

GEDORE

TOOLS FOR LIFE

Ball Joint Extractor Series



KL-0165-Series



0165-..Seriee150806.docx

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Ball Joint Extractor

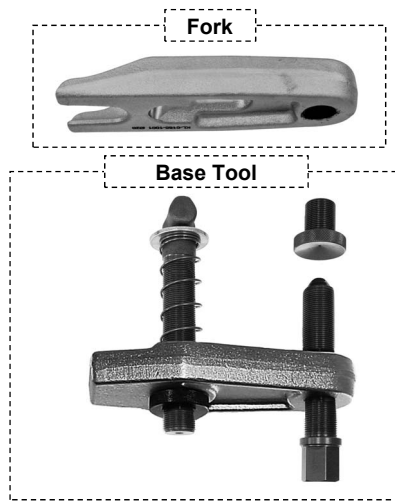


Fig. 1: Dimensions of fork

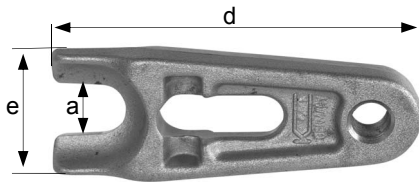
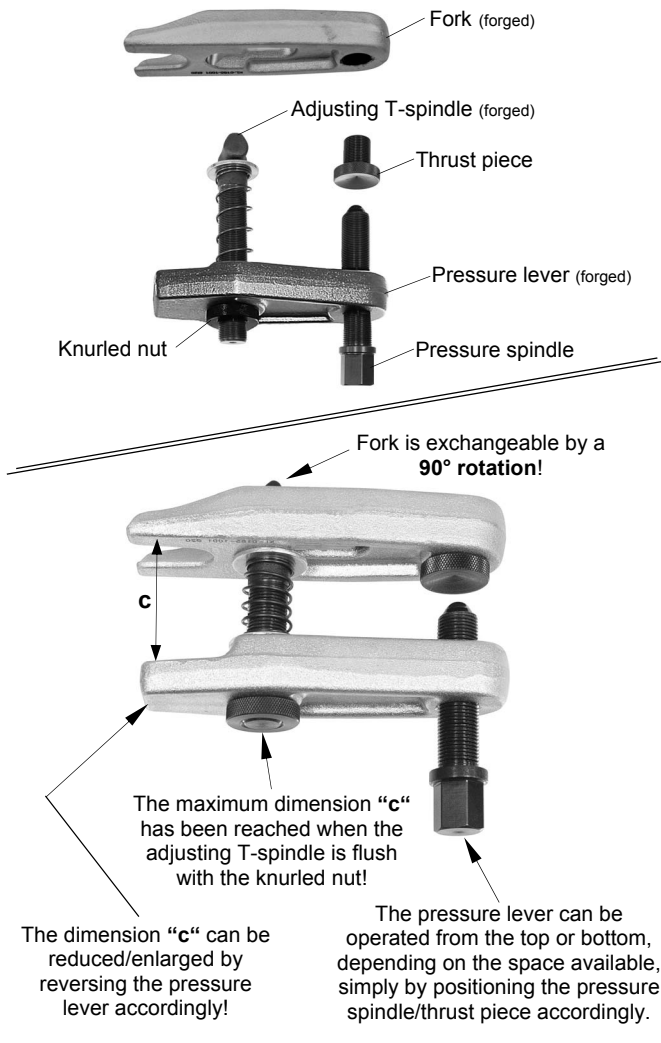


Fig. 2: Function/Exploded View: Ball Joint Extractor



KL-0165-Series - Ball Joint Extractors (Pat.)

Universally suitable for passenger cars, vans/light commercial vehicles, and HGVs.

Indispensable tools 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 today's vehicle suspension and steering systems has led to the need for an ever-widening range of ball joint extractors for separating ball joint connections from steering knuckles/stub axles and steering arms.

This is mainly due to the different diameters and sizes of the ball joints. In addition, ball joints with conical pivot pins require increased stability and strength of the ball joint extractors to achieve easy separation. When separating ball joint connections, it is decisive that the correct pressure point for separation and angle can be adjusted on the extractor.

