

### KL-0165-1 – Extractor Set in storage case

*The right decision!*

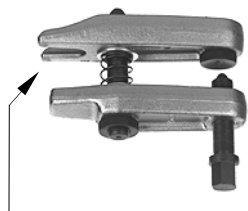
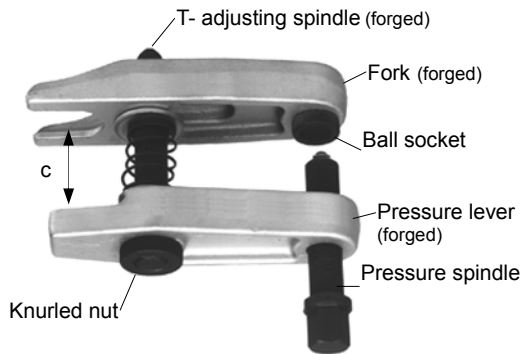


Suitable for all Ball Joint Types



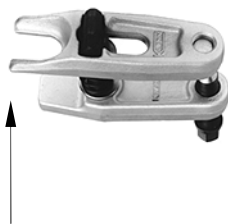
**Note:** For specification and components see page 5.

### KL-0165-10



Dimension **c** can be reduced by turning round the pressure lever.

**KL-0165-1:  $c_{max.} = 65 \text{ mm}$**



Fork inter-changeable by a 90° degree rotation.

**KL-0165-3:  $c_{max.} = 70 \text{ mm}$**

## KL-0165-Series Ball Joint Extractors

(Patented)  
(e.g. US-Patent 5 906 034)

**Application:** Suitable for all passenger cars, vans and trucks.

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 led 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 KL-0165 Series offer the mechanic a tool with high stability and universal application. Interchanging the forks enables the extractor to be adjusted to the required ball joint diameter and pivot pin height.

**Ball Joint Extractor size 1** (see page 2-27)  
For passenger cars.

**Ball Joint Extractor size 2** (see page 2-27)  
For vans.

**Ball Joint Extractor size 3** (see page 2-28)  
For HGV

### Advantages:

- The pressure fork can be removed by a 90° rotation. Interchangeable forks provide universal applications.
- Infinitely adjustment of the pressure point via a knurled nut. No need to position and remove the tool for adjustment.
- The pressure lever is positioned with a T-adjusting spindle which offers a high degree of stability.
- By moving the pressure spindle, the pressure lever can be operated from above or from below, offering a real advantage where working space is limited.
- The pressure-spindle is driven by a 19mm hexagon provided with a safety shoulder to prevent the risk of accidents resulting from the spanner slipping.
- Changing the forks provides you with five extractors size 1 and six extractors size 2 with different fork openings.
- By changing the forks, the extractor size 3 can further be enhanced to six ball joint extractors with different fork openings



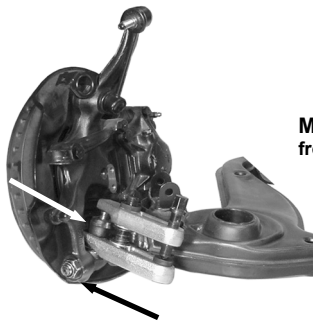
### Warnings and Notes

- Any work on vehicle axles should only be performed by qualified personnel observing and complying with the directions, provisions, and safety regulations issued by the vehicle manufacturer
- When adjusting the dimension "c", keep in mind that the maximum dimension has been reached when the T-adjusting spindle is flush with the knurled nut. (see fig. „Extractor adjusting“) For a further enlargement of the dimension "c", an extended T-adjusting spindle and an extended pressure spindle have to be used.

### KL-0165-Series Ball Joint Extractor

KL-0165-12

Patented



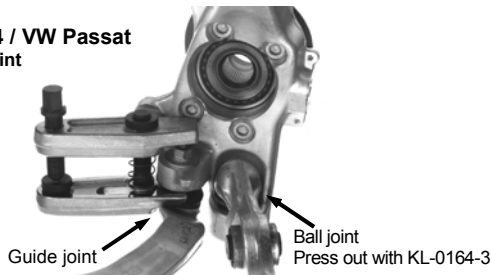
Mercedes W140 (S-Class)  
front axle etc.

