

# BPW special tools and measuring devices

for BPW trailer axles and axle suspensions





Page 2 BPW-WP 39382201e

#### **BPW** special tools and measuring devices

#### **Contents**

			Page
0	1	Tools, general	4 – 14
	1.1	Spanner for wheel nuts	4
	1.2	Spanner for hub caps, flat version	5
	1.3	Box spanner for hub caps and axle nuts, long version	6
	1.4	Box spanner for axle nuts	7
	1.5	Box spanner for garage use	8
	1.6	Hub puller for wheel hubs and spoke wheels	9
	1.7	Tool outfits, tool kits	10 – 11
	1.8	Pressing tools for outer rings of roller bearings and ECO hub seal bearing races	12
	1.9	Assembly aid for ABS exciter ring	13
	1.10	Grease sprays for greasing roller bearings	14
0	2	Tools for drum brakes	16 – 19
	2.1	Lever, spring pliers and U-bolts for brake shoe assembly	16
	2.2	Pulling device for brake bolts	17
	2.3	Driving mandrel for bearing bushes on brake bolts and brake camshaft	18
	2.4	Pulling device for slack adjusters	19
0	3	Tools for the overhaul of BPW disc brakes	20 – 25
	3.1	Contents of the tool case	21
	3.2	BPW special tools at work	22 - 25
0	4	Tools for air suspensions and mechanical suspensions	26 – 29
	4.1	Assembly tools for rubber-steel bushes, for manual removal and assembly	26
	4.2	Assembly tools for rubber-steel bushes, assembly with a press	27
	4.3	Assembly tools for steel-rubber-steel bushes, assembly with a press	28
	4.4	Assembly tools for rubber-steel bushes, ECO Air/ECO Air Compact	29
0	5	Measuring devices	30
	5.1	Calibration tubes, threaded adapters and pulling screw	30

Valid: 01/05/2022

This list includes the original tools for BPW trailer axles and suspension units.

For more information on tool operation see the corresponding workshop manuals.

For current information and further information material, please visit our website: www.bpw.de.

Subject to change without notice.

#### BPW special tools and measuring devices

General

#### BPW special tools and measuring devices

Special tools and measuring devices have a long tradition at BPW Bergische Achsen KG and are based on decades of experience.

The existing range of tools has been systematically improved with each new generation of axles and expanded by new products.

For the maintenance and repair of its ECO Disc TS2/TSB disc brake, BPW offers a new **tool case (BPW code no. 99.00.000.9.72)** that keeps all the tools that may be required to hand.

In addition, BPW offers special measuring devices for checking dimensions on axles and suspensions (toe-in, toe-out etc.).

#### Version

Tools must prove their worth in hard, everyday use. Only then does it become clear whether tools are up to the demands of the real world.

#### Use of high-quality materials

Top quality materials are the key to high quality tools. Continuous quality assurance guarantees consistent quality.

#### **Favourable cost-performance ratio**

Quality is not always obvious at first glance (e.g. materials).

Buying quality tools is often the better-value solution in the long run. This is the case especially whenever tools are required on a regular basis and trouble-free use has to be ensured at all times.

- © The special tools guarantee that all recommended service work on the BPW ECO Disc (TS2 3709/4309 as well as TSB 3709/4309/4312) can be performed safely and with ease.
- All work on the vehicle is only allowed to be performed by employees of the commercial vehicle industry and the commercial vehicle trade who have the appropriate technical proficiency. Always follow the safety instructions issued by the vehicle manufacturer.
- Observe the BPW workshop manual (www.bpw.de).

#### Long-life, low wear

BPW tools are designed to be particularly resistant to wear and tear, and guarantee an extremely long service life, even with frequent use.

#### Easy to handle

The best solutions are always the simplest ones. And this is especially the case when it comes to tools.

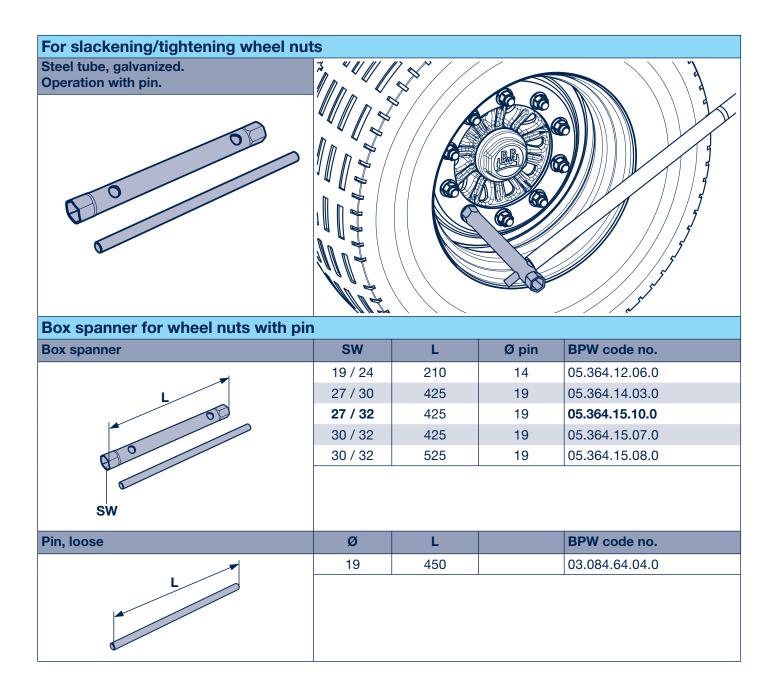
This is the reason whey BPW tools are geared specifically to meet technical requirements. Solutions that do not meet practical requirements are rigorously weeded out at the development stage.

Details on the correct use of the tools can be found in the respective workshop manuals.

