



Press Tool Set (hydraulic/mechanical drive)



KL-0326-10 A KL-0326-108

EN

www.gedore-automotive.com

GEDORE Automotive GmbH

Breslauer Straße 41 78166 - Donaueschingen Postfach 1329 78154 Donaueschingen - GERMANY T +49 (0) 771 / 8 32 23-0 F +49 (0) 771 / 8 32 23-90 info.gam@gedore.com www.gedore-automotive.com

GEDORE WELTWEIT / GEDORE WORLDWIDE

Weltweite GEDORE Servicestellen / Niederlassungen finden Sie im Internet unter: www.gedore.com Worldwide GEDORE service centers / offices are listed on the Internet at: www.gedore.com

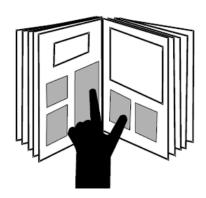
GEDORE TOOLS, INC.

Only for USA, Canada & Mexico Sólo para EE.UU., Canadá y México Seulement pour les USA, le Canada et le Mexique

7187 Bryhawke Circle, Suite 700 North Charleston, SC 29418, USA Phone +1-843 / 225 50 15 Fax +1-843 / 225 50 20 info@gedoretools.com







English

Impressum

Im Zuge der Verbesserung und Anpassung an den Stand der Technik behalten wir uns Änderungen im Hinblick auf Aussehen, Abmessungen, Gewichte und Eigenschaften sowie Leistungen vor.

Damit ist kein Anspruch auf Korrektur oder Nachlieferung bereits gelieferter Produkte verbunden. Streichungen können jederzeit vorgenommen werden, ohne dass ein rechtlicher Anspruch entsteht.

Alle Hinweise zur Benutzung und Sicherheit sind unverbindlich. Sie ersetzen keinesfalls irgendwelche gesetzlichen oder berufsgenossenschaftlichen Vorschriften.

Für Druckfehler übernehmen wir keine Haftung.

Ein Nachdruck, auch auszugsweise, bedarf der vorherigen schriftlichen Zustimmung durch GEDORE Automotive GmbH.

Alle Rechte weltweit vorbehalten.

 $Wir verweisen auf unsere Allgemeinen Geschäftsbedingungen, ersichtlich im Impressum unter {\color{red}www.gedore-automotive.com}.$

© Copyright by GEDORE Automotive GmbH Donaueschingen (GERMANY)

Impressum/Legal Notice

As part of our commitment to continuous product improvement and adaptation to state-of-the art technology, we reserve the right to make modifications to our products with regard to design, dimension, weight, features and performances at any time and without prior notice.

Thus, the right to adjustments or replacement deliveries of goods already delivered is excluded. Cuts and cancellations can be made by us at any time without notice and no legal claims against us may arise or be derived from this.

All indications regarding use and safety are given for information only and without any commitment. In no case do they substitute for legal provisions or the regulations of the Employer's Liability Insurance Association.

Errors and omissions excepted.

Any reproduction, also in extracts, is subject to the prior written consent of **GEDORE Automotive GmbH**.

We refer to our General Terms and Conditions of Sale under 'Imprint' at www.gedore-automotive.com.

© Copyright by GEDORE Automotive GmbH Donaueschingen (GERMANY)

Impressum/Mentions légales

En raison des améliorations continues que nous apportons à nos produits et pour assurer leur adaptation constante à l'évolution des techniques, nous nous réservons le droit de procéder à des modifications de nos produits quant à l'apparence, aux dimensions, aux poids, aux caractéristiques et aux performances à tout moment sans préavis et sans obligation de modifier ou de remplacer des produits précédemment livrés.

Des suppressions peuvent être effectuées à tout moment et sans préavis sans qu'elles puissent donner lieu à réclamation.

Toutes les instructions d'utilisation et conseils de sécurité sont donnés sans engagement de notre part. Ils ne se substituent en aucun cas aux réglementations légales en vigueur ou à celles émises par les associations professionnelles.

Le plus grand soin possible a été apporté à la rédaction de ce document. Toutefois, nous n'assumons aucune responsabilité pour des erreurs, omissions ou défauts d'impression

Une reproduction, même en partie, ne peut être effectuée qu'après autorisation écrite préalable de GEDORE Automotive GmbH.

Vous trouverez nos conditions générales de vente, sous Impressum/Mentions légales sur www.gedore-automotive.com.

© Copyright by GEDORE Automotive GmbH Donaueschingen (GERMANY)

0326-10Ae160927.docx







Table Of Contents



	Page
1. Essential Safety Notices	18
1.1 Safety Notices and Warnings	18
1.2 Personal Protective Equipment	18
1.3 Intended Use	19
1.4 Safe and Proper Use	19
1.5 Work Environment	19
1.6 Appropriate Users	19
2. Product Description	20
2.1 KL-0326-10 A - Hydraulic Press Tool Set	20
2.2 Technical Data (KL-0326-10 A)	20
2.3 KL-0326-108 - Mechanical Press Frame	20
2.4 Technical Data (KL-0326-108)	20
3. Preparatory Work	21
3.1 Checking the Delivery	21
3.2 Preparing the Hydraulic Press Frame	21
3.3 Preparing the Mechanical Press Frame	21
3.4 Allocation of Tool Components	21
4.1 Example of use: Removing a Suspension Ball Joint using the mechanical press frame KL-0326-108	22
4.1.1 Suspension Ball Joint Removal	22
W163, Front and Rear Axle	22
4.2 Example of use: Removing a Suspension Ball Joint using the hydraulic press frame KL-0326-100 A	23
4.2.1 Suspension Ball Joint Removal	23
W163, Front and Rear Axle	23
W211, W219, W220 and W230, Front Axle	24
W124 and W201, Front Axle	25
4.3 Example of use: Installing a Suspension Ball Joint using the mechanical press frame KL-0326-108	25
4.3.1 Suspension Ball Joint Installation	25
W163, Front and Rear Axle	
4.4 Example of use: Installing a Suspension Ball Joint using the hydraulic press frame KL-0326-100 A	26
4.4.1 Suspension Ball Joint Installation	26
W163, Front and Rear Axle	
W211, W219, W220 and W230, Front Axle	26
W124 and W201, Front Axle	27
5. Care and Storage	28
6. Accessories	28
7. Maintenance and Repair by the GEDORE Automotive Service Centre	
8. Spare Parts	28
9. Environmentally Safe Disposal	29



1. Essential Safety Notices



Before using the press tool set, it is imperative that you read and understand the Product Information. Misuse can lead to SERIOUS or FATAL INJURIES.

