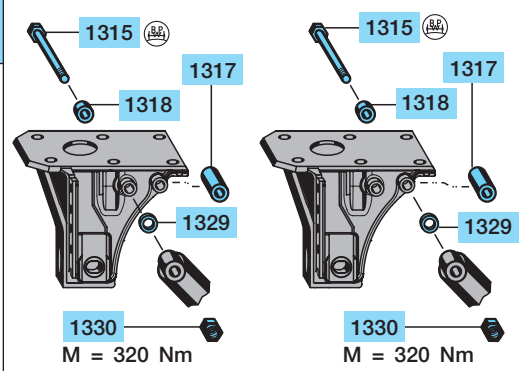
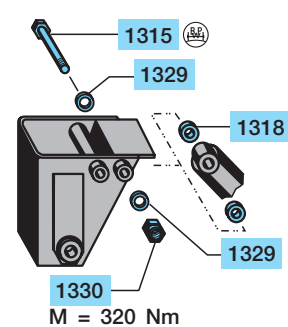
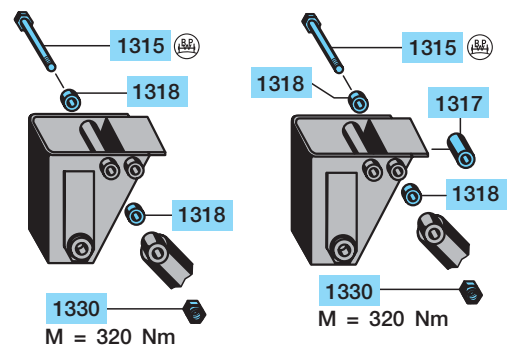


Item	Designation	Remark	BPW Code no.	Dimension	B	L
Shock absorber attachment between plates, steel hanger bracket / integrated support / frame						
1315	Hexagon screw		03.340.14.15.0	M 24 x 100	55	75
			02.5023.29.80	M 24 x 120	70	90
			02.5023.47.82	M 24 x 130	76	96
1318	Ring (1x)		03.310.31.21.0	Ø 25 / 42 x 15	70	90
	Ring (2x)		03.310.31.40.0	Ø 25 / 42 x 10	76	96
1330	Lock nut		02.5220.74.12	VM 24 / 980-10		
Repair solution for shock absorber attachment with retracted supports						
1312	Repair kit (Item 1313, 1315, 1317, 1330)		05.801.64.28.0	X = 100		
			05.801.64.25.0	X = 121		
1313	Support		05.189.13.27.0	X = 100		
			05.189.13.22.0	X = 121		
1315	Screw		02.5023.49.80	M 24 x 140 / 931-8.8		
1317	Bush		03.112.03.06.0	Ø 25 / 40 x 67		
1330	Lock nut		02.5220.74.12	VM 24 / 980-10		



Upper shock absorber attachment with screws

Item	Designation	Remark	BPW Code no.	Dimension
Shock absorbers next to hanger bracket, alloy hanger bracket				
1315	Hexagon screw		02.5023.45.85	M 24 x 270-8.8
			03.340.14.12.0	M 24 x 275-8.8
1317	Spacer		03.200.75.62.0	Ø 25 / 40 x 55 ¹⁾
			03.112.03.06.0	Ø 25 / 40 x 67 ²⁾
1318	Ring (2x)		03.310.31.21.0	Ø 25 / 42 x 15
1330	Lock nut		02.5220.74.12	VM 24 / 980-10
		1) inside dimension of the hanger bracket = 55 mm 2) inside dimension of the hanger bracket = 67 mm		
Shock absorbers next to hanger bracket, alloy hanger bracket				
1315	Hexagon screw		03.340.14.21.0	M 24 x 200
			02.5023.35.82	M 24 x 200
1318	Ring (2x)		03.310.30.60.0	Ø 25 / 50 x 6
1329	Washer (2x)		02.5401.25.07	Ø 25 / 125
1330	Lock nut		02.5220.74.12	VM 24 / 980-10
Shock absorbers next to hanger bracket, cast alloy hanger bracket				
1315	Hexagon screw		03.340.14.19.0	M 24 x 240-8.8
			03.340.14.12.0	M 24 x 275-8.8
1317	Spacer		03.112.03.06.0	Ø 25 / 40 x 67 ²⁾
1318	Ring		03.310.31.21.0	Ø 25 / 42 x 15
1329	Washer		02.5401.25.07	Ø 25 / 125
	Ring	e.g.	03.310.30.60.0	Ø 25 / 50 x 6
	Ring		03.310.31.40.0	Ø 25 / 42 x 10
1330	Lock nut		02.5220.74.12	VM 24 / 980-10
Shock absorbers next to hanger bracket, cast alloy hanger bracket				
1315	Hexagon screw		03.340.14.21.0	M 24 x 200
1318	Ring		03.310.30.60.0	Ø 25 / 50 x 6
1329	Washer		02.5401.25.07	Ø 25 / 125
1330	Lock nut		02.5220.74.12	VM 24 / 980-10



8.3 Lower shock absorber attachments

Lower shock absorber attachment

Item	Designation	Remark	BPW Code no.	Dimension	
			O / SL / AL		
			attachment to spring seats with threaded bolt, shock absorber front		
1026	Spring seat, right		see page 21 - 27		
1027	Spring seat, left		see page 21 - 27		
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10		M = 420 Nm
			OM		
			Shock absorber front, shock absorber attachment to adjustable support		
1320	Support		05.189.04.71.0		
1324	Hexagon screw		03.340.14.15.0	M 24 x 100	
1325	Hexagon screw		02.5026.33.80	M 16 x 35 / 933	
1326	Hexagon nut		02.5205.07.04	M 16 / 936	
1327	Spacer		03.200.74.44.0	Ø 25 / 42 x 22	
1330	Lock nut		02.5220.74.12 VM 24 / 980-10		M = 420 Nm

			OM / SLM		
			Shock absorber rear		
Item	Designation	Remark	Item 1320 right	Item 1321 left	X
1224	Locking screw		see page 105		
1320	Support, right		05.189.05.65.0	05.189.05.64.0	100
	Support, left		05.189.05.66.0	05.189.05.67.0	150
			05.189.05.92.0	05.189.05.91.0	160
1322	Spring U-bolt		03.138.29.02.0		
1323	Lock nut		02.5220.31.12 VM 16 x 1.5 / 980-10		
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10		
			<p>* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07</p>		

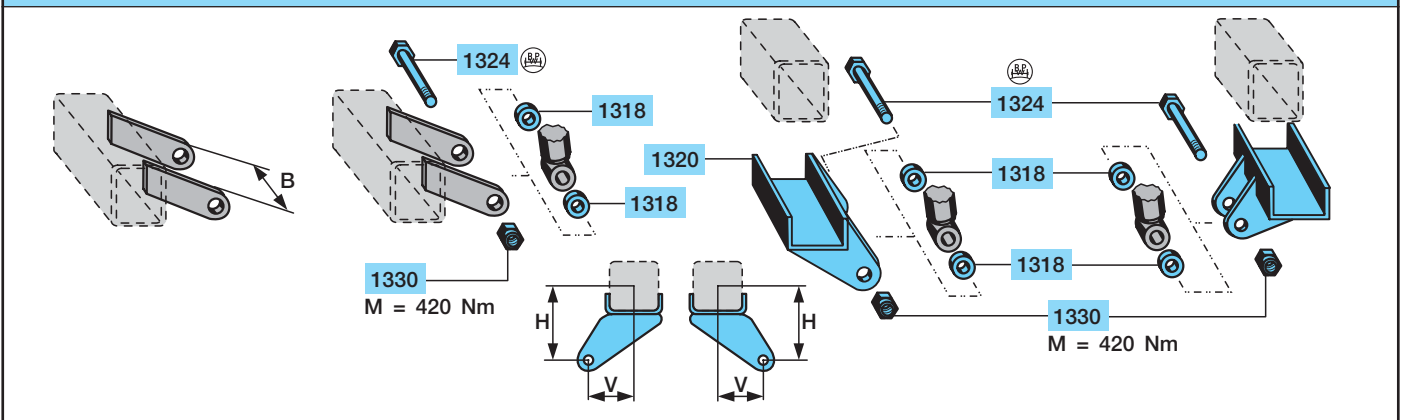
Lower shock absorber attachment

Item	Designation	Remark	BPW Code no. Dimension				
			OM / SLM / ALM				
			Shock absorber rear, attachment to support with threaded bolt				
			Item 1320 right	Item 1321 left	X	A	B
1320	Support, right		05.189.13.16.0	05.189.13.15.0	44.5	125	150
1321	Support, left		05.189.13.18.0	05.189.13.17.0	44.5	125	180
			05.189.13.30.0	05.189.13.29.0	92	125	180
			05.189.13.20.0	05.189.13.21.0	126	125	150
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10				

M = 420 Nm

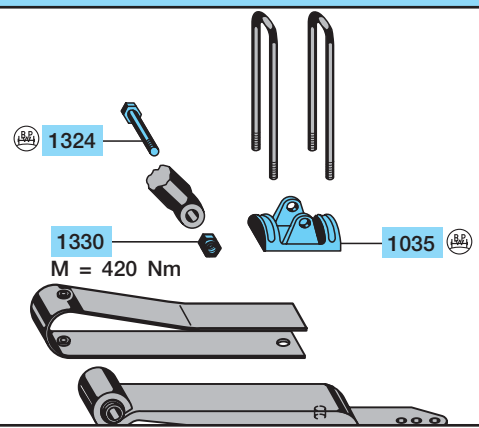
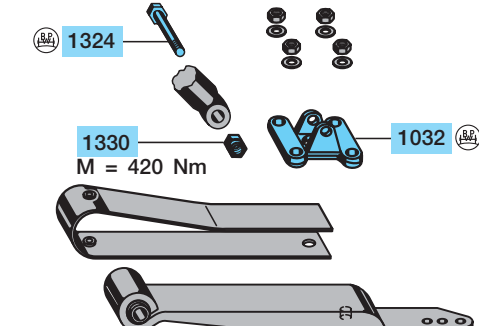
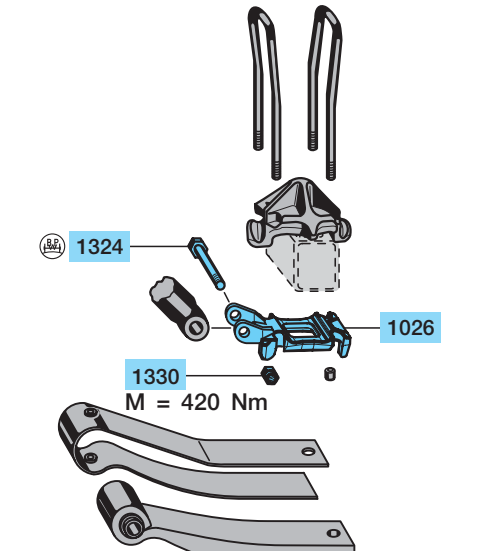
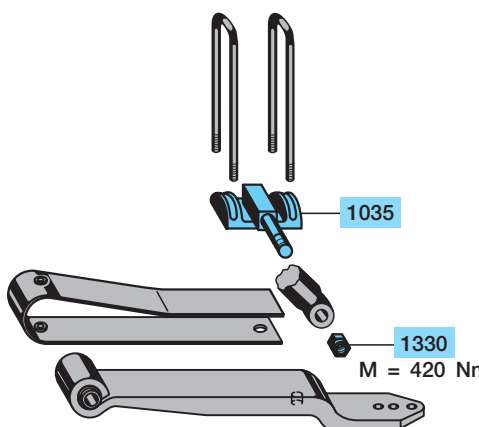
* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07

Lower shock absorber attachment between plates



Item	Designation	BPW Code no.					Dimension
		B = 56	B = 75	B = 86	B = 90	B = 100	
1311	Repair kit cpl. (Item 1318 - 1330)	-	-	-	-	-	○ 127 □ 120 □ 150
1318	Ring	-	03.310.31.40.0	-	-	-	Ø 25/42x10 Ø 25/42x15
	Spacer	-	-	03.310.31.21.0	-	-	Ø 25/42x17.5
		-	-	-	03.310.31.38.0	-	Ø 25/42x22
1320	Support						
	H 190 / V 150	-	-	05.189.06.85.0	-	-	○ 127
	H 200 / V 160	-	-	-	05.189.07.15.0	-	□ / ■ 120
	H 185 / V 120	-	-	-	05.189.10.51.0	-	■ 120
	H 217 / V 125	-	-	-	05.189.10.92.0	-	■ 120
	H 245 / V 120	-	-	-	05.189.10.44.0	-	■ 120
	H 185 / V 160	-	-	-	05.189.07.16.0	-	□ / ■ 150
1324	Hexagon screw	02.5023.46.80	-	-	-	-	M 24 x 110
		-	02.5023.49.80	-	-	-	M 24 x 130
		-	03.340.14.24.0	03.340.14.24.0	03.340.14.24.0	-	M 24 x 140
		-	-	-	-	02.5023.91.80	M 24 x 150
1330	Lock nut	02.5220.74.12 VM 24 / 980-10					

8.3 Lower shock absorber attachments

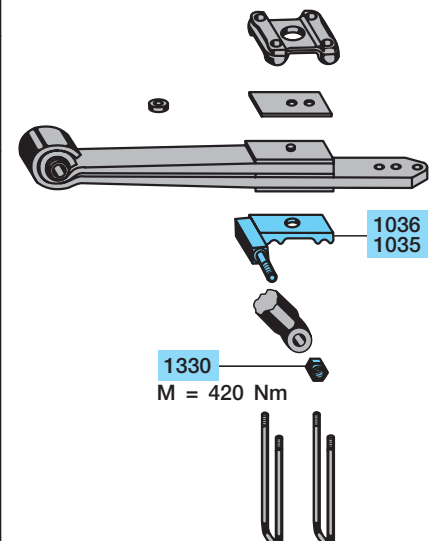
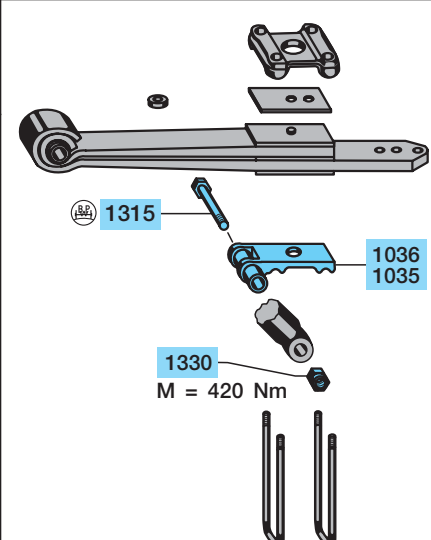
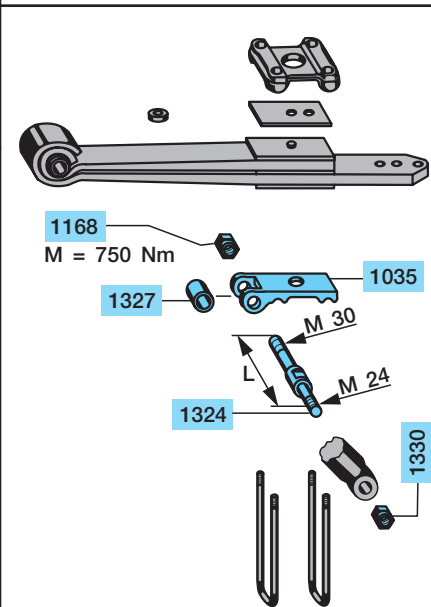
Lower shock absorber attachment			
Item	Designation	Remark	BPW Code no. Dimension
			O / SL / AL Attachment to spring plate above the trailing arm, spring U-bolts mounted from above
1035	Spring plate		see page 37 / 39
1324	Hexagon screw		03.340.14.15.0 M 24 x 100-8.8
1330	Lock nut		02.5220.74.12 VM 24 / 980-10
			
			O / SL / AL Attachment to spring plate above the trailing arm, spring U-bolts mounted from below
1032	Spring plate		see page 39 / 41
1324	Hexagon screw		03.340.14.15.0 M 24 x 100-8.8
1330	Lock nut		02.5220.74.12 VM 24 / 980-10
			
			DLU Attachment to spring seat above the trailing arm with screw,, spring U-bolts mounted from above
1026	Spring seat		see page 25
1324	Hexagon screw		03.340.14.15.0 M 24 x 100-8.8
1330	Lock nut		02.5220.74.12 VM 24 / 980-10
			
			O / SL / AL Attachment to spring plate with threaded bolt welded on, spring U-bolts mounted from above
1035	Spring plate, right		see page 37
1036	Spring plate, left		see page 37
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10
			

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

Lower shock absorber attachment			
Item	Designation	Remark	BPW Code no. Dimension
			O / SL / AL Attachment to spring plate with threaded bolt welded on, spring U-bolts mounted from below
1032	Spring plate		see page 39
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10
			OT / SLU / ALU Attachment to spring plate with threaded bolt, spring U-bolts mounted from above
1032	Spring plate, right		see page 43
1033	Spring plate, left		see page 43
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10
			OT / SLU / ALU Attachment to spring plate with screw, spring U-bolts mounted from above
1032	Spring plate		see page 43
1315	Hexagon screw		02.5023.41.82 M 24 x 230-8.8
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10
<p>* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07</p>			

O
SL
AL

8.3 Lower shock absorber attachments

Lower shock absorber attachment			
Item	Designation	Remark	BPW Code no. Dimension
			OT / SLU / ALU Attachment to spring plate with threaded bolt welded on, spring U-bolts mounted from below
1035	Spring plate, left		see page 37
1036	Spring plate, right		see page 37
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10
			
			OT / SLU / ALU Attachment to spring plate with screw, spring U-bolts mounted from below
1035	Spring plate, left		upon request
1036	Spring plate, right		upon request
1315	Hexagon screw		02.5023.42.80 M 24 x 240
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10
			
			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 37
1168	Lock nut		03.260.15.01.0 M 30
1324	Threaded bolt		03.177.24.22.0 M 24 / M 30 / L = 260
1327	Spacer *		03.200.73.53.0 Ø 32 / 38 x 68
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10
		* not applicable with U-stabilizer	
			

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

Lower shock absorber attachment

Item	Designation	Remark	BPW Code no. Dimension	
<p>OT / SLU / ALU Attachment to spring plate with threaded bolt screwed on, spring U-bolts mounted from below, shock absorber rear</p>				
1035	Spring plate		see page 37	
1168	Lock nut		03.260.15.01.0 M 30	
1324	Threaded bolt		03.177.24.39.0 M 24 / M 30 / L = 290	
1327	Spacer		03.200.73.53.0 Ø 32 / 38 x 68	
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10	
<p>SL / AL Attachment to spring plate with screw, spring U-bolts mounted from below</p>				
1035	Spring plate		see page 41	
1315	Hexagon screw	B 187 B 144	03.340.14.12.0 M 24 x 275-8.8 02.5023.42.82 M 24 x 240-8.8	
1330	Lock nut		02.5220.74.12 * VM 24 / 980-10	

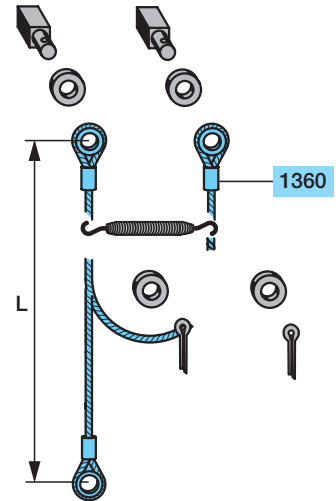
* With PDC-shock absorber use lock nut 02.5220.76.12 + washer 02.5401.25.07

O
SL
AL

9 Check straps

Check straps

Item	Designation	BPW Code no.		Dimension
		Check straps, standard	Check straps, PVC coated	L
1360	Check strap	05.327.14.15.0	-	730
		05.327.14.13.0	-	865
		05.327.14.04.0	05.327.14.37.0	940
		05.327.14.05.0	05.327.14.30.0	1010
		05.327.14.06.0	05.327.14.31.0	1060
		05.327.14.03.0	05.327.14.25.0	1120
		05.327.14.02.0	05.327.14.24.0	1160
		05.327.14.01.0	05.327.14.23.0	1220
		05.327.14.09.0	05.327.14.26.0	1270
		05.327.14.08.0	05.327.14.29.0	1330
		05.327.14.19.0	05.327.14.32.0	1350
		05.327.14.14.0	05.327.14.28.0	1390
		05.327.14.10.0	05.327.14.35.0	1415
		05.327.14.07.0	05.327.14.27.0	1455
		05.327.14.11.0	05.327.14.38.0	1500
		05.327.14.12.0	-	1550
		05.327.14.18.0	05.327.14.33.0	1570
		05.327.14.20.0	05.327.14.34.0	1685
		05.327.14.21.0	-	1775



Check strap attachments 9.1

Check strap attachment with hexagon nuts					
SC = Spring centre			O / SL / AL	OR / SLR / ALR (with frame)	
Item	Designation	Remark	BPW Code no.	Dimension	BPW Code no. Dimension
1362	Threaded bolt		03.177.25.05.0	M 30 / □ 40 x 70	-
			03.177.25.06.0	M 30 / □ 40 x 110	-
1363	Screw	SC 900 - 980 SC 1100 - 1300	-		03.340.75.21.0 M 30 x 210 03.340.75.22.0 M 30 x 165
1365	Spacer	SC 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

Check strap attachment with split pins					
SC = Spring centre			O / SL / AL	OR / SLR / ALR (with frame)	
Item	Designation	Remark	BPW Code no.	Dimension	BPW Code no. Dimension
1362	Bolt		03.084.47.11.0	Ø 30 / □ 40 x 70	-
1363	Screw	SC 900 - 980 SC 1100 - 1300	-		03.084.76.37.0 M 30 x 218 03.084.76.36.0 M 30 x 170
1365	Spacer	SC 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
		¹⁾ not applicable if check strap length < 1120 mm			

10 Hanger brackets / integrated support

General

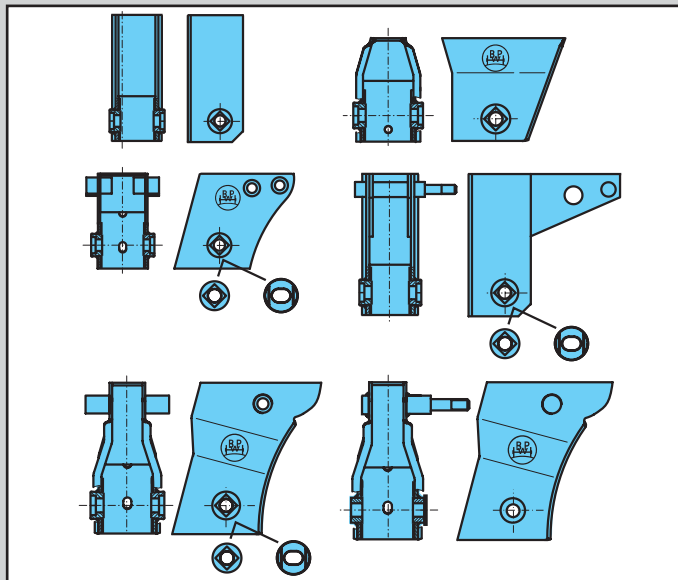
BPW Air suspension hanger brackets

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, reduce weight and cut the flexural load 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 (only Airlight II).