KL-0165-14



VW T4 track rod joint

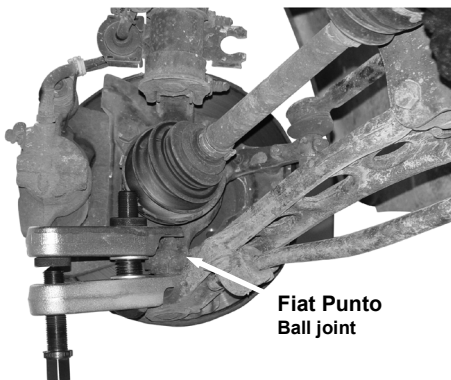
Audi A4 / VW Passat  
Guide joint



Guide joint

Ball joint  
Press out with KL-0164-3

KL-0165-15



Fiat Punto  
Ball joint

### KL-0165-12 Ball Joint Extractor size 1

Suitable, for example, for Mercedes W140 (S Class), W220 (S Class)

Ball-/ guide joint front axle,  
VW Golf IV track rod joint etc.

**Advantage:** Universal use.

For more information see page 1

(Fork opening a = 24 mm)

consists of:

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

**Note:** For spare parts and additional forks see page 5.

### KL-0165-14 Ball Joint Extractor size 1

Suitable, for example, for Audi A4 / VW Passat, Skoda Superb,  
Guide joint, VW T4 track rod joint etc.

**Advantage:** Universal use.

For more information see page 1.

(Fork opening a = 30 mm)

consists of:

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

**Note:** For spare parts and additional forks see page 5.

### KL-0165-15 Ball Joint Extractor size 1

Particularly suitable for ball joints on Fiat Punto.

**Advantage:** Universal use.

For more information see page 1.

(Fork opening a = 22 mm)

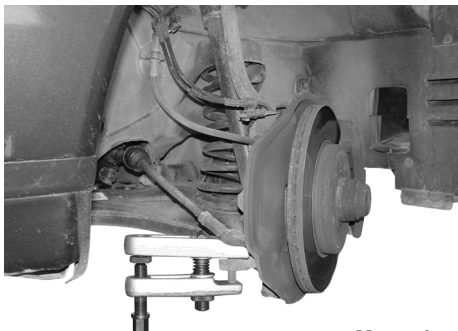
consists of:

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-0165-Series Ball Joint Extractor

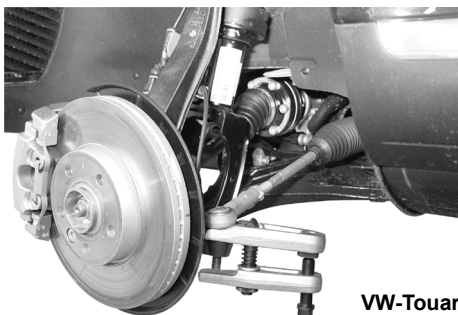
KL-0165-20

Patented



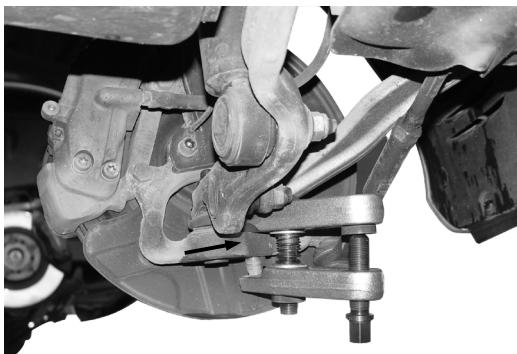
Mercedes W202 (C-Class)  
Track rod joint etc.

KL-0165-22



VW-Touareg  
Track rod joint etc.

KL-0165-25



Mercedes W230 (SL)  
lower ball joint

### KL-0165-20 Ball Joint Extractor size 2

Suitable, for example, for Mercedes W163 (M-Class),

W211 (E-Class), W220 (S-Class)  
upper guide joint

W170 (SLK),

W202 (C-Class), W220 (S-Class)  
track rod etc.