This Product Information is part of the press tool set. Keep the Product Information in a safe place for further reference and pass it on to subsequent users of the press tool set.

All specific vehicle data stated herein are supplied under reserve and without commitment.

1.1 Safety Notices and Warnings

For better differentiation, the warning notices in this instruction manual are classified as follows:

Warning sign	Sign reads	Meaning	
A	DANGER	NGER Indicates a hazardous situation which, if not avoided, may result in serious or fatal injuries.	
A	⚠ CAUTION Indicates a hazardous situation which, if not avoided, may result in moderate or minor inju		
ATTENTION Indicates a situation which, if not avoided, may result in possible damage to the press or its functioning, or to objects in its vicinity.		Indicates a situation which, if not avoided, may result in possible damage to the press tool set or its functioning, or to objects in its vicinity.	

A DANGER

When removing/installing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Hydraulic drive: Use hydraulic pump with pressure gauge KL-0040-2529.
- Hydraulic drive: Observe and do not exceed the maximum load capacity of the tool.
- Mechanical drive: Do not use any impact wrench or any extensions!
- Use only genuine spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.

CAUTION

A falling tool can cause injuries.

· Always wear safety shoes/boots.

ATTENTION

Risk of damage to the vehicle and tool.

- 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.
- Always refer to the vehicle manufacturer's data and instructions as only these apply to all work that is carried out on the vehicle.

1.2 Personal Protective Equipment

ALWAYS wear personal protective equipment when using the press tool set. The press tool set can cause mechanical hazards leading to injuries such as confusions, cuts or concussions.



EYE PROTECTION (see OSHA 29 CFR 1910.133 and ANSI Z87) designed to protect you from flying debris/objects must be worn when using the hydraulic press tool set.

• Particles may be ejected at very high speed when working with the press tool set and could cause serious injuries to your eyes.



SAFETY GLOVES must be worn when using the hydraulic press tool set.

• Working with the press tool set can cause skin abrasions and contusions.



SAFETY SHOES/BOOTS with slip resistant soles and steel-toe caps (see OSHA 29 CFR 1910.136 and ANSI 241) must be worn when using the press tool set.

• Falling parts can cause serious injuries to feet and toes.







1.3 Intended Use



⚠ The hydraulic press tool set is only designed to be used for removing and installing suspension ball joints on the following Mercedes vehicles: W163 (M-Class, front/rear axle), W211 (E-Class from 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 press tool set may only be used in the manner as described in this Product Information.

• Any other use can result in serious injuries or even death.

1.4 Safe and Proper Use

Take the following safety precautions in order to prevent injuries and damage that could be caused by improper handling or unsafe use of the press tool set.



Misuse can result in extremely severe injuries or even death.

- NEVER overload the press tool set.
- ALWAYS check the press tool set prior to EACH use in order to ensure that it is in good order and condition.
- ALWAYS replace all damaged or worn parts prior to using the tool set.
- ONLY use the original spare parts and accessories from GEDORE Automotive on the press tool set.
- DO NOT use an impact wrench nor any extensions!

1.5 Work Environment

Work with the press tool set should only be carried out in a safe work environment.

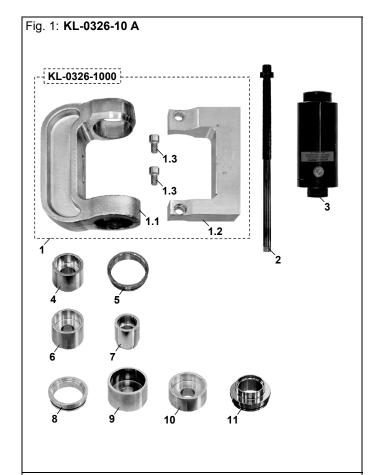
- The workplace should always be clean and tidy.
- The workplace should be sufficiently large and must be secured.

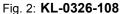
1.6 Appropriate Users

This Product Information is designed for technicians in workshops.

DO NOT allow children to use the press tool set.

Purchasers/employers purchasing the press tool set MUST ensure that any person/employee using the press tool set have read and understood this Product Information prior to using the tool. This Product Information MUST be made available to the users of the press tool set for reference at all times.







2. Product Description

2.1 KL-0326-10 A - Hydraulic Press Tool Set

Suitable for: Mercedes W163 (M-Class, front/rear axle), W211 (E-Class from 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 KL-0326-10 A hydraulic press tool set is designed to press in/press out the suspension ball joints found on the lower wishbone. With some applications, the removal and installation of the suspension ball joints can also be carried out directly on the vehicle, without having to dismount the wishbone.

Note: The hydraulic hand pump KL-0215-35 M25 (accessory) is needed to drive the hydraulic cylinder KL-0040-2500.

