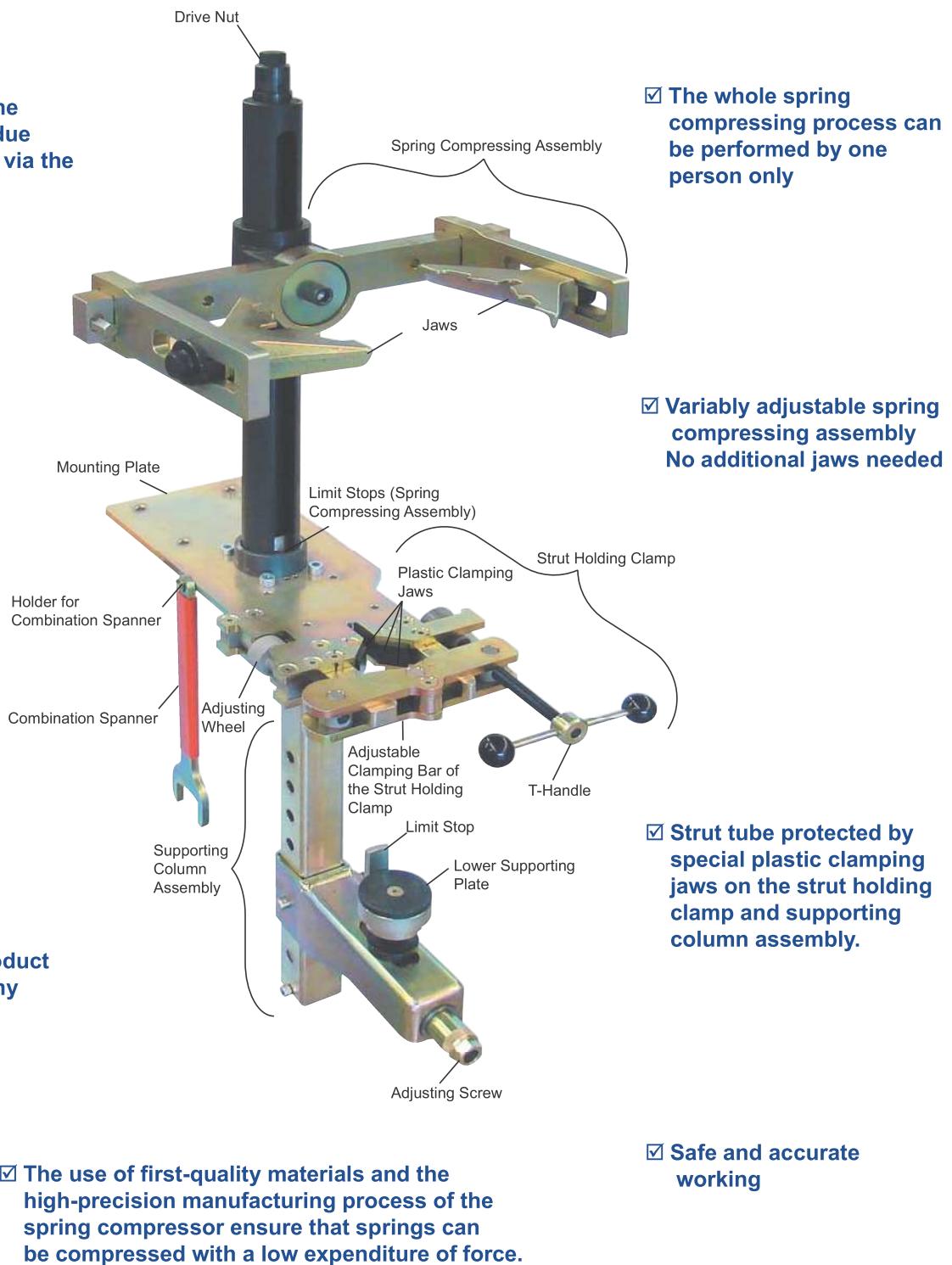
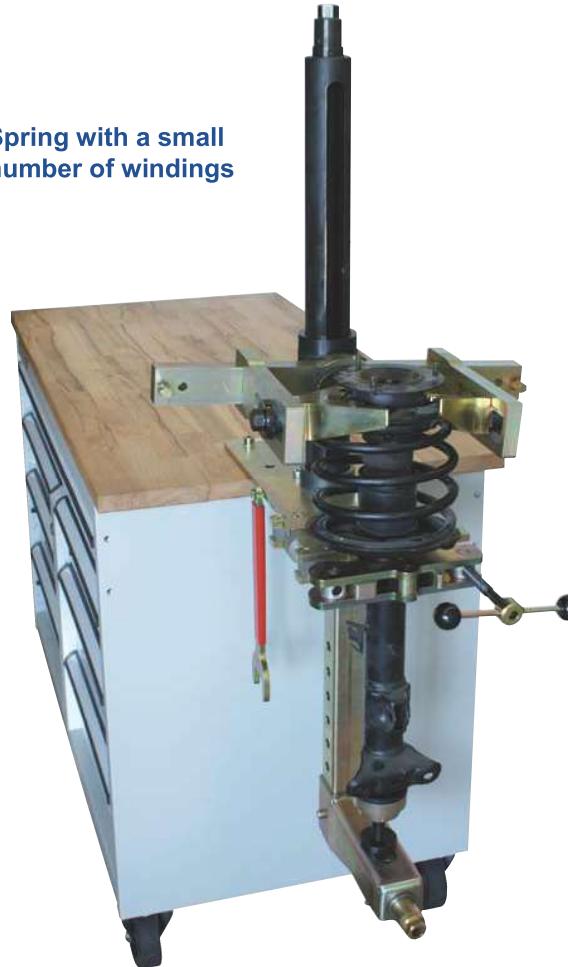




Universally suitable for almost all MacPherson strut/semi-strut designs such as

- Standard springs**
- Springs with right or left-hand windings**
- Very eccentric springs**
- Springs with a small number of windings where the outer winding swings very far.**

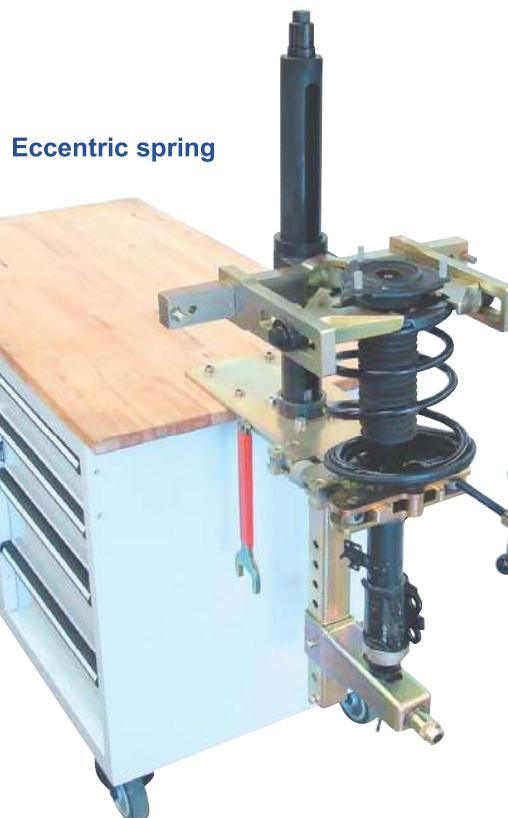




KLANN – where customer satisfaction always comes first!

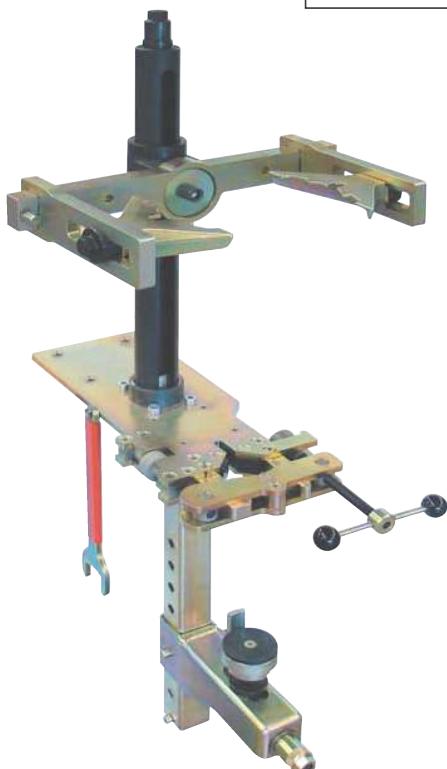
On our website
www.klann-online.de
we offer a wide range of application videos on selected tools!

The application videos are free for you to download!



Advantages:

- No additional accessories needed!
- No damage to the strut tube!
- One-Person-Operation!
- Mobile thanks to the workshop trolley!

KL-5501
Spring compressor stationary
(Pat.)
1
Patented


Universally suitable for MacPherson- and Semi-Struts e.g. with standard springs, right or left wound springs, excentrical springs or spring plates, conical springs, springs with a small number of windings, high or varying spring coil angles.

As the spring is compressed with its upper seat against the lower spring seat, the spring shape or the spring coil angles are not an issue. The variably settable spring cup seat, the adjustable support and the retaining jig with single hand operation widen the field of application of the compressor to almost any spring and shock absorber while satisfying the highest security and safety standards.

Advantages:

- **No further accessories needed!**

Due to the special design of the jaws, the radial arms, and the swivelling bar to which they are mounted, all the above mentioned Struts and Semi-Struts can be compressed without any additional jaws.

- **No damage to the Strut tube!**

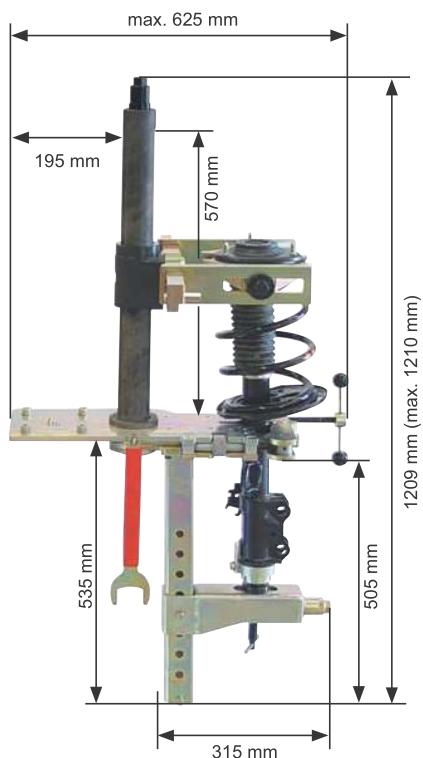
The special strut vise can quickly and easily be adjusted via a knurled nut up to the correct diameter of the strut tube. (the clamping bars should be parallel to each other) Jaws with plastic coating.

- **One-Person Operation!**

The whole working operation can be carried out by one person only. Strut holding clamp enabling quick and easy clamping as well as one-hand-operation.