**Advantage:** Universal use.

For more information see page 1.

(Fork opening a = 22 mm)

consists of:

Part No.	Description
KL-0165-100	Base tool without fork (Spindle M18×1.5)
KL-0165-2001	Fork a=22 mm e=60 mm d=165 mm

### KL-0165-22 Ball Joint Extractor size 2

Suitable, for example, for VW Touareg / Porsche Cayenne  
track rod and upper guide joint,

Mercedes W210 Sprinter track rod joint

Ford Transit track rod joint

VW Golf IV lower ball joint etc.

**Advantage:** Universal use.

For more information see page 1.

(Fork opening a = 26 mm)

consists of:

Part No.	Description
KL-0165-100	Base tool without fork (Spindle M18×1.5)
KL-0165-2201	Fork a=26 mm e=60 mm d=165 mm

**Note:** For spare parts and further forks see page 5.

### KL-0165-25 Ball Joint Extractor size 2

Suitable, for example, for Mercedes W211 (E-Class), W220 (S-Class)

and W230 (SL) lower ball joint

**Advantage:** Universal use.

For more information see page 1.

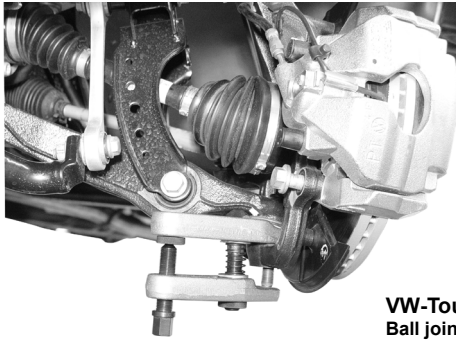
(Fork opening a = 24 mm)

consists of:

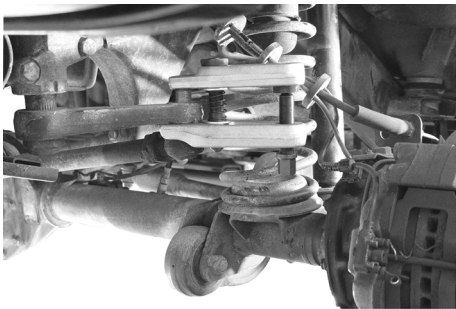
Part No.	Description
KL-0165-100	Base tool without fork (Spindle M18×1.5)
KL-0165-2501	Fork a=24 mm e=60 mm d=165 mm

**Note:** For spare parts and additional forks see page 5.

### KL-0165-23

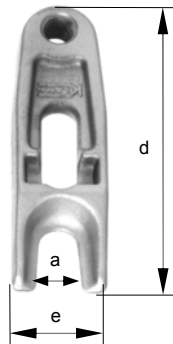


VW-Touareg  
Ball joint etc.

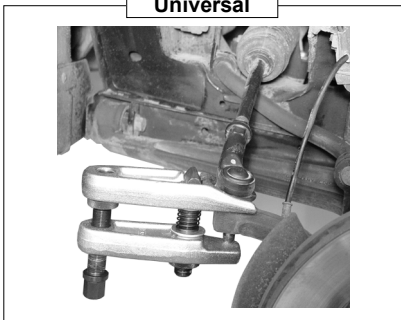


Mercedes G-Class  
steering box reversing  
lever etc.

### KL-0165-0 K



Universal



### KL-0165-23 Ball Joint Extractor size 2

Suitable, for example, for **VW Touareg / Porsche Cayenne ball joint,**  
**VW T4 lower ball joint, Mercedes G-Class track rod joint and steering box reversing lever**, **Ford Transit lower ball joint**

**Advantage:** Universal use.  
For more information see page 1.

(Fork opening a = 30 mm)

consists of:

Part No.	Description
KL-0165-100	Base tool without fork (Spindle M18×1.5)
KL-0165-2301	Fork a=30 mm e=60 mm d=165 mm

**Note:** For spare parts and additional forks see page 5.

### KL-0165-0 K Ball Joint Extractor Set size 1

Suitable for passenger cars and vans e.g.