KL-0326-10 A - Hydraulic Press Tool Set (Fig. 1)

Pos.	Part No.	Description
1	KL-0326-1000	Press Frame (complete tool)
1.1	KL-0326-1001	Press Frame
1.2	KL-0326-1002 B	Stabilising Bracket
1.3	KL-0326-1003-1	Cheese Head Screws
2	KL-0039-1930	Pressure Spindle
3	KL-0040-2500	Hydraulic Cylinder
4	KL-0039-1642	Pressure Sleeve (Removal W163)
5	KL-0326-1111	Support Ring No. 1 - Installation: W163, - Removal: W211/W219/W220/W230
6	KL-0039-1650	Pressure Sleeve - Installation: W211/W219/W220/W230
7	KL-0039-1634	Pressure Sleeve - Removal: W211/W219/W220/W230
8	KL-0326-1312 A	Support Ring No. 4 - Installation: W124/W201/W211/W219/ W220/W230
9	KL-0326-1313 A	Sleeve - Removal: W124/W201 - Installation: W163
10	KL-0326-1314	Pressure Sleeve - Installation: W124/W201
11	KL-0326-1311	Pressure Ring No. 3 - Removal: W124/W201

2.2 Technical Data (KL-0326-10 A)

Weight:	kg
Maximum load capacity of the press frame with stabilising bracket:1	7t
Maximum load capacity of the press frame without stabilising bracket1	4t
Maximum load capacity of the hydraulic cylinder:	7t

2.3 KL-0326-108 - Mechanical Press Frame

Fits the sleeve sets of the KL-0326-..Series A mechanical alternative to KL-0326-100 A

The press frame comes with a mechanical drive. Used in conjunction with the corresponding sleeve set, it allows for the quick and easy removal and installation of suspension ball joints to be carried out in situ on the vehicle without the need for dismounting the wishbone. THE ideal tool for Mercedes vehicles.

KL-0326-108 - Mechanical Press Frame (Fig. 2)

Pos.	Part No.	Description
1	KL-0326-1000	Press Frame (complete tool)
1.1	KL-0326-1001	Press Frame
1.2	KL-0326-1002 B	Stabilising Bracket
1.3	KL-0326-1003-1	Cheese Head Screws
2	KL-0174-831	Mechanical Drive Set
2.1	KL-0174-620	Spindle, M20x2 x 230mm
2.2	KL-0174-853	Thrust Piece for Mechanical Spindle
2.3	KL-0174-547	Adaptor, 2 1/4"-14 UNS to M20x2

2.4 Technical Data (KL-0326-108)

Maximum load capacity of the press frame with stabilising bracket:17t
Maximum load capacity of the press frame without stabilising bracket:14t
Usable length of the spindle:
Drive of the spindle: 22mm



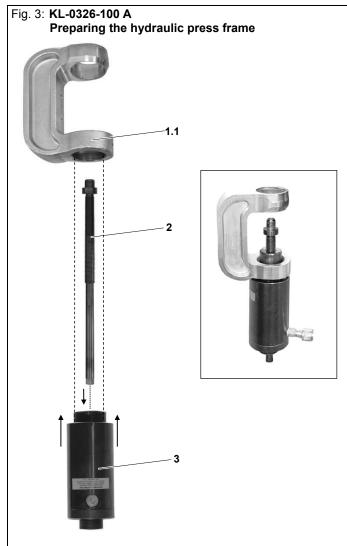
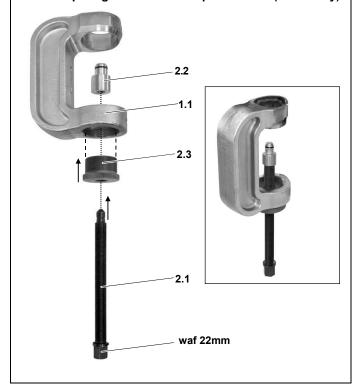


Fig. 4: KL-0326-108

Preparing the mechanical press frame (accessory)



3. Preparatory Work

Before the first commissioning of the hydraulic press tool set, check and confirm you have all the parts listed in the scope of delivery. Then, read and follow the mounting instructions.

3.1 Checking the Delivery. (See Fig. 1 and/or Fig. 2)

3.2 Preparing the Hydraulic Press Frame.

- Screw pressure spindle "2" into hydraulic cylinder "3". (Fig. 3)
- 2. Screw hydraulic cylinder"3" into press frame "1.1". (Fig. 3)
- Get the hydraulic hand pump KL-0215-35 M25 (accessory) ready for use.
- 4. Continue with Chapter 4.2, and Chapter 4.4.

3.3 Preparing the Mechanical Press Frame.

- 1. Screw adaptor "2.3" into press frame "1.1". (Fig. 4)
- 2. Screw spindle "2.1" into adaptor "2.3, place thrust piece for mechanical spindle "2.2" onto spindle "2.1" (Fig. 4)
- 3. To drive the spindle, get a suitable socket (waf 22mm) and a reversible ratchet ready for use.
- 4. Continue with Chapter 4.1, and Chapter 4.3.

Note: The mechanical press frame **KL-0326-108** is a mechanical alternative to the hydraulic press frame **KL-0326-100** A covering the same field of application.

3.4 Allocation of Tool Components:

Use on W163 (M-Class):

Removal: Pressure sleeve "4"

Installation: Sleeve "9", support ring no. 1 "5"

Use on W211 (E-Class, 2002 onwards), W219 (CLS), W220 (S-Class) and W230 (SL):

Removal: Pressure sleeve "7", support ring no. 1 "5" Installation: Support ring no. 4 "8", pressure sleeve "6"

Use on W124 (E-Class), W201 (190 Series):

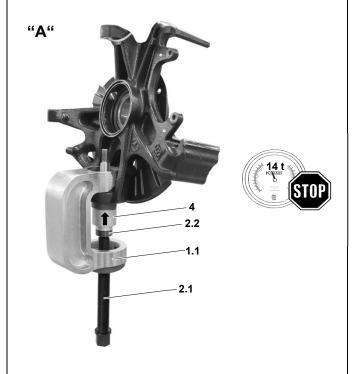
Removal: Pressure ring no. 3 "11", sleeve "9"

Installation: Support ring no. 4 "8", pressure

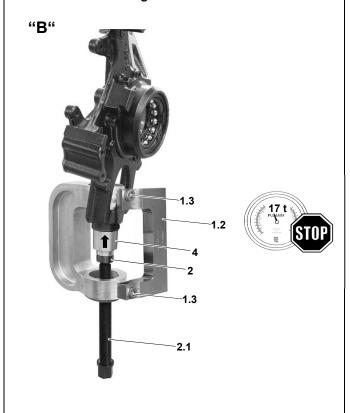
sleeve "10"



Fig. 5: Suspension ball joint, W163: Removal without stabilising bracket.



Suspension ball joint, W163: Removal with stabilising bracket.



4.1 Example of use:

Removing a Suspension Ball Joint

using the mechanical press frame KL-0326-108.