- **Mobile due to the workshop trolley (KL-4999-100)**

The stationary spring compressor features a mounting plate that enables the spring compressor to be fixed to the workshop trolley **KL-4999-100** or a workbench. The workshop trolley enables convenient working directly beside the vehicle.



Technical data:

Drive:	24 mm hex
Breaking point:	60,000 N
Maximum load:	15,000 N
Weight:	46 kg
Compressing range:	570 mm
Spring plate Ø:	(min. / max.) 125 mm / 220 mm

Ratchet Wrench 1/2" Code: 1479229

GEDORE 5011

Technical Data:

Drive square	1/2"
Idle speed	180 rpm
Max. torque:	67 Nm
Compressed air connector:	1/4"
Working pressure:	6.2 bar
Air consumption:	220 l/min
Length:	270 mm
Height:	60 mm
Weight:	1.2 kg



1

Workshop trolley (without spring compressor)

KL-4999-100

The sturdy workshop trolley **KL-4999-100** combined with the stationary spring compressor **KL-5501** and the wheel bearing/bush tools of the **KL-0039-Series** provides a professional and mobile workplace for accurate and quick chassis or axle repairs.

The large and sturdy worktop made of solid spray-glued copper beech provides an ideal working surface.

The large mobile frame and the robust sliding wheels with double brakes enable easy and smooth mobility of the trolley.

The 7 drawers feature a locking mechanism and this lock prevents unintentional opening of the drawers.

Technical Data:

Dimensions:	W 1310 x H 925 x D 600 mm
Worktop:	W1200 x H 25 x D 600 mm
Drawer (1x):	W 1035 x H 180 mm
Drawer (2x):	W 490 x H 135 mm
Drawer (4x):	W 490 x H 180 mm
Castor with brake (2x):	Ø 125 mm
Fixed roller (2x):	Ø 125 mm
Weight:	125 kg



Note:
For further accessories for this workshop trolley such as the storage system of the **KL-0039 Series**, please refer to chapter 10.



Adaptor for Mercedes M-Class

(German Utility Model)

KL-5501-161

Suitable for Mercedes M-Class (W163) rear axles strut.

The adaptor **KL-5501-161** enables rear axles struts be placed on the lower supporting plate.



Holding Fixture

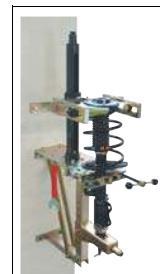
KL-5501-20

Suitable for the stationary spring compressor KL-5501.

The holding fixture **KL-5501-20** enables the installation of the stationary spring compressor **KL-5501** on a vertical wall.

Technical Data:

Weight:	4.8 kg
---------	--------





1

Patented

- Bayonet Locking System for jaw mounting with automatic self-locking mechanism

- Maximum load 27 500 N

- Automatic freewheel of the spindle

- All components are available as spare parts

- Universally suitable, for example, for MacPherson strut/semi-strut designs

- No key bed in the piston
➤ High Load Capacity

- High-quality product made in Germany

- Cylinder and piston nitrided (68 Rockwell) ensuring high wear resistance



- Sealed Spindle System „Maintenance-Free“ (no particles can enter)

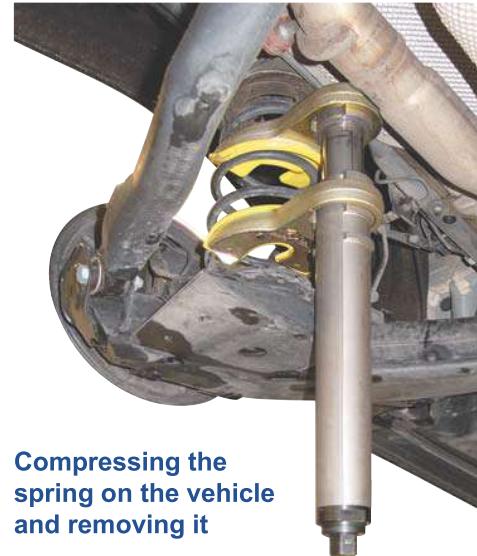
- Latching System for adjusting the jaw opening width.

- A wide range of jaws for various application possibilities is available.

- Interchangeable plastic protective inserts to prevent failure of the spring caused by notches and corrosion.

- Approved for use with a 1/2" impact wrench drive

Compressing and decompressing a conical spring



Compressing the spring on the vehicle and removing it

Compressing the spring together with the upper spring plate



Compressing the spring together with the upper spring plate

**KL-9002****Telescopic Safety Spring Compressor****Patented, e.g. US-Patent 5 954 314****1**

Universally suitable for vehicles with MacPherson Struts and Semi-Struts, ideal for 4x4 vehicles, Transporters and Vans such as Citroën Jumper; Fiat Ducato; Mercedes Vito, V-Class, M-Class, W210 4Matic; Peugeot Boxer, Break; Renault Master etc.

(If required, additional jaws can be used!)

Special jaws allow coil springs to be removed and replaced in wishbone suspensions provided available space permits access.

Pairs of jaws in size 1 and 2 for spring-Ø of from 100-175 mm are included.
Additional jaws for spring-Ø of from 70-210 mm are optionally available.

Max. Load 27 500 N *

*at the specified 4-times Safety-Factor, the maximum safe load of the KL-9002 is 27,500 N!

A universal telescopic spring compressor,

- which due to a **latching system** offers an adjustable range of jaw openings (compression range), from a **minimum of 40 mm** to a **maximum of 361mm**. This is important when compressing very short springs (2-3 coils) and also very long springs so that they can be fully de-compressed and/or replaced. (eg. Audi, BMW, Fiat, Ford, Lancia, Mazda, Mercedes, Renault etc.)
- which offers a patented **Bayonet Interlock System with an automatic self-locking mechanism** to attach the forged jaws (no tools, bolts or locking rings required).
- whose spindle drive remains closed in case the locking pin breaks. Due to an auxiliary drive the copressed spring can be decompressed in order to install a new locking pin.
- which offers **automatic free-wheel** if the spindle reaches the end of operating travel during de-compression - so eliminating the risk of damage to the spring-compressor.
- whose **plastic protective inserts** can be screw-connected to the jaws in order to protect the spring coating. Important to prevent spring failure/breakage caused by notches and corrosion.
- which is suitable for all MacPherson Struts, Semi-Struts and can also be used on many wishbone suspensions thanks to a **wide range of jaws** available.

Due to the combination of high-precision components and wear-resistant nitrided steel, this cylinder is smooth-running and highly resistant to wear and tear. To compress a spring which is coil bound at approx. 18,000 N (for example of a Mercedes M-Class) a torque of only 35 Nm is required!

Examples of coil-bound forces:

- VW Polo AO3 approx. 6,000 N
- VW Golf A4 approx. 7,000 N
- VW Passat B5 approx. 8,000 N
- Audi A4 6 cyl. approx. 9,000 N
- Mercedes Vito approx. 14,200 N
- Chrysler Voyager approx. 14,000 N
- Peugeot Boxer approx. 15,000 N
- Fiat Ducato approx. 15,000 N
- MB M Class approx. 18,000 N
- BMW X5 approx. 18,000 N



Advantages:

- **Bayonet Interlock System for jaw mountings with automatic self-locking mechanism**
- **Adjustable compression length.**
- **Drive with additional auxiliary drive.**
- **Automatic free-wheel of the spindle.**
- **Also applicable to conical springs.**
- **Plastic protective inserts (optionally available)**

Scope of Delivery:

KL-9002 Telescopic Safety Spring Compressor

Part No.	Description
KL-9002-100	Cylinder
KL-9001-11	Pair of jaws in size 1
KL-9001-12	Pair of jaws in size 2

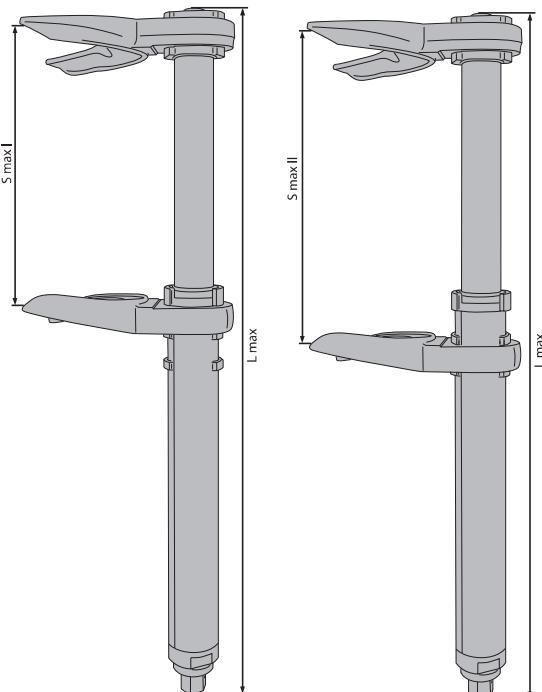
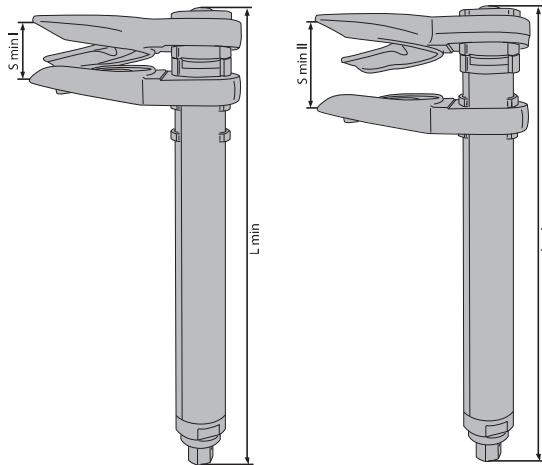
Technical Data

Cylinder	KL-9002-100
L min.	Overall length min. 475 mm
L max.	Overall length max. 715 mm
A	Working Travel (piston stroke) 305 mm
SPF	Spindle freewheel at 735 mm
Smin.I	Compression range min. (I) (distance between jaws) 40 mm
Smin.II	Compression range min. (II) (distance between jaws) 72 mm
Smax.I	Compression range max. (I) (distance between jaws) 328 mm
Smax.II	Compression range max. (II) (distance between jaws) 361 mm
	Load capacity max. (at 4-times safety factor) 27,500 N
	Breaking point 110,000 N
	Spindle drive 24 mm hex
	Cylinder weight 6.9 kg
	Cylinder weight with Jaws size. 1 and 2 13.4 kg



Note:

Additional jaws for spring-Ø of from 70-210 mm are optionally available.



KL-9002 SP

Telescopic Safety Spring Compressor (not shown)

As KL-9002, but with Jaws including Protective Inserts.

**KL-9001-10****Pair of jaws size 0****Universally suitable.**

Pair of special jaws with closed attachment ring.

**Technical Data:**

For spring Ø:	70 - 125 mm
Weight (Pair):	2.5 kg

KL-9001-10 SP Pair of jaws size 0 with protective inserts (not shown)As **KL-9001-10**, however with protective inserts included.**KL-9001-11****Pair of jaws size 1****Universally suitable.**

Pair of standard jaws with closed attachment ring.

