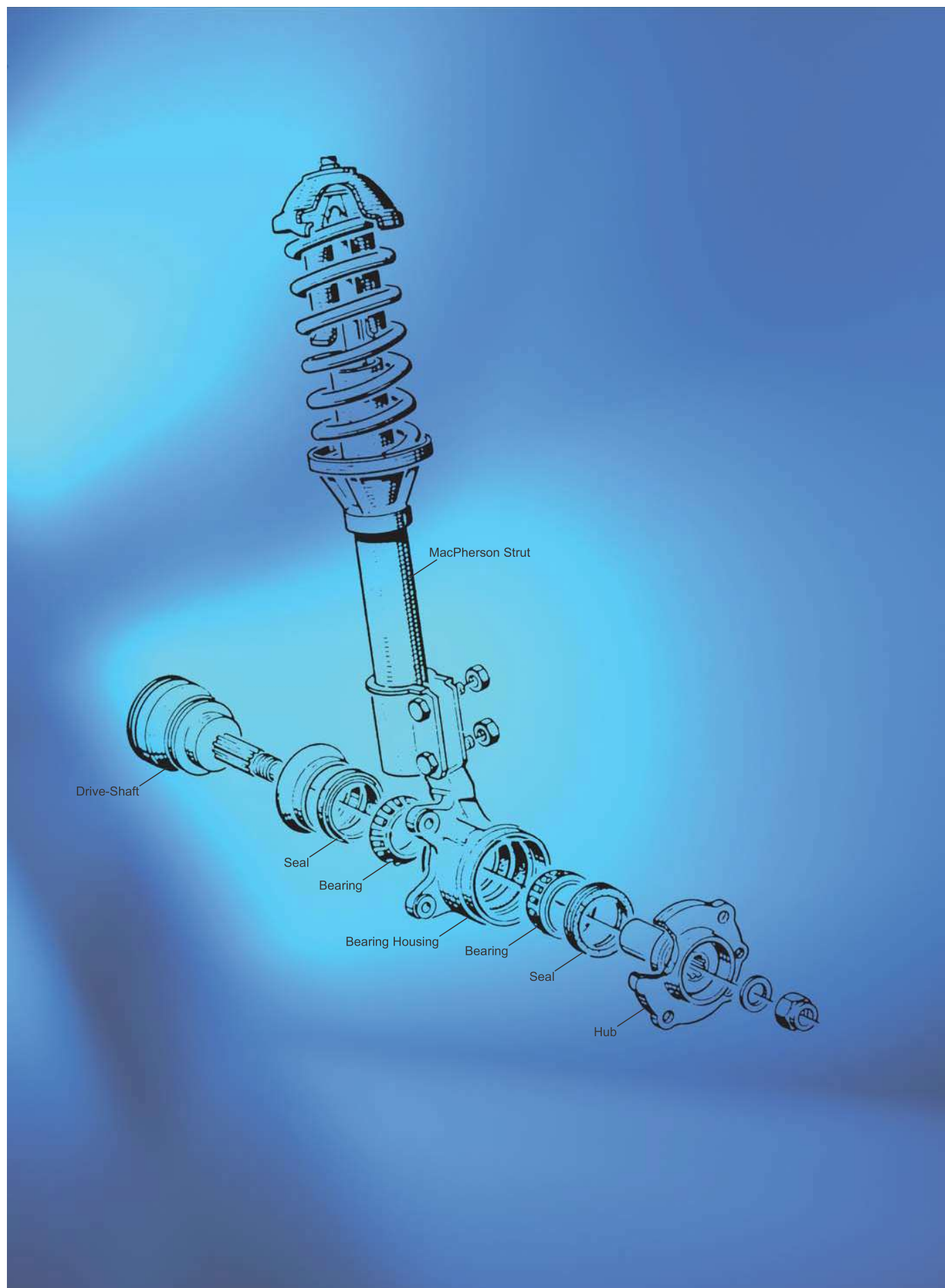


Axle repairs

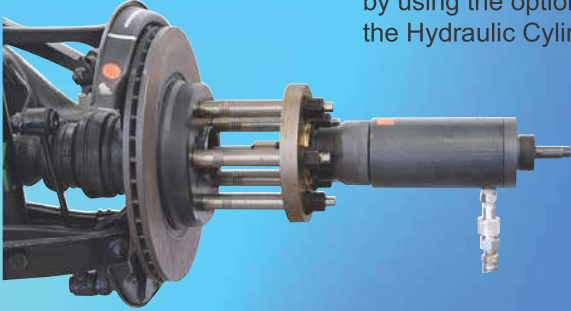
e.g. Wheels, Bearings, Hubs, Drive Shafts, etc.



3

Application examples of the KLANN modular system

- ☑ **Drive-Shaft extraction** With the KL-0174-series Puller
Extraction of glued drive shafts can be easily accomplished
by using the optional Hydraulic Spindle **KL-0045-7 (12t.)** or
the Hydraulic Cylinder **KL-0215-10 (17t.)**

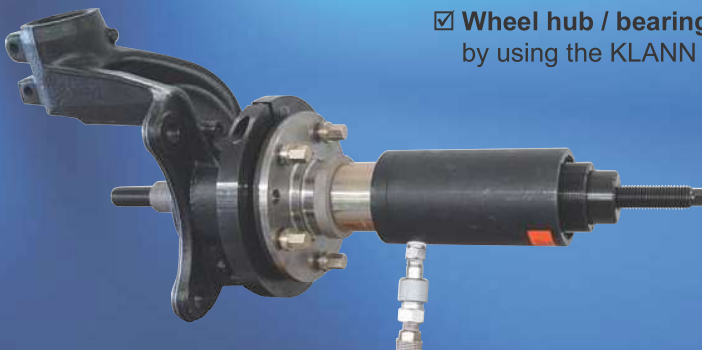


- ☑ **Removal of wheel bearing inner races from the hub** by using the **KL-0042-90** with the appropriate chuck.

- ☑ **Wheel hub / bearing unit extraction** by using tool **KL-0041-38**. Hydraulic cylinder (17t) **KL-0040-2500** allows even severely seized wheel hubs to be extracted without any problem.



- ☑ **Wheel hub / bearing unit insertion**
by using the KLANN wheel bearing tool set.



Chapter 3 overview

3.1 Wheel Bearings

Page 3.1-1 to 3.1-16



3.2 Wheel Hub Bearing Units

Page 3.2-1 to 3.2-6



3.3 Wheel Hubs

Page 3.3-1 to 3.3-12



3.4 Drive Shafts

Page 3.4-1 to 3.4-7



3.5 Wheels

Page 3.5-1 to 3.5-5



3

The KLANN Wheel Bearing/Bush Tool KL-0039-Series !!!!!

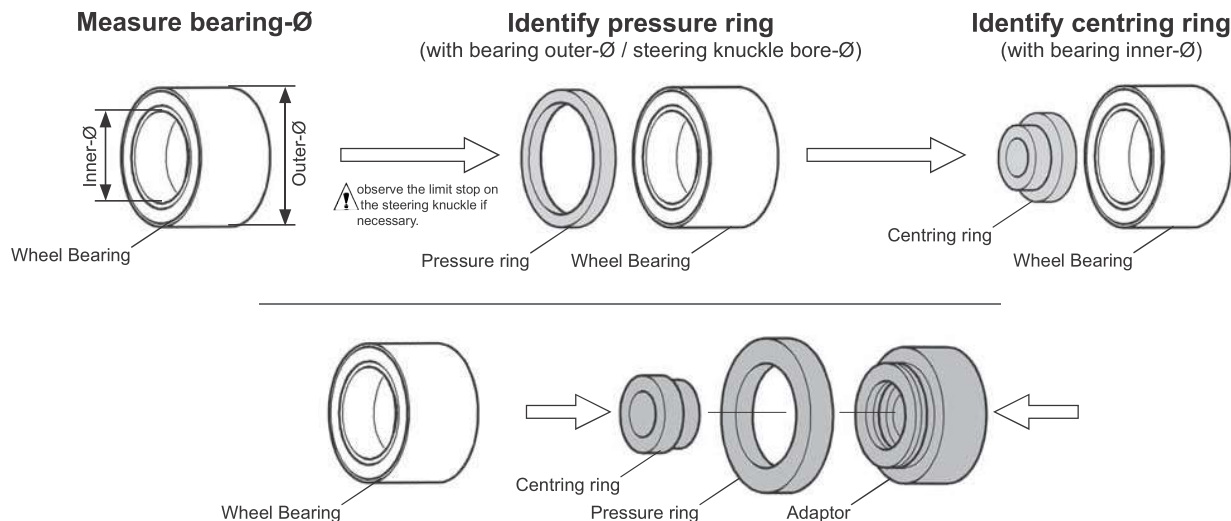
The big advantages of the unrivalled bearing/bush tools are:

- ☑ Modular system with universally combinable centring and pressure rings. This system requires substantially fewer single parts than the conventional tool sets for axle repair.
- ☑ Possibility to complement the set universally with additional centring and pressure rings, two possible drives (mechanical and hydraulic), optional use of press support/sleeves and press frames. All these features make this tool almost universal in its field of application.

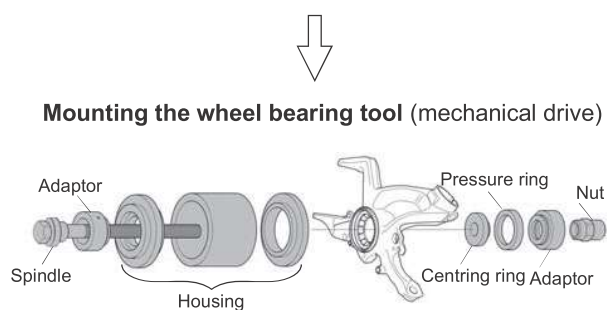
Wheel bearing removal

Identification of the required parts and assembling the tool:

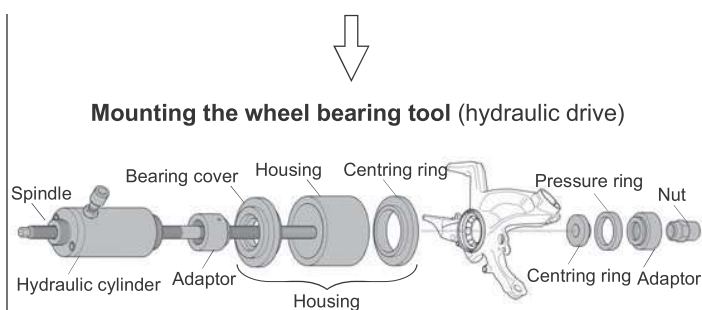
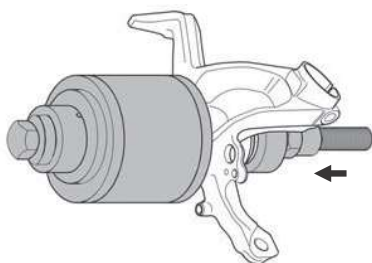
- ⇒ Measuring the inner and outer bearing-Ø
- ⇒ Determination of pressure and centring ring
- ⇒ Assembling and/or mounting the press piece.



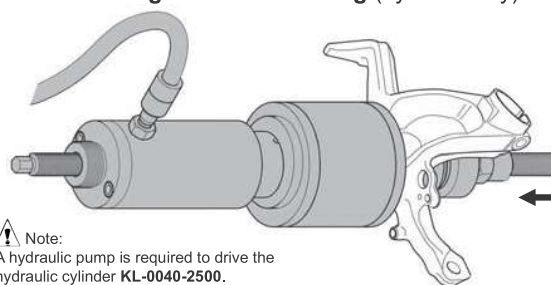
Note: The special design of the press piece enables the safe and accurate alignment when changing a wheel bearing. It ensures that during the removal and installation of the wheel bearing there will only be a pressure on the outer bearing race, and that during the installation of the wheel hub there will only be a pressure on the inner bearing race. Thus, damage to the new wheel bearing is prevented. **The combination of centring rings and pressure rings creates press pieces which can accurately be adapted to the required bearing-Ø.**



Extracting the wheel bearing (mechanically)



Extracting the wheel bearing (hydraulically)



The KLANN Wheel Bearing/Bush Tool KL-0039-Series !!!!!

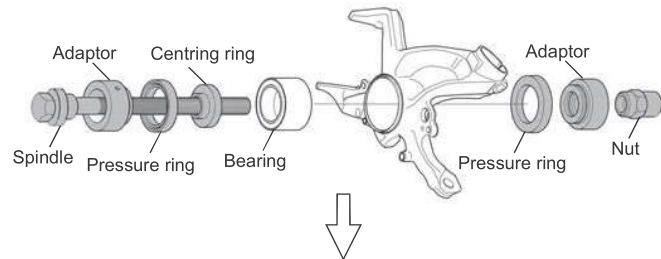
The big advantages of the unrivalled KL-0039- Tool Series are:

- ☑ Accurate alignment while inserting a wheel bearing and wheel hub.
- ☑ Substantial time and cost savings as the required tool can easily and universally be assembled.

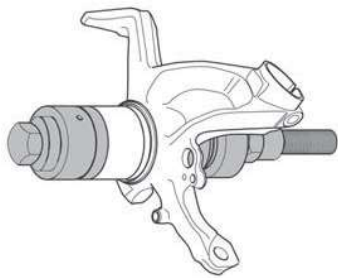
Wheel bearing installation

Identification of the required parts and assembling the tool:

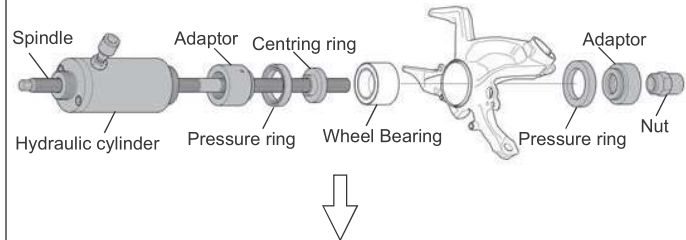
Mounting the wheel bearing tool (mechanical drive)



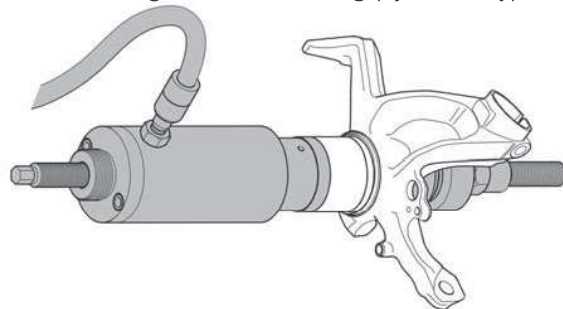
Extracting the wheel bearing (mechanically)



Mounting the wheel bearing tool (hydraulic drive)



Inserting the wheel bearing (hydraulically)



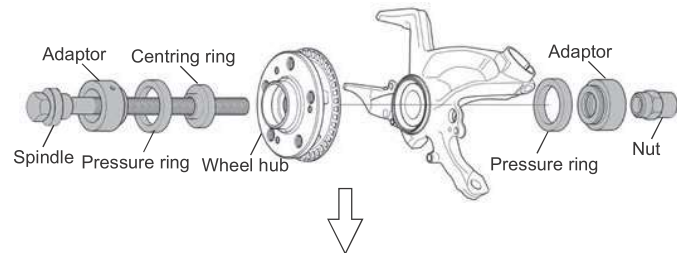
3

Wheel hub installation

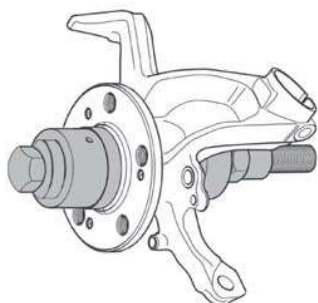
Identification of the required parts and assembling the tool:

- ⇒ Identify pressure ring
- ⇒ Identify wheel hub shoulder outer Ø; identify centring ring
- ⇒ Identify wheel hub shoulder inner Ø; identify pressure ring (support)
- ⇒ Inner bearing race-Ø

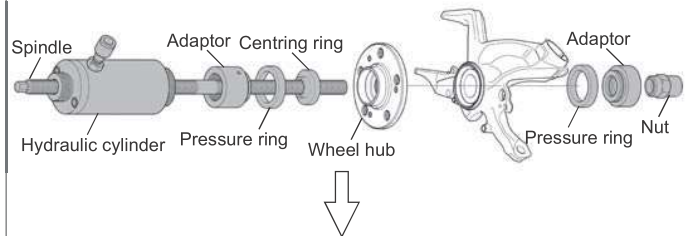
Mounting the wheel bearing tool (mechanical drive)



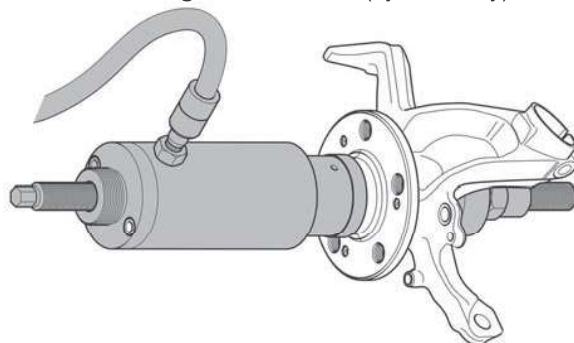
Inserting the wheel hub (mechanically)



Mounting the wheel bearing tool (hydraulic drive)



Inserting the wheel hub (hydraulically)



KL-0039-0110 K Wheel Bearing Tool Set (with mechanical drive)


Suitable for VW-Audi, BMW, Ford, Seat, Skoda, Opel/Vauxhall, etc.

For the quick, safe and professional removal and replacement of wheel bearings.

The special design of the press pieces enables safe and accurate centring and alignment when changing wheel bearings. It ensures that when removing and mounting the wheel bearing there will only be a pressure on the outer bearing race, and that when mounting the wheel hub there will only be a pressure on the inner bearing race. This prevents damage to the new wheel bearing.

The combination of centring rings and pressure rings creates press pieces which can be adjusted accurately to the bearing-Ø.

Optionally a hydraulic 17t drive can be used if the wheel bearings are heavily corroded or seized in place.

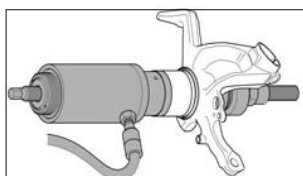
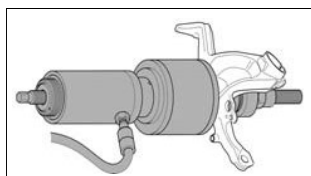
Complementing this tool set with other parts of the **KL-0039 .. Series**, such as centring and pressure rings or press-/support sleeves, makes this wheel bearing tool almost universal in its field of application. It can, therefore, also be used for changing suspension ball joints or silentblobs.

Scope of Delivery: KL-0039-0110 K Wheel Bearing Tool Set

Part No.	Description	Qty.
KL-0039-0110	Wheel Bearing Tool Set (with mechanical drive)	1
KL-0039-0119	Plastic storage case	1

Scope of Delivery: KL-0039-0110 Wheel Bearing Tool Set

Part No.	Description	Qty.
KL-0039-140	Housing set	1
KL-0039-0101	Pressure/Centring ring set 16 pieces	1
KL-0039-1011	Retainer adaptor for mechanical spindle	1
KL-0039-1002	Retainer adaptor	1
KL-0040-3008	Spindle	1
KL-0040-3009	Clamping nut	1

KL-0039-0100 Wheel Bearing Tool Set without hydr. cylinder


Suitable for VW-Audi, BMW, Ford, Seat, Skoda, Opel/Vauxhall, etc.

For the quick, accurate and safe removal and replacement of wheel bearings. Even very seized or corroded wheel bearings can easily be removed with the tool set **KL-0039-0100** that is used in conjunction with the hydraulic cylinder **KL-0040-2500**.

The special design of the press pieces enables safe and accurate centring and alignment when changing wheel bearings. It ensures that when removing and mounting the wheel bearing there will only be a pressure on the outer bearing race, and that when mounting the wheel hub there will only be a pressure on the inner bearing race. This prevents damage to the new wheel bearing.

The combination of centring rings and pressure rings creates press pieces which can accurately be adjusted to the bearing-Ø.

Complementing this tool set with other parts of the **KL-0039-.. Series**, such as centring and pressure rings or press-/support sleeves, makes this wheel bearing tool almost universal in its field of application. It can, therefore, also be used for changing suspension ball joints or silentblobs.

Scope of Delivery: KL-0039-0100 Wheel Bearing Tool Set without hydr. cyl.

Part No.	Description	Qty.
KL-0039-101	Drive set without hydraulic cylinder	1
KL-0039-0101	Pressure/Centring ring set 16 pieces	1

Scope of Delivery: KL-0039-101 Drive set without hydraulic cylinder

Part No.	Description	Qty.
KL-0039-1002	Retainer adaptor for clamping nut M20 with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920	Pull spindle M20 with clamping nut	1
KL-0039-140	Housing set	1

Storage Container with Drive Parts

KL-4999-20

The storage container **KL-4999-20** allows a clear and easy way of working with the wheel bearing / silentbloc tools of the KL-0039-.. Series.

