

Sleeve Set for Suspension Ball Joint, Renault/Dacia

(Pressing Device for Suspension Ball Joint)









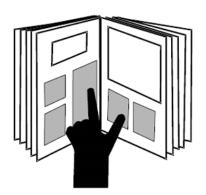
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1. Essential Safety Notices



Before using the pressing device, it is imperative that you read and understand the Instruction Manual. Misuse can lead to SERIOUS INJURIES and even DEATH.

This Instruction Manual is part of the pressing device.

Keep the Instruction Manual in a safe place for future reference and pass it on to subsequent users of the pressing device.

All vehicle-specific 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	Signal Word	Meaning	
A	WARNING	Indicates a hazardous situation which, if not avoided, could result in serious or fatal injuries.	
A	CAUTION	Indicates a hazardous situation which, if not avoided, could result in moderate or minor injuries .	
	ATTENTION	Indicates a situation which, if not avoided, may result in damage to the tool or its functioning, or to objects in its vicinity.	

A WARNING

When removing and installing suspension ball joints, there is a risk of the tool breaking.

This will lead to parts becoming projectiles.

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

When removing/installing suspension ball joints with the aid of a workshop press, there is a danger of severe injuries caused by ejected parts, inappropriate support plates and operator errors.

- Make sure the suspension ball joint completely and properly bears against the press sleeve.
- Make sure the support sleeve is properly positioned on wishbone and aligned so as to enable the suspension ball joint to be removed without risk of collision.
- Make sure you use support plates that are the right size, with the largest possible contact surface, and a load capacity of more than 17 tonnes.
- Make sure the support sleeve is securely seated.
- Make sure the press sleeve along with retaining adaptor are securely seated.
- Make sure the wishbone and press/support sleeves are perfectly aligned with the hydraulic cylinder of the workshop press.
- Observe and do not exceed the maximum load capacity of the sleeve set.
- Observe and do not exceed the maximum load capacity of the workshop press.
- Read and adhere to the workshop press manufacturer's safety instructions and regulations.
- Only use the genuine spare parts and accessories from GEDORE Automotive.

A CAUTION

The pressing device and wishbone can cause injuries to feet and toes if dropped.

- Secure pressing device against falling with safety belt KL-0040-2590 (accessory) for example.
- Always wear safety shoes/boots.

ATTENTION

Risk of damage to press sleeve.

- Press sleeve may only be used in conjunction with the retaining adaptor.
- Remove dust boot from suspension ball joint to be replaced.
- Make sure the press sleeve completely and properly bears against the suspension ball joint.

Risk of damage to dust boot and suspension ball joint during installation.

- Make sure the support sleeve is properly positioned on wishbone and aligned so as to enable the suspension ball joint to be installed without risk of collision.
- Make sure the dust boot of the suspension ball joint does not get pinched during installation.
- · Observe the installation position for the suspension ball joint specified by the vehicle manufacturer.





1.2 Personal Protective Equipment

ALWAYS wear personal protective equipment when using the pressing device.

The pressing device can cause mechanical hazards leading to injuries such as contusions, cuts or concussions.



EYE PROTECTION (see OSHA 29 CFR 1910.133 and ANSI Z87) designed to protect you from flying debris/parts must be worn when using the pressing device.

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



SAFETY GLOVES must be worn when using the pressing device.

• Working with the pressing device 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 pressing device.

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

1.3 Intended Use



1 The pressing device is only designed to remove and install the suspension ball joints that are found at the front axle wishbone of Renault and Dacia vehicles.

The pressing device may only be used for the purpose and in the manner as described in this Instruction Manual.

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

1.4 Safe and Proper Use

Take the following safety precautions to prevent injuries and damage that could be caused by improper handling or unsafe use of the pressing device.



A Misuse can result in extremely severe injuries or even death.

- NEVER overload the pressing device.
- ALWAYS check the pressing device prior to EACH use in order to ensure that it is in good order and condition.
- ALWAYS replace all damaged and worn parts prior to using the tool.
- ONLY use the genuine spare parts and accessories from **GEDORE Automotive** on the pressing device.