Page 4 BPW-WP 39382201e

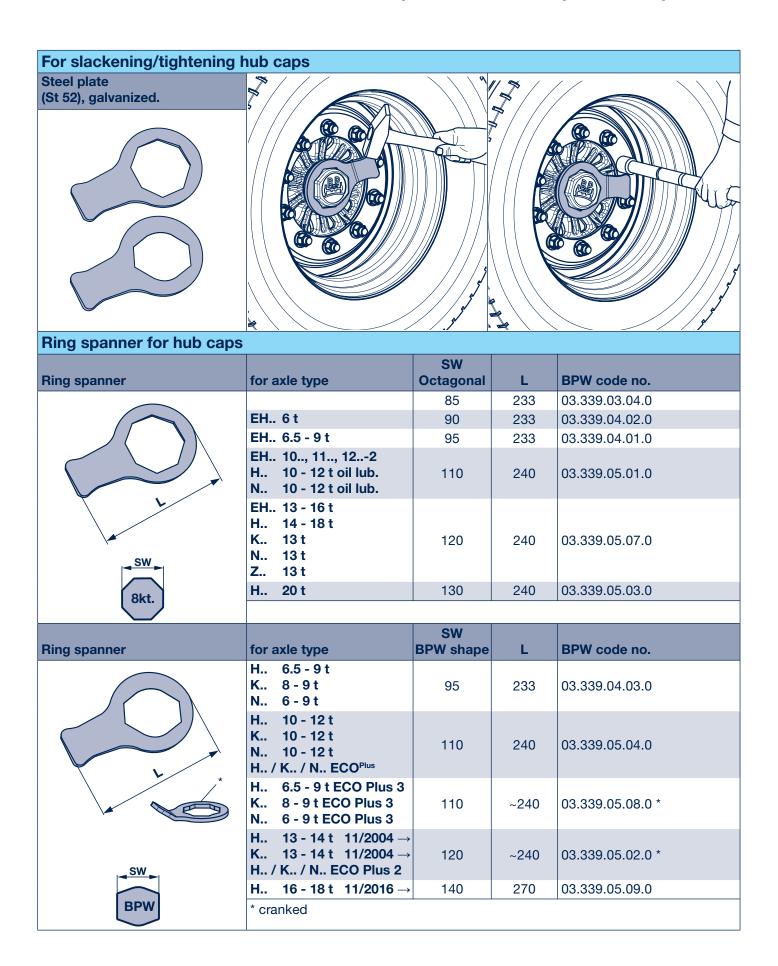
#### 1 Tools, general

#### 1.1 Box spanner for wheel nuts, extension tube



#### Tools, general

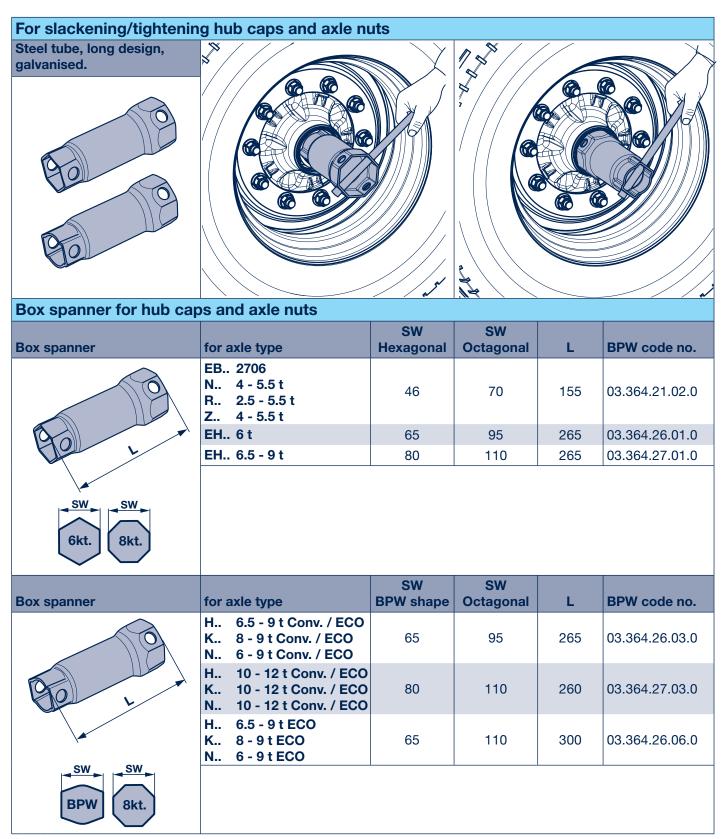
#### Spanner for hub caps, flat shape 1.2



Page 6 BPW-WP 39382201e

#### 1 Tools, general

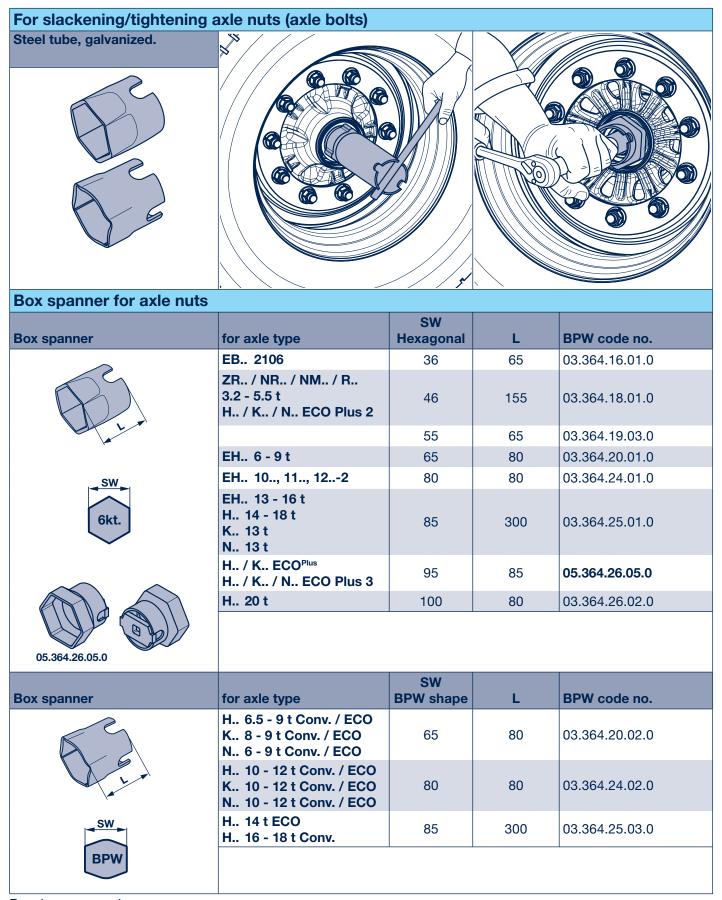
#### 1.3 Box spanner for hub caps and axle nuts



For pin see page 4.

#### Tools, general

#### Box spanner for axle nuts 1.4



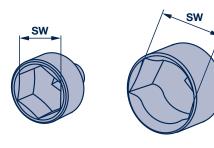
For pin see page 4.

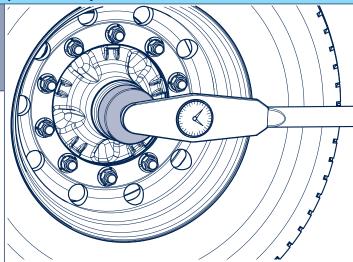
Page 8 BPW-WP 39382201e

#### 1 Tools, general

#### 1.5 Box spanner for garage use

### For slackening/tightening axle nuts (axle bolts) or hub caps Chromium-steel box spanner (31 CR V 3) with hexagon socket (pin retention) for garage use, either manually (torque wrench) or with impact wrench (hub cap spanner).