The drive parts included in this kit are used in conjunction with the tools of the **KL-0039-.. Series** for removing and installing bearings, bushings, joints etc.

Scope of Delivery:

KL-4999-20 Storage Container with Drive Parts

Part No.	Description	Qty.
KL-4999-201	Storage Container for Drive Parts	1
KL-4999-202	Drive Part Set for Storage Container	1



Wheel Bearing Tool in a storage container

KL-4999-21

Universal use

Scope of Delivery:

KL-4999-21 Wheel Bearing Tool in a storage container

Part No.	Description	Qty.
KL-4999-211	Storage Container for wheel bearing tool	1
KL-0039-1501	Centring ring	1
KL-0039-1503	Adaptor ring conical	1
KL-0039-1504	Adaptor ring conical	1
KL-0039-1505	Adaptor ring cylindrical	1
KL-0039-1413	Centring ring Ø70 mm	1
KL-0039-1414	Centring ring Ø75 mm	1
KL-0039-1415	Centring ring Ø80 mm	1
KL-0039-1401	Bearing cover	1
KL-0039-1402	Housing	1
KL-0039-130	Set of Centring Rings Ø25-60 mm	1
KL-0039-120	Set of Pressure Rings Ø54-90 mm	1



3

Wheel Bearing Tool Set for VW / Audi without drive

KL-0039-812

Suitable for VW-Audi e.g. A3 (8L), Audi A4 (B5), A4 Quattro (B6) rear axle, A6 (4A, 4B), A8 (4D, 4E), TT (8N, 8J); VW Polo (6N), Golf (II, III, IV), Passat, Sharan, T4.

For the quick, safe and professional removal and replacement of wheel bearings.

The easy complementing of this tool set with other parts of the **KL-0039-.. Series**, makes this wheel bearing tool almost universal in its field of application.

To drive this wheel bearing tool either the mechanical or the hydraulic drive set is required.

Scope of Delivery:

KL-0039-812 Wheel bearing tool set for VW / Audi without drive

Part No.	Description	Qty.
KL-0039-1401	Bearing cover	1
KL-0039-1402	Housing	1
KL-0039-1413	Centring ring Ø70 mm	1
KL-0039-1414	Centring ring Ø75 mm	1
KL-0039-1415	Centring ring Ø80 mm	1
KL-0039-1265	Pressure ring Ø65 mm	1
KL-0039-1266	Pressure ring Ø66 mm	1
KL-0039-1267	Pressure ring Ø67 mm	1
KL-0039-1270	Pressure ring Ø70 mm	1
KL-0039-1272	Pressure ring Ø72 mm	1
KL-0039-1274	Pressure ring Ø74 mm	1
KL-0039-1275	Pressure ring Ø75 mm	1
KL-0039-1276	Pressure ring Ø76 mm	1
KL-0039-1278	Pressure ring Ø78 mm	1
KL-0039-1279	Pressure ring Ø79 mm	1
KL-0039-1280	Pressure ring Ø80 mm	1
KL-0039-1281	Pressure ring Ø81 mm	1
KL-0039-1282	Pressure ring Ø82 mm	1
KL-0039-1283	Pressure ring Ø83 mm	1
KL-0039-1285	Pressure ring Ø85 mm	1
KL-0039-1334	Centring ring Ø34 mm	1
KL-0039-1337	Centring ring Ø37 mm	1
KL-0039-1339	Centring ring Ø39 mm	1
KL-0039-1340	Centring ring Ø40 mm	1

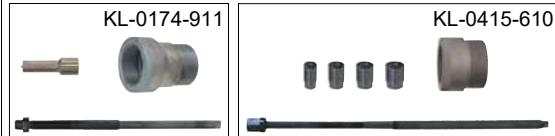


KL-0039-85 Wheel Bearing Tool Set BMW with Hydraulic Cylinder


KL-0039-802

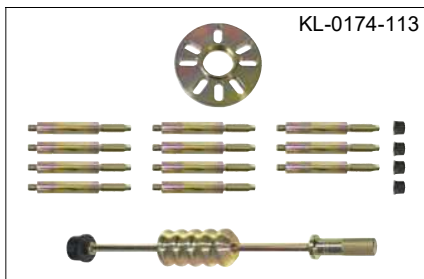
KL-0039-850

KL-0174-910



KL-0174-911

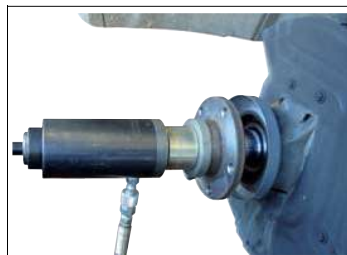
KL-0415-610



KL-0174-113



KL-0039-810 A



Suitable for BMW 3-Series (E30, E36); 5-Series (E34, E39); 7-Series (E32, E38) etc.

This tool set allows quick, trouble-free, and professional removal and replacement of drive shaft, wheel hub and wheel bearing directly in-situ on the vehicle.

Scope of Delivery: KL-0039-85 Wheel Bearing Tool Set BMW with Hydraulic Cylinder

Part No.	Description	Qty.
KL-0039-850	Wheel bearing tool set BMW without hydr. cyl.	1
KL-0039-802	Hydraulic drive without hydr. cyl.	1
KL-0040-2500	Hydraulic cylinder 17t	1

Scope of Delivery: KL-0039-850 Wheel Bearing Tool Set BMW without Hydraulic Cylinder

Part No.	Description	Qty.
KL-0174-910	Wheel hub - drive shaft tool without hydraulic cylinder	1
KL-0039-810 A	Wheel bearing tool set for BMW without drive	1

Scope of Delivery: KL-0174-910 Wheel Hub - Drive Shaft Tool without Hydraulic Cylinder

Part No.	Description	Qty.
KL-0174-113	Puller set with slide hammer	1
KL-0174-911	Upgrade Kit (Drive shaft removal)	1
KL-0415-610	Upgrade Kit (Drive shaft installation)	1

Scope of Delivery: KL-0174-113 Puller Set with Slide Hammer

Part No.	Description	Qty.
KL-0174-723	Puller bolt B Type, M12x1.5 (l=100)	4
KL-0174-724	Puller bolt B Type, M14x1.5 (l=100)	4
KL-0174-727	Puller bolt B Type, M14x1.25 (l=100)	3
KL-0174-701	Hex shoulder nut M14	4
KL-0049-31	Slide hammer 4.8 kg	1

Scope of Delivery: KL-0174-911 Upgrade Kit (Drive Shaft Removal)

Part No.	Description	Qty.
KL-0174-559	Adaptor 2 1/4"-14UNS to 2 1/4"-14UNS	1
KL-0039-1930	Pressure spindle M20x350 with O-ring	1
KL-0039-1935	Press piece	1

Scope of Delivery: KL-0415-610 Upgrade Kit (Drive Shaft Installation)

Part No.	Description	Qty.
KL-0174-563	Adaptor 2 1/4"-14 UNS to Ø60 mm	1
KL-0040-2242-1	Pull spindle M16x590	1
KL-0039-1916-2	Shoulder nut M16	1
KL-0415-0008	Adaptor M24x1.5	1
KL-0415-0009	Adaptor M30x1.5	1
KL-0415-0010	Adaptor M22x1.5	1
KL-0415-0011	Adaptor M27x1.5	1

Scope of Delivery: KL-0039-810 A Wheel Bearing Tool Set for BMW (without drive)

Part No	Description	Qty.
KL-0039-1401	Bearing cover	1
KL-0039-1402	Housing	1
KL-0039-1415	Centring ring Ø80 mm	1
KL-0039-1260	Pressure ring Ø60 mm	1
KL-0039-1264	Pressure ring Ø64 mm	1
KL-0039-1274	Pressure ring Ø74 mm	1
KL-0039-1275	Pressure ring Ø75 mm	1
KL-0039-1280	Pressure ring Ø80 mm	1
KL-0039-1281	Pressure ring Ø81 mm	1
KL-0039-1283	Pressure ring Ø83 mm	1
KL-0039-1285	Pressure ring Ø85 mm	1
KL-0039-1290	Pressure ring Ø90 mm	1
KL-0039-1339	Centring ring Ø39 mm	1
KL-0039-1342	Centring ring Ø42 mm	1
KL-0039-1345	Centring ring Ø45 mm	1
KL-0039-1349	Centring ring Ø49 mm	1
KL-0039-1506	Centring ring Ø60 mm	1

Scope of Delivery: KL-0039-802 Hydraulic Drive without hydraulic cylinder

Part No.	Description	Qty.
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920	Pull spindle M20, with clamping nut	1

Wheel Bearing Tool Set for Mercedes without drive

KL-0039-811

Suitable for Mercedes e.g. 190 series (W201), A-Class (W168, W169), B-Class (W245), W124, C-Class (W202, W203), E-Class (W210), M-Class (W163, W164), S-Class (W140), V-Class (W639).

For the quick, safe and professional removal and replacement of wheel bearings.

The easy complementing of this tool set with other parts of the **KL-0039... Series**, makes this wheel bearing tool almost universal in its field of application. To drive this wheel bearing tool either the mechanical or the hydraulic drive set is required.

Scope of Delivery: KL-0039-811 Wheel bearing tool set without drive

Part No.	Description	Qty.
KL-0039-1401	Bearing cover	1
KL-0039-1402	Housing	1
KL-0039-1403	Housing	1
KL-0039-1415	Centring ring Ø80	1
KL-0039-1266	Pressure ring Ø66	1
KL-0039-1270	Pressure ring Ø70	1
KL-0039-1273	Pressure ring Ø73	1
KL-0039-1275	Pressure ring Ø75	1
KL-0039-1279	Pressure ring Ø79	1
KL-0039-1283	Pressure ring Ø83	1
KL-0039-1284	Pressure ring Ø84	1
KL-0039-1285	Pressure ring Ø85	1
KL-0039-1288	Pressure ring Ø88	1
KL-0039-1342	Centring ring Ø42	1
KL-0039-1345	Centring ring Ø45	1
KL-0039-1349	Centring ring Ø49	1
KL-0039-1350	Centring ring Ø50	1
KL-0039-1501	Centring ring	1
KL-0039-1502	Pressure ring Ø93	1
KL-0039-1506	Centring ring Ø60	1



3

Wheel bearing tool set MB W639 rear axle with hydr. cylinder

KL-0039-210

Suitable for Mercedes Benz Vito / Viano (W639) rear axle. (bearing-Ø outer 92 mm / inner 50 mm)

For the quick, safe and professional removal and replacement of wheel bearings as well as for the replacement of wheel hubs on the rear axle wishbone without having to remove the wishbone from the vehicle.

The special design of the press pieces enables safe and accurate centring and alignment when changing wheel bearings. It ensures that when removing and mounting the wheel bearing, there will only be a pressure on the outer bearing race, and that when mounting the wheel hub, there will only be a pressure on the inner bearing race. This prevents damage to the new wheel bearing.

The combination of centring rings and pressure rings creates press pieces which can be adjusted accurately to the bearing-Ø.

Complementing this tool set with other parts of the **KL-0039... series**, such as e.g. centring- and pressure rings or press/support sleeves, makes this wheel bearing tool set almost universal in its field of application. It can, therefore, also be used for changing suspension ball joints or silentblochs.

Scope of Delivery: KL-0039-210 Wheel bearing tool set with hydr. cylinder

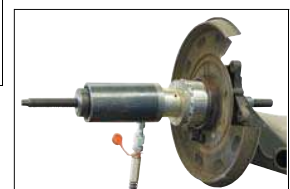
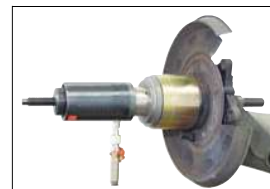
Part No.	Description	Qty.
KL-0039-211	Wheel bearing tool set MB W639 rear axle without hydr. cylinder	1
KL-0040-2500	Hydraulic cylinder 17t	1

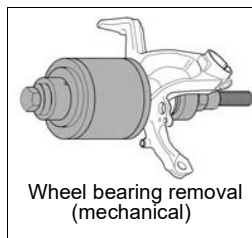
Scope of Delivery: KL-0039-211 Wheel bearing tool set without hydr. cyl.

Part No.	Description	Qty.
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920	Pull spindle M20, with clamping nut	1
KL-0039-213	Sleeve Set MB W639 rear axle	1

Scope of Delivery: KL-0039-213 Sleeve Set

Part No.	Description	Qty.
KL-0039-1270	Pressure ring Ø70 mm	1
KL-0039-1273	Pressure ring Ø73 mm	1
KL-0039-1350	Centring ring Ø50 mm	1
KL-0039-1403	Housing	1
KL-0039-1501	Centring ring	1
KL-0039-1502	Pressure ring Ø93 mm	1
KL-0039-1401	Bearing cover	1



KL-0039-801 Mechanical Drive


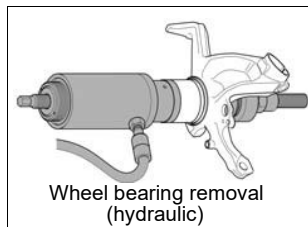
Required to mechanically operate the wheel bearing tools of the **KL-0039-... Series**.

The ball bearing and the integrated guide of the pull spindle and clamping nut in the adaptor enable professional and efficient working, even if the wheel bearings are seized in place.

Scope of Delivery:
KL-0039-801 Mechanical drive

Part No.	Description	Qty.
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1011	Retainer adaptor for mechanical spindle	1
KL-0040-3008	Pull spindle	1
KL-0040-3009	Clamping nut	1

3

KL-0039-802 Hydraulic Drive without hydraulic cylinder


This tool is necessary to hydraulically operate the wheel bearing tool sets **KL-0039-... Series** in conjunction with the 17 t hydraulic cylinder **KL-0040-2500** and a hydraulic pump such as **KL-0215-35 M25** or **KL-0215-37 M25** if the wheel bearings are seized in place.

The special design of the two retainer adaptors enables the accurate and safe guiding and centring of the hydraulic cylinder and the clamping nut towards the wheel bearing tool.

Scope of Delivery:
KL-0039-802 Hydraulic Drive without hydraulic cylinder

Part No.	Description	Qty.
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920	Pull spindle M20, with clamping nut	1

KL-0040-3008 Pull Spindle M20

Technical Data:

Overall length:	290 mm
Drive:	19 mm
Max. load:	20 t.

KL-0039-2030 Pull Spindle M20

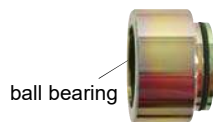
Technical Data:

Overall length:	420 mm
Drive:	19 mm
Max. charge:	20 t

KL-0040-3009 Clamping Nut M20

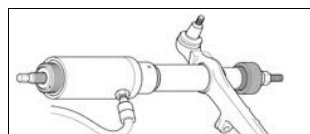
Technical Data:

Overall length:	50 mm
Drive:	30 mm

KL-0039-1011 Retainer Adaptor for mechanical spindle


This tool is necessary to retain the various **KL-0039-..** or **KL-0043-..** press/support sleeves if these are to be inserted by using the mechanical drive.

The built-in ball bearing ensures accurate and professional working, even under intensive load.

KL-0039-1002 Retainer Adaptor for clamping nut and pressure spindle with O-ring


This adaptor is designed to retain the various press/support sleeves of the **KL-0039-..** or **KL-0043-..Series**.

Retaining Ø for clamping nut or pressure spindle: 20 mm

Hydraulic-Cylinder 17 t

KL-0040-2500

Due to its special design as a tubular piston cylinder and in conjunction with various spindles, the hydraulic cylinder **KL-0040-2500** is suitable for pulling and pushing.

Application:

In conjunction with various KLANN tools, the hydraulic-cylinder **KL-0040-2500** can be used for the removal and replacement of drive shafts, wheel hubs, wheel bearings, silentblocs and suspension ball joints.



Note:

A hydraulic pump is required to drive the hydraulic cylinder **KL-0040-2500**. For accessories such as coupling, hydraulic pump, dial gauge etc., please refer to chapter 4.



Technical Data:

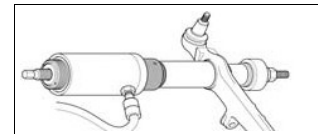
Maximum admissible force:	170 kN (17 t)
Maximum stroke:	45 mm
Maximum oil pressure:	700 bar
Maximum volume of oil:	122 cm³
Piston area:	27 cm²
Thread in tubular piston:	M20
Retaining thread (pressure side):	2 1/4"-14 UNS
Retaining thread (pulling side):	M42x2
Cylinder outer diameter:	80 mm
Cylinder overall length (piston retracted):	202 mm
Cylinder overall length (piston extended):	247 mm
Hydraulic fluid connection thread:	3/8"NPT
Weight:	5.2 kg

3

Retainer Adaptor for hydr. cyl. with O-ring

KL-0039-1003

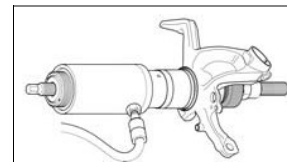
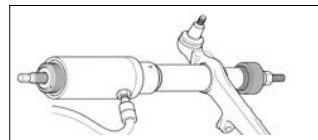
This tool is necessary to retain the various **KL-0039-..** or **KL-0043-..** press-/support sleeves if these are to be inserted by using the hydraulic cylinder **KL-0040-2500**. (Thread: M42x2)



Retainer Adaptor for clamping nut and pressure spindle with O-ring

KL-0039-1002

This adaptor is designed to retain the various press-/support sleeves of the **KL-0039-..** or **KL-0043-..Series**.
Retaining Ø for clamping nut or pressure spindle: 20 mm



Pull Spindle M20 with clamping nut

KL-0039-1920

Technical Data:

Overall length:	590 mm
Working travel:	390 mm
Load max.:	20 t.



Scope of Delivery:

KL-0039-1920 Pull Spindle M20 with clamping nut

Part No.	Description	Quantity
KL-0039-1920-1	Pull Spindle M20	1
KL-0040-3009	Clamping Nut M20	1

Pressure Spindle M20x350 with O-ring

KL-0039-1930

Technical Data:

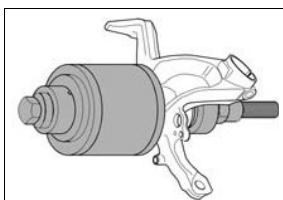
Pin-Ø:	20 mm
Overall length:	350 mm
Load max.:	20 t.



Scope of Delivery:

KL-0039-1930 Pressure spindle M20x350 with O-ring

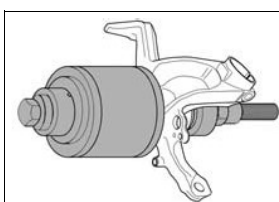
Part No.	Description	Quantity
KL-0039-1930-1	Pressure spindle M20x350 without O-ring	1
KL-0159-1223	O-ring Ø15 x 2	1

KL-0039-1401**Bearing Cover**

This tool enables centred power transmission from drive to housing.

KL-0039-1402**Housing**

3



Suitable for bearing Ø up to 90 mm.

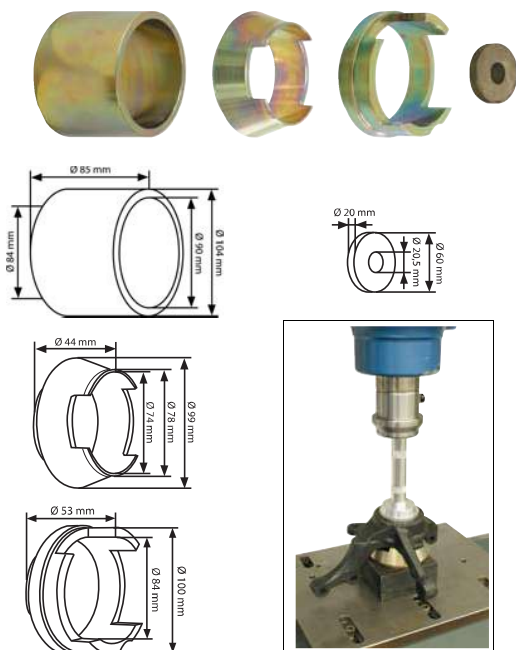
KL-0039-...**Centring Ring Ø70 mm**

These rings are necessary to support the wheel bearing tool housing on the wheel bearing housing.

KL-0039-1413	Centring Ring Ø70 mm
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KL-0039-1414	Centring Ring Ø75 mm
---------------------	-----------------------------

KL-0039-1415	Centring Ring Ø80 mm
---------------------	-----------------------------

KL-0039-807 A**Support Ring Set**

Universally suitable.

Designed to support the wheel bearing housing when removing the wheel bearing by means of a hydraulic press.

