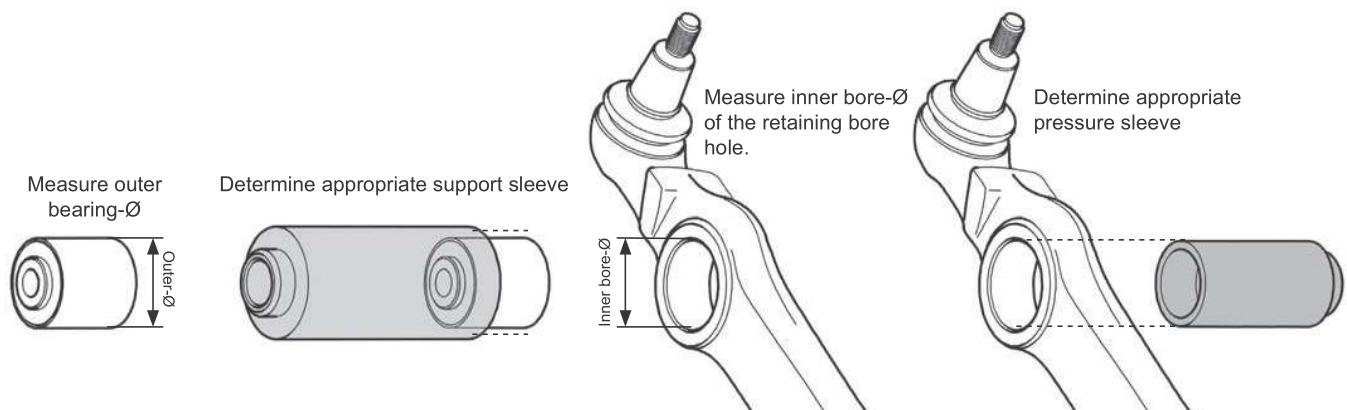


**The KLANN Silentboc Tool KL-0039- Series !!!!****The big advantages of the unrivalled KL-0039- Tool Series are:**

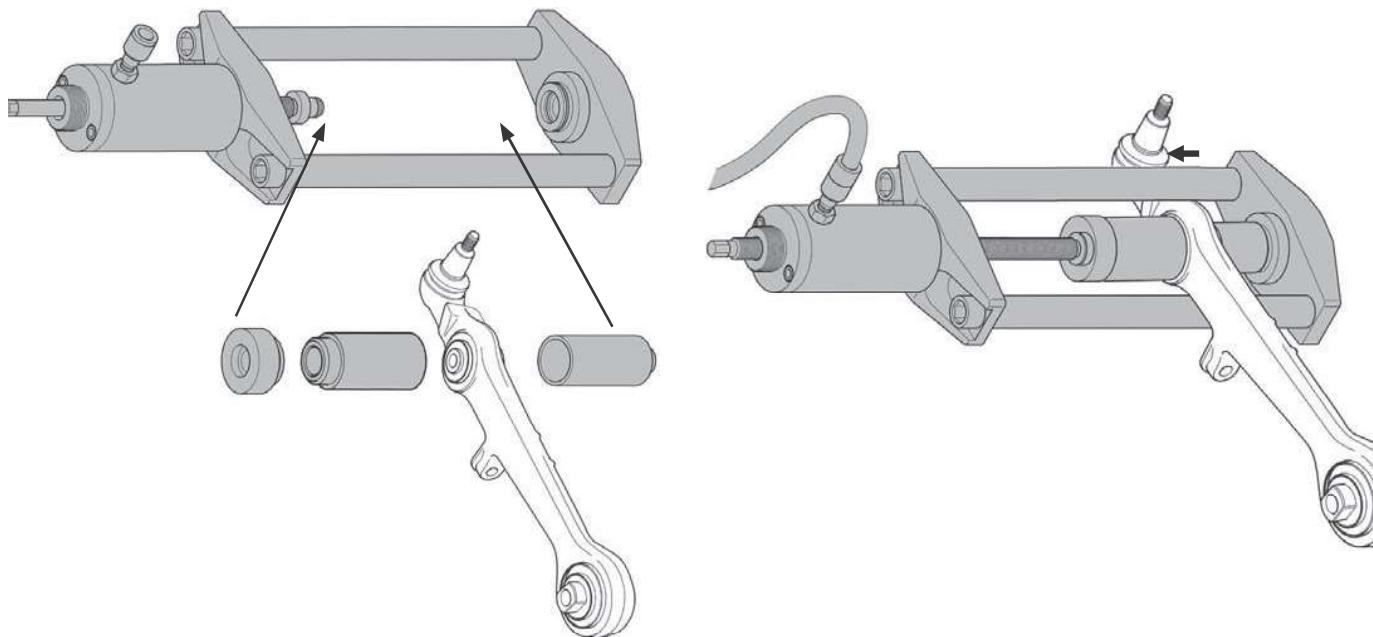
- Universal use of the tool.
- Substantial time and cost savings – as the required tool can easily and universally be assembled

2**Silentbloc / Suspension Ball Joint – Removal and Installation using a press frame****Identifying the required parts and assembling the tool:****Mounting the tool and pressing out the silentbloc / suspension ball joint**

⇒ Identifying the required parts and assembling the tool:

**Mount the tool as shown below and press out the silentbloc / suspension ball joint**

⇒ Installation follows the same principle.



Press Tool Set (short) with hydraulic cylinder 17 t

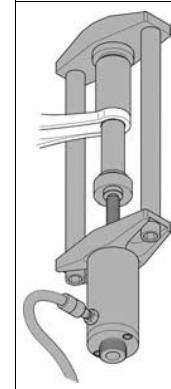
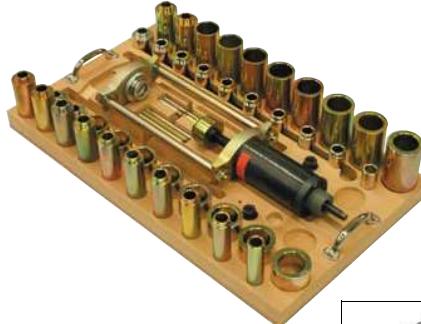
KL-0039-930 H

Universally suitable for silentblocs, suspension ball joints, guide joints etc.

The Press Tool Set **KL-0039-930 H** allows quick, professional and safe removal and replacement of silentblocs, ball joints, etc. with Ø 30 - 59 mm, directly on the vehicle without having to dismantle the axle or the wishbone. The hydraulic cylinder 17 t, included in the set, ensures professional and trouble-free pressing-out of silentblocs or ball joints.

The possibility to complement the tool set with other parts of the **KL-0039-.. Series**, such as e.g. pull spindles and adaptors, makes this press tool set almost universally applicable.

2



Technical Data:

| | |
|-------------------------------|--------|
| Inner Length (Press frame): | 275 mm |
| Inner Width (Press frame): | 115 mm |
| Press frame max. load: | 12 t |
| Hydraulic cylinder max. load: | 17 t |

Specification:

KL-0039-930 H Press Tool Set (short) with hydraulic cylinder 17 t.

| Part No. | Description | Qty. |
|--------------|---|------|
| KL-0039-1140 | Press frame, short | 1 |
| KL-0040-2500 | Hydraulic Cylinder 17t | 1 |
| KL-0039-1930 | Pressure Spindle M20x350 with O-ring | 1 |
| KL-0039-1002 | Retainer Adaptor for hex nut and pressure spindle with O-ring | 1 |
| KL-0039-1601 | Press/Support Sleeve Set short | 1 |
| KL-0039-1701 | Press/Support Sleeve Set long | 1 |
| KL-0039-9000 | Wooden Plate Empty | 1 |

Press Tool Set (short) without drive

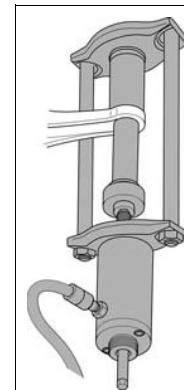
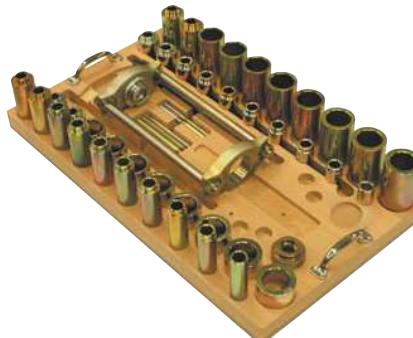
KL-0039-931 H

Universally suitable for silentblocs, suspension ball joints guide joints etc.

The press tool set **KL-0039-931 H** allows the quick, professional and safe removal and replacement of silentblocs, suspension ball joints, etc. with Ø 30 - 59 mm in-situ on the vehicle without having to remove the axle or the wishbone from the vehicle.

Using this tool set in combination with a hydraulic drive ensures professional and trouble-free extraction of silentblocs or pivoting bearings.

The possibility to easily complement the tool set with other parts of the **KL-0039-.. Series** such as a mechanical drive by pull spindle, makes this press tool set almost universal in its field of application.



Technical Data:

| | |
|-----------------------------|--------|
| Inner length (press frame) | 275 mm |
| Inner width (press frame) | 115 mm |
| Max. charge of press frame: | 12 t |

Scope of Delivery:

KL-0039-931 H Press Tool Set (short) without drive

| Part No. | Description | Qty. |
|--------------|---|------|
| KL-0039-1140 | Press frame, short | 1 |
| KL-0039-1002 | Retainer Adaptor for hex nut and pressure spindle with O-ring | 1 |
| KL-0039-1930 | Pressure Spindle M20x350 with O-ring | 1 |
| KL-0039-1601 | Press/Support Sleeve Set short | 1 |
| KL-0039-1701 | Press/Support Sleeve Set long | 1 |
| KL-0039-9000 | Wooden Plate Empty | 1 |

Note:

For the storage system for the KL-0039-Series please refer to chapter 10.

**KL-0039-160****Press-/Support Sleeve Set Ø 30-90 mm (short) 45 mm**

Designed to press in and press out silentblocs, shafts, bushes etc. in conjunction with the tools of the **KL-0039-.. Series**.

**2****Scope of Delivery:****KL-0039-160 Press-/Support Sleeve Set Ø30 - 90 mm, short (Length: 45 mm)**

| Part No. | Description | Qty. |
|--------------|--------------------------------------|------|
| KL-0039-1630 | Press-/Support sleeve, short Ø30/Ø22 | 1 |
| KL-0039-1632 | Press-/Support sleeve, short Ø32/Ø24 | 1 |
| KL-0039-1634 | Press-/Support sleeve, short Ø34/Ø26 | 1 |
| KL-0039-1636 | Press-/Support sleeve, short Ø36/Ø28 | 1 |
| KL-0039-1638 | Press-/Support sleeve, short Ø38/Ø30 | 1 |
| KL-0039-1640 | Press-/Support sleeve, short Ø40/Ø32 | 1 |
| KL-0039-1642 | Press-/Support sleeve, short Ø42/Ø34 | 1 |
| KL-0039-1644 | Press-/Support sleeve, short Ø44/Ø36 | 1 |
| KL-0039-1646 | Press-/Support sleeve, short Ø46/Ø38 | 1 |
| KL-0039-1648 | Press-/Support sleeve, short Ø48/Ø40 | 1 |
| KL-0039-1650 | Press-/Support sleeve, short Ø50/Ø42 | 1 |
| KL-0039-1652 | Press-/Support sleeve, short Ø52/Ø44 | 1 |
| KL-0039-1654 | Press-/Support sleeve, short Ø54/Ø46 | 1 |
| KL-0039-1656 | Press-/Support sleeve, short Ø56/Ø48 | 1 |
| KL-0039-1658 | Press-/Support sleeve, short Ø58/Ø50 | 1 |
| KL-0039-1660 | Press-/Support sleeve, short Ø60/Ø52 | 1 |

| Part No. | Description | Qty. |
|--------------|--------------------------------------|------|
| KL-0039-1662 | Press-/Support sleeve, short Ø62/Ø54 | 1 |
| KL-0039-1664 | Press-/Support sleeve, short Ø64/Ø56 | 1 |
| KL-0039-1666 | Press-/Support sleeve, short Ø66/Ø58 | 1 |
| KL-0039-1668 | Press-/Support sleeve, short Ø68/Ø60 | 1 |
| KL-0039-1670 | Press-/Support sleeve, short Ø70/Ø62 | 1 |
| KL-0039-1672 | Press-/Support sleeve, short Ø72/Ø64 | 1 |
| KL-0039-1674 | Press-/Support sleeve, short Ø74/Ø66 | 1 |
| KL-0039-1676 | Press-/Support sleeve, short Ø76/Ø68 | 1 |
| KL-0039-1678 | Press-/Support sleeve, short Ø78/Ø70 | 1 |
| KL-0039-1680 | Press-/Support sleeve, short Ø80/Ø72 | 1 |
| KL-0039-1682 | Press-/Support sleeve, short Ø82/Ø74 | 1 |
| KL-0039-1684 | Press-/Support sleeve, short Ø84/Ø76 | 1 |
| KL-0039-1686 | Press-/Support sleeve, short Ø86/Ø78 | 1 |
| KL-0039-1688 | Press-/Support sleeve, short Ø88/Ø80 | 1 |
| KL-0039-1690 | Press-/Support sleeve, short Ø90/Ø82 | 1 |

KL-0039-170**Press-/Support Sleeve Set Ø 30-90 mm (long) 115 mm**

Designed to press in and press out silentblocs, shafts, bushes etc. in conjunction with the tools of the **KL-0039-.. Series**.