⇒ with fork **KL-0165-1201** for:

**Mercedes W140, W220 (S-Class) ball joint / guide joint front axle, VW Golf IV track rod joint etc.**

⇒ with fork **KL-0165-1401** for:

**Audi A4 / VW Passat, Skoda Superb guide joint, VW T4 track rod joint etc.**

For the quick and easy separation of ball joint connections at suspension and steering systems.

Weight: ..... 6.5 kg

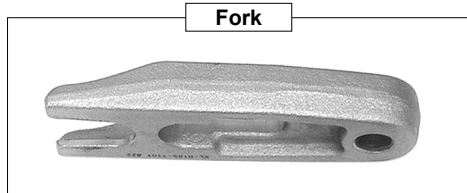
#### Specification:

Part No.	Description
<b>KL-0165-0 K</b>	<b>Ball Joint Extractor Set</b>
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18×1.5)
KL-0165-1001	Fork a=20 mm e=50 mm d=165 mm
KL-0165-1101	Fork a=22 mm e=50 mm d=165 mm
KL-0165-1201	Fork a=24 mm e=50 mm d=165 mm
KL-0165-1301	Fork a=27 mm e=50 mm d=165 mm
KL-0165-1401	Fork a=30 mm e=50 mm d=165 mm
KL-0165-1090	Plastic storage case

**Absolutely indispensable for VW-Audi, Seat, Škoda, Mercedes, Opel etc.**

**Note:** For additional forks size 2 see page 5.

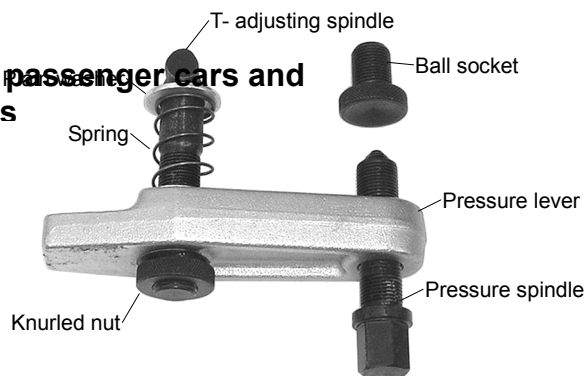
Patented



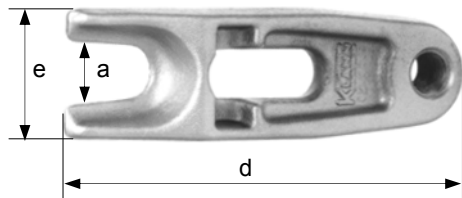
Fork

Base tool without fork

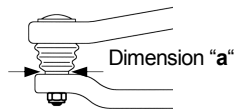
For passenger cars and vans



### Fork for KL-0165 Extractor-Series



**Note:** For determination of the suitable fork, measure dimension "a", on the car (see ill.) and choose the appropriate fork.

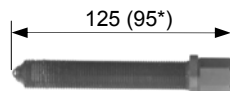


### Accessories: Extended T-Adjusting Spindle and Pressure Spindle

**KL-0165-1013**  
T-adjusting spindle



**KL-0165-1014**  
Pressure spindle M18x1.5



## KL-0165-1 Ball Joint Extractor Set

For passenger cars and vans. (size 1 and size 2) Weight:..... 10.5 kg

Part No.	Description
<b>KL-0165-1</b>	<b>Ball Joint Extractor Set</b>
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-1001	Fork a=20 mm e=50 mm d=165 mm
KL-0165-1101	Fork a=22 mm e=50 mm d=165 mm
KL-0165-1201	Fork a=24 mm e=50 mm d=165 mm
KL-0165-1301	Fork a=27 mm e=50 mm d=165 mm
KL-0165-1401	Fork a=30 mm e=50 mm d=165 mm
KL-0165-2001	Fork a=22 mm e=60 mm d=165 mm
KL-0165-2101	Fork a=24 mm e=60 mm d=165 mm
KL-0165-2201	Fork a=26 mm e=60 mm d=165 mm
KL-0165-2301	Fork a=30 mm e=60 mm d=165 mm
KL-0165-1090	Plastic storage case