Set consists of:

KL-0039-1402 Housing:

Outer Ø: 104 mm

Inner Ø: 84 mm / 90 mm

Height: 85 mm

KL-0039-1504 Adaptor ring conical:

Outer Ø: 99 mm

Inner Ø: 74 mm

Height: 44 mm

KL-0039-1505 Adaptor ring cylindric:

Outer Ø: 104 mm

Inner Ø: 84 mm

Height: 53 mm

KL-0039-1506 Centring ring:

Outer Ø: 60 mm

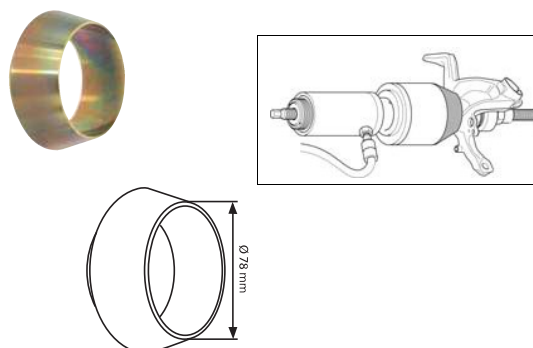
Inner Ø: 20.5 mm

Height: 20 mm

Adaptor Ring (conical)

KL-0039-1503

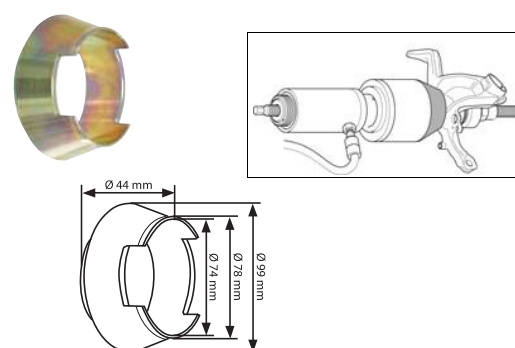
This ring is required for the accurate support of the wheel bearing tool housing on the wheel bearing housing if a standard support via the centring rings is not possible, e.g. on French vehicles where the wheel bearing has to be extracted inwards.



Adaptor Ring (conical)

KL-0039-1504

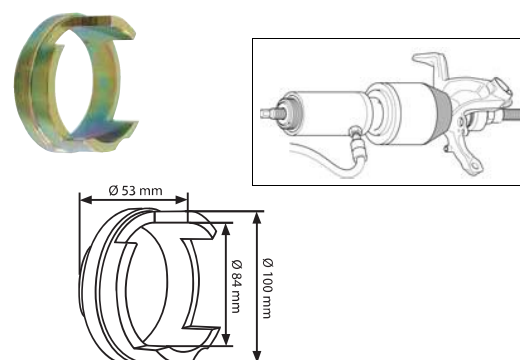
This ring is required for the accurate support of the wheel bearing tool housing on the wheel bearing housing if a standard support via the centring rings is not possible, e.g. on French vehicles where the wheel bearing has to be extracted inwards.



Adaptor Ring (cylindric)

KL-0039-1505

Used to ensure the accurate support of the wheel bearing tool housing on the wheel bearing housing if a standard support via the centring rings is not possible, e.g. on French vehicles where the wheel bearing has to be extracted inwards.

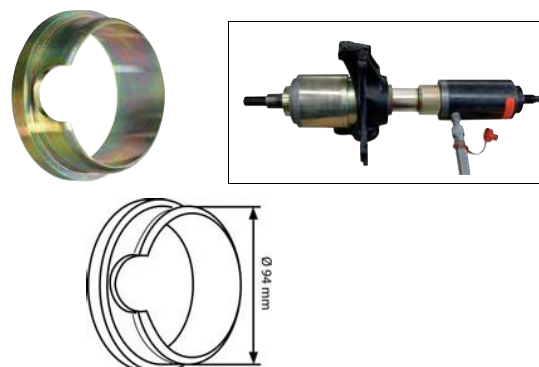


Adaptor Ring (cylindric)

KL-0039-1509

Suitable for Peugeot 407 / Citroen C5 Adaptor ring.

Required for the accurate support of the wheel bearing tool housing on the wheel bearing housing, if a standard support via the centring rings is not possible, e.g. on French vehicles where the wheel bearing has to be extracted inwards.



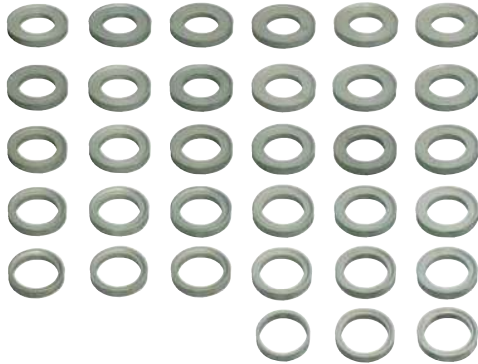
KL-0039-120

Set of Pressure Rings Ø54-90 mm

For accurate pressure force transmission on the outer bearing race or inner bearing race.

**Note:**

The special design of the press pieces enables a safe and accurate centring and alignment when changing the wheel bearing. It ensures that when removing and mounting the wheel bearing there will only be a pressure on the outer bearing race, and that when mounting the wheel hub there will only be a pressure on the inner bearing race. This prevents damage to the new wheel bearing. The combination of centring rings and pressure rings creates press pieces which can be adapted accurately to the bearing Ø.

**Scope of Delivery:****KL-0039-120 Set of Pressure Rings Ø 54 - 90 mm**

Part No.	Description	Part No.	Description
KL-0039-1254	Pressure ring Ø54 mm	KL-0039-1275	Pressure ring Ø75 mm
KL-0039-1260	Pressure ring Ø60 mm	KL-0039-1276	Pressure ring Ø76 mm
KL-0039-1261	Pressure ring Ø61 mm	KL-0039-1277	Pressure ring Ø77 mm
KL-0039-1262	Pressure ring Ø62 mm	KL-0039-1278	Pressure ring Ø78 mm
KL-0039-1263	Pressure ring Ø63 mm	KL-0039-1279	Pressure ring Ø79 mm
KL-0039-1264	Pressure ring Ø64 mm	KL-0039-1280	Pressure ring Ø80 mm
KL-0039-1265	Pressure ring Ø65 mm	KL-0039-1281	Pressure ring Ø81 mm
KL-0039-1266	Pressure ring Ø66 mm	KL-0039-1282	Pressure ring Ø82 mm
KL-0039-1267	Pressure ring Ø67 mm	KL-0039-1283	Pressure ring Ø83 mm
KL-0039-1268	Pressure ring Ø68 mm	KL-0039-1284	Pressure ring Ø84 mm
KL-0039-1269	Pressure ring Ø69 mm	KL-0039-1285	Pressure ring Ø85 mm
KL-0039-1270	Pressure ring Ø70 mm	KL-0039-1286	Pressure ring Ø86 mm
KL-0039-1271	Pressure ring Ø71 mm	KL-0039-1287	Pressure ring Ø87 mm
KL-0039-1272	Pressure ring Ø72 mm	KL-0039-1288	Pressure ring Ø88 mm
KL-0039-1273	Pressure ring Ø73 mm	KL-0039-1289	Pressure ring Ø89 mm
KL-0039-1274	Pressure ring Ø74 mm	KL-0039-1290	Pressure ring Ø90 mm

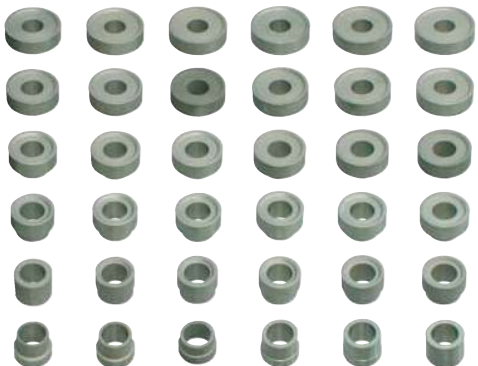
KL-0039-130

Set of Centring Rings Ø 25 - 60 mm

The centring rings ensure the exact guiding of the wheel bearing during the removal and installation process.

**Note:**

Complementing the **KL-0039-... series** with press/support sleeves, pressure spindles and pressure frames creates a tool set which is almost universal in its field of application.

**Scope of Delivery:****KL-0039-130 Set of Centring Rings Ø 25 - 60 mm**

Part No.	Description	Part No.	Description
KL-0039-1325	Centring ring Ø25 mm	KL-0039-1343	Centring ring Ø43 mm
KL-0039-1326	Centring ring Ø26 mm	KL-0039-1344	Centring ring Ø44 mm
KL-0039-1327	Centring ring Ø27 mm	KL-0039-1345	Centring ring Ø45 mm
KL-0039-1328	Centring ring Ø28 mm	KL-0039-1346	Centring ring Ø46 mm
KL-0039-1329	Centring ring Ø29 mm	KL-0039-1347	Centring ring Ø47 mm
KL-0039-1330	Centring ring Ø30 mm	KL-0039-1348	Centring ring Ø48 mm
KL-0039-1331	Centring ring Ø31 mm	KL-0039-1349	Centring ring Ø49 mm
KL-0039-1332	Centring ring Ø32 mm	KL-0039-1350	Centring ring Ø50 mm
KL-0039-1333	Centring ring Ø33 mm	KL-0039-1351	Centring ring Ø51 mm
KL-0039-1334	Centring ring Ø34 mm	KL-0039-1352	Centring ring Ø52 mm
KL-0039-1335	Centring ring Ø35 mm	KL-0039-1353	Centring ring Ø53 mm
KL-0039-1336	Centring ring Ø36 mm	KL-0039-1354	Centring ring Ø54 mm
KL-0039-1337	Centring ring Ø37 mm	KL-0039-1355	Centring ring Ø55 mm
KL-0039-1338	Centring ring Ø38 mm	KL-0039-1356	Centring ring Ø56 mm
KL-0039-1339	Centring ring Ø39 mm	KL-0039-1357	Centring ring Ø57 mm
KL-0039-1340	Centring ring Ø40 mm	KL-0039-1358	Centring ring Ø58 mm
KL-0039-1341	Centring ring Ø41 mm	KL-0039-1359	Centring ring Ø59 mm
KL-0039-1342	Centring ring Ø42 mm	KL-0039-1360	Centring ring Ø60 mm

Wheel Bearing Tool VW, Audi

(German Utility Model)

KL-0041-71 A

Suitable for compact wheel hub/ wheel bearing units (bearing-Ø 85mm) on Audi A3 (8P); Skoda Oktavia estate (1Z); VW Eos, Passat (3C), Golf (V), Tiguan and Touran, compact wheel bearing (bearing-Ø 85mm) on Audi A4 (8E).

The wheel bearing tool **KL-0041-71 A** used in conjunction with hydraulic pump **KL-0215-35 M25** or **KL-0215-37 M25** enables the quick and trouble-free removal of the flanged one-piece compact wheel hub/wheel bearing unit (bearing-Ø 85mm). It also enables the separate removal and replacement of the wheel hub and the removal of the wheel bearing housing on two-piece compact wheel bearings. Even very seized wheel bearings are no longer an issue by using the 17 t hydraulic cylinder **KL-0040-2500**. With this tool, it is not necessary to remove the steering knuckle from the vehicle. The tool works in situ on the vehicle.

Scope of Delivery:

KL-0041-71 A Wheel Bearing Tool VW, Audi

Part No.	Description	Quantity
KL-0041-710 A	Wheel bearing tool VW, Audi without hydraulic cylinder	1
KL-0040-2500	Hydraulic cylinder 17 t	1

Scope of Delivery:

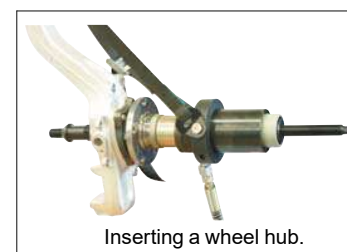
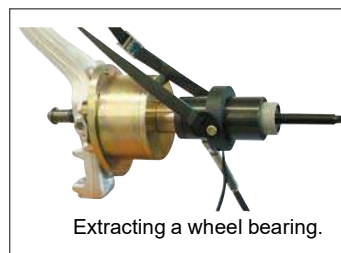
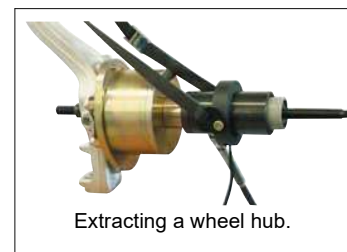
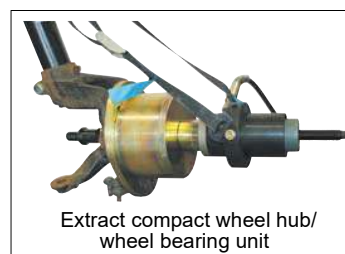
KL-0041-710 A Wheel Bearing Tool VW, Audi without Hydraulic Cylinder

Part No.	Description	Quantity
KL-0041-711 A	Upgrade kit VW, Audi	1
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydr. cylinder with O-ring	1
KL-0039-1920-1	Pull spindle M20	1
KL-0039-1920-4	Clamping nut Ø38 mm	1

Scope of Delivery:

KL-0041-711 A Upgrade Kit VW, Audi

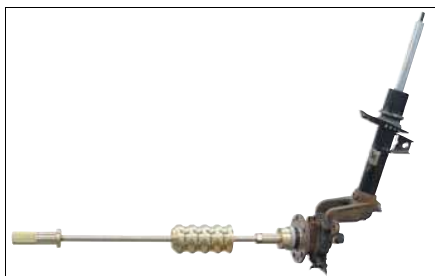
Part No.	Description	Quantity
KL-0041-7101	Cover	1
KL-0041-7102	Support sleeve with bolts	1
KL-0041-7103	Supporting plate	1
KL-0041-7104	Bolt, long (18 mm)	3
KL-0041-7105	Bolt, short (11 mm)	1
KL-0041-7106	Hexagon socket screw M6 x 45 mm	1
KL-0041-7107	Hexagon socket screw M6 x 35 mm	1
KL-0041-7120	Countersunk screw M6 x 30 mm	3
KL-0041-7110	Spacer	1
KL-0039-1265	Pressure ring Ø65 mm	1
KL-0039-1282	Pressure ring Ø82 mm	1
KL-0039-1506	Centring ring Ø60 mm	1
KL-0039-7111	Spacer 7 mm	3



KL-0049-320

Wheel Bearing Puller

(German Utility Model)



Suitable for Audi A3 (8P); Seat Altea (5P), Leon (1P); Skoda Oktavia estate (1Z); VW Eos, Passat (3C), Golf V, Tiguan and Touran.

The flange-mounted compact wheel bearing (bearing-Ø 85mm) can easily and smoothly be extracted from the steering knuckle by using the wheel bearing puller **KL-0049-320** together with the slide hammer **KL-0049-31**.

It is not necessary to remove the steering knuckle.

Scope of Delivery:

KL-0049-320 Wheel bearing puller

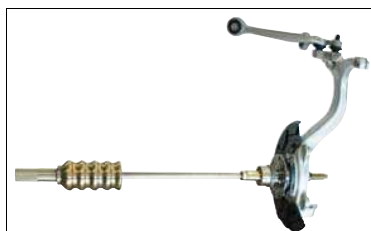
Part No.	Description	Quantity
KL-0049-3200	Pull spindle (thread M18)	1
KL-0039-1002	Retainer adaptor for clamping nut (M20 with O-ring)	2
KL-0039-1266	Pressure ring Ø66 mm	1
KL-0039-1506	Centring ring Ø60 mm	1
KL-0040-3009	Clamping nut	1

3

KL-0049-330

Wheel Bearing Puller Audi

(German Utility Model)



Suitable for Audi A4 (8E), A6 (4B) and A8 (4D).

The wheel hub and the flange-mounted compact wheel bearing (bearing-Ø 85mm) can easily and smoothly be extracted from the steering knuckle by using the wheel bearing puller **KL-0049-330** together with the slide hammer **KL-0049-31**.

It is not necessary to remove the steering knuckle.



Note:

Only the pressure ring **KL-0039-1282** and clamping nut **KL-0041-3811** are required for Audi A4 if the wheel bearing puller **KL-0049-320** is already available.

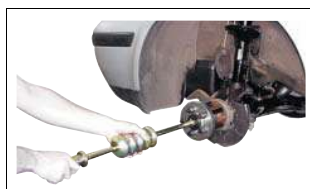
Scope of Delivery:

KL-0049-330 Wheel bearing puller Audi

Part No.	Description	Quantity
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	2
KL-0039-1266	Pressure ring Ø66 mm	1
KL-0039-1281	Pressure ring Ø81 mm	1
KL-0049-3200	Pull spindle	1
KL-0040-3009	Clamping nut	1
KL-0041-3811	Clamping nut Ø 38 mm	1
KL-0039-1273	Pressure ring Ø73 mm	1

KL-0049-31

Slide Hammer 4.8 kg with Adaptor 2 1/4"-14UNS to M18



Designed to extract wheel hubs, half-shafts, universally jointed drive shafts and brake drums etc. Used in conjunction with the **KL-0174-Series**.

Technical Data:

Hammer weight:	4.8 kg
Length:	690 mm
Adaptor thread on tie rod:	M18

Scope of Delivery:

KL-0049-31 Slide Hammer 4.8 kg with Adaptor 2 1/4"-14UNS to M18

Part No.	Description	Quantity
KL-0049-3001	Tie rod for KL-0049-3	1
KL-0049-3002	Hammer weight 4.8 kg for KL-0049-3	1
KL-0049-3003	Handle for KL-0049-3	1
KL-0049-3004	Hex nut M18	1
KL-0174-545	Adaptor 2 1/4"-14UNS to M18	1

Socket Insert XZN-M18, 78 mm, drive 1/2"

KL-4031-3518

Suitable e.g. for Audi A3, VW Polo, Golf V etc.

This tool is designed to loosen and tighten the rear axle wheel hub bearing unit fastening screw.

Technical Data:

Drive:	1/2"
Size:	XZN-M18
Length:	78 mm



1/2"



Socket Insert XZN-M12, 78 mm, drive 1/2"

KL-4031-3512

For loosening and tightening XZN M12 mounting screws.

Reinforced design, however, not suitable for use on impact wrenches.

Technical Data:

Size	XZN M12
Drive	1/2"
Length	78 mm



1/2"



3

Wheel Bearing / Wheel Hub Tool Set

KL-0430-1

Suitable for: Opel/Vauxhall Vivaro / Renault Traffic front axle:

Extraction and insertion of wheel hubs and wheel bearings.

Due to the special design of the wheel bearing housing installed on these vehicles, it is recommended to remove the wheel bearing housing from the vehicle and then, extract and insert the wheel hub and the wheel bearing by means of the hydraulic bench press **KL-0145-80**.

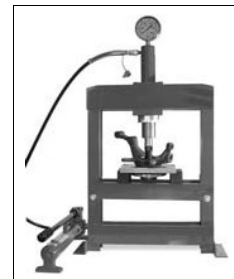
Here it is important that the wheel bearing side with the built-in ABS-sensor points towards the inner side of the wheel bearing housing. In order to avoid damage to the ABS-sensor retaining ring on the inner side of the wheel bearing housing, the centring disc **KL-0430-1003** features the appropriate recesses.

Advantages:

- Precise pressing out and pressing in of wheel bearing and wheel hub without the risk of damaging the ABS-sensor retaining ring.
- Time savings of approx 1 hour.

Scope of Delivery: KL-0430-1 Wheel Bearing / Wheel Hub Tool Set

Part No.	Description	Qty.
KL-0430-1001	Base plate; wheel hub removal	1
KL-0430-1002	Mandrel; wheel hub removal	1
KL-0430-1003	Centring disc for wheel bearing installation (support)	1
KL-0430-1004	Housing for wheel bearing removal/installation rear axle, wheel bearing removal front axle, ABS-sensor retaining ring installation	1
KL-0430-1005	Pressure disc for wheel bearing removal front axle, wheel hub installation	1
KL-0430-1006	Pressure disc for wheel bearing installation front axle	1
KL-0430-1007	Pressure disc for wheel bearing removal/installation rear axle	1



Wheel Bearing Tool Set with Hydraulic Cylinder (28 t)

KL-0040-86

Suitable for Ford Transit 2002-onwards.

To replace the brake disc or wheel bearing, the wheel bearing must be pulled out of the wheel bearing housing together with the hub and the brake disc. With this tool, the wheel bearing can be removed or installed within a few minutes, without removing the suspension strut.



Note:

A hydraulic pump is required to drive the hydraulic cylinder **KL-0040-2800**.