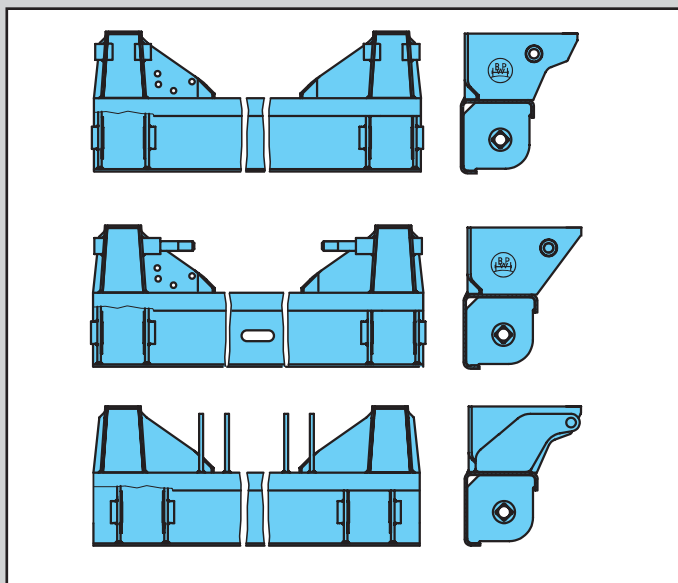
Complete frames are no longer available.



BPW Integrated support

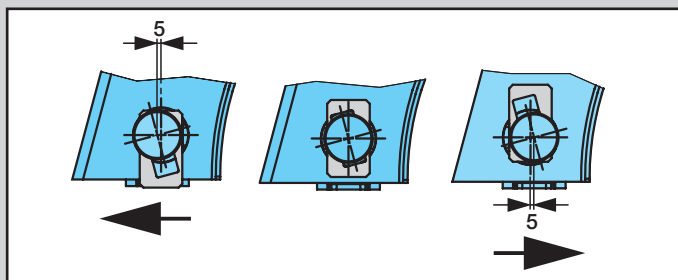
Vehicle manufacturers all over the world quickly appreciate the assembly benefits of this module. Whether it's the hanger brackets, the shock absorber attachments or the cross-braces, everything is integrated to save space. Even steering axles can be connected to it without additional preparation.

The channel crossmember 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 channel crossmember can even make additional crossmembers unnecessary, depending on the frame design.



Track alignment

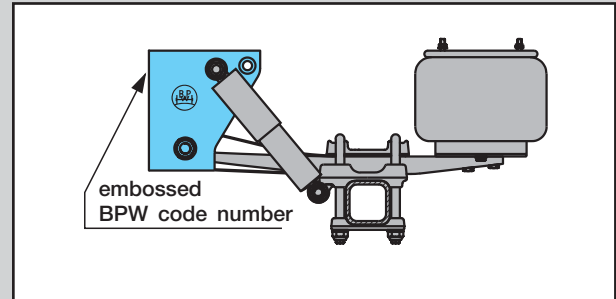
Rapid axle alignment is possible using BPW hanger brackets with integrated track adjustment. Production tolerances on the vehicle can be counteracted or tracking corrected without the need to unfasten the U-bolts (axle tracking).



Determining replacement air suspension hanger brackets

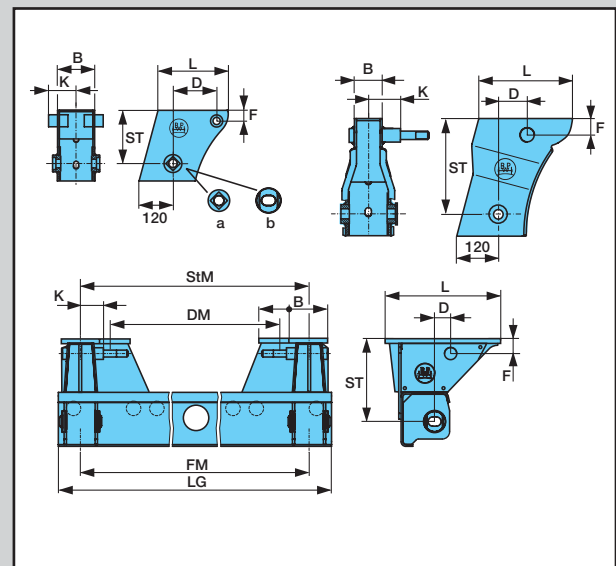
The BPW code number is embossed into the end of the hanger bracket.

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.



1. Clarifying design

- Hanger bracket / integrated support / frame
- Steel, aluminium or high-grade steel hanger bracket
- Straight box-section hanger bracket / Best-Design hanger bracket / retracted hanger bracket
- Rigid or adjustable spring pivot bolt mounting
- 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)



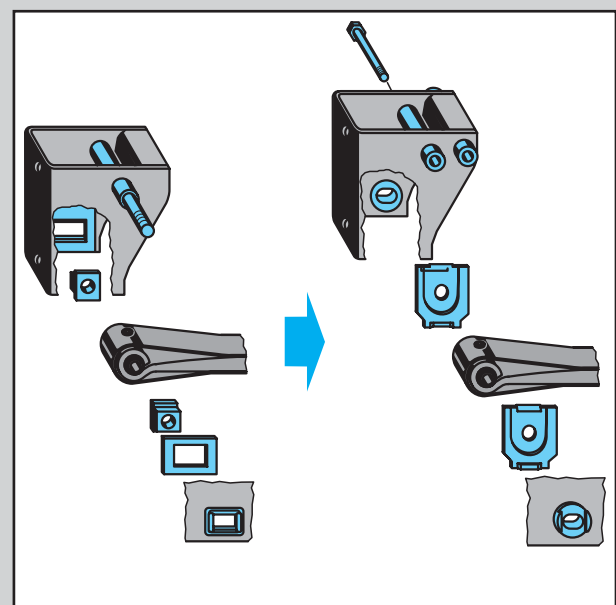
Hanger bracket with welded bolt for shock absorber attachment (100 mm wide trailing arm) replaced by hanger brackets with hexagon bolt and nut.

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

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

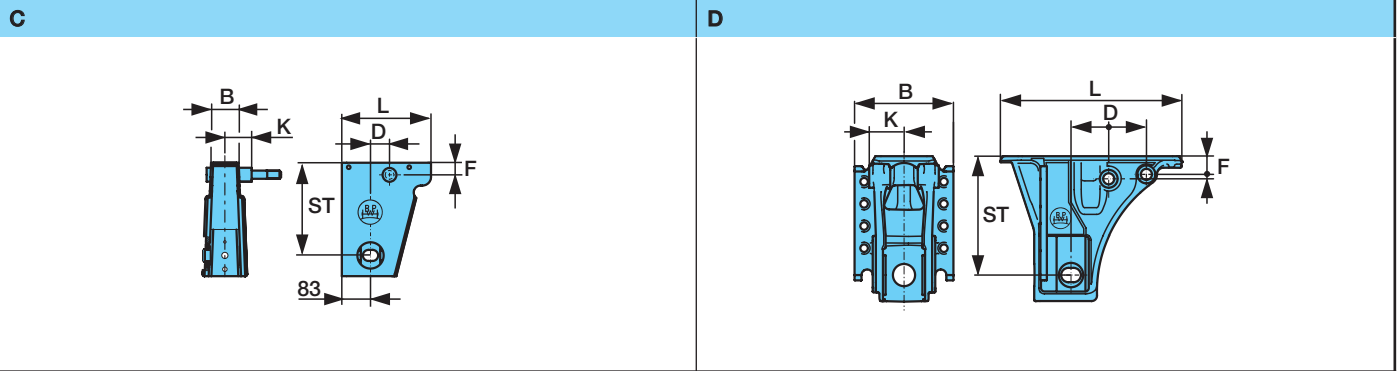
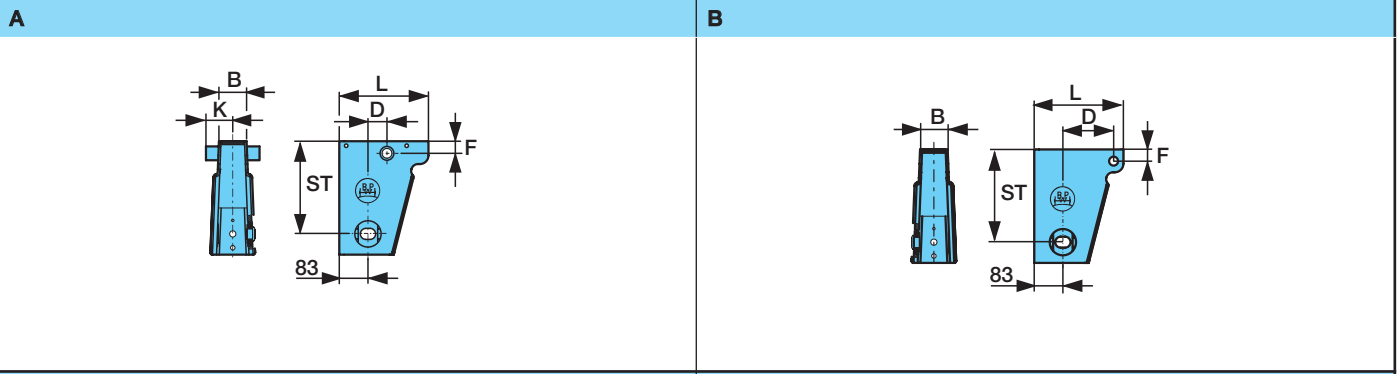
It is essential to use new spring pivot bolts when the hanger bracket / integrated support is replaced!

Observe modified spring pivot bolt bearing !



10.1 Hanger brackets

Hanger brackets / trailing arms 70 mm wide (AL II)



Remark:

- Do not apply heat to the suspension hanger brackets to effect any re-working or alignment. Damaged hanger brackets should be completely replaced!
- When exchanging the hanger brackets, new spring pivot bolts and locking nuts are to be used!
- Observe the welding guidelines as per BPW installation instructions!

AL

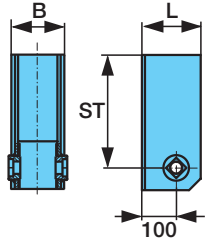
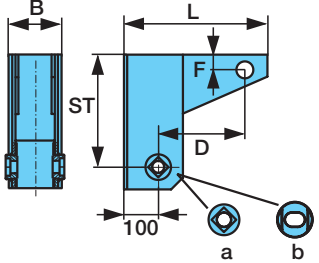
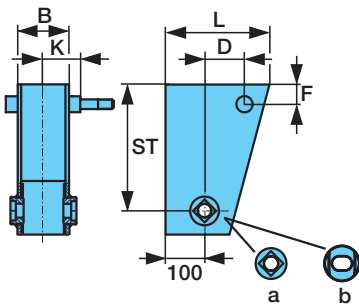
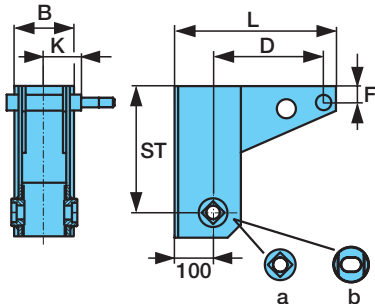
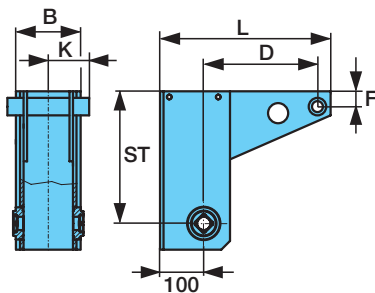
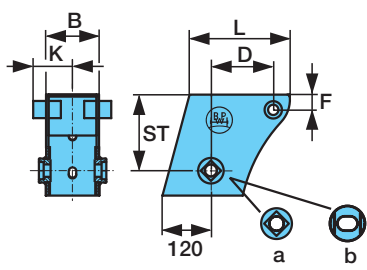
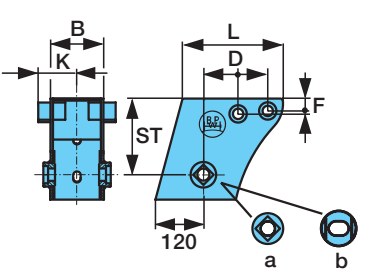
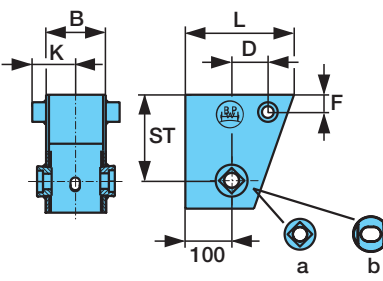
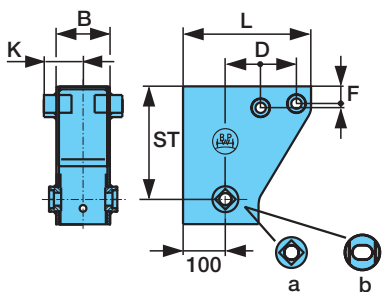
Hanger brackets / trailing arms 70 mm wide (AL II)										
ST = 184 - 276 mm							Hanger bracket without shock absorber attachment	Hanger bracket with shock absorber attachment on threaded bolt	Hanger bracket with shock absorber attachment with screw	
Dimensions							Adjustable	Adjustable	Adjustable	
Fig.	ST	L	B	K	D	F	Exec. V	Exec. V	Exec. V	
Steel hanger bracket, adjustable, trailing arm 70 mm wide										
Item 1510 / 1511 / 1513										
A	184	240	80	77.5	70	35				05.375.44.03.0
A	192 (w. TP)	240	110	77.5	70	43				05.375.44.11.0
A	268	258	80	77.5	55	35				05.375.44.01.0
A	268	258	80	77.5	90	35				05.375.44.02.0
B	268	258	80	-	150	41				05.375.44.05.0
A	276 (w. TP)	280	100	77.5	90	43				05.375.44.10.0
Stainless steel hanger bracket, adjustable, trailing arm 70 mm wide										
C	268	258	80	77.5	83	40		05.375.44.12.0 R 05.375.44.13.0 L		
Cast alloy hanger bracket, adjustable, trailing arm 70 mm wide										
D	184	410	223	73.5	80	35				05.375.44.14.0
D	268	410	223	78.5	85/170	51/41				05.375.44.04.0

Further executions upon request.
(w. TP) = with top plate

AL

10.1 Hanger brackets

Straight steel hanger brackets / trailing arms 100 mm wide

A	B	C
		
		
		
		<p>Remark:</p> <ul style="list-style-type: none"> ● Do not apply heat to the suspension hanger brackets to effect any re-working or alignment. Damaged hanger brackets should be completely replaced! ● When exchanging the hanger brackets, new spring pivot bolts and locking nuts are to be used! ● Observe the welding guidelines as per BPW installation instructions!

* New hanger bracket with loose wear plates.
(w. TP) = with top plate

Further executions upon request.

No longer available.
Change over to hanger bracket with loose wear plates resp. hanger bracket with shock absorber attachment with screw.

Straight steel hanger brackets / trailing arms 100 mm wide														
ST = 184 - 302 mm									Hanger bracket without shock absorber attachment		Hanger bracket with shock absorber attachment on threaded bolt		Hanger bracket with shock absorber attachment with screw	
Dimensions									Unadjust.	Adjustable	Unadjust.	Adjustable	Unadjust.	Adjustable
Fig.	ST	L	B	K	D	F	Exec. E/D	Exec. V	Exec. E/D	Exec. V	Exec. E/D	Exec. V		
Item 1510 / 1511 / 1513							05.375.	05.375.	05.375.	05.375.	05.375.	05.375.		
Standard hanger bracket, trailing arm 100 mm wide														
G	184	243	128	93.5	80	37					40.20.0	40.55.0		
J		236	132		130	35					40.73.0 *	68.22.0	68.52.0	
G		242	128									68.88.0 *	40.29.0	40.58.0
G	190 (w. TP)	262	160	93.5	80	43					40.24.0	40.60.0		
D	260	236	148	93.5	85	35			67.20.0 R 67.21.0 L					
A	268	160	148	-	-	-	67.88.0							
								68.85.0 *						
G		242	128	93.5	85	51					40.03.0	40.56.0		
K		305	132										40.65.0 *	
H		242	128		85/170	51/41						68.63.0 *		
K		305	132									40.01.0	40.49.0	
B		298	148	-	170	25	67.86.0							
								68.84.0 *						
G	242	128	93.5	170	41						40.05.0			
											40.66.0 *			
G	274 (w. TP)	262	160	93.5	85	57					40.15.0			
H					85/170	57/47							40.71.0 *	
B	276 (w. TP)	350	160	-	170	33	67.27.0							
								68.78.0 *						
K	330	160	93.5	85/170	59/49						68.34.0			
											68.92.0 *			
A	302	160	148	-	-	-	67.49.0							
								68.81.0 *						
J		236	132	93.5	75	35					68.29.0	68.53.0		
														68.91.0 *
E		355	148		227	25				67.52.0 R 67.51.0 L	68.48.0 R 68.47.0 L			
F												68.67.0 *	68.76.0 *	
E	390	148		260	35			67.54.0 R 67.53.0 L						
F											68.68.0 *			

10.1 Hanger brackets

Straight steel hanger brackets / trailing arms 100 mm wide

<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>Remark:</p> <ul style="list-style-type: none"> ● Do not apply heat to the suspension hanger brackets to effect any re-working or alignment. Damaged hanger brackets should be completely replaced! ● When exchanging the hanger brackets, new spring pivot bolts and locking nuts are to be used! ● Observe the welding guidelines as per BPW installation instructions!

Straight steel hanger brackets / trailing arms 100 mm wide																		
ST = 310 - 378 mm							Hanger bracket without shock absorber attachment		Hanger bracket with shock absorber attachment on threaded bolt		Hanger bracket with shock absorber attachment with screw							
							Unadjust.	Adjustable	Unadjust.	Adjustable	Unadjust.	Adjustable						
							Exec. E/D	Exec. V	Exec. E/D	Exec. V	Exec. E/D	Exec. V						
Fig.	ST	L	B	K	D	F												
Item 1510 / 1511 / 1513							05.375.	05.375.	05.375.	05.375.	05.375.	05.375.						
Standard hanger bracket, trailing arm 100 mm wide																		
A	310 (w. TP)	180	160	-	-	-	67.48.0											
								68.80.0 *										
M		255	160	93.5	93.5	75	43					68.35.0						
														68.93.0 *				
I		375					-	227	33	67.50.0								
											68.82.0 *							
H		350						170					67.98.0 R					
I								220								68.75.0 *		
~ I		318						220							68.69.0 *			
H		375						227					67.46.0 R					
I								227					67.47.0 L				68.66.0 *	
H										260	43			67.44.0 R	68.50.0 R			
														67.45.0 L	68.49.0 L			
~ H														68.04.0 R				
I												68.05.0 L						
												68.65.0 *	68.77.0 *					
A	367	160	148	-	-	-	67.93.0											
		298					170	25	67.99.0									
C									68.86.0 *									
M	370	328	132	93.5	40	100						68.36.0	68.55.0					
															68.94.0 *			
M								140	90						68.24.0	68.54.0		
												68.90.0 *						
C	375	408	160	93.5	-	-	67.59.0											
H								270	33			67.58.0 R						
I												67.57.0 L						
												68.70.0 *						
M	378 (w. TP)	350	160	93.5	40	108						68.37.0						
															68.95.0 *			
M								140	98						68.39.0			
												68.96.0 *						

* New hanger bracket with loose wear plates.
(w. TP) = with top plate

Further executions upon request.

No longer available.
Change over to hanger bracket with loose wear plates resp. hanger bracket with shock absorber attachment with screw.

10.1 Hanger brackets

Straight steel hanger brackets / trailing arms 100 mm wide

<p>A</p>	<p>B</p>	<p>C</p>
<p>D</p>		
<p>G</p>	<p>H</p>	<p>I</p>
<p>J</p>	<p>K</p>	
<p>M</p>	<p>N</p>	<p>Remark:</p> <ul style="list-style-type: none"> ● Do not apply heat to the suspension hanger brackets to effect any re-working or alignment. Damaged hanger brackets should be completely replaced! ● When exchanging the hanger brackets, new spring pivot bolts and locking nuts are to be used! ● Observe the welding guidelines as per BPW installation instructions!