1.5 Work Environment

For safety reasons, work with the pressing device should only be carried out in a safe and secure work environment.

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

1.6 Target Group

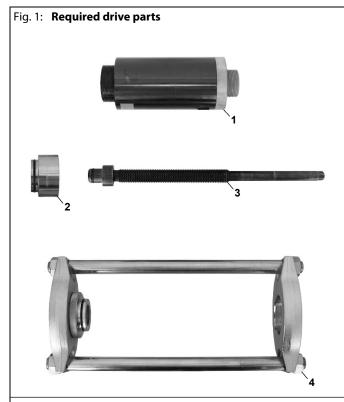
This Instruction Manual is intended for technicians/mechanics in workshops.

DO NOT allow children to use the pressing device.

The buyer of the pressing device MUST ensure that any person using the pressing device has read and understood this Instruction Manual prior to using the tool.

This Instruction Manual MUST be made available to the users of the pressing device for reference at all times.







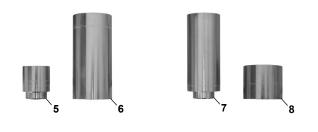


Fig. 2: Removing the dust boot.

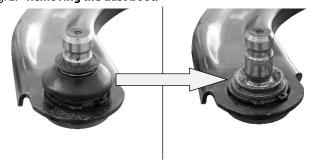


Fig. 3: Removing the snap ring if present (depending on the type of suspension ball joint).



2. Product Description

KL-1210-221 A Sleeve Set for Suspension Ball Joint, Renault / Dacia

Suitable for use on the suspension ball joints at the front axle wishbone of Renault and Dacia vehicles.

For example, fitted to Renault Clio Grandtour, Clio III, Clio IV, Grand Scénic II, Mégane II, Modus / Grand Modus, Scénic II, Twizy, Zoe; Dacia Logan, Logan Express, Logan MCV, Logan Pick-up, Sandero, Sandero II.

Especially also suitable for suspension ball joints from Sidem.

For the quick, safe and professional removal and installation of the suspension ball joint found at front axle wishbones. Replacement of the suspension ball joint can be carried out in situ on the vehicle, within a few minutes, without the need for dismantling the wishbone.

Required drive parts:

Pos.	Part no.	Description	Qty.
1	KL-0040-2500	Hydraulic Cylinder, 17t	1
2	KL-0039-1002	Retaining Adaptor	1
3	KL-0039-1930	Pressure Spindle, M20x350	1
4	KL-0039-1140	Press Frame (lightweight, short design)	1

NOTE: The hydraulic hand pump **KL-0215-35 M25** (accessory) will be needed to drive the hydraulic cylinder **KL-0040-2500**.

2.1 Scope of delivery:

Pos.	Part no.	Description	Qty.
5	KL-0711-1111	Press Sleeve, short, Ø 38mm	1
6	KL-0039-1756	Support Sleeve, long, Ø 56mm/Ø 48mm	1
7	KL-0039-1746	Press Sleeve, long, Ø 46mm/Ø 38mm	1
8	KL-0039-1654	Support Sleeve, short, Ø 54mm/Ø 46mm	1

2.2 Technical Data:

Inner length of press frame	275mm
Inner width of press frame:	115mm
Maximum load capacity of press frame:	12t
Maximum load capacity of sleeve set:	17t
Maximum load capacity of hydraulic cylinder:	17t

3. Preparatory Work

Before first use, check the pressing device 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)

3.2 Preparing the Vehicle:

- Prepare vehicle and loosen and/or remove parts as necessary in accordance with the manufacturer's instructions.
- 2. Remove dust boot from suspension ball joint to be replaced. (Fig. 2)
- 3. Depending on type of suspension ball joint, remove snap ring (circlip) if present. (Fig. 3)

3.3 Optional Use/Examples of Use:

- ► Removal and installation with the aid of hydraulic drive: See section 4.1
- ► Removal and installation with the aid of mechanical drive: See section 4.2
- ► Removal and installation with the aid of a <u>workshop press</u>: **See section 4.3**

Fig. 4: Applying the press frame against the wishbone.