The **KL-0165- Ball Joint Extractor Series** from GEDORE Automotive offers automotive service technicians and mechanics a range of tools with high stability and universal application possibilities. The extractors can easily be adjusted to the respective ball joint diameter and pivot pin height - simply by changing the forks.

Ball Joint Extractors, Size 1 and 2

(for passenger cars and vans/light commercial vehicles)

(see pages 4 - 6)

Ball Joint Extractors, Size 3

(for HGVs and vans/light commercial vehicles)

(see pages 7 - 9)

Warnings and Notes

- Any work on vehicles should only be performed by qualified specialist personnel observing and complying with the directions, provisions, and safety regulations specified by the vehicle manufacturer!
- When adjusting the dimension "c", remember that the maximum dimension "c" has been reached when the adjusting T-spindle is flush with the knurled nut. (see Fig.2) If you want to enlarge the dimension "c", you need to use an extended adjusting T-spindle and pressure spindle. (please, see accessories)

Examples of use:

KL-0165-12



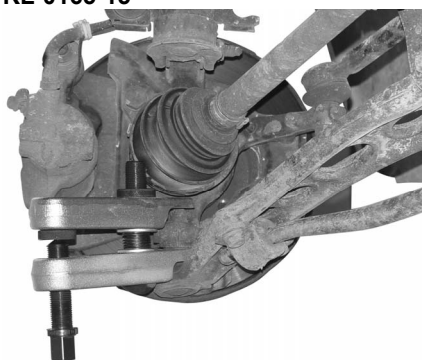
KL-0165-13



KL-0165-14



KL-0165-15



KL-0165-20



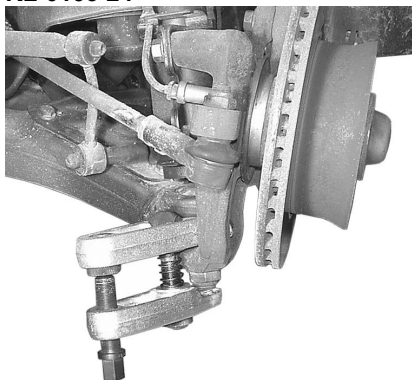
KL-0165-22



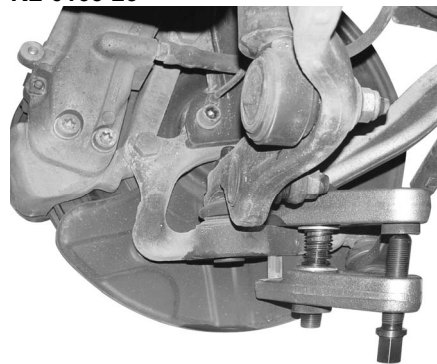
KL-0165-23



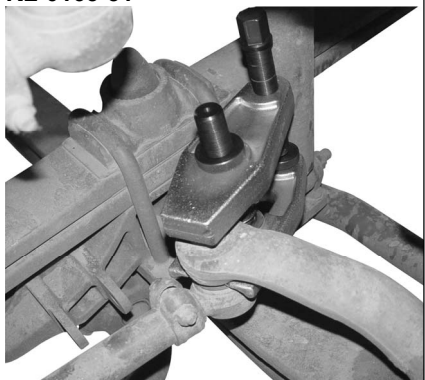
KL-0165-24



KL-0165-25



KL-0165-31



KL-0165-32



KL-0165-32

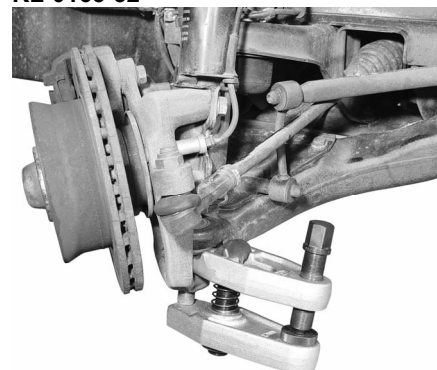


Fig. 3: KL-0165-0 K



Size 1
with 5 forks

Fig. 4: KL-0165-1



Size 1 / Size 2
with 9 forks

Fig. 5: KL-0165-100



Fig. 6: KL-0165-10



KL-0165-..Series - Ball Joint Extractors, Size 1 and Size 2 (for passenger cars, vans/light commercial vehicles)

KL-0165-0 K - Ball Joint Extractor Set, Size 1 (with 5 Forks)

Universally suitable.