#### Box spanner for axle nuts

Box spanner	for axle type	SW Hexagonal		BPW code no.
6kt.	EB 2106 N 4 - 5.5 t R 2.5 - 5.5 t ZR 4 - 5.5 t H / K / N ECO Plus 2	46	1/2"	03.364.18.02.0

Box spanner	for axle type	SW BPW shape		BPW code no.
SW	H / K / N 6 - 9 t Conv. H / K / N 6 - 9 t ECO	65	1/2"	03.364.20.03.0
BPW	H / K / N 10 - 12 t Conv. H / K / N 10 - 12 t ECO	80	1/2"	03.364.24.03.0

#### Box spanner for hub caps

Box spanner	for axle type	SW Octagonal		BPW code no.
SW	EH 8 - 9 t H 6 - 9 t oil lub. K 6.5 t Conv., alloy hub	95	1"	03.364.26.04.0
8kt.	EH 10 - 12 t H 10 - 12 t oil lub.	110	1"	03.364.27.04.0

Box spanner	for axle type	SW BPW shape		BPW code no.
SW	H / K / N 6.5 - 9 t Conv.	95	1"	03.364.29.02.0
BPW	H / K / N 6.5 - 12 t ECO H / K ECO <sup>Plus</sup> H / K / N ECO Plus 3	110	1"	03.364.29.03.0

#### Tools, general

#### Hub puller for wheel hubs and spoke wheels 1.6

# Steel plate, galvanized, screw to be ordered separately

#### Hub puller for wheel hubs and spoke wheels

Hub puller	for axle type	Thread	SW Octagonal	BPW code no.	Suitable screw
	EH 6.5 - 9 t ZR 8 - 9 t	M 115 x 3	95	05.012.26.02.0	
sw 8kt.	EB 10 t EH 121, 131, 141 H / M 141 K / N / Z 13 t	M 135 x 3	120	05.012.27.02.0	02.5026.70.80 M 22 x 100 SW 32
	EH 13 - 16 t H 14 - 18 t	M 155 x 3	120	05.012.28.01.0	
	H 20 t	M 180 x 3	130	05.012.29.01.0	

Hub puller	for axle type	Thread	SW BPW shape	BPW code no.	Suitable screw
sw	H 10 - 12 t K 10 - 12 t N 10 - 12 t	M 125 x 2	110	05.012.27.05.0	02.5026.70.80
BPW	H / K 14 t 11/2004 →	M 150 x 2	120	05.012.28.03.0	M 22 x 100 SW 32
	H 16 - 18 t 11/2016 →	M 170 x 2	-	05.012.29.03.0	



Page 10 BPW-WP 39382201e

#### 1 Tools, general

#### 1.7 Tool outfits, tool kits

		Kapselgewin	Außen	BPV sw 8kt		BP <sup>1</sup>	W	SW
	Hub bearing version	Hub cap	Shape	Hub cap	Shape	Axle nut/	axle bolt Shape	Wheel nut
6 - 9 t	ECO / ECO-MAXX	M 125 x 2	I	SW 110	BPW	SW 65	BPW	27 / 32
	ECOPlus	M 136 x 2.5	- 1	SW 110	BPW	SW 95	Hex.	27 / 32
	ECO Plus 3	M 135 x 2	I	SW 110	BPW	SW 95	Hex.	27 / 32
	ECO Plus 2	Bayonet		SW 120	BPW	SW 46	Hex.	27 / 32
10 - 12 t	Conv.	M 125 x 2	Α	SW 110	BPW	SW 80	BPW	27 / 32
	ECO / ECO-MAXX	M 136 x 2.5	I	SW 110	BPW	SW 80	BPW	27 / 32
	ECO <sup>Plus</sup>	M 136 x 2.5	I	SW 110 SW 120	BPW Oct.	SW 95	Hex.	27 / 32
13 - 14 t	Conv., → 10/2004	M 135 x 3	Α	SW 120	Oct.	SW 85	Hex.	27 / 32
	Conv., 11/2004 →	M 150 x 2	- 1	SW 120	Oct.	SW 85	BPW	27 / 32
	Conv., 11/2004 →	M 150 x 2	I	SW 120	Oct.	SW 85	Hex.	27 / 32
	ECO	M 150 x 2	- 1	SW 120	BPW	SW 85	BPW	27 / 32
16 - 18 t	Conv., → 11/2016	M 155 x 3	Α	SW 120	Oct.	SW 85	Hex.	27 / 32
								30 / 32
	Conv., 11/2016 →	M 170 x 2	I	SW 140	BPW	SW 85	BPW	27 / 32
								30 / 32
20 t	Conv.	M 180 x 3	Α	SW 130	Oct.	SW 100	Hex.	27 / 32

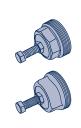
Alternative versions on request.

SW = Spanner width

#### Tools, general

#### Tool outfits, tool kits 1.7











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Con	tents	tooi	KITS	CDI.