**Technical Data:**

For spring Ø:	100 - 163 mm
Weight (Pair):	3.1 kg

KL-9001-11 SP Pair of jaws size 1 with protective inserts (not shown)As **KL-9001-11**, however with protective inserts included.**KL-9001-12****Pair of jaws size 2****Universally suitable.**

Pair of standard jaws with closed attachment ring.

**Technical Data:**

For spring Ø:	135 - 175 mm
Weight (Pair):	3.3 kg

KL-9001-12 SP Pair of jaws size 2 with protective inserts (not shown)As **KL-9001-12**, however with protective inserts included.**KL-9001-13****Pair of jaws size 3****Universally suitable.**

Pair of special jaws with closed attachment ring.

**Technical Data:**

For spring Ø:	165 - 210 mm
Weight (Pair):	4.3 kg

KL-9001-13 SP Pair of jaws size 3 with protective inserts (not shown)As **KL-9001-13**, however with protective inserts included.**KL-9001-33 SP****Pair of jaws in size 1 B with protective inserts****Suitable for Audi Q7, Porsche Cayenne, VW Touareg.**

For compressing and decompressing the front spring.

**Technical Data:**

For spring Ø:	100-163 mm
Weight (Pair):	3.4 kg

KL-9001-16**Pair of jaws size 0, extended design****Suitable for VW Golf V rear axle, Volvo etc.** This pair of jaws with an extended attachment axle is ideal for conical springs or springs that are hard to reach.**Technical Data:**

For spring Ø:	70 - 125 mm
Weight (Pair):	3.0 kg

KL-9001-16 SP Pair of jaws size 0 with protective inserts (not shown)As **KL-9001-16** however, with protective inserts included.**KL-9001-11****Pair of jaws size 1, extended design****Suitable for Nissan Pathfinder, Seat Arosa, VW Lupo, Mercedes etc.**

This pair of jaws with an extended attachment axle is ideal for conical springs or springs that are hard to reach.

**Technical Data:**

For spring Ø:	100 - 163 mm
Weight (Pair):	3.7 kg

KL-9001-17 SP Pair of jaws size 1 with protective inserts (not shown)As **KL-9001-17** however, with protective inserts included.**KL-9001-18****Pair of jaws size 2, extended design****Universally suitable.** This pair of jaws with an extended attachment axle is ideal for conical springs or springs that are hard to reach.**Technical Data:**

For spring Ø:	135 - 175 mm
Weight (Pair):	3.7 kg

KL-9001-18 SP Pair of jaws size 2 with protective inserts (not shown)As **KL-9001-18** however, with protective inserts included.**KL-9001-15****Pair of jaws size 5****Suitable for Mercedes W210 4Matic, Alfa Romeo, Chrysler, Nissan, VW Lupo rear axle, etc.** Ideal for conical springs or springs that are hard to reach.**Technical Data:**

For spring Ø:	70 - 116 mm
Weight (Pair):	3.0 kg

KL-9001-32 SP**Pair of jaws size 0 with protective inserts****Suitable for Audi A8 (armoured) rear axle.**

Ideal for conical and hard-to-reach springs.

**Technical Data:**

Weight:	3.4 kg
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KL-9001-14

Pair of jaws size 4

Suitable for Citroën C 15 rear axle and Peugeot 305 Break rear axle.



Technical Data:

Weight (Pair):	3.0 kg
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KL-9001-1920

Jaw size 6

Suitable for Peugeot 206 (1998 onwards).

Special jaw with an open jaw ring.



Technical Data:

For spring Ø:	165 mm
Weight:	1.9 kg

KL-9001-1900

Ring jaw

Suitable for BMW E46 (3-Series) and BMW E39 (5-Series).

Used for compressing and decompressing front springs.



Technical Data:

For spring Ø:	165 mm
Weight:	2.8 kg

KL-9001-1910

Adaptor ring BMW E46

Suitable for BMW E46 (3-Series 1998 onwards), E39 (5-Series 1995 onwards) front spring. Spacer ring for ring jaw KL-1571.



Technical Data:

Clearance-Ø:	139 mm
Inner Ø:	160 mm

KL-9001-310

Ring jaw with adaptor ring MB W203

Suitable for Mercedes C-Klasse (W203).

Used for compressing and decompressing front springs.



Scope of delivery:

KL-9001-310 Ring jaw with adaptor ring

Part No.	Description	Quantity
KL-9001-3100	Ring jaw MB W203	1
KL-9001-3111	Adaptor ring MB W203, without screws	1
KL-9001-3112	Countersunk screw M6 x 10	3

1

KL-9001-20

Pair of protective inserts size 0, with plastic rivets

Matching the pair of jaws KL-9001-10.

8 plastic rivets KL-9001-2002 included.



KL-9001-21

Pair of protective inserts size 1, with plastic rivets

Matching the pair of jaws KL-9001-11.

8 plastic rivets KL-9001-2002 included.

KL-9001-22

Pair of protective inserts size 2, with plastic rivets

Matching the pair of jaws KL-9001-12.

8 plastic rivets KL-9001-2002 included.

KL-9001-23

Pair of protective inserts size 3, with plastic rivets

Matching the pair of jaws KL-9001-13.

8 plastic rivets KL-9001-2002 included.

KL-9001-91

Jaw Set for BMW

Suitable for BMW E46 (3-Series 1998 onwards), E39 (5-Series 1995 onwards).

Ideal for compressing and decompressing front springs.



Scope of Delivery:

KL-9001-91 Jaw set for BMW

Part-No.	Description	Qty.
KL-9001-1900	Ring jaw	1
KL-1575	Adaptor ring for KL-9001-1900	1
KL-9001-1310	Jaw size 3	1
KL-9001-2301	Protective insert size 3 for KL-9001-1310	1

KL-9001-92

Jaw Set for Mercedes

Suitable for Mercedes C-Class (W203), CLK (W209).

Ideal for compressing and decompressing front springs.



Scope of Delivery:

KL-9001-92 Jaw set for Mercedes

Part No.	Description	Quantity
KL-9001-3100	Ring jaw	1
KL-9001-3110	Adaptor ring MB W203	1
KL-9001-1810	Jaw size 2A, extended design	1
KL-9001-2201	Protective insert size 2	1

**KL-9001-93****Jaw Set MB W211, W230**

Suitable for Mercedes E-Class (W211) and SL (W230) front axle.
Ideal for compressing and decompressing front springs.

**Scope of Delivery:****KL-9001-93 Jaw Set MB W211, W230**

Part No.	Description	Quantity
KL-9001-1600 SP	Jaw size 0, extended design with protective insert	1
KL-9001-312	Ring jaw with adaptor ring	1

KL-9001-313**Jaw Set Mercedes**

Suitable for Mercedes C-Class (W204) and GLK (X204).
Designed to compress and decompress front springs.



Image similar

Scope of Delivery:**KL-9001-313 Jaw Set Mercedes**

Part No.	Description	Quantity
KL-9001-3100	Ring-jaw	1
KL-9001-3131	Adaptor ring MB W204	1
KL-9001-3132	Adaptor ring MB X204	1
KL-9001-3133	Clamping device	1
KL-9001-1810 SP	Jaw Size 2A, extended design with protective insert	1

KL-9001-314**Jaw Set Mercedes**

Suitable for Mercedes E-Class (W212).
Designed to compress and decompress front springs



Image similar

Scope of Delivery:**KL-9001-314 Jaw Set Mercedes**

Part No.	Description	Qty
KL-9001-3100	Ring jaw	1
KL-9001-3141	Adaptor ring MB W212	1
KL-9001-1810 SP	Jaw size 2A, extended design with protective insert	1

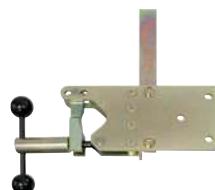
KL-0050-50**Special Toothed Socket Mercedes W203**

Suitable for Mercedes W203 (C-Class), W209 (CLK) front axle.
Toothed socket for shock absorber piston rod nut.

**KL-0055-60****(German Utility Model)****Holding Fixture**

Suitable for MacPherson suspension struts, shock-absorbers and steering systems.

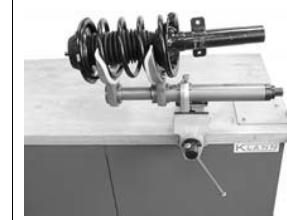
This holding fixture is either screwed into position on a workbench or clamped in a vice thus enabling quick, safe and professional repair to be carried out. Strut axles should NOT directly be clamped into a vice for assembly work (risk of deformation).

**KL-9055-1****Holding Fixture**

Holding fixture for the spring compressors KL-9002 and KL-9001. The fixture can rotate through 360° so allowing struts to be clamped horizontally or vertically.

**KL-9055-2****Holding Fixture**

Holding fixture specially designed for the spring compressors KL-9002 and KL-9001.





- Universally suitable, for example, for MacPherson strut/semi-strut designs

- Used as original tool by the world's leading car manufacturers

- All components are available as spare parts



- High-quality product made in Germany

- Spindle drive also suitable for pneumatic impact wrench

- A wide range of jaws for various application possibilities is available

- Self-Locking-Mechanism of the mobile spring compressing assembly, ensures spindle is pressure-free whilst compressing the spring

- Hardened cylinder tube

- Maximum Load Capacity 17 500 N

- Also suitable for compressing conical and barrel springs by using the adaptor KL-1590-1

- Interchangeable plastic protective inserts to prevent damage to the spring surface are available

KL-0015

Universal Spring Compressor

1



Compressing the spring on the vehicle and removing it

Compressing the spring together with the upper spring plate



Compressing the spring together with the upper spring plate



Changing shock absorbers and adjusting the upper spring plate in conjunction with KL-0255 and KL-0255-10

Compressing and decompressing conical springs in conjunction with KL-1590-1



Spring Compressor

(Universal)

KL-0015

Universally suitable for strut suspensions. Pairs of jaws size 1N and 2N for spring-Ø of from 80-195 mm included.

Advantages:

- Self-locking of the mobile jaw/sliding jaw mount.
- Also suitable for conical springs.
- Plastic protective inserts (optionally available).

Scope of delivery:

KL-0015 Spring Compressor

Part No.	Description	Quantity
KL-0015-100	Cylinder	1
KL-1510	Pair of jaws size 1N	1
KL-1520	Pair of jaws size 2N	1



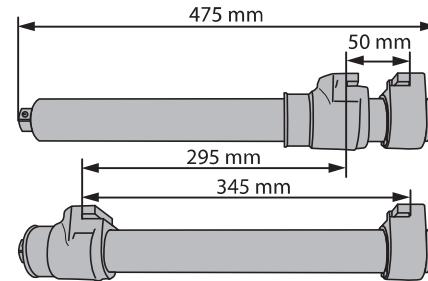
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Technical Data:

Compression length:	min. 50 mm / max. 345 mm
Working travel (sliding jaw mount):	295 mm
Overall length:	475 mm
Drive:	27 mm
Maximum load:	17,500 N
Breaking point:	70,000 N

Note:

Additional jaws for spring-Ø of from 70-240 mm are optionally available.