The following instructions describe the procedure for removing a suspension ball joint from the steering knuckle/stub axle housing on a W163 using the mechanical press frame KL-0326-108.

4.1.1 Suspension Ball Joint Removal

W163, Front and Rear Axle

(with direction of removal from bottom to top)

Note: If the installed suspension ball joint has been screw-fitted, remove the lock nut using the KL-0326-20 socket (accessory).

1. Place pressure sleeve "4" onto thrust piece for mechanical spindle "2.2".

2. ATTENTION

Risk of damage to the tool.

• When removing the suspension ball joint, take care to align the press frame "1.1" correctly to ensure the ball joint can pass through the upper opening without risk of collision.

Apply press frame against steering knuckle/stub axle housing as shown in Fig. 5 A.

3. Screw in spindle "2.1" until pressure sleeve "4" touches the suspension ball joint.

4. A DANGER

When removing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the press frame.
- Do not drive the spindle by means of an impact wrench.
- Only use the Original spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.

ATTENTION

Risk of damage to the tool.

- Without the stabilising bracket "1.2", the maximum load capacity of the press frame "1.1" is 14t.
- If this press-out force is not sufficient to remove the ball joint, proceed as follows: Dismount brake calliper, brake disc, and brake backing plate. Then, mount stabilising bracket "1.2" with cheese head screws "1.3" to press frame "1.1". (Fig. 5 B)

With the stabilising bracket "1.2" fitted, the maximum load capacity of the press frame "1.1" is 17t.

Using a suitable socket (waf 22mm), turn spindle "2.1" clockwise and press out ball joint.

5. Remove tool from steering knuckle/stub axle housing.





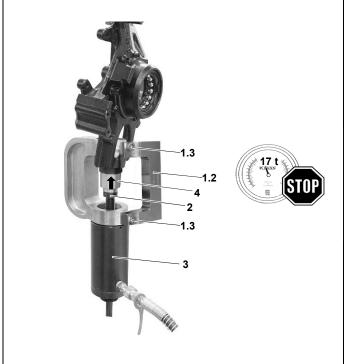
Fig. 6: Suspension ball joint, W163: Removal without stabilising bracket.

"A"



Suspension ball joint, W163:
Removal with stabilising bracket.

"B"



4.2 Example of use:

Removing a Suspension Ball Joint using the hydraulic press frame KL-0326-100 A.

The following instructions describe the procedure for removing a suspension ball joint from the lower wishbone/stub axle housing on the following vehicles: W163, W211, W219, W220, W230, W124 and W201 with the aid of the **KL-0326-100 A** hydraulic press frame.

4.2.1 Suspension Ball Joint Removal

W163, Front and Rear Axle

(with direction of removal from bottom to top)

Note: If the installed suspension ball joint has been screw-fitted, remove the lock nut using the **KL-0326-20** socket (accessory).

1. Place pressure sleeve "4" onto pressure spindle "2".

2. ATTENTION

Risk of damage to the tool.

 When removing the suspension ball joint, take care to align the press frame "1.1"correctly to ensure the ball joint can pass through the upper opening without risk of collision.

Apply press frame against steering knuckle/stub axle housing as shown in ${\bf Fig.~6~A}$.

- Screw in pressure spindle "2" until pressure sleeve "4" touches the suspension ball joint.
- Connect hydraulic cylinder to hydraulic pump KL-0215-35 M25 (accessory).

5. A DANGER

When removing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the press frame.
- Use hydraulic pump with pressure gauge KL-0040-2529.
- Only use the Original spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.

ATTENTION

Risk of damage to the tool.

• Without the stabilising bracket "1.2", the maximum load capacity of the press frame "1.1" is 14t.

If this press-out force is not sufficient to remove the ball joint, proceed as follows: Dismount brake calliper, brake disc, and brake backing plate. Then, mount stabilising bracket "1.2" with cheese head screws "1.3" to press frame "1.1". (Fig. 6 B)

With the stabilising bracket "1.2" fitted, the maximum load capacity of the press frame "1.1" is 17t.

Operate hydraulic pump and remove suspension ball joint. During the removal process, read and observe the force indicated on the pressure gauge of the hydraulic pump.

6. Remove tool from steering knuckle/stub axle housing.



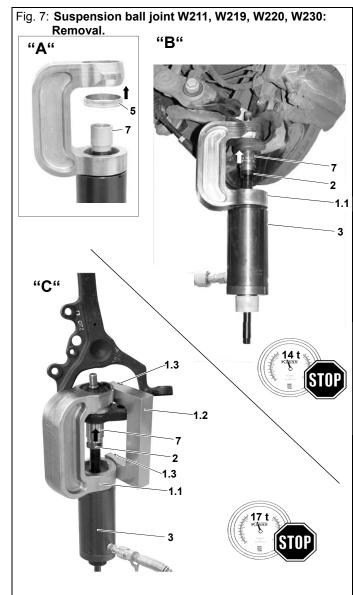
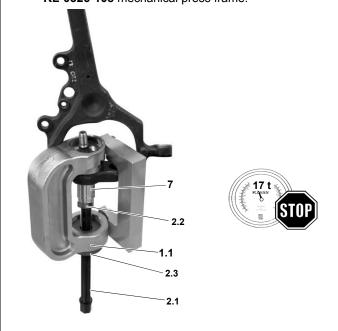


Fig. 8: Example of use Fig. 7 C in conjunction with the KL-0326-108 mechanical press frame.



W211, W219, W220 and W230, Front Axle (with direction of removal from bottom to top)

1. Place pressure sleeve "7" onto pressure spindle "2". Insert support ring no. 1 "5" into the upper opening of press frame "1.1" (Fig. 7 A).

2. ATTENTION

Risk of damage to the tool.

• When removing the suspension ball joint, take care to align the press frame "1.1" correctly to ensure the ball joint can pass through the support ring no. 1 "5" without risk of

Apply press frame against steering knuckle as shown in Fig. 7 B.