**Scope of Delivery:****KL-0039-170 Press-/Support Sleeve Set Ø 30-90 mm (long) 115 mm**

| Part No. | Description | Qty. |
|--------------|-------------------------------------|------|
| KL-0039-1730 | Press-/Support sleeve, long Ø30/Ø22 | 1 |
| KL-0039-1732 | Press-/Support sleeve, long Ø32/Ø24 | 1 |
| KL-0039-1734 | Press-/Support sleeve, long Ø34/Ø26 | 1 |
| KL-0039-1736 | Press-/Support sleeve, long Ø36/Ø28 | 1 |
| KL-0039-1738 | Press-/Support sleeve, long Ø38/Ø30 | 1 |
| KL-0039-1740 | Press-/Support sleeve, long Ø40/Ø32 | 1 |
| KL-0039-1742 | Press-/Support sleeve, long Ø42/Ø34 | 1 |
| KL-0039-1744 | Press-/Support sleeve, long Ø44/Ø36 | 1 |
| KL-0039-1746 | Press-/Support sleeve, long Ø46/Ø38 | 1 |
| KL-0039-1748 | Press-/Support sleeve, long Ø48/Ø40 | 1 |
| KL-0039-1750 | Press-/Support sleeve, long Ø50/Ø42 | 1 |
| KL-0039-1752 | Press-/Support sleeve, long Ø52/Ø44 | 1 |
| KL-0039-1754 | Press-/Support sleeve, long Ø54/Ø46 | 1 |
| KL-0039-1756 | Press-/Support sleeve, long Ø56/Ø48 | 1 |
| KL-0039-1758 | Press-/Support sleeve, long Ø58/Ø50 | 1 |
| KL-0039-1760 | Press-/Support sleeve, long Ø60/Ø52 | 1 |

| Part No. | Description | Qty. |
|--------------|-------------------------------------|------|
| KL-0039-1762 | Press-/Support sleeve, long Ø62/Ø54 | 1 |
| KL-0039-1764 | Press-/Support sleeve, long Ø64/Ø56 | 1 |
| KL-0039-1766 | Press-/Support sleeve, long Ø66/Ø58 | 1 |
| KL-0039-1768 | Press-/Support sleeve, long Ø68/Ø60 | 1 |
| KL-0039-1770 | Press-/Support sleeve, long Ø70/Ø62 | 1 |
| KL-0039-1772 | Press-/Support sleeve, long Ø72/Ø64 | 1 |
| KL-0039-1774 | Press-/Support sleeve, long Ø74/Ø66 | 1 |
| KL-0039-1776 | Press-/Support sleeve, long Ø76/Ø68 | 1 |
| KL-0039-1778 | Press-/Support sleeve, long Ø78/Ø70 | 1 |
| KL-0039-1780 | Press-/Support sleeve, long Ø80/Ø72 | 1 |
| KL-0039-1782 | Press-/Support sleeve, long Ø82/Ø74 | 1 |
| KL-0039-1784 | Press-/Support sleeve, long Ø84/Ø76 | 1 |
| KL-0039-1786 | Press-/Support sleeve, long Ø86/Ø78 | 1 |
| KL-0039-1788 | Press-/Support sleeve, long Ø88/Ø80 | 1 |
| KL-0039-1790 | Press-/Support sleeve, long Ø90/Ø82 | 1 |

Hydraulic Press Tool (17t) VW-T4

KL-0043-861

Suitable for VW T4 front axle upper guide ball-joint.

The upper ball-joint may be removed and replaced within 30 minutes using the new Press Tool **KL-0043-861**, without the need to dismantle the upper wishbone.

Advantages

- Large time savings (2 - 3 hours).
- Simple and precise to use.

Scope of Delivery: KL-0043-861 Hydraulic Press Tool (17t)

| Part No. | Description | Qty. |
|---------------------|--|------|
| KL-0043-8610 | Press Frame | 1 |
| KL-0043-8691 | Set of Sleeves VW-T4 | 1 |
| KL-0215-10 | Hydraulic Cylinder 17t with pressure spindle; pin Ø18 mm | 1 |

**Scope of Delivery: KL-0043-860 Press Tool Set VW-T4**

| Part No. | Description | Qty. |
|--------------|------------------|------|
| KL-0043-8610 | Press frame | 1 |
| KL-0043-8691 | Sleeve set VW-T4 | 1 |

Scope of Delivery: KL-0043-8610 Press Frame

| Part No. | Description | Qty. |
|----------------|--|------|
| KL-0039-1144 | Base Plate 2 1/4"-14 UNS | 1 |
| KL-0043-8501-V | Base Plate 2 1/4"-14 UNS (reinforced design) | 1 |
| KL-0215-4004 | Tie rods (frame) | 1 |
| KL-0049-3004 | Hex nut M18 | 2 |
| KL-0043-8601 | Adaptor 2 1/4"-14UNS to Ø60 mm | 4 |

Scope of Delivery: KL-0043-8691 Sleeve Set VW-T4

| Part No. | Description | Qty. |
|----------------|--------------------|------|
| KL-0043-8661 | Lower Sleeve VW-T4 | 1 |
| KL-0043-8501-V | Upper Sleeve VW-T4 | 1 |

Upgrade Kit VW T4 for Pulling Device KL-0215-4.. Series

KL-0043-8611

Suitable for VW T4 front axle upper guide joint.

The upgrade kit **KL-0043-8611** allows the pulling device for silentblos of the **KL-0215-4.. Series** also to be used to replace the upper guide joint on the front axle of VW T4.

Scope of Delivery: KL-0043-8611 Upgrade Kit VW T4 for Pulling Device KL-0215-4.. Series

| Part No. | Description | Qty. |
|----------------|-------------------------------------|------|
| KL-0043-8501-V | Base Plate 2 1/4"-14 UNS reinforced | 1 |
| KL-0043-8601 | Adaptor 2 1/4"-14UNS to Ø60 | 1 |
| KL-0043-8691 | Sleeve Set VW-T4 | 1 |

Press Tool Set (short), BMW E36, with Hydraulic Cylinder

KL-0039-762

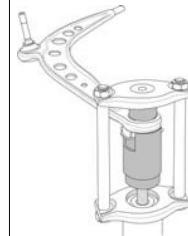
Suitable for BMW 3-Series (E36) front axle wishbone.

The tool set **KL-0039-762** enables quick and trouble-free removal and installation of the outer suspension ball joint on the lower wishbone.

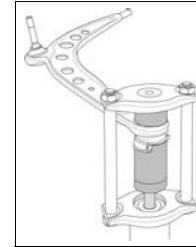
The removal and replacement of the outer suspension ball joint can be performed directly on the vehicle within a few minutes, without the need to remove the wishbone from the vehicle.

Scope of Delivery: KL-0039-762 Press Tool Set (short), BMW E36, with Hydr. Cyl.

| Part No. | Description | Qty. |
|---------------------|---|------|
| KL-0039-7620 | Press Tool Set (short), BMW E36, without drive | 1 |
| KL-0040-2500 | Hydraulic Cylinder 17t | 1 |

**Scope of Delivery: KL-0039-7620 Press Tool Set (short), BMW E36, without drive**

| Part No. | Description | Qty. |
|---------------------|--|------|
| KL-0039-7623 | Sleeve Set (short), BMW E36 | 1 |
| KL-0039-1140 | Press Frame (short) | 1 |
| KL-0039-1002 | Retainer Adaptor for clamping nut and pressure spindle with O-ring | 1 |
| KL-0039-1930 | Pressure spindle M20x350 with O-ring | 1 |

**Scope of Delivery: KL-0039-7623 Set of Sleeves (short) BMW E36**

| Part No. | Description | Qty. |
|----------------|--------------------------------------|------|
| KL-0043-8288-1 | Press sleeve for BMW E36 | 1 |
| KL-0043-8289-1 | Support sleeve for BMW E36 | 1 |
| KL-0039-1648 | Press-/Support sleeve (short) Ø48 mm | 1 |
| KL-0039-1658 | Press-/Support sleeve (short) Ø58 mm | 1 |

KL-0326-10 A

Hydraulic Press Tool Set

(German Utility Model)

KL-0326-100 A



KL-0326-101 A



KL-0326-112 A



KL-0326-131 A



W163 (M-class)



W211 (E-class) / W220 (S-class)



W124, W201 (190)



W211 (E-class) / W220 (S-class)



KL-0326-101 A

Hydraulic Press Tool Set

Suitable for Mercedes W163 (M-Class, front- / rear axle), W211 (E-Class 2002 onwards, front axle), W219 (CLS, front axle), W220 (S-Class, front axle), W230 (SL, front axle), W124 (E-Class, front axle) and W201 (190-Series, front axle).

The hydraulic press tool set **KL-0326-10 A** allows the suspension ball joint to be quickly and easily pressed into and out of the lower wishbone. The suspension ball joint can often be removed or installed directly on the vehicle within a few minutes, without having to dismount the wishbone.

Scope of Delivery: KL-0326-10 A Hydraulic Press Tool Set

| Part No. | Description | Qty. |
|---------------|---|------|
| KL-0326-100 A | Hydraulic Press Frame | 1 |
| KL-0326-112 A | Set of Sleeves (W163 / W211 / W219 / W220 / W230) | 1 |
| KL-0326-131 A | Set of Sleeves (W124 / W201) | 1 |

Scope of Delivery: KL-0326-100 A Hydraulic Press Frame

| Part No. | Description | Qty. |
|--------------|--------------------------------------|------|
| KL-0326-1000 | Press frame | 1 |
| KL-0040-2500 | Hydraulic Cylinder 17t | 1 |
| KL-0039-1930 | Pressure spindle M20x350 with O-ring | 1 |

Scope of Delivery: KL-0326-1000 Press Frame

| Part No. | Description | Qty. |
|--------------|-------------------------------|------|
| KL-0326-1001 | Press frame | 1 |
| KL-0326-1002 | Guide rail | 1 |
| KL-0326-1003 | Hexagon socket screw M12 x 20 | 2 |

Scope of delivery: KL-0326-101 A Hydraulic press tool set suspension ball joint MB without drive

| Part No. | Description | Qty. |
|---------------|---|------|
| KL-0326-1000 | Press Frame | 1 |
| KL-0326-112 A | Set of Sleeves (W163 / W211 / W219 / W220 / W230) | 1 |
| KL-0326-131 A | Set of Sleeves W124 / W201 | 1 |

Scope of Delivery: KL-0326-131 A Set of Sleeves (W124 / W201)

| Part No. | Description | Qty. |
|----------------|----------------------------|------|
| KL-0326-1311 | Adaptor ring 3 with O-ring | 1 |
| KL-0326-1312 | Adaptor ring 4 with O-ring | 1 |
| KL-0326-1313 A | Press piece (removal) | 1 |
| KL-0326-1314 | Press piece (removal) | 1 |

Scope of Delivery: KL-0326-112 A Set of Sleeves (W163 / W211 / W219 / W220 / W230)

| Part No. | Description | Qty. |
|----------------|--------------------------------|------|
| KL-0326-1111 | Adaptor ring 1 with O-ring | 1 |
| KL-0326-1211 | Adaptor ring 2 with O-ring | 1 |
| KL-0039-1634 | Press/Support sleeve short Ø34 | 1 |
| KL-0039-1642 | Press/Support sleeve short Ø42 | 1 |
| KL-0039-1650 | Press/Support sleeve short Ø50 | 1 |
| KL-0326-1313 A | Press piece (removal) | 1 |

KL-0326-11 A

Hydraulic Press Tool W163

(German Utility Model)

KL-0326-111 A



KL-0326-11 A



KL-0326-111 A

Set of Sleeves (W163)

Suitable for Mercedes M-Class (W163).

The hydraulic press tool set **KL-0326-11 A** allows the suspension ball joint to be quickly and easily pressed into and out of the lower wishbone. The suspension ball joint can often be removed or installed directly on the vehicle within a few minutes, without having to dismount the wishbone.

Scope of Delivery: KL-0326-11 A Hydraulic Press Tool W163

| Part-No. | Description | Qty. |
|---------------|--------------------------------------|------|
| KL-0326-111 A | Set of Sleeves (W163) | 1 |
| KL-0326-1000 | Press Frame | 1 |
| KL-0040-2500 | Hydraulic Cylinder 17 t. | 1 |
| KL-0039-1930 | Pressure spindle M20x350 with O-ring | 1 |

Scope of Delivery: KL-0326-111 A Set of Sleeves (W163)

| Part-No. | Description | Qty. |
|----------------|--------------------------------|------|
| KL-0326-1111 | Adaptor ring 1 with O-ring | 1 |
| KL-0039-1642 | Press/Support sleeve short Ø42 | 1 |
| KL-0326-1313 A | Press piece (removal) | 1 |

Hydraulic Press Tool Set W211 / W219 / W220 / W230

(German Utility Model)

KL-0326-12 A

Suitable for Mercedes E-Class (W211), CLS (W219), S-Class (W220) SL (W230).