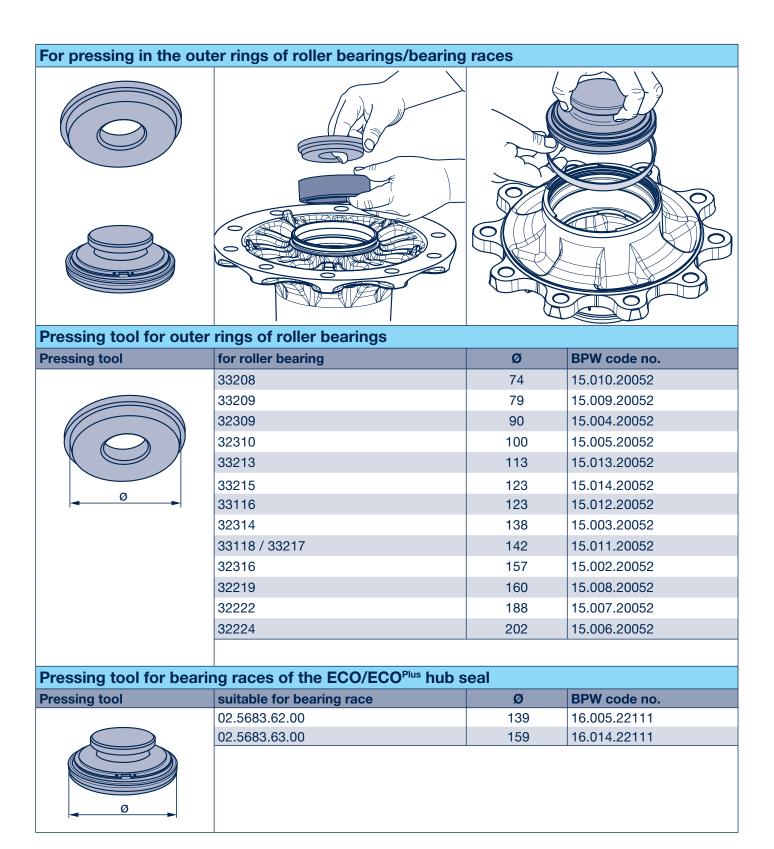
Spanner for hub cap BPW code no.	Hub puller BPW code no.	Suitable screw BPW code no.	Box spanner for axle nut/ axle bolt BPW code no.	Box spanner for wheel nuts BPW code no.	Tool kit cpl. BPW code no.
03.339.05.04.0	-	-	03.364.20.02.0	05.364.15.10.0	99.00.000.9.44
03.339.05.04.0	-	-	05.364.26.05.0	05.364.15.10.0	99.00.000.9.53
03.339.05.08.0	-	-	05.364.26.05.0	05.364.15.10.0	99.00.000.9.70
03.339.05.02.0	-	-	03.364.18.01.0	05.364.15.10.0	99.00.000.9.62
03.339.05.04.0	05.012.27.05.0	02.5026.70.80	03.364.24.02.0	05.364.15.10.0	99.00.000.9.30
03.339.05.04.0	-	-	03.364.24.02.0	05.364.15.10.0	99.00.000.9.45
03.339.05.04.0	-	-	05.364.26.05.0	05.364.15.10.0	99.00.000.9.53
03.339.05.07.0	-	-	05.364.26.05.0	05.364.15.10.0	99.00.000.9.59
03.339.05.07.0	05.012.27.02.0	02.5026.70.80	03.364.25.01.0	05.364.15.10.0	99.00.000.9.16
03.339.05.07.0	05.012.28.03.0	02.5026.70.80	03.364.25.03.0	05.364.15.10.0	- *
03.339.05.07.0	05.012.28.03.0	02.5026.70.80	03.364.25.01.0	05.364.15.10.0	99.00.000.9.61
03.339.05.02.0	-	-	03.364.25.03.0	05.364.15.10.0	- *
03.339.05.07.0	05.012.28.01.0	02.5026.70.80	03.364.25.01.0	05.364.15.10.0	99.00.000.9.11
03.339.05.07.0	05.012.28.01.0	02.5026.70.80	03.364.25.01.0	05.364.15.08.0	_ *
03.339.05.09.0	-	-	03.364.25.03.0	05.364.15.10.0	99.00.000.9.71
03.339.05.09.0	-	-	03.364.25.03.0	05.364.15.08.0	On request
03.339.05.03.0	05.010.29.01.0	02.5026.70.80	03.364.26.02.0	05.364.15.10.0	- *

<sup>\*</sup> Please order in single parts.