Scope of Delivery: KL-0040-86 Wheel Bearing Tool Set with Hydr. Cyl. (28t)

Part No.	Description	Qty.
KL-0040-860	Wheel bearing tool set Ford Transit, without Hydr. Cyl. 28t	1
KL-0040-2800	Hydraulic-cylinder 28t	1
KL-0040-2812-1	Pull spindle M24x590	1
KL-0040-2812-2	Clamping nut Ø42 mm, M24	1

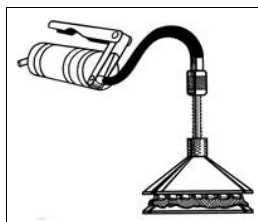


KL-0040-860

Scope of Delivery: KL-0040-860 Wheel Bearing Tool Set without Hydr. Cyl.

Part No.	Description	Qty.
KL-0040-8601	Pressure disc Ø77	1
KL-0040-8602	Pressure disc Ø68	1
KL-0040-8501	Pressure ring	1
KL-0039-1823-4	Hexagon socket screw M10 x 120	5
KL-0040-8503	Mandrel	5



KL-0179-11 Bearing Grease Arrangement Ø 114 mm


Fast, Efficient, Universal.

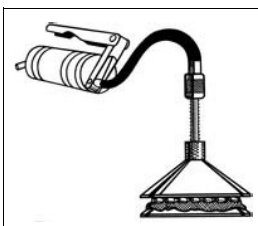
Simply place the bearing between the cones, tighten, and apply grease through the fitting on the end of the threaded shaft. Forces out old grease and evenly injects fresh grease.

Technical Data:

Cone-Ø:	114 mm
Weight:	460 g

KL-0179-12 Bearing Grease Arrangement Ø 165 mm

3

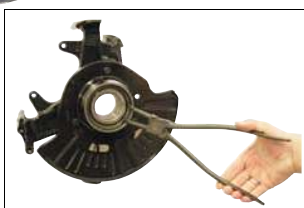


Fast, Efficient, Universal.

Simply place the bearing between the cones, tighten, and apply grease through the fitting on the end of the threaded shaft. Forces out old grease and evenly injects fresh grease.

Technical Data:

Cone-Ø:	165 mm.
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KL-0192-5 Circlip Pliers Ø 40-100 mm


Due to the 45° angled tips, this tool is ideal for inside safety clips. Required for gearbox and wheel bearing repairs.

Technical Data:

TipØ	2.5 mm
Length:	220 mm
Weight:	220 g

KL-0192-6 Circlip Pliers Ø 85-165 mm


The specially designed tips (angled at 45°) allows trouble-free removal and installation of inner safety clips. Required for gearbox and wheel bearing repairs.

Technical Data:

TipØ	3 mm
Length:	310 mm
Weight:	410 g

Circlip Pliers for inner circlips without eyes

(German Utility Model)

KL-0192-19

Suitable e.g. for wheel bearing circlips on Citroën.

The special design of the pliers' tips and the fixing via a spring-loaded counterbearing enable the easy removal and replacement of wheel bearing-circlips without eyes.

Professional removal and replacement of wheel bearing-circlips are almost impossible without this special tool.



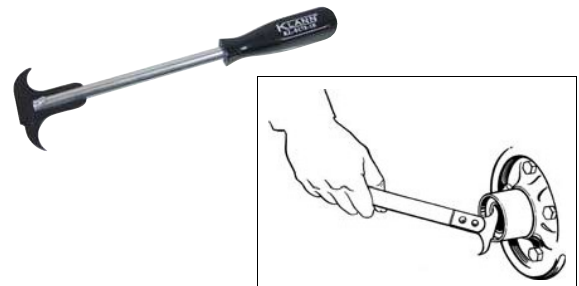
Seal Puller

KL-0178-10

The seal puller **KL-0178-10** allows easy and trouble-free removal of oil or grease seals on engines, gearboxes and axles. Two size tips reach in and fit nearly all seal applications.

Technical Data:

Weight:	400 g
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Bearing Race and Seal Assembly Tool Set Ø 40-81 mm

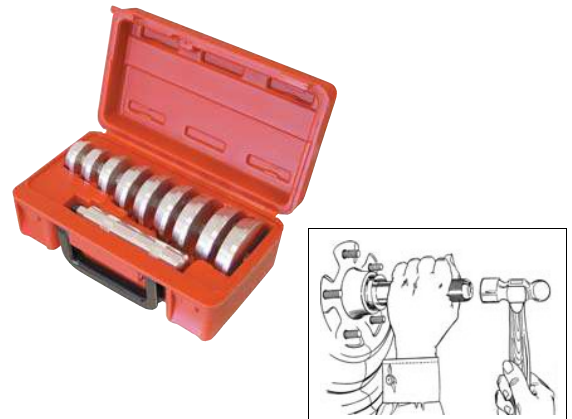
KL-0179-51 K

Universal application.

Makes it easier to insert bearing race and seals without damage to race and axle housing. This master set includes nine disc sizes to fit most standard wheel bearings. Turn discs over to drive seals. Packages in convenient clam shell for storage. The set contains a Drift and 9 Pressure Discs [Ø 40 mm; Ø 44 mm; Ø 50 mm; Ø 59 mm; Ø 63 mm; Ø 65 mm; Ø 72 mm; Ø 76 mm; Ø 81 mm].

Technical Data:

Weight:	1360 g
---------	--------



Bearing Race Assembly Tool Set

KL-0040-91

These universally applicable pressure discs are necessary to press in the outer bearing race on angular-roller bearings in conjunction with a hydraulic bench press.

The set contains drift **KL-0040-3090** and 10 pressure discs with Ø of 40 / 25mm, 40 / 32mm, 42mm, 42 / 32.5mm, 47 / 37.5mm, 49.5mm, 49.5 / 48mm, 50 / 41.5mm, 52 / 41mm and 53.5mm.



Wheel Hub Bearing unit extraction with the Puller KL-0041-38

(German Utility Model)

Wheel Hub Bearing Unit



The problem with the Extraction:

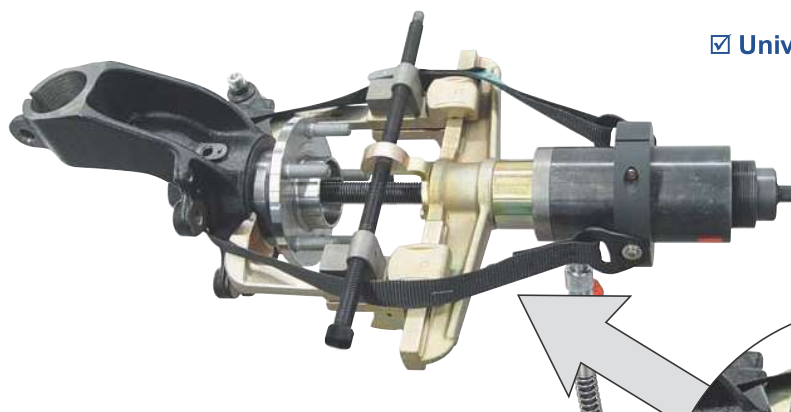
A very high pulling force is necessary to extract a wheel hub bearing unit with locking crown. The resistance of the safety locking crown has to be overcome both in case of rust and corrosion and during bearing extraction. This means that during the extraction the locking teeth of the locking crown break.

Wheel bearing pullers provided with a mechanic spindle are not suitable to perform this operation due to high pulling force.

3

German Utility Model

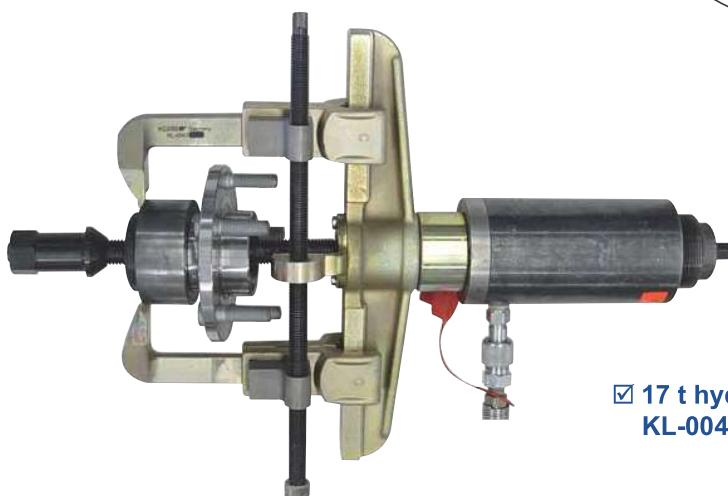
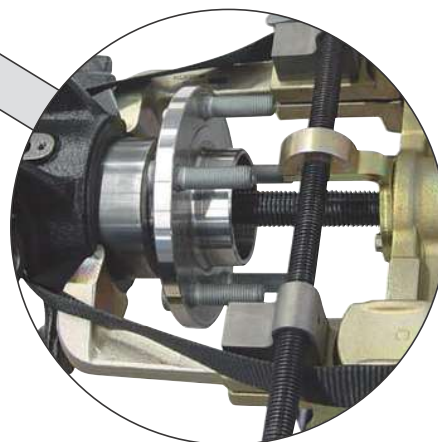
Extract wheel hub bearing unit with the wheel hub puller tool KL-0041-38


☒ Universally suitable for hub Ø up to 250 mm

☒ Adjusting spindle preattunement allows trouble-free installation

☒ Universal

☒ Accurate

☒ Easy

☒ The two support surfaces and spacer plates offer universal supporting possibilities.

☒ Easy handling and convenient single-hand operation.

☒ 17 t hydr. cylinder
KL-0040-2500

Wheel Hub Bearing Unit insertion with the tool set KL-0041-....

(German Utility Model)

The problem with the Insertion:

A particular feature of the wheel hub bearing unit is that the external safety ring that before had a safety function, has been replaced by a locking crown fixed on the wheel bearing of the wheel hub bearing unit. The wheel hub and the wheel bearing are now no longer separated but a complete unit. This means that the wheel bearing can no more, as in the past, be inserted by means of a pressure piece under a press or a standard wheel bearing tool. As it is known, there must be pressure only on the external bearing race when pressing a bearing into a bearing housing. Non-observance will destroy the bearing. Without the appropriate tool however, the bearing can only be inserted into the wheel bearing housing by pressing on the wheel hub. But this procedure will damage the new bearing on the wheel hub. In order to avoid this kind of damage we have designed a special tool that is placed behind the wheel hub to the external bearing race, on the locking crown. As a result, the wheel bearing is pressed into the external bearing race and the locking crown locks in place regularly. By using the hydraulic cylinder **KL-0040-2500**, the insertion of new wheel hub bearing unit can then be performed without any trouble and without the risk of damaging the components within just a few minutes.

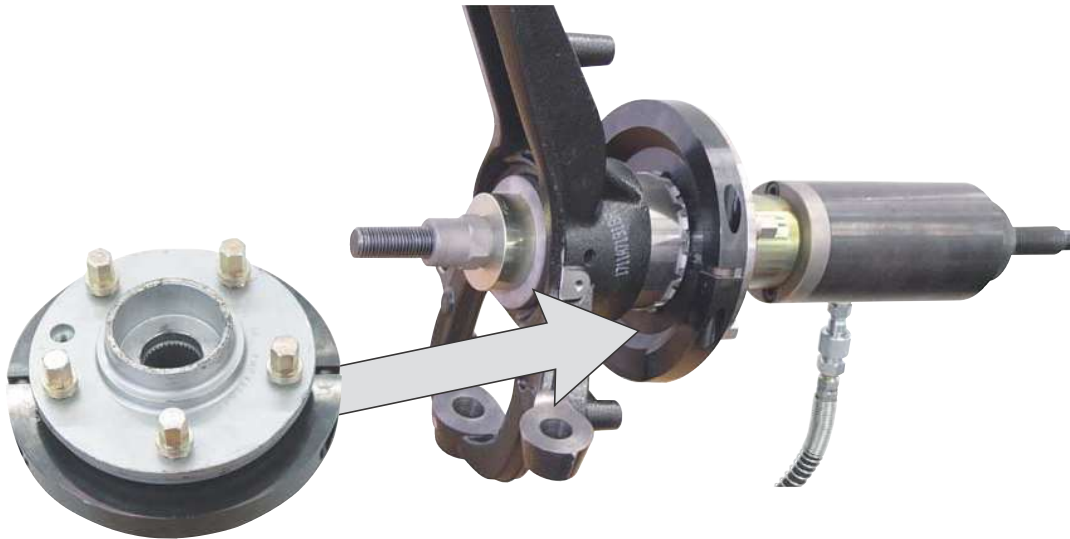
Wheel Hub Bearing unit



3

German Utility Model

Inserting a wheel hub bearing unit with the wheel bearing tool KL-0041-4.. Series



☑ Fast

☑ Safe

☑ Trouble-free

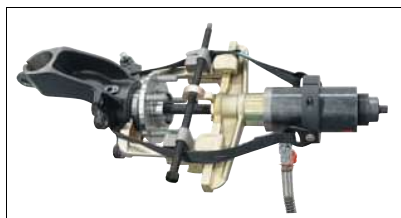
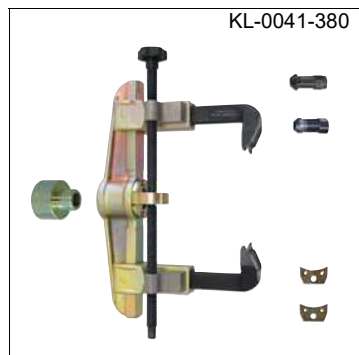
☑ 17 t hydr. cylinder
KL-0040-2500



KL-0041-38

Wheel Hub Puller, with hydr. cyl.

(German Utility Model)



The wheel hub bearing unit or the wheel hub can be quickly, safely and precisely pulled out by using the wheel hub puller **KL-0041-38**. Thanks to the hydraulic cylinder **KL-0040-2500** even stuck, stubborn or rusty wheel hub bearing units or wheel hubs are no longer a problem.

**Note:**

- The plates **KL-0041-3821** and **KL-0041-3822** can be used as distance adjusting plates if during the removal of the wheel hub it is necessary to support on the rear side of the hooks and if the supporting surface is not even.
- A hydraulic pump is required to drive the hydraulic cylinder **KL-0040-2500**.

Scope of Delivery:**KL-0041-38 Wheel Hub Puller with adjusting spindle, with hydr. cyl.**

Part No.	Description	Quantity
KL-0040-2500	Hydraulic-cylinder 17t	1
KL-0039-1920-1	Pull spindle M20	1
KL-0041-380	Wheel Hub Puller with adjusting spindle, without hydr. cyl.	1

Scope of Delivery:**KL-0041-380 Wheel Hub Puller with adjusting spindle, without hydr. cyl.**

Part No.	Description	Quantity
KL-0041-3800	Wheel hub puller base tool with adj. spindle	1
KL-0041-3802	Adaptor M42x2	1
KL-0041-3811	Clamping nut Ø38 mm	1
KL-0041-3812	Clamping nut Ø30 mm	1
KL-0041-3821	Distance plate with magnet 4 mm	1
KL-0041-3822	Distance plate with magnet 6 mm	1

KL-0039-801 B

Mechanical Drive for Wheel Hub Tools



Required to mechanically operate the wheel hub puller **KL-0041-380**.

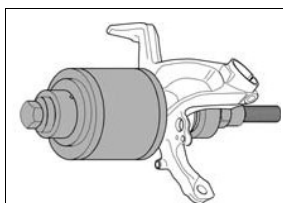
The ball bearing and the integrated guide of the pull spindle and clamping nut in the adaptor enable professional and efficient working.

Scope of Delivery:**KL-0039-801 B Mechanical Drive for Wheel Hub Tools**

Part No.	Description	Qty.
KL-0039-1011	Retainer adaptor for mechanical spindle	1
KL-0039-2030	Pull spindle M20	1
KL-0039-1332	Centring ring Ø32 mm	1
KL-0039-1920-4	Clamping nut Ø38 mm	1
KL-0041-3812	Clamping nut Ø30 mm	1

KL-0039-801 A

Mechanical Drive, 390 mm



Required to mechanically operate the wheel bearing tools of the **KL-0041-4.. Series**.

The ball bearing and the integrated guide of the pull spindle and clamping nut in the adaptor enable professional and efficient working.

Scope of Delivery:**KL-0039-801 A Mechanical Drive, 390 mm**

Part No.	Description	Qty.
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1011	Retainer adaptor for mechanical spindle	1
KL-0039-2030	Pull spindle M20	1
KL-0040-3009	Clamping nut	1

Wheel Bearing Tool Lupo Ø62 mm with hydraulic cylinder

(German Utility Model)

KL-0041-42

Suitable for vehicles with bearing-Ø 62 mm e.g. Audi A2 and VW Lupo etc.

The wheel bearing tool **KL-0041-42** enables the quick and safe mounting of wheel hub-/bearing units without the risk of damaging them.



Note:

- The wheel hub puller **KL-0041-38** is required to remove wheel hub- /bearing units.
- A hydraulic pump, is required to drive the hydraulic cylinder **KL-0040-2500**.

Scope of Delivery:

KL-0041-42 Wheel bearing tool Lupo Ø62 mm with hydraulic cylinder

Part No.	Description	Quantity
KL-0040-2500	Hydraulic cylinder 17 t	1
KL-0041-420	Wheel bearing tool Lupo Ø62 mm,without drive	1

Scops of Delivery:

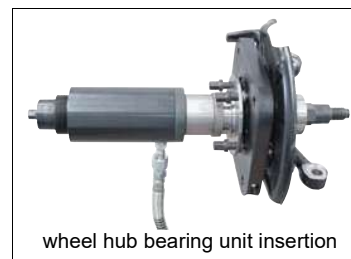
KL-0041-420 Wheel bearing tool Lupo Ø62 mm, without drive

Part No.	Description	Quantity
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920-1	Pull spindle M20	1
KL-0040-3009	Clamping nut	1
KL-0041-421	Upgrade Kit Lupo Ø62 mm	1

Scope of Delivery:

KL-0041-421 Upgrade Kit Lupo Ø62 mm

Part No.	Description	Quantity
KL-0041-4200	Clamping jaws (pair) Ø62 mm	1
KL-0041-3921	Pressure screw M12x1.5	4
KL-0039-1265	Pressure ring Ø65 mm	1
KL-0039-1359	Centring ring Ø59 mm	1
KL-0041-4204	Pressure- / Support Sleeve	1



wheel hub bearing unit insertion

Wheel Bearing Tool Ø 66 mm, with hydr. cyl.

(German Utility Model)

KL-0041-43

Suitable for vehicles with bearing-Ø 66 mm e.g VW Polo '02 onwards, Skoda Fabia '00 onwards etc.

The wheel bearing tool **KL-0041-43** enables the quick and safe mounting of wheel hub-/bearing units without the risk of damaging them.



Note:

- The wheel hub puller **KL-0041-38** is required to remove wheel hub- /bearing units.
- A hydraulic pump, is required to drive the hydraulic cylinder **KL-0040-2500**.

Scope of Delivery:

KL-0041-43 Wheel bearing tool Ø 66 mm, with hydraulic cylinder

Part No.	Description	Quantity
KL-0040-2500	Hydraulic cylinder 17 t	1
KL-0041-430	Wheel bearing tool Ø 66 mm,without hydraulic cylinder	1

Scope of Delivery:

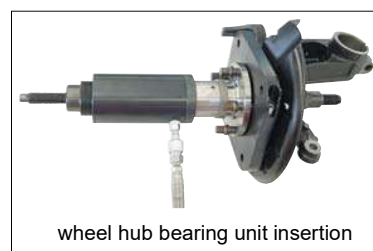
KL-0041-430 Wheel bearing tool Polo / Fabia Ø66, without hydr. cylinder

Part No.	Description	Quantity
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920-1	Pull spindle M20	1
KL-0040-3009	Clamping nut	1
KL-0041-431	Upgrade Kit Polo / Fabia Ø66 mm	1

Scope of Delivery:

KL-0041-431 Upgrade Kit Ø 66 mm

Part No.	Description	Quantity
KL-0041-4300	Clamping jaws (pair) Ø 66 mm	1
KL-0041-3931	Pressure screw M14x1.5	5
KL-0039-1265	Pressure ring Ø 65 mm	1
KL-0041-4204	Pressure- / Support Sleeve	1

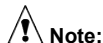


wheel hub bearing unit insertion

KL-0041-44 B Wheel Bearing Tool with Hydr. Cyl. Ø 72 mm (German Utility Model)


Suitable for vehicles with bearing-Ø 72 mm e.g. Audi A2 (model 2000 onwards), Seat Ibiza (model 2002 onwards), Škoda Fabia (model 2000 onwards) and VW Polo (model 2002 onwards) etc.

The wheel bearing tool **KL-0041-44 B** enables the quick and safe mounting of wheel hub-/bearing units without the risk of damaging them.


Note:

- The wheel hub puller **KL-0041-38** is required to remove wheel hub-/bearing units.
- A hydraulic pump is required to drive the hydraulic cylinder **KL-0040-2500**.