KL-0015 SP

Spring Compressor (not shown)

As KL-0015, but supplied with pairs of jaws with protective inserts.

Spring Compressor

(Universal)

KL-2000

Suitable for Struts and Semi-Struts. Supplied with Jaws size 1N and 2N.

Advantages:

- Load guided in cylinder tube.
- Hardened cylinder tube.

Scope of delivery:

KL-2000 Spring Compressor

Part No.	Description	Quantity
KL-2000-100	Cylinder	1
KL-1510	Pair of jaws size 1N	1
KL-1520	Pair of jaws size 2N	1



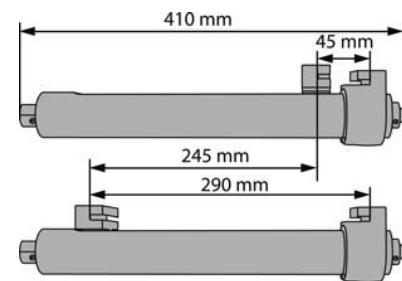
Technical Data:

Compression length:	45-290 mm
Working travel:	245 mm
Overall length:	410 mm
Drive:	reversible ratchet or impact wrench
Max. load:	8,500 N
Breaking point:	32,000 N

KL-2000 SP

Spring Compressor (not shown)

As KL-2000, but supplied with pairs of jaws with protective inserts.



**KL-1502****Pair of Jaws Size 0C**

Universally suitable.

**Technical Data:**

For spring-Ø:	70 - 110 mm
Weight (Pair):	1.1 kg

KL-1502-SP **Pair of jaws size Gr. 0 C with protective inserts**
As **KL-1502**, however, supplied with plastic protective inserts.

KL-1510**Pair of Jaws Size 1N**

Universally suitable.

**Technical Data:**

For spring-Ø:	80 - 165 mm
Weight (Pair):	1.9 kg

KL-1510-SP **Pair of jaws size 1N with protective inserts**
As **KL-1510**, however, supplied with plastic protective inserts.

KL-1520**Pair of Jaws Size 2N**

Universally suitable.

**Technical Data:**

For spring-Ø:	155 - 195 mm
Weight (Pair):	1.9 kg

KL-1520-SP **Pair of jaws Size 2N with protective inserts**
As **KL-1520** however, supplied with plastic protective inserts.

KL-1530**Pair of Jaws Size 3N**

Universally suitable.

**Technical Data:**

For spring-Ø:	180 - 240 mm
Weight (Pair):	3.0 kg

KL-1525-SP**Jaw with Protective Insert Size 2B**

Suitable for BMW 3-series E46, BMW 5-series E39.

**Technical Data:**

For spring-Ø:	155 - 195 mm
Weight (Piece):	0.9 kg

KL-1512**Pair of Jaws Size 1A**

Suitable for Audi A4 front axle, Audi A8 rear axle, Porsche, Saab 90/900, Chrysler, Vauxhall/Opel etc.

**Technical Data:**

For spring-Ø:	80 - 150 mm
Weight (Pair):	1.9 kg

KL-1512-SP **Pair of jaws Size 1A with protective inserts**
As **KL-1512**, however, supplied with plastic protective inserts.

KL-1514**Pair of Jaws Size 1B**

Suitable for Audi A8 front axle.

**Technical Data:**

For spring-Ø:	85 - 150 mm
Weight (Pair):	2.0 kg

KL-1514-SP **Pair of jaws Size 1B with protective inserts**
As **KL-1514**; however, supplied with plastic protective inserts.

KL-1516-SP**Pair of Jaws with Protective Inserts Size 1C**

Suitable for Audi A4 (model 2001 onwards) rear axle wishbone.

These jaws allow removal and replacement of rear axle springs within a few minutes without having to loosen the wishbone or lower the axle. This technique eliminates the need to perform a wheel alignment after springs have been replaced.

**Technical Data:**

For spring-Ø:	80-150 mm
Weight:	1.9 kg

KL-1550**Pair of Jaws Size 5**

Suitable for Citroën C 15 rear axle, Peugeot 305 Break rear axle.

**Technical Data:**

Weight (Pair):	2.3 kg
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KL-1561

Jaw Size 6

Suitable for Ford Probe, Mazda 323, 626, MX6, Mitsubishi-Galant with electronically-pneumatically controlled strut, Peugeot 206.



Technical Data:

Special recess:	110 mm
Inner-Ø:	180 mm
Weight (Piece):	1.3 kg

KL-1502-S

Pair of Protective Inserts Size 0 C

Designed to be used with the pair of jaws KL-1502. 6 plastic rivets KL-9001-2002 included.



1

KL-1512-S

Pair of Protective Inserts Size 1A

Suitable for the pair of jaws KL-1512.



KL-1514-S

Pair of Protective Inserts Size 1B

Suitable for the pair of jaws KL-1514.



KL-1510-S

Pair of Protective Inserts Size 1N

Suitable for the pair of jaws KL-1510.



KL-1520-S

Pair of Protective Inserts Size 2N

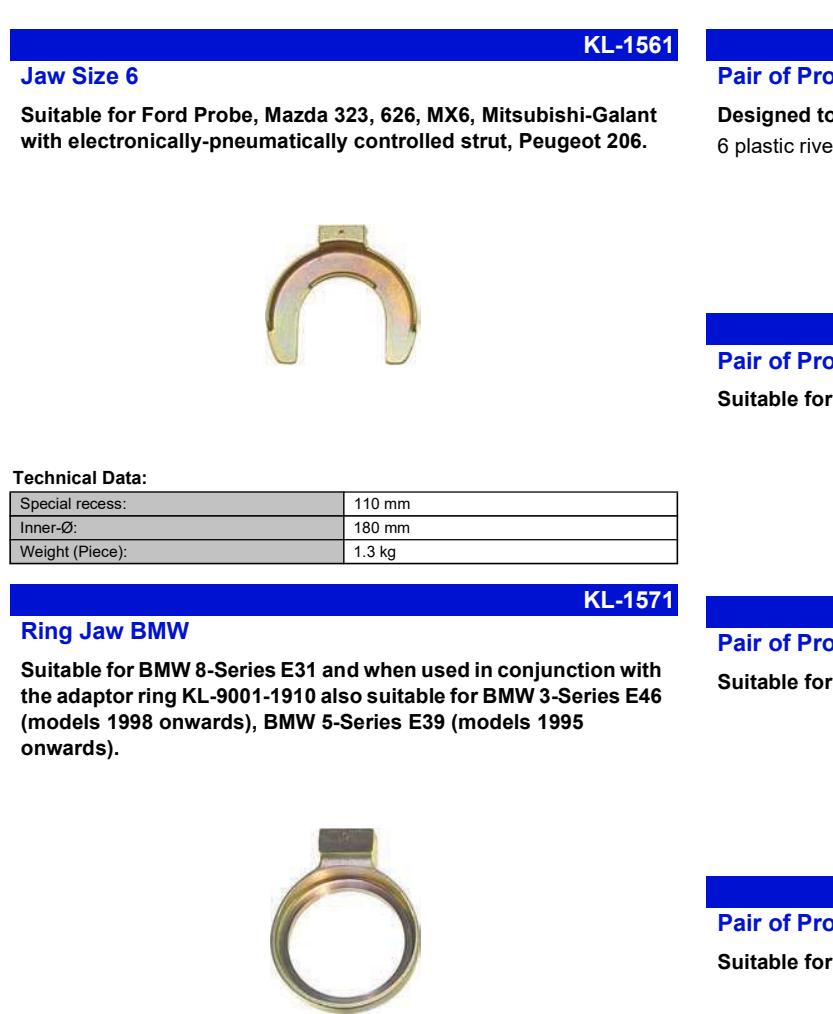
Suitable for the pair of jaws KL-1520.



KL-1521-S

Protective Insert Size 2N

Suitable for the jaw KL-1525.



Technical Data:

Recess-Ø:	139 mm
Inner-Ø:	165 mm
Weight (Piece):	2.3 kg

KL-1581-R

Ring Jaw for Renault

Suitable for Renault Laguna and Safrane, Lancia Gamma in conjunction with jaw size 3, Hyundai.



Technical Data:

Special recess:	162 mm
Inner-Ø:	238 mm
Weight (Piece):	2.5 kg

**KL-1540****Set of Jaws (4 pieces) Size 4****Suitable for VW Golf, Bora vehicles with 4-wheel drive (4 Motion).**

These specially shaped jaws are indispensable for the removal and replacement of rear axle suspension struts.

Advantages:

- No need to lower the rear axle.
- No need for an additional wheel alignment.
- No need to loosen the shock absorber and drive shaft.

**Scope of Delivery:****KL-1540 Set of Jaws (4 pieces) Size 4**

Part No.	Description
KL-1541	Jaw size 4 bottom left
KL-1543	Jaw size 4 top left
KL-1545	Jaw size 4 bottom right
KL-1547	Jaw size 4 top right

KL-1570-1**(German Utility Model)****Jaw Set BMW****Suitable for BMW E46 (3-Series 1998 onwards), E39 (5-Series 1995 onwards).**

The jaw set **KL-1570-1** used in conjunction with jaw ring **KL-1571** allows compressing the front spring.

**Scope of Delivery:****KL-1570-1 Jaw set BMW**

Part No.	Description	Spring Ø
KL-1525	Jaw Size 2B	155-195 mm
KL-1521-S	Protective insert Size 2N	155-195 mm
KL-1575	Adaptor ring BMW E46	160 mm

KL-1579-2**Jaw Set BMW E90****Suitable for BMW E90/E91/E92/E93 front axle.**

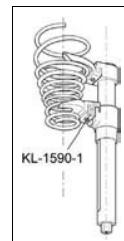
For the removal and replacement of front springs.

**Scope of Delivery:****KL-1579-2 Jaw set BMW E90**

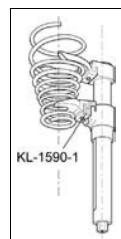
Part No.	Description
KL-1511-SP	Jaw with protective insert Size 1N
KL-1590-1	Adaptor for conical springs
KL-1579-1	Ring jaw with adaptor ring BMW E90 (Consists of ring jaw KL-1571 and adaptor ring KL-1579)

KL-1590-1**Adaptor for conical springs****Suitable for Alfa Romeo, Chrysler, Nissan, Seat Arosa, VW Lupo etc.**

Used to extend the jaws.

**KL-1590-2****Adaptor Set**

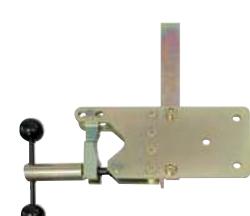
Used to extend the jaws, for example, when compressing the rear axle spring on **VW Lupo** or barrel springs. (consists of 2 x **KL-1590-1**).