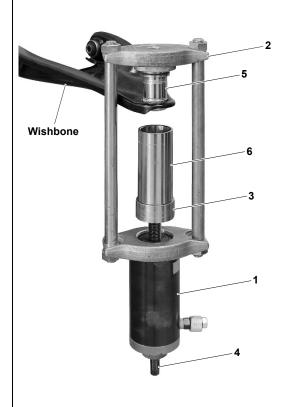
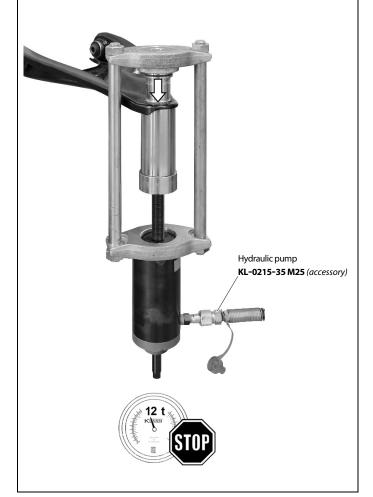


Fig. 5: Removing the suspension ball joint.



4. Examples of Use:

4.1 Suspension Ball Joint Removal/Installation (Hydraulic drive):

The following instructions describe how to remove/install a suspension ball joint from/to the front lower wishbone on a Dacia Logan, by using the pressing device in conjunction with a hydraulic drive.

(With Renault Clio II, the same procedure will apply.)

4.1.1 Removing the Suspension Ball Joint

1. A CAUTION

The pressing device can cause injuries to feet if dropped.

- Secure pressing device against falling by means of safety belt KL-0040-2590 (accessory) for example.
- Always wear safety shoes/boots.

Pre-assemble pressing device and apply it against wishbone as shown in **Fig. 4**.

2. ATTENTION

Risk of damage to press sleeve '5' during the removal process.

- Remove dust boot from suspension ball joint to be replaced.
- Make sure that press sleeve '5' completely and properly bears against the suspension ball joint.

Manually screw in pressure spindle '4' until support sleeve '6' rests completely against wishbone.

3. Connect hydraulic cylinder '1' to hydraulic pump KL-0215-35 M25 (accessory).

4. A WARNING

When removing suspension ball joints, there is a danger of the tool breaking and falling to pieces.

This will lead to parts becoming projectiles.

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

Operate hydraulic pump, remove suspension ball joint (**Fig. 5**). When removing the suspension ball joint, always monitor the hydraulic pressure and necessary force on the pressure gauge of the hydraulic pump.

- Relieve pressure on hydraulic cylinder '1'.
 Withdraw pressing device along with suspension ball joint from wishbone.
- 6. Withdraw press sleeve '5' and support sleeve '6' from pressing device.





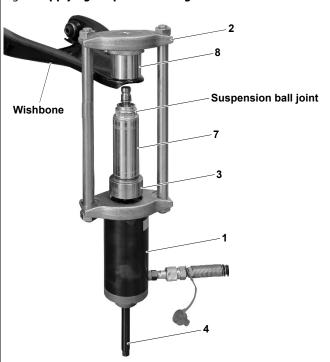


Fig. 7: Installing the suspension ball joint.

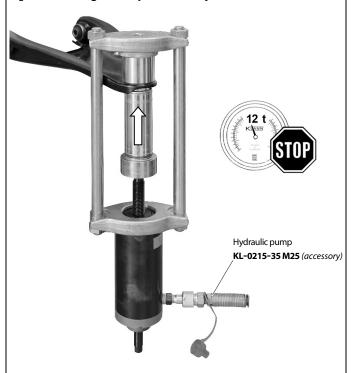


Fig. 8: Installing the snap ring if necessary (depending on type of suspension ball joint).



4.1.2 Installing the Suspension Ball Joint

1. A CAUTION

The pressing device can cause injuries to feet if dropped.