- 3. Screw in pressure spindle "2" until pressure sleeve "7" touches the suspension ball joint.
- 4. Connect hvdraulic cvlinder hydraulic numn KL-0215-35 M25 (accessory).

5. A DANGER

When removing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the press frame.
- Use hydraulic pump with pressure gauge KL-0040-2529.
- Only use the Original spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.
- ATTENTION: Risk of Damage to the Tool Set
- Without the stabilising bracket "1.2", the maximum load capacity of the press frame "1.1" is 14t.
- If this press-out force is not sufficient to remove the ball joint. proceed as follows: Dismount brake calliper, brake disc, and brake backing plate. Then, mount stabilising bracket "1.2" with cheese head screws "1.3" to press frame "1.1". (Fig. 7 C)

With the stabilising bracket "1.2" fitted, the maximum load capacity of the press frame "1.1"is 17t.

Operate hydraulic pump and remove suspension ball joint. During the removal process, read and observe the force indicated on the pressure gauge of the hydraulic pump.

Note: As shown in the example in Fig. 8, it is also possible to use the mechanical press frame KL-0326-108 instead of the hydraulic cylinder with pressure spindle.

6. Remove tool from steering knuckle.



Fig. 9: Suspension ball joint, W124 and W201: Removal.

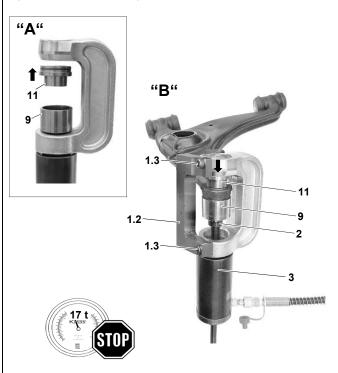
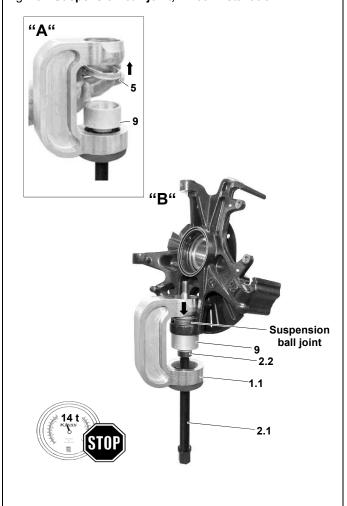


Fig. 10: Suspension ball joint, W163: Installation.



W124 and W201, Front Axle

(with direction of removal from top to bottom)

Place support sleeve "9" onto pressure spindle "2".
 Insert pressure ring no. 3 "11" into the upper opening of press frame "1.1" (Fig. 9 A).

ATTENTION

Risk of damage to the tool.

 When removing the suspension ball joint, take care to align the press frame "1.1" correctly to ensure the ball joint can be pushed into the sleeve "9" without risk of collision.

Apply press frame against wishbone as shown in Fig. 9 B. Mount stabilising bracket "1.2" with cheese head screws "1.3" to press frame.

- 2. Screw in pressure spindle "2" until sleeve "9" touches the wishbone.
- Connect hydraulic cylinder to hydraulic pump KL-0215-35 M25 (accessory).

4. A DANGER

When removing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the press frame.
- Use hydraulic pump with pressure gauge KL-0040-2529.
- Only use the Original spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.

Operate hydraulic pump and remove suspension ball joint. During the removal process, read and observe the force indicated on the pressure gauge of the hydraulic pump.

5. Remove tool from wishbone.

4.3 Example of use: Installing a Suspension Ball Joint using the mechanical press frame KL-0326-108.

The following instructions describe the procedure for installing a suspension ball joint on the steering knuckle/stub axle housing of a W163 vehicle with the aid of the mechanical press frame **KL-0326-108**.

4.3.1 Suspension Ball Joint Installation W163, Front and Rear Axle

(with direction of installation from top to bottom)

 Place sleeve "9" onto thrust piece for mechanical spindle "2.2". Insert support ring no. 1 "5" into the upper opening of press frame "1.1" (Fig. 10 A). From the bottom, insert suspension ball joint into support ring no. 1 "5".

ATTENTION

Risk of damage to the tool.

 When installing the suspension ball joint, take care to align the press frame "1.1" correctly to ensure the ball joint can be pushed into the sleeve "9" without risk of collision.

Apply press frame against steering knuckle/stub axle housing.

 Screw in spindle "2.1" until sleeve "9" touches the steering knuckle/stub axle housing. (Fig. 10 B)

3. A DANGER

When installing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the press frame.
- Do not drive the spindle by means of an impact wrench.
- Only use the Original spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.

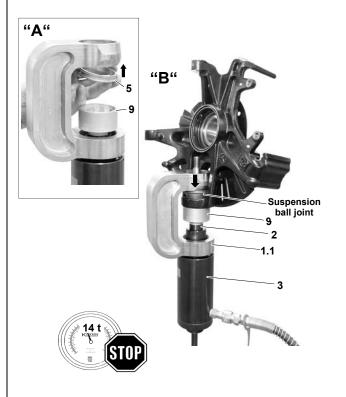
Using a suitable socket (waf 22mm), turn spindle "2.1" clockwise and press in ball joint. Stop the installation process as soon as the suspension ball joint is correctly positioned.

- 4. Remove tool from steering knuckle/stub axle housing.
- With the aid of the KL-0326-20 socket (accessory), tighten the suspension ball joint lock nut to the manufacturer's specifications.

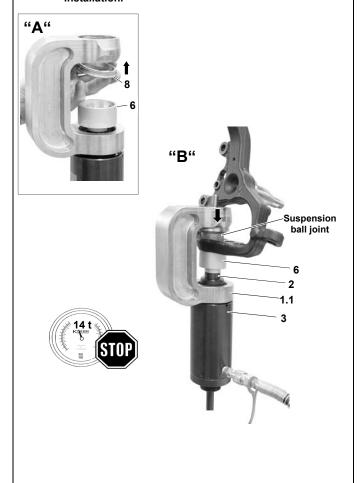




Fig. 11: Suspension ball joint, W163: Installation.