The suspension ball joint can easily and quickly be pressed into and out of the lower wishbone with the press tool set **KL-0326-12 A**. The ball joint can often be removed or installed directly on the vehicle within a few minutes, without having to dismount the wishbone.

Scope of Delivery: **KL-0326-12 A** Hydraulic Press Tool Set

| Part No. | Description | Qty. |
|---------------|--|------|
| KL-0326-121 A | Set of Sleeves (W211 / W219 / W220 / W230) | 1 |
| KL-0326-1000 | Press frame | 1 |
| KL-0040-2500 | Hydraulic cylinder 17t | 1 |
| KL-0039-1930 | Pressure spindle M20x350 with O-ring | 1 |

Scope of Delivery: **KL-0326-121 A** Set of Sleeves

| Part No. | Description | Qty. |
|--------------|--------------------------------|------|
| KL-0326-1111 | Adaptor ring 1 with O-ring | 1 |
| KL-0326-1211 | Adaptor ring 2 with O-ring | 1 |
| KL-0039-1634 | Press/Support sleeve short Ø34 | 1 |
| KL-0039-1650 | Press/Support sleeve short Ø50 | 1 |



KL-0326-121 A



2

Hydraulic Press Tool Set W124 / W201

(German Utility Model)

KL-0326-13 A

Suitable for Mercedes W124, W201 (190 series).

The suspension ball joint can easily and quickly be pressed into and out of the lower wishbone with the press tool set **KL-0326-13 A**. The ball joint can often be removed or installed directly on the vehicle within a few minutes, without having to dismount the wishbone.

Scope of Delivery: **KL-0326-13 A** Hydraulic Press Tool Set

| Part No. | Description | Qty. |
|---------------|--------------------------------------|------|
| KL-0326-131 A | Set of Sleeves (W124 / W201) | 1 |
| KL-0326-1000 | Press frame | 1 |
| KL-0040-2500 | Hydraulic cylinder 17t | 1 |
| KL-0039-1930 | Pressure spindle M20x350 with O-ring | 1 |

Scope of Delivery: **KL-0326-131 A** Set of Sleeves

| Part No. | Description | Qty. |
|----------------|----------------------------|------|
| KL-0326-1311 | Adaptor ring 3 with O-ring | 1 |
| KL-0326-1312 | Adaptor ring 4 with O-ring | 1 |
| KL-0326-1313 A | Press piece (removal) | 1 |
| KL-0326-1314 | Press piece (removal) | 1 |



KL-0326-131 A



Toothed Socket

KL-0326-20

Suitable for Mercedes M-Class (W163)

For tightening the suspension ball joint fastening nut on the steering knuckle.

Technical Data:

| | |
|-----------------|---------|
| Outer diameter: | 63.0 mm |
| Inner diameter: | 52.5 mm |
| Tooth Width: | 7.5 mm |
| Weight: | 500 g |



Hydraulic Press Tool (17t.)

KL-0626-10

Suitable for Ford Transit 2002 onwards front axle.

The support ball joint can be pressed out of or into the wheel bearing housing quickly and without any difficulty by using press tool set **KL-0626-10**. The support ball joint can be removed or installed in-situ on the vehicle within just a few minutes, without the wheel bearing housing having to be removed.

Scope of Delivery: **KL-0626-10** Hydraulic Press Tool (17t.)

| Part No. | Description | Qty. |
|--------------|---------------------------------------|------|
| KL-0626-100 | Press Tool without Hydraulic Cylinder | 1 |
| KL-0040-2500 | Hydraulic Cylinder 17t. | 1 |
| KL-0040-2510 | Press Spindle | 1 |

Scope of Delivery: **KL-0626-100** Hydraulic Press Tool without Hydr. Cyl.

| Part No. | Description | Qty. |
|--------------|--------------------------------------|------|
| KL-0626-1001 | Press Frame | 1 |
| KL-0626-1002 | Collar screw | 1 |
| KL-0174-559 | Adaptor 2 1/4"-14UNS to 2 1/4"-14UNS | 1 |
| KL-0626-1003 | Press piece (removal) Ø: 38 mm | 1 |
| KL-0626-1004 | Support sleeve (removal) Ø: 66.5mm | 1 |
| KL-0626-1005 | Support sleeve (replacement) Ø: 54mm | 1 |
| KL-0626-1006 | Press piece (replacement) Ø: 56mm | 1 |



KL-0039-750

Press Tool Set with hydraulic cylinder

(Pat. e.g. US-Patent 7,020,944)



KL-0039-7500



Ball joint extraction



Ball joint insertion

Suitable for changing suspension ball joints on Mercedes Sprinter (904) models '95 onwards and VW LT (2D) models '96 onwards.

The Press Tool Set **KL-0039-750** in conjunction with the Hydraulic Pump **KL-0215-35 M25** or **KL-0215-37 M25** enables quick and trouble-free pushing out and pressing in of ball joints on the lower wishbone. Replacement of a ball joint can be performed directly on the vehicle within a few minutes, without having to remove the wishbone from the vehicle.



Note: Two different wishbones with two different ball joints are used on Mercedes Sprinter and VW LT.

Scope of Delivery:**KL-0039-750 Press Tool Set with hydraulic cylinder**

| Part-No. | Description | Qty. |
|--------------|---|------|
| KL-0039-7500 | Press Tool Set without hydraulic cylinder | 1 |
| KL-0040-2500 | Hydraulic Cylinder 17t | 1 |

Scope of Delivery:**KL-0039-7500 Press Tool Set without hydraulic cylinder**

| Part No: | Description | Qty. |
|--------------|--|------|
| KL-0039-7503 | Sleeve Set short MB Sprinter | 1 |
| KL-0039-1140 | Press frame, short | 1 |
| KL-0039-1002 | Retainer Adaptor for clamping nut and pressure spindle with O-ring | 1 |
| KL-0039-1930 | Pressure spindle M20x350 mm with O-ring | 1 |

Scope of Delivery:**KL-0039-7503 Sleeve Set short MB Sprinter**

| Part No. | Description | Qty. |
|--------------|--|------|
| KL-0039-1823 | Support Sleeves with clamping disc for MB Sprinter | 1 |
| KL-0039-1662 | Press-/Support sleeve short Ø62 mm | 1 |
| KL-0039-1762 | Press-/Support sleeve long Ø62 mm | 1 |
| KL-0043-8531 | Press sleeve | 1 |

KL-0039-752

Press Tool Set (short), MB, with hydr. cylinder



KL-0039-7520



Suitable for Mercedes 190-Series (W201) W124 and W129 suspension ball joint on the front lower wishbone.

The press tool set **KL-0039-752** used in conjunction with a hydraulic pump such as **KL-0215-35 M25** enables a suspension ball joint to be quickly and easily pressed into and pressed out of the lower wishbone. Removal and installation of a suspension ball joint can be carried out directly on the vehicle within a few minutes without the need to remove the wishbone from the vehicle.

Scope of Delivery:**KL-0039-752 Press Tool Set (short), MB, with hydr. cylinder**

| Part-No. | Description | Qty. |
|--------------|---|------|
| KL-0039-7520 | Press Tool Set (short), MB, without drive | 1 |
| KL-0040-2500 | Hydraulic cylinder 17t | 1 |

Scope of Delivery:**KL-0039-7520 Press Tool Set (short), MB, without drive**

| Part-No. | Description | Qty. |
|--------------|--|------|
| KL-0039-7523 | Sleeve Set (short) MB | 1 |
| KL-0039-1140 | Press Frame (short) | 1 |
| KL-0039-1002 | Retainer Adaptor for clamping nut and pressure spindle with O-ring | 1 |
| KL-0039-1930 | Pressure spindle M20x350 with O-ring | 1 |

Scope of Delivery:**KL-0039-7523 Sleeve Set (short) MB**

| Part-No. | Description | Qty. |
|--------------|-------------------------------------|------|
| KL-0039-1636 | Press-/Support sleeve, short Ø36 mm | 1 |
| KL-0039-1658 | Press-/Support sleeve, short Ø58 mm | 1 |
| KL-0039-1760 | Press-/Support sleeve, long Ø60 mm | 1 |

Press Tool Set (short) with hydraulic cylinder

KL-0039-710

Suitable for Renault Master II ('98 onwards) and Opel/Vauxhall Movano I ('98 onwards).

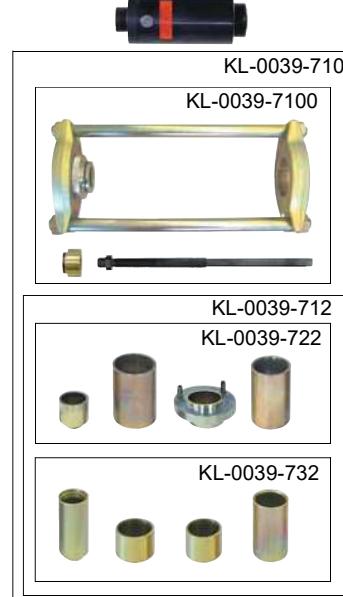
The Press Tool **KL-0039-710** in conjunction with the Hydraulic Pump **KL-0215-35 M25** or **KL-0215-37 M25** allows quick, professional and safe removal and replacement of ball joints on the front upper and lower wishbone. This tool enables even heavily corroded ball joints to be pressed in and pushed out within a few minutes.

The removal of the upper or lower wishbone is not necessary.

Advantages:

- Substantial time savings of approx. 1 to 2 hours
- Quick and professional pressing out and pressing in of ball joints
- Hydraulic cylinder 17t **KL-0040-2500** can be used on other KLANN tools to exert thrust or compression force

2

**Scope of Delivery:****KL-0039-710 Press Tool Set with hydraulic cylinder**

| Part-No. | Description | Qty. |
|--------------|---|------|
| KL-0039-7100 | Press Tool Set without hydraulic cylinder | 1 |
| KL-0040-2500 | Hydraulic cylinder 17 t | 1 |

Scope of Delivery:**KL-0039-7100 Press Tool Set without hydraulic cylinder**

| Part-No. | Description | Qty. |
|--------------|---|------|
| KL-0039-1140 | Press frame, short | 1 |
| KL-0039-1930 | Pressure spindle M20x350 with O-Ring | 1 |
| KL-0039-1002 | Retainer Adaptor for clamp nut and pressure spindle | 1 |
| KL-0039-712 | Pressure- / Support Sleeve Set Renault Master / Opel Movano | 1 |



Press out upper ball joint



Press in upper ball joint



Press out lower ball joint



Press in lower ball joint

Scope of Delivery:**KL-0039-712 Pressure- / Support Sleeve Set**

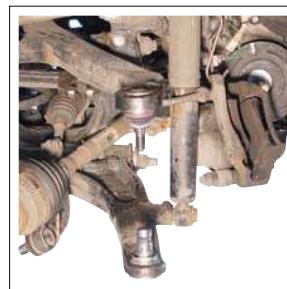
| Part-No. | Description | Qty. |
|-------------|--|------|
| KL-0039-722 | Sleeve Set upper suspension ball joint | 1 |
| KL-0039-732 | Sleeve Set lower suspension ball joint | 1 |

KL-0039-722 Sleeve Set (short) upper suspension ball joint

| Part No. | Description | Qty. |
|--------------|---|------|
| KL-0039-1644 | Press- / Support Sleeve short Ø 44 mm | 1 |
| KL-0039-1764 | Press- / Support Sleeve long Ø 64 mm | 1 |
| KL-0039-1820 | Support Sleeve | 1 |
| KL-0039-1758 | Pressure- / Support Sleeve long Ø 58 mm | 1 |

Scope of Delivery:**KL-0039-732 Sleeve Set (short) upper suspension ball joint**

| Part-No. | Description | Qty. |
|--------------|---------------------------------------|------|
| KL-0039-1821 | Press- / Support Sleeve | 1 |
| KL-0039-1658 | Press- / Support Sleeve short Ø 58 mm | 1 |
| KL-0039-1652 | Press- / Support Sleeve short Ø 52 mm | 1 |
| KL-0039-1822 | Press- / Support Sleeve | 1 |



KL-0039-720

Press Tool Set with Hydraulic Cylinder Renault Master / Vauxhall/Opel Movano

Suitable for Renault Master II ('98 onwards) and Opel/Vauxhall Movano I ('98 onwards).

The press tool set **KL-0039-720** used in conjunction with the hydraulic pump **KL-0215-35 M25** or **KL-0215-37 M25** allows quick, professional and safe removal and replacement of suspension ball joints on the front upper wishbone. This tool enables even heavily corroded suspension ball joints to be pressed in and pushed out within just a few minutes.

The removal of the upper wishbone is not necessary.