### KL-0165-100 Base Tool without Fork

Part No.	Description
<b>KL-0165-100</b>	<b>Base Tool without Fork</b>
<i>consists of:</i>	
KL-0165-1002	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 Ø18 mm

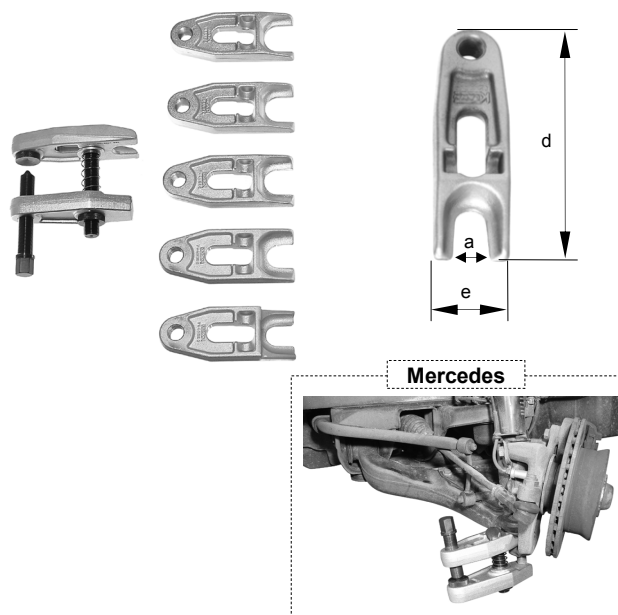
## Ball Joint Extractor size 1

Part No.	Description
<b>KL-0165-10</b>	<b>Ball Joint Extractor size 1</b>
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-1001	Fork a=20 mm e=50 mm d=165 mm
<i>KL-0165-11 Ball Joint Extractor size 1</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-1101	Fork a=22 mm e=50 mm d=165 mm
<i>KL-0165-12 Ball Joint Extractor size 1</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-1201	Fork a=24 mm e=50 mm d=165 mm
<i>KL-0165-13 Ball Joint Extractor size 1</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-1301	Fork a=27 mm e=50 mm d=165 mm
<i>KL-0165-14 Ball Joint Extractor size 1</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-1401	Fork a=30 mm e=50 mm d=165 mm