Page 12 BPW-WP 39382201e

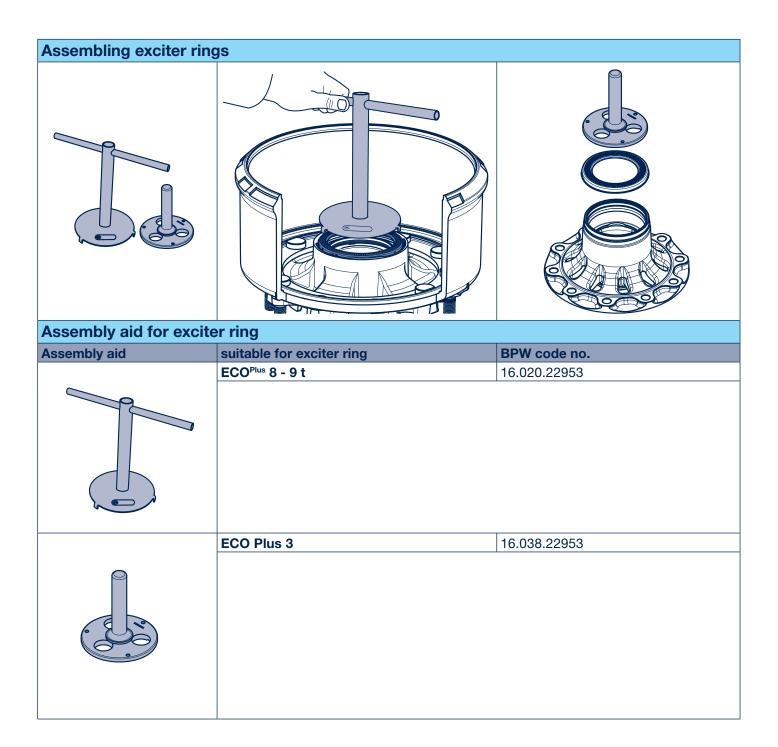
#### 1 Tools, general

#### 1.8 Pressing tools



#### Tools, general

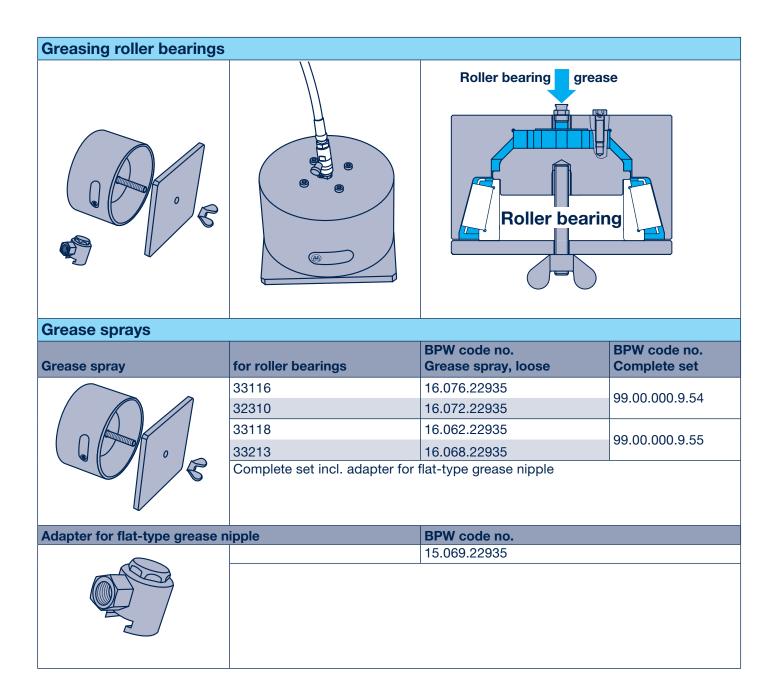
#### Assembly aid for exciter rings 1.9



Page 14 BPW-WP 39382201e

#### 1 Tools, general

#### 1.10 Grease spray for greasing roller bearings

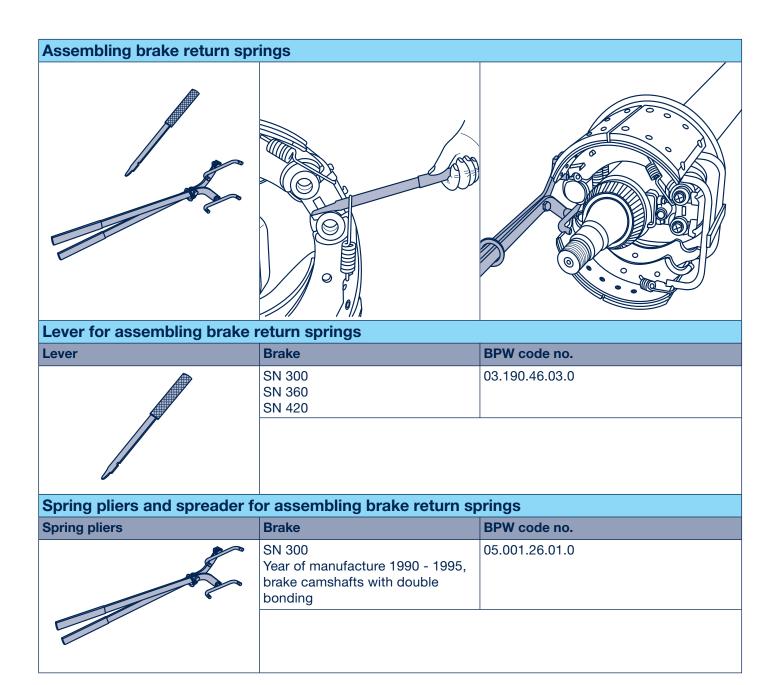


#### **Notes**

Page 16 BPW-WP 39382201e

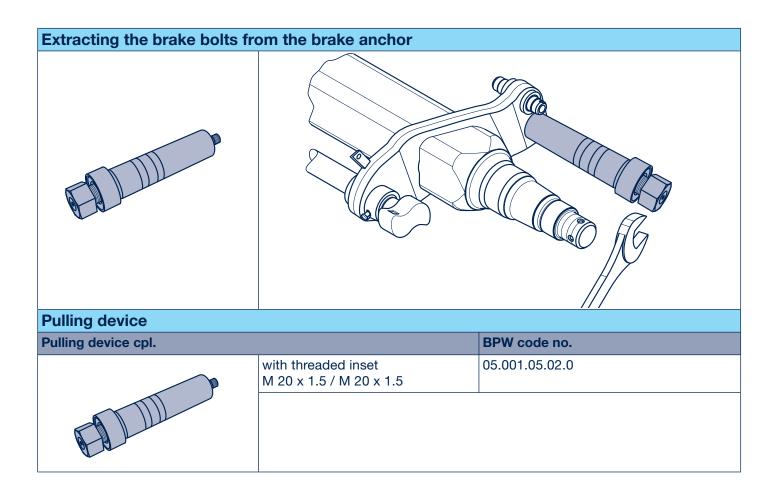
#### 2 Tools for drum brakes

#### 2.1 Lever, spring pliers



#### Tools for drum brakes

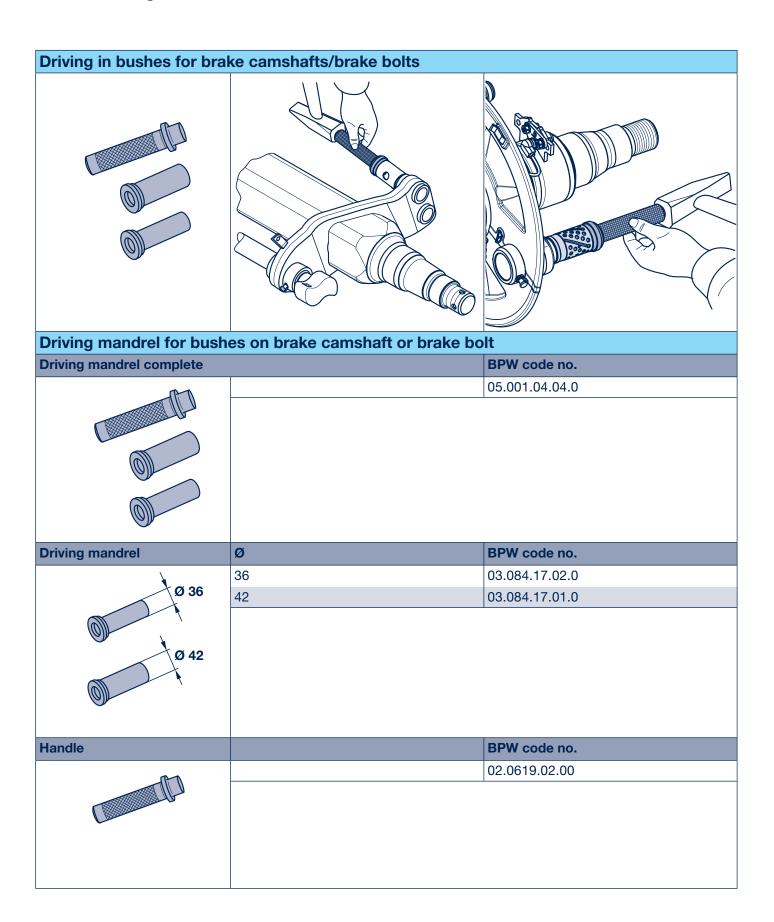
#### Pulling device for brake bolts 2.2



Page 18 BPW-WP 39382201e

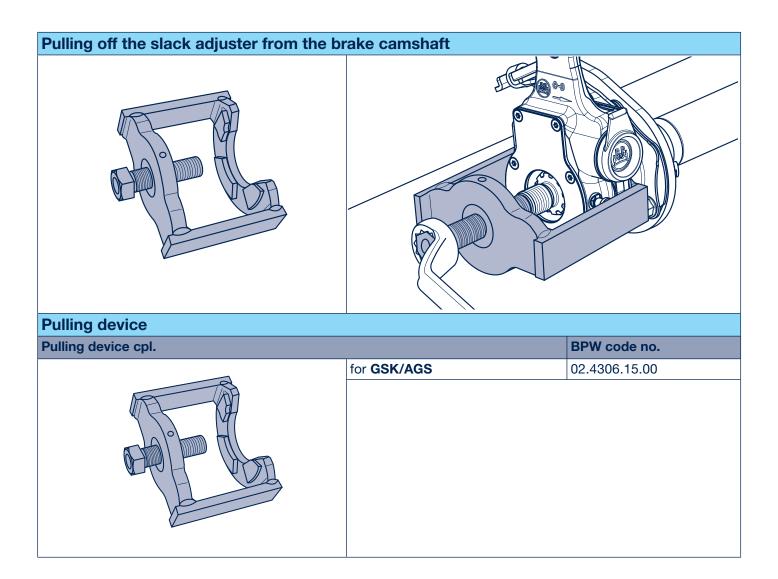
#### 2 Tools for drum brakes

#### 2.3 Driving mandrels



#### **Tools for drum brakes**

#### Pulling device for slack adjusters 2.4



Page 20 BPW-WP 39382201e

#### 3 Tools for ECO Disc disc brakes

#### **General**

#### BPW special tools and measuring devices

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The existing range of tools has been systematically improved with each new generation of axles and expanded by new products.

For the maintenance and repair of its ECO Disc TS2/TSB disc brake, BPW offers a new **tool case (BPW code no. 99.00.000.9.72)** that keeps all the tools that may be required to hand.

For an existing TSB tool case, BPW offers a **supplemental set (BPW code no. 09.801.08.82.0)** which contains all additional tools for the TS2.

In addition, BPW offers special measuring devices for checking dimensions on axles and suspensions (toe-in, toe-out etc.).

- The special tools guarantee that all recommended service work on the BPW ECO Disc (TS2 3709/4309 as well as TSB 3709/4309/4312) can be performed safely and with ease.