Suspension ball joint, W211, W219, W220, W230: Fig. 12: Installation



0326-10Ae160927.docx

4.4 Example of use: Installing a Suspension Ball Joint

using the hydraulic press frame KL-0326-100 A.

The following instructions describe the procedure for installing a suspension ball joint on the lower wishbone/stub axle housing of the following vehicles: W163, W211, W219, W220, W230, W124 and W201 with the aid of the hydraulic press frame KL-0326-100 A.

4.4.1 Suspension Ball Joint Installation W163, Front and Rear Axle

(with direction of installation from top to bottom)

1. Place sleeve "9" onto pressure spindle "2". Insert support ring no. 1 "5" into the upper opening of press frame "1.1" (Fig. 11 A). From the bottom, insert suspension ball joint into support ring no. 1 "5".

2. ATTENTION

Risk of damage to the tool.

• When installing the suspension ball joint, take care to align the press frame "1.1" correctly to ensure the ball joint can be pushed into sleeve "9" without risk of collision.

Apply press frame against steering knuckle/stub axle housing.

- 3. Screw in pressure spindle "2" until sleeve "9" touches the steering knuckle/stub axle housing. (Fig. 11 B)
- 4. Connect hydraulic cylinder to hydraulic pump KL-0215-35 M25 (accessory).

5. A DANGER

When installing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles

- Observe and do not exceed the maximum load capacity of the press
- Use hydraulic pump with pressure gauge KL-0040-2529.
- Only use the Original spare parts from GEDORE Automotive.
- · Always keep all parts of your body away from the axial extension of the pressure spindle.

Operate hydraulic pump and install suspension ball joint. During the installation process, read and observe the force indicated on the pressure gauge of the hydraulic pump.

Stop the installation process as soon as the suspension ball joint is correctly positioned.

- 6. Remove tool from steering knuckle/stub axle housing.
- 7. Using the KL-0326-20 socket (accessory), tighten the suspension ball joint lock nut to the manufacturer's specifications.

W211, W219, W220 and W230, Front Axle (with direction of installation from top to bottom)

1. Place pressure sleeve "6" onto pressure spindle "2". Insert support ring no. 4 "8" into the upper opening of press frame "1.1" (Fig. 12 A). From the bottom, insert suspension ball joint into support ring no. 4 "8".

2. ATTENTION

Risk of damage to the tool.

• When installing the suspension ball joint, take care to align the press frame "1.1" correctly to ensure the ball joint can be pushed into pressure sleeve "6" without risk of collision.

Apply press frame against steering knuckle.

3. Screw in pressure spindle "2" until pressure sleeve "6" touches the steering knuckle. (Fig. 12 B)



Fig. 13: Suspension ball joint, W211, W219, W220, W230: Installation

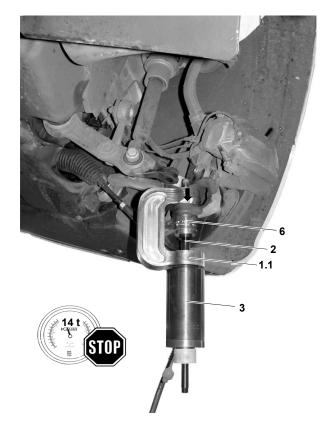
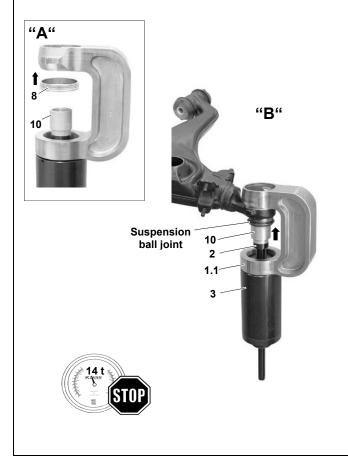


Fig. 14: Suspension ball joint, W124, W201: Installation



 Connect hydraulic cylinder to hydraulic pump KL-0215-35 M25 (accessory).

5. A DANGER

When installing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the press frame.
- Use hydraulic pump with pressure gauge KL-0040-2529.
- Only use the Original spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.

Operate hydraulic pump and install suspension ball joint. During the installation process, read and observe the force indicated on the pressure gauge of the hydraulic pump.

Stop the installation process as soon as the suspension ball joint is correctly positioned. (Fig. 13)

6. Remove tool from steering knuckle.

W124 and W201, Front Axle

(with direction of installation from bottom to top)

1. Place pressure sleeve "10" onto pressure spindle "2". Insert support ring no. 4 "8" into the upper opening of press frame "1.1" (Fig. 14 A). From the bottom, insert suspension ball joint into wishbone.

2. ATTENTION

Risk of damage to the tool.

 When installing the suspension ball joint, take care to align the press frame "1.1" correctly to ensure the suspension ball joint can be pushed into support ring No. 4 "8" without risk of collision.

Apply press frame against wishbone.

- Screw in pressure spindle "2" until pressure sleeve "10" touches the suspension ball joint. (Fig. 14 B)
- 4. Connect hydraulic cylinder to hydraulic pump **KL-0215- 35 M25** (accessory).

5. A DANGER

When installing suspension ball joints, there is a risk that the press frame could break and fall to pieces. This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the press frame.
- Use hydraulic pump with pressure gauge KL-0040-2529.
- Only use the Original spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the pressure spindle.

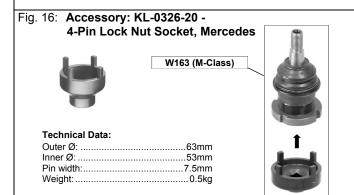
Operate hydraulic pump and install suspension ball joint. During the installation process, read and observe the force indicated on the pressure gauge of the hydraulic pump. Stop the installation process as soon as the suspension ball joint is correctly positioned.