- Secure pressing device against falling by means of safety belt **KL-0040-2590** (accessory) for example.
- Always wear safety shoes/boots.

Insert suspension ball joint along with press sleeve '7' and support sleeve '8' into pressing device. Next, apply the assembled unit against wishbone as shown in Fig. 6.

2. ATTENTION

Risk of damage to dust boot and suspension ball joint during installation.

Make sure support sleeve '8' is properly positioned on wishbone and aligned so as to enable the suspension ball joint to be installed without risk of collision.

Manually screw in pressure spindle '4' until suspension ball joint completely bears against the wishbone.

NOTE: Ensure that the dust boot of the suspension ball joint does not get pinched during installation.

 Connect hydraulic cylinder '1' to hydraulic pump KL-0215-35 M25 (accessory).

4. A WARNING

When installing suspension ball joints, there is a danger of the tool breaking and falling to pieces.

This will lead to parts becoming projectiles.

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

ATTENTION

Risk of damage to dust boot and suspension ball joint during installation.

- Ensure that the dust boot of the suspension ball joint does not get pinched during installation.
- Observe the installation position of the suspension ball joint specified by the vehicle manufacturer.

Operate hydraulic pump, install suspension ball joint. (Fig. 7) When installing the suspension ball joint, always monitor the hydraulic pressure and necessary force on the pressure gauge of the hydraulic pump.

- Relieve pressure on hydraulic cylinder '1'.
 Withdraw pressing device from wishbone.
- 6. Depending on the type of suspension ball joint, install snap ring in accordance with the manufacturer's instructions. **(Fig. 8)**
- Reassemble vehicle in accordance with the manufacturer's instructions.

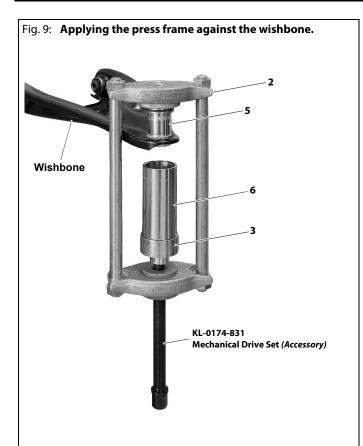
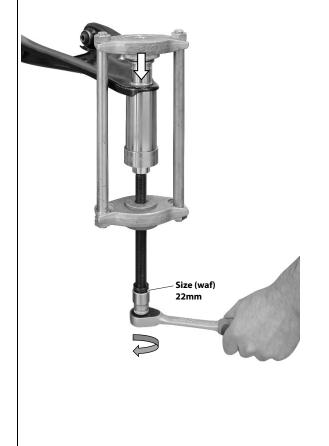


Fig. 10: Removing the suspension ball joint.



4.2 Suspension Ball Joint Removal/Installation (Mechanical drive):

The following instructions describe how to remove/install a suspension ball joint from/to the front lower wishbone on a Dacia Logan, by using the pressing device in conjunction with a mechanical drive.

(With Renault Clio II, the same procedure will apply.)

4.2.1 Removing the Suspension Ball Joint

1. A CAUTION

The pressing device can cause injuries to feet if dropped.

• Always wear safety shoes/boots.

Pre-assemble pressing device and apply it against wishbone as shown in Fig. 9.

2. ATTENTION

Risk of damage to press sleeve '5' during the removal process.

- Remove dust boot from suspension ball joint to be replaced.
- Make sure that press sleeve '5' completely and properly bears against the suspension ball joint.

Manually screw in pressure spindle of mechanical drive set KL-0174-831 (accessory) until support sleeve '6' completely bears against the wishbone.

3. A WARNING

When removing suspension ball joints, there is a danger of the tool breaking and falling to pieces.

This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the pressing device.
- Only use the genuine spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the press frame.

Operate pressure spindle of mechanical drive set KL-0174-831 (accessory) and remove suspension ball joint. (Fig. 10)

- 4. Relieve pressure spindle of mechanical drive set **KL-0174-831** (accessory) and withdraw pressing device along with suspension ball joint from wishbone.
- 5. Withdraw press sleeve '5' and support sleeve '6' from pressing device.