- All work on the vehicle is only allowed to be performed by employees of the commercial vehicle industry and the commercial vehicle trade who have the appropriate technical proficiency. Always follow the safety instructions issued by the vehicle manufacturer.
- Observe the BPW workshop manual (www.bpw.de).

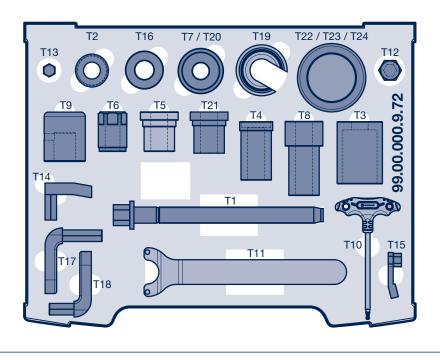
#### **Tools for ECO Disc disc brakes**

#### Contents of the tool case 3.1

3

No.	Designation	TSB	TS2	BPW code no.	Dimension	Page
T1	Threaded spindle	•	•	02.0130.39.10	Tr 20 x 2 / SW 22	22
T2	Ball bearing	•	•	02.0130.40.10	Ø 20.5/40 x 14.5	22
Т3	Sleeve	•	•	02.1410.26.00	Ø 20.2/42 x 75.5	22
T4	Extractor tool for moveable and fixed bearings	•	•	02.0130.41.10	Ø 20.5/40.1 x 71	22
T5	Pressing tool for moveable bearing	•		02.0130.42.10	Ø 20.5/45.8 x 48	22
T6	Nut	•	•	02.5270.37.00	Tr 20 x 2 / SW 32	22
T7/T20	Retractable plate	•	•	02.1421.25.00	Ø 20.2/53 x 13	22
T8	Pressing tool for fixed bearing	•	•	02.0130.43.10	Ø 20.5/45.8 x 90	22
Т9	Press tool (plastic bellows)	•		02.0130.45.10	Ø 26.1/50 x 60	23
T10	Torx spanner reset	•		02.0130.44.10	TX 25	23
T11	Two-hole spanner for coarse dirt seal	•		02.3516.20.00		23
T12	Adapter for moveable bearing bolt	•	•	02.0130.46.10	SW 14 / SW 24	23
T13	Adapter for sealing plug	•	•	02.0130.47.10	SW 14 / SW 12	23
T14	Adapter for torque wrench (moveable bearing)	•	•	02.0130.48.10	SW 14	23
T15	Adapter for torque wrench (sealing cap)	•	•	02.0130.49.10	SW 14	23
T16	Ring for inserting wheel studs	•	•	02.5683.92.00	Ø 23/46 x 15	23
T17	Tool for fixed bearing bolt	•	•	02.0130.64.10	SW 14 / SW 14	23
T18	Tool for moveable bearing bolt	•	•	02.0130.65.10	SW 14 / SW 14	23
T19	Assembly tool for bellows	•		02.0130.80.10	Ø 27.6/62 x 32	23
T21	Pressing tool for moveable bearing		•	02.0130.72.20	Ø 20.5/45.8 x 50	22
T22	Piston for bellow pressing tool		•	02.0130.74.20	Ø 83 / M 20 x 2	24
T23	Screw for bellow pressing tool		•	02.0130.73.20	M 14 x 2	24
T24	Spacer for bellow pressing tool		•	02.4319.42.00	SW 24 / M 20 x 2 / M 14 x 2	24