Scope of Delivery:
KL-0041-44 B Wheel bearing tool with hydraulic cylinder

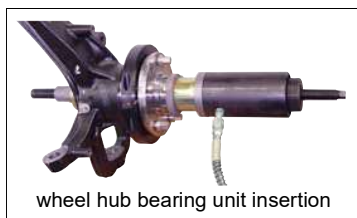
Part No.	Description	Quantity
KL-0040-2500	Hydraulic cylinder 17 t	1
KL-0041-440 B	Wheel bearing tool without hydraulic cylinder	1

Scope of Delivery:
KL-0041-440 B Wheel bearing tool without hydraulic cylinder

Part No.	Description	Quantity
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920-1	Pull spindle M20	1
KL-0040-3009	Clamping nut	1
KL-0041-441 B	Upgrade Kit Polo Ø72	1

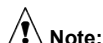
Scope of Delivery:
KL-0041-441 B Upgrade Kit Polo Ø72

Part No.	Description	Quantity
KL-0041-4400 B	Clamping jaws (pair) Ø72	1
KL-0041-3931	Pressure screw M14x1.5	5
KL-0039-1802	Centring sleeve long Ø27.4	1
KL-0039-1265	Pressure ring Ø65	1
KL-0039-1674	Press/support sleeve short Ø74	1

KL-0041-45 B Wheel bearing tool Ø85 mm with hydr. cyl. (German Utility Model)


Suitable for vehicles with bearing-Ø 85 mm e.g. VW T5 V front and rear axle.

The wheel bearing tool **KL-0041-45 B** enables the quick and safe mounting of wheel hub-/bearing units without the risk of damaging them.


Note:

- The wheel hub puller **KL-0041-38** is required to remove wheel hub-/bearing units.
- A hydraulic pump is required to drive the hydraulic cylinder **KL-0040-2500**.

Scope of Delivery:
KL-0041-45 B Wheel bearing tool Ø85 mm with hydraulic cylinder

Part No.	Description	Quantity
KL-0040-2500	Hydraulic cylinder 17 t	1
KL-0041-450 B	Wheel bearing tool Ø85 mm without hydraulic cylinder 17 t	1

Scope of Delivery:
KL-0041-450 B Wheel bearing tool Ø85 mm without hydraulic cylinder

Part No.	Description	Qty.
KL-0041-451 B	Upgrade Kit VW-T5 Ø85 mm	1
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920-1	Pull spindle M20	1
KL-0040-3009	Clamping nut	1

Scope of Delivery:
KL-0041-451 B Upgrade Kit Ø85 mm

Part No.	Description	Qty.
KL-0041-4500 B	Pair of clamping jaws Ø85 mm	1
KL-0041-3931	Pressure screw M14x1.5	5
KL-0039-1502	Pressure ring Ø93 mm	1
KL-0039-1803	Centring sleeve (long) Ø29.5 mm	1
KL-0039-1273	Pressure ring Ø73 mm	1
KL-0039-1289	Pressure ring Ø89 mm	1

Wheel bearing tool set with hydraulic cylinder

KL-0041-41

Suitable for VW Touareg and Porsche Cayenne.

The wheel bearing tool set **KL-0041-41** enable quick and trouble-free removal and replacement of wheel hub-/bearing units.



Note:

A hydraulic pump is required to drive the hydraulic cylinder **KL-0040-2500**.

Scope of Delivery:

KL-0041-41 Wheel bearing tool set with hydraulic cylinder

Part No.	Description	Qty.
KL-0040-2500	Hydraulic cylinder 17 t	1
KL-0040-2512	Pull spindle	1
KL-0040-3009	Clamping nut	1
KL-0041-410	Wheel bearing tool set without hydraulic cylinder	1

Scope of Delivery:

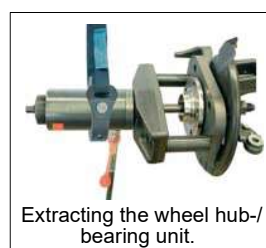
KL-0041-410 Wheel bearing tool set without hydraulic cylinder

Part No.	Description	Qty.
KL-0330-0002	Distance piece	2
KL-0330-0003	Hexagon socket screw M12 x 30 mm	4
KL-0330-0004	Bearing bridge	1
KL-0041-3811	Clamping nut Ø38 mm	1
KL-0041-411	Upgrade kit Touareg / Cayenne	1

Scope of Delivery:

KL-0041-411 Upgrade kit Touareg / Cayenne

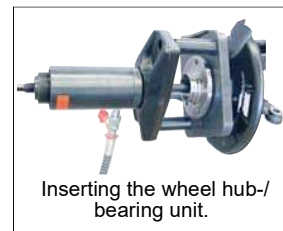
Part No.	Description	Qty.
KL-0041-4110	Base plate Touareg / Cayenne	1
KL-0041-4100	Clamping jaws (pair) VW-Touareg	1
KL-0041-4113	Pressure disc	1



Extracting the wheel hub-/bearing unit.



Wheel hub-/bearing unit



Inserting the wheel hub-/bearing unit.

Wheel Bearing Tool Volvo, Ford with Hydraulic Cylinder

KL-0041-46 C

Suitable for vehicles with bearing-Ø 78 mm; e.g. Ford Focus, S-Max; Volvo C30, S40 and V50 etc.

Designed for the quick and safe mounting of wheel hub-/bearing units in-situ on the vehicle. Due to its special design, this tool ensures that during the mounting process there will only be a pressure on the outer bearing race and not on the wheel hub. This prevents damage to the bearing. A professional mounting of wheel hub-/bearing units is almost impossible without this tool.



Note:

- The wheel hub puller **KL-0041-38** is required to remove wheel hub-/bearing units.
- A hydraulic pump is required to drive the hydraulic cylinder **KL-0040-2500**.

Scope of Delivery:

KL-0041-46 C Wheel bearing tool Volvo, Ford with hydraulic cylinder

Part No.	Description	Quantity
KL-0040-2500	Hydraulic cylinder 17 t	1
KL-0041-460 C	Wheel bearing tool without hydraulic cylinder	1

Scope of Delivery:

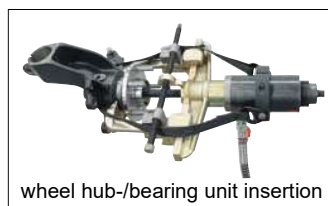
KL-0041-460 C Wheel bearing tool Volvo Ford without hydraulic cylinder

Part No.	Description	Quantity
KL-0041-461 C	Upgrade Kit Volvo	1
KL-0039-1002	Retainer adaptor for clamping nut and pressure spindle with O-ring	1
KL-0039-1003	Retainer adaptor for hydraulic cylinder with O-ring	1
KL-0039-1920-1	Pull spindle M20	1
KL-0040-3009	Clamping nut	1

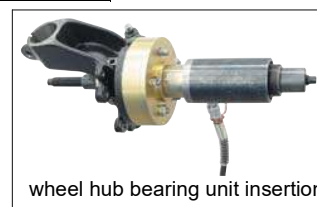
Scope of Delivery:

KL-0041-461 C Upgrade Kit Volvo, Ford

Part No.	Description	Quantity
KL-0041-4600 B	Clamping jaws (pair) Ø78 mm	1
KL-0041-4607	Housing	1
KL-0041-4608 C	Cover	1
KL-0039-1288	Pressure ring Ø88 mm	1



wheel hub-/bearing unit insertion



wheel hub bearing unit insertion

KL-0174 Puller Series



The **KL-0174 Puller Series** used together with the hydraulic cylinder **KL-0215-10** (17t.) or with the hydraulic spindle **KL-0045-7** (12t.) allow to press out drive shafts glued with loctite or rusted. Together with the slide hammer **KL-0049-31** wheel hubs, brake drums and half shafts can be removed directly in-situ on the vehicle.

Thanks to the use and combination of different perforated disks, tie bolts and drives the **Puller Series KL-0174** is almost universally applicable.

Application:

Drive shaft pressing out: mechanical or hydraulic drive

- e.g. the use of the 17 t. hydraulic cylinder **KL-0040-2500** and of the press spindle **KL-0039-1930** allows you to press out even rusted, very stuck or glued drive shafts.

Wheel hubs, half shafts and brake drums removal: with slide hammer KL-0049-31

- By using the slide hammer **KL-0049-31** wheel hubs, brake drums and half shafts can be removed directly in-situ on the vehicle.

Wheel Hubs

Standard Hub,
4 Wheel Bolts

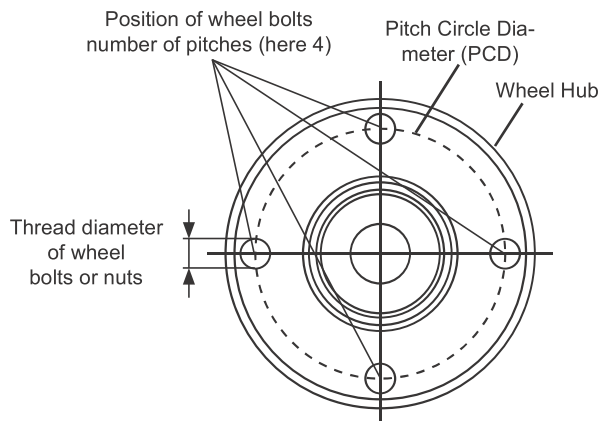
Standard Hub,
5 Wheel nuts

4X4 Off-Road,
6 Wheel nuts



In order to select the correct puller, the following important data must be known:

- PCD and number of studs (3, 4, 5 or 6).
→ important to determine the correct plate size with the correct hole pattern
- Wheel nuts (type M) or Screws (type B) and thread diameters.
→ important to determine the puller bolts with inner or outer threads.
- What drive method is to be used, mechanical spindle, slide-hammer, Hydraulic spindle or Hydraulic Cylinder?
→ important to determine the appropriate adaptor. (see table)

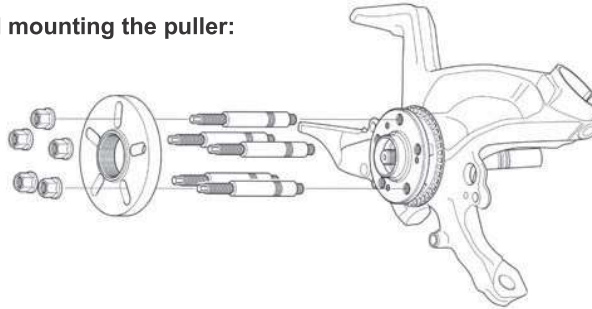


KL-0174 Puller Series

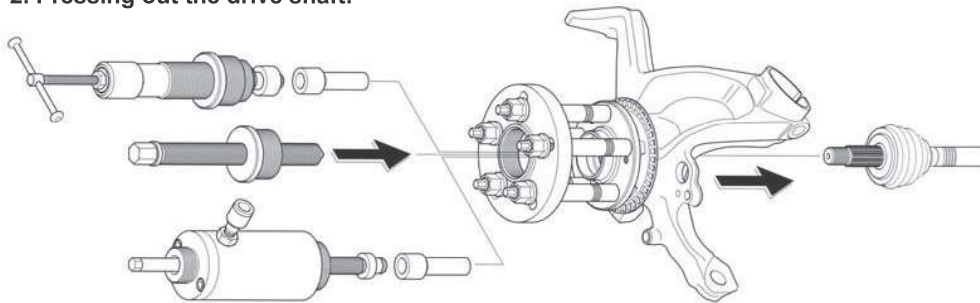
Components for the assembly of a Puller from the Puller-Series KL-0174-...

The puller plates with the sizes 0, 1, 2 and 3 can be assembled to an all-purpose puller-system by using different adaptors, spindles, puller bolts, screws and drives.

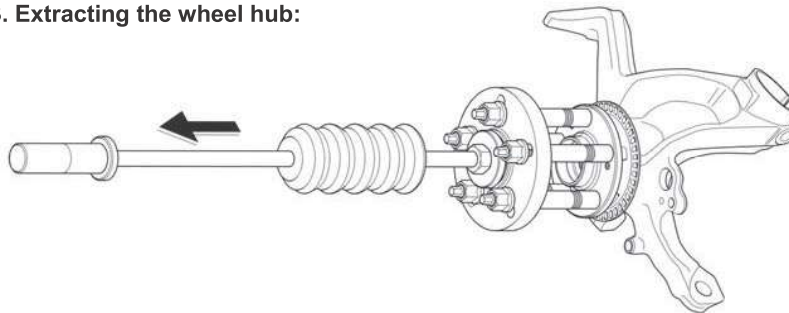
1. Assembling and mounting the puller:



2. Pressing out the drive shaft:



3. Extracting the wheel hub:



Examples of application:

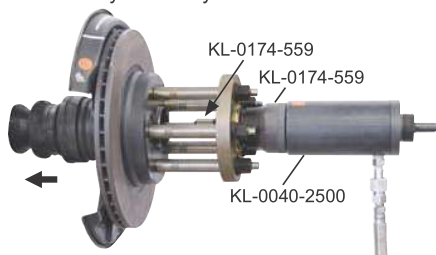
Pressing out the drive-shaft flange



Removing the hub using a slide-hammer



Pressing out the drive-shaft using 17 ton Hydraulic Cylinder.



Pressing out the drive-shaft with the mechanical spindle.



KL-0174-110

Puller Set



Suitable for VW-Audi, Alfa Romeo, BMW, Citroën, Fiat, Ford, Mazda, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Škoda, etc.

Designed to press out drive shafts mechanically.

Even glued, corroded or heavily seized drive shafts are no longer an issue by using the hydraulic cylinder 17t which is available as an option.

Scope of Delivery:

KL-0174-110 Puller Set

Part No.	Description	Qty.
KL-0174-240	Puller plate size 2 (3-4-and 5-hole)	1
KL-0174-723	Puller bolt type B, M12x1.5 (l=100)	4
KL-0174-724	Puller bolt type B, M14x1.5 (l=100)	4
KL-0174-701	Hex shoulder nut M14	4
KL-0174-547	Adaptor 2 1/4"-14UNS to M20x2	1
KL-0174-620	Spindle M20x2 x 230	1

3

KL-0174-111

Puller Set with Slide hammer



Suitable for VW-Audi, Alfa Romeo, BMW, Citroën, Fiat, Ford, Mazda, Mercedes, Opel/Vauxhall, Peugeot, Porsche, Renault, Seat, Škoda, etc.

This set is designed to mechanically press out drive shafts by means of pressure spindle M20 as well as to pull out wheel hubs, half-shafts etc. by means of the slide hammer.

Using the optionally available 17t hydraulic cylinder instead of pressure spindle M20, enables even glued, corroded or severely seized shafts to be pressed out easily.

Scope of Delivery:

KL-0174-111 Puller Set with slide hammer

Part No.	Description	Qty.
KL-0174-240	Puller disc size 2 (3-4-and 5-pitch)	1
KL-0174-723	Puller bolt Type B, M12x1.5 (l=100)	4
KL-0174-724	Puller bolt Type B, M14x1.5 (l=100)	4
KL-0174-701	Hex shoulder nut M14	4
KL-0174-547	Adaptor 2 1/4"-14UNS to M20x2	1
KL-0174-620	Spindle M20x2 x 230	1
KL-0049-31	Slide hammer 4.8 kg	1



Note:

The Puller Set **KL-0174-111** can be further enhanced by the addition of further Puller Discs, Adaptors, Spindles and Puller Bolts.

Puller Plates

KL-0174-...

Components for the assembly of a Puller from the Puller-Series KL-0174-...

The puller plate with the size 0, 1, 2 or 3 can be assembled to an all-purpose puller-system by using different adaptors, spindles, puller bolts, screws and drives.

Puller plate size 0

KL-0174-020

Technical Data:

Spindle Inner Thread:	M16×1.5
PCD:	40 - 88 mm
Outer-Ø:	108 mm
Fixing:Hole Pattern	2, 3, 4 hole pitch

Puller plate size 1 (3-4-and 5-hole)

KL-0174-140

Technical Data:

Spindle Inner Thread:	M42x2
PCD:	76 - 105 mm
Outer-Ø:	130 mm
Fixing:Hole Pattern	2, 3, 4, 5, 6 hole pitch

Puller plate size 2 (3-4-and 5-hole)

KL-0174-240

Technical Data:

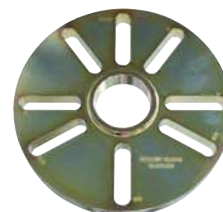
Spindle Inner Thread:	2 1/4" - 14 UNS
PCD:	90 - 130 mm
Outer-Ø:	160 mm
Fixing:Hole Pattern	2, 3, 4, 5, 6 hole pitch

Puller plate size 3 (3-4-and 5-hole)

KL-0174-360

Technical Data:

Spindle Inner Thread:	2 1/4" - 14 UNS
PCD:	100 - 180 mm
Outer-Ø:	220 mm
Fixing:Hole Pattern	2, 3, 4, 5, 6 hole pitch



3

Adaptors

KL-0174-...

Components for the assembly of a Puller from the Puller-Series KL-0174-...

KL-0174-510	Adaptor M42×2 to M14
KL-0174-511	Adaptor M42×2 to M14×1.5
KL-0174-513	Adaptor M42×2 to M16×1.5
KL-0174-515	Adaptor M42×2 to M18×1.5
KL-0174-516	Adaptor M42×2 to M18
KL-0174-517	Adaptor M42×2 to M20×2
KL-0174-519	Adaptor M42×2 to M22×2
KL-0174-521	Adaptor M42×2 to M24×2
KL-0174-535	Adaptor 1 1/2"-16UN to M18
KL-0174-540	Adaptor 2 1/4"-214UNS to M14
KL-0174-542	Adaptor 2 1/4"-14UNS to M16×1.5
KL-0174-543	Adaptor 2 1/4"-14UNS to M16
KL-0174-544	Adaptor 2 1/4"-14UNS to M18×1.5
KL-0174-545	Adaptor 2 1/4"-14UNS to M18
KL-0174-547	Adaptor 2 1/4"-14UNS to M20×2
KL-0174-549	Adaptor 2 1/4"-14UNS to M22×2
KL-0174-551	Adaptor 2 1/4"-14UNS to M24×2
KL-0174-552	Adaptor 2 1/4"-14UNS to M42×2
KL-0174-555	Adaptor 2 1/4"-14UNS to 1 1/2"-16UN
KL-0174-559	Adaptor 2 1/4"-14UNS to 2 1/4"-14UNS
KL-0174-563	Adaptor 2 1/4"-14 UN to Ø60 mm
KL-0174-565	Adaptor M68 to 2 to 2 1/4"-14UNS



KL-0174-... Spindles


Components for the assembly of a Puller from the Puller-Series KL-0174-...

KL-0174-610	Spindle M14×1.5 × 150
KL-0174-811	Spindle M16×1.5 × 50
KL-0174-615	Spindle M18×1.5 × 150
KL-0174-618	Spindle M20×1.5 × 230
KL-0174-619	Spindle M20×2 × 150
KL-0174-623	Spindle M22×2 × 150
KL-0174-624	Spindle M22×2 × 230
KL-0174-620	Spindle with pin (Ø 14 mm) M20×2 × 230
KL-0174-812	Spindle with pin (Ø 14 mm) M16×1.5 × 150
KL-0174-817	Spindle with pin (Ø 14 mm) M20×1.5 × 150

3
KL-0174-... Puller Bolts Type B


Outer thread (Wheel bolt system)

Technical Data:

Distance area:	100 mm
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KL-0174-722	Puller Bolt Type B, M12x1.25
KL-0174-723	Puller Bolt Type B, M12x1.5
KL-0174-724	Puller Bolt Type B, M14x1.5
KL-0174-725	Puller Bolt Type B, M16x1.5
KL-0174-726	Puller Bolt Type B, M12x1.75
KL-0174-727	Puller Bolt Type B, M14x1.25

KL-0174-... Puller Bolts Type M


Inner thread (Wheel nut system)

Technical Data:

Distance area:	100 mm
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KL-0174-762	Puller Bolt Type M, M12x1.25
KL-0174-763	Puller Bolt Type M, M12x1.5
KL-0174-764 A	Puller Bolt Type M, M14x1.5
KL-0174-765	Puller Bolt Type M, M16x1.5
KL-0174-767	Puller Bolt Type M, M14
KL-0174-768	Puller Bolt Type M, M12

KL-0174-... Shoulder Nuts


Technical Data:

Size:	22 mm
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KL-0174-700	Shoulder Nut Set (6 units) M14
consists of:	
KL-0174-701	Shoulder Nut M14 (6x)

Mechanical Drive

KL-0174-547

Components for the assembly of a Puller from the Puller-Series KL-0174-...

KL-0174-547	Adaptor 2 1/4"-14UNS to M20x2
KL-0174-620	Spindle with pin (Ø 14 mm) M20x2 x 230



Hydraulic spindle 12 t M42x2

KL-0045-7

The KL-0045-7 is a hydraulic spindle with a maximum admissible force capacity of 120 kN (12 t) designed to fit a range of KLANN tool systems.