Scope of Delivery:**KL-0039-720 Press Tool Set with Hydraulic Cylinder**

| Part-No. | Description | Qty. |
|--------------|--|------|
| KL-0039-721 | Press Tool Set without hydraulic cylinder Renault Master / Opel Movano | 1 |
| KL-0040-2500 | Hydraulic cylinder 17 t | 1 |

Scope of Delivery:**KL-0039-721 Press Tool Set without Hydraulic Cylinder**

| Part-No. | Description | Qty. |
|--------------|---|------|
| KL-0039-1140 | Press Frame, short | 1 |
| KL-0039-1930 | Retainer Adaptor for clamp nut and pressure spindle | 1 |
| KL-0039-1002 | Pressure spindle M20x350 with O-Ring | 1 |
| KL-0039-722 | Sleeve Set upper suspension ball joint | 1 |

Scope of Delivery:**KL-0039-722 Sleeve Set upper suspension ball joint**

| Part No. | Description | Qty. |
|--------------|---|------|
| KL-0039-1644 | Press- / Support Sleeve short Ø 44 mm | 1 |
| KL-0039-1764 | Press- / Support Sleeve long Ø 64 mm | 1 |
| KL-0039-1820 | Support Sleeve Master / Movano | 1 |
| KL-0039-1758 | Pressure- / Support Sleeve long Ø 58 mm | 1 |



Press out upper ball joint



Press in upper ball joint

KL-0039-730

Press Tool Set with hydraulic cylinder, Renault Master / Opel/Vauxhall Movano

Suitable for Renault Master II ('98 onwards) and Opel Movano I ('98 onwards).

The Press Tool **KL-0039-730** in conjunction with the Hydraulic Pump **KL-0215-35 M25** or **KL-0215-37 M25** allows quick, professional and safe removal and replacement of ball joints on the front lower wishbone.

This tool enables even heavily corroded ball joints to be pressed in and pushed out within a few minutes.

The removal of the lower wishbone is not necessary.

Scope of Delivery:**KL-0039-730 Press Tool Set with hydraulic cylinder, Renault Master / Opel/Vauxhall Movano**

| Part-No. | Description | Qty. |
|--------------|---|------|
| KL-0039-731 | Press Tool Set without hydraulic cylinder Renault Master / Opel/Vauxhall Movano | 1 |
| KL-0040-2500 | Hydraulic cylinder 17 t | 1 |

Scope of Delivery:**KL-0039-731 Press Tool Set without Hydraulic Cylinder Renault Master / Opel/Vauxhall Movano**

| Part-No. | Description | Qty. |
|--------------|---|------|
| KL-0039-1140 | Press Frame, short | 1 |
| KL-0039-1930 | Pressure spindle | 1 |
| KL-0039-1002 | Retainer Adaptor for clamp nut and pressure spindle | 1 |
| KL-0039-732 | Sleeve Set (short) lower wishbone | 1 |



Press out lower ball joint



Press in lower ball joint

Scope of Delivery:**KL-0039-732 Sleeve Set (short) lower suspension ball joint**

| Part-No. | Description | Qty. |
|--------------|---------------------------------------|------|
| KL-0039-1821 | Press- / Support Sleeve | 1 |
| KL-0039-1658 | Press- / Support Sleeve short Ø 58 mm | 1 |
| KL-0039-1652 | Press- / Support Sleeve short Ø 52 mm | 1 |
| KL-0039-1822 | Press- / Support Sleeve | 1 |

Pulling Device with Hydraulic Cylinder

(Pat.)

KL-1210-2



Suitable for Renault Master II ('98 onwards) and Opel/Vauxhall Movano I ('98 onwards)

The pulling device **KL-1210-2** is designed for the professional removal and replacement of the two silentblocks on the lower wishbone.

Scope of Delivery:

KL-1210-2 Pulling Device with Hydraulic Cylinder

| Part No. | Description | Qty. |
|--------------------|---|----------|
| KL-0040-2500 | Hydraulic Cylinder 17 t. | 1 |
| KL-0039-1003 | Retainer adaptor for hydr. cyl. with O-ring | 1 |
| KL-0039-1002 | Retainer adaptor for clamp nut and pressure spindle with O-ring | 1 |
| KL-1210-200 | Pulling Device without Hydraulic cylinder 17 t. | 1 |

Scope of Delivery:

KL-1210-200 Pulling Device without Hydraulic Cylinder

| Part No. | Description | Qty. |
|--------------------|---------------------------------|----------|
| KL-0039-1914 | Pull spindle M14 with nut | 1 |
| KL-1210-201 | Press/support sleeve set | 1 |

Scope of Delivery:

KL-1210-201 Press/Support Sleeve Set Renault Master/Opel Movano

| Part No. | Description | Qty. |
|--------------|----------------|------|
| KL-1210-2001 | Support sleeve | 1 |
| KL-1210-2002 | Pressure piece | 1 |
| KL-1210-2003 | Support sleeve | 1 |
| KL-1210-2004 | Pressure piece | 1 |
| KL-1210-2005 | Pressure piece | 1 |

2



Press Tool Set with hydraulic cylinder

KL-0711-11 L

Suitable for Volvo S40 / V40 front axle wishbone.

For quick and easy removal and replacement of suspension ball joints. The ball joint can be removed and installed directly on the vehicle within a few minutes without having to dismount the wishbone.

This tool enables even heavily corroded ball joints to be pushed out and pressed in within a few minutes.

Scope of Delivery:

KL-0711-11 L Press Tool Set with hydraulic cylinder

| Part No. | Description | Qty. |
|----------------------|--|----------|
| KL-0711-110 L | Press Tool Set without hydraulic cylinder | 1 |
| KL-0040-2500 | Hydraulic cylinder 17t | 1 |

Scope of Delivery:

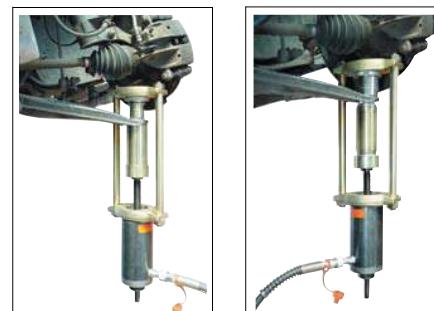
KL-0711-110 L Press Tool Set without hydraulic cylinder

| Part No. | Description | Qty. |
|--------------------|--|----------|
| KL-0039-1140 | Press Frame, short | 1 |
| KL-0711-111 | Sleeve Set | 1 |
| KL-0039-1002 | Retainer Adaptor for clamping nut and pressure spindle | 1 |
| KL-0039-1930 | Pressure spindle M20 x 350 mm with O-ring | 1 |

Scope of Delivery:

KL-0711-111 Sleeve Set

| part-No. | Description | Qty. |
|--------------|------------------------------------|------|
| KL-0711-1111 | Press Sleeve short Ø38 mm | 1 |
| KL-0039-1754 | Press-/Support Sleeve long Ø54 mm | 1 |
| KL-0039-1750 | Press-/Support Sleeve long Ø50 mm | 1 |
| KL-0039-1654 | Press-/Support Sleeve short Ø54 mm | 1 |





Application list: KL-0039-... Press- / Support sleeves if the KLANN Press frame is already available

2

* = short
** = long

Frame

Internal dimension
* 240mm / ** 314mm



(KL-0043-..)

KL-0043-..

Which frame is available?

Which drive is available?

Drive



Hydraulic Spindle



Hydraulic Cylinder

Adaptor

Adaptor

KL-0039-1106
KL-0039-1002
KL-0045-7021
available?

Adaptor

KL-0039-1106
KL-0039-1002 (for pressure spindle KL-0039-1930)
KL-0039-1004 (for pressure spindle KL-0040-2510)
available?

Sleeve sets

HS1 * = short
** = long

Yes

HS1 * = short
** = long
+ KL-0039-804

No

HS5

Yes

HS2 * = short
** = long

No

HS2 * = short
** = long
+ KL-0039-1106
+ KL-0039-1004

HS6

Note:

For pressure spindle
KL-0039-1930
use HS2, KL-0039-1106
+ KL-0039-1002

Application list: KL-0039... Press- / Support sleeves if the KLANN Press frame is already available

P1 (KL-0039-...)

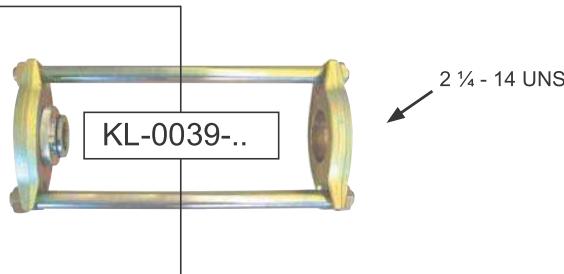
KL-0039-..

2

Internal dimension
* 275mm / ** 350mm

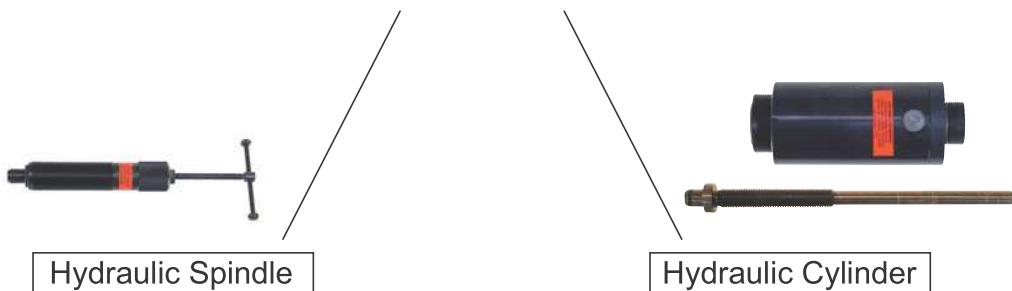
2 1/4 - 14 UNS

2 1/4 - 14 UNS



Frame

Which drive is available?



Drive

Hydraulic Spindle

Hydraulic Cylinder

Adaptor
KL-0039-1002
KL-0045-7021
available?

Adaptor
KL-0039-1002 (for pressure spindle KL-0039-1930)
available?

Yes

No

Yes

No

HS3 * = short
** = long

HS3 * = short
** = long
+ KL-0039-1002
+ KL-0045-7021

HS4 * = short
** = long

HS4 * = short
** = long
+ KL-0039-1002

Adaptor

Sleeve sets

Note: For individual components please refer to chapter 4.



Universal Press Tool Sets

| KL-0043- ... Series | |
|---------------------|--------------------------------------|
| KL-0043-82 | Press Tool Set Univ. |
| KL-0043-820 | Press Tool Kit without drive |
| KL-0043-83 | Press Tool Set Univ. (short) |
| KL-0043-85 | Press Tool Set Univ. (short) |
| KL-0043-850 | Press Tool Kit without drive (short) |

| KL-0039-... Series | | |
|--------------------|---------------|--|
| P1 | KL-0039-910 H | Press Tool Set (long) with hydraulic spindle |
| P1 | KL-0039-931 H | Press Tool Set (short) without drive (alternatively) |
| P1 | KL-0039-920 H | Press Tool Set (short) with hydraulic spindle |
| P1 | KL-0039-930 H | Press Tool Set (short) with hydraulic cylinder 17 t |
| P1 | KL-0039-931 H | Press Tool Set (short) without drive |

2

Universal Sleeve Sets

| KL-0043- ... Series | |
|---------------------|----------------------|
| KL-0043-8295 | Press Tube Set long |
| KL-0043-8595 | Press Tube Set short |

| KL-0039-... Series | | |
|--------------------|--------------|------------------------------------|
| | KL-0039-1701 | Press / Support Sleeve Set (long) |
| | KL-0039-1601 | Press / Support Sleeve Set (short) |

Vehicle-specific Press Tool Sets

| KL-0043- ... Series | |
|---------------------|---|
| Mercedes | |
| KL-0043-822 | Press Tool with Hydraulic Spindle MB W124, W129 and W201 |
| KL-0043-8292 | Press/Support Tube Set long MB W124, W129 und W201 |
| | |
| | |
| | |
| | |
| KL-0043-854 | Press Tool with Hydraulic Cylinder 17t, short MB W124, W129 and W201 |
| KL-0043-8592 | Press/Support Tube Set short MB W124, W129 and W201 |
| | |
| | |
| | |
| KL-0043-855 C | Press Tool with hydraulic cylinder short MB Sprinter |
| KL-0043-8591C | Press / Support Sleeve Set short MB Sprinter |
| | |

| KL-0039-... Series | | |
|-------------------------|--------------|---|
| P1 | KL-0039-751 | Press Tool Set (long) MB with hydraulic spindle |
| | KL-0039-7510 | Press Tool Set (long) MB without drive |
| HS1** | KL-0039-7514 | Sleeve Set (long) MB (for KL-0043-82..) |
| HS2** HS3** HS4** | KL-0039-7513 | Sleeve Set (long) MB |
| HS5** | KL-0039-7512 | Sleeve Set (long) MB, with adaptor (for KL-0043-82 with hydr. spindle) |
| HS6** | KL-0039-7511 | Sleeve Set (long) MB with adaptor (for KL-0043-82..) |
| P1 | KL-0039-752 | Press Tool Set (short) MB with hydraulic cylinder 17 t |
| | KL-0039-7520 | Press Tool Set (short) MB without drive |
| HS1* | KL-0039-7524 | Sleeve Set (short) MB (for KL-0043-85..) |
| HS2* HS3* HS4* | KL-0039-7523 | Sleeve Set (short) MB |
| HS5* | KL-0039-7522 | Sleeve Set (short) MB with adaptor (for KL-0043-85.. with hydr. spindle) |
| HS6* | KL-0039-7521 | Sleeve Set (short) MB with adaptor (for KL-0043-85..) |
| P1 | KL-0039-750 | Press Tool Set (short) MB Sprinter with hydr. cyl. |
| | KL-0039-7500 | Press Tool Set (short) MB Sprinter without drive |
| HS2* HS3* HS4* | KL-0039-7503 | Sleeve Set (short) MB Sprinter |
| HS6* | KL-0039-7501 | Sleeve Set (short) MB Sprinter with adaptor (for KL-0043-85..) |