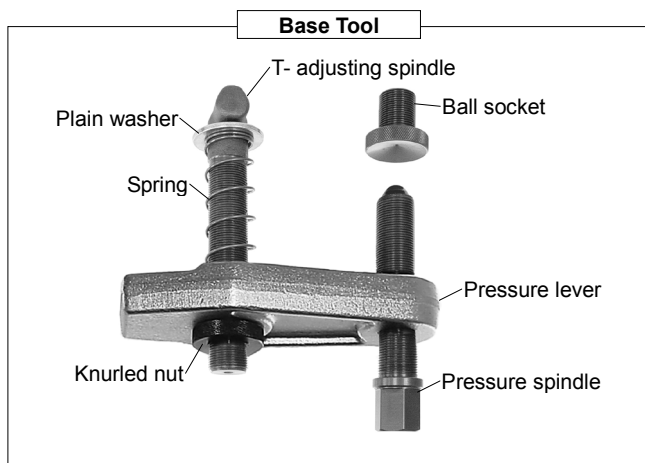
## Ball Joint Extractor size 2

Part No.	Description
<b>KL-0165-20</b>	<b>Ball Joint Extractor size. 2</b>
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-2001	Fork a=22 mm e=60 mm d=165 mm
<i>KL-0165-21 Ball Joint Extractor size. 2</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-2101	Fork a=24 mm e=60 mm d=165 mm
<i>KL-0165-22 Ball Joint Extractor size. 2</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-2201	Fork a=26 mm e=60 mm d=165 mm
<i>KL-0165-23 Ball Joint Extractor size. 2</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-2301	Fork a=30 mm e=60 mm d=165 mm
<i>KL-0165-24 Ball Joint Extractor size. 2</i>	
<i>consists of:</i>	
KL-0165-100	Base Tool without fork (Spindles with thread M18x1.5)
KL-0165-2401	Fork a=34 mm e=60 mm d=165 mm
<i>KL-0165-25 Ball Joint Extractor size. 2</i>	
<i>consists of:</i>	
KL-0165-100	Base tool without fork (Spindle M18x1.5)
KL-0165-2501	Fork a=24 mm e=60 mm d=165 mm

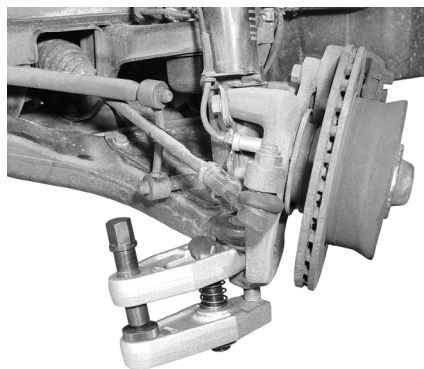
### KL-0165-3 A



### KL-0165-300



### Application examples:



**KL-0165-35**  
suitable e.g. for  
MB Sprinter, VW LT '98 onwards, VW T4 Guide Joint

## KL-0165-3 A Ball Joint Extractor Set (with 6 forks) (Patented)

Suitable for Mercedes HGV etc.

Ball Joint Extractor **KL-0165-3 A** is the ideal tool for separating ball joints at axles and steering systems, and is particularly suitable for Mercedes.

Part No.	Description	Qty.
<b>KL-0165-3 A</b>	<b>Ball Joint Extractor Set</b>	<b>1</b>
<i>consists of:</i>		
KL-0165-300	Base tool without fork (Spindle M24x1.5)	1
KL-0165-3001	Fork a=30 mm, e=80 mm, d=200 mm e.g. suitable for Landini-Tractors	1
KL-0165-3101	Fork a=34 mm, e=80 mm, d=200 mm	1
KL-0165-3201	Fork a=40 mm, e=80 mm, d=200 mm e.g. suitable for Mercedes, MAN, Scania, Volvo, etc.	1
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	1
KL-0165-3401	Fork a=47 mm, e=80 mm, d=200 mm	1
KL-0165-3501	Fork a=30 mm, e=80 mm, d=200 mm e.g. suitable for MB Sprinter '95 onwards, VW LT '98 onwards ball joint, VW T4 guide joint etc.	1

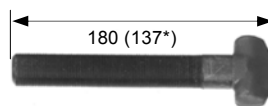
### KL-0165-300 Base Tool without Fork

Part No.	Description
<b>KL-0165-300</b>	<b>Base tool without fork</b>
<i>consists of:</i>	
KL-0165-3002	Pressure lever
KL-0165-3013	T- adjusting spindle M24x1.5 x 180
KL-0165-3014	Pressure Spindle M24x1.5 x 135
KL-0165-3005	Ball socket
KL-0165-3006	Knurled nut M24x1.5
KL-0165-3007	Spring
KL-0165-3008	Plain washer Ø24