Straight steel hanger brackets / trailing arms 100 mm wide																	
ST = 400 - 430 mm							Hanger bracket without shock absorber attachment		Hanger bracket with shock absorber attachment on threaded bolt		Hanger bracket with shock absorber attachment with screw						
							Unadjust.	Adjustable	Unadjust.	Adjustable	Unadjust.	Adjustable					
							Exec. E/D	Exec. V	Exec. E/D	Exec. V	Exec. E/D	Exec. V					
Fig.	ST	L	B	K	D	F											
Item 1510 / 1511 / 1513							05.375.	05.375.	05.375.	05.375.	05.375.	05.375.					
Standard hanger bracket, trailing arm 100 mm wide																	
D	400	328	148	-	-	-	67.76.0										
B		308					67.43.0										
G		328	148	93.5	40	130			67.70.0 R 67.69.0 L								
M											68.72.0 *						
G					130	50			67.78.0 R 67.77.0 L								
M											68.73.0 *						
D	408 (w. TP)	350	160	93.5	40	138	67.75.0										
							68.83.0 *										
G													67.62.0 R 67.63.0 L				
M																68.71.0 *	
G							130	58			67.80.0 R 67.79.0 L						
M										68.74.0 *							
M	430	350	160	93.5	140	110					68.40.0	68.56.0					

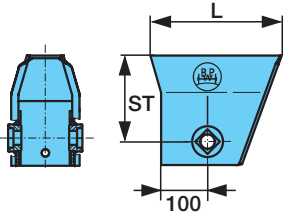
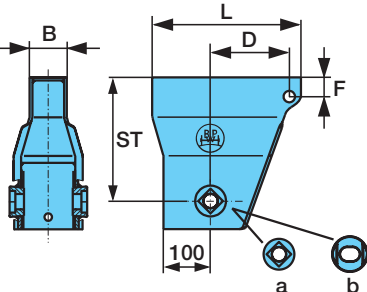
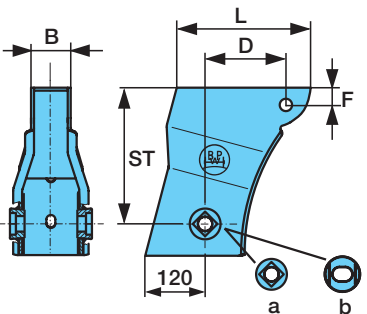
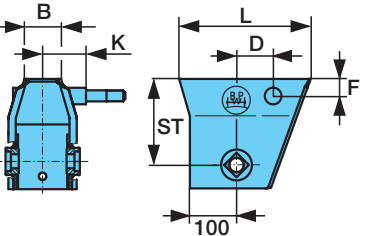
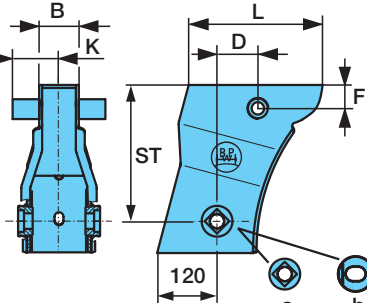
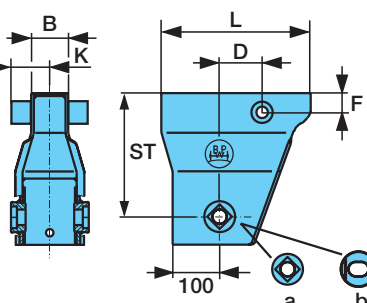
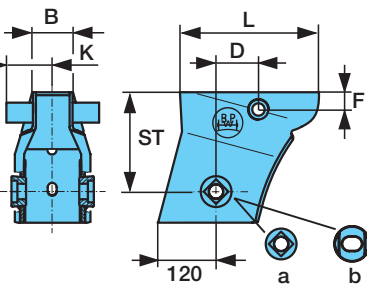
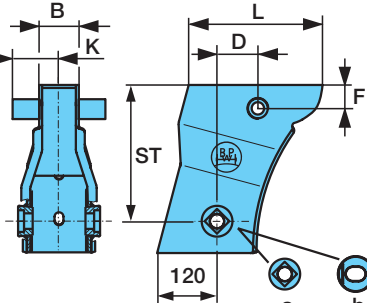
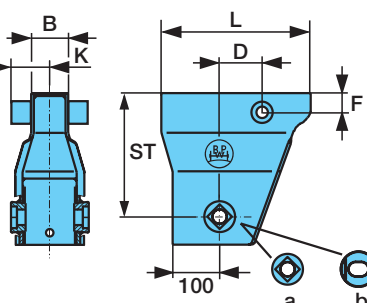
* New hanger bracket with loose wear plates.
(w. TP) = with top plate

Further executions upon request.

No longer available.
Change over to hanger bracket with loose wear plates resp. hanger bracket with shock absorber attachment with screw.

10.1 Hanger brackets

Taper mounted steel hanger brackets, trailing arms 100 mm wide

<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> 

Remark:

- Do not apply heat to the suspension hanger brackets to effect any re-working or alignment. Damaged hanger brackets should be completely replaced!
- When exchanging the hanger brackets, new spring pivot bolts and locking nuts are to be used!
- Observe the welding guidelines as per BPW installation instructions!

Taper mounted steel hanger brackets, trailing arms 100 mm wide

ST = 184 - 268 mm									Hanger bracket without shock absorber attachment		Hanger bracket with shock absorber attachment on threaded bolt		Hanger bracket with shock absorber attachment with screw	
Dimensions							Unadjust.	Adjustable	Unadjust.	Adjustable	Unadjust.	Adjustable		
Fig.	ST	L	B	K	D	F	Exec. S	Exec. SV	Exec. S	Exec. SV	Exec. S	Exec. SV		

Item 1510 / 1511 / 1513							05.375.	05.375.	05.375.	05.375.	05.375.	05.375.
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Taper mounted steel hanger bracket, trailing arm 100 mm wide

G	184	265	80	93.5	80	37					40.17.0	40.54.0
G					130	35						40.72.0 *
H	268	270	80	93.5	85	51					40.10.0	40.51.0
I											68.43.0	
B		319	80	-	170	41					68.98.0 *	
B							84				67.07.0	
C		270	80	93.5	170	41					68.44.0	
H											68.99.0 *	
I		319	80	93.5	170	41					40.11.0	40.52.0
H											40.69.0 *	
H		270	80	93.5	170	41						40.61.0
I											68.42.0	
H	319	80	93.5	170	41					68.97.0 *		
I										40.08.0	40.48.0	
H	270	80	93.5	170	41					40.67.0 *		
I										68.07.0		
H	270	80	93.5	170	41					40.14.0	40.53.0	
I										40.70.0 *		

* New hanger bracket with loose wear plates.

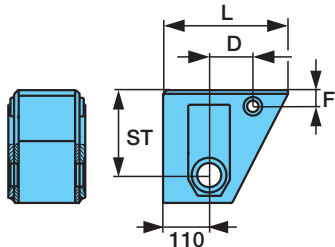
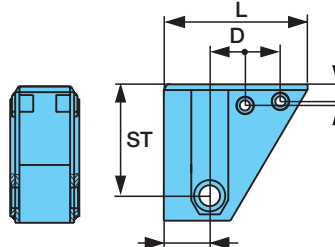
Further executions upon request.

No longer available.
Change over to hanger bracket with loose wear plates resp. hanger bracket with shock absorber attachment with screw.

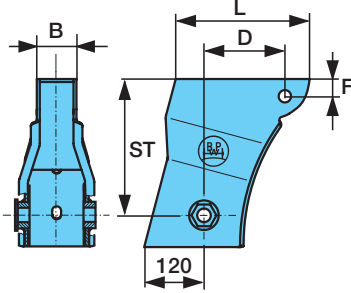
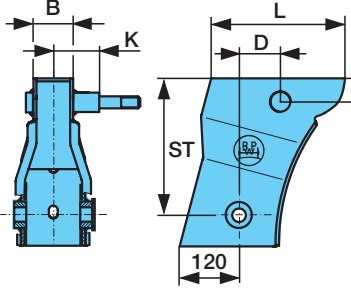
10.1 Hanger brackets

Alloy hanger brackets / stainless steel hanger brackets, trailing arms 100 mm wide

Alloy hanger bracket, trailing arm 100 mm wide

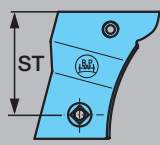
<p>A</p> 	<p>B</p> 	<p>Aluminium hanger brackets for 100 mm wide trailing arms are no longer available. Contact BPW if replacement is required.</p>
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Taper mounted stainless steel hanger bracket, trailing arm 100 mm wide

<p>D</p> 	<p>E</p> 	<p>Remark:</p> <ul style="list-style-type: none"> ● Do not apply heat to the suspension hanger brackets to effect any re-working or alignment. Damaged hanger brackets should be completely replaced! ● When exchanging the hanger brackets, new spring pivot bolts and locking nuts are to be used! ● Observe the welding guidelines as per BPW installation instructions!
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Hanger brackets 10.1

Alloy hanger brackets / stainless steel hanger brackets, trailing arms 100 mm wide

ST = 184 - 268 mm 							Hanger bracket without shock absorber attachment		Hanger bracket with shock absorber attachment on threaded bolt		Hanger bracket with shock absorber attachment with screw	
							Unadjust.	Adjustable	Unadjust.	Adjustable	Unadjust.	Adjustable
Fig.	ST	L	B	K	D	F	Exec. S	Exec. SV	Exec. S	Exec. SV	Exec. S	Exec. SV
Item 1510 / 1511 / 1513							05.375.	05.375.	05.375.	05.375.	05.375.	05.375.

Alloy hanger bracket, trailing arm 100 mm wide

Aluminium hanger brackets for 100 mm wide trailing arms are no longer available.
Contact BPW if replacement is required.

Taper mounted stainless steel hanger bracket, trailing arm 100 mm wide

D	268	269	80	-	170	41	40.42.0 R 40.47.0 L					
E	268	269	80	93.5	85	51			40.38.0 R 40.39.0 L			
E	268	269	80	93.5	170	41			40.40.0 R 40.41.0 L			

Further executions upon request.

Stainless steel hanger brackets for 100 mm wide trailing arms are no longer available.
Contact BPW if replacement is required.

10.2 Integrated supports

Integrated support / trailing arms 70 mm wide (AL II)

AL

<p>A</p>	<p>B</p>
<p>C</p>	
<p>E</p>	<p>F</p>
<p>G</p>	<p>Remark:</p> <ul style="list-style-type: none"> ● Do not apply heat to the suspension integrated support to effect any re-working or alignment. Damaged integrated supports should be completely replaced! ● When exchanging the integrated supports, new spring pivot bolts and locking nuts are to be used! ● Observe the welding guidelines as per BPW installation instructions!

Integrated supports 10.2

Integrated support / trailing arms 70 mm wide (AL II)														
ST = 184 - 312 mm											Integrated support with shock absorber attachment on threaded bolt	Integrated support with shock absorber attachment with screw between plates		
Dimensions											Adjustable	Adjustable		
Fig.	ST	FM	DM	StM	LG	L	B	K	D	F	Exec. CV	Exec. CV		
Integrated support, adjustable, trailing arm 70 mm wide Item 1515														
A	184	1100	890	1100	1274	270	90	77.5	105	35	05.445.56.36.0			
		1200	990	1200	1354						05.445.56.31.0			
		1300	1090	1300	1454						05.445.56.12.0			
		1350	1140	1350	1554						05.445.56.38.0			
		1400	1190	1400							05.445.56.02.0			
E	186	1200	770	1200	1354	270	90	-	105	35		05.445.56.34.0		
				1300	1454							05.445.56.20.0		
		1300	870	1350	1554							05.445.56.25.0		
				1400								05.445.56.39.0		
												05.445.56.28.0		
C	194	1300	1090	1300	1454	450	140/230	77.5	100	45	05.445.56.41.0			
B	268	980	770	980	1134	303	90	77.5	55	35	05.445.56.35.0			
				85	50						05.445.56.15.0			
		1100	890	1100	1274						85	50	05.445.56.42.0	
													55	35
		1200	990	1200	1354						85	50	05.445.56.18.0	
													55	35
		1300	1090	1300	1454						85	50	05.445.56.19.0	
													55	35
		1350	1140	1350	1554						85	50	05.445.56.40.0	
													55	35
1400	1190	1400	1554	85	50	05.445.56.03.0								
F	270	1200	770	1200	1354	303	90	-	85	50		05.445.56.33.0		
			990	1300	1454							05.445.56.11.0		
		1300	870									05.445.56.16.0		
												05.445.56.22.0		
		1350	920	1350	1554							05.445.56.44.0		
C	278	1300	1090	1300	1454	450	140/230	77.5	100	60	05.445.56.06.0			
G	280	1200	770	1300	1454	450	140/230	-	100	60		05.445.56.13.0		
C	312	1300	1090	1300	1454	450	140/230	77.5	120	45	05.445.56.45.0			
Further executions upon request.														

AL

10.2 Integrated supports

Integrated support / trailing arms 100 mm wide

<p>A</p>	<p>B</p>
<p>C</p>	<p>D</p>
<p>E</p>	<p>F</p>
<p>G</p>	<p>Remark:</p> <ul style="list-style-type: none"> ● Do not apply heat to the suspension integrated support to effect any re-working or alignment. Damaged integrated supports should be completely replaced! ● When exchanging the integrated supports, new spring pivot bolts and locking nuts are to be used! ● Observe the welding guidelines as per BPW installation instructions!

Integrated support / trailing arms 100 mm wide																
ST = 184 - 370 mm											Integrated support with shock absorber attachment on threaded bolt	Integrated support with shock absorber attachment with screw between plates	Integrated support with shock absorber attachment screw in support centre			
Dimensions											Adjustable	Adjustable	Adjustable			
Fig.	ST	FM	DM	StM	LG	L	B	K	D	F	Exec. C	Exec. C	Exec. C			
Integrated support, adjustable, trailing arm 100 mm wide Item 1515																
A	184	980	738	980	1134	270	90	93.5	120	35	05.445.55.21.0					
A		1100	858	1100	1274						05.445.54.76.0					
A		1200	958	1200	1354						05.445.54.68.0					
A		1300	1058	1300	1454						05.445.54.22.0					
E	186	1200	738	1200	1354	270	90	-	120	35		05.445.55.34.0				
E				1300	1454							05.445.54.59.0				
B	268	900	658	900	1054	303	90	93.5	170	41	05.445.54.67.0					
B		980	738	980	1134				85	51	05.445.54.73.0					
B									170	41	05.445.54.82.0					
B		1100	858	1100	1274				303	90	93.5	85	51	05.445.54.61.0		
B												170	41	05.445.55.31.0		
B		1200	958	1200	1354				303	90	93.5	85	51	05.445.54.50.0		
B														1250	1028	1270
B		1300	1058	1300	1454				303	90	93.5	85	51	05.445.54.40.0		
B												1300			170	41
G			1300										-			
G		1350	1350	1350	1554				303	90	-	170	41			05.445.55.36.0
B		1400	1158	1400	1554				303	90	93.5	85	51	05.445.55.33.0		
F	270	1170	928	1270	1454	303	90	-	85	51		05.445.54.21.0				
F				170	41					05.445.54.89.0						
F		1200	738	1200	1354	303	90	-	85	51		05.445.55.01.0				
F				1300	1454							05.445.54.48.0				
C	278	980	738	980	1134	450	140/230	93.5	85	61	05.445.55.19.0					
B	302	980	738	980	1134	323	90	93.5	120	35	05.445.55.29.0					
B									190	41	05.445.55.26.0					
B									1300	1058	1300	1454	120	35	05.445.55.30.0	
B	370	980	738	980	1134	346	90	93.5	140	90	05.445.55.25.0					

Replacement channel crossmembers are now only supplied with adjustable spring bolt mounting.
Note the modified spring pivot bolts if replacement is required.

Further executions upon request.

10.3 Spare parts for hanger brackets, integrated supports, frames

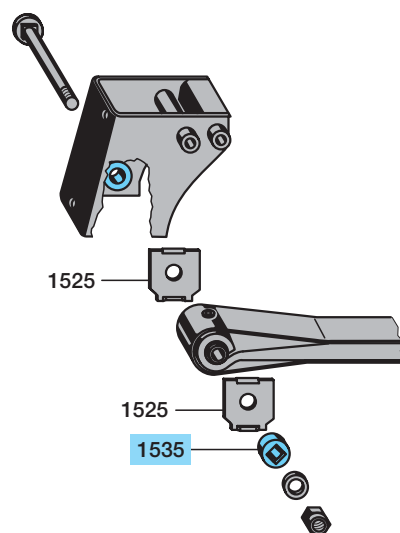
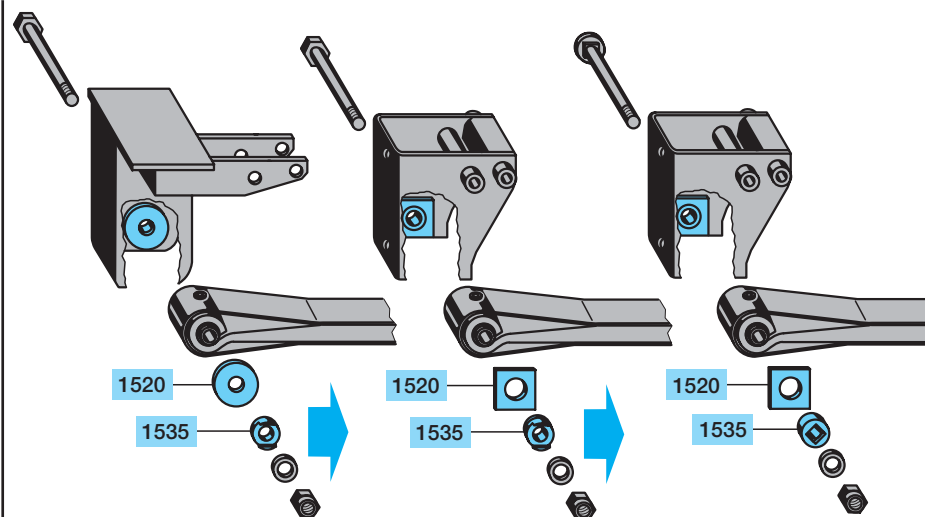
Weld-in bushes for spring pivot bearings

Weld-in bushes for steel hanger brackets / integrated supports / frames with unadjustable spring pivot bolt bearing

Spring pivot bolt bearing for steel hanger bracket with slotted bushes (torsion protection), welded on wear plates (1520)

Spring pivot bolt bearing for steel hanger bracket with square internal lock bushes (torsion protection), welded on wear plates (1520)

Spring pivot bolt bearing for steel hanger bracket with square internal lock bushes (torsion protection), loose wear plates (1525)



Weld-in bushes (Item 1535) no longer available.
Conversion to torsion protection with square internal lock bush.

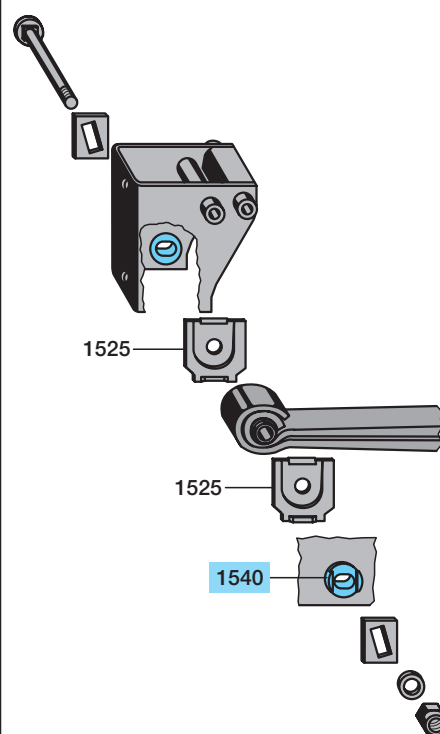
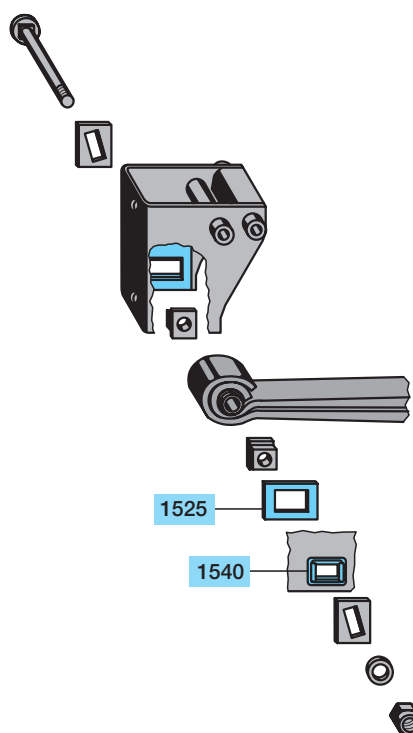
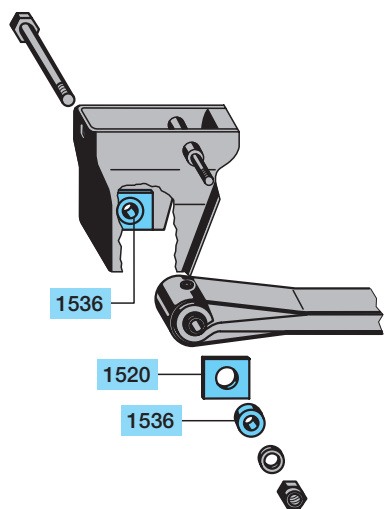
Weld-in bushes for stainless steel hanger brackets with unadjustable spring pivot bolt bearing

Weld-in bushes for steel hanger brackets / integrated supports with adjustable spring pivot bolt bearing

Unadjustable spring pivot bolt bearing

Adjustable spring pivot bolt bearing, hanger bracket with square profile

Adjustable spring pivot bolt bearing, hanger bracket with elongated bush



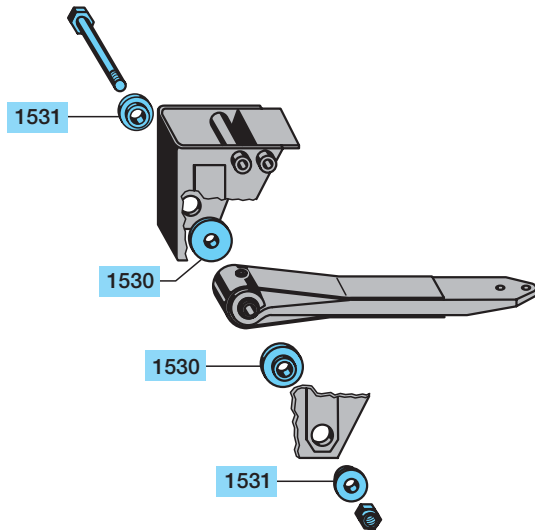
Spare parts for hanger brackets, integrated supports, frames 10.3

Weld-in bushes for spring pivot bearings			
Item	Designation	Remark	BPW Code no. Dimension
Weld-in bushes for steel hanger brackets / integrated supports / frames with unadjustable spring pivot bolt bearing			
Round wearing plate, torsion protection with square internal lock bush			
1520	Washer		
1535	Bush		03.113.02.06.0 no longer available *
Square wearing plate, pivot bush, torsion protection with square internal lock bush			
1520	Plate		
1535	Bush		03.281.35.16.0 \varnothing 56 / \square 101 / 140 x 4.5 03.113.02.09.0 no longer available *
Square wearing plate, pivot bush, torsion protection with square internal lock bush			
1520	Plate		
1535	Bush		03.281.35.16.0 \varnothing 56 / \square 101 / 140 x 4.5 03.113.01.34.0 \varnothing 30 / 51 / 56 x 29
Loose wear plates, torsion protection with square internal lock bush			
1535	Bush		
Weld-in bushes for stainless steel hanger brackets with unadjustable spring pivot bolt bearing			
Square wearing plate, pivot bush, torsion protection with square internal lock bush			
1520	Plate		
1535	Bush with torsion protection		05.113.01.40.0 \varnothing 30.5 / 55 x 31
1536	Ring		03.310.32.45.0 \varnothing 30.5 / 55 x 25
Weld-in bushes for steel hanger brackets / integrated supports, with adjustable spring pivot bolt bearing			
Adjustable spring pivot bolt bearing, hanger bracket with square profile			
1525	Plate		
1540	Shaped part		03.001.14.86.0 92 x 62 x 25
Adjustable spring pivot bolt bearing, hanger bracket with elongated bush			
1540	Bush		
* Conversion kits see spring pivot bolt bearing page 61 / 63 / 73.			