KL-0043-... Series

BMW

| | |
|----------------|--|
| KL-0043-823 | Press Tool with Hydraulic Spindle BMW E36 |
| | |
| KL-0043-8294 | Press /Support Sleeve Set long BMW E36 |
| | |
| | |
| | |
| KL-0043-823 A | Press Tool with Hydraulic Spindle 12 t BMW E36 |
| | |
| KL-0043-8294 A | Press / Support Sleeve Set long BMW E36 |
| | |
| | |
| | |
| KL-0043-859 | |
| | |
| KL-0043-8594 | Press / Support Sleeve Set short BMW E36 |
| | |
| | |
| | |
| KL-0043-8296 | Press / Support Sleeve Set long BMW E30 |

KL-0039-... Series

| | | |
|-------|--------------|---|
| P1 | KL-0039-760 | Press Tool Set (long) BMW E36 with hydr. spindle |
| | KL-0039-7600 | Press Tool Set (long) BMW E36 without drive |
| HS1** | KL-0039-7604 | Sleeve Set (long) BMW E36, (for KL-0043-82..) |
| HS2** | KL-0039-7603 | Sleeve Set (long) BMW E36 |
| HS3** | | |
| HS4** | | |
| HS5** | KL-0039-7602 | Sleeve Set (long) BMW E36 with adaptor (for KL-0043-82.. with hydr. spindle) |
| HS6** | KL-0039-7601 | Sleeve Set (long) BMW E36 with adaptor (for KL-0043-82..) |
| P1 | KL-0039-761 | Press Tool Set (long) BMW E36 with hydr. spindle |
| | KL-0039-7610 | Press Tool Set (long) BMW E36 without drive |
| HS1** | KL-0039-7614 | Sleeve Set (long) BMW E36 (for KL-0043-82..) |
| HS2** | | |
| HS3** | KL-0039-7613 | Sleeve Set (long) BMW E36 |
| HS4** | | |
| HS5** | KL-0039-7612 | Sleeve Set (long) BMW E36 with adaptor (for KL-0043-82.. with hydr. spindle) |
| HS6** | KL-0039-7611 | Sleeve Set (long) BMW E36 with adaptor (for KL-0043-82..) |
| P1 | KL-0039-762 | Press Tool Set (short) BMW E36 with hydr. cylinder |
| | KL-0039-7620 | Press Tool Set (short) BMW E36 without drive |
| HS1* | KL-0039-7623 | Sleeve Set (short) BMW E36 |
| HS2* | | |
| HS3* | | |
| HS4* | | |
| HS5* | KL-0039-7622 | Sleeve Set (short) BMW E36 with adaptor (for KL-0043-85.. with hydr. spindle) |
| HS6* | KL-0039-7621 | Sleeve Set (short) BMW E36 with adaptor (for KL-0043-85..) |
| HS1** | KL-0039-7633 | Sleeve Set (long) BMW E30 |
| HS2** | | |
| HS3** | | |
| HS4** | | |

KL-0043-... Series

Renault

| | |
|----------------|--|
| KL-0043-829 | Press Tool Set with hydraulic cylinder 17 t.; Renault Master |
| KL-0043-8290 A | Press Tool Set without hydraulic cylinder; Renault Master, Vauxhall / Opel Movano |
| | |
| KL-0043-8298 | Press /Support Sleeve Set; Renault Master, Vauxhall / Opel Movano upper ball joint |
| KL-0043-8101 | Press /Support Sleeve Set; Renault Master, Vauxhall / Opel Movano lower ball joint |
| KL-0043-810 | Press Tool with hydr.cylinder Renault Master/Opel Movano |
| KL-0043-8101 | Press / Support Sleeve Set Renault Master/Opel Movano, lower suspension ball joint |

KL-0039-... Series

| | | |
|------|--------------|---|
| P1 | KL-0039-710 | Press Tool Set (short) Renault Master, Vauxhall / Opel Movano, with hydraulic cylinder. |
| | KL-0039-7100 | Press Tool Set (short) Renault Master, Vauxhall / Opel Movano, without hydraulic cylinder |
| HS2* | KL-0039-712 | Sleeve Set (short) Renault Master, Vauxhall / Opel Movano |
| HS4* | | |
| HS2* | KL-0039-722 | Sleeve Set (short) Renault Master, Vauxhall / Opel Movano upper ball joint |
| HS4* | | |
| HS2* | KL-0039-732 | Sleeve Set (short) Renault Master, Vauxhall / Opel Movano lower ball joint |
| HS4* | | |
| P1 | KL-0039-730 | Press Tool Set with hydr. cylinder Renault Master, Vauxhall / Opel Movano |
| HS2* | KL-0039-732 | Press / Support Sleeve Set Renault Master/Opel Movano, lower suspension ball joint |
| HS4* | | |

KL-0043-... Series

Volvo

| | |
|--|--|
| | |
| | |
| | |
| | |

KL-0039-... Series

| | | |
|------|---------------|--|
| P1 | KL-0711-11 L | Press Tool Set with hydraulic cylinder Volvo S40 / V40 lower suspension ball joint |
| | KL-0711-110 L | Press Tool Set without hydraulic cylinder Volvo S40 / V40 Tragel.ohne Hydr. Zyl. lower suspension ball joint |
| HS2* | KL-0711-111 | Press / Support Sleeve Set |
| HS4* | KL-0711-112 | Upgrade Kit KL-0043-8510 |

KL-0250-40

Extractor for Clamping Bolt and Ball Joint (Pat. e.g. US-Patent 6,546,610)

Suitable for Audi A4 (up to 2000) / VW Passat front axle (up to 2005). Essential tool for the extraction of the upper wishbone pivot pin clamping bolt out of the steering knuckle clamping bore.

The removal of the long retaining bolt securing the double ball-joints is a serious problem, due to the severe corrosion leading to the bolt becoming extremely stubborn to remove.

Previously the only method has been a hammer and drift, which is not only time-consuming, but entails greater risks to the mechanic, and also risks damage to the suspension components.

The extractor KL-0250-40 allows a quick, easy and risk-free extraction of the long retaining bolt and both ball-joints. The tool functions for both left and right-hand sides of the suspension.

Application example:

- Mount tool with pressure unit on steering knuckle (with pressure drift I inserted).
- Drive hex nut by means of an impact wrench and push back the hex clamping bolt. The loosening process takes place with a loud noise.
- Extract the hex clamping bolt with the pressure unit in 3 stages. For this, insert the pressure drifts II + III one after another.
- Pull out the hex clamping bolt completely. In case it is not yet possible to pull out the hex clamping bolt completely, use the supplementary pressure drift set **KL-0250-402**, for the entire extraction of the clamping bolt.
- Remove the hex nut. Completely remove the pressure drift so that the clamping bore is clear.
- Push both pivot pins out of the clamping bore by means of the pressure spindle.

Advantages:

- Large cost savings.
- Substantial savings of between 2 and 3 hours.
- No risk of damage to the suspension components.

Technical Data:

| | |
|---------|--------|
| Weight: | 2.4 kg |
|---------|--------|

Scope of Delivery:

KL-0250-40 Extractor for Clamping Bolt and Ball Joint

| Part No. | Description | Qty. |
|--------------|--|------|
| KL-0250-4001 | Tool body | 1 |
| KL-0250-4002 | Thread adaptor (with big bore) | 1 |
| KL-0250-4005 | Pressure screw M10 x 1.25 x 95 mm | 1 |
| KL-0250-4011 | Housing | 1 |
| KL-0250-4012 | Pressure drift I (Length 78 mm) | 1 |
| KL-0250-4013 | Nut | 1 |
| KL-0250-4014 | Pressure drift II (Length 98 mm) | 1 |
| KL-0250-4015 | Pressure drift III (Length 118 mm) | 1 |
| KL-0014-0030 | Molybdenum disulphide paste 50g (not III.) | 1 |

KL-0250-402

Supplementary Pressure Drift Set

Used to press out the hex clamping bolt completely out of the clamping bore.



Scope of Delivery:

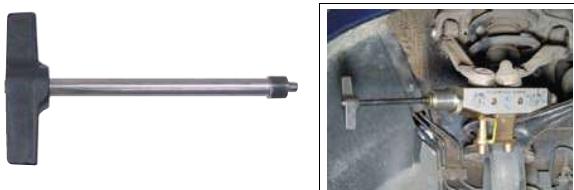
KL-0250-402 Supplementary Pressure Drift Set

| Part No. | Description | Qty. |
|--------------|-----------------------------------|------|
| KL-0250-4016 | Pressure drift IV (Length 138 mm) | 1 |
| KL-0250-4017 | Pressure drift V (Length 158 mm) | 1 |
| KL-0250-4018 | Pressure drift VI (Length 178 mm) | 1 |

KL-0250-403

Pressure Drift Puller

The pressure drift puller **KL-0250-403** enables the pressure drifts to be pulled out of the tool body.



Extractor with extraction device for clamping bolt

(German Utility Model)

KL-0250-41 KA

Suitable for Audi A4 (8E) and A6 (2004 onwards).**Essential tool for the extraction of the upper wishbone pivot pin clamping bolt out of the steering knuckle clamping bore.****Essential tool for the extraction of the upper wishbone pivot pin clamping bolt out of the steering knuckle clamping bore.**

Removing the upper clamping bolt from the steering knuckle has always been a serious problem for the mechanic when the components are heavily corroded.

Not only is the usual technique using hammer, welding torch, angle grinder and drift time-consuming and arduous, but there is also the risk of damaging steering knuckles, pivot pins and wishbone struts.

The extractor **KL-0250-41 KA** with its proper pressure unit and extraction device, enables the quick and professional extraction of the hex clamping bolt. The loosened clamping bolt can be removed using the extraction device.

The tool is suitable for both right and left suspensions.

Application example:

- Mount the extractor with the pressure unit and the fixing unit on the steering knuckle.
- Screw in the hex nut of the pressure unit using the special socket 24 mm hex and a $\frac{1}{2}$ "-impact wrench. The hex clamping bolt is pressed out. The loosening process takes place with a loud noise.
- Remove the extractor. Install the extraction device to extract the loosened clamping bolt.
- Screw in the hex nut of the extraction device using the special socket 24 mm hex and remove the hex clamping bolt completely.

Advantages

- Large cost savings.
- Substantial time savings of between 2 and 3 hours .
- No risk of damage to the suspension components.

Technical Data:

| | |
|---------|--------|
| Weight: | 8.2 kg |
|---------|--------|

Scope of Delivery:**KL-0250-41 KA Extractor with extraction device for clamping bolt**

| Part No. | Description | Quantity |
|--------------|--|----------|
| KL-0250-410 | Extractor for clamping bolt | 1 |
| KL-0250-416 | Extraction device for clamping bolt size 16 mm | 1 |
| KL-0250-417 | Upgrade Kit Audi A6 | 1 |
| KL-0014-0030 | Molybdenum disulphide paste 50g | 1 |
| KL-0250-4190 | Plastic storage case | 1 |



2



Pivot Pin Removal Tool

KL-0250-42

Suitable for Audi A4 (2001 onwards) and Audi A6 (2004 onwards).

This tool is designed to punch a pivot pin out of the wishbone strut.

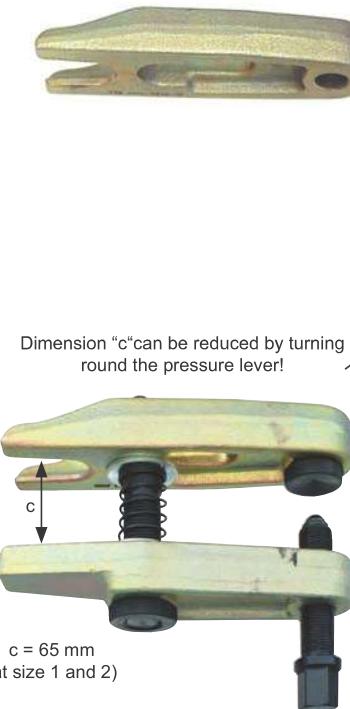


**Patented**

**High-quality product
made in Germany.**

2

Interchangeable forks enable quick and easy adjustment to the required ball joint head size.



Dimension "c" can be reduced by turning round the pressure lever!

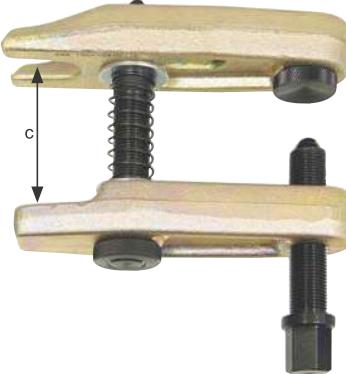
**All components are
available as spare parts.**

**Forks are removable by
a 90° rotation and feature a
T-bolt locking mechanism.**

Pressure spindle and ball socket are replaceable and can be inserted from the top or from the bottom.