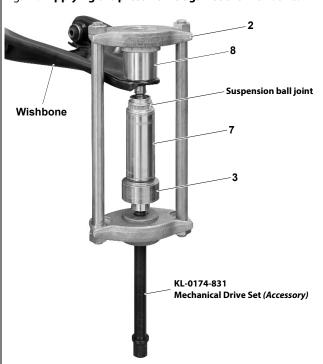


Fig. 12: Installing the suspension ball joint.

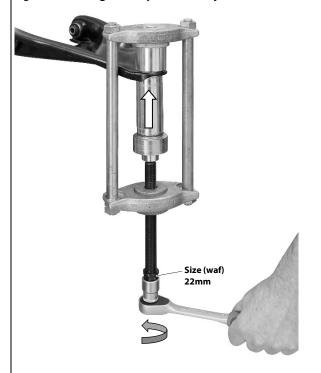


Fig. 13: Installing the snap ring if necessary (depending on the type of suspension ball joint).



4.2.2 Installing the Suspension Ball Joint

1. A CAUTION

The pressing device can cause injuries to feet if dropped.

• Always wear safety shoes/boots.

Insert suspension ball joint along with press sleeve '7' and support sleeve '8' into pressing device. Next, apply the assembled unit against wishbone as shown in Fig. 11.

2. ATTENTION

Risk of damage to dust boot and suspension ball joint during installation.

 Make sure support sleeve '8' is properly positioned on wishbone and aligned so as to enable the suspension ball joint to be installed without risk of collision.

Manually screw in the pressure spindle from the mechanical drive set **KL-0174-831** (accessory) until the suspension ball joint completely bears against the wishbone.

NOTE: Ensure that the dust boot of the suspension ball joint does not get pinched during installation.

WARNING

When installing suspension ball joints, there is a danger of the tool breaking and falling to pieces.

This will lead to parts becoming projectiles.

- Observe and do not exceed the maximum load capacity of the pressing device.
- Only use the genuine spare parts from GEDORE Automotive.
- Always keep all parts of your body away from the axial extension of the press frame.

ATTENTION

Risk of damage to dust boot and suspension ball joint during installation.

- Ensure that the dust boot of the suspension ball joint does not get pinched during installation.
- Observe the installation position of the suspension ball joint specified by the vehicle manufacturer.

Operate pressure spindle of mechanical drive set **KL-0174-831** (accessory) and install suspension ball joint. (**Fig. 12**)

NOTE: Ensure that the dust boot of the suspension ball joint does not get pinched during installation.

- Relieve pressure spindle of mechanical drive set KL-0174-831 (accessory). Withdraw pressing device from wishbone.
- 5. Depending on the type of suspension ball joint, install snap ring in accordance with the manufacturer's instructions. (Fig. 13)
- Reassemble the vehicle in accordance with the manufacturer's instructions.



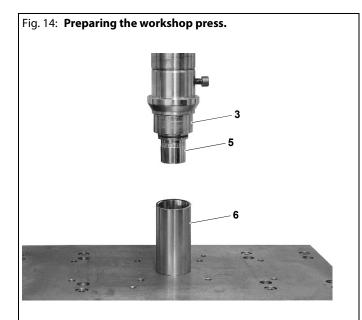


Fig. 15: Inserting the wishbone into the workshop press.

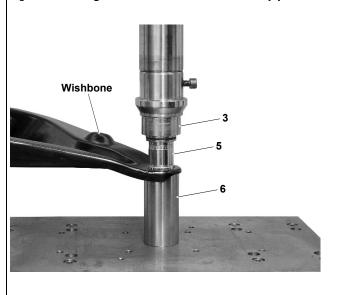


Fig. 16: Removing the suspension ball joint.



4.3 Suspension Ball Joint Removal and Installation (Workshop press):

The following instructions describe how to remove/install a suspension ball joint from/to the front lower wishbone of a Dacia Logan, by using the sleeve set in conjunction with a workshop press. (With Renault Clio II, the same procedure will apply.)