Particularly useful on passenger cars and vans such as Audi A6 Avant (4A) and Golf (IV) track rod ball joint; Peugeot 307 (2.0 HDI, 136 bhp, model year 2006) lower suspension ball joint; Mercedes A-Class (W168) track rod ball joint; Mercedes S-Class (W220) and (W140), front axle lower/upper ball joint; VW Golf (IV) track rod ball joint; VW LT and Mercedes Sprinter (906) track rod; Audi A4, VW Passat and Skoda Superb, upper ball joint; VW T4 track rod ball joint.

KL-0165-1 - Ball Joint Extractor Set Size 1 and Size 2 (with 9 Forks)

Universally suitable.

Particularly useful on passenger cars and vans such as Audi A6 Avant (4A) and Golf (IV) track rod ball joint; Peugeot 307 (2.0 HDI, 136 bhp, model year 2006) lower suspension ball joint; Mercedes A-Class (W168) track rod ball joint; Mercedes S-Class (W220) and (W140), front axle lower/upper ball joint; VW Golf (IV) track rod ball joint; VW LT and Mercedes Sprinter (906) track rod; Audi A4, VW Passat and Skoda Superb, upper ball joint; VW T4 track rod ball joint; Mercedes M-Class (W163), E-Class (W211), W220 (S-Class), upper ball joint SLK (W170), C-Class (W202), S-Class (W220), track rod; VW Touareg; Porsche Cayenne track rod and upper ball joint, Mercedes E-Class (W210), Sprinter track rod ball joint, Ford Transit track rod ball joint, VW Golf (IV) lower suspension ball joint; VW Touareg; Porsche Cayenne suspension ball joint, VW T4 / T5 lower suspension ball joint, Mercedes G-Model track rod ball joint and steering gear reversing lever, Ford Transit lower suspension ball joint.

KL-0165-100 - Base Tool without Fork

The KL-0165-100 base tool is designed for the separation of ball joint connections in suspension and steering systems. It is used in conjunction with a fork (Size 1 or Size 2).

Composed of:

Part No.	Description
KL-0165-1002	Pressure Lever
KL-0165-1003	Adjusting T-Spindle, M18x1.5 x 110
KL-0165-1004	Pressure Spindle, M18x1.5 x 70
KL-0165-1005	Thrust Piece
KL-0165-1006	Knurled Nut M18x1.5
KL-0165-1007	Spring
KL-0165-1008	Plain Washer, Ø 18 mm

KL-0165-10 - Ball Joint Extractor, Size 1 Universally suitable.

Ideal for Audi A6 Avant (4A), Golf (IV) track rod ball joint and Peugeot 307 (2.0 HDI, 136 bhp, model year 2006) lower suspension ball joint etc.

Composed of:

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

Fig. 7: KL-0165-11



KL-0165-11 - Ball Joint Extractor, Size 1

Universally suitable.

Ideal for Mercedes A-Class (W168) track rod ball joint etc.

Composed of:

Part No.	Description
KL-0165-100	Base Tool without Fork (Spindle M18×1.5)
KL-0165-1101	Fork a=22 mm e=50 mm d=165 mm

Fig. 8: KL-0165-12



KL-0165-12 - Ball Joint Extractor, Size 1

Universally suitable.

Ideal for Mercedes S-Class (W220), W140, front axle suspension lower/upper ball joints, VW Golf (IV) track rod ball joints etc.

Composed of:

Part No.	Description
KL-0165-100	Base Tool without Fork (Spindle M18×1.5)
KL-0165-1201	Fork a=24 mm e=50 mm d=165 mm

Fig. 9: KL-0165-13



KL-0165-13 - Ball Joint Extractor, Size 1

Universally suitable.

Ideal for VW LT, Mercedes Sprinter (906) track rod etc.

Composed of:

Part No.	Description
KL-0165-100	Base Tool without Fork (Spindle M18×1.5)
KL-0165-1301	Fork a=27 mm e=50 mm d=165 mm

Fig. 10: KL-0165-14



KL-0165-14 - Ball Joint Extractor, Size 1

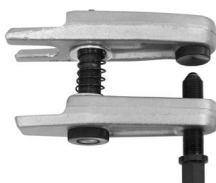
Universally suitable.