Extended T-adjusting spindle and pressure spindle for enlarging the dimension "c" are optionally available.



**Forged pressure lever
and fork.**

**Pressure spindle driven by
a 19 mm hexagon and
provided with a safety
shoulder to prevent
spanner slipping.**

**Infinitely adjustable to the
required pivot pin height.**

**A wide range of forks for the
most different kinds of ball joint
connections is available.**



**KL-0165-0 K****Ball Joint Extractor Set size 1****(Pat. e.g. US-Patent 5,906,034)****2**

Suitable for cars and small trucks e.g.

- with fork KL-0165-1201 for: Mercedes S-Class (W220) and W140 suspension ball joint / guide joint front axle; VW Golf (IV) track rod ball joint etc.
- with fork KL-0165-1401 for: Audi A4; VW Passat; Škoda Superb guide joint; VW T4 track rod ball joint etc.

Essential tool set for VW-Audi, Seat, Škoda, Mercedes, Opel/Vauxhall etc.

Technical Data:

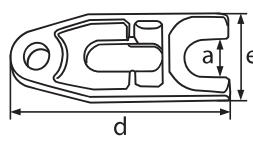
| | |
|---------|--------|
| Weight: | 6.5 kg |
|---------|--------|

Scope of Delivery:**KL-0165-0 K Ball Joint Extractor Set size 1**

| Part No. | Description | Qty. |
|--------------|--|------|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) | 1 |
| KL-0165-1001 | Fork - a=20 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1101 | Fork - a=22 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1201 | Fork - a=24 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1301 | Fork - a=27 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1401 | Fork - a=30 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1090 | Plastic storage case | 1 |

KL-0165-1**Ball Joint Extractor Set****(Pat. e.g. US-Patent 5,906,034)**

For passenger cars and vans. (size 1 and size 2).

**Technical Data:**

| | |
|---------|---------|
| Weight: | 10,5 kg |
|---------|---------|

Scope of Delivery:**KL-0165-1 Ball Joint Extractor Set**

| Part No. | Description | Qty. |
|--------------|--|------|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) | 1 |
| KL-0165-1001 | Fork - a=20 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1101 | Fork - a=22 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1201 | Fork - a=24 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1301 | Fork - a=27 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-1401 | Fork - a=30 mm - e=50 mm - d=165 mm | 1 |
| KL-0165-2001 | Fork - a=22 mm - e=60 mm - d=165 mm | 1 |
| KL-0165-2101 | Fork - a=24 mm - e=60 mm - d=165 mm | 1 |
| KL-0165-2201 | Fork - a=26 mm - e=60 mm - d=165 mm | 1 |
| KL-0165-2301 | Fork - a=30 mm - e=60 mm - d=165 mm | 1 |
| KL-0165-1090 | Plastic storage case | 1 |

KL-0165-100**Base Tool without Fork**The base tool **KL-0165-100** used with a fork (size 1), for example **KL-0165-1201**, is designed for the separation of ball joint connections in suspension and steering systems.**Scope of Delivery****KL-0165-100 Base tool without fork**

| Part No. | Description | Qty. |
|--------------|-----------------------------------|------|
| KL-0165-1002 | Pressure lever | 1 |
| KL-0165-1003 | T-adjusting spindle M18x1.5 x 110 | 1 |
| KL-0165-1004 | Pressure spindle M18x1.5 x 70 | 1 |
| KL-0165-1005 | Ball socket | 1 |
| KL-0165-1006 | Knurled nut M18x1.5 | 1 |
| KL-0165-1007 | Spring | 1 |
| KL-0165-1008 | Plain washer Ø18 mm | 1 |

Ball Joint Extractor size 1

(Pat. e.g. US-Patent 5,906,034)

KL-0165-10

Universally suitable.

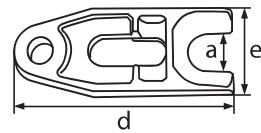
Ideal for Audi A6 Avant (4A), Golf (IV) track rod joint and Peugeot 307 (2.0L ,HDI, 136 PS, model 2006) suspension ball joint at the bottom (Fork opening a=20 mm)

The ball joint extractor KL-0165-10 is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:

KL-0165-10 Ball Joint Extractor size 1

| Part No. | Description |
|--------------|--|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-1001 | Fork - a=20 mm - e=50 mm - d=165 mm |



2



Ball Joint Extractor size 1

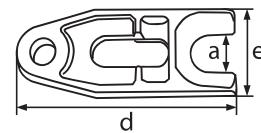
(Pat. e.g. US-Patent 5,906,034)

KL-0165-11

Scope of Delivery:

KL-0165-11 Ball Joint Extractor size 1

| Part No. | Description |
|--------------|--|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-1101 | Fork - a=22 mm - e=50 mm - d=165 mm |



Ball Joint Extractor size 1

(Pat. e.g. US-Patent 5,906,034)

KL-0165-12

Scope of Delivery:

| Part No. | Description |
|--------------|--|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-1201 | Fork - a=24 mm - e=50 mm - d=165 mm |



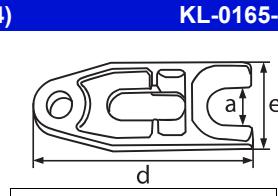
Ball Joint Extractor size 1

(Pat. e.g. US-Patent 5,906,034)

KL-0165-13

Scope of Delivery:

| Part No. | Description |
|--------------|--|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-1301 | Fork - a=27 mm - e=50 mm - d=165 mm |



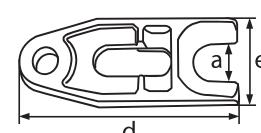
Ball Joint Extractor size 1

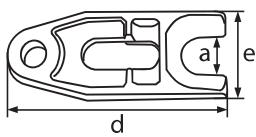
(Pat. e.g. US-Patent 5,906,034)

KL-0165-14

Scope of Delivery:

| Part No. | Description |
|--------------|--|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-1401 | Fork - a=30 mm - e=50 mm - d=165 mm |



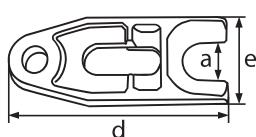
**KL-0165-20****Ball Joint Extractor size 2****(Pat. e.g. US-Patent 5,906,034)****Universally suitable.**

Ideal for Mercedes M-Class (W163), E-Class (W211), W220 (S-Class), upper guide joint SLK (W170), C-Class (W202), S-Class (W220), track rod etc.
(Fork opening $a=22$ mm)

The ball joint extractor **KL-0165-20** is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:**KL-0165-20 Ball Joint Extractor size 2**

| Part No. | Description |
|--------------|---|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-2001 | Fork - $a=22$ mm - $e=60$ mm - $d=165$ mm |

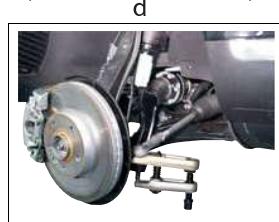
2**KL-0165-21****Ball Joint Extractor size 2****(Pat. e.g. US-Patent 5,906,034)****Universally suitable.**

(Fork opening $a=24$ mm)

The ball joint extractor **KL-0165-21** is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:**KL-0165-21 Ball Joint Extractor size 2**

| Part No. | Description |
|--------------|---|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-2101 | Fork - $a=24$ mm - $e=60$ mm - $d=165$ mm |

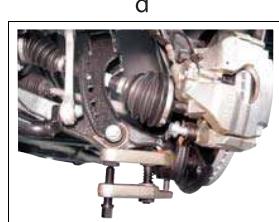
KL-0165-22**Ball Joint Extractor size 2****(Pat. e.g. US-Patent 5,906,034)****Universally suitable.**

Ideal for VW Touareg; Porsche Cayenne track rod and upper guide joint, Mercedes E-Class (W210), Sprinter track rod joint, Ford Transit track rod joint, VW Golf (IV) lower suspension ball joint etc.
(Fork opening $a=26$ mm)

The ball joint extractor **KL-0165-22** is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:**KL-0165-22 Ball Joint Extractor size 2**

| Part No. | Description |
|--------------|---|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-2201 | Fork - $a=26$ mm - $e=60$ mm - $d=165$ mm |

KL-0165-23**Ball Joint Extractor size 2****(Pat. e.g. US-Patent 5,906,034)****Universally suitable.**

Ideal for VW Touareg; Porsche Cayenne suspension ball joint, VW T4 lower suspension ball joint, Mercedes G-Model track rod joint and steering box reversing lever, Ford Transit lower suspension ball joint
(Fork opening $a=30$ mm)

The ball joint extractor **KL-0165-23** is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:**KL-0165-23 Ball Joint Extractor size 2**

| Part No. | Description |
|--------------|---|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-2301 | Fork - $a=30$ mm - $e=60$ mm - $d=165$ mm |

Ball Joint Extractor size 2

(Pat. e.g. US-Patent 5,906,034)

KL-0165-24

Universally suitable.

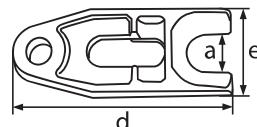
(Fork opening a=34 mm)

The ball joint extractor **KL-0165-24** is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:

KL-0165-24 Ball Joint Extractor size 2

| Part No. | Description |
|--------------|--|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-2401 | Fork - a=34 mm - e=60 mm - d=165 mm |



2

Ball Joint Extractor size 2

(Pat. e.g. US-Patent 5,906,034)

KL-0165-25

Universally suitable.

Ideal for Mercedes E-Class (W211), CLS (W219), S-Class (W220) and SL (W230) lower suspension ball joint etc.

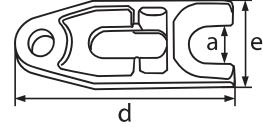
(Fork opening a=24 mm)

The ball joint extractor **KL-0165-25** is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:

KL-0165-25 Ball Joint Extractor size 2

| Part No. | Description |
|--------------|--|
| KL-0165-100 | Base tool without fork (Spindle M18x1.5) |
| KL-0165-2501 | Fork - a=24mm - e=60mm - d=165mm |



Ball Joint Extractor Set

(Pat. e.g. US-Patent 5,906,034)

KL-0165-3

Suitable for Mercedes HGV etc.

Indispensable for the quick and easy separation of ball joint connections in suspension and steering systems.

The ever-increasing number of different ball-joints used in suspension and steering systems in today's vehicles has lead to the need for an ever-widening range of ball-joint extractors for separating ball joint connections from steering knuckles and steering arms, due to the wide range of diameters and lengths of the ball-joints.

Conical ball-joint pins require an increased stability and strength of the ball-joint extractors to achieve easy separation. When separating ball joint connections, it is very important that the separation pressure point and the angle can be adjusted on the extractor.

The ball joint extractor set **KL-0165-3** offers the mechanic a tool with high stability and universal application possibilities. Interchanging the forks enables the extractor to be adjusted to the required ball joint diameter and pivot pin height.

Scope of Delivery:

KL-0165-3 Ball Joint Extractor Set

| Part No. | Description |
|--------------|--|
| KL-0165-300 | Base tool without fork (Spindle M24x1.5) |
| KL-0165-3001 | Fork a=30 mm, e=80 mm, d=200 mm - e.g. suitable for Landini-Tractors |
| KL-0165-3101 | Fork a=34 mm, e=80 mm, d=200 mm |
| KL-0165-3201 | Fork a=40 mm, e=80 mm, d=200 mm - e.g. suitable for Mercedes, MAN, Scania, Volvo, etc. |
| KL-0165-3301 | Fork a=42 mm, e=80 mm, d=200 mm - e.g. suitable for Mercedes, MAN, Scania, Volvo, etc. and John Deere-Tractors |
| KL-0165-3401 | Fork a=47 mm, e=80 mm, d=200 mm |



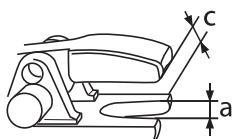
**KL-0165-35****Ball Joint Extractor size 3****(Pat. e.g. US-Patent 5,906,034)****2**

**Suitable for suspension ball joint MB Sprinter (1995 onwards), VW LT (1998 onwards), guide joint VW T4 etc.
(Fork opening $a=47$ mm)**

The ball joint extractor **KL-0165-35** is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:**KL-0165-35 Ball Joint Extractor size 3**

| Part No. | Description |
|--------------|--|
| KL-0165-300 | Base tool without fork (Spindle M24x1.5) |
| KL-0165-3501 | Fork - a=30 mm - e=80 mm - d=200 mm |

KL-0163-21**Ball Joint Extractor size 2****(German Utility Model)**

Suitable for VW-Audi, BMW, Fiat, Ford, Mercedes, Nissan, Opel, Peugeot, Renault, Rover, Saab, Toyota, Volvo.

The ball joint extractor **KL-0163-21** is the ideal tool for separating ball joint connections in suspension and steering systems.