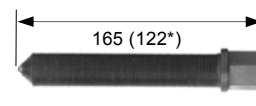
## Ball Joint Extractor size 3 for HGV

Part No.	Description
<b>KL-0165-30</b>	<b>Ball Joint Extractor size 3</b> suitable e.g. for MAN and Landini-Tractors, etc.
<i>consists of:</i>	
KL-0165-300	Base tool without fork (Spindle M24x1.5)
KL-0165-3001	Fork a=30 mm e=80 mm d=200 mm
<b>KL-0165-31</b>	<b>Ball Joint Extractor size 3</b> e.g. suitable for MAN, etc.
<i>consists of:</i>	
KL-0165-300	Base tool without fork (Spindle M24x1.5)
KL-0165-3101	Fork a=34 mm e=80 mm d=200 mm
<b>KL-0165-32</b>	<b>Ball Joint Extractor size 3</b> suitable e.g. for Mercedes, MAN, Scania, Volvo, etc.
<i>consists of:</i>	
KL-0165-300	Base tool without fork (Spindle M24x1.5)
KL-0165-3201	Fork a=40 mm e=80 mm d=200 mm
<b>KL-0165-33</b>	<b>Ball Joint Extractor size 3</b> suitable e.g. for Mercedes, MAN, Scania, Volvo, etc. and John Deere-Tractors.
<i>consists of:</i>	
KL-0165-300	Base tool without fork (Spindle M24x1.5)
KL-0165-3301	Fork a=42 mm e=80 mm d=200 mm
<b>KL-0165-34</b>	<b>Ball Joint Extractor size 3</b> e.g. suitable for Mercedes buses, etc.
<i>consists of:</i>	
KL-0165-300	Base tool without fork (Spindle M24x1.5)
KL-0165-3401	Fork a=47 mm e=80 mm d=200 mm
<b>KL-0165-35</b>	<b>Ball Joint Extractor size 3</b> suitable e.g. for MB Sprinter '95 onwards, VW LT '98 onwards ball joint, VW T4 guide joint etc.
<i>consists of:</i>	
KL-0165-300	Base tool without fork (Spindle M24x1.5)
KL-0165-3501	Fork a=30 mm e=80 mm d=200 mm

### Accessories for KL-0165-3: Extended T-Adjusting Spindle and Pressure Spindle



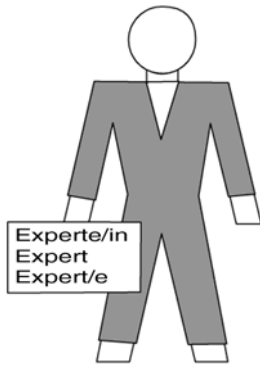
**KL-0165-3013**  
T-Adjusting Spindle M24x1.5



**KL-0165-3014**  
Pressure Spindle M24x1.5

\* Values in brackets apply to standard versions.

- de** Produkt-Information komplett durchlesen und verstehen.
- en** Carefully read the Product Information and make sure you have understood it correctly.
- fr** Lisez entièrement l'information produit et assurez-vous de l'avoir bien comprise.



- de** Vorschriften und Hinweise beachten
- en** Observe warnings and notes
- fr** Respecter les prescriptions et les remarques.



**de** Sicherheitsvorkehrungen treffen

- Hydraulik-Zylinder mit Sicherheitshaltegurt gegen Herunterfallen sichern.
- Schutzausrüstungsvorgaben der Berufsgenossenschaft beachten.

**en** Ensure all safety measures are in place to avoid injury/potential hazards

- Secure the hydraulic cylinder with a safety belt to prevent it from falling.
- Always follow the procedures and precautions within the operator instruction manual; failure to do this could result in serious injury and could invalidate your warranty and insurance.

**fr** Prendre toutes les mesures de sécurité nécessaires

- Sécuriser le cylindre hydraulique contre les chutes à l'aide de la sangle de sécurité.
- Respecter les prescriptions du Syndicat Professionnel en matière d'équipements de protection.

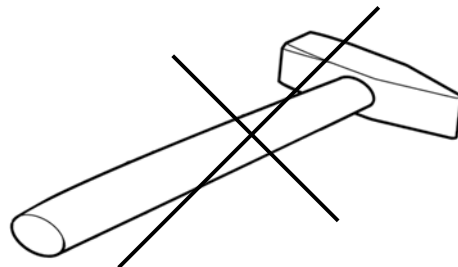
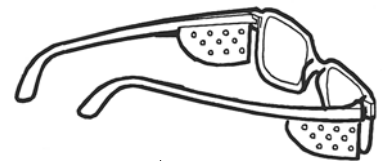
Werkzeug gegen Herunterfallen sichern.  
Secure tool to prevent it from falling  
Sécuriser l'outil contre les chutes