4.3.1 Removing the Suspension Ball Joint

1. ATTENTION

Risk of damage to press sleeve '5'.

• Press sleeve '5' may only be used in conjunction with retaining adaptor '3'.

Set up workshop press for suspension ball joint removal. Get ready for use/insert press sleeve '5' along with retaining adaptor '3' and support sleeve '6' into workshop press. (Fig. 14)

2. A CAUTION

The wishbone can cause injuries to feet if dropped.

• Always wear safety shoes/boots.

Insert wishbone into workshop press as shown in Fig. 15.

3. A WARNING

When removing suspension ball joints with the aid of a workshop press, there is a danger of severe injuries caused by ejected parts, inappropriate support plates and operator errors.

- Observe and do not exceed the maximum load capacity of the sleeve set.
- Observe and do not exceed the maximum load capacity of the workshop press.
- Make sure you use support plates that are the right size, with the largest possible contact surface, and a load capacity of more than 17 tonnes.
- Ensure wishbone and press/support sleeves are perfectly aligned with the hydraulic cylinder of the workshop press.
- Make sure that support sleeve '6' is securely seated.
- Read and adhere to the workshop press manufacturer's safety instructions and regulations.
- Only use the genuine spare parts and accessories from GEDORE Automotive.

ATTENTION

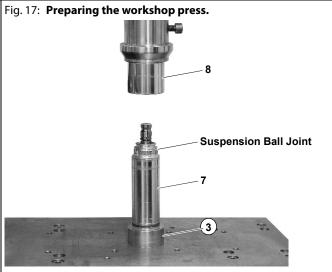
Risk of damage to press sleeve '5' during removal.

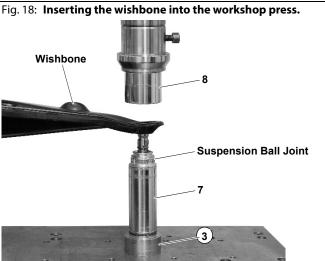
- Remove dust boot from suspension ball joint to be replaced.
- Make sure that press sleeve '5' completely and properly bears against the suspension ball joint.
- Make sure support sleeve '6' is properly positioned on wishbone and aligned so as to enable the suspension ball joint to be removed without risk of collision.

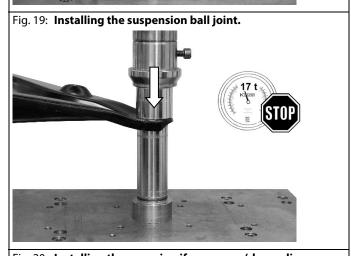
Operate workshop press pump and remove suspension ball joint. (Fig. 16) When removing the suspension ball joint, always monitor the hydraulic pressure and necessary force on the pressure gauge of the workshop press pump.

Relieve pressure on workshop press and withdraw from press: wishbone, press sleeve, adaptor, support sleeve with suspension ball joint.











4.3.2 Installing the Suspension Ball Joint

1. ATTENTION

Risk of damage to press sleeve '7'.

 Press sleeve '7' may only be used in conjunction with retaining adaptor '3'.

Set up workshop press for suspension ball joint installation. Get ready for use/insert press sleeve '7' along with retaining adaptor '3', and support sleeve '8' into workshop press. (Fig. 17)

2. A CAUTION

The wishbone can cause injuries to feet if dropped.

• Always wear safety shoes/boots.

Insert wishbone into workshop press as shown in Fig. 18.

3. A WARNING

When installing suspension ball joints with the aid of a workshop press, there is a danger of severe injuries caused by ejected parts, inappropriate support plates and operator errors.

- Observe and do not exceed the maximum load capacity of the sleeve set.
- Observe and do not exceed the maximum load capacity of the workshop press.
- Make sure you use support plates that are the right size, with the largest possible contact surface and a load capacity of more than 17 tonnes.
- Ensure wishbone, press sleeve and support sleeve are perfectly aligned with the hydraulic cylinder of the workshop press.
- Make sure that press sleeve '7' along with retaining adaptor '3' are securely seated.
- Read and adhere to the workshop press manufacturer's safety instructions and regulations.
- Only use the genuine spare parts and accessories from GEDORE Automotive.