6. Remove tool from wishbone.

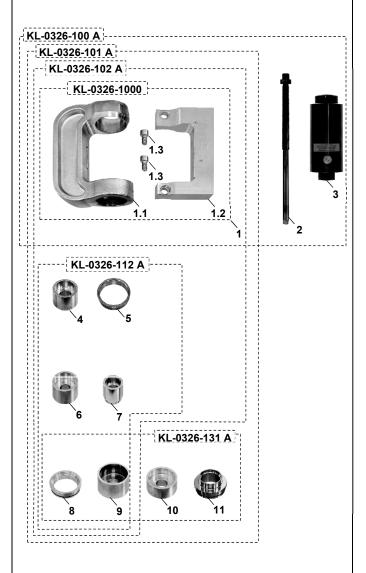


Fig. 15: Accessory: KL-0215-35 M25 - Hydraulic Hand Pump





Spare Parts Overview: KL-0326-10 A



5. Care and Storage

ATTENTION: Petroleum ether and chemical solvents can damage plastic parts. Always clean all parts after their use with a clean cloth only. In order to protect against corrosion, slightly lubricate all metal parts after their use and store them in a clean and dry place.

Accessories

KL-0215-35 M25 - Hydraulic Hand Pump

The KL-0215-35 M25 hydraulic hand pump is used to drive the hydraulic press tool set KL-0326-10 A.

Note: The hydraulic pressure and necessary force can be monitored while operating the pump at pressure gauge **KL-0040-2529** (supplied with the tool set). The pressure gauge features a tonne scale specifically adapted to our **KL-0040-2500** hydraulic cylinder (17t).

KL-0326-20 - 4-Pin Lock Nut Socket, Mercedes

Suitable for Mercedes M-Class vehicles (W163).

For tightening the suspension ball joint lock nut on the steering knuckle/stub

7. Maintenance and Repair by the **GEDORE Automotive Service Centre**

For safety reasons, as soon as damage is noticed on the hydraulic press tool set, immediate steps must be taken to prevent it from being used. For professional inspection and repair of the tool, please contact the GEDORE Automotive Service Centre.

Address:

GEDORE Automotive GmbH

Breslauerstr. 41

DE-78166 Donaueschingen

Phone: +49 (0)771 83 22 371
Email info@gedore-automotive.com
For additional information concerning the use of our hydraulic press tool set, please contact the GEDORE Automotive Service Centre.

8. Spare Parts

KL-03	326-10 A - Hyd	raulic Press Tool Set,	composed of
Pos.	Part No.	Description	Qty
-	KL-0326-100 A	Hydraulic Press Frame	1
	KL-0326-112 A	Sleeve Set, W163/W211/W219/W220/W230	1
10	KL-0326-1314	Pressure Sleeve, Ø56mm (installation W124/W201)	1
11	KL-0326-1311	Pressure Ring no. 3 (removal W124/W201)	1

KL-0326-100 A - Hydraulic Press Frame comp			posed of:
Pos.	Part No.	Description	Qty
1	KL-0326-1000	Press Frame (without drive, sleeves)	1
2	KL-0039-1930	Pressure Spindle with O-Ring, M20x350	1
3	KL-0040-2500	Hydraulic Cylinder, 17t	1

KL-0326-1000 - Press Frame (without drive, sleeves) compos				
Pos.	Part No.	Description		Qty
1.1	KL-0326-1001	Press Frame		1
1.2	KL-0326-1002 B	Stabilising Bracket		1
1.3	KL-0326-1003-1	Cheese Head Screw, M12x20		2

KL-03	326-101 A - Hy	draulic Press Tool Set without Drive com	posed of:
Pos.	Part No.	Description	Qty
1	KL-0326-1000	Press Frame (without drive, sleeves))	1
-	KL-0326-112 A	Sleeve Set, W163/W211/W219/W220/W230	1
10	KL-0326-1314	Pressure Sleeve, Ø 56mm (installation W124/W201)	1
11	KI -0326-1311	Pressure Ring (removal W124/W201)	1

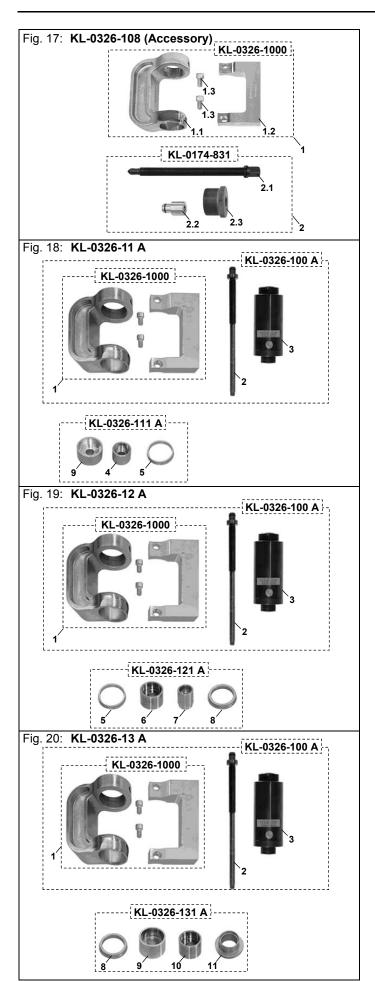
KL-0326-102 A - Hydraulic Press 1001 Set Without Drive comp			posed of:
Pos.	Part No.	Description	Qty
1	KL-0326-1000	Press Frame (without drive, sleeves)	1
-	KL-0326-112 A	Sleeve Set, W163/W211/W219/W220/W230	1

KL-0326-131 A - Sleeve Set, W124/W201 comp			posed of:
Pos.	Part No.	Description	Qty
9	KL-0326-1313 A	Sleeve, Ø 60mm (removal W124/W201)	1
10	KL-0326-1314	Pressure Sleeve, Ø 56mm (installation W124/W201)	1
11	KL-0326-1311	Pressure Ring No. 3 (removal W124/W201)	1
8	KL-0326-1312 A	Support Ring No. 4 (installation W124/W201)	1

(L-03	326-112 A - Sle	eve Set, W163/W211/W219/W220/W230 con	nposed of:
Pos.	Part No.	Description	Qty
4	KL-0039-1642	Pressure Sleeve, Ø 42mm (removal W163)	1
5	KL-0326-1111	Support Ring No.1 (Installation W163, removal W211/W219/W220/W230)	1
6	KL-0039-1650	Pressure Sleeve, Ø 50mm (installation W211/W219/W220/W230)	1
7	KL-0039-1634	Pressure Sleeve, Ø 34mm (removal W211/W219/W220/W230)	1
8	KL-0326-1312 A	Support Ring No. 4 (installation W211/W219/W220/W230)	1
9	KL-0326-1313 A	Sleeve, Ø 60mm (removal W124/W201, installation W163)	1