Technical Data

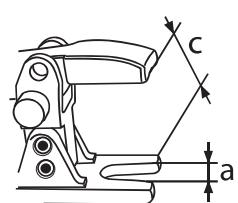
| | |
|----|---------------------|
| a: | 20 mm |
| c: | 2-stage up to 50 mm |

Scope of Delivery:**KL-0163-21 Ball Joint Extractor size 2**

| Part No. | Description | Qty. |
|--------------|------------------|------|
| KL-0163-2101 | Fork Body | 1 |
| KL-0163-2102 | Pressing Lever | 1 |
| KL-0163-2103 | Pressing Spindle | 1 |
| KL-0163-2104 | Bolt | 1 |
| KL-0163-2105 | Thread Bush | 1 |

KL-0163-221**Adaptor with rolled pins****Scope of Delivery:****KL-0163-221 Adaptor with rolled pins**

| Part No. | Description | Qty. |
|--------------|-------------|------|
| KL-0163-2202 | Adaptor | 1 |
| KL-0163-2204 | Rolled pin | 2 |

KL-0163-22**Ball Joint Extractor size 2****(German Utility Model)**

Suitable for Opel, VW Transporter, etc.

The ball joint extractor **KL-0163-22** is the ideal tool for separating ball joint connections in suspension and steering systems.

Technical Data

| | |
|----|---------------------|
| a: | 20 mm |
| c: | 2-stage up to 95 mm |

Scope Delivery:**KL-0163-22 Ball Joint Extractor size 2**

| Part No. | Description | Qty. |
|--------------|---------------------|------|
| KL-0163-2201 | Fork Body | 1 |
| KL-0163-2202 | Pressing Lever | 1 |
| KL-0163-2203 | Pressing Spindle | 1 |
| KL-0163-2204 | Rolled pin Ø10 x 40 | 2 |
| KL-0163-2104 | Bolt | 1 |
| KL-0163-2105 | Thread Bush | 1 |

Ball Joint Extractor

(universal)

KL-0163-1

Suitable for VW-Audi, BMW, Fiat, Ford, Mercedes, Nissan, Opel/Vauxhall, Peugeot, Renault, Rover, Saab, Toyota, Volvo.

Designed to extract the ball joint pivot pin out of the steering arm, steering knuckle, stabilizer etc.

Technical Data:

| | |
|----|---------------------|
| a: | 20 mm |
| c: | 2-stage up to 50 mm |



2

Ball Joint Extractor

(universal)

KL-0163-2

Suitable for Opel/Vauxhall, VW Transporter etc.

Designed to extract the ball joint pivot pin out of the steering arm, steering knuckle, stabilizer etc.

Technical Data:

| | |
|----|-------------------|
| a: | 20 mm |
| c: | 2-stage, 50-80 mm |



Ball Joint Extractor

(universal)

KL-0162-1

Designed to extract the track rod pivot pin out of the steering arm, steering knuckle, stabilizer etc.

Advantage:

Dimension c is infinitely adjustable, thus providing a wider range of applications.

Technical Data:

| | |
|----|------------|
| a: | 23 mm |
| c: | 30 - 50 mm |



Ball Joint Extractor

KL-0162-2

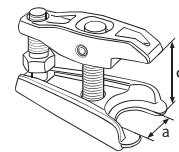
Designed to extract the track rod pivot pin out of the steering arm, steering knuckle, stabilizer etc.

Advantage:

Dimension c is infinitely adjustable, thus providing a wider range of applications.

Technical Data:

| | |
|----|------------|
| a: | 30 mm |
| c: | 30 - 85 mm |



Ball Joint Extractor size 1

(Pat. e.g. US-Patent 5,906,034)

KL-0165-15

Universally suitable.

Ideal tool for suspension ball joints on Fiat Punto.

(Fork opening a=22 mm)

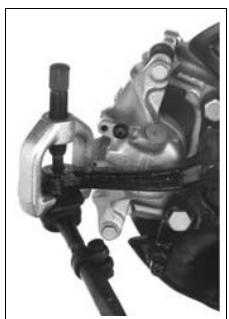
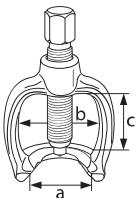
The ball joint extractor KL-0165-15 is the ideal tool for separating ball joint connections in suspension and steering systems.

Scope of Delivery:

KL-0165-15 Ball Joint Extractor size 1

| Part No. | Description |
|--------------|-------------------------------------|
| KL-0165-1502 | Pressure lever |
| KL-0165-1003 | T-adjusting spindle (M18x1.5 x 110) |
| KL-0165-1004 | Pressure spindle (M18x1.5 x 70) |
| KL-0165-1005 | Ball socket |
| KL-0165-1006 | Knurled nut (M18x1.5) |
| KL-0165-1007 | Spring |
| KL-0165-1008 | Plain washer Ø 18 mm |
| KL-0165-1501 | Fork 22mm |



**KL-0161...****Ball Joint Extractor****2**

Designed to extract the track rod pivot pin out of the steering arm, steering knuckle, stabilizer etc.

KL-0161-1**Ball Joint Extractor****Technical Data:**

| | |
|----|-------|
| a: | 18 mm |
| b: | 40 mm |
| c: | 35 mm |

KL-0161-2**Ball-Joint Extractor****Technical Data:**

| | |
|----|-------|
| a: | 23 mm |
| b: | 50 mm |
| c: | 45 mm |

KL-0161-3**Ball-Joint Extractor****Technical Data:**

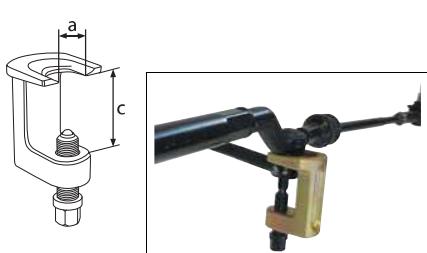
| | |
|----|-------|
| a: | 29 mm |
| b: | 60 mm |
| c: | 55 mm |

KL-0161-4**Ball-Joint Extractor****Technical Data:**

| | |
|----|-------|
| a: | 40 mm |
| b: | 80 mm |
| c: | 80 mm |

KL-0161-5**Ball-Joint Extractor****Technical Data:**

| | |
|----|--------|
| a: | 46 mm |
| b: | 90 mm |
| c: | 100 mm |

KL-0164-2**Ball Joint Extractor**

Ideal for use in narrow space conditions like on Audi, VW, BMW, Ford, Mercedes A-Class (W168), C-Class (W202), E-Class (W2109), M-Class (W163), SLK (R170), Vauxhall/Opel etc.

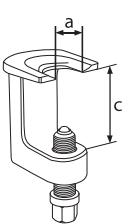
Designed to extract the ball joint pivot pin out of the steering arm, steering knuckle, stabilizer etc. Required for extracting the suspension ball joint pivot pin out of the steering knuckle.

Technical Data:

| | |
|---------|-------|
| a : | 23 mm |
| c : | 55 mm |
| Weight: | 900 g |

Note:

Only suitable for closed ball joint pivot pins or with centre hole.

KL-0164-3**Ball Joint Extractor**

Suitable for front axle on Audi A4, A6 and A8 as well as VW Passat, Mercedes W203 etc.

Designed to extract the suspension ball joint pivot pin out of the steering knuckle.

Technical Data:

| | |
|---------|-------|
| a : | 28 mm |
| c : | 55 mm |
| Weight: | 900 g |

Note:

Only suitable for closed ball joint pivot pins or with centre hole.

Ball Joint Extractor

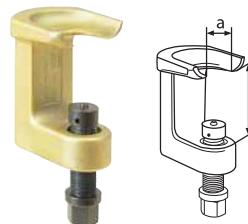
KL-0164-7

Suitable for front axle on **BMW 5-Series (E39)**, **Mercedes E-Class (W211)**, **CLS (W219)**, **S-Class (W220)** and **SL (W230)** lower guide joint etc.

Designed to extract the guide joint pivot pin out of the steering knuckle.

Technical Data:

| | |
|---------|-------|
| a : | 24 mm |
| c : | 55 mm |
| Weight: | 900 g |



2

Ball Joint Extractor

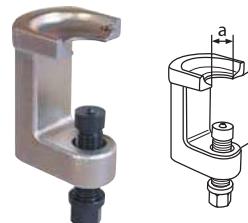
KL-0164-8

Suitable for front axle on **Mercedes**, for example: suspension ball joint and guide joint **C-Class (W203)**, suspension ball joint **E-Class (W210)**, track rod joint **M-Class (W163)**, **E-Class (W211)**, **CLS (W219)**, **S-Class (W220)** and **SL (W230)** as well as on **VW**, for example: **T5 track rod joint etc.**

Designed to extract the pivot pin out of ball joint connections.

Technical Data:

| | |
|---------|-------|
| a : | 26 mm |
| c : | 56 mm |
| Weight: | 750 g |



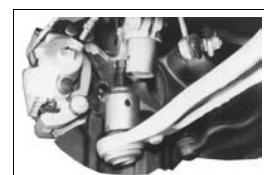
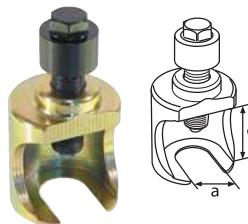
Ball Joint Extractor

KL-0164-5

Designed to extract the pivot pin of the suspension ball joint/guide joint out of the steering knuckle, for example **Mercedes W211, W220**. Can also be used for pressing the outer track rod pivot pin out of the steering arm. Ideal tool for **BMW E46** and **Mercedes W168** etc.

Technical Data:

| | |
|-----------|-------|
| a : | 24 mm |
| c : | 45 mm |
| Drive: | 17 mm |
| Ø-outside | 55 mm |



Ball Joint Extractor

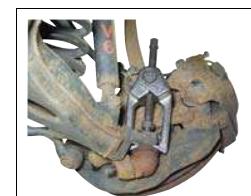
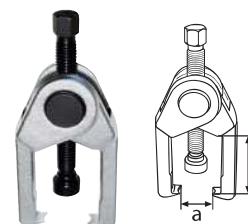
KL-0161-8

Suitable for **Mercedes G-Model; S-Class (W220)**, **Porsche Cayenne**, **VW Touareg**, **Golf IV** etc.

This two-arm extractor can be used universally. Allows the user quick and trouble-free extraction of ball joint pivot pins, for example, out of steering arms, steering knuckles, stabilizers etc.

Technical Data:

| | |
|----|------------|
| a: | 18 - 45 mm |
| c: | 60 mm |



Suspension Ball Joint Extractor

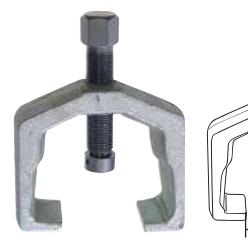
KL-0161-9

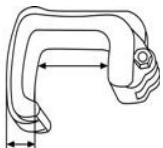
Suitable for **Fiat Ducato** etc.

Designed to extract the suspension ball joint pivot pin out of the steering knuckle. Specially designed for the front axle.

Technical Data:

| | |
|----|-------|
| a: | 34 mm |
| c: | 51 mm |



**KL-0049-360****Jointed Latch Hook****2**

Especially suitable for removing the wishbone from the suspension ball joint clamping hole in conjunction with the slide hammer **KL-0049-31 / KL-0049-300**. Due to its profiled shape, the hook can be positioned very close to the suspension ball joint.

Scope of Delivery:**KL-0049-360 Jointed Latch Hook**

| Part No. | Description | Qty. |
|--------------|--------------------------|------|
| KL-0049-3600 | Latch Hook without Joint | 1 |
| KL-0049-3502 | Joint M18 | 1 |

KL-0049-300**Slide Hammer 4.8 kg, base tool**

The ideal tool for extracting stuck or tight-fitting components such as half-shafts, universally jointed drive shafts, injector nozzles etc. To be used with the appropriate adaptors and puller bolts.

Scope of Delivery:**KL-0049-300 - Slide hammer 4.8 kg, base tool**

| Part No. | Description | Qty. |
|--------------|------------------------------------|------|
| 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-0160...**Separator Fork 18 mm**

The wedge profiled fork allows easy and quick separation of conical seat ball-joints.

Also useful for removal of shock-absorbers and steering-column clamps.

⚠ Warning:

Separator Forks may damage the gaiter.

KL-0160-1**Separator Fork 18 mm****Technical Data:**

| | |
|--------------|-------|
| Fork opening | 18 mm |
|--------------|-------|

KL-0160-2**Separator Fork 23 mm****Technical Data:**

| | |
|--------------|-------|
| Fork opening | 23 mm |
|--------------|-------|

KL-0160-3**Separator Fork 30 mm****Technical Data:**

| | |
|--------------|-------|
| Fork opening | 30 mm |
|--------------|-------|

KL-0160-4**Separator Fork 40 mm****Technical Data:**

| | |
|--------------|-------|
| Fork opening | 40 mm |
|--------------|-------|



Separator Fork Set

KL-0160-7 K

5-piece Separator Fork Set.

Consists of:

3 Fork heads with openings $a = 17.5$ mm, $a = 23.5$ mm and $a = 28.5$ mm.
A 200 mm Handle and an Adaptor with 10 mm Ø Shaft and 175 mm Length,
suitable for pneumatic hammer.

The wedge form of the forks enable the quick and easy separating of ball joint pins from their conical seats.



Warning:

Separator Forks may damage the gaiter.