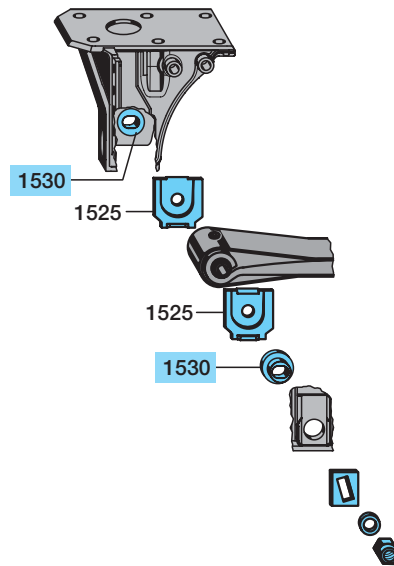
10.3 Spare parts for hanger brackets, integrated supports, frames

Wear plates for alloy hanger brackets

Unadjustable spring pivot bolt bearing

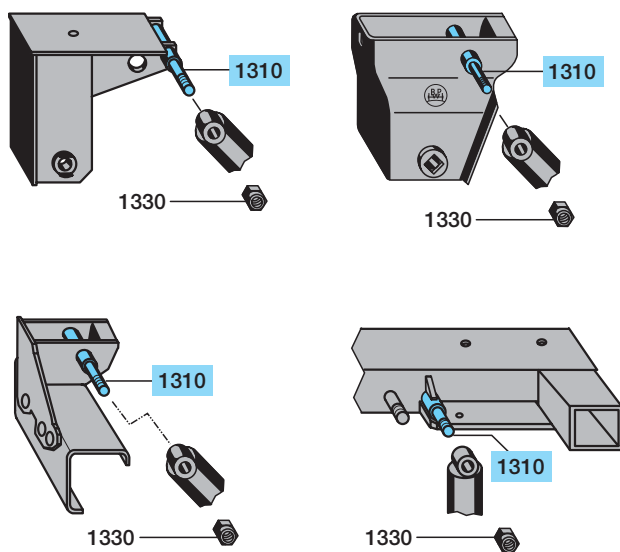


Adjustable spring pivot bolt bearing
Cast alloy hanger bracket

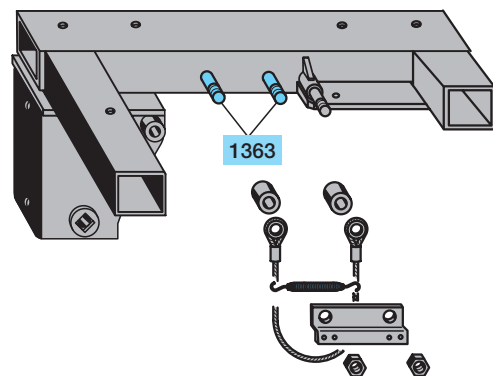


Weld-in bolts for shock absorber attachment / check strap

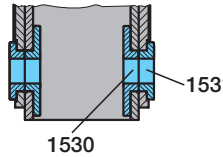
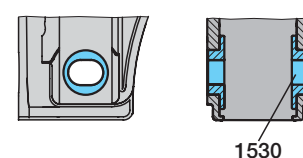
Weld-in bolts for shock absorber attachment



Weld-in bolts for check strap attachment

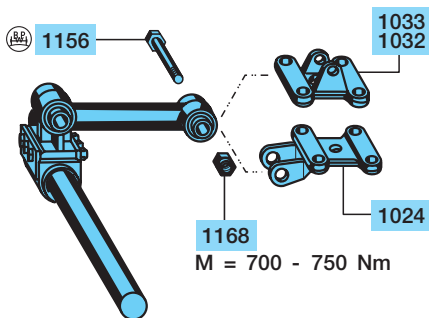


Spare parts for hanger brackets, integrated supports, frames 10.3

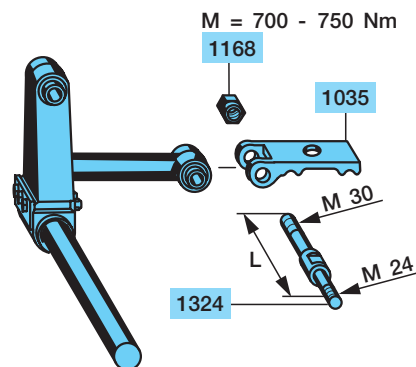
Wear plates for alloy hanger brackets			
Item	Designation	Remark	BPW Code no. Dimensions
Wear plates for alloy hanger brackets with unadjustable spring pivot bolt bearing			
			Unadjustable spring pivot bolt bearing
1530	Washer		03.320.16.04.0 Ø 30 / 50 / 110 x 20
1531	Washer		03.320.14.07.0 Ø 30 / 50 / 70 x 16
			
Wear plates for alloy hanger brackets with adjustable spring pivot bolt bearing			
			Adjustable spring pivot bolt bearing Cast alloy hanger bracket
1530	Bush		03.113.01.43.0 Ø 30.2/42.5 / 55/90 x 20
			
Weld-in bolts for shock absorber attachment / check strap			
			Shock absorber attachment
1310	Threaded bolt		see upper shock absorber attachment page 110
			Check strap attachment
1363	Threaded bolt		see check strap attachment page 121

11 U-stabilizers

U-stabilizer attachments

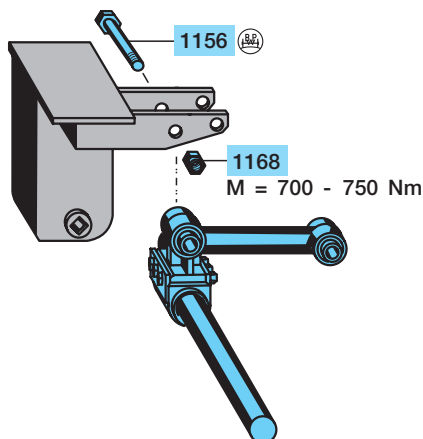


Lower U-stabilizer attachment between plates

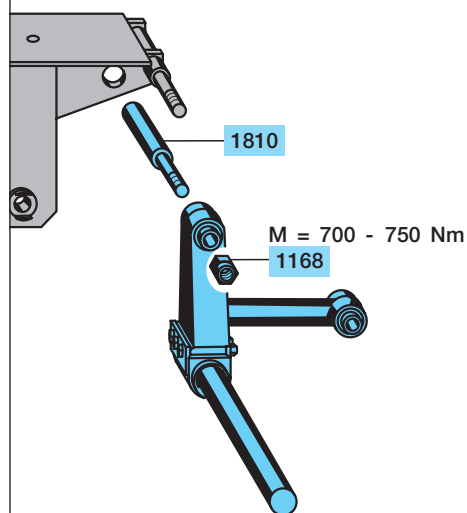


Lower U-stabilizer attachment on threaded bolts

Item	Designation	Remark	BPW Code no. Dimensions	BPW Code no. Dimensions
1024	Spring seat		see page 29	-
1032	Spring plate		see page 36 / 41	see page 36
1033				
1035				
1156	Hexagon screw		03.340.15.26.0 M 30 x 130 - 8.8	-
1168	Lock nut		03.260.15.01.0 M 30 / SW 46	03.260.15.01.0 M 30 / SW 46
1324	Threaded bolt		-	03.177.24.22.0 M 24 / M 30 / L = 260



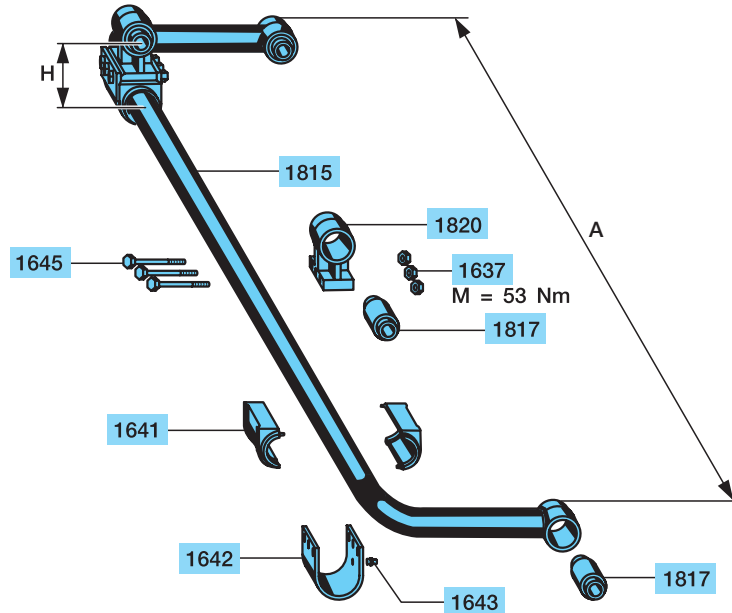
Upper U-stabilizer attachment between plates



Upper U-stabilizer attachment on threaded bolts

Item	Designation	Remark	BPW Code no. Dimensions	BPW Code no. Dimensions
1156	Hexagon screw		03.340.15.26.0 M 30 x 130 - 8.8	-
1168	Lock nut		03.260.15.01.0 M 30 / SW 46	03.260.15.01.0 M 30 / SW 46
1810	Threaded bolt		-	03.177.35.08.0 M 30 / Ø 45 x 144

U-stabilizers



Item	Designation	Remark	BPW Code no.	Dimensions
1637	Lock nut		02.5220.10.82	VM 10 / 980
1641	Bush		03.113.98.06.0	Ø 50 / 70 x 94
1642	Shaped plate		03.160.56.01.0	
1643	Grease nipple		02.6802.03.50	AM 10 x 1 / 71412
1645	Hexagon screw		02.5021.54.10	M 10 x 110 - 10.9

Bush (Item 1817)

1815	U-stabilizer (incl. item 1817)		05.114.98.18.0	A = 900	05.113.96.06.0	Ø 30 / 52.6 x 68
			05.114.98.19.0	A = 980	05.113.96.06.0	Ø 30 / 52.6 x 68
			05.114.98.20.0	A = 1100	05.113.96.06.0	Ø 30 / 52.6 x 68
			05.114.98.21.0	A = 1200	05.113.96.06.0	Ø 30 / 52.6 x 68
			05.114.98.22.0	A = 1300	05.113.96.06.0	Ø 30 / 52.6 x 68

1817	Bush		05.113.96.06.0	Ø 30 / 52.6 x 68
			05.113.96.05.0	Ø 30 / 60 x 68

Bush (Item 1817)

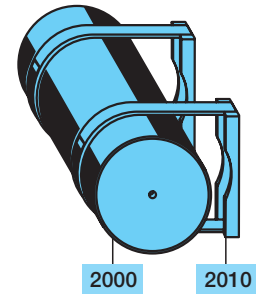
1820	Support (incl. item 1817)		05.189.01.78.0	H = 120	05.113.96.06.0	Ø 30 / 52.6 x 68
			05.189.03.97.0	H = 180	05.113.96.05.0	Ø 30 / 60 x 68
			05.189.02.16.0	H = 275	05.113.96.05.0	Ø 30 / 60 x 68
			05.189.03.99.0	H = 395	05.113.96.05.0	Ø 30 / 60 x 68

12 Drawbar attachments, spring pivot bolt torsion protections

Drawbar attachments, spring pivot bolt torsion protections

			Drawbar attachment for welded hanger brackets		Drawbar attachment for formed hanger brackets / Best-Design-hanger brackets	
Item	Designation	Remark	BPW Code no.	Dimension	BPW Code no.	Dimension
1550	Support (incl. item 1551 + 1552)		05.189.05.63.0	for bolt Ø 30	05.189.10.85.0	for bolt Ø 30
1551	Bush	without slit	03.113.01.23.0	Ø 30 / 58 / 65 x 31	03.113.01.31.0	Ø 30 / 58 / 65 x 31
1552	Bush	with slit	03.113.01.24.0	Ø 30 / 58 / 65 x 36	03.113.01.30.0	Ø 30 / 58 / 65 x 36
			Welded on torsion protection with steel hanger brackets / integrated supports and axle lift device		Screwed on torsion protection with steel hanger brackets / integrated supports and axle lift device	
Item	Designation	Remark	BPW Code no.	Dimension	BPW Code no.	Dimension
1560	Shaped plate (welded on torsion protection)		03.161.35.07.0	for SW 46	-	
1560	Shaped part (screwed on torsion protection)		-		03.001.14.88.0	for SW 46
			Fit connecting link disc with welded on torsion protection for adjustable steel hanger bracket / integrated support and axle lift device, hanger bracket with square profile		Fit connecting link disc with welded on torsion protection for adjustable steel hanger bracket / integrated support and axle lift device, hanger bracket with elongated bush	
Item	Designation	Remark	BPW Code no.	Dimension	BPW Code no.	Dimension
1560	Fit connecting link disc with welded on torsion protection		05.001.32.01.0	B = 72	05.001.32.02.0	B = 57.5

Air tank								
Item	Designation	Remark	BPW Code no.	Dimension			BPW Code no.	
			Air tank Item 2000	Capacity Litre	Ø	L	Attachment Item 2010	
2000	Air tank		02.2004.09.00	10	206	355	05.189.15.21.0	
			02.2004.01.00	40	276	745	02.0328.10.00	
			02.2004.05.00	60	310	850	05.189.14.68.0	
			02.2004.11.00 AL	60	310	850	05.189.14.68.0	
			02.2004.02.00	60	396	565	02.0326.13.00	
			02.2004.10.00 AL	60	396	565	02.0326.13.00	
			AL = Alloy					



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13 Axle lifts

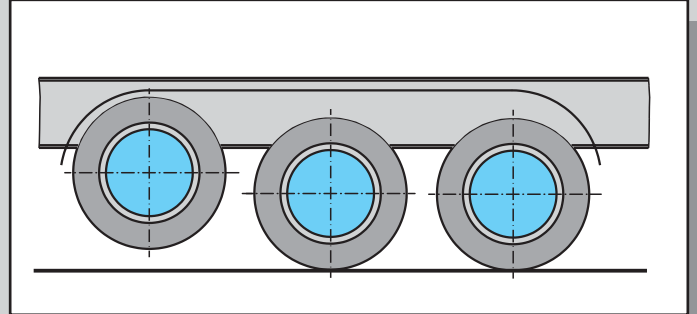
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General

BPW Axle lift devices

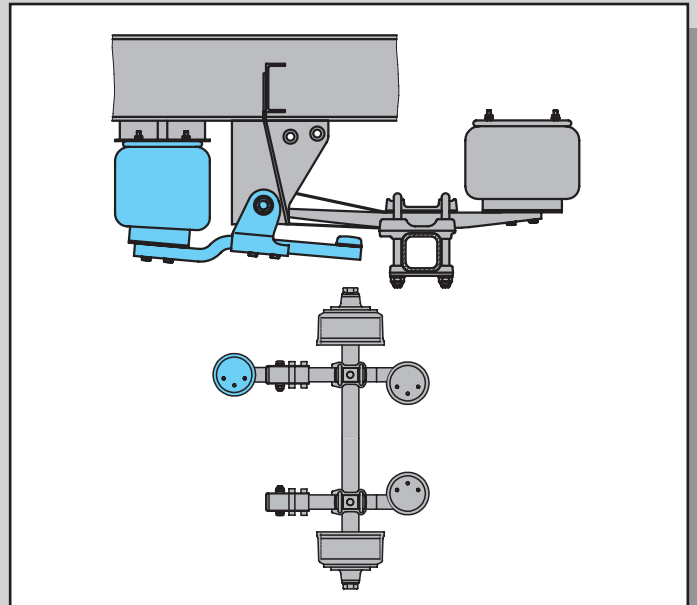
As an option, multi-axle vehicles can be equipped with an axle lift to reduce the wear on the tyres when driving unladen or with a light cargo.

BPW offers axle lifts for positioning in the middle or at the sides of the axle.



Sidewise mounted axle lift

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

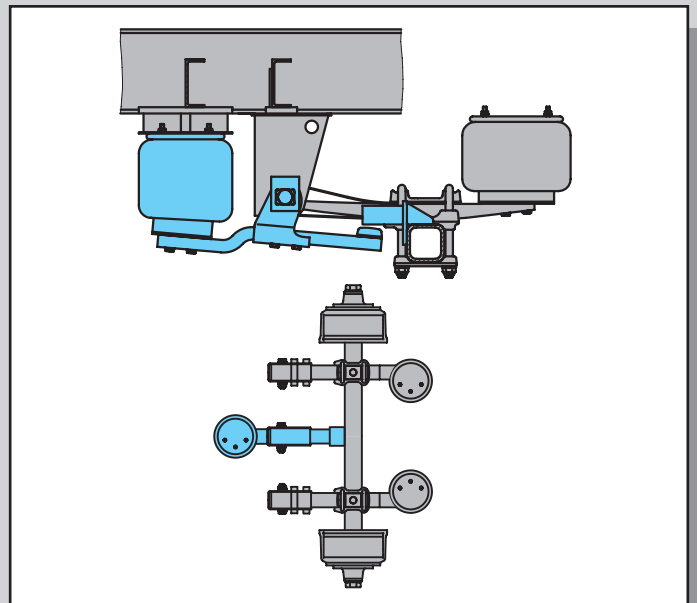


Central mounted axle lift

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

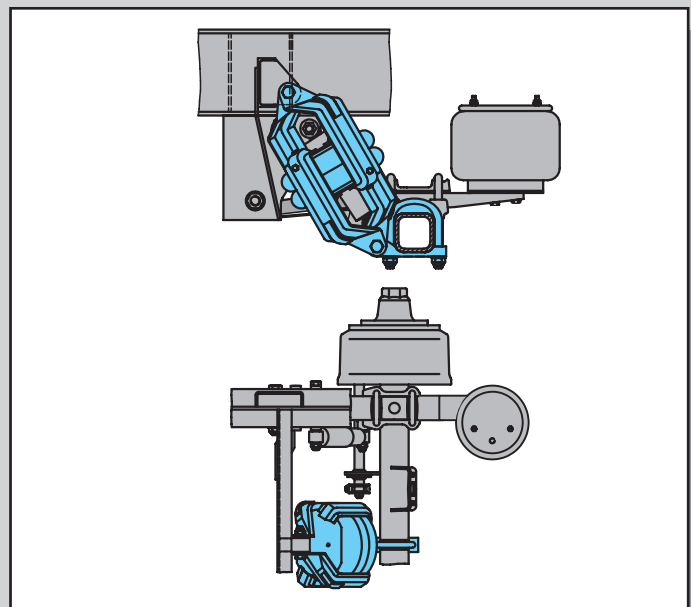
This axle lift device is attached to the frame by crossmembers in the middle of the vehicle.

The lift bag forces must also be absorbed by a crossmember.



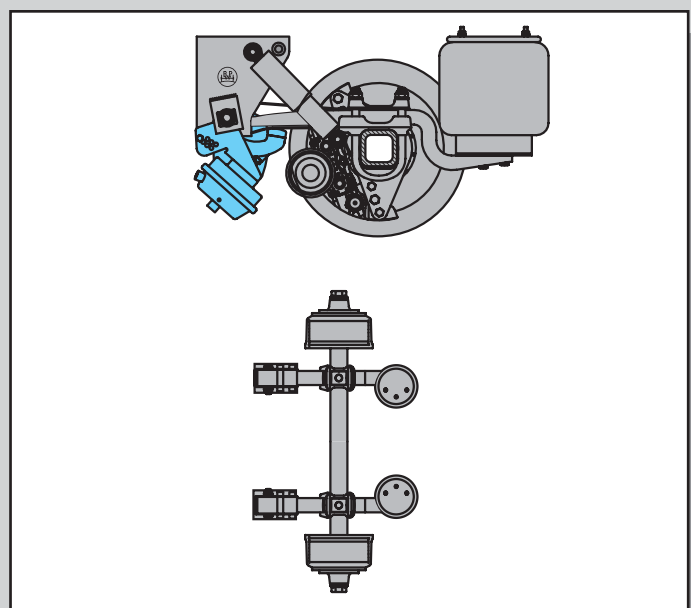
Central lift

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).



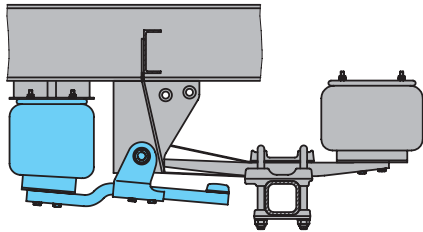
Two-side axle lift

The double-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.