The base tool KL-0045-700 consist of a body made of high-grade steel, two internal pistons, cup seals and various screw joints. The spindle is operated via a pressure screw.

If the hydraulic spindle KL-0045-7 is combined with tools of the KL-0174-Series, the adaptor KL-0174-522 (2 1/4"-14UNS to M42x2) is needed when the perforated puller plates size 2 and size 3 are used.

Technical Data:

Maximum admissible force:	120 kN (12 t)
Maximum stroke	16 mm
Thread of cylinder	M42x2
Length without 'T' Handle	240 mm
Weight	2.3 kg

Scope of Delivery:

KL-0045-7 Hydraulic spindle 12 t M42x2

Part No.	Description	Qty.
KL-0045-700	Hydraulic spindle 12 t M42x2 base tool	1
KL-0045-7009	Press piece short	1
KL-0045-7020	Press piece long	1



3

Hydraulic-Cylinder 17 t

KL-0040-2500

Due to its special design as a tubular piston cylinder and in conjunction with various spindles, the hydraulic cylinder KL-0040-2500 is suitable for pulling and pushing.

Application:

In conjunction with various KLANN tools, the hydraulic-cylinder KL-0040-2500 can be used for the removal and replacement of drive shafts, wheel hubs, wheel bearings, silentbloks and suspension ball joints.



Note:

A hydraulic pump is required to drive the hydraulic cylinder KL-0040-2500. For accessories such as coupling, hydraulic pump, dial gauge etc., please refer to chapter 4.



Technical Data:

Maximum admissible force:	170 kN (17 t)
Maximum stroke:	45 mm
Maximum oil pressure:	700 bar
Maximum volume of oil:	122 cm³
Piston area:	27 cm²
Thread in tubular piston:	M20
Retaining thread (pressure side):	2 1/4"-14 UNS
Retaining thread (pulling side):	M42x2
Cylinder outer diameter:	80 mm
Cylinder overall length (piston retracted):	202 mm
Cylinder overall length (piston extended):	247 mm
Hydraulic fluid connection thread:	3/8"NPT
Weight:	5.2 kg

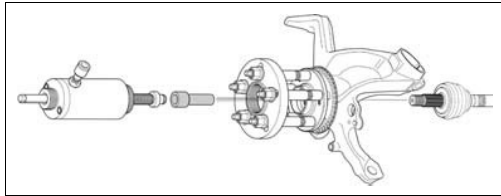
KL-0039-1930 Pressure spindle M20x350 with O-ring

Technical Data:

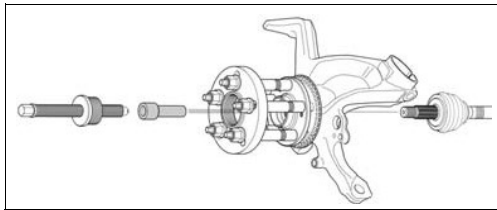
Pin-Ø:	20 mm
Overall length:	350 mm
Max. load	20 t

KL-0039-1935 Press Piece

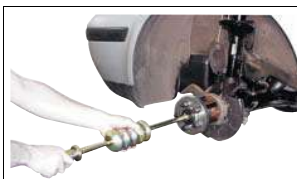
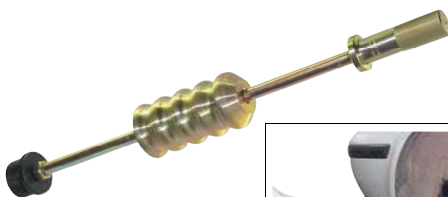

This tool is necessary to press out drive shafts in conjunction with the **KL-0174-.. Series**, the hydraulic cylinder **KL-0040-2500** and the pressure spindle with pin-Ø 20 mm **KL-0039-1930**.


3
KL-0174-856 Pressure piece for drive shafts


Designed to press out drive shafts. Used in conjunction with the tools of the **KL-0174-.. Series** and mechanical pressure spindles with a pin-Ø of 14 mm.


KL-0174-559 Adaptor 2 1/4"-14UNS to 2 1/4"-14UNS


This adaptor is needed to operate the hydraulic cylinder **KL-0215-10** and/or **KL-0040-25** when using the perforated puller plates size 2 and size 3 of the **KL-0174-.. Series** with a pitch circle diameter of from 90 - 102 mm.

KL-0049-31 Slide Hammer 4.8 kg with Adaptor 2 1/4"-14UNS to M18


Designed to extract wheel hubs, half-shafts, universally jointed drive shafts and brake drums etc. Used in conjunction with the **KL-0174-Series**.

Technical Data:

Hammer weight:	4.8 kg
Length:	690 mm
Adaptor thread on tie rod:	M18

Scope of Delivery:
KL-0049-31 Slide Hammer 4.8 kg with Adaptor 2 1/4"-14UNS to M18

Part No.	Description	Quantity
KL-0049-3001	Tie rod for KL-0049-3	1
KL-0049-3002	Hammer weight 4.8 kg for KL-0049-3	1
KL-0049-3003	Handle for KL-0049-3	1
KL-0049-3004	Hex nut M18	1
KL-0174-545	Adaptor 2 1/4"-14UNS to M18	1

Wheel Hub Puller (hydraulic)

KL-0330-12

Suitable for Mercedes A-Class (W168, W169), B-Class (W245), C-Class (W202, W203), E-Class (W210, W211), M-Class (W163), S-Class (W140), W124, W129, W201 etc.

This tool allows quick and safe extraction of seized wheel hubs in-situ on the vehicle without the risk of damaging the suspension.



Note:

Not suitable for Mercedes W124 (T-Model).

Scope of Delivery:

KL-0330-12 Wheel Hub Puller (hydraulic)

Part No.	Description	Qty.
KL-0330-121	Wheel Hub Puller without drive	1
KL-0040-2500	Hydraulic-cylinder 17t	1
KL-0040-2512	Pull spindle	1



Scope of Delivery:

KL-0330-121 Wheel Hub Puller without drive

Part No.	Description	Qty.
KL-0330-1201	Base plate	1
KL-0330-0002	Spacer	2
KL-0330-0003	Hexagon socket screw M12 x 30	4
KL-0330-0004	Bearing bridge	1
KL-0041-3811	Clamping nut Ø 38 mm	1

3

Base Plate

KL-0330-1201

If wheel hub puller **KL-0330** with baseplate **KL-0330-0001** is already available, additionally the baseplate **KL-0330-1201** is needed for the current vehicle models.



Wheel Hub Puller (mechanical drive)

KL-0330-120

Suitable for Mercedes A-class (W168, W169), B-class (W245), C-class (W202, W203), E-class (W210, W211), M-class (W163), W124, W129, W140, W201 etc.

This tool allows quick and safe extraction of seized wheel hubs in-situ on the vehicle without the risk of damaging the suspension.



Note:

Not suitable for Mercedes W124 (T-Model).

Scope of Delivery:

KL-0330-120 Wheel Hub Puller (mechanical drive)

Part No.	Description	Qty.
KL-0330-1201	Base plate	1
KL-0330-0002	Spacer	2
KL-0330-0003	Hexagon socket screw M12 x 30 mm	4
KL-0330-0004	Bearing bridge	1
KL-0040-303	Bearing unit insert with thrust bearing	1
KL-0040-3008	Pull spindle	1
KL-0041-3811	Clamping nut Ø 38 mm	1



Pairs of Pressure Screws



For Wheel Hub extraction.

KL-0105 Pair of Pressure Screws M12×1.5

Suitable for BMW, Ford, Mazda, Mercedes, Opel/Vauxhall, Renault, Seat, VW.

KL-0106 Pair of Pressure Screws M12×1.5

Suitable for BMW, Ford, Mazda, Mercedes, Opel/Vauxhall, Renault, Seat, VW.

KL-0107 Pair of Pressure Screws M14×1.5

Suitable for Audi, Citroën, Fiat, Mercedes, Peugeot, VW.

3

KL-0155-9 Twin-Arm Puller with clamp



Suitable for VW-Audi, Seat.

With pushing adaptor. Specially designed to remove the inner bearing race from the front wheel hub.

Technical Data:

Pulling width:	90 mm
Pulling height:	100 mm
Max. Load:	1 t.
Weight:	1.7 kg

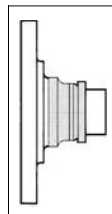
KL-0252-10 Inner Bearing Race Puller



Suitable for VW Golf (IV) with ABS-ring.

Designed to remove the inner bearing race from the front wheel hub.

KL-0042-90 K Inner Bearing Race Puller Set



Can be used universally on vehicles with an inner bearing race-Ø of from 44 mm to 72 mm, such as VW-Audi, Ford, Lancia, Renault, Seat, Škoda, etc.

This tool is designed for the precise removal of inner bearing races from the wheel hub.

Removal of the wheel hub almost always leaves the inner bearing race on the wheel hub. It is almost impossible to remove inner bearing races without suitable tools. Makeshift methods using grinders, chisels and welding torches bear high accident risks such as the risk of severe personal injury or damage to the components.

The puller set **KL-0042-90 K** allows inner bearing races with **diameters from 44 mm up to 72 mm** to be removed from the wheel hub within a few minutes.

Scope of Delivery:

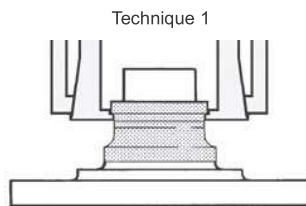
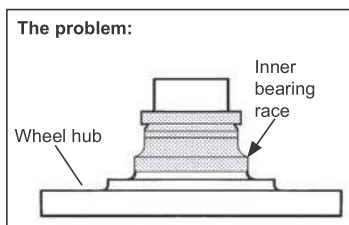
KL-0042-90 K Inner Bearing Race Puller Set

Part No.	Description	Qty.
KL-0042-900	Inner bearing race puller; base tool	1
KL-0042-9031	Collet chuck size 3, Ø 44 -48 mm	1
KL-0042-9041	Collet chuck size 4, Ø 48 -52 mm	1
KL-0042-9051	Collet chuck size 5, Ø 52 -56 mm	1
KL-0042-9061	Collet chuck size 6, Ø 56 -60 mm	1
KL-0042-9071	Collet chuck size 7, Ø 60 -64 mm	1
KL-0042-9081	Collet chuck size 8, Ø 64 -68 mm	1
KL-0042-9091	Collet chuck size 9, Ø 68 - 72 mm	1
KL-0042-9099	Plastic storage case	1

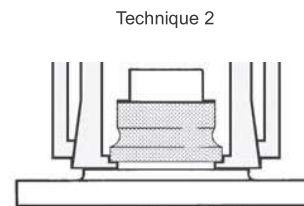
Inner bearing race puller

KL-0042-...

1. Pulling techniques for inner bearing races (Choose the appropriate pulling technique)

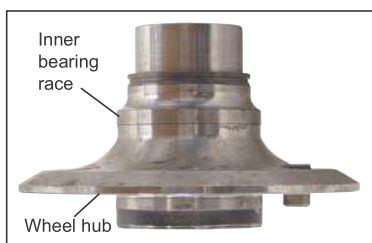


When using technique 1, the collet chuck engages behind the inner bearing race.



When using technique 2, the collet chuck engages the groove/recess of the inner bearing race.

3



Identify the inner bearing race Ø



Determine suitable collet chuck. For this, measure the inner bearing race-Ø on the area to be clamped.

2. Place the pulling device on the inner bearing race and close the collet chuck.



Close the collet chuck by tightening the clamping nut.

3. Remove the inner bearing race.



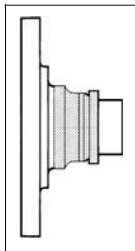
Remove the inner bearing race from the wheel hub by screwing in the pressure spindle.

KL-0042-... Inner Bearing Race Pullers

Base Tool



e.g. KL-0042-903



Used with a collet chuck of the **KL-0042-Series**, this tool allows the accurate removal of inner bearing races from the wheel hub. Removing the wheel hub almost always leaves the inner bearing race on the wheel hub. It is almost impossible to remove inner bearing races without the appropriate tools. Makeshift methods using grinder, chisel and welding torch present a high risk of accidents. The inner bearing race puller base tool **KL-0042-900** used with a collet chuck of the **KL-0042-Series** allows the removal of inner bearing races from the wheel hub within only a few minutes.

KL-0042-900 Inner Bearing Race Puller (base tool)

Scope of Delivery: KL-0042-900 Inner bearing race puller; base tool

Part No.	Description	Qty.
KL-0042-9001	Clamping nut	1
KL-0042-9002	Handle	1
KL-0042-9004	Special ring spanner size 36 mm	1
KL-0174-817	Spindle with pin M20x1.5 x 150 mm	1
KL-0174-851	Press piece for wheel hubs	1
KL-0174-854	Press piece for wheel hubs	1

KL-0042-903 Inner Bearing Race Puller Size 3, Ø 44 - 48 mm

Suitable for inner bearing race-Ø 44 - 48 mm. For example on Lancia Cappa, Renault etc.

Scope of Delivery: KL-0042-903 Inner Bearing Race Puller

Part No.	Description	Qty.
KL-0042-900	Inner Bearing Race Puller Base tool	1
KL-0042-9031	Collet chuck Size 3, Ø 44 -48 mm	1

KL-0042-904 Inner Bearing Race Puller Size 4, Ø 48 - 52 mm

Suitable for inner bearing race-Ø 48 - 52 mm. For example on Ford Transit, T330 etc.

Scope of Delivery: KL-0042-904 Inner Bearing Race Puller Size 4,

Part No.	Description	Qty.
KL-0042-900	Inner Bearing Race Puller Base tool	1
KL-0042-9041	Collet chuck Size 4, Ø 48 -52 mm	1

KL-0042-905 Inner Bearing Race Puller Size 5, Ø 52 - 56 mm

Suitable for inner bearing race Ø 52 - 56 mm. For example on VW-Audi, Seat, Škoda etc.

Scope of Delivery: KL-0042-905 Inner Bearing Race Puller Size 5

Part No.	Description	Qty.
KL-0042-900	Inner Bearing Race Puller Base tool	1
KL-0042-9051	Collet chuck Size 5, Ø 52 -56 mm	1

KL-0042-906 Inner Bearing Race Puller Size 6, Ø 56 - 60 mm

Suitable for inner bearing race Ø 56 - 60 mm. For example on Mercedes W168 etc.

Scope of Delivery: KL-0042-906 Inner Bearing Race Puller Size 6

Part No.	Description	Qty.
KL-0042-900	Inner Bearing Race Puller Base tool	1
KL-0042-9061	Collet chuck Size 6, Ø 56 -60 mm	1

KL-0042-907 Inner Bearing Race Puller Size 7, Ø 60 - 64 mm

Suitable for inner bearing race Ø 60 - 64 mm. For example on Mercedes W201, W202, W203, W210, W124, BMW, Peugeot, etc.

Scope of Delivery: KL-0042-907 Inner Bearing Race Puller Size 7

Part No.	Description	Qty.
KL-0042-900	Inner Bearing Race Puller Base tool	1
KL-0042-9071	Collet chuck Size 7, Ø 60 -64 mm	1

KL-0042-908 Inner Bearing Race Puller Size 8, Ø 64 - 68 mm

Suitable for inner bearing race-Ø 64 - 68 mm. For example, on Mercedes A-Class (W169), B-Class (W245), E-Class (W211), M-Class (W163), S-Class (W220), W124, W140.

Scope of Delivery: KL-0042-908 Inner Bearing Race Puller Gr. 8

Part No.	Description	Qty.
KL-0042-900	Inner Bearing Race Puller Base tool	1
KL-0042-9081	Collet chuck Size 8, Ø 64 -68 mm	1

KL-0042-909 Inner Bearing Race Puller Size 9, Ø 68 - 72 mm

Suitable for inner bearing race-Ø 68 - 72 mm. For example on VW Touareg, Porsche Cayenne etc.).

Scope of Delivery: KL-0042-909 Inner Bearing Race Puller Size 9

Part No.	Description	Qty.
KL-0042-900	Inner Bearing Race Puller Base tool	1
KL-0042-9091	Collet chuck Size 9, Ø 68 - 72 mm	1

Inner Bearing Race Puller Set with collet chucks size 4 and size 5

KL-0042-91 K

Universally suitable for vehicles with inner bearing race-Ø of from 48 mm up to 56 mm e.g. VW-Audi, Ford, Lancia, Renault, Seat, Škoda, etc.

This tool is designed for the precise removal of inner bearing races from the wheel hub.

Scope of Delivery:

KL-0042-91 K Inner Bearing Race Puller Set

Part No.	Description	Quantity
KL-0042-900	Inner Bearing Race Puller; Base Tool	1
KL-0042-9041	Collet chuck size 4; Ø 48 - 52 mm	1
KL-0042-9051	Collet chuck size 5; Ø 52 - 56 mm	1
KL-0042-9099	Plastic storage case	1



3

Inner Bearing Race Puller Set with collet chucks size 6, size 7 and size 8

KL-0042-92 K

Universally suitable for vehicles with inner bearing race-Ø from 56 mm up to 68 mm e.g. VW-Audi, Ford, Lancia, Renault, Seat, Škoda, etc.

This tool is designed for the precise removal of inner bearing races from the wheel hub.

Scope of Delivery:

KL-0042-92 K Inner Bearing Race Puller Set

Part No.	Description	Quantity
KL-0042-900	Inner bearing race puller; base tool	1
KL-0042-9061	Collet chuck size 6; Ø 56 - 60 mm	1
KL-0042-9071	Collet chuck size 7; Ø 60 - 64 mm	1
KL-0042-9081	Collet chuck size 8; Ø 64 - 68 mm	1
KL-0042-9099	Plastic storage case	1



Inner Bearing Race Puller Set with collet chucks size 3, size 4 and size 5

KL-0042-93 K

Universally suitable for vehicles with inner bearing race-Ø from 44 mm up to 56 mm e.g. VW-Audi, Ford, Lancia, Renault, Seat, Škoda, etc.

This tool is designed for the precise removal of inner bearing races from the wheel hub.

Scope of Delivery:

KL-0042-93 K Inner bearing race puller set

Part No.	Description	Quantity
KL-0042-900	Inner bearing race puller; base tool	1
KL-0042-9031	Collet chuck size 3; Ø 44 - 48 mm	1
KL-0042-9041	Collet chuck size 4; Ø 48-52 mm	1
KL-0042-9051	Collet chuck size 5; Ø 52-56 mm	1
KL-0042-9099	Plastic storage case	1



KL-0177-2 CV Joint Splitter


Suitable for VW-Audi, Opel/Vauxhall, Jap. vehicles, etc.

Allows quick and easy separation of the outer constant velocity joint on drive shafts. The operation can be performed without removing the drive shaft from the vehicle. (On some cars it is not possible to pull off the CV Joint) - Important when changing the Gaiter or CV joint.

The various spindles ensure that this tool is universally suitable for a wide range of vehicles.

Advantages:

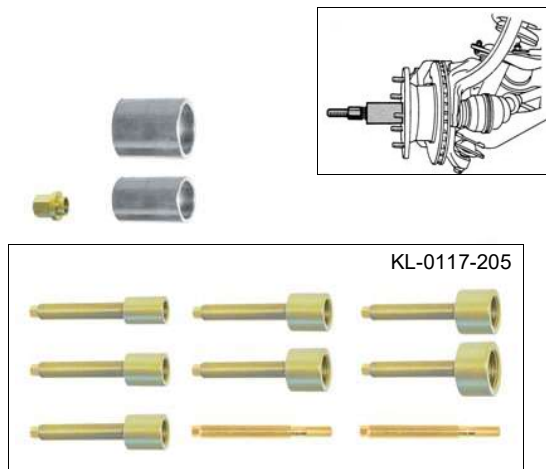
- High time savings
- Eliminates damage to components caused by Hammers, Chisels, etc.
- Universal application.

Scope of Delivery: KL-0177-2 CV Joint Splitter

Part No.	Description	Qty.
KL-0177-201	Press Frame	1
KL-0177-202	Clamping Jaw Set Ø 19 - 34 mm	1
KL-0177-205	Set of Pull Spindles	1

Scope of Delivery: KL-0177-205 Set of Pull Spindles

Part No.	Description	Qty.
KL-0177-2051	Spindle M16x1.5 inner thread	1
KL-0177-2052	Spindle M18x1.5 inner thread	1
KL-0177-2053	Spindle M20x1.5 inner thread	1
KL-0177-2054	Spindle M22x1.5 inner thread	1
KL-0177-2055	Spindle M24x1.5 inner thread	1
KL-0177-2056	Spindle M27x1.5 inner thread	1
KL-0177-2057	Spindle M30x1.5 inner thread	1
KL-0177-2061	Spindle M14x1.5 outer thread	1
KL-0177-2062	Spindle M16x1.5 outer thread	1

KL-0177-3 Drive Shaft Insertion Tool


Suitable for VW-Audi (Touareg etc.) BMW, Mercedes, Opel/Vauxhall, Renault, Peugeot, Porsche (Cayenne etc.) etc.