**KL-0055-50****(German Utility Model)****Holding Fixture****Suitable for MacPherson suspension struts, shock-absorbers and steering systems.**

The holding fixture block is screwed into position on the workbench thus enabling a quick, safe and professional repair to be carried out. Strut axles should NOT be clamped into a vice for assembly work (risk of deformation).

**KL-0055-60****(German Utility Model)****Holding Fixture****Suitable for MacPherson suspension struts, shock-absorbers and steering systems.**

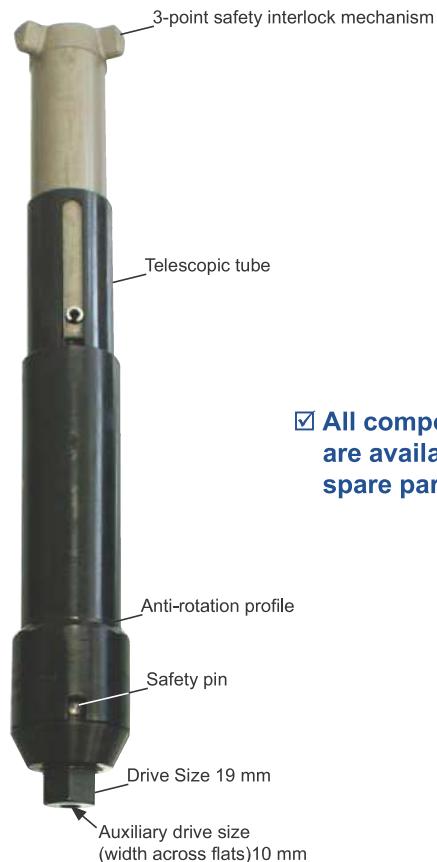
This holding fixture is either screwed into position on a workbench or clamped in a vice thus enabling quick, safe and professional repair to be carried out. Strut axles should NOT directly be clamped into a vice for assembly work (risk of deformation).



**High-quality product
made in Germany**

**Universal field of application thanks
to a wide range of pressure plates.**

**Used as original tool by the world's
leading car manufacturers**



**All components
are available as
spare parts**

**All critical components are
drop-forged and highly
annealed**

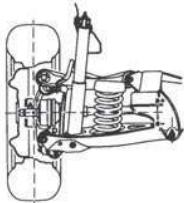
**Safe working thanks to the
anti-rotation profile and safety
interlock mechanism**

**Automatic free-wheel
at end of stroke**

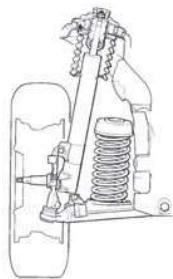
**Spindle overload
protection**



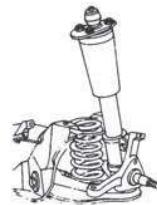
1



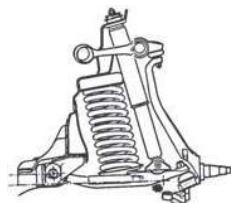
Mercedes, Renault,
Peugeot



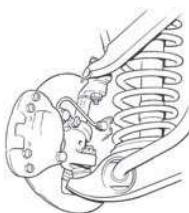
Mercedes W124,
W201, W202, W210



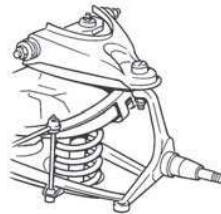
Mercedes, Ford
USA



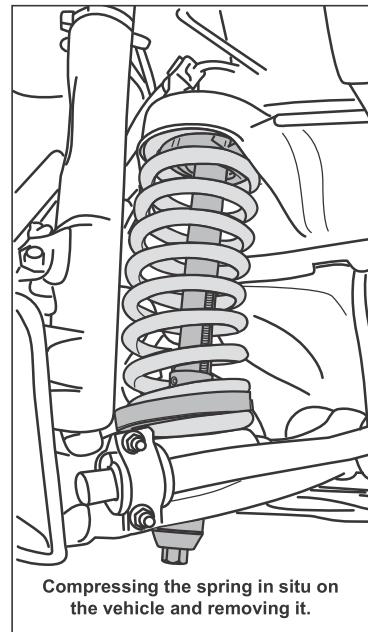
Mercedes
W123, W126, W140



Ford, GM, Chrysler,
Hummer



Ford, GM,
Japanese passenger cars



Compressing the spring in situ
on the vehicle and removing it.



Spring Compressor (long version) with pressure plates size 1+2 in a storage case

(German Utility Model)

KL-0025-1 K

For wishbone and multi-link independent suspensions; supplied with pairs of pressure plates size 1 and 2.

Suitable for Mercedes 190 (W201), C-Class (W202), CLK (W208), E-Class (W210), S-Class (W140), SL (R129), SLK (R170), W116, W123, W124, and W126 front and rear axle.

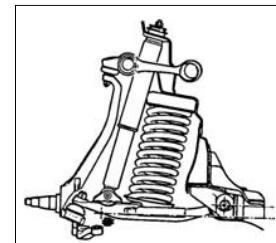
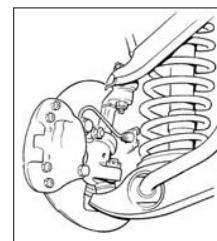
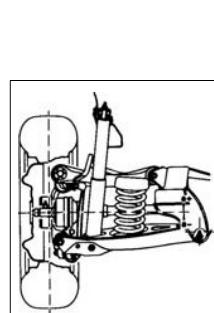
Ford, GM, Chrysler, VW T2 and LT, Fiat, Hummer, Mazda, Toyota, Nissan, Mitsubishi, Renault, Peugeot, Volvo, etc.

This universal telescopic safety spring compressor with a 3-point safety interlock mechanism, an anti-rotation profile and a spindle overload protection is unrivalled.

It enables the user to quickly and safely remove and install coil springs on wishbone and multi-link independent suspensions without having to dismantle the axle (exceptions possible). This provides at the same time a high level of safety and a substantial job time saving of 1 - 2 hours.

Advantages:

- The 3-point safety interlock mechanism allows the compression of a spring only when the piston has been locked correctly in the pressure plate. Thus, accidents due to wrong interlock are eliminated.
- Automatic freewheel ensures the freewheeling of the spindle when the maximum compression length has been reached, thus preventing any pressure on the limits stops of the spring compressor.
- All important components such as pressure plates, piston, intermediate tube, and housing are interlocked to one another. This safety feature eliminates the risk of a compressed spring unwinding itself.
- All critical components are drop-forged and highly annealed.
- The spring compressor has been tested and approved by German BG (German Employer's Liability Insurance Association) and by Mercedes.
- Due to its special telescopic design, the length of the tool changes whilst compressing a spring, thus very often enabling coil springs to be replaced without the need to dismantle the suspension. Time savings of between ½ and 2 hours per spring can so be achieved.
- Universal field of application thanks to a wide range of pressure plates.



Technical Data:

Max. load:	30 000 N
Compression length:	110-317 mm
Working travel:	207 mm
Overall length:	263 mm
Drive:	19 mm hex
Breaking point:	120 000 N
Weight	1.5 kg

Scope of delivery:

KL-0025-1 K - Spring Compressor (long version) with pressure plates

Part no.	Description	Quantity
KL-0025-100	Cylinder (long design)	1
KL-0025-11	Pair of pressure plates size 1	1
KL-0025-12	Pair of pressure plates size 2	1
KL-0025-1090	Plastic storage case	1

Spring Compressor (long version) with pressure plates size 1+2

(German Utility Model)

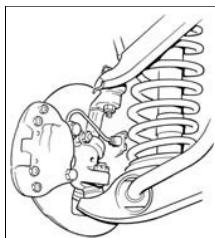
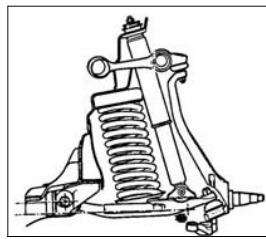
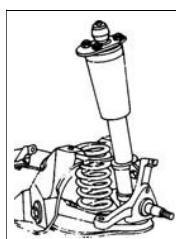
KL-0025-1

Scope of delivery:

KL-0025-1 Spring Compressor (long version) with pressure plates

Part no.	Description	Quantity
KL-0025-100	Cylinder (long design)	1
KL-0025-11	Pressure Plates Size 1	1
KL-0025-12	Pressure Plates Size 2	1



KL-0021
Spring Compressor
(German Utility Model)
1


For wishbone and multi-link independent suspensions; supplied with pairs of pressure plates size 1 and 2.

Suitable for Mercedes 190 (W201), C-Class (W202), CLK (W208), E-Class (W210), S-Class (W140), SL (R129), SLK (R170), W116, W123, W124, and W126 front and rear axle.

Ford, GM, Chrysler, VW T2 and LT, Fiat, Hummer, Mazda, Toyota, Nissan, Mitsubishi, Renault, Peugeot, Volvo, etc.

This universal telescopic safety spring compressor with a 3-point safety interlock mechanism and an anti-rotation profile enables the user to quickly and safely remove and install coil springs on wishbone and multi-link suspensions without having to dismantle the axle (exceptions possible). This provides at the same time a high level of safety and a substantial job time saving of 1 - 2 hours.

Advantages:

- 3-point safety interlock mechanism
- Automatic freewheel
- Anti-rotation profile

Technical Data:

Max. load.:	30,000 N
Compression length:	110-317 mm
Working travel:	207 mm
Overall length:	262.5 mm
Drive:	Size (width across flats) 19 mm hex
Breaking point:	120,000 N
Weight:	1.5 kg

Accessories:

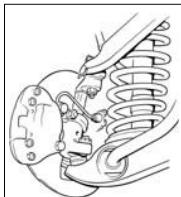
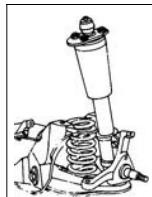
KL-0025-16 - Pair of pressure plates

Suitable for Mercedes W211 (E-Class) rear axle.

Scope of delivery:

KL-0021 Spring Compressor

Part no.	Description	Quantity
KL-0021-100	Cylinder	1
KL-0025-11	Pair of pressure plates size. 1	1
KL-0025-12	Pair of pressure plates size 2	1

KL-0025-2
Spring Compressor (short version) with pressure plates size 1+2
(German Utility Model)


Suitable for Chrysler, Mercedes C-Class (W202), CLK (W208), E-Class (W210, W211), S-Class (W140), SL (R107, R129, R170), W114, W115, W116, W123, W124, W126 and W201 rear axle springs. Also suitable for BMW 1-Series (E87) and 3-Series (E90) if used with the pair of pressure plates KL-0025-16.