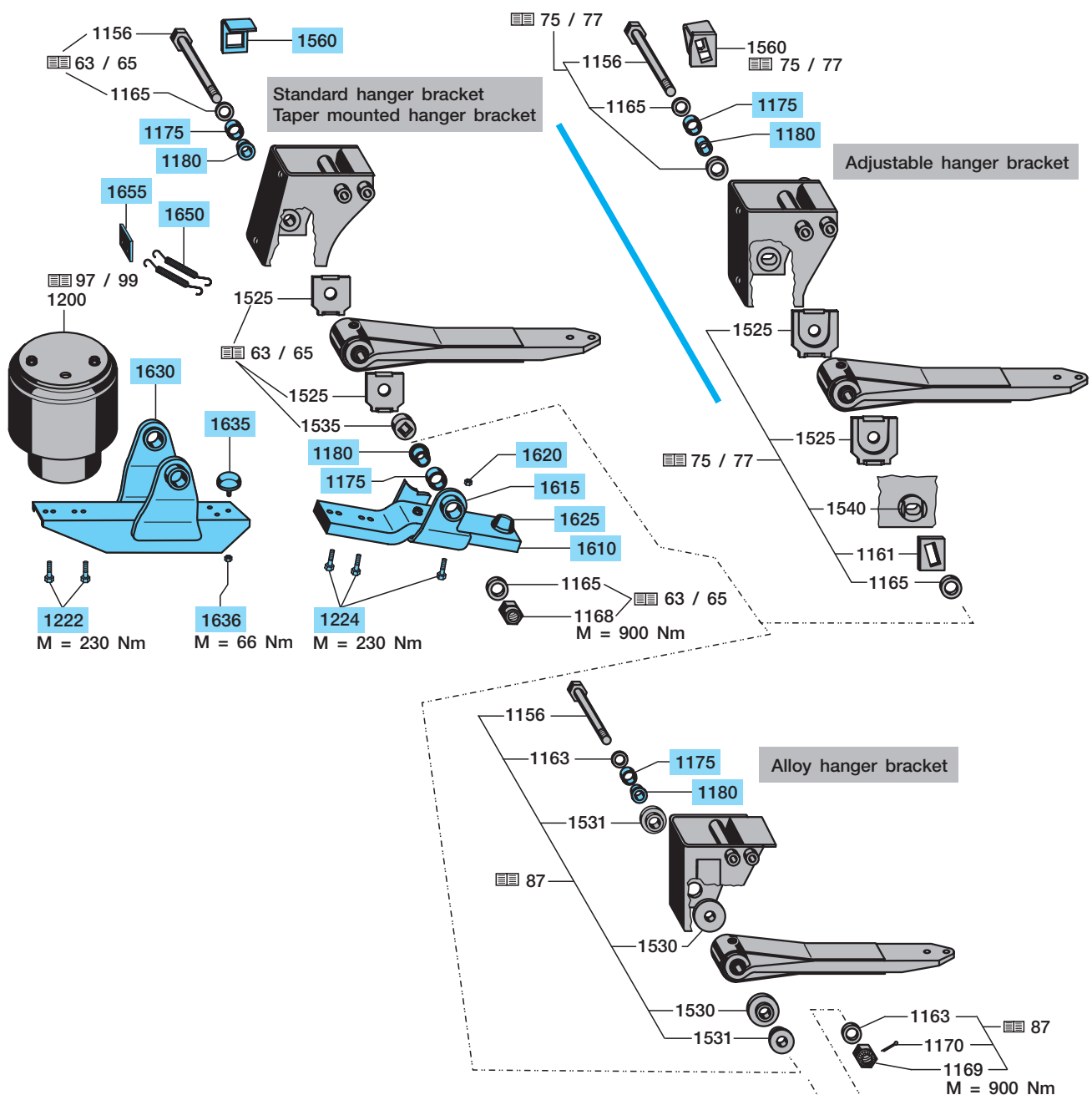


13.1 Sidewise mounted axle lifts

Sidewise mounted axle lifts, trailing arms 100 mm wide



Sidewise mounted axle lift

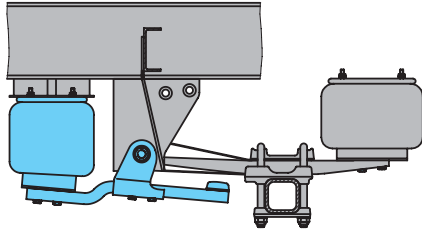


Sidewise mounted axle lift, trailing arms 100 mm wide			
Item	Designation	Remark	BPW Code no. Dimension
			Steel hanger bracket, torsion protection with square internal lock bush
			Alloy hanger bracket
1156	Screw (Spring bolt)		see page 63 / 65, 75 / 77
1163	Washer		
1165	Washer		
1168	Lock nut		
1169	Castle nut		
1170	Split pin		
1175	Bush		03.113.94.10.0 \varnothing 41 / 50 x 23
1180	Bush		03.113.01.29.0 \varnothing 30 / 40 / 46 x 31
1200	Air bag		see page 97 / 99
1222	Locking screw		03.340.12.21.0 M 16 x 30 (for welded supporting arm)
1224	Locking screw		02.5070.95.00 M 16 x 65 (for solid supporting arm)
1513	Support		see page 127 - 133
1560	Shaped plate (welded on torsion protection with steel hanger brackets)		-
			Solid, screwed supporting arm
			Supporting arm with bump stop
1610	Supporting arm		03.195.00.97.0 L = 680 03.195.00.96.0 L = 720
1615	Support	(for steel hanger bracket)	05.189.12.38.0 B = 166
		(for steel hanger bracket)	05.189.13.19.0 B = 176
		(for alloy hanger bracket)	05.189.07.38.0 B = 192.5
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 \varnothing 80 / M 12
* for supporting arm without threaded holes.			

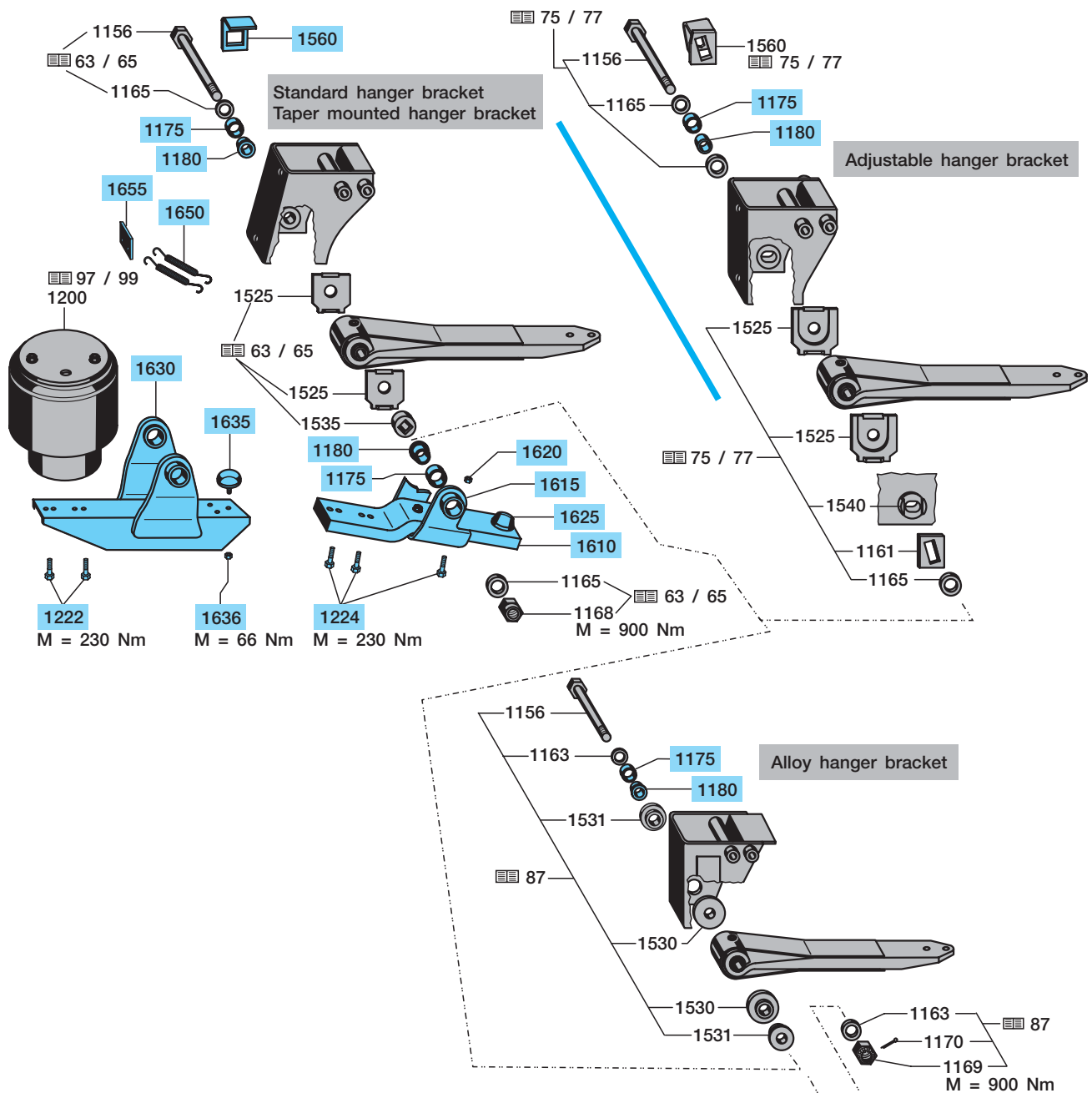
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13.1 Sidewise mounted axle lifts

Sidewise mounted axle lifts, trailing arms 100 mm wide



Sidewise mounted axle lift

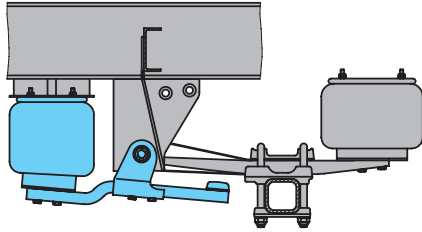


Sidewise mounted axle lifts 13.1

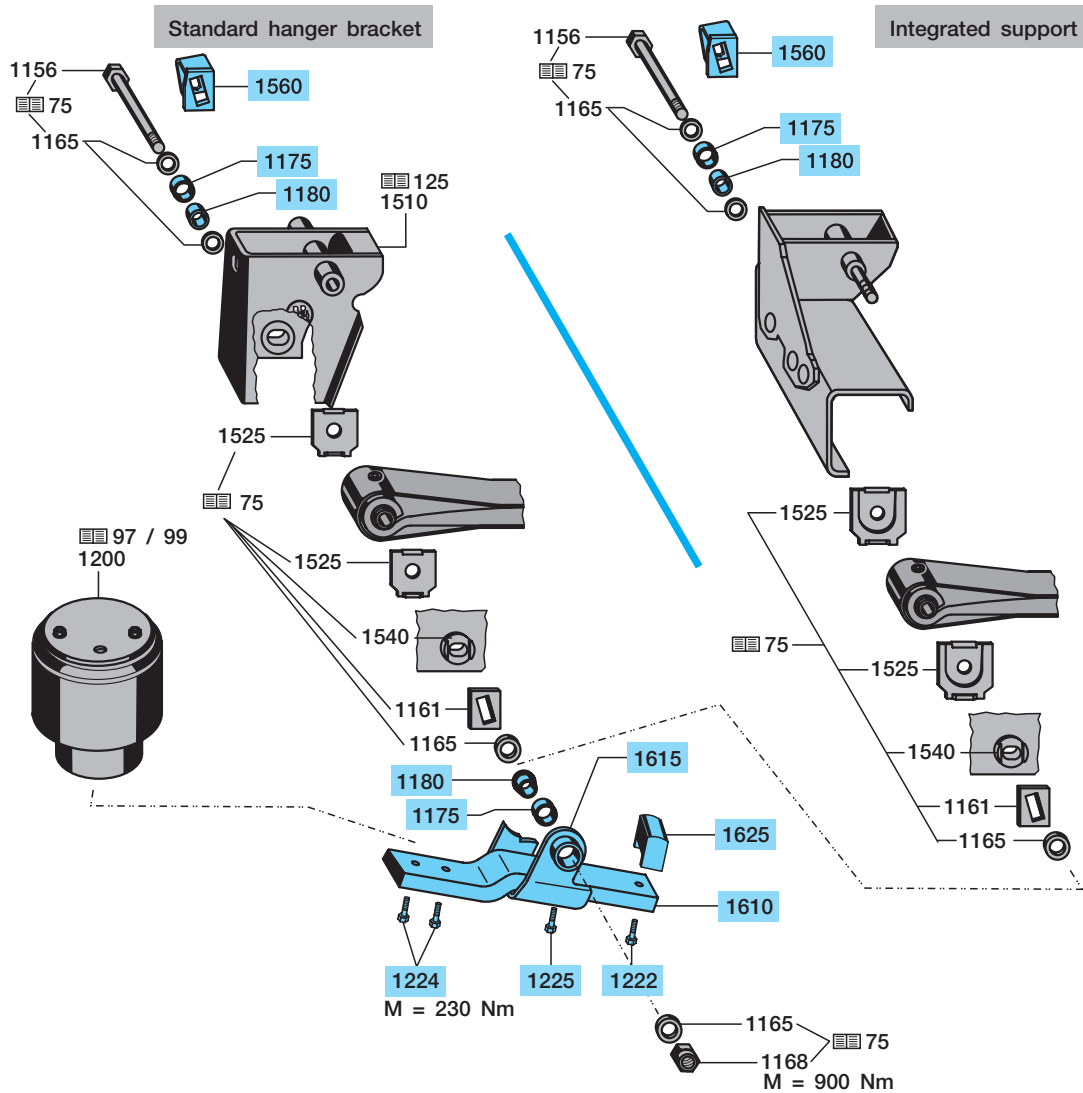
Sidewise mounted axle lift, trailing arms 100 mm wide							
Item	Designation	Remark	BPW Code no.	Dimension			
			Welded supporting arm with bump stop				
				B	H	L 4	
1630	Lever	(for steel hanger bracket)	05.190.49.39.0	166	105	280	
			05.190.49.45.0		105	320	
			05.190.49.55.0		120	230	
			05.190.49.56.0		135	280	
			05.190.49.28.0		165	250	
			05.190.49.29.0		165	280	
			05.190.49.30.0		165	320	
			05.190.49.31.0		165	350	
			05.190.49.32.0		165	390	
			05.190.49.62.0		165	470	
			05.190.49.46.0		165	550	
			05.190.49.57.0		185	215	
					Support		
1630	Lever	(for alloy hanger bracket)	05.190.49.63.0	192	105	280	
			05.190.49.49.0		130	240	
			05.190.49.50.0		135	280	
			05.190.49.54.0		135	320	
			05.190.49.47.0		165	250	
			05.190.49.48.0		165	280	
1635	Bump stop		02.3506.01.00	□ 80 / M 12 x 32			No longer available. Change over to solid lever (page 151) if replacement is required.
			02.3506.02.00	∅ 80 / M 12			
1636	Lock nut		02.5273.33.80	M 12 - 10			
1650	Return spring		05.397.36.05.0	∅ 3.5 / 23.5 x 250			
1655	Plate		03.281.42.12.0	70 x 70 x 6			

13.1 Sidewise mounted axle lifts

Sidewise mounted axle lifts, trailing arms 70 mm wide



Sidewise mounted axle lift

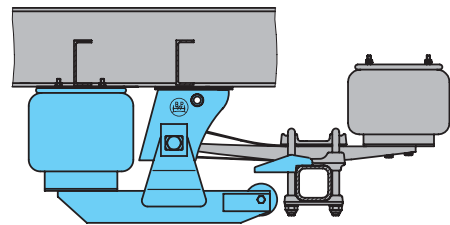
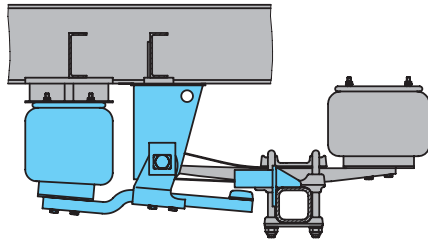


Sidewise mounted axle lift, trailing arms 70 mm wide			
Item	Designation	Remark	BPW Code no. Dimension
			Adjustable spring pivot bolt bearing, hanger bracket / integrated support with elongated hole, connecting link disc with welded on torsion protection
1156	Screw (Spring bolt)		see page 75
1161	Plate (fit connecting link disc)		
1165	Washer		
1168	Lock nut		
1175	Bush		03.113.94.10.0 \varnothing 41 / 50 x 23
1180	Ring		03.310.30.49.0 \varnothing 30 / 39 x 25
1200	Air bag		see page 97 / 99
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
1513	Hanger bracket		see page 125
1525	Shaped plate		see page 75
1560	Connecting link disc with welded on torsion protection		
			Solid, screwed supporting arm
			Supporting arm with bump stop
1610	Supporting 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

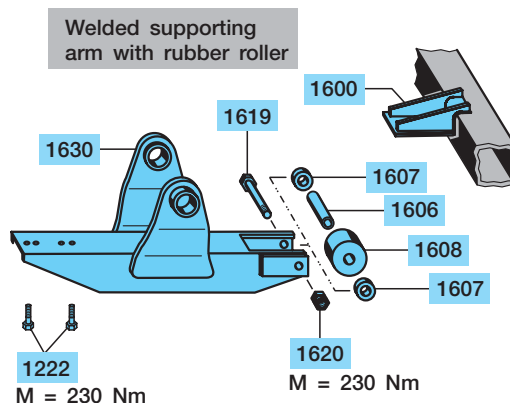
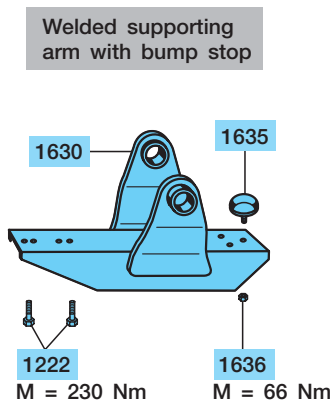
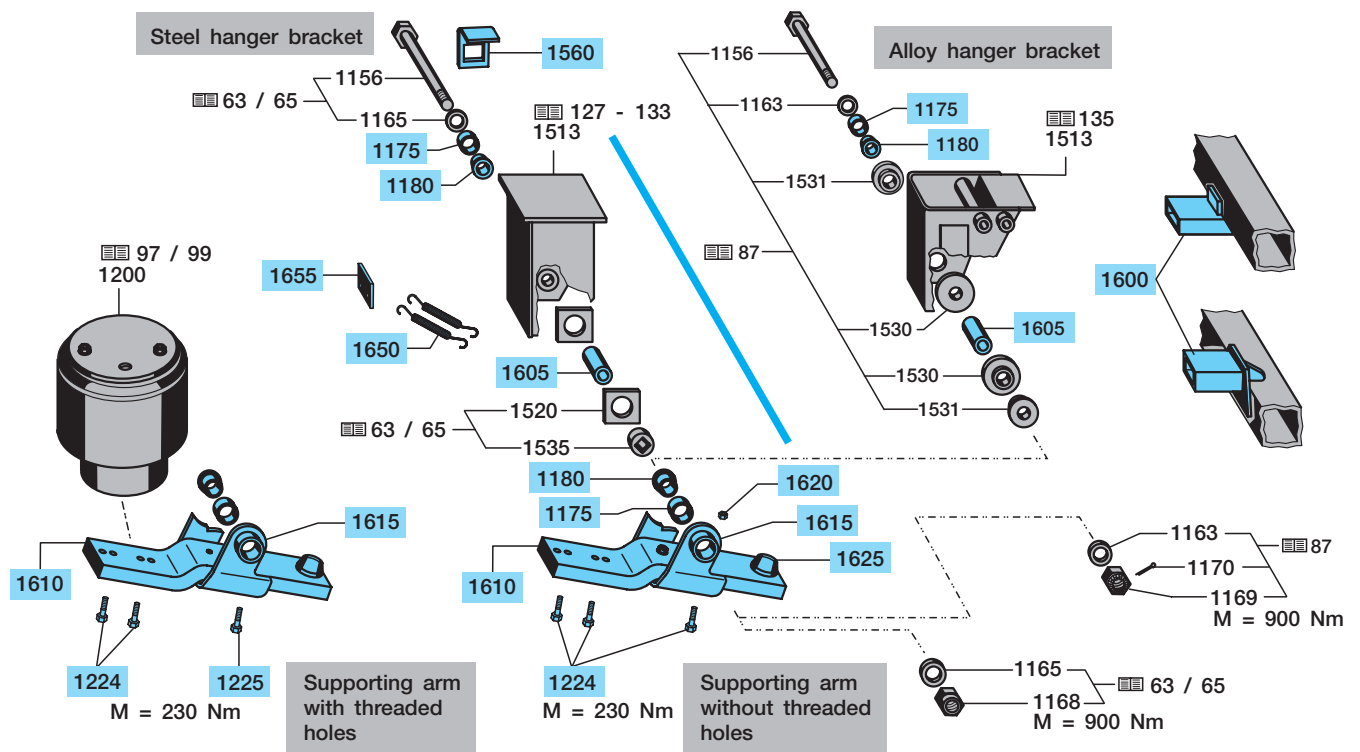
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13.2 Central axle lifts

Central axle lift



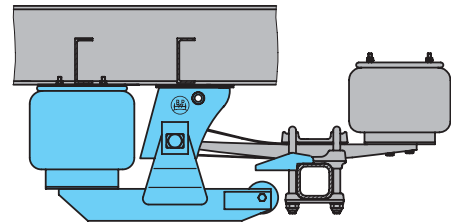
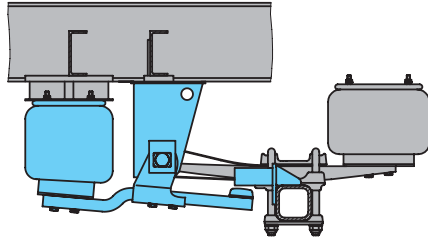
Central axle lift