KL-0326-108 - Mechanical Press Frame (Accessory)

Pos.	Part No.	Description	Qty
-	KL-0326-108	Mechanical Press Frame	1
	composed of:		
1	KL-0326-1000	Press Frame (without drive, sleeves)	1
2	KL-0174-831	Mechanical Drive Set	1
Pos.	Part No.	Description	Qty
2	KL-0174-831	Mechanical Drive Set	1
	composed of		
2.1	KL-0174-620	Spindle M20x2 x 230mm	1
2.2	KL-0174-853	Thrust Piece for Mechanical Spindle	1
2.3		Adaptor 2 1/4"-14 UNS to M20x2	

KL-0326-11 A - Hydraulic Press Tool Set, Mercedes W163 Like KL-0326-10 A, but only suitable for W163 (M-Class).

Pos.	Part No.	Description	Qty
	KL-0326-11 A	Hydraulic Press Tool Set, Mercedes W163	1
	composed of:		
	KL-0326-100 A	Hydraulic Press Frame, Mercedes	1
-	KL-0326-111 A	Sleeve Set, Mercedes W163	1
Pos.	Part No.	Description	Qty
-	KL-0326-100 A	Hydraulic Press Frame, Mercedes	1
	composed of:		
1	KL-0326-1000	Press Frame	1
2	KL-0039-1930	Pressure Spindle with O-Ring, M20x350	1
3	KL-0040-2500	Hydraulic Cylinder (17t)	1
Pos.	Part No.	Description	Qty
	KL-0326-111 A	Sleeve Set, Mercedes W163	1
	composed of:		
4	KL-0039-1642	Pressure Sleeve, Ø 42mm (removal W163)	1
5	KL-0326-1111	Support Ring No. 1 (installation W163)	1
9	KL-0326-1313 A	Sleeve, Ø 60mm (installation W163)	1

KL-0326-12 A - Hydraulic Press Tool Set, Mercedes W211/W220 Like KL-0326-10 A, but only suitable for W211 (E-Class), W219 (CLS), W220 (S-Class) and W230 (SL).

Pos.	Part No.	Description	Qty
-	KL-0326-12 A	Hydraulic Press Tool Set, Mercedes W211/W219/W220/W230	1
	composed of:		
	KL-0326-100 A	Hydraulic Press Frame, Mercedes	1
	KL-0326-121 A	Sleeve Set, W211/W219/W220/W230	1
Pos.	Part No.	Description	Qty
-	KL-0326-100 A	Hydraulic Press Frame	1
	Composed of:		
1	KL-0326-1000	Press Frame (without drive, sleeves)	1
2	KL-0039-1930	Pressure Spindle with O-Ring, M20x350	1
3	KL-0040-2500	HydraulicCylinder (17t)	1
Pos.	Part No.	Description	Qty
	KL-0326-121 A	Sleeve Set, W211/W219/W220/W230	1
	composed of:		
5	KL-0326-1111	Support Ring No. 1 (removal W211/W219/W220/W230)	1
6	KL-0039-1650	Pressure Sleeve, Ø 50mm (installation W211W219W220W230)	1
7	KL-0039-1634	Pressure Sleeve, Ø 34mm (removal W211/W219W220W230)	1
8	KL-0326-1312 A	Support Ring No. 4 (installation W211/W219/W220/W230)	1

KL-0326-13 A - Hydraulic Press Tool Set, Mercedes W124/W201 Like KL-0326-10 A but only suitable for W124, W201.

Pos.	Artikel Nr.	Description	Qty
-	KL-0326-13 A	Hydraulic Press Tool Set, Mercedes W124/W201	1
	Composed of:		
-	KL-0326-100 A	Hydraulic Press Frame	1
-	KL-0326-131 A	Sleeve Set, W124/W201	1
Pos.	Part No.	Description	Qty
-	KL-0326-100 A	Hydraulic Press Frame	1
	Composed of:		
1	KL-0326-1000	Press Frame (without drive, sleeves)	1
2	KL-0039-1930	Pressure Spindle with O-Ring, M20x350	1
3	KL-0040-2500	Hydraulic Cylinder (17t)	1
Pos.	Part No	Description	Qty
-	KL-0326-131 A	Sleeve Set, W124/W201	1
	Composed of:		
8	KL-0326-1312 A	Support Ring No. 4 (installation W124/W201)	1
9	KL-0326-1313 A	Sleeve, Ø 60mm (removal W124/W201)	1
10	KL-0326-1314	Pressure Sleeve, Ø 56mm (installation W124/W201)	1
	KL-0326-1311	Pressure Ring No. 3 (removal W124/W201)	1

9. Environmentally Safe Disposal

Recycle/dispose of the Press Tool Sets, Pressing Devices, and their packaging material in compliance with the applicable national legal rules and regulations in force.



GEDORE Automotive GmbH

Breslauer Straße 41 78166 Donaueschingen Postfach 1329

78154 Donaueschingen - GERMANY

T +49 (0) 771 / 8 32 23-0 F +49 (0) 771 / 8 32 23-90 info@gedore-automotive.com www.gedore-automotive.com

Only for USA, Canada & Mexico Sólo para EE.UU., Canadá y México Seulement pour les USA,

le Canada et le Mexique

GEDORE TOOLS, INC.

7187 Bryhawke Circle, Suite 700 North Charleston, SC 29418

USA

Phone +1-843 / 225 50 15 Fax +1-843 / 225 50 20 info@gedoretools.com

GEDORE WELTWEIT GEDORE WORLDWIDE

Weltweite GEDORE Servicestellen / Niederlassungen finden Sie im Internet unter: www.gedore.com

Worldwide GEDORE service centers / offices are listed on the Internet at: www.gedore.com