This tool is used to pull in the drive shaft into the wheel hub. It is required for those vehicles with tight tolerances between the wheel hub and drive shaft splines. Various spindles ensure universal application.

Scope of Delivery: KL-0177-3 Drive Shaft Insertion Tool

Part No.	Description	Qty.
KL-0177-3001	Housing outer Ø39 mm inner Ø 29 mm	1
KL-0177-3002	Housing outer Ø46 mm inner Ø 36 mm	1
KL-0177-2012	Shoulder nut	1
KL-0177-205	Pull Spindle Set	1

Scope of Delivery: KL-0177-205 Set of Pull Spindles

Part No.	Description	Qty.
KL-0177-2051	Spindle M16x1.5 inner thread	1
KL-0177-2052	Spindle M18x1.5 inner thread	1
KL-0177-2053	Spindle M20x1.5 inner thread	1
KL-0177-2054	Spindle M22x1.5 inner thread	1
KL-0177-2055	Spindle M24x1.5 inner thread	1
KL-0177-2056	Spindle M27x1.5 inner thread	1
KL-0177-2057	Spindle M30x1.5 inner thread	1
KL-0177-2061	Spindle M14x1.5 outer thread	1
KL-0177-2062	Spindle M16x1.5 outer thread	1

KL-0415-4 Drive shaft insertion tool with 6 adaptors


Suitable for VW-Audi (Touareg etc.), BMW (E30, E32, E34, E36 E38, E39, X5, etc.), Mercedes (W203 etc.) and Porsche (Cayenne etc.).

For inserting the drive shaft into the wheel hub; required for vehicles whose drive shaft is firmly seized in the wheel hub. Also intended for mounting the wheel hub.

Scope of Delivery: KL-0415-4 Drive shaft insertion tool with 6 adaptors

Part No.	Description	Qty.
KL-0415-0006	Adaptor M16x1.5	1
KL-0415-0007	Adaptor M20x1.5 (e.g. Porsche Cayenne, VW-Touareg)	1
KL-0415-0008	Adaptor M24x1.5 (e.g. BMW E36, Mercedes W203)	1
KL-0415-0009	Adaptor M30x1.5 (e.g. BMW E32, E34, E36)	1
KL-0415-0010	Adaptor M22x1.5 (e.g. BMW E30, E46)	1
KL-0415-0011	Adaptor M27x1.5 (e.g. BMW E32, E34, E38, E39, X5)	1
KL-0415-100	Drive shaft insertion tool (base tool)	1

Upgrade Kit (Drive Shaft Installation)

KL-0415-610

Suitable for BMW (E30, E32, E34, E36 E38, E39, etc.) and Mercedes (W203 etc.).

Used in conjunction with hydraulic cylinder **KL-0040-2500** to insert drive shafts or install wheel hubs.

Scope of Delivery:

KL-0415-610 Upgrade Kit (Drive Shaft Installation)

Part No.	Description	Qty.
KL-0174-563	Adaptor 2 1/4"-14 UNS to Ø60 mm	1
KL-0040-2242-1	Pull spindle M16x590	1
KL-0039-1916-2	Shoulder nut M16	1
KL-0415-0008	Adaptor M24x1.5	1
KL-0415-0009	Adaptor M30x1.5	1
KL-0415-0010	Adaptor M22x1.5	1
KL-0415-0011	Adaptor M27x1.5	1



3

Upgrade Kit (Drive Shaft Removal)

KL-0174-911

Designed to press out universal joint drive shafts / drive shafts. This kit is used with a puller of the **KL-0174-.. series** and the hydraulic cylinder **KL-0040-2500**. The hydraulic cylinder (17 t) allows even glued or very tight-fitting universal joint drive shafts / drive shafts to be pressed out quickly and easily.

Scope of Delivery:

KL-0174-911 Upgrade Kit (Drive Shaft Removal)

Part No.	Description	Qty.
KL-0174-559	Adaptor 2 1/4"-14UNS to 2 1/4"-14UNS	1
KL-0039-1930	Pressure spindle M20x350 with O-ring	1
KL-0039-1935	Press piece	1



Pressure Screw Set

KL-0233-1

Suitable for VW-Audi.

The pressure screw set **KL-0233-1** allows the quick and easy removal of the outer constant velocity joint from the drive shaft. (Not suitable for sleeve shafts)

Technical Data:

Weight:	595 g
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Scope of Delivery:

KL-0233-1 Pressure Screw Set

Part No.	Description	Qty.
KL-0233-10	Pressure Screw M14x1,5	1
KL-0233-11	Pressure Screw M16x1,5	1



Adaptor Set Fiat Ducato

KL-0049-303

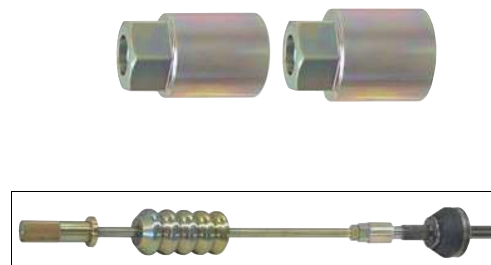
Suitable for Fiat Ducato.

The CV Joint is easily and trouble-free separated from the drive shaft by using the adaptor KL-0049-3014 or KL-0049-3015 together with the slide hammer KL-0049-31.

Scope of Delivery:

KL-0049-303 Adaptor Set Fiat Ducato

Part No.	Hex.	Ø	Length	Connection thread
KL-0049-3014	32	40	65	M18 / M28x1.5
KL-0049-3015	32	45	65	M18 / M33x1.5



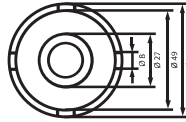
KL-0115 Wheel Hub Locking Tool


Application for almost all passenger cars and light commercial vehicles.

Drive shaft retaining nuts and hub bearing nuts can be easily removed - even with the vehicle off the ground, and can also be replaced using the correct torque setting.

Technical Data:

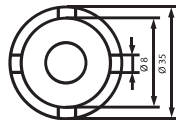
Length:	620 mm
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KL-0301 Toothed Socket Rear Axle Drive Flange MB


Suitable for Mercedes W116, W123, W126 Rear Axle Drive Flange.

Technical Data

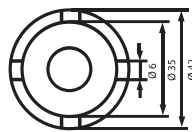
Drive:	3/4"
Length:	80 mm
Weight:	420 g

KL-0302 Toothed Socket Gearbox Flange MB


Suitable for Mercedes Gearbox Flange.

Technical Data

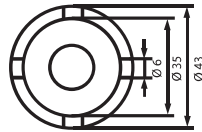
Drive:	3/4"
Length:	70 mm
Weight:	440 g

KL-0303 Toothed Socket Differential Flange MB


Suitable for Mercedes Differential Flange.

Technical Data

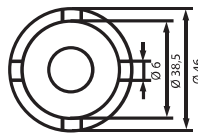
Drive:	3/4"
Length:	70 mm
Weight:	370 g

KL-0303-10 Toothed Socket Mercedes G-Class 35 x 6


Suitable for Mercedes G-Model (W460, W461, W463) front axle wheel bearing.

Technical Data:

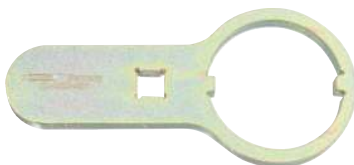
Drive:	1/2"
Length:	70 mm
Weight:	370 g

KL-0303-11 Toothed Socket Mercedes G-Class 38.5 x 6


Suitable for Mercedes G-Model (W460, W461, W463) front axle wheel bearing.

Technical Data:

Drive:	1/2"
Length:	70 mm
Weight:	370 g

KL-1020-901 Rear Axle Nut Spanner


Suitable for Mercedes Sprinter (W901 - W905) rear axle (741.407 / 741.408 / 741.409).

For loosening and tightening the wheel bearing fixing groove nut on the rear-axle shaft or the full floating axle.

This tool is indispensable when replacing a rear wheel bearing or performing rear axle repairs.

Special bi-hex Socket 30 mm

KL-0304

Suitable for BMW 3 series (E36, E46); Citroen Saxo; Ford Galaxy; Mercedes E-Class (W211), C-Class (W203), SL (W129), W123, W124, W126, W201; Opel Astra F, Astra G; Renault Scenic, Clio, Kangoo; Toyota Avensis, Picnic und VW Golf (III, IV), Lupo, Touareg, T5 etc.

Technical Data:

Size (width across flats):	30 mm
Profile:	bi-hex
Drive:	1/2"
Length:	80 mm
Weight:	350 g



Special bi-hex Socket 32 mm

KL-0305

Suitable for Fiat Punto; Ford Escort, Mondeo; Mercedes S-Class (W140); Nissan Almera, Opel Astra H, Vivaro; Subaru Outback etc.

Technical Data:

Size (width across flats):	32
Profile:	bi-hex
Drive:	1/2"
Length:	75 mm
Weight:	450 g



3

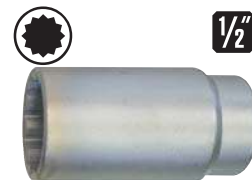
Special bi-hex Socket 34 mm

KL-0307

Suitable for Fiat Marea, Lancia Lybra, Renault etc.

Technical Data:

Size (width across flats):	34 mm
Profile:	bi-hex
Drive:	1/2"
Length:	75 mm
Weight:	600 g



Special bi-hex Socket 36 mm

KL-0306

Suitable for Audi; BMW 3 series (E36, E39), X5; Ford Transit; Seat Ibiza, Cordoba; Nissan Primera; Porsche Cayenne; VW Polo, Golf (V), Touareg etc.

Technical Data:

Size (width across flats):	36 mm
Profile:	bi-hex
Drive:	1/2"
Length:	90 mm
Weight:	650 g



Special hex Socket 35 mm

KL-0308

Suitable for Citroen Berlingo, Peugeot 307, 407, 806 etc.

Technical Data:

Size (width across flats):	35 mm
Profile:	hex
Drive:	1/2"
Length:	75 mm
Weight:	600 g



Socket Size (width across flats) 36 mm

KL-1340-301

Universal application.

Particularly required for Citroen Jumpy; Peugeot 806 / Expert and Opel / Vauxhall Corsa D etc.

For loosening and controlled tightening of the drive shaft fixing nut. Thanks to its angle datum marks of 0°, 5° and 60°, the Special Socket KL-1340-301 enables accurate tightening of the drive shaft fixing nut, according to manufacturer's specifications, without the use of an additional degree gauge.



KL-0232-... Special Socket XZN M8, 800 mm


Suitable for VW-Audi, etc.

This special socket enables the drive shaft fixing screws to be loosened quickly and easily from the outside. Not intended for use on impact wrenches.

Advantages

- Substantial time savings.

KL-0232-1 Special Socket XZN M8, 800 mm

Suitable for VW-Audi, etc.

Technical Data:

Size (width across flats):	XZN M8
Drive:	1/2"
Length:	800 mm

KL-0232-2 Special Socket XZN M10, 800 mm

Suitable for VW Golf IV etc.

Technical Data:

Size (width across flats):	XZN M10
Drive:	1/2"
Length:	800 mm

KL-0232-3 Special Socket XZN M12, 800 mm

Suitable for VW T4, Touareg etc.

Technical Data:

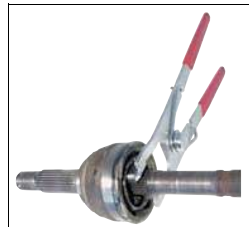
Size (width across flats):	XZN M12
Drive:	1/2"
Length:	800 mm

KL-0232-4 Special Socket XZN M14, 800 mm

Suitable for VW T4, Touareg etc.

Technical Data:

Size (width across flats):	XZN M14
Length:	800 mm
Drive:	1/2"

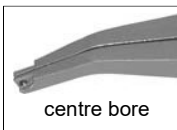
KL-0192-13 Circlip Pliers


Suitable for VW-Audi, Ford, Honda, Mazda, Mitsubishi, Nissan, Opel/Vauxhall, Seat, Škoda, Subaru, Suzuki, Toyota, etc.

This tool is used to pretension the drive shaft circlip when mounting the outer constant velocity joint. Pretensioning the drive shaft circlip by means of the circlip pliers **KL-0192-13**, enables the constant velocity joint to quickly and easily be slid onto the drive shaft.

Technical Data:

Weight:	360 g
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KL-0192-12 Circlip Pliers angled


Suitable for VW-Audi, Mercedes, Opel/Vauxhall, BMW, Ford, etc.

Field of Application:

Specially designed for deep-seated, large clips on gear shafts and articulated axles that are hard to access.

Ideal for drive shafts/cv-joints, engines and gearboxes.

Technical Data:

Length:	200 mm
Tip form:	30° angled centring rand, long slim
Min. opening:	3 mm
Max. opening:	35 mm
Weight:	190 g

Special Circlip Pliers

KL-0192-825

Suitable for VW-Audi, Mercedes, Opel/Vauxhall, BMW, Ford, etc.

Field of application:

Deep-seated, large clips on gear shafts and articulated axles.

Ideal for drive shafts/cv-joints, engines and gearboxes.

Technical Data:

Length:	240 mm
Tip-Form:	straight, centering-rand, long, slim
opening min.:	5 mm
opening max.:	40 mm
Weight:	210 g



Special Circlip Pliers

KL-0192-826

Suitable for VW-Audi, Mercedes, Opel/Vauxhall, BMW, Ford, etc.

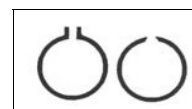
Field of application:

Large clips on gear shafts and articulated axles

Ideal for drive shafts/cv-joints, engines and gearboxes.

Technical Data:

Length:	225 mm
Tip-Form:	straight with Hold profile
Opening min.:	6.5 mm
Opening max.:	35 mm
Weight:	205 g



3

Hose Band Pliers

KL-0121-90

Applicable on Audi, BMW, Chrysler, Ford, GM, Honda, Mazda, Mercedes, Nissan, Opel/Vauxhall, VW, etc.

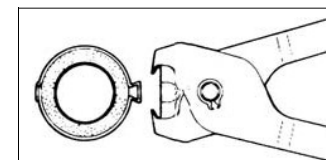
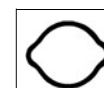
For the tightening of clamps (system Oetiker) on cv boots, water and fuel hoses.

Advantages:

- No damage to spring band clamps.
- No damage to hoses.
- Easy and quick replacement of hoses.

Technical Data:

Length:	240 mm
Weight:	492 g



Hose Band Pliers

KL-0121-93

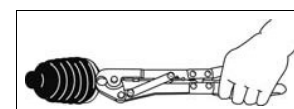
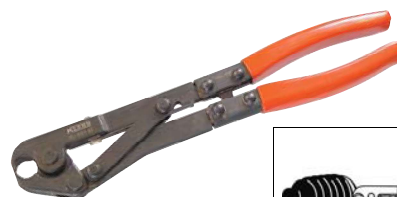
Suitable for Audi, BMW, Chrysler, Ford, GM, Honda, Mazda, Mercedes, Nissan, Opel/Vauxhall, VW etc.

With power transmission and 2 working stages.

For the tightening of clamps (system Oetiker) on cv boots, water and fuel hoses.

Technical Data:

Length:	280 mm
Weight:	475 g



Hose Band Tool with Ratchet

KL-0121-86

Suitable for pre-manufactured and endless hose clips (e.g. Bandimax) up to 9.5 mm, for example on cv boots etc.

For quick and easy tensioning and cutting endless Hose-Bands.

Technical Data:

Length:	200 mm
Weight:	360 g



KL-0121-81**Hose Clip Pliers**

Universal Application.
Ideal for VW-Audi etc.

Works on „earless“ Hose-Bands on axle collars, water and fuel hoses.

Technical Data:

Lenght:	230 mm
Weight:	340 g

3

KL-0121-97**Hose Clip Pliers for CLIC Hose Clips**

Suitable for Citroën, Peugeot etc.

This tool is designed to open and close the re-usable hose clips Type CLIC (Caillau/Serflex).

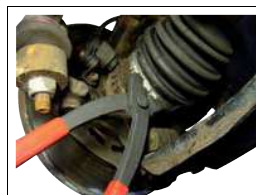
Due to the special design of its clamping jaws, this tool enables even hose clips that are difficult to reach to be opened and closed without any problems.

KL-0121-96**Hose Clip Pliers for use with a Torque Drive**

Suitable for VW-Audi, Ford, Opel/Vauxhall etc.

This tool is designed to tighten stainless steel clamps on cv-boots with the prescribed tightening torques.

A 3/8" torque wrench, for example **4549-05**, is required as a drive.

KL-0121-98**Hose Clamp Pliers**

Suitable for stepless low profile clamps 192 (Oetiker) with Ø19.5mm – Ø120.5mm.

Especially required for cv boots on Vauxhall/Opel vehicles.

Pliers allow the user a quick and trouble-free opening and closing of clamps.

Set of Wheel Hex Sockets

KL-0100-57 K

Universally suitable

Long and slim design with plastic sleeve.

For loosening and tightening wheel bolts on light-alloy wheel rims.

Technical Data

Size (width across flats):	15 mm, 17 mm, 19 mm, 21 mm, 22 mm
Length:	150 mm
Drive:	1/2"
Weight:	2.11 kg

Scope of Delivery:

KL-0100-57 K Set of Wheel Hex Sockets

Part No.	Description	Quantity
KL-0100-5715	Wheel hex socket with plastic sleeve; size 15, 150 mm long	1
KL-0100-5717	Wheel hex socket with plastic sleeve; size 17, 150 mm long	1
KL-0100-5719	Wheel hex socket with plastic sleeve; size 19, 150 mm long	1
KL-0100-5721	Wheel hex socket with plastic sleeve; size 21, 150 mm long	1
KL-0100-5722	Wheel hex socket with plastic sleeve; size 22, 150 mm long	1

Accessories:

KL-0100-5715-S	Plastic sleeve for size (width across flats) 15
KL-0100-5717-S	Plastic sleeve for size (width across flats) 17
KL-0100-5719-S	Plastic sleeve for size (width across flats) 19
KL-0100-5721-S	Plastic sleeve for size (width across flats) 21
KL-0100-5722-S	Plastic sleeve for size (width across flats) 22



3

Wheel Hexagon Socket with protective outer sleeve

KL-0100-5622

Suitable for Vauxhall/ Opel Insignia etc.

Ideal for loosening and tightening wheel-nuts on light-alloy wheels.

Technical Data:

Size:	22 mm
Length:	82 mm
Drive:	1/2"
Weight:	300 g



Set of Special Sockets

KL-0101-22 K

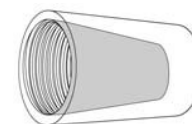
Used to remove security wheel-nuts or bolts when the original security key is missing, also to un-do other hexagonal nuts and bolts which have damaged or „rounded“ heads.

The sockets are specially designed (tapering, and with a left-hand thread) to unscrew and remove screws, nuts and threaded pins without difficulty.

Scope of Delivery:

KL-0101-22 K Set of Special Sockets

Part No.	Description	Ø
KL-0101-2201	Special Socket	17 mm
KL-0101-2202	Special Socket	18.5 mm
KL-0101-2203	Special Socket	20 mm
KL-0101-2204	Special Socket	21.5 mm
KL-0101-2205	Special Socket	23 mm
KL-0101-2206	Special Socket	24.5 mm
KL-0101-2207	Special Socket	26 mm
KL-0101-2290	Plastic storage case	



Conical left-hand thread



KL-0100-Serie Accu Torq Impact Sockets


These AccuTorq Impact Sockets are designed to be used in conjunction with a 1/2"-drive impact gun to tighten vehicle wheel-nuts to pre-determined torque limits according to manufacturers specifications.

AccuTorqs work by absorbing excessive torque into a torsion bar spring which will release the stored energy by rotating the anvil of the impact gun backwards during the intervals between hammer blows.

AccuTorqs work by "wasting" the excess torque generated by air impact guns, as all torque above the rated limited of any given AccuTorq will deflect the shaft (torsion bar spring) between the 1/2" input end and the hexagonal output end of the AccuTorq.

Special Features:

- Combines impact gun speed with torque-wrench accuracy.
- Fits all 1/2" air impact guns with min. 220 Nm (1"- impact guns for lorries with min. 1,400 Nm).
- Maintenance free, no need for calibration adjustments.
- Colour coded for easy identification of size and torque-limit for passenger cars (AccuTorqs for lorries are black).