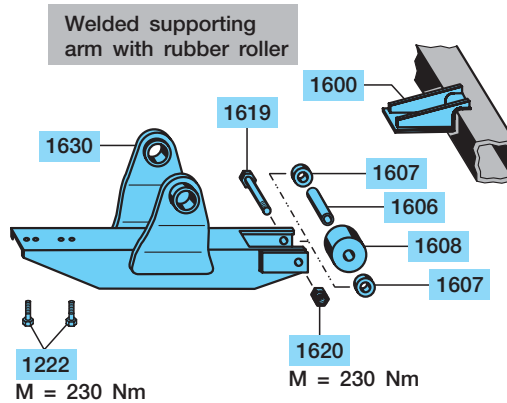
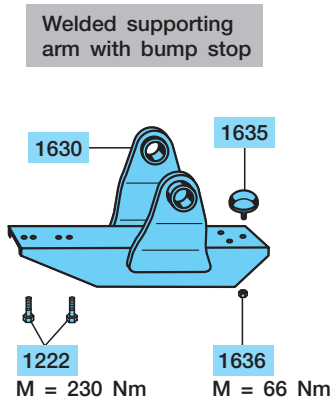
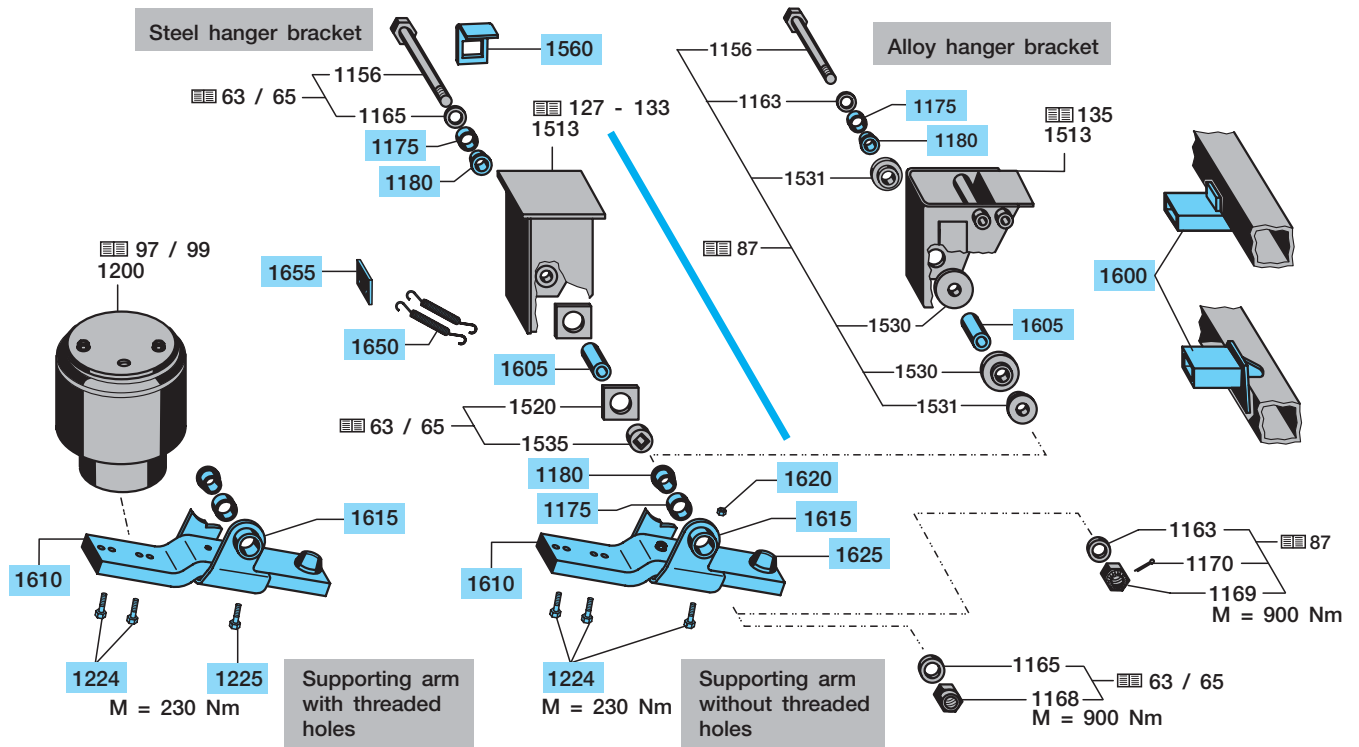
Central axle lift			
Item	Designation	Remark	BPW Code no. Dimension
			Steel hanger bracket, torsion protection with square internal lock bush
			Alloy hanger bracket
1156	Screw (Spring bolt)		see page 63 / 65
1163	Washer		
1165	Washer		
1168	Lock nut		
1169	Castle nut		
1170	Split pin		
1175	Bush		03.113.94.10.0 Ø 41 / 50 x 23
1180	Bush		03.113.01.29.0 Ø 30 / 40 / 46 x 31
1200	Air bag		see page 97 / 99
1222	Locking screw		03.340.12.21.0 M 16 x 30 (for welded supporting arm)
1224	Locking screw		02.5070.95.00 M 16 x 65 (for solid supporting arm)
1513	Hanger bracket		see page 127 - 133
1560	Shaped plate (welded on torsion protection with steel hanger brackets)		-
Supporting arm with bump stop			
			Support above the axle
			Support underneath the axle
1600	Support		05.189.06.53.0 □ 120/150, Ø 127
			-
			05.189.07.31.0 □ 120, Ø 127
			05.189.07.32.0 □ 150
Supporting arm with bump stop			
			Support above the axle
1600	Support		05.189.10.31.0 □ 120/150, Ø 127
1605	Tube		03.301.74.04.0 Ø 35 / 51 x 102
Solid, screwed supporting arm			
			Supporting arm with bump stop
1610	Supporting arm		03.195.00.97.0 L = 680
			03.195.00.96.0 L = 720
1615	Support	(for steel hanger bracket)	05.189.12.38.0 B = 166
		(for steel hanger bracket)	05.189.13.19.0 B = 176
		(for alloy hanger bracket)	05.189.07.38.0 B = 192.5
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 supporting arm without threaded holes.			

13.2 Central axle lifts

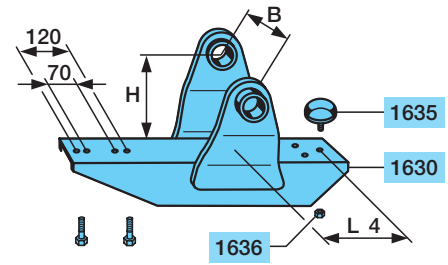
Central axle lift



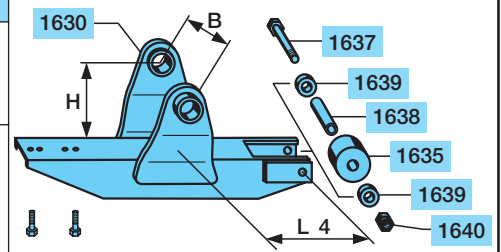
Central axle lift



Central axle lift								
Item	Designation	Remark	BPW Code no.	Dimension				
			Welded supporting arm with bump stop					
				B	H			
1630	Lever (for steel hanger bracket)		05.190.49.39.0	166	105	280		
			05.190.49.45.0		105	320		
			05.190.49.55.0		120	230		
			05.190.49.56.0		135	280		
			05.190.49.28.0		165	250		
			05.190.49.29.0		165	280		
			05.190.49.30.0		165	320		
			05.190.49.31.0		165	350		
			05.190.49.32.0		165	390		
			05.190.49.62.0		165	470		
			05.190.49.46.0		165	550		
			05.190.49.57.0		185	215		
			Support		05.189.14.83.0	176	55	240
		1630	Lever (for alloy hanger bracket)			05.190.49.63.0	192	105
	05.190.49.49.0			130	240			
	05.190.49.50.0			135	280			
	05.190.49.54.0			135	320			
	05.190.49.47.0			165	250			
	05.190.49.48.0			165	280			
1635	Bump stop		02.3506.01.00	□ 80 / M 12 x 32				
			02.3506.02.00	∅ 80 / M 12				
1636	Lock nut		02.5273.33.80	M 12 - 10				
			Welded supporting arm with rubber roller					
				B	H			
1630	Lever		05.190.49.44.0	176	165	275		
			05.190.49.74.0			380		
			05.190.49.72.0			420		
1635	Roll		03.331.98.01.0	∅ 25.5 / 110 x 70				
1637	Hexagon screw		02.5022.49.86	M 16 x 150-8.8				
1638	Tube		03.300.73.46.0	∅ 17 / 25 x 99				
1639	Ring		03.310.70.13.0	∅ 25.5 / 35 x 14				
1640	Lock nut		02.5220.23.82	VM 16-8				
1650	Return spring		05.397.36.05.0	∅ 3.5 / 23.5 x 250				
1655	Plate		03.281.43.12.0	70 x 70 x 6				

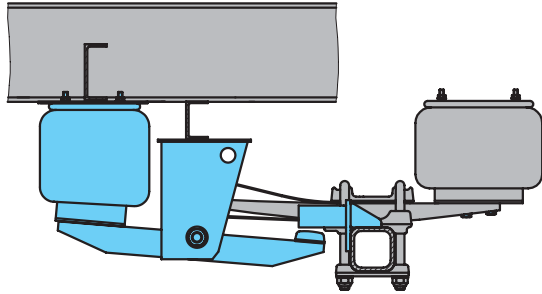


No longer available.
Change over to solid lever
(page 157) if replacement is
required.

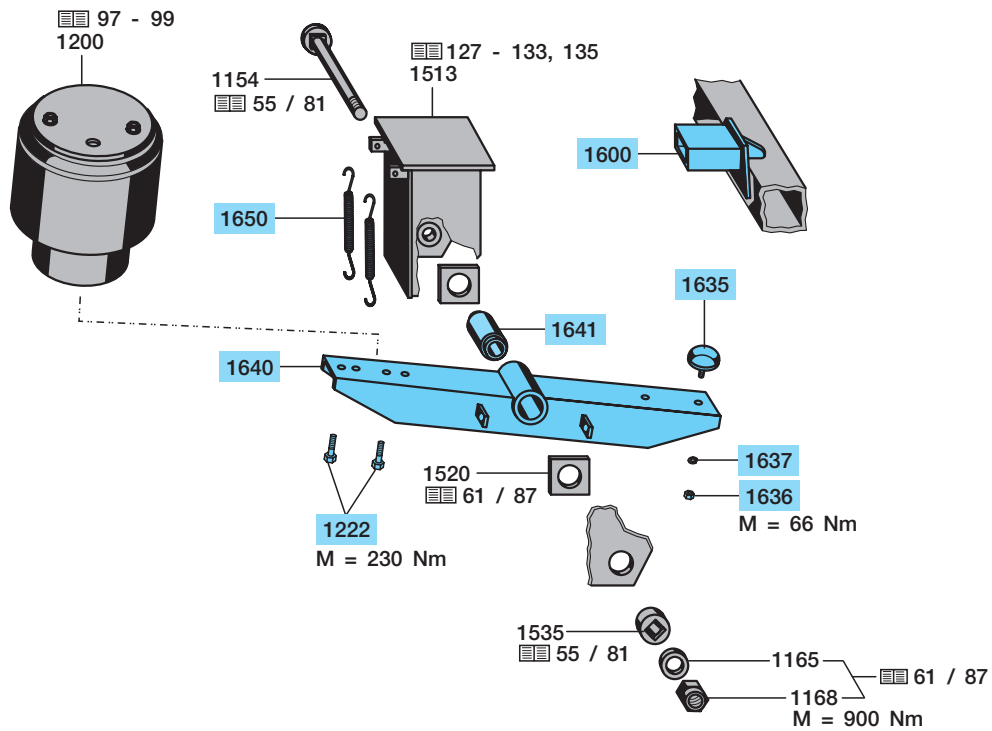


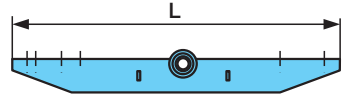
13.2 Central axle lifts

Central axle lift with rubber / steel bush



Central axle lift with rubber / steel bush

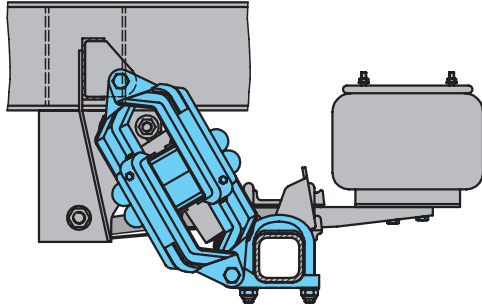


Central axle lift with rubber / steel bush			
Item	Designation	Remark	BPW Code no. Dimension
			Steel hanger bracket, torsion protection with square internal lock bush
			Alloy hanger bracket
1156	Screw (Spring bolt)		see page 61
1165	Washer		
1168	Lock nut		
	Castle nut		
1200	Air bag		see page 91 / 93
1222	Locking screw		03.340.12.21.0 M 16 x 30
1513	Hanger bracket		see page 127 - 133
			see page 135
1600	Support		05.189.06.53.0
1635	Bump stop		02.3506.01.00
1636	Lock nut		02.5220.14.82 M 12
1637	Spring washer		02.5403.12.90 B 12 / 137
1640	Lever (incl. item 1641)		05.190.49.36.0 L 880 05.190.49.53.0 L 1050
1641	Bush		02.0316.06.00 Ø 30 / 60 x 102
			
1650	Return spring		05.397.36.05.0 Ø 3.5 / 23.5 x 250

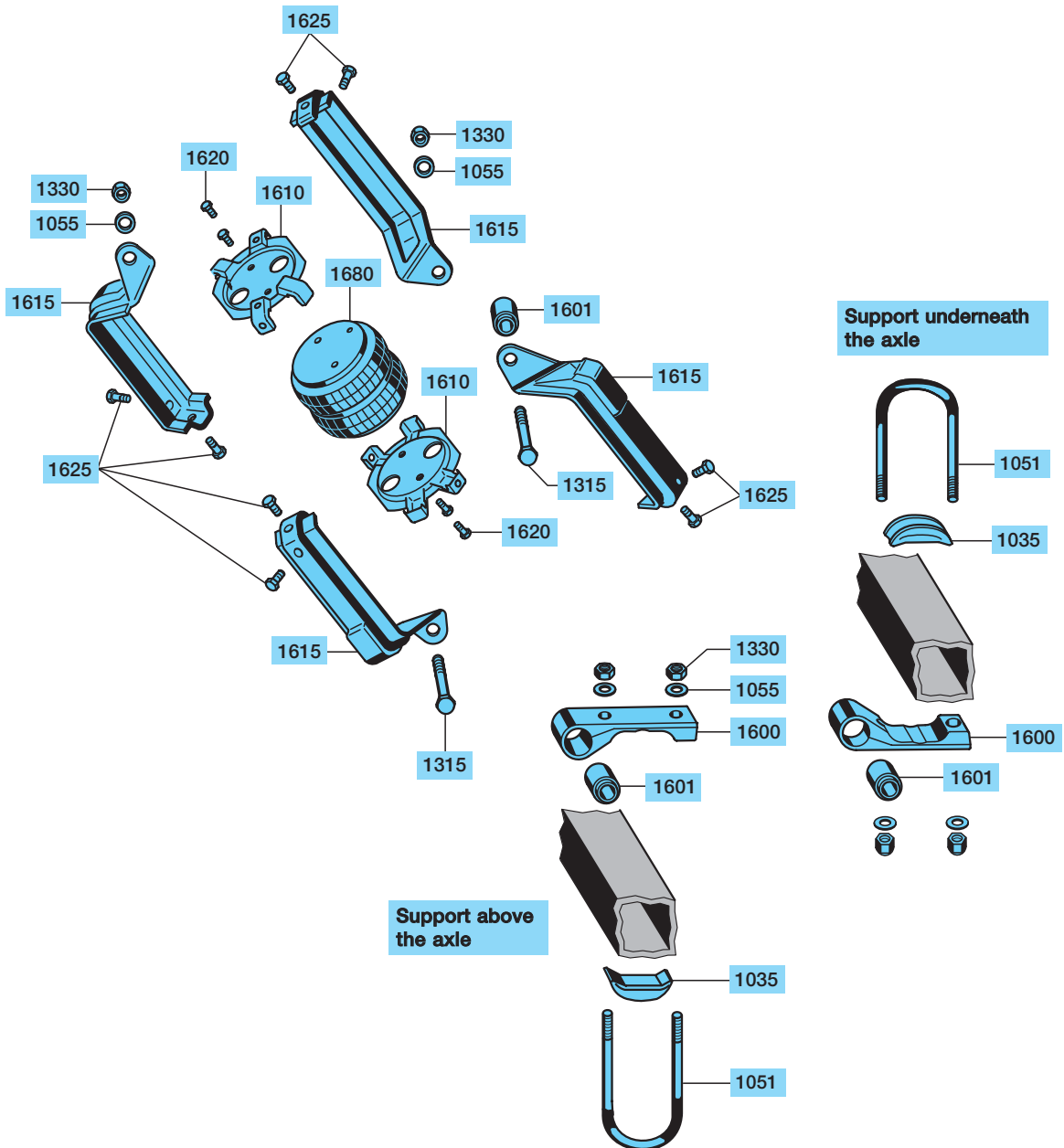
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13.2 Central axle lifts

Central axle lift



Central axle lift

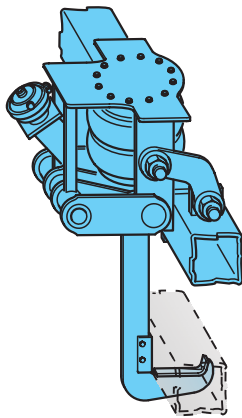


Central axle lift				
Item	Designation	Remark	BPW Code no.	Dimension
1035	Segment		03.345.23.02.1	for □ 120
1051	Spring U-bolt		03.138.41.31.4	for □ 120
1055	Washer		02.5401.25.07	Ø 25 / 125
1315	Hexagon screw		02.5023.29.82	M 24 x 120 / 931
1330	Lock nut		02.5220.74.12	VM 24 / 980-10
1600	Support (incl. item 1601)		05.189.13.28.0	for □ 120
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	

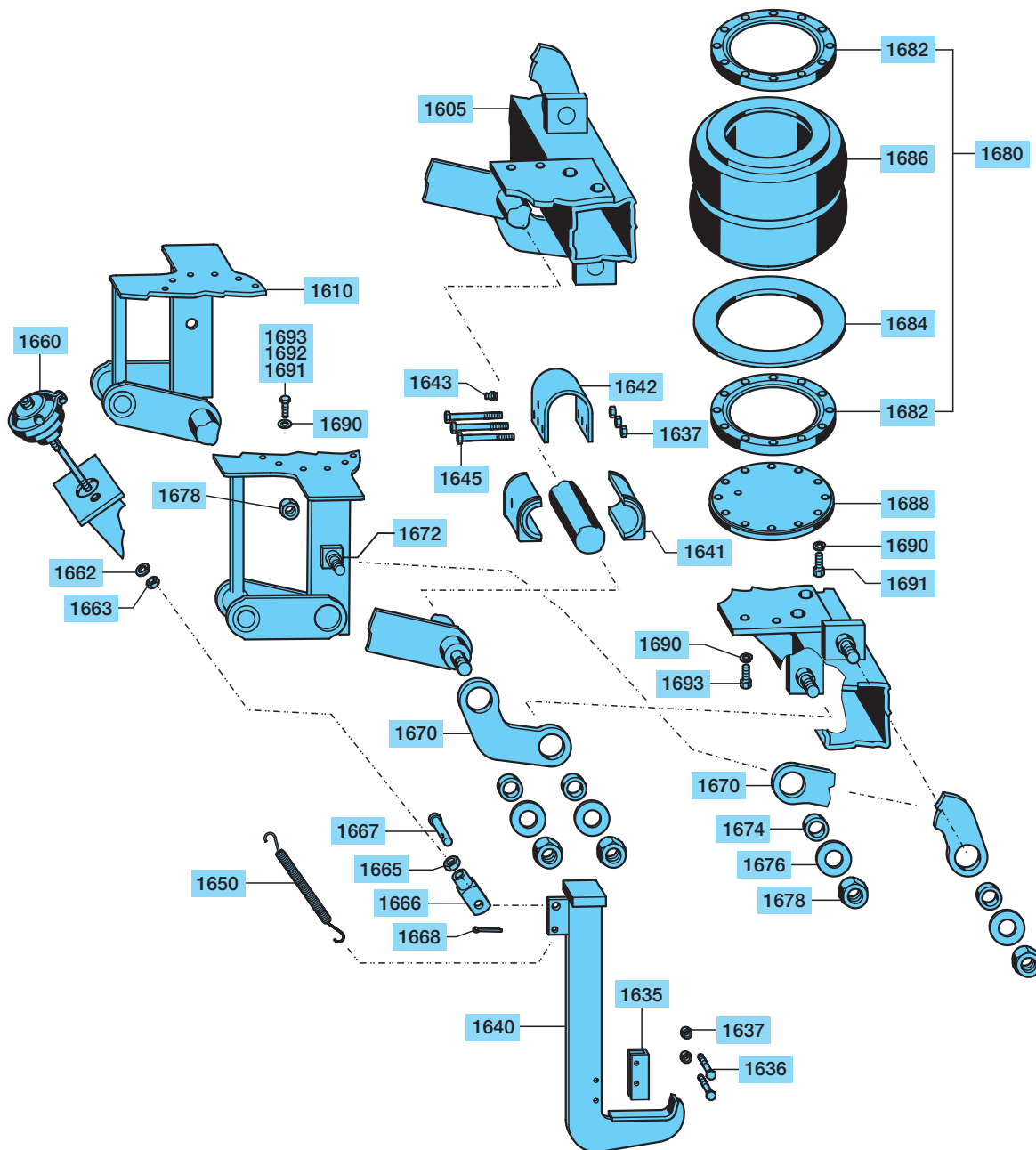


13.2 Central axle lifts

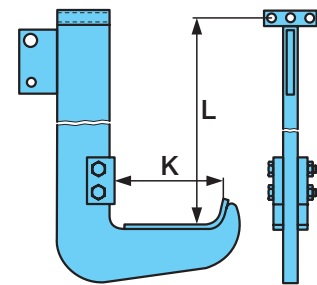
Axle lift (central) with lever



Axle lift (central) with lever



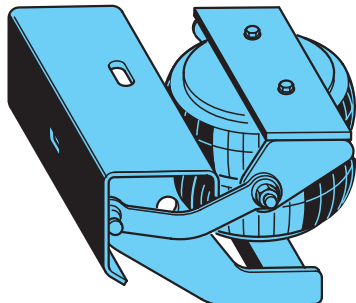
Axle lift (central) with lever				
Item	Designation	Remark	BPW Code no.	Dimension
1605	Profile		05.445.46.....	Model no longer available, for further information contact BPW.
1610	Support		05.189.05.80.0	
1635	Bump stop		03.060.02.12.0	
1636	Hexagon screw		02.5021.45.80	M 10 x 55 / 933-8.8
1637	Lock nut		02.5220.10.82	VM 10 / 980-10
				K L
1640	Lever		05.190.45.03.1	167
			05.190.45.24.1	220
			05.190.45.28.1	240
			05.190.45.12.1	272
			05.190.45.07.1	359
			05.190.45.20.1	372
			05.190.45.05.1	417
			05.190.45.19.1	272
			05.190.45.22.1	295
			05.190.45.18.1	337
			05.190.45.14.1	372
			05.190.45.16.1	397
			05.190.45.10.1	417
			05.190.45.09.1	490
1641	Bush		03.113.98.06.0	Ø 50 / 90 x 94
1642	Shaped plate		03.160.56.01.0	
1643	Grease nipple		02.6802.03.50	
1645	Hexagon screw		02.5021.54.10	M 10 x 110 / 931
1650	Return spring		05.397.26.02.0	
1660	Brake cylinder		02.0329.27.00	
1662	Spring washer		02.5601.12.90	A 12 / 127
1663	Hexagon nut		02.5202.16.80	M 12 / 934-8
1665	Hexagon nut		02.5205.08.04	M 16 x 1.5 / 936
1666	Fork head		02.1201.13.00	G 16 x 32
1667	Bolt		02.5826.50.15	16 x 45 x 37
1668	Split pin		02.6201.41.01	4 x 25
1670	Plate		03.285.64.27.0	
1672	Threaded bolt		03.177.43.06.0	M 20 / □ 40 / M 20 x 79
1674	Ring		03.310.80.04.0	Ø 24.5 / 33.5 x 11
1676	Washer		03.320.32.28.0	Ø 21 / 51 x 4
1678	Lock nut		03.260.03.12.0	M 20 - 10
1680	Air bag (incl. item 1682 - 1686)		05.429.00.01.0	
1682	Ring		03.310.09.26.0	
1684	Ring		03.310.19.26.0	
1686	Air bag (only)		02.2002.05.00	
1688	Washer		03.320.69.11.0	Ø 205 x 8
1690	Spring washer		02.5403.08.92	B 8 (24x)
1691	Hexagon screw		02.5025.28.82	M 8 x 20 - 8.8 (8x)
1692	Hexagon screw		02.5025.31.80	M 8 x 30 - 8.8 (4x)
1693	Hexagon screw		02.5025.32.80	M 8 x 28 - 8.8 (12x)