Ideal for Audi A4; VW Passat; Skoda Superb, upper ball joint, VW T4 track rod ball joint etc.

Composed of:

Part No.	Description
KL-0165-100	Base Tool without Fork (Spindle M18×1.5)
KL-0165-1401	Fork a=30 mm e=50 mm d=165 mm

Fig. 11: KL-0165-15



KL-0165-15 - Ball Joint Extractor, Size 1

Universally suitable.

Ideal for Audi A4; VW Passat; Skoda Superb, upper ball joint, VW T4 track rod ball joint etc.

Composed of:

Part No.	Description
KL-0165-100	Base Tool without Fork (Spindle M18×1.5)
KL-0165-1401	Fork a=30 mm e=50 mm d=165 mm

Fig. 12: KL-0165-20



KL-0165-20 - Ball Joint Extractor, Size 2

Universally suitable.

Ideal for Mercedes M-Class (W163), E-Class (W211), W220 (S-Class), upper ball joint, SLK (W170), C-Class (W202), S-Class (W220), track rod etc.

Composed 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

Fig. 13: KL-0165-21



KL-0165-21 - Ball Joint Extractor, Size 2

Universally suitable.

Composed of:

Part No.	Description
KL-0165-100	Base Tool without Fork (Spindle M18×1.5)
KL-0165-2101	Fork a=24 mm e=60 mm d=165 mm

Fig. 14: KL-0165-22



KL-0165-22 - Ball Joint Extractor, Size 2

Universally suitable.

Ideal for VW Touareg; Porsche Cayenne track rod and upper ball joint, Mercedes E-Class (W210), Sprinter track rod ball joint, Ford Transit track rod ball joint, VW Golf (IV) lower suspension ball joint etc.

Composed 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

Fig. 15: KL-0165-23



KL-0165-23 - Ball Joint Extractor, Size 2

Universally suitable.

Ideal for VW Touareg; Porsche Cayenne suspension ball joint, VW T4 / T5 lower suspension ball joint, Mercedes G-Model track rod ball joint and steering gear reversing lever, Ford Transit lower suspension ball joint etc.

Composed 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

Fig. 16: KL-0165-24



KL-0165-24 - Ball Joint Extractor, Size 2

Universally suitable.

Composed of:

Part No.	Description
KL-0165-100	Base Tool without Fork (Spindle M18×1.5)
KL-0165-2401	Fork a=34 mm e=60 mm d=165 mm

Fig. 17: KL-0165-25



KL-0165-25 - Ball Joint Extractor, Size 2

Universally suitable.

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

Composed 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

Fig. 18: KL-0165-300



Fig. 19: KL-0165-3

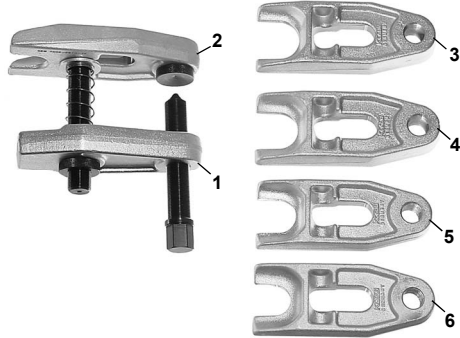


Fig. 20: KL-0165-3 K



Fig. 21: KL-0165-3 A

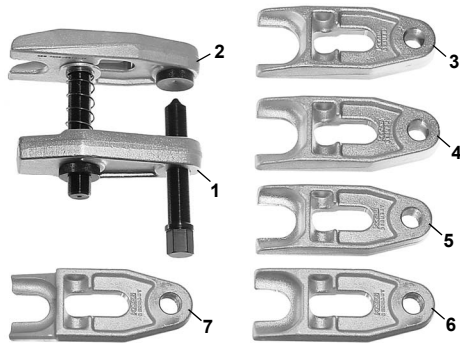


Fig. 22: KL-0165-3 KA



KL-0165-..Series - Ball Joint Extractors, Size 3 (for HGVs /Vans/Light Commercial Vehicles)

KL-0165-300 - Base Tool without Fork

The KL-0165-300 base tool is designed for the separation of ball joint connections in suspension and steering systems. It is used with a fork in size 3.