Allows the removal of rear axle springs in very confined spaces without having to lower the rear sub-frame

Advantages:

- Autom. 3-Point Safety Interlock mechanism
- Automatic free-wheel at end of stroke
- Anti rotation profile
- Spindle overload protection

Technical Data:

Max. load.:	30,000 N
Compression length:	110-287 mm
Working travel:	177 mm
Overall length:	233 mm
Drive:	Size (width across flats) 19 mm hex
Breaking point:	120,000 N
Weight:	1.3 kg

Scope of Delivery:

KL-0025-2 Spring Compressor (short version) with pressure plates

Part no.	Description	Quantity
KL-0025-200	Cylinder (short design)	1
KL-0025-11	Pair of pressure plates size 1	1
KL-0025-12	Pair of pressure plates size 2	1

KL-0025-11

Pair of Pressure Plates Size 1

Suitable for Mercedes 190 (W201), C-Klasse (W202), SL (R129), W116, W123, W124, front axle; 190 (W201), C-Class (W202), SL (R129), W124; 4-Matic rear spring; Saab ; Skoda ; Ford ; etc.

Features an anti-rotation profile - to lock the pressure plates and prevent them from distorting during the compression process or in a stressed position, thus eliminating the risk of a stressed spring unwinding itself out of the spring compressor.



Technical Data:

Compression range:	Spring-Ø: 95-120 mm; incline to: 240°=6 mm
Weight:	1.3 kg

KL-0025-12

Pair of Pressure Plates Size 2

Suitable for Mercedes S-Class (W140) and W126 front spring; Mercedes C-Class (W203), S-Class (W140), SL (R107), W114, W115, W116, W123 und W126 rear spring; Vauxhall/Opel; GM; Lada; Peugeot; Rover; Hyundai; Saab; Volvo; VW T2; Ford Taunus; Mitsubishi; etc.

Features an anti-rotation profile - to lock the pressure plates and prevent them from distorting during the compression process or in a stressed position, thus eliminating the risk of a stressed spring unwinding itself out of the spring compressor.



Technical Data:

Compression range:	Spring-Ø: 20-140 mm; incline to: 240°=6 mm
Weight:	1.8 kg

KL-0025-13

Pair of Pressure Plates Size 3

Universally suitable.

Features an anti-rotation profile - to lock the pressure plates and prevent them from distorting during the compression process or in a stressed position, thus eliminating the risk of a stressed spring unwinding itself out of the spring compressor.



Technical Data:

Compression range:	Spring-Ø: 100-155 mm; incline to: 240°=20 mm
Weight:	2.1 kg

KL-0025-14

Pair of Pressure Plates Size 4

Universally suitable.

Features an anti-rotation profile - to lock the pressure plates and prevent them from distorting during the compression process or in a stressed position, thus eliminating the risk of a stressed spring unwinding itself out of the spring compressor.



Technical Data:

Compression range:	Spring-Ø: 155-190 mm; incline to: 180°=25/15 mm
Weight:	2.3 kg

KL-0025-15

Pair of Pressure Plates Size 5

Suitable for Mercedes W124 4-Matic front axle.

Features an anti-rotation profile - to lock the pressure plates and prevent them from distorting during the compression process or in a stressed position, thus eliminating the risk of a stressed spring unwinding itself out of the spring compressor.



Technical Data:

Compression range:	Spring-Ø: 110-130 mm; incline to: 270°=5 mm
Weight:	1.8 kg

(Pat. e.g. US-Patent 6,862,788)

KL-0025-16

Pair of Pressure Plates Size 0A

Suitable for Mercedes rear spring, for example, E-Class (W211), CLK (W209); BMW 1-Series (E87) rear axle, BMW 3-Series (E90) rear axle.

Features an anti-rotation profile - to lock the pressure plates and prevent them from distorting during the compression process or in a stressed position, thus eliminating the risk of a stressed spring unwinding itself out of the spring compressor.



Technical Data:

Compression range:	Spring-Ø: 95-110 mm; incline to: 240°=6 mm
Weight:	1.1 kg

KL-0025-17

Pair of Pressure Plates M-Class

Suitable for Mercedes rear axle M-Class (W164).

Features an anti-rotation profile - to lock the pressure plates and prevent them from distorting during the compression process or in a stressed position, thus eliminating the risk of a stressed spring unwinding itself out of the spring compressor.



Technical Data:

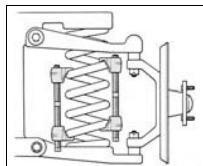
Compression range:	Spring-Ø: 110-130 mm; incline to: 270°=7 mm
Weight:	1.9 kg

Technical Data:

Compression range:	Spring-Ø: 155-190 mm; incline to: 180°=25/15 mm
Weight:	2.3 kg



1

KL-0005**Spring Compressor**

Universally suitable for use on springs in which the spring pressure does not exceed 8 000 N.

The spindles feature contra-rotating threads which eliminate the risk of slipping off. (Not suitable for use on Mercedes springs.)



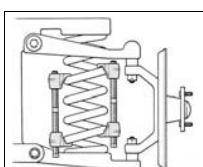
Note:
Two-part spring compressors without a safety loop are not authorized in workshops.

Technical Data:

Max. load.:	8000 N
Compression length:	65-320 mm

Accessories:

KL-0005-1 Pair of spindles for level-lift suspensions (not shown)

KL-0006-2**Spring Compressor****(Universal)**

Allows the compressing of the spring in-situ on the vehicle, so that the strut can be removed without dismantling the steering knuckle.

This is important on the front axle of **VW** vehicles and on the rear axle of **Ford Mondeo**, etc.

Especially suitable for:

- Suspension strut step bearing replacement e.g. **VW Golf (IV)**
Thanks to the spring compressor **KL-0006-2**, the suspension strut step bearing can be replaced in-situ on the vehicle within a few minutes without having to remove and re-install the suspension strut.

Expenditure of time about 15 minutes; Time saving about 1 hour.

- Spring and shock absorber unit removal and installation **e.g. VW Golf (IV, V), Passat (3C)**

By using the spring compressor **KL-0006-2** springs can be pre-compressed inside the vehicle without having to remove the axle box case/drive shaft.

Spreader tool **KL-0104-21-1A** is used to open out the clamping bores thus allowing the spring/shock absorber unit to be easily removed from the clamping bore hole.

Expenditure of time about 10 minutes; Time saving about 30 minutes.

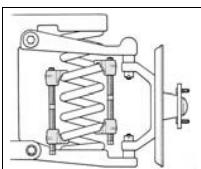
The spindles are equipped with contra-rotating threads which eliminate the risk of slipping round the spring. (Not suitable for use on Mercedes springs.)



Note:
Use spring compressor, for example **KL-9002** or **KL-5501** to remove the spring.
Two-part spring compressors without safety loop are not authorized in workshops.

Technical Data:

Max. load capacity:	8 000 N
Compressing range:	65-200 mm

KL-0006**Spring Compressor****(Universal)**

Suitable for Ford and Mercedes.

For replacement of self-levelling shock absorbers, particularly on rear axles.

Advantages:

- Contra-rotating threads to eliminate the risk of slipping off.
- Hex drive situated in the centre of the spindle permitting easy use in confined spaces where other spring-compressors cannot be used.



Two-part spring compressors without safety loop are not authorized in workshops.

Technical Data:

Max. load.:	8 000 N
Compression length:	85-170 mm



Spring Compressor for BMW 8-Series

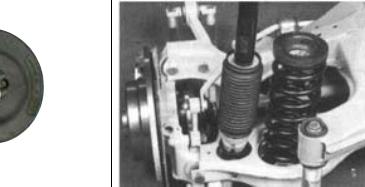
KL-0016

For wishbone (front and rear axles) e.g. rear axle on the BMW 8-Series; supplied with pair of pressure plates size 0.

This spring compressor allows replacement of coil springs without the need to dismantle the rear axle.

Technical Data:

Compression length:	25-270 mm
Working travel:	245 mm
Max. load.:	20 000 N



1

Spring Compressor

KL-0026

For Jaguar XJ-6.

This spring compressor allows front springs to be removed and replaced quickly and safely by only one person.



Spring Compressor

KL-0027

For Jaguar XJ-S and Aston Martin.

The special compressing technique allows quick and safe replacement of front springs despite of the arched mounting position.



Tool Set for the shock absorber service

(Patented)

KL-..80

For changing shock absorber inserts without dismounting the MacPherson Strut.

Scope of Delivery:

KL-..80 Tool Set for the fast shock absorber service

Part No.	Description	Qty.
KL-0008	Spring compressor	1
KL-0050-1	Special box spanner 29 mm hex, Drive 1/2"	1
KL-0050-2	Box Spanner 33.5 mm hex, Drive 1/2"	1
KL-0054-0010	Hex Socket	1
KL-0054-0011	O-ring Ø80 x 3.8	1
KL-0054-0020	Tool insert 90 degree graduation with sliding block Tool insert 90 degree graduation with sliding block	1
KL-0050-0023	Allen Key 4 mm	1
KL-0050-0012	Toothed Socket 10.5	1
KL-0050-0013	Toothed Socket 12.5	1
KL-0050-0014	Toothed Socket 14.5	1
KL-..80-0001	Plastic Storage Case	1



Spring Compressor

(Patented)

KL-0008

The KL-0008 Safety Spring Compressor allows shock-absorber inserts to be exchanged on the vehicle, without the need to remove the strut from the vehicle.

Time savings ½ - 2 hours

Technical Data:

Max. load:	10000 N
Compression length:	42-210 mm
Spring-Ø:	110-188 mm
Drive:	Size (waf) 24 mm

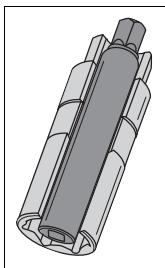


Special Impact Socket hex 24

KL-0008-12

Special long impact socket with 24 mm and ½"-square drive to operate Spring Compressor KL-0008-1 using an impact gun.



**KL-0056-1****Universal Tool Set****1**

Designed to prevent the damper-rod from rotating while loosening or tightening the damper piston rod nut on MacPherson Struts and Semi-Struts. Allows the use of a torque-wrench to achieve the correct torque without the risk of the damper-rod rotating.