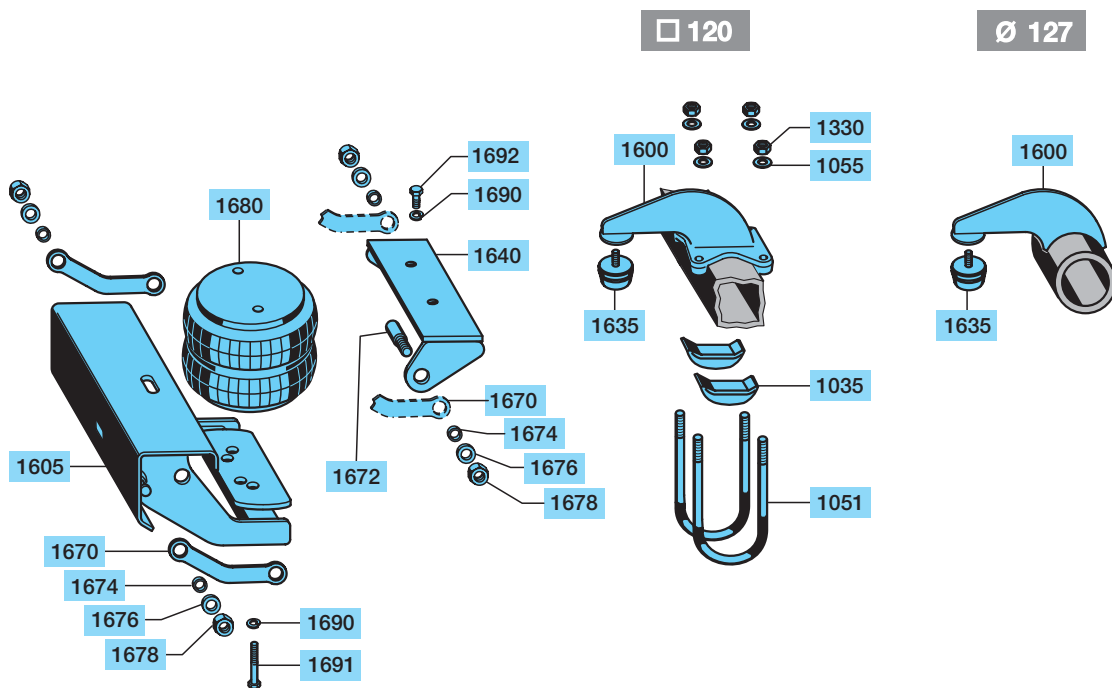
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13.2 Central axle lifts

Central axle lift with support



Central axle lift with support

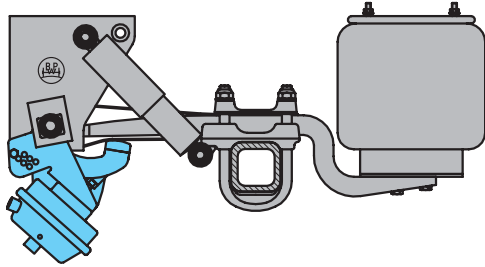


Central axle lift with support

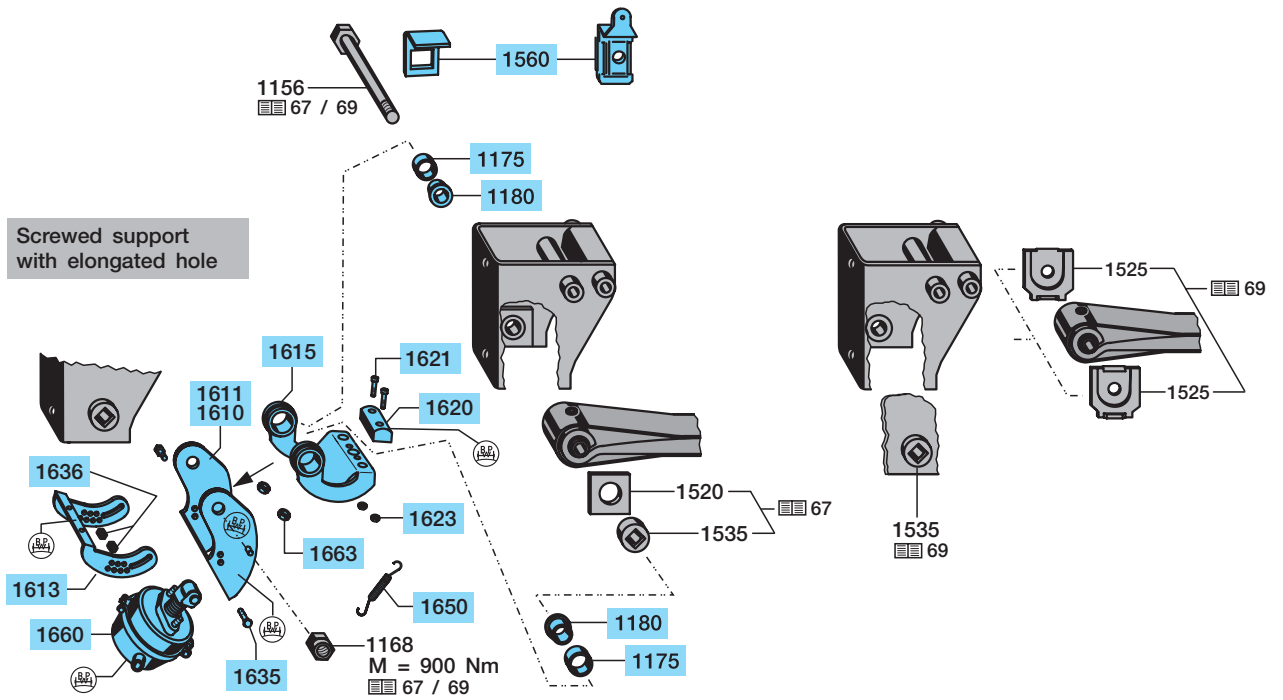
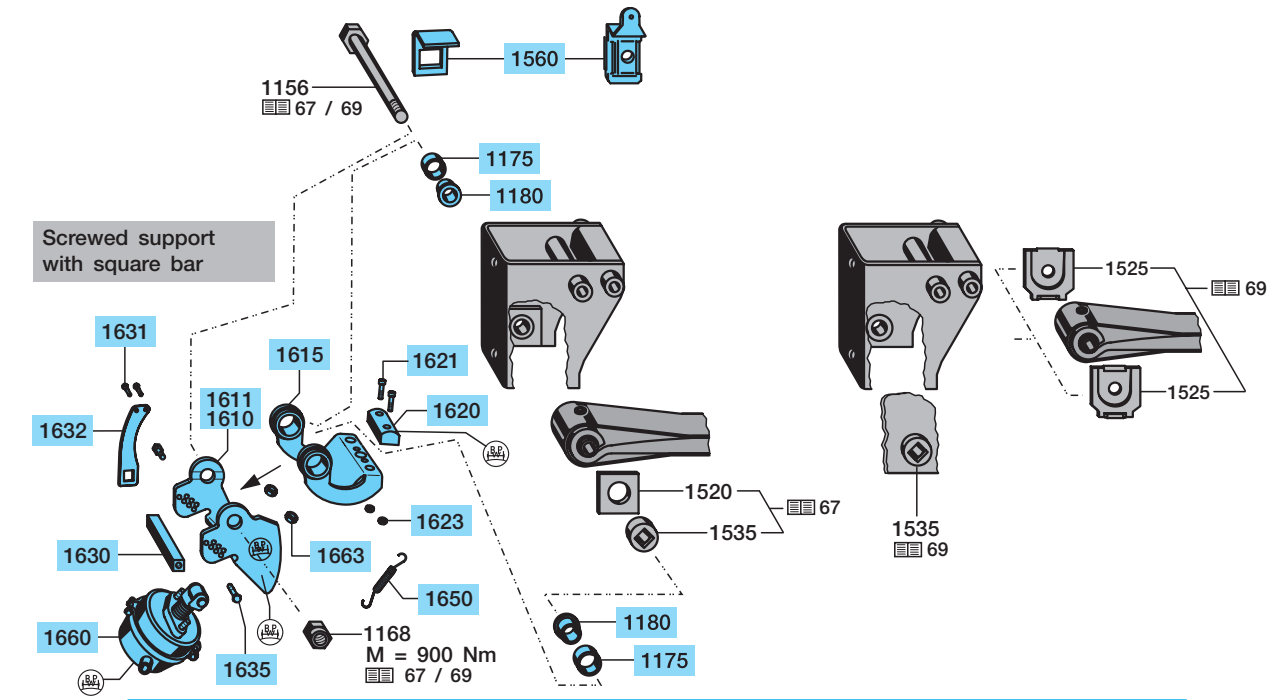
Item	Designation	Remark	BPW Code no. Dimension			BPW Code no. Dimension		
			□ 120			Ø 127		
1035	Segment		03.345.23.02.1			-		
1051	Spring U-bolt		03.138.41.31.4			-		
1055	Washer		02.5401.25.07 Ø 25 / 125			-		
1330	Lock nut		02.5220.74.12 VM 24 / 980			-		
				A	B		A	B
1600	Support (incl. item 1635)		05.189.12.32.0	255	152	05.189.12.40.0	255	167
			05.189.12.15.0	255	215	05.189.12.17.0	255	254
			05.189.12.25.0	255	275	05.189.12.35.0	255	305
			05.189.13.04.0	255	298	05.189.12.73.0	265	202
1605	Integrated support (incl. item 1672)		upon request					
1635	Bump stop		02.3506.02.00 Ø 80 / M 12					
1640	Support		05.189.11.59.0					
1670	Lever		03.190.08.02.0					
1672	Threaded bolt		03.177.33.14.0 M 20 / Ø 24 x 56					
1674	Ring		03.310.80.04.0 Ø 24.5 / 33.5 x 11					
1676	Washer		03.320.32.28.0 Ø 21 / 51 x 4					
1678	Lock nut		03.260.03.12.0 M 20 - 10					
1680	Air bag		02.2002.18.00					
1690	Spring washer		02.5403.08.92 B 8 / 137					
1691	Hexagon screw		02.5021.26.80 M 8 x 55 / 933-8.8					
1692	Hexagon screw		02.5025.29.80 M 8 x 22 / 933-8.8					

13.3 Two-side axle lifts

Two-side axle lift, steel hanger bracket with unadjustable spring pivot bolt bearing



Two-side axle lift



Two-side axle lift, steel hanger bracket with unadjustable spring pivot bolt bearing				
Item	Designation	Remark	BPW Code no. Dimension	
Trailing arms 100 mm wide				
1156	Screw (Spring bolt)		see page 67 / 69	
1163	Washer			
1165	Washer			
1168	Lock nut			
1175	Bush		03.113.04.11.0 Ø 42 / 50 / 54 x 17.5	
1180	Bush		03.113.01.37.0 Ø 30 / 42 / 62 x 22	
1560	Shaped plate (welded on torsion protection)		03.161.35.07.0 for SW 46	
	Shaped part (screwed on torsion protection)		03.001.14.88.0 for SW 46	
		Screwed support with square bar	Screwed support with elongated hole	
1609	Retrofit kit two-side axle lift (Item 1610, 1611, 1615, 1660)		09.801.02.89.0 Contents per axle	09.801.02.90.0 Contents per axle
1610	Support, right		03.189.14.22.0	05.189.14.26.0
1611	Support, left		03.189.14.21.0	05.189.14.27.0
1613	Support with elongated hole		-	05.189.14.28.0
1615	Lever		05.190.44.14.0	
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	
1630	Square bar		03.441.01.18.0 □ 25 x 205	-
1631	Locking screw		02.5071.37.00 M 8 x 45	-
1632	Plate		03.285.46.26.0	-
1635	Locking screw		02.5071.53.11 M 12 x 30	02.5071.53.11 M 12 x 30
1636	Lock nut		-	02.5220.14.82 VM 12 / 980-8
1650	Return spring		03.397.26.07.0 Ø 22.5 / 2.5 x 99	
1660	Diaphragm cylinder for axle lift		05.444.10.37.0 Type 36, Stroke > 90 mm	
1663	Hexagon nut		02.5202.21.80 M 16 x 1.5	
See pages 180 / 181 for assembly and installation instructions.				

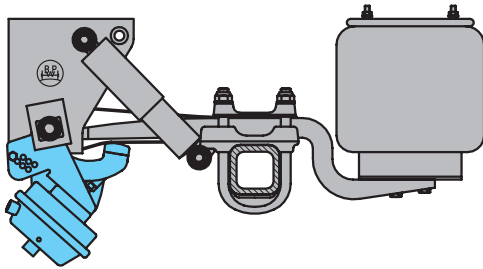
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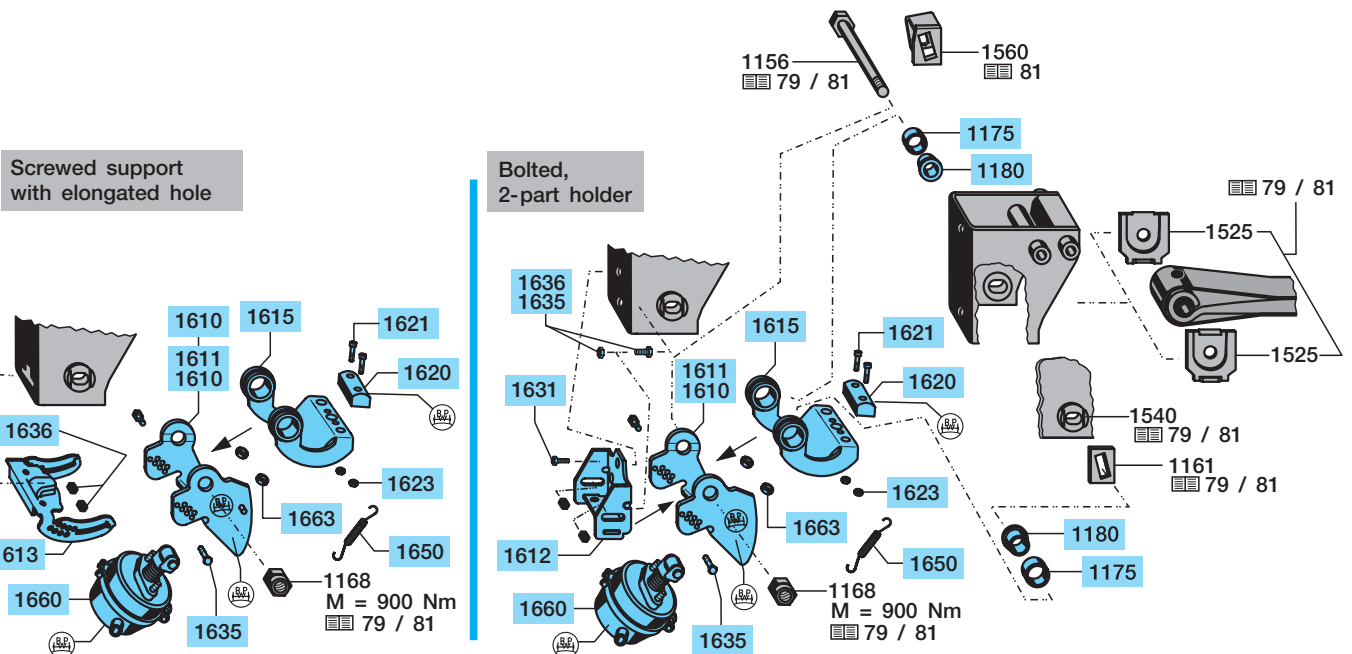
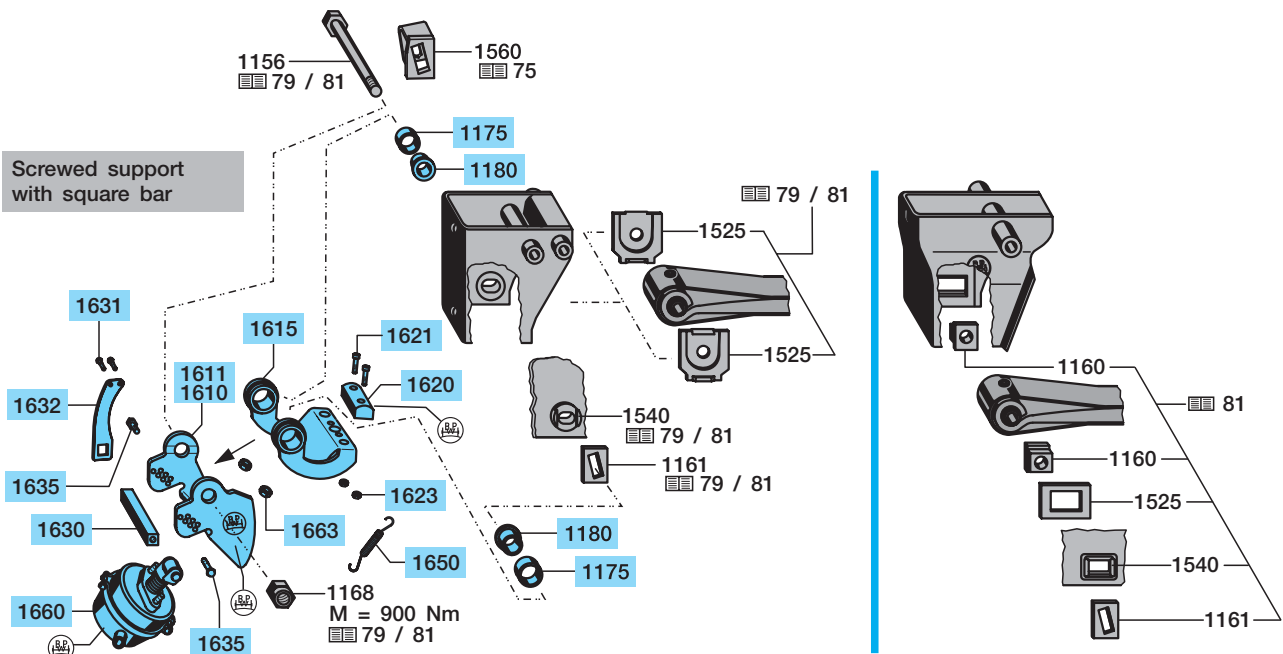
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13.3 Two-side axle lifts

Two-side axle lift, steel hanger bracket with adjustable spring pivot bolt bearing



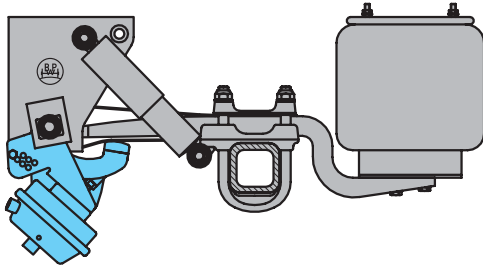
Two-side axle lift



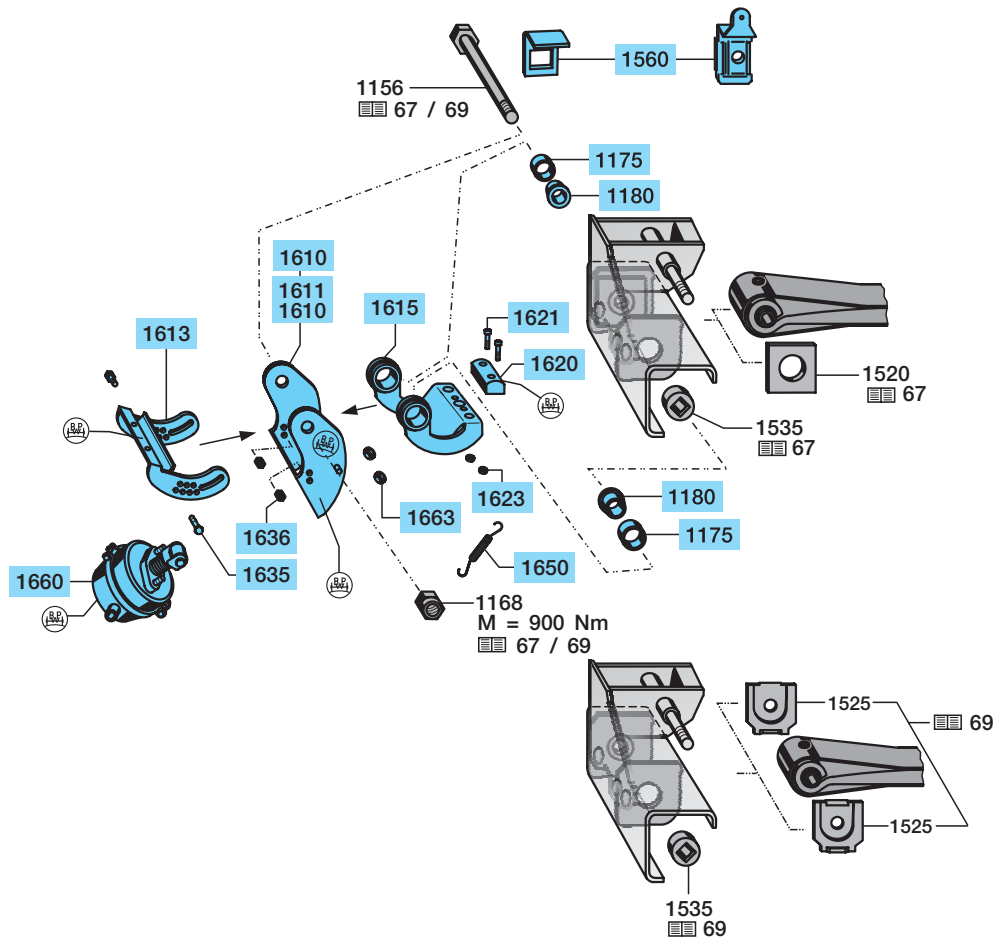
Two-side axle lift, steel hanger bracket with adjustable spring pivot bolt bearing				
Item	Designation	Remark	BPW Code no. Dimension	
			Trailing arm 70 mm wide	Trailing arm 100 mm wide
1156	Screw (Spring bolt)		see page 79	see page 81
1161	Plate (fit connecting link disc)			
1163	Washer			
1165	Washer			
1168	Lock nut			
1175	Bush		03.113.04.11.0	∅ 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0	∅ 30 / 42 / 62 x 22
1525	Shaped plate		see page 79	see page 81
1560	Shaped plate (welded on torsion protection)			
	Shaped part (Connecting link disc with welded on torsion protection)			
			Screwed support with square bar, trailing arm 100 mm wide	Screwed support with elongated hole, trailing arm 100 mm wide
1609	Retrofit kit two-side axle lift (Item 1610, 1611, 1615, 1660)		09.801.02.89.0	Contents per axle
1610	Support, right		03.189.14.22.0	05.189.14.26.0
1611	Support, left		03.189.14.21.0	05.189.14.27.0
1613	Support		-	05.189.14.28.0 (for steel hanger bracket)
			Screwed support with elongated hole, trailing arm 70 mm wide	
1610	Shaped plate		03.165.46.52.0	
1613	Shaped plate		05.165.46.57.0	(for steel hanger bracket)
			Bolted, 2-part holder, trailing arm 70 mm wide	
1610	Support, right		03.189.14.98.0	
1611	Support, left		03.189.14.97.0	
1612	Support		03.189.14.96.0	
			Trailing arm 70 mm wide	Trailing arm 100 mm wide
1615	Lever		05.190.44.12.0	05.190.44.14.0
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
			Screwed support with elongated hole	Screwed support with square bar
1630	Square bar		-	03.441.01.18.0 □ 25 x 205
1631	Locking screw		-	02.5071.37.00 M 8 x 45
1632	Plate		-	03.285.46.26.0
1635	Locking screw		02.5071.53.11	M 12 x 30
1636	Lock nut		02.5220.14.82	VM 12 / 980-8
1650	Return spring		03.397.26.07.0	∅ 22.5 / 2.5 x 99
1660	Diaphragm cylinder for axle lift		05.444.10.37.0	Type 36, Stroke > 90 mm
1663	Hexagon nut		02.5202.21.80	M 16 x 1.5
See pages 180 / 181 for assembly and installation instructions.				