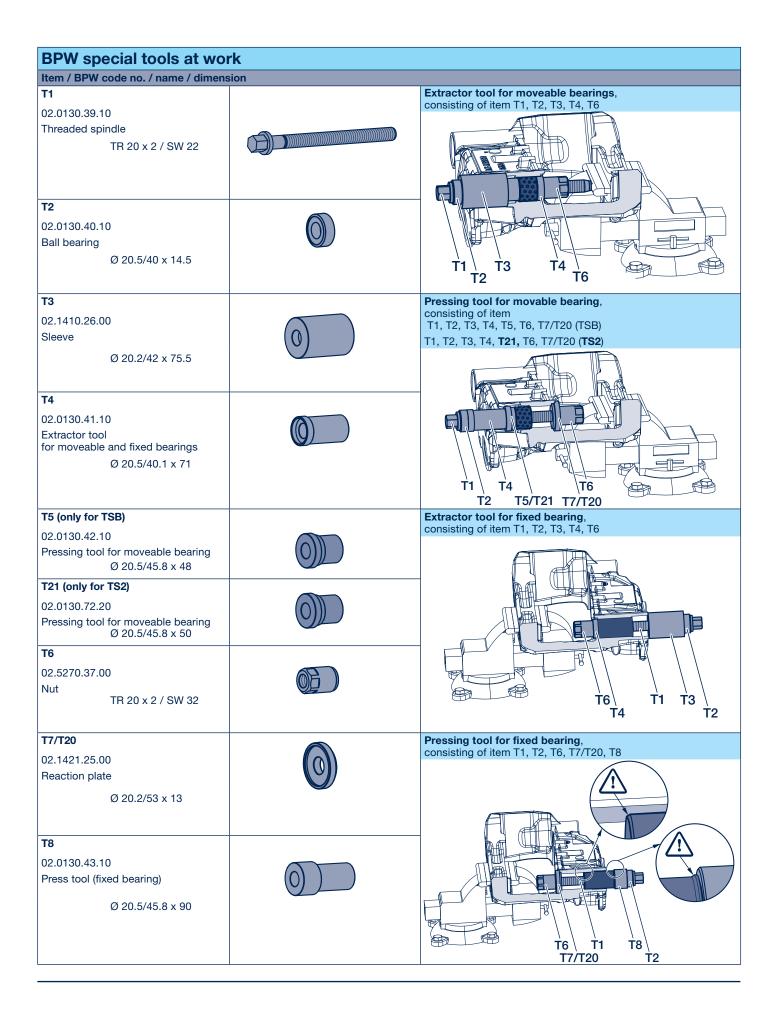
SW = Spanner width



Page 22 BPW-WP 39382201e

#### 3 Tools for disc brakes ECO Disc

#### 3.2 BPW special tools at work



#### **Tools for disc brakes ECO Disc**

#### BPW special tools at work 3.2

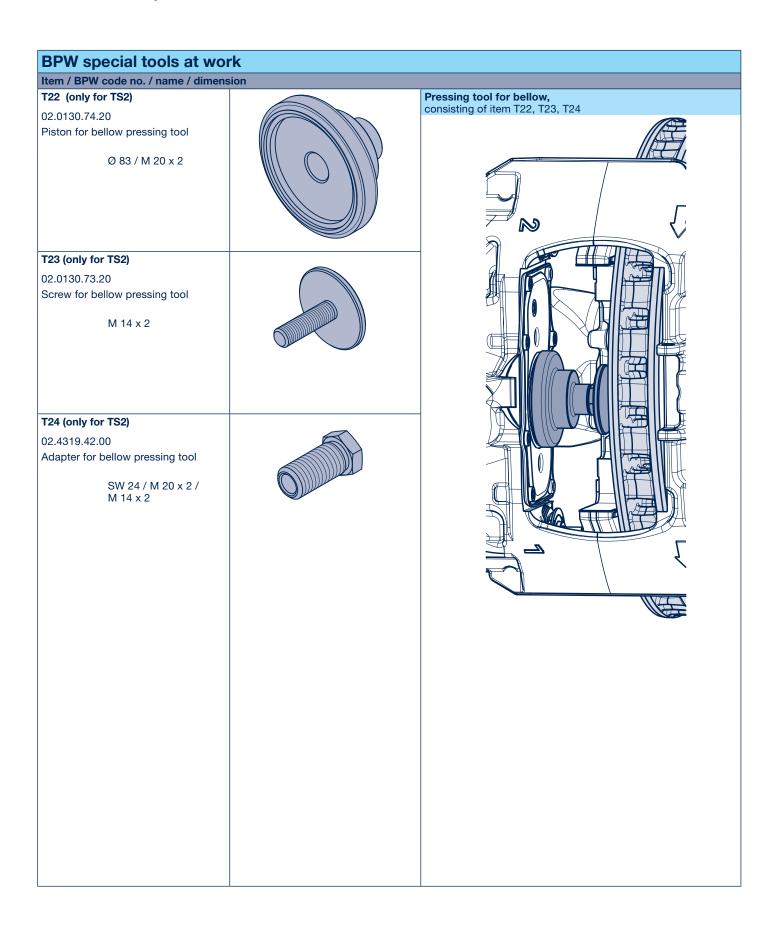
3

BPW special tools at wor	k		
Item / BPW code no. / name / dimens			
T9 (only for TSB) 02.0130.45.10 Press-out tool for bellow Ø 26.1/50 x 60	0	9 0	10
T10 (only for TSB) 02.0130.44.10 Torx spanner for return mechanism TX 25			
T11 (only for TSB) 02.3516.20.00 Two-hole spanner for coarse dirt seal		11	12
02.0130.46.10 Adapter for moveable bearing bolt SW 14 / SW 24			
T13 02.0130.47.10 Adapter for plastic cap SW 14 / SW 12 T14		13	14
02.0130.48.10 Adapter for torque wrench (moveable bearing) SW 14			0
T15 02.0130.49.10 Adapter for torque wrench (plastic cap) SW 14		15	16
716 02.5683.92.00 Ring for inserting wheel studs Ø 23/46 x 15			
T17 02.0130.64.10 Adapter for fixed bearing bolt SW 14 / SW 14		17	18
T18 02.0130.65.10 Adapter for moveable bearing bolt SW 14 / SW 14			
T19 (only for TSB) 02.0130.80.10 Assembly tool for bellows Ø 27.6/62 x 32		19	

Page 24 BPW-WP 39382201e

#### 3 Tools for disc brakes ECO Disc

#### 3.2 BPW special tools at work



#### Tools for disc brakes ECO Disc 3

#### BPW special tools at work 3.2

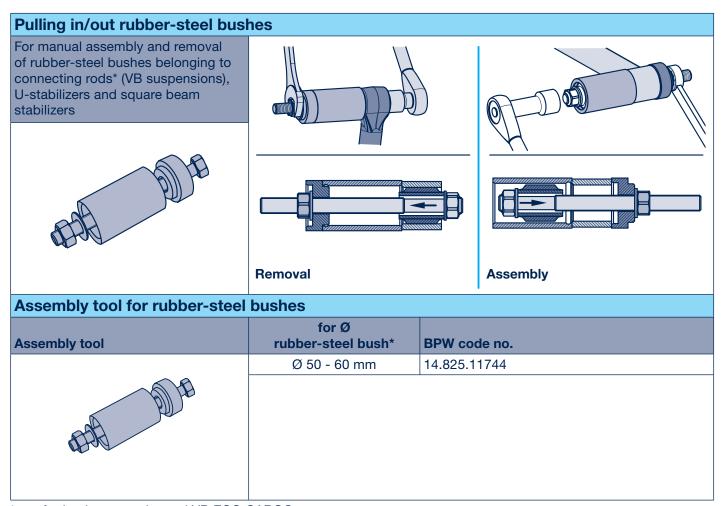
BPW supplemental set TS2 – 09.801.08.82.0				
Item	BPW code nr.:	Designation	Dimension	
T7 / T20	02.1421.25.00	Reaction plate	Ø 20.2/53 x 13	
T21	02.0130.72.20	Pressing tool for moveable bearing	Ø 20.5/45.8 x 50	
T22	02.0130.74.20	Piston for bellow pressing tool	Ø 83 / M 20 x 2	
T23	02.0130.73.20	Screw for bellow pressing tool	M 14 x 2	
T24	02.4319.42.00	Spacer for bellow pressing tool	SW 24 / M 20 x 2 / M 14 x 2	