Scope of Delivery:**KL-0056-1 Universal Tool Set**

Part No.	Description	Qty.	Suitable for:
KL-0056-14	Hex Socket SW14	1	Nissan
KL-0056-16	Hex Socket SW16	1	VW-Audi, Seat, Fiat
KL-0056-17	Hex Socket SW17	1	VW-Audi, Seat, Fiat
KL-0056-18	Hex Socket SW18	1	VW-Audi, Seat, Citroën, Fiat, Opel, Peugeot, Renault, jap. vehicle
KL-0056-19	Hex Socket SW19	1	VW-Audi, Seat, Citroën, Fiat, Opel, Peugeot, Renault, jap. vehicle
KL-0056-21	Hex Socket SW21	1	VW-Audi, BMW, Mercedes, Jap. Pkw, Volvo
KL-0056-22	Hex Socket SW22	1	VW-Audi, Seat, Citroën, Fiat, Opel, Peugeot, Renault
KL-0056-27	Hex Socket SW27	1	VW-Audi, Citroën, Peugeot
KL-0056-43	Hex Insert 9 mm	1	Opel
KL-0056-45	Hex Insert 11 mm	1	jap. vehicle
KL-0056-51	Allen Key 6 mm	1	BMW, Seat, Fiat, Citroën, Peugeot, Opel, Renault, jap. vehicle
KL-0056-52	Allen Key 7 mm	1	VW-Audi, Seat, Fiat, Citroën, Mercedes, Peugeot, Renault
KL-0056-53	Allen Key 8 mm	1	Mercedes
KL-0056-60	Insert Slit 3 mm	1	Opel, Renault
KL-0056-61	Insert Slit 3,5 mm	1	Citroën, Peugeot
KL-0056-62	Insert Slit 4 mm	1	Citroën, Peugeot
KL-0056-70	Double Flat 4 mm	1	Nissan
KL-0056-71	Double Flat 5,2 mm	1	VW-Audi, Nissan
KL-0056-72	Double Flat 6 mm	1	VW-Audi, Renault
KL-0056-73	Double Flat 6,3 mm	1	Nissan
KL-0056-74	Double Flat 7 mm	1	VW-Audi, Seat, Fiat
KL-0056-75	Double Flat 8 mm	1	Seat, Fiat
KL-0056-76	Double Flat 9 mm	1	jap. vehicle, Volvo
KL-0056-77	Double Flat 10 mm	1	Seat, Fiat
KL-0056-78	Double Flat 12 mm	1	Seat, Fiat
KL-0056-81	Single Flat "D" 5 mm	1	Nissan
KL-0056-86	Single Flat "D" 10 mm	1	Nissan
KL-0056-96	Insert XZN-M12	1	Opel
KL-0056-1020	Plastic Storage Case	1	

KL-0056-24**Special Hexagon Socket Size (width across flats) 24 mm****Suitable for Opel Astra 2009 onwards, Omega etc.**

Designed to loosen or tighten the piston rod nut while at the same time preventing the damper piston rod from rotating. Used with an insert of the **KL-0056.. Series**, for example on MacPherson strut suspensions.

KL-0056-50**Insert Size (width across flats) 5 mm hex**

Designed to prevent the damper-rod from rotating while loosening or tightening the damper piston rod nut. Used with a special socket of the **KL-0056.. Series**, for example on MacPherson Struts and Semi-Struts.

KL-0056-35**Insert Torx® T40****Suitable for Porsche Cayenne, VW Touareg etc.**

Designed to prevent the damper piston rod from rotating while loosening or tightening the damper piston rod nut. Used with a special socket of the **KL-0056.. Series**, for example on MacPherson Struts and Semi-Struts.

® = reg. trademark of Acument Intellectual Properties, LLC. USA

KL-0056-37**Insert Torx® T50****Suitable for Vauxhall/Opel Astra 2009 onwards, Volvo XC90 etc.**

Designed to prevent the damper piston rod from rotating while loosening or tightening the damper piston rod nut. Used with a special socket of the **KL-0056.. Series**, for example on MacPherson Struts and Semi-Struts.

® = reg. trademark of Acument Intellectual Properties, LLC. USA

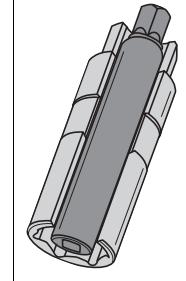
Shock Absorber Piston Rod Tool Set

KL-0056-100 K

Universal application.

Indispensable for locking the shock absorber piston rod whilst loosening or tightening the piston rod nut, e.g. on MacPherson struts.

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® = reg. trademark of Acument Intellectual Properties, LLC. USA

Application list:

Part No.	Size	Suitable for	Part No.	Size	Suitable for
KL-0056-17	17 mm	Audi: A3, A4, A6 Honda: Civic, Mazda: 3, 5 Mercedes: M-class (W163), E-class (W211) Mitsubishi: Outlander Peugeot: 4007	KL-0056-51	Allen Key 6 mm	Alfa Romeo: 159 Audi: A3, A4, A6, A8 BMW: 1-Series (E87), 3-Series (E36), 3-Series (E90), 5-Series (E34), 5-Series (E39), X5 Dacia: Logan Fiat: Fiorino, Bravo, Idea, Doblo Ford: C Max, Mondeo, Civic Mazda: 3, 5 Mini: One (2007 onwards) Mitsubishi: Colt Renault: Twingo, Megane, Modus, Traffic Volvo: XC 60, C70
KL-0056-18	18 mm	Audi: A3, A4, A6 Ford: C Max, Mondeo III Opel/Vauxhall: Astra F, Porsche Renault: Megane, Modus Volvo: S40, V40, XC60, C70	KL-0056-52	Allen Key 7 mm	Fiat: Scudo Mercedes: C-Class (W203), Vito, Viano Peugeot: 205, 207, 306, 308, 309, 405, 605 Seat: Arosa, Ibiza; VW: Polo (9N), Polo (6R), Golf (IV), Golf (VI), Scirocco, Passat
KL-0056-19	19 mm	Audi: A8 BMW: 5-Series (E39) Fiat: Fiorino, Bravo, Idea, Doblo	KL-0056-71	2- point 5.2 mm	Audi Mitsubishi: Colt, Micra, Primera VW
KL-0056-21	19 mm	BMW: 1-Series (E87), 3er (E90), X5 Dacia: Logan Mercedes: C-Class (W203), Viano, Vito Mini: One (2007 onwards) Mitsubishi: Colt; Volvo: S60, S80, XC 90 Peugeot: 205, 207, 306, 308, 309, 605 Seat: Ibiza VW: Polo (9N, 6R), Golf IV, Scirocco, Passat	KL-0056-72	2- point 6 mm	Audi Citroen Mercedes: C-Class (W203), M-Class (W163) VW: Touareg
KL-0056-22	22 mm	BMW: 3-Series (E36), 5-Series (E34) Citroen Mercedes Opel/Vauxhall	KL-0056-74	2- point 7 mm	Audi Citroen Mercedes: C-Class (W203), M-Class (W163) VW: Touareg
KL-0056-24	24 mm	Opel/Vauxhall: Astra (2009 onwards), Omega	KL-0056-75	2- point 8 mm	Mitsubishi: Colt, Outlander Peugeot: 4007 Volvo: S40
KL-0056-37	Torx T50	Opel/Vauxhall: Astra (2009 onwards), XC90	KL-0056-96	XZN M12	Opel/Vauxhall: Astra F, Vectra A, Calibra, Omega
KL-0056-45	11 mm	Jap. Vehicle Opel/Vauxhall: Omega			



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KL-0250-1**Strut Tool****Suitable for VW-Audi, Ford, Opel, Japanese cars, etc.**

Designed to prevent the damper piston rod from rotating while removing and replacing the rear strut.

Technical Data:

Length:	182 mm
Weight:	139 g
2-point:	5 and 6 mm

KL-0050-0070**Toothed Socket Set (3 Pcs.)**

Toothed socket for shock absorber piston rod nut.

Scope of Delivery: KL-0050-0070 Toothed Socket Set (3 Pcs.)

Part No.	Description	Bore	for
KL-0050-0012	Toothed Socket	10,5 mm	VW Golf rear axle
KL-0050-0013	Toothed Socket	12,5 mm	VW Polo front axle
KL-0050-0014	Toothed Socket	14,5 mm	Polo, Golf, Passat, Audi 80, Vento
Accessoires:			
KL-0050-0015	Toothed Socket	14,5 mm	Austin Maestro

KL-0050-0071**Toothed Socket Set (4 Pcs.)**

Toothed socket for shock absorber piston rod nut.

Scope of Delivery: KL-0050-0071 Toothed Socket Set (4 Pcs.)

Part No.	Description	Bore	Suitable for
KL-0050-0012	Toothed Socket	10,5 mm	VW Golf rear axle
KL-0050-0013	Toothed Socket	12,5 mm	VW Polo rear axle
KL-0050-0014	Toothed Socket	14,5 mm	Polo, Golf, Passat, Audi 80
KL-0050-0015	Toothed Socket	14,5 mm	Austin Maestro

KL-0050-50**Special Toothed Socket Mercedes W203****Suitable for Mercedes W203 (C-Class), W209 (CLK) front axle.**

For removal of damper rod nuts.

KL-0050-510**Shock Absorber Piston Rod Tool Set****Suitable for Mercedes W203 (C-Class), W209 (CLK) front axle.**

For loosening and tightening the shock absorber piston rod nut (groove nut).

Scope of Delivery: KL-0050-510 Shock Absorber Piston Rod Tool Set

Part No.	Description	Qty.
KL-0050-51	Toothed socket Mercedes W203	1
KL-0056-52	Insert internal hex 7 mm	1

KL-0050-511**Shock Absorber Pin Wrench****Suitable for Mercedes E-Class (W211) T-Model rear axle.**Intended to loosen and tighten the piston rod fastening nut. The upper mounting plate is to be locked with the pin wrench **KL-0050-511** during the loosening process.**Technical data:**

Drive:	3/8"
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KL-0050-5221**Special Socket 21 mm****Suitable for BMW-vehicles, e.g. 1 series (E87), 3 series (E46, E90), 5 series (E39, E60, E61), 6 series (E63, E64), 7 series (E38, E65, E66), X5 (E53), X3 (E83), Z8 (E52), Z4 (E85); Mini Cooper (R50, R52, R53) front axle.**To loosen and tighten the piston rod fastening nut it is necessary to lock the piston rod through the recess in the socket **KL-0050-5221**. This prevents the piston rod from turning out of position and consequently the risk of damaging the actuator cable (front axle with EDC) is eliminated.**Technical Data:**

Size (waf):	21 mm
Drive:	19 mm



Special Socket Set

KL-0050-100



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Suitable for Audi 80, 90, 100, 200, A6, VW Polo, Golf, Jetta, Vento, Passat, etc.

Extra long Special Sockets to loosen or tighten the gland nuts retaining shock-absorber inserts.

Scope of Delivery: KL-0050-100 Special Socket Set

Part-No.	Description	Qty.
KL-0050-1	Special Socket 29 mm hex	1
KL-0050-2	Special Socket 33,5 mm hex	1

Pulling T-Wrench

KL-0050-

Pulling T-Wrench for shock absorber Piston Rod



Pulling T-Wrench M12x1.25 KL-0050-0001

Suitable for BMW.

Technical Data:

Inner -Thread:	M12x1.25
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Pulling T-Wrench M15x1.5 KL-0050-0002

Suitable for GM/Opel/Vauxhall.

Technical Data:

Inner -Thread:	M15x1.5
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Pulling T-Wrench M12x1.5 KL-0050-0003

Suitable for Audi.

Technical Data:

Inner -Thread:	M12x1.5
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Pulling T-Wrench M10x1 KL-0050-0005

Passend für Renault.

Technische Daten:

Inner -Thread:	M10x1
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Pulling T-Wrench M14x1.5 KL-0050-0006

Suitable for VW-Audi, Opel/Vauxhall.