13.3 Two-side axle lifts

Two-side axle lift, integrated support with unadjustable spring pivot bolt bearing



Two-side axle lift

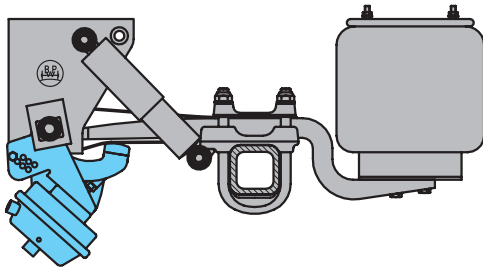


Two-side axle lift, integrated support with unadjustable spring pivot bolt bearing			
Item	Designation	Remark	BPW Code no. Dimension
			Trailing arms 100 mm wide
1156	Screw (Spring bolt)		see page 67 / 69
1163	Washer		
1165	Washer		
1168	Lock nut		
1175	Bush		03.113.04.11.0 Ø 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0 Ø 30 / 42 / 62 x 22
1560	Shaped plate (welded on torsion protection)		03.161.35.07.0 for SW 46
	Shaped part (screwed on torsion protection)		03.001.14.88.0 for SW 46
			Screwed support with elongated hole
1609	Retrofit kit two-side axle lift (Item 1610, 1611, 1615, 1660)		09.801.02.90.0 Contents per axle
1610	Support, right		05.189.14.26.0
1611	Support, left		05.189.14.27.0
1613	Support with elongated hole		05.189.14.25.0
1615	Lever		05.190.44.14.0
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
1635	Locking screw		02.5071.53.11 M 12 x 30
1636	Lock nut		02.5220.14.82 VM 12 / 980-8
1650	Return spring		03.397.26.07.0 Ø 22.5 / 2.5 x 99
1660	Diaphragm cylinder for axle lift		05.444.10.37.0 Type 36, Stroke > 90 mm
1663	Hexagon nut		02.5202.21.80 M 16 x 1.5
See pages 180 / 181 for assembly and installation instructions.			

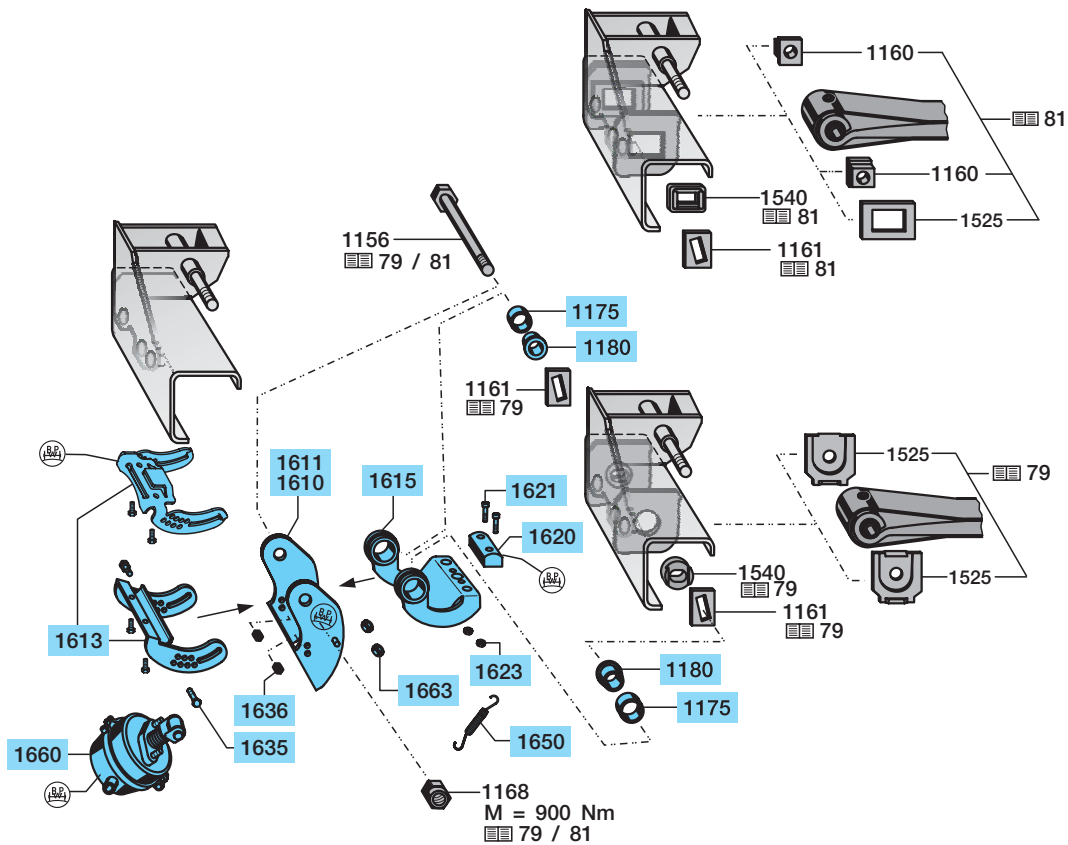
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13.3 Two-side axle lifts

Two-side axle lift, integrated support with adjustable spring pivot bolt bearing



Two-side axle lift

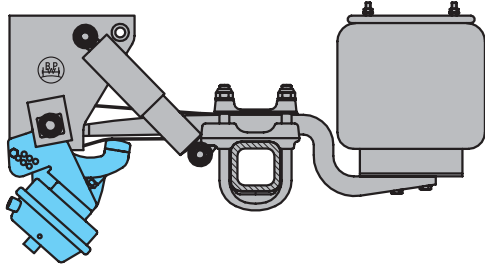


Two-side axle lift, integrated support with adjustable spring pivot bolt bearing					
Item	Designation	Remark	BPW Code no. Dimension		
			<table border="1"> <thead> <tr> <th>Trailing arm 70 mm wide</th> <th>Trailing arm 100 mm wide</th> </tr> </thead> </table>	Trailing arm 70 mm wide	Trailing arm 100 mm wide
Trailing arm 70 mm wide	Trailing arm 100 mm wide				
1156	Screw (Spring bolt)				
1161	Plate (fit connecting link disc)				
1163	Washer	see page 79	see page 81		
1165	Washer				
1168	Lock nut				
1175	Bush	03.113.04.11.0	Ø 42 / 50 / 54 x 17.5		
1180	Bush	03.113.01.37.0	Ø 30 / 42 / 62 x 22		
1525	Shaped plate	see page 79	see page 81		
			<table border="1"> <thead> <tr> <th>Screwed support with elongated hole, trailing arm 100 mm wide</th> </tr> </thead> </table>	Screwed support with elongated hole, trailing arm 100 mm wide	
Screwed support with elongated hole, trailing arm 100 mm wide					
1609	Retrofit kit two-side axle lift (Item 1610, 1611, 1615, 1660)	09.801.02.90.0	Contents per axle		
1610	Support, right	05.189.14.26.0			
1611	Support, left	05.189.14.27.0			
1613	Support	05.189.14.25.0	(for integrated support)		
			<table border="1"> <thead> <tr> <th>Screwed support with elongated hole, trailing arm 70 mm wide</th> </tr> </thead> </table>	Screwed support with elongated hole, trailing arm 70 mm wide	
Screwed support with elongated hole, trailing arm 70 mm wide					
1610	Shaped plate	03.165.46.52.0			
1613	Shaped plate	03.165.46.53.0	(for integrated support)		
			<table border="1"> <thead> <tr> <th>Trailing arm 70 mm wide</th> <th>Trailing arm 100 mm wide</th> </tr> </thead> </table>	Trailing arm 70 mm wide	Trailing arm 100 mm wide
Trailing arm 70 mm wide	Trailing arm 100 mm wide				
1615	Lever	05.190.44.12.0	05.190.44.14.0		
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		
			<table border="1"> <thead> <tr> <th>Screwed support with elongated hole</th> </tr> </thead> </table>	Screwed support with elongated hole	
Screwed support with elongated hole					
1635	Locking screw	02.5071.53.11	M 12 x 30		
1636	Lock nut	02.5220.14.82	VM 12 / 980-8		
1650	Return spring	03.397.26.07.0	Ø 22.5 / 2.5 x 99		
1660	Diaphragm cylinder for axle lift	05.444.10.37.0	Type 36, Stroke > 90 mm		
1663	Hexagon nut	02.5202.21.80	M 16 x 1.5		
See pages 180 / 181 for assembly and installation instructions.					

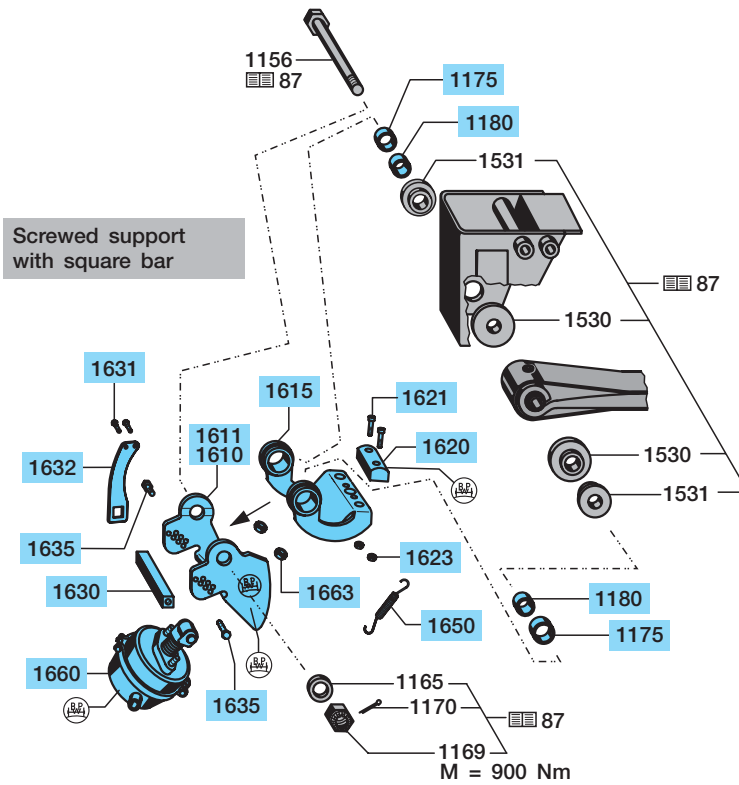
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13.3 Two-side axle lifts

Two-side axle lift, alloy hanger bracket with unadjustable spring pivot bolt bearing



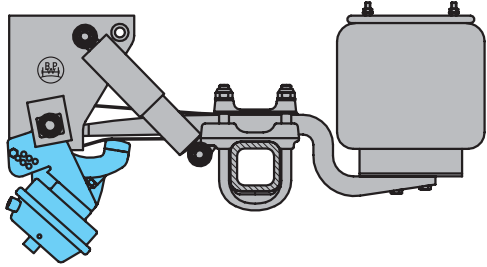
Two-side axle lift



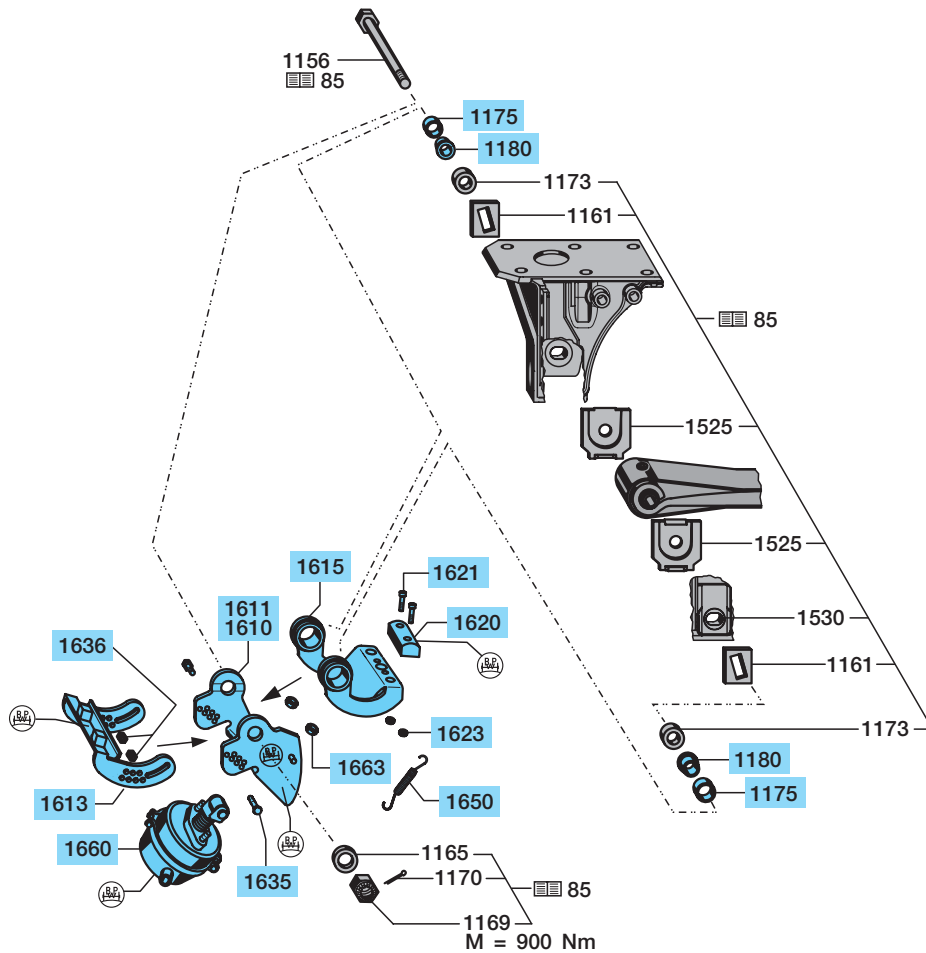
Two-side axle lift, alloy hanger bracket with unadjustable spring pivot bolt bearing			
Item	Designation	Remark	BPW Code no. Dimension
			Trailing arms 100 mm wide
1156	Screw (Spring bolt)		see page 87
1163	Washer		
1165	Washer		
1169	Castle nut		
1170	Split pin		
1175	Ring		03.310.92.09.0 Ø 42 / 50 x 15
1180	Bush		03.112.13.12.0 Ø 30 / 42 x 16
			Screwed support with square bar
1609	Retrofit kit two-side axle lift (Item 1610, 1611, 1615, 1660)		09.801.02.89.0 Contents per axle
1610	Support, right		03.189.14.22.0
1611	Support, left		03.189.14.21.0
1615	Lever		05.190.44.14.0
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
1630	Square bar		03.441.01.18.0 □ 25 x 205
1635	Locking screw		02.5071.53.11 M 12 x 30
1650	Return spring		03.397.26.07.0 Ø 22.5 / 2.5 x 99
1660	Diaphragm cylinder for axle lift		05.444.10.37.0 Type 36, Stroke > 90 mm
1663	Hexagon nut		02.5202.21.80 M 16 x 1.5
See pages 180 / 181 for assembly and installation instructions.			

13.3 Two-side axle lifts

Two-side axle lift, alloy hanger bracket with adjustable spring pivot bolt bearing



Two-side axle lift



Two-side axle lift, alloy hanger bracket with adjustable spring pivot bolt bearing			
Item	Designation	Remark	BPW Code no. Dimension
			Trailing arm 70 mm wide
1156	Screw (Spring bolt)		
1161	Plate (fit connecting link disc)		
1163	Washer		
1165	Washer	see page 85	
1169	Castle nut		
1170	Split pin		
1173	Washer		
1175	Bush		03.113.04.11.0 Ø 42 / 50 / 54 x 17.5
1180	Bush		03.113.01.37.0 Ø 30 / 42 / 62 x 22
1525	Shaped plate	see page 85	
			Screwed support with elongated hole, trailing arm 70 mm wide
1609	Retrofit kit two-side axle lift (Item 1610, 1611, 1615, 1660)		09.801.02.90.0 Contents per axle
1610	Support, right		05.189.14.26.0
1611	Support, left		05.189.14.27.0
1613	Support		05.189.15.13.0 (for alloy hanger bracket)
1615	Lever		05.190.44.14.0
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
			Screwed support with elongated hole
1635	Locking screw		02.5071.53.11 M 12 x 30
1636	Lock nut		02.5220.14.82 VM 12 / 980-8
1650	Return spring		03.397.26.07.0 Ø 22.5 / 2.5 x 99
1660	Diaphragm cylinder for axle lift		05.444.10.37.0 Type 36, Stroke > 90 mm
1663	Hexagon nut		02.5202.21.80 M 16 x 1.5
See pages 180 / 181 for assembly and installation instructions.			

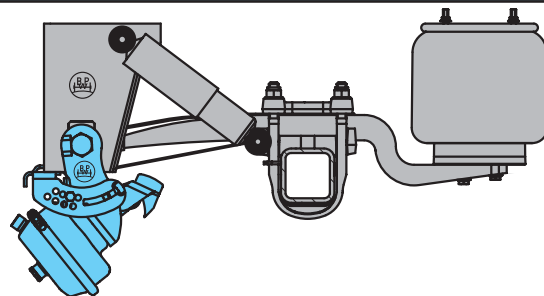
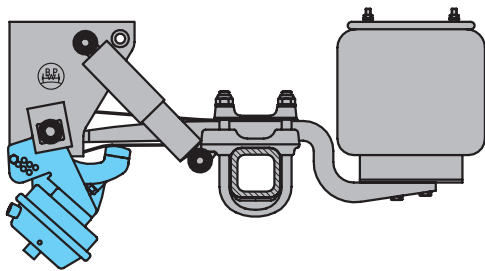
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13.3 Two-side axle lifts

Two-sided axle lift, installation notes



General

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

- 9 t air-suspension axles for single and twin wheels
- 10 t 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.).

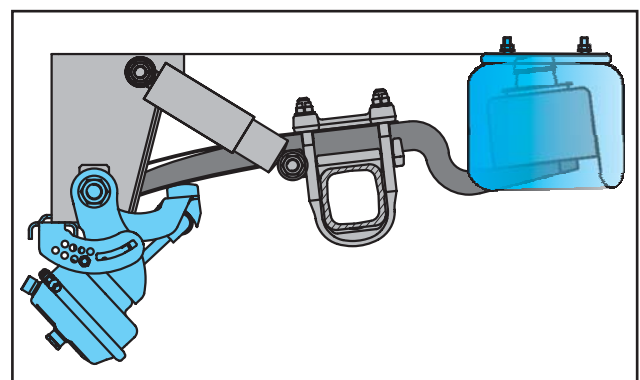
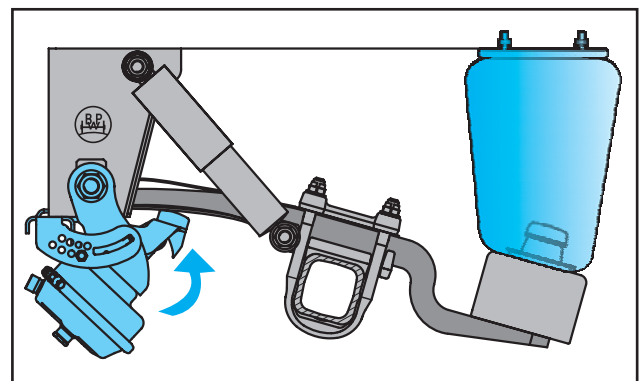
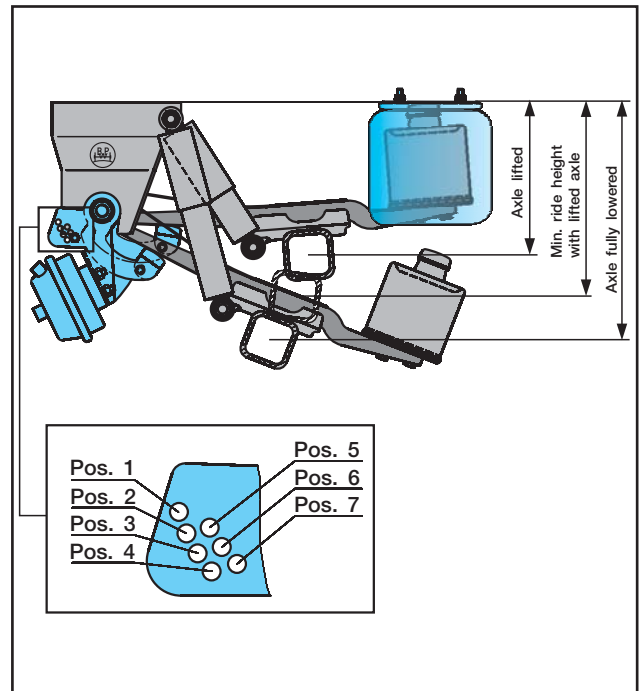
Two-sided axle lift, installation notes

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 (channel crossmember) 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 (channel crossmember).
 - Adjust the air suspension to the nominal ride height with the rotary disc in the "driving" position.
 - Fit the spring bolt anti-rotation lock.
 - Tighten the spring bolt screw connection to the prescribed tightening torque (M = 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.







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