Page 26 BPW-WP 39382201e

#### 4 Tools for air suspensions/mechanical suspensions

#### 4.1 Assembly tool for rubber-steel bushes

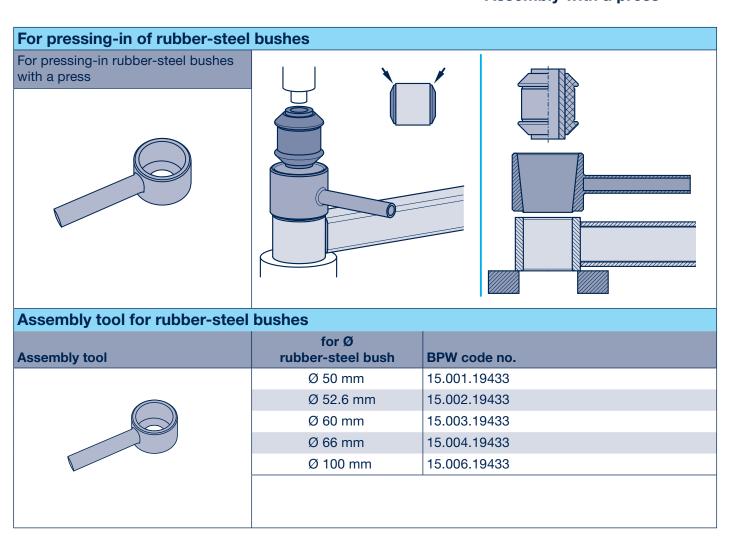
Manual removal and assembly



<sup>\*</sup> not for bush connecting rod VB ECO CARGO.

#### Tools for air suspensions/mechanical suspensions

#### Assembly tool for rubber-steel bushes 4.2 Assembly with a press

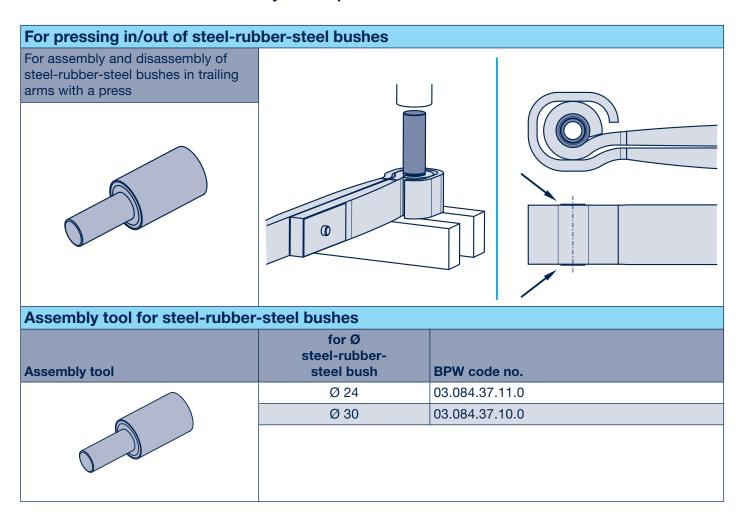


Page 28 BPW-WP 39382201e

#### 4 Tools for air suspensions/mechanical suspensions

#### 4.3 Assembly tool for steel-rubber-steel bushes

For removal and assembly with a press



#### Tools for air suspensions/mechanical suspensions

#### **Assembly tool for rubber-steel bushes**

4.4

ECO Air/ECO Air Compact, for manual removal and assembly

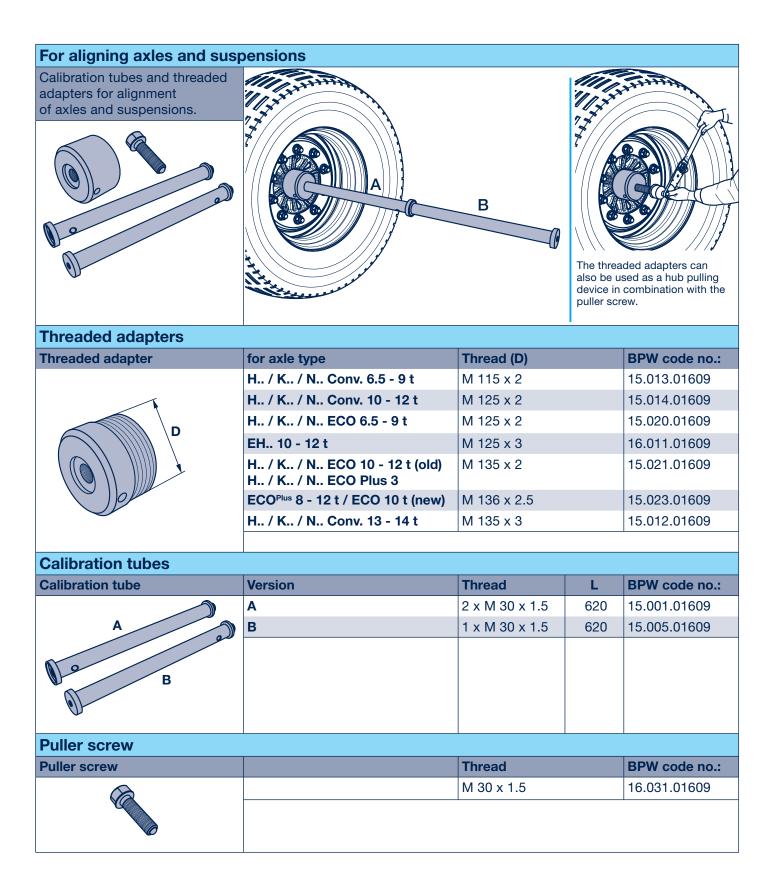
# Pulling in/out rubber-steel bushes For manual assembly and removal of rubber-steel bushes on the trailing arm for ECO Air/ECO Air COMPACT running gear systems Removal Assembly tool for rubber-steel bushes with ECO Air/ECO Air Compact for Ø rubber-steel bushes BPW code no

for Ø rubber-steel bush	BPW code no.
Ø 24 / 132	99.00.000.9.69
	rubber-steel bush

Page 30 BPW-WP 39382201e

#### 5 Calibration equipment

#### 5.1 Calibration tubes and threaded adapters



#### **Notes**



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

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

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

# Your partner on the way to economic viability!