Technical Data:

Inner -Thread:	M14x1.5
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Pulling T-Wrench M10x1.5 KL-0050-0007

Suitable for BMW.

Technical Data:

Inner -Thread:	M10x1.5
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Shock Absorber Tool Kit

KL-0054-K

Universal.

Designed to loosen shock absorber screwed-connections including

Gas shock absorber systems (Bilstein excepted).

The use of KLANN Tool Set KL-0054-K guarantees professional mounting of the threaded rings when replacing a shock absorber.

Stubborn or corroded threaded rings are quickly and easily undone. The flat and round profiled slide blocks included in the tool set allow the universal and correct application of the tool on the correspondent type of shock absorber threaded rings.

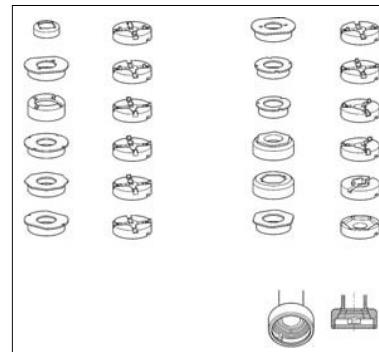
The Special Socket KL-0054-0010 also allows easy loosening of threaded rings on gas shock absorbers which have strengthened damper-rods (except "Bilstein"). The drive-head of the special socket features a series of steps with dimensions 46, 51, 55, 58 and 60 mm that make it suitable for use on the most common shock absorber threaded rings.

Thus allowing the shock absorber threaded rings also to be loosened by directly putting on the special socket KL-0054-0010.

Note: This Tool Set replaces KL-0050, KL-0051 and KL-0052.

Scope of Delivery: KL-0054-K Shock Absorber Tool Kit

Part-No.	Description	Qty.
KL-0054-0010	Extension Socket	1
KL-0054-0011	O-Ring Ø80 x 3,8	1
KL-0054-0021	Plate, 90° Universal	1
KL-0050-0022	Screw M6 x 18 Din 7984	4
KL-0050-0023	Allen Key 4 mm	1
KL-0050-0025	Round Key	4
KL-0050-0027	Flat Key	4
KL-0054-0035	Plate for VW-Audi	1
KL-0050-0012	Toothed Socket 10.5	1
KL-0050-0013	Toothed Socket 12.5	1
KL-0050-0014	Toothed Socket 14.5	1
KL-0054-0090	Plastic storage case	1

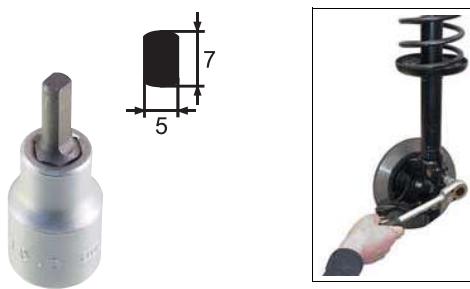


**KL-0101****Spreader Bar for suspension strut mounting****Suitable for Ford, VW-Audi, Peugeot, Renault, Citroën, jap. vehicle, etc.**

This tool is designed to open out the steering knuckle clamping bore for the suspension strut mounting. Never use a chisel or screwdriver for this work!

Technical Data:

Length:	205 mm
Breadth:	5 mm
Spreader Width:	7 mm
Weight:	65 g

KL-0101-1**Spreader Socket Size (width across flats) 5 mm****Suitable for strut clamping bores e.g. VW-Audi, BMW, Citroën, Ford, Seat, Škoda, Renault, Peugeot, jap. vehicle, etc.**

The spreader socket **KL-0101-1** is designed to open out clamping bores. This is essential in order to remove tight suspension strut-/damper units from the steering knuckle clamping bore. Then, the damper unit can easily be removed and installed. Hammer and chisel are no longer required.

Technical Data:

Drive:	1/2"
Length:	60 mm
Breadth:	5 mm
Spreader width:	7 mm
Weight:	75 g

KL-0101-2**Spreader Socket Size (width across flats) 5.5 mm****Suitable for strut clamping bores e.g. on VW-Audi Golf (IV), TT, BMW, Citroën, Ford, Seat, Škoda, Renault, Peugeot, jap. vehicle, etc.**

The spreader socket **KL-0101-2** is designed to open out clamping bores. This is essential in order to remove tight suspension strut-/damper units from the steering knuckle clamping bore. Due to its special design, this pry socket enables clamping bores to be opened out without the risk of damaging the steering knuckle. Then, the damper unit can easily be removed and installed. Hammer and chisel are no longer required.

Technical Data:

Drive:	1/2"
Length:	50 mm
Breadth:	5.5 mm
Spreader width:	8.2 mm
Weight:	75 g

KL-0168-90 K**Camber Gauge (in Case)**

The **KL-0168-90 K** Camber Gauge with magnetic foot allows the existing camber angle to be memorised before the suspension is dismantled. After reassembly, the camber can be set to the previous setting without time-consuming geometry check.

Technical Data:

Weight:	500 g
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Spreader tool with wedge No.1 and No.2

(Pat.)

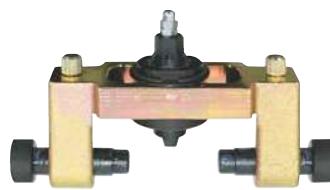
KL-0104-21-1 A

Suitable for strut clamping bores on for example VW Golf IV, Golf V, Passat; Audi; BMW; Citroën; Ford; Mercedes Vito, V-Class; Seat; Škoda; Renault; Peugeot; jap. vehicle, etc.

The Spreader tool **KL 0104-21-1 A** is designed to open out clamping bores. This is essential to remove very tight spring/shock absorber units. Then, the shock absorber unit can easily be removed and installed without the risk of damaging the (cast iron or aluminium) steering knuckle.

This tool, thanks to its variably relocatable spreading head, is especially suitable for vehicles whose fastening slot is out of centre such as VW-Audi, Ford etc. Due to its dimensions and special shape the replaceable wedge of the spreading head is particularly suitable for aluminium knuckles. The wedge is provided with an limit stop to avoid excessive knuckle widening. Other wedges are available as accessories (e.g. for steel knuckles).

Fully floating bolts avoid the tool jamming during knuckle widening.



Technical Data:

Clamping bore width (max.):	75 mm
Dimensions (wedge No.1):	a.: 5.8 mm; b.: 8.5 mm; c.: 4.5 mm
Dimensions (wedge No.2):	a.: 4.5 mm; b.: 8 mm; c.: 10 mm
Weight:	900 g

Scope of Delivery:

KL-0104-21-1 A Spreader tool with wedge No.1 and No.2

Part No.	Description	Qty.
KL-0104-21 A	Spreader tool adjustable with wedge No.1	1
KL-0104-2122	Pressure screw with wedge No.2	1

Bolt Ø10 mm

KL-0104-2111

Suitable for M12 tapped holes e.g. for VW T5

Required for knuckle bores with internal thread



Spreader tool with wedge No.1

(Pat.)

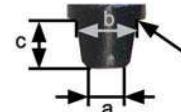
KL-0104-20

Suitable for VW-Audi; BMW; Citroën; Ford; Mercedes Vito, V-Class; Seat; Škoda; Renault; Peugeot, jap. vehicle, etc.

The Spreader tool **KL-0104-20** is designed to open out clamping bores. This is essential to remove very tight spring/shock absorber units. Then, the shock absorber unit can easily be removed and installed without the risk of damaging the (cast iron or aluminium) steering knuckle.

Due to its dimensions and special shape the replaceable wedge of the spreading head is particularly suitable for aluminium knuckles. The wedge is provided with a limit stop to avoid excessive knuckle widening. Other wedges are available as accessories (e.g. for steel knuckles).

Fully floating bolts avoid the tool jamming during knuckle widening.



Technical Data:

Clamping bore width (max.):	60 mm
Widening dimension (wedge No.1):	a.: 5.8 mm; b.: 8.5 mm; c.: 4.5 mm
Weight:	900 g

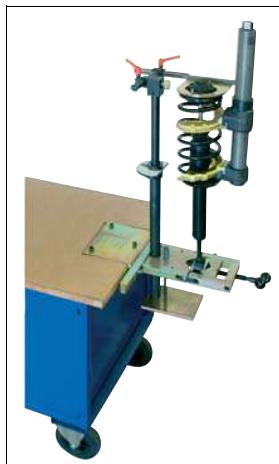


KL-0255

Strut Vise and Adjustment Tool

(Pat.)

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**For VW-Audi 1990 onwards.**

This strut vise and adjustment tool establishes quick, easy and correct adjustment and repairs of struts on the workbench.

Due to the special design strut tubes can be clamped vertically and damper eye bolts can be clamped horizontally.

The built-in protractor permits exact positioning of the strut base-fixing in relation to the upper locating fixture.

Advantages:

- Strut is clamped professionally and safely during repair.
- Strut tubes can be clamped vertically and damper eye bolts can be clamped horizontally thanks to interchangeable jaws.
- The graduated protractor ensures compatibility and universal use also with future suspension systems.
- The tool can be mounted on a bench or in a vice.

Attention:

For VW-Audi, only use the Spring Compressor **KL-0015** and protective inserts.

Parameters:

Audi 80/90 rear axle	21° ± 2°
Audi 100 Quattro from '91 onwards rear axle	51° ± 2°
Audi 100 (Front WD) from '91 onwards rear axle	45° ± 2°
Audi A4 (B5) front axle (with KL-0255-10)	11° ± 2°
Audi A4 (B5) rear axle (with KL-0255-10)	50° ± 2°
Audi A6 ab Bj. '97/Audi A6 from '97 onwards	11° ± 2°
VW Passat from '96 onwards	11° ± 2°

Weight: 26 kg

Accessories:**KL-0255-10 Adjustment plate for Audi A4**

Adjustment plate for Audi A4 (B5 from '96 - '01), front and rear axle.

KL-0255-11 Upgrade Kit for Audi A6

(for use with strut vise and adjusting tool **KL-0255**)

Suitable for Audi A6 (04/04 onwards) front axle.

The upgrade kit is used with the strut vise and adjusting tool **KL-0255**, thus enabling quick and professional adjustment of the spring plate relative to the shock absorber strut fixing eye.

With the adjusting gauge, the precise amount of offset between the lower shock absorber strut mounting and the upper spring plate can be adjusted correctly.

Note for VW and Audi vehicles:

The front spring/shock absorber struts on VW-Audi vehicles must be pre-adjusted on the workbench, so that the upper mounting point (the spring plate) and the lower shock absorber strut mounting (fork/shock absorber lug) are correctly aligned with one another.

Unless this work is undertaken first, the shock absorber strut cannot be installed, because the fastening points between the shock absorber strut and the body/axle beam will not be aligned.

If the shock absorber strut mounting is forced into the correct position, the O-rings for level control will be damaged and the shock absorber strut will be distorted, which could lead to drumming noise and cause the vehicle to handle incorrectly.

Accessories:

KL-0255-10



KL-0255-11