Composed of:

Part No.	Description
KL-0165-3002	Pressure Lever
KL-0165-3005	Thrust Piece
KL-0165-3006	Knurled Nut, M24x1.5
KL-0165-3007	Spring
KL-0165-3008	Plain Washer, Ø 24 mm
KL-0165-3013	Adjusting T-Spindle, M24x1.5 x 180
KL-0165-3014	Pressure Spindle, M24x1.5 x 135

KL-0165-3 - Ball Joint Extractor Set, Size 3 (with 5 Forks)

Suitable for: like the KL-0165-3 KA.

Composed of:

Pos.	Part No.	Description
1	KL-0165-300	Base Tool without Fork (Spindle M24x1.5)
2	KL-0165-3001	Fork a=30 mm, e=80 mm, d=200 mm
3	KL-0165-3101	Fork a=34 mm, e=80 mm, d=200 mm
4	KL-0165-3201	Fork a=40 mm, e=80 mm, d=200 mm
5	KL-0165-3301	Fork a=42 mm, e=80 mm, d=200 mm
6	KL-0165-3401	Fork a=47 mm, e=80 mm, d=200 mm

KL-0165-3 K - Ball Joint Extractor Set, Size 3 (with 5 Forks)

Universally suitable for HGVs.

Ideal for HGVs from MAN, Mercedes, Scania, Volvo, and tractors from Landini, John Deere. For example, Mercedes Actros thrust rod; Mercedes Actros drop arm etc.

Composed of:

Part No.	Description
KL-0165-3	Ball Joint Extractor Set, (with 5 Forks)
KL-0165-3090	Plastic Storage Case

KL-0165-3 A - Ball Joint Extractor Set, Size 3 (with 6 Forks)

Suitable for: like the KL-0165-3 KA.

Composed of:

Pos.	Part No.	Description
1	KL-0165-300	Base Tool without Fork (Spindle M24x1.5)
2	KL-0165-3001	Fork a=30 mm, e=80 mm, d=200 mm
3	KL-0165-3101	Fork a=34 mm, e=80 mm, d=200 mm
4	KL-0165-3201	Fork a=40 mm, e=80 mm, d=200 mm
5	KL-0165-3301	Fork a=42 mm, e=80 mm, d=200 mm
6	KL-0165-3401	Fork a=47 mm, e=80 mm, d=200 mm
7	KL-0165-3501	Fork a=30 mm, e=80 mm, d=200 mm

KL-0165-3 KA - Ball Joint Extractor Set, Size 3 (with 6 Forks)

Universally suitable HGVs and Vans.

Ideal for HGVs from MAN, Mercedes, Scania, Volvo, and tractors from Landini, John Deere. For example, Mercedes Actros thrust rod; Mercedes Actros drop arm etc; MB Sprinter (1995 onwards), VW LT (1998 onwards) suspension ball joint; VW T4 upper ball joint, MB Citaro EvoBus O 530 stabiliser ball joint.

Composed of:

Part No.	Description
KL-0165-3 A	Ball Joint Extractor Set
KL-0165-3090	Plastic Storage Case

Fig. 23: KL-0165-30



KL-0165-30 - Ball Joint Extractor, Size 3

Universally suitable.

Ideal for use on MAN, Landini tractors etc.

Composed of:

Part No.	Description
KL-0165-300	Base Tool without Fork (Spindle M24×1.5)
KL-0165-3001	Fork a=30 mm e=80 mm d=200 mm

Fig. 24: KL-0165-31



KL-0165-31 - Ball Joint Extractor, Size 3

Universally suitable.

Ideal for use on MAN, Mercedes, etc.; for example, Mercedes Actros thrust rods.

Composed of:

Part No.	Description
KL-0165-300	Base Tool without Fork (Spindle M24×1.5)
KL-0165-3101	Fork a=34 mm e=80 mm d=200 mm

Fig. 25: KL-0165-32



KL-0165-32 - Ball Joint Extractor, Size 3

Universally suitable.