Sicherheitshaltegurt

Safety belt

Sangle de sécurité



- de** Pflege und Reinigung
- en** Care and cleaning
- fr** Entretien et nettoyage

KL-0014-0030





de

**Vorschriften und Hinweise**

en

**Warnings and Notes**

fr

**Prescriptions et remarques**

- de Arbeiten an Fahrzeugen nur durch Fachpersonal unter Beachtung der Hinweise, Vorschriften und Sicherheitsvorschriften des Fahrzeugherstellers durchführen!
- en Any work on vehicles should only be performed by qualified personnel observing and complying with the directions, provisions, and safety regulations issued by the vehicle manufacturer .
- fr Toutes interventions sur les véhicules doivent impérativement être effectuées par du personnel qualifié, tout en respectant les recommandations, prescriptions et consignes de sécurité du constructeur du véhicule
  
- de Für alle Arbeiten am Fahrzeug gelten nur die vom Fahrzeughersteller vorgegebenen Daten.
- en Only the vehicle manufacturer's data apply to all work done on the vehicle.
- fr Pour tous les travaux sur le véhicule, seules les données indiquées par le constructeur du véhicule sont valables.
  
- de Alle angegebenen fahrzeugspezifischen Daten erfolgen unter Vorbehalt.
- en All specific vehicle data stated herein are supplied without commitment.
- fr Toutes les caractéristiques mentionnées spécifiques aux véhicules sont données sous réserve.
  
- de Einbauhinweise des Fahrzeugherstellers beachten.
- en Observe the vehicle manufacturer's installation notes.
- fr Respecter les indications du constructeur du véhicule pour le montage.
  
- de Vor Inbetriebnahme durch Sichtprüfung überzeugen, dass das Werkzeug keine Beschädigung aufweist.
- en Before putting the tool into operation, visually check that it is not damaged.
- fr Avant la mise en service, contrôler visuellement que l'outil ne présente pas d'endommagement.

**de Folgende Punkte sind unbedingt zu beachten:**

**en It is imperative to observe the following points:**

**fr Les points suivants sont impérativement à respecter:**

- de Vor Arbeitsbeginn Produkt-Information komplett durchlesen und verstehen.
- en Before starting work, read the Product Information carefully and make sure you have understood it correctly.
- fr Avant de démarrer les travaux, lisez entièrement l'information produit et assurez-vous de l'avoir bien comprise.
  
- de Niemals mit einem Hammer auf das Werkzeug schlagen.
- en Never strike the tool with a hammer.
- fr Ne frappez jamais l'outil avec un marteau.
  
- de Werkzeug stets sauber halten.
- en Always keep the tool clean and serviced.
- fr Maintenez toujours l'outil dans un état de propreté.
  
- de Als Schmiermittel für Spindeln und Gewinde ausschließlich Molybdändisulfid Paste **KL-0014-0030** verwenden.
- en To lubricate spindles and threads use only Molybdenum Disulphide Paste **KL-0014-0030**.
- fr Graissez les tiges et les filetages exclusivement avec de la pâte de bisulfure de molybdène **KL-0014-0030**.
  
- de Die Verwendung des Sicherheitshaltegurtes **KL-0040-2...** wird generell bei Arbeiten mit dem Hydraulik-Zylinder **KL-0040-2...** am Fahrzeug empfohlen.
- en The use of the safety belt **KL-0040-2...** is always recommended when working with the hydraulic cylinder **KL-0040-2...** on the vehicle.
- fr En général, il est recommandé d'utiliser la sangle de sécurité pour tout travail avec le cylindre hydraulique **KL-0040-2...** sur le véhicule
  
- de Schutzausrüstungsvorgaben der Berufsgenossenschaft beachten.
- en Observe the protective equipment provisions and recommendations prescribed by the relative Employer's Liability Insurance Association.
- fr Respecter les prescriptions du Syndicat Professionnel en matière d'équipements de protection
  
- de Generell dürfen nur KLANN Original-Ersatzteile verwendet werden.
- en Only KLANN original spare parts are recommended.
- fr Généralement, vous ne devez utiliser que des pièces de rechange originales KLANN.