ATTENTION

Risk of damage to press sleeve '7' during installation. Risk of damage to dust boot and suspension ball joint during installation.

- Ensure that the dust boot of the suspension ball joint does not get pinched during installation.
- Make sure press sleeve '7' completely and properly bears against the suspension ball joint.
- Make sure support sleeve '8' is properly positioned on wishbone and aligned so as to enable the suspension ball joint to be installed without risk of collision.
- Observe the installation position of the suspension ball joint specified by the vehicle manufacturer.

Operate pump of workshop press and install suspension ball joint. **(Fig. 19)** When installing the suspension ball joint, monitor the hydraulic pressure and necessary force on the pressure gauge of the workshop press pump.

NOTE: Ensure that the dust boot of the suspension ball joint does not get pinched during installation.

- Relieve pressure on workshop press and withdraw from pess: wishbone with installed suspension ball joint, press sleeve, adaptor, support sleeve.
- 5. Depending on the type of suspension ball joint, install snap ring in accordance with the manufacturer's instructions. (**Fig. 20**)
- Reassemble the vehicle in accordance with the manufacturer's instructions.





Fig. 22: Accessory: KL-0174-831

Fig. 23: Accessory: KL-0039-1002



Fig. 24: Required drive parts

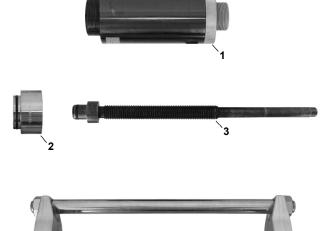




Fig. 25: KL-1210-221 A

5. Care and Storage

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

6. Accessories

KL-0215-35 M25 Hydraulic Hand Pump

The hydraulic hand pump KL-0215-35 M25 is used to drive the pressing

NOTE: When operating the pump, the hydraulic pressure and necessary force can be monitored on pressure gauge KL-0040-2529, (supplied with the tool set). The pressure gauge features an additional tonne scale that is precisely adapted to our KL-0040-2500 hydraulic cylinder (17t).

KL-0174-831 Mechanical Drive Set

The mechanical drive set KL-0174-831 enables GEDORE Automotive pressing devices, for example those consisting of press frame KL-0039-1140, KL-0326-1000 etc. and sleeves sets of the KL-0039-Series, to be driven mechanically.

KL-0039-1002 Retaining Adaptor

The retaining adaptor is required if the **KL-1210-210** sleeve set is to be used in conjunction with a workshop press.

Required drive parts:

Pos.	Part no.	Description	Qty.
1	KL-0040-2500	Hydraulic Cylinder, 17t	1
2	KL-0039-1002	Retaining Adaptor	1
3	KL-0039-1930	Pressure Spindle, M20x350	1
4	KL-0039-1140	Press Frame (lightweight, short design)	1

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

For safety reasons, as soon as damage is noticed on the tool, 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

Breslauer Str. 41 // 78166 Donaueschingen

Phone: 0771 83 22 371 / Email: info.gam@gedore.com

For additional information concerning the use of our tool, please contact the GEDORE Automotive Service Centre.

8. Spare Parts:

Pos.	Part No.	Description	Qty
-	KL-1210-221 A	Sleeve Set for Suspension Ball Joint, Renault / Dacia	
	composed of:		
5	KL-0711-1111	Press Sleeve, short, Ø 38mm	1
6	KL-0039-1756	Support Sleeve, long, Ø 56mm/Ø 48mm	1
7	KL-0039-1746	Press Sleeve, long, Ø 46mm/Ø 38mm	1
8	KL-0039-1654	Support Sleeve, short, Ø 54mm/Ø 46mm	1

9. Environmentally Safe Disposal

Recycle/dispose of the pressing device and its packaging material in an environmentally sound manner in compliance with the legal rules and regulations in force.







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

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