Ideal for use on Mercedes, MAN, Scania, Volvo, etc.; for example, Mercedes Actros drop arms.

Composed of:

Part No.	Description
KL-0165-300	Base Tool without Fork (Spindle M24×1.5)
KL-0165-3201	Fork a=40 mm e=80 mm d=200 mm

Fig. 26: KL-0165-33



KL-0165-33 - Ball Joint Extractor, Size 3

Universally suitable.

Ideal for use on Mercedes, MAN, Scania, Volvo, John Deere tractors, etc.

Composed of:

Part No.	Description
KL-0165-300	Base Tool without Fork (Spindle M24×1.5)
KL-0165-3301	Fork a=42 mm e=80 mm d=200 mm

Fig. 27: KL-0165-34



Fig. 28: KL-0165-35



Fig. 29: KL-0165-36



KL-0165-34 - Ball Joint Extractor, Size 3

Universally suitable.

Ideal for use on Mercedes buses, etc.

Composed of:

Part No.	Description
KL-0165-300	Base Tool without Fork (Spindle M24x1.5)
KL-0165-3401	Fork a=47 mm e=80 mm d=200 mm

KL-0165-35 - Ball Joint Extractor, Size 3

Universally suitable.

Ideal tool for the suspension ball joints found on Mercedes Sprinter (1995 onwards), VW LT (1998 onwards); upper ball joint VW T4, Mercedes Citaro EvoBus O 530 stabiliser ball joint etc.

Composed of:

Part No.	Description
KL-0165-300	Base Tool without Fork (Spindle M24x1.5)
KL-0165-3501	Fork a=33 mm e=80 mm d=200 mm

KL-0165-36 - Ball Joint Extractor, Size 3

Universally suitable.

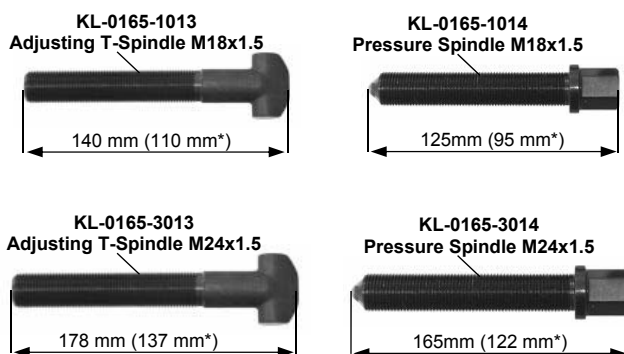
Ideal tool for the thrust rod on the reversing lever at the front axle of MAN Buses A21.

Composed of:

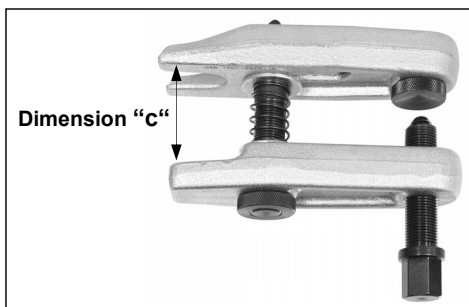
Part No.	Description
KL-0165-300	Base Tool without Fork (Spindle M24x1.5)
KL-0165-3601	Fork a=40 mm e=80 mm d=200 mm

Accessories:

Fig. 30: Extended Adjusting T-Spindle and Pressure Spindle



* The dimensions in brackets apply to the standard version.



Accessories

KL-0165-1013 - Adjusting T-Spindle, M18x1.5

KL-0165-1014 - Pressure Spindle, M18x1.5

Compatible with Base Tool KL-0165-100

The maximum dimension "c" on base tool KL-0165-100 can be enlarged by replacing the standard adjusting T-spindle and pressure spindle with the extended adjusting T-spindle and pressure spindle.

This will allow also ball joint connections in suspension and steering systems requiring a larger span width to be loosened professionally.

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

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

Compatible with Base Tool KL-0165-300

The maximum dimension "c" on base tool KL-0165-100 can be enlarged by replacing the standard adjusting T-spindle and pressure spindle with the extended adjusting T-spindle and pressure spindle.

This will allow also ball joint connections in suspension and steering systems requiring a larger span width to be loosened professionally.