2



Track Rod Head Socket

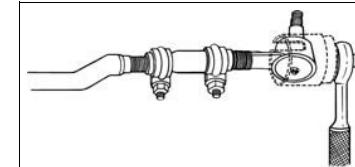
KL-0169-50

Universal application.

Designed for the quick and trouble-free removal and installation of the track rod head. After separating the ball joint from steering knuckle, slip tool over track rod head and remove.

Technical Data:

| | |
|------------|--------------|
| U-opening: | 34,9 x 19 mm |
| Inner-Ø: | 23,8 mm |
| Drive: | 1/2" |
| Length: | 57 mm |
| Weight: | 490 g |



Track Rod Adjusting Tool

KL-0169-1

For loosening and adjusting stubborn track rods on passenger cars. The broad serrated jaws prevent damage to the track rod.

Application: track rods Ø 14-23 mm

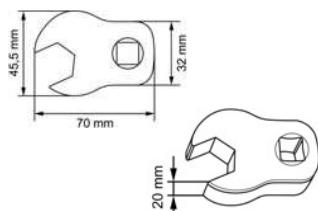


Adaptor for Track Rods

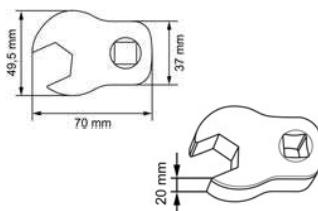
KL-0169-1001

Suitable from track rod tubes as from Ø 11 mm upwards.



KL-0169-318
Open Ended Spanner Socket

Suitable for track rod Opel/Vauxhall Vectra B, etc.
Extra-strong design.
Ideal for loosening and twisting track rods.
Technical Data:

| | |
|----------------------------|-------|
| Size (width across flats): | 18 mm |
| Drive: | 1/2" |
| Weight: | 300 g |

2
KL-0169-321
Open Ended Spanner Socket

Suitable for track rod Opel/Vauxhall Sintra, etc.
Extra-strong design.
Ideal for loosening and twisting track rods.
Technical Data:

| | |
|----------------------------|-------|
| Size (width across flats): | 21 mm |
| Drive: | 1/2" |
| Weight: | 330 g |

KL-0167-20
Track Rod Eccentric Socket Ø 33 - 42 mm

Suitable for track rod joints with Ø 33 - 42 mm.

This tool allows quick and easy replacement of the inner track rod joint. Removal of the steering gear is not necessary.

Technical Data:

| | |
|-------|-------|
| Size: | 18 mm |
|-------|-------|

KL-0167-15
Universal Wrench for Inner Track Rod Joint Ø30-Ø43 mm

Universally suitable for all inner track rod joints with a spherical head -Ø of from 30 mm up to 43 mm.
Specially designed for Mercedes Sprinter (Ø43 mm).

This tool allows quick and easy removal and installation of an inner track rod joint without having to remove the complete steering system. Suitable for spherical heads with diameters of from 30 to 43 mm.

KL-0167-151
Set of Mounting Tools for Inner Track Rod Joints Ø30-Ø43 mm

Suitable for Renault vehicles.

The tool set KL-0167-151 allows quick and easy removal and installation of an inner track rod joint without having to remove the complete steering system. Suitable for spherical heads with diameters of from 30 to 43 mm.

Procedure:

To counter-hold the rack, the locking tools depending on the steering type have to be fixed to the rack.

The inner track rod joint is loosened and tightened by means of the universal wrench while the rack must be counter-held using the suitable locking tool.

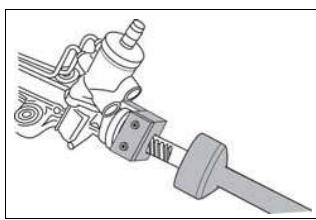
After the inner track rod joint has been removed, the sealing ring in the steering-gear housing can be replaced quickly and easily.

Scope of Delivery:
KL-0167-151 Set of Mounting Tools for Inner Track Rod Joints Ø30-Ø43 mm

| Part No. | Description | Qty. |
|-------------|--|------|
| KL-0167-15 | Universal wrench for inner track rod joint Ø30-Ø43mm | 1 |
| KL-0167-131 | Set of counter-hold tools Renault | 1 |

Scope of Delivery:
KL-0167-131 Set of Counter hold Tools Renault

| Part No. | Description | Qty. |
|--------------|---|------|
| KL-0167-1313 | Counter hold tool Renault | 1 |
| KL-0167-1314 | Counter hold tool Renault (KL-0167-1311 + KL-0167-1312) | 1 |

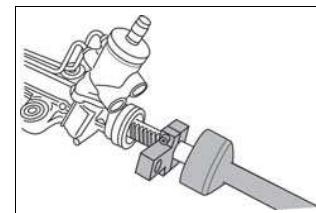


Counter Hold Tool

KL-0167-141

Suitable for racks with a Ø of 25 mm, for example ZF power steering systems Type 7832 (974 115) on Toyota vehicles.

Designed to counter hold the rack when removing and installing an inner track rod joint. Used in conjunction with universal wrench **KL-0167-15**. Any standard $\frac{1}{2}$ " ratchet or $\frac{1}{2}$ "sliding T-Bar can be used as a holding tool.



2

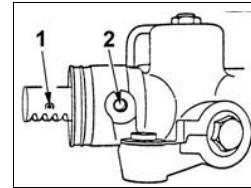
Locking screw

KL-0241-1

Suitable for Audi A4, A6, VW Passat from '97 upwards etc.

Procedure:

Move the steering rack until Pos. 1 and Pos. 2 are level. Then, screw in the locking screw **KL-0241-1**. The rack is now in the centre position so that it is possible to carry out the track basic adjustment of the right-hand and left-hand steering rod.



Retention Bolt Set

KL-0322-6

Suitable for Mercedes W107, W114, W115, W116, W123, W126.

With conical tip for middle positioning of the steering while adjusting the steering geometry.



Hose Clip Pliers

KL-0121-81

Universal Application.

Ideal for VW-Audi etc.

Works on „earless“ hose clips on cv-boots, radiator and fuel hoses.



Technical Data:

| | |
|---------|--------|
| Lenght: | 230 mm |
| Weight: | 340 g |

Hose Band Tool with Rachet

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 the quick and easy tensioning and cutting of hose clips.



Technical Data:

| | |
|---------|--------|
| Length: | 200 mm |
| Weight: | 360 g |



KL-0240-1

Puller for Spacer Sleeves VW



2

Suitable for vehicle models as from 1988 onwards such as VW Golf (II and III), Jetta, Vento, Polo, Passat, etc.

When replacing steering column switches, it is necessary to firstly remove the steering wheel and then to extract the spacer sleeve from the cone.

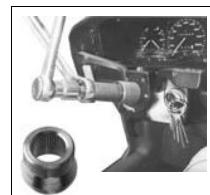
The special design of the puller **KL-0240-1** ensures that its collet chuck precisely encompasses the spacer sleeve which enables quick and smooth extraction of the spacer sleeve.

Technical Data:

| | |
|-----------------|------------|
| Clamping range: | 27 - 30 mm |
|-----------------|------------|

KL-0240-2

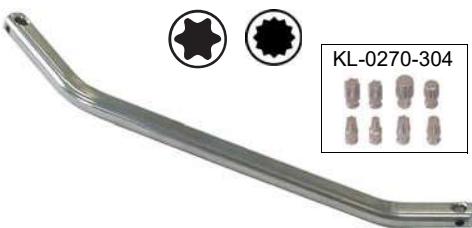
Drive-in Mandrel for Spacer Sleeves



The drive-in mandrel **KL-0240-2** made of brass allows the spacer sleeve to be pushed into the steering column without risk of damage.

KL-0270-3 C

Wrench with 8 Bit Inserts



Designed to quickly and easily loosen and tighten the bolts in door hinges.

Technical Data:

| | |
|--------------|--|
| Size: | 5/16" |
| Bit-Inserts: | T30, T40, T45, T50, T55, XZN-8, XZN-10, XZN-12 |
| Length: | 310 mm |
| Weight: | 430 g |
| Bit-Drive: | 5/16" |

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



KL-0270-304

Bit-Insert Set 8 pcs.



Consists of 5/16" Drive Bit-Inserts:
(Torx®) T30, T40, T45, T50, T55,
XZN-M8, XZN-M10, XZN-M12

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

Wrench with 8 Bit Inserts

Suitable for Door Hinge Bolts e.g. Audi (97 - onwards); Renault Safrane / Laguna; Seat Arosa / Cordoba / Ibiza; VW Golf III / Golf IV / Passat (97 - onwards) / Polo / Vento; Škoda.

The loosening and adjusting of car doors has been so far a big issue for the mechanic as the screws are very difficult to access.

The wrench **KL-0270-31 C**, thanks to its special shape, allows the easy loosening and tightening of door hinge bolts.

Suitable for Mercedes Toe Adjustment e.g. 190 Series (W201), C-Class (W202), C-Class (W203), 200 - 300 E (W124), E-Class (W210, W211), S-Class (W220)

With 8 interchangeable 5/16" Bit inserts.

The wrench **KL-0270-31 C** is the ideal tool for setting the toe at the rear axle.

Due to its special shape, this tool allows the user to easily and accurately turn the adjusting screw that is particularly hard to access.

Technical Data:

| | |
|--------------|--|
| Bit-Inserts: | T30, T40, T45, T50, T55, XZN-8, XZN-10, XZN-12 |
| Bit-Inserts: | 20 mm |
| Bit-Drive: | 5/16" |
| Lenght: | 320 mm |
| Weight: | 500 g |

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

Camber Gauge (in Case)

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

Technical Data:

| | |
|---------|-------|
| Weight: | 500 g |
|---------|-------|

KL-0270-31 C



2



KL-0168-90 K



Camber Adjustment Tools

KL-0168-...

Universally suitable.

With extra strong spindle (M14).

This camber adjustment tool allows a single technician working alone to adjust and set camber angles on the vehicle. This tool not only saves a lot of time, but also eliminates the need for additional labour.

The tool is placed between the strut or bodywork and the wheel-rim. The camber is adjusted by rotating the hexagonal drive.



Camber Adjustment Tool Set (2 Pcs.)

KL-0168-1

Technical Data: (Suitable for VW Golf, Jetta, etc.)

| | |
|------------------|--------|
| Spin width min : | 135 mm |
| Spin width max : | 175 mm |



Camber Adjustment Tool Set (2 Pcs.)

KL-0168-2

Technical Data: (Suitable for VW Polo)

| | |
|------------------|--------|
| Spin width min : | 155 mm |
| Spin width max : | 180 mm |

Camber Adjustment Tool Set (2 Pcs.)

KL-0168-3

Technical Data: (Suitable for Chrysler)

| | |
|------------------|--------|
| Spin width min : | 175 mm |
| Spin width max : | 210 mm |

**KL-0540-21****Camber Adjustment Tool****2****Suitable for BMW E46 (3-series) and E53 (X5)**

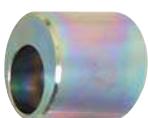
The camber adjustment tool **KL-0540-21** enables the accurate and quick adjustment of the front axle camber.

The adjusting process is carried out via the exact alignment of the upper strut tower bearing.

Professional and accurate adjustment of the camber is nearly impossible without this tool.

Technical data:

| | |
|---------|-------|
| Weight: | 750 g |
|---------|-------|

KL-0540-1**Eccentric Nut****For adjusting the toe on BMW E36, E46 rear axle.**

For this purpose, the screws on the lower wishbone have to be loosened. Then the eccentric nut is set on the wishbone fixing screw. By turning the eccentric nut, the wishbone will reach the right toe direction.

| | |
|--------|------|
| Drive: | 1/2" |
|--------|------|

KL-0326-20**Toothed Socket****Suitable for Mercedes M-Class (W163)**

For tightening the suspension ball joint fastening nut on the steering knuckle.

Technical Data:

| | |
|-----------------|---------|
| Outer diameter: | 63.0 mm |
| Inner diameter: | 52.5 mm |
| Tooth Width: | 7.5 mm |
| Weight: | 500 g |

KL-1340-10**Toothed Socket****Suitable for Citroën BX (model 09/'82 until '94) / Citroën C5 / Citroën Xantia; Peugeot 305 (model 7/'82 until '90) / Peugeot 405 (as from model 6/'87) / Peugeot 406 / Peugeot 605 / Peugeot 607 etc.**

Designed to loosen and tighten screwed suspension ball joints.

Technical Data:

| | |
|-----------------|---------|
| Outer diameter: | 52 mm |
| Inner diameter: | 42.5 mm |
| Tooth Width: | 5.5 mm |
| Weight: | 520 g |

KL-1340-201**Socket Size (width across flats) 41 mm****Suitable for Peugeot 307, Citroën C4 etc.**

Designed to loosen and tighten screwed suspension ball joints.

Technical Data:

| | |
|---------|----------|
| Size: | 12-point |
| Drive: | 1/2" |
| Length: | 75 mm |
| Weight: | 700 g |

KL-4031-3014**Special Socket Insert XZN M14****Suitable for VW T4.**

Intended for the removal of the lower suspension ball joint.

Technical Data:

| | |
|---------|-------|
| Length: | 55 mm |
| Drive: | 1/2" |
| Weight: | 110 g |