KL-0100-10 Accu Torq Socket, hex. 17/75Nm (green)
Suitable for Renault, Skoda and Suzuki.
Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	17
Torque/Moment of Torsion:	75 Nm

KL-0100-11 Accu Torq Socket, hex. 17/95Nm (beige)
Suitable for Opel and Renault.
Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	17
Torque/Moment of Torsion:	95 Nm

KL-0100-12 Accu Torq Socket, hex. 17/110Nm (red)
Suitable for Audi, BMW, Mercedes, Opel, Porsche und VW.
Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	17
Torque/Moment of Torsion:	110 Nm

KL-0100-13 Accu Torq Socket, hex. 19/55Nm (dark blue)
Suitable for Alfa Romeo, Citroën, Fiat, Honda, Hyundai, Peugeot, Renault and Rover.
Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	19
Torque/Moment of Torsion:	75 Nm

KL-0100-14 Accu Torq Socket, hex. 19/90Nm (gelb)
Suitable for Alfa Romeo, Citroën, Fiat, Ford, Lada, Opel, Peugeot, Renault, Rover and Volvo.
Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	19
Torque/Moment of Torsion:	90 Nm

KL-0100-15 Accu Torq Socket, hex. 19/110Nm (light blue)
Suitable for Alfa Romeo, Fiat, Ford, Honda, Hyundai, Isuzu, Kia, Mercedes, Rover, Saab and Volvo.
Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	19
Torque/Moment of Torsion:	110 Nm

Accu Torq Socket, hex. 19/135Nm (grey) KL-0100-16

Suitable for Ford and Porsche.

Technical Data:

Drive:	½"
Length:	220 mm
Weight:	0.3 kg
Hex:	19
Torque/Moment of Torsion:	135 Nm

Accu Torq Socket, hex. 21/80Nm (black) KL-0100-17

Suitable for Mitsubishi and Rover.

Technical Data:

Drive:	½"
Length:	220 mm
Weight:	0.3 kg
Hex:	21
Torque/Moment of Torsion:	80 Nm

Accu Torq Socket, hex. 21/110Nm (light brown) KL-0100-18

Suitable for Daihatsu, Ford, Mazda, Mitsubishi, Nissan and Toyota.

Technical Data:

Drive:	½"
Length:	220 mm
Weight:	0.3 kg
Hex:	21
Torque/Moment of Torsion:	110 Nm

Accu Torq Socket, hex. 21/95Nm (pink) KL-0100-19

Suitable for Ford.

Technical Data:

Drive:	½"
Length:	220 mm
Weight:	0.3 kg
Hex:	21
Torque/Moment of Torsion:	95 Nm

3

Accu Torq Socket, hex. 17/120Nm (creme) KL-0100-20

Suitable for Audi A4, A6, A8 and Skoda Oktavia.

Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	17
Torque/Moment of Torsion:	120 Nm

Accu Torq Socket, hex. 17/150Nm (lemon) KL-0100-21

Suitable for Mercedes S class.

Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	17
Torque/Moment of Torsion:	150 Nm

Accu Torq Socket, hex. 19/100Nm (lime) KL-0100-22

Suitable for Fiat Ulysse and Multipla.

Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	19
Torque/Moment of Torsion:	100 Nm

Accu Torq Socket, hex. 19/150Nm (lilac) KL-0100-23

Suitable for Mercedes M-class.

Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	19
Torque/Moment of Torsion:	150 Nm

Accu Torq Socket, hex. 22/80Nm (dark green) KL-0100-24

Suitable for Jaguar XJS-Series , X300 & XK8 (steel rims only).

Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	22
Torque/Moment of Torsion:	80 Nm

Accu Torq Socket, hex. 22/100Nm (orange) KL-0100-25

Suitable for Jaguar XJS-Serie , X300 & XK8 (Aluminium rims only).

Technical Data:

Drive:	1/2"
Length:	220 mm
Weight:	0.3 kg
Hex:	22
Torque/Moment of Torsion:	100 Nm

Accu Torq rack KL-0100-1000

KL-4031-3518 Socket Insert XZN-M18, 78 mm, drive 1/2"

1/2"

Suitable e.g. for Audi A3, VW Polo, Golf V etc.

This tool is designed to loosen and tighten rear axle bearing-/hub unit-retaining bolts.

Technical Data:

Drive:	1/2"
Size:	XZN-M18
Length:	78 mm

KL-0193-10 Pliers for Protection Top
3

Suitable for VW-Audi, Opel/Vauxhall, etc.

For the safe removal of plastic tops off of wheel bolts.

KL-0101-10 Pliers for Balance Weights


Hard rubber top eliminates any damage to alloy rims.

KL-0101-11 Pliers for Balance Weights

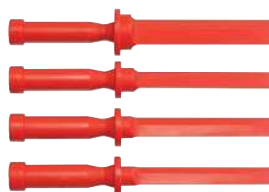

Without hard rubber top.

KL-0140-74 Tire Tread Depth Gauge


Strong brass construction.

Technical Data:

Weight:	50 g
Range:	30 mm
Legibility:	0.1 mm

KL-0194-17 Plastic Chisel Set

Universal application.

This tool is used for the quick and easy removal of trim strips, and door linings etc., as well as for the removal of adhesive weights on aluminium rims. The special design of the chisels and their handles ensure safe working.

4549 - 4550

Torque wrench TORCOFIX K

- Controlled screw tightening in the most widely used range of 5 - 400 N·m
- For use in almost all areas of industrial manufacturing
- Adjustable torque wrench with square drive and integrated ratchet-head function
- For controlled bi-directional tightening
- 3/8" or 1/2" interchangeable mushroom head with ball locking device as per DIN 3120 - A 6,3, A 10 or A 12,5, ISO 1174
- Acc. to DIN EN ISO 6789, traceable to national standards
- Lever-breaking mechanism with a slide roller guarantees tactile-impulse and audible actuation signals
- Working accuracy: +/- 3% tolerance of scale set torque
- Robust, silk-matt chrome-plated steel tube construction, with chrome-plated ratchet head and high-quality plastic parts
- Dual scale N·m and lbf·ft below a window with a magnifying-glass effect
- Additional micrometer scale with N·m graduation of 0,25; 0,5 or 1 N·m
- Ergonomically shaped black plastic handgrip
- With an indentation in the middle of the handgrip as a calibration aid
- The individual wrench is delivered in a transparent plastic box with a practical suspension mounting or in sturdy cardboard packaging (No. 4550-40)



Code:	No.	□"	N·m	lbf·ft	□ mm	□°	□ mm	□ mm
1545140	4549-05	3/8	5-50	3,5-37	335	10,0	0,25 N·m	540
7601530	4550-10	1/2	10-100	8-75	395	7,5	0,5 N·m	900
7601610	4550-20	1/2	20-200	15-150	485	7,5	1 N·m	1100
7601880	4550-30	1/2	60-300	45-220	575	7,5	1 N·m	1400
7674330	4550-40	1/2	75-400	55-300	665	7,5	1 N·m	2000

8568-01 DRL

Torque wrench DREMOMETER

- Controlled screw tightening in the range 140 - 760 N·m
- Ideal for the truck and/or industrial-vehicle sectors
- For use in all areas of industrial manufacturing
- Adjustable torque wrench with 3/4" double square drive for controlled clockwise / anticlockwise tightening
- 3/4" square drive with pin-locking mechanism DIN 3120 - B 20, ISO 1174
- Test certificate acc. to DIN EN ISO 6789, traceable to national standards
- Automatic short-path actuation with tactile impulse and audible signal
- Working accuracy: +/- 3% tolerance of scale set torque
- Full-metal construction from high-strength aluminium alloy
- Infinitely adjustable ALU-extension tube (No. 8571-80) (lever length from 1100-1400 mm)
- Dual scale with a scale graduation of 10 N·m and 10 lbf·ft



Code:	No.	□"	N·m	lbf·ft	□ mm	□°	□ mm	□ mm
7670500	8568-01 DRL	3/4	140-760	100-560	1100-1400	10 N·m / 10 lbf·ft	5000	

8573 BC

Torque wrench DREMOMETER

- Controlled screw tightening in the range 40 - 200 N·m
- Ideal for the automotive industry
- Utilisation in all areas of industrial manufacturing
- Torque wrench with 1/2" single square drive for controlled clockwise tightening
- 1/2" square drive with ball locking device DIN 3120 - A 12,5, ISO 1174
- Test certificate acc. to DIN EN ISO 6789, traceable to national standards
- Automatic short-path actuation with tactile impulse and audible signal
- Working accuracy: +/- 3% tolerance of scale set torque
- Full-metal construction from high-strength aluminium alloy
- Dual scale with a scale graduation of 5 N·m and 5 lbf·ft



Code:	No.	□"	N·m	lbf·ft	□ mm	□ mm	□ mm
7685530	8573-00 BC	1/2	40-200	30-150	551	5 N·m / 5 lbf·ft	540

8563-10 D

Torque wrench DREMOMETER

- Controlled screw tightening in the range 140 - 760 N·m
- Ideal for the truck and/or industrial-vehicle sectors
- For use in all areas of industrial manufacturing
- Adjustable torque wrench with 3/4" single square drive for controlled clockwise tightening
- 3/4" square drive with pin-locking mechanism DIN 3120 - B 20, ISO 1174
- Test certificate acc. to DIN EN ISO 6789, traceable to national standards
- Automatic short-path actuation with tactile impulse and audible signal
- Working accuracy: +/- 3% tolerance of scale set torque
- Full-metal construction from high-strength aluminium alloy
- Dual scale with a scale graduation of 10 N·m and 10 lbf·ft

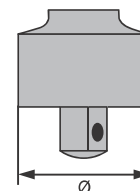


Code:	No.	□"	N·m	lbf·ft	□ mm	□ mm	□ mm
7691500	8563-10 D	3/4	140-760	100-560	812	10 N·m / 10 lbf·ft	3200

754

Ratchet heads DREMOMETER

- Enables controlled torque tightening in combination with a DREMOMETER torque wrench
- Fine-pitched, sturdy ratchet head
- 754-02 with 1/2", 754-04 with 3/4" output square drive
- For right-hand rotation
- Made of chrome-vanadium steel



Code:	Artikel-Nr.	□"	□"	□ mm	□°	Verwendung	□ mm
7680650	754-02	1/2	1/2	46	7,5	B, BC, C	350
7680730	754-04	3/4	3/4	65	10,0	CD, DS, D DR, DX	1000

TIGHTENING TORQUES FOR WHEEL NUTS AND WHEEL SCREWS OF CARS AND ESTATE CARS

Cars (in the case of aluminium wheel rims, comply with the manufacturer's specifications!)

Vehicle manufacturer			Tightening torque N-m			Vehicle manufacturer			Tightening torque N-m			Vehicle manufacturer			Tightening torque N-m						
ALFA ROMEO	Alfa 33	88-108	ISUZU	Trooper until 1992	80-118	NISSAN	Micra (1992-02)/X-Trail	98-117	JAGUAR	X-Type (2001-02)	68-92	OPEL	Agila	85	PEUGEOT	106/206/Estate	85				
	Alfa 145/146/147/Spider/GTV	83-103		Trooper from 1992	118		Almera (2002-02)/Maxima (2000-02)/Serena (1996-02)	98-118		Frontera-B (1999-02) other models	120		306	80							
	Alfa 155 (V6)	73-90		Campo until 1997	78-98		Terrano II/Patrol GR/Pick-Up	118-147		307/406/605/607	90										
	Alfa 156	98		Campo from 1998	82					806/Expert	100										
	Alfa 164	95-105								Boxer	160-180										
	Alfa 166	86																			
AUDI	A2/A3/S3/A4/A6/100/A8/S8/TT	120	KIA	S-Type	128	LADA	Samara/Riva	70-78	LANCIA	other models	86	PORSCH	all models	130	RENAULT	Twingo/Clio/Megane/Safrane/Kangoo R5	90				
	Audi 80/Coupé/Cabriolet/Audi	200		XJ6	65-85		Niva	88-91		Dedra/Kappa	98		Clio Sport/Scenix RX4	80							
	Audi Quattro	110		XJR/XJ12	88-102								Laguna/Espace	105							
BMW	3 Serie/5 Serie	90-110		XJ8/XJ-S	66-82		LAND ROVER	Freelander		115	LEXUS		all models	103		LOTUS	Elise (lighthweight metal wheel rims)	90	ROVER	Mini Cooper	57
	M5	100		Pride/Mentor/Sephia/Clarus/Carens	88-118			Discovery until 1998		129			Elan (lighthweight metal wheel rims)	80-88			25/45/MG	110			
	Z3	100-110		Sedona/Sportage	88-108			Discovery from 1998		140			Excel (lighthweight metal wheel rims)	88			75 Tourer/MG ZT-T	125			
	X5	140	Besta	90-120	Range Rover from 1994	108		Esprit (lighthweight metal wheel rims)	100												
	CHRYSLER	Neon (1994-99)/Stratus/Neon (1999-02)/PT Cruiser	109-150	LADA	Samara/Riva	70-78		LANCIA	other models	86		LAND ROVER	Freelander	115	LEXUS		all models	103		LOTUS	Elise (lighthweight metal wheel rims)
Voyager (1987-90)/Caravan		115-155	Niva		88-91	Dedra/Kappa	98		Discovery until 1998	129	Elan (lighthweight metal wheel rims)		80-88								
Voyager (2001-02)		129							Discovery from 1998	140	Excel (lighthweight metal wheel rims)		88								
Jeep Wrangler (1993-96)		110-135							Range Rover from 1994	108	Esprit (lighthweight metal wheel rims)		100								
Jeep Wrangler (1996-02)		102	LAND ROVER		Freelander	115	LEXUS		all models	103	LOTUS		Elise (lighthweight metal wheel rims)	90							
Jeep Wrangler (1996-02)		109-150			Defender	100-120			Elan (lighthweight metal wheel rims)	80-88											
Jeep Cherokee (1997-01)		115-150			Discovery	129			Excel (lighthweight metal wheel rims)	88											
Jeep Grand Cherokee (1997-01)	115-150	Discovery		129	Esprit (lighthweight metal wheel rims)	100															
CITROËN	AX10/AX11/AX14/AX GT/AX GTI/AX Sport/ZK	90	MAZDA	121 from 1995	85	SEAT	Arosa/Inca	110	MERCEDES-BENZ	S-Class (1998-02)/M-Class	150	SUZUKI	Alto	70-100							
	Saxo/Xsara	85		323 from 1998	90-117		Ibiza/Cordoba	110		S-Class (1998-02)/M-Class	150		Swift	80-80							
	Xantia/XM	90		626 from 1997	80-115		Toledo (1999-02)/Leon	120		CL (1999-02)	175		Liana/Ignis/Baleono/Wagon	85							
	C5	80-100		Xedos 6 from 1994	89-117		Alhambra	140		V-Class (1995-02)/Vito	190		R/Super Carry (1999-02)	95							
	C15E	70		MX-6 from 1994	88-127					200GE/230GE	180 + 20		Jimmy/Grand Vitara	80-100							
	Berlingo	85		MVP from 1999	90-117					Sprinter (1995-02)	140		Vitara								
	Dispatch	100		Xedos 9 from 1998	87-117					MB 100D	160-180										
	C25	180		MX-5	90-117					508D/510	250										
DAEWOO	Matiz	90-110	MAZDA	323 from 1998	90-117	SKODA	Fabia/Octavia	120	MERCEDES-BENZ	S-Class (1998-02)/M-Class	150	SUBARU	all models	78-98	SUZUKI	Alto	70-100				
	Nexia/Lanos/Espero/Nubira	80		626 from 1997	80-115		Ibiza/Cordoba	110		S-Class (1998-02)/M-Class	150		Swift	80-80							
	Leganza	100		Xedos 6 from 1994	89-117		Toledo (1999-02)/Leon	120		CL (1999-02)	175		Liana/Ignis/Baleono/Wagon	85							
	Tacuma	108		MX-6 from 1999	88-127		Alhambra	140		V-Class (1995-02)/Vito	190		R/Super Carry (1999-02)	95							
	Musso/Korando/	80-120		Xedos 9 from 1998	87-117					200GE/230GE	180 + 20		Jimmy/Grand Vitara	80-100							
	Cuore/Aplause/YRV/Move/	88-118		MX-5	90-117					Sprinter (1995-02)	140		Vitara								
	Grand Move/Terios	89-118		Demio	80-117					MB 100D	160-180										
FIAT	other models	90-120		MAZDA	Premacy	80-117	SKODA	Fabia/Octavia		120	MERCEDES-BENZ	S-Class (1998-02)/M-Class	150	SUBARU	all models	78-98	SUZUKI	Alto	70-100		
	Stilo/Croma/Coupé/	86			Tribute	133		Ibiza/Cordoba		110		S-Class (1998-02)/M-Class	150		Swift	80-80					
	Ulysee/Scudo	98			E-Series	90-120		Toledo (1999-02)/Leon		120		CL (1999-02)	175		Liana/Ignis/Baleono/Wagon	85					
	Ducato/Talento	100			other models	110		Alhambra		140		V-Class (1995-02)/Vito	190		R/Super Carry (1999-02)	95					
	Ducato Maxi	160	S-Class (1998-02)/M-Class		150				200GE/230GE	180 + 20		Jimmy/Grand Vitara	80-100								
		180	CL (1999-02)		150				Sprinter (1995-02)	140		Vitara									
FORD	KA/Mondeo (1996-00)/	85	MAZDA		323 from 1998	90-117	SKODA	Fabia/Octavia	120	MERCEDES-BENZ		S-Class (1998-02)/M-Class	150	SUBARU	all models	78-98	SUZUKI	Alto	70-100		
	Scorpio/Puma	70-100			626 from 1997	80-115		Ibiza/Cordoba	110			S-Class (1998-02)/M-Class	150		Swift	80-80					
	Fiesta (1990-93)	85			Xedos 6 from 1994	89-117		Toledo (1999-02)/Leon	120			CL (1999-02)	175		Liana/Ignis/Baleono/Wagon	85					
	Fiesta (1994-02)/	85			MX-6 from 1999	88-127		Alhambra	140			V-Class (1995-02)/Vito	190		R/Super Carry (1999-02)	95					
	Focus (1998-02)	100			Xedos 9 from 1998	87-117						200GE/230GE	180 + 20		Jimmy/Grand Vitara	80-100					
	Escort/Estate (1995-00)/Sierra	88-117		MX-5	90-117				Sprinter (1995-02)		140	Vitara									
	Probe	128		Demio	80-117			MB 100D	160-180												
	Cougar	170		Premacy	80-117			508D/510	250												
	Galaxy (2001-02)	133		Tribute	133																
	Maverick (2001-02)	135		E-Series	90-120																
HONDA	all models	108-110		MAZDA	323 from 1998	90-117	SKODA	Fabia/Octavia	120		MERCEDES-BENZ	S-Class (1998-02)/M-Class	150	SUBARU	all models	78-98	SUZUKI	Alto	70-100		
			626 from 1997		80-115	Ibiza/Cordoba		110	S-Class (1998-02)/M-Class	150		Swift	80-80								
			Xedos 6 from 1994		89-117	Toledo (1999-02)/Leon		120	CL (1999-02)	175		Liana/Ignis/Baleono/Wagon	85								
			MX-6 from 1999		88-127	Alhambra		140	V-Class (1995-02)/Vito	190		R/Super Carry (1999-02)	95								
			Xedos 9 from 1998		87-117				200GE/230GE	180 + 20		Jimmy/Grand Vitara	80-100								
		MX-5	90-117					Sprinter (1995-02)	140	Vitara											
HYUNDAI	other models	90-110	MAZDA		323 from 1998	90-117	SKODA	Fabia/Octavia	120	MERCEDES-BENZ		S-Class (1998-02)/M-Class	150	SUBARU	all models	78-98	SUZUKI	Alto	70-100		
	Pony (bis 90)/Stellar/	70-80			626 from 1997	80-115		Ibiza/Cordoba	110			S-Class (1998-02)/M-Class	150		Swift	80-80					
	S Coupé (90-92)	88-108			Xedos 6 from 1994	89-117		Toledo (1999-02)/Leon	120			CL (1999-02)	175		Liana/Ignis/Baleono/Wagon	85					
	H1/H200	120-140			MX-6 from 1999	88-127		Alhambra	140			V-Class (1995-02)/Vito	190		R/Super Carry (1999-02)	95					
					Xedos 9 from 1998	87-117						200GE/230GE	180 + 20		Jimmy/Grand Vitara	80-100					
				MX-5	90-117				Sprinter (1995-02)		140	Vitara									

10 N-m ≈ 1 kp-m

Specifications given without warranty.

Mounting wheels



Using a torque wrench, lighten the wheel nuts and screws uniformly over the cross up to the specified torque. Without fail, check the torque following a travelling distance of approx. 50 km after the wheel is mounted and at regular intervals. If a wheel-specific general operating licence is the case, it must comply with the tightening torque specified here.

Use regulation-compliant wheel attachment elements

(Do not mix up spherical and conical, different lengths, parts for steel and lightweight-metal wheels etc.! Ensure sound strength quality!) Replace difficult-to-manipulate or corroded screws and nuts! Exercise caution with lubricants!

Specifications given without warranty.