

Pulling Device with Hydraulic Cylinder, for Silentbloc with Ø 50 mm







KL-1002-25 KL-1002-250 KL-1002-251







1002-25e121014_g.docx

GEDORE Automotive GmbH

Breslauer Straße 41 78166 Donaueschingen Postfach 1329 78154 Donaueschingen - GERMANY Phone: +49 (0) 771 / 8 32 23-0 Fax: +49 (0) 771 / 8 32 23-90 Email: info@gedore-automotive.com Internet: www.gedore-automotive.com



Instruction manual





English en 9 - 14

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 KLANN-Spezial-Werkzeugbau GmbH.

Alle Rechte weltweit vorbehalten.

Wir verweisen auf unsere Allgemeinen Geschäftsbedingungen, ersichtlich im Impressum unter www.klann-online.de. © Copyright by KLANN-Spezial-Werkzeugbau GmbH Donaueschingen

Legal Notice Due to continuous improvements 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 the right to legal claim.

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.

All information and technical data in this document were compiled with the utmost care. However, KLANN assumes no responsibility for possible errors and omissions.

Any reproduction, also in extracts, is subject to the prior and written consent of KLANN Spezial-Werkzeugbau-GmbH.

All rights reserved. We refer to our General Terms and Conditions of Sale under 'Legal Notice' at www.klann-online.de

© Copyright by KLANN Spezial-Werkzeugbau-GmbH Donaueschingen

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 The modifications de nos produits que nous appoint a ensoin produits en produits en contracter a departient constant a revolution de nour sea produits que nous appoint a ensoin de modifications de nos produits que nous appoint a ensoin 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 éventuels. Une reproduction, même en partie, ne peut être effectuée qu'après autorisation écrite préalable de KLANN Spezial-Werkzeugbau GmbH. Tous droits réservés.

Vous trouverez nos conditions générales de vente, sous Impressum/Mentions légales sur www.klann-online.de.

© Copyright by KLANN-Spezial-Werkzeugbau GmbH Donaueschingen



Table Of Contents en

1. Essential Safety Notices10
1.1 Safety Notices and Warnings 10
1.2 Personal Protective Equipment 10
1.3 Intended Use11
1.4 Safe and Proper Use11
1.5 Work Environment11
1.6 Appropriate Users11
2. Product Description12
2.1 KL-1002-25 Pulling Device with Hydraulic Cylinder, for Silentbloc with Ø 50 mm
2.2 Technical Data 12
3. Preparatory Work12
3.1 Checking the Delivery (Fig. 1) 12
3.2 Preparing the Vehicle
3.3 Preparing the Tool
4. Metal Silentbloc Removal/Installation13
4.1 Metal Silentbloc Removal
4.2 Metal Silentbloc Installation
5. Care and Storage14
6. Accessories14
7. Maintenance and Repair by the GEDORE Automotive Service Centre
8. Spare Parts List14
9. Environmentally Safe Disposal14



1. Essential Safety Notices

A Before using the pulling device, it is imperative that you read and understand the instruction manual. Misuse can lead to SERIOUS or FATAL INJURIES.

This instruction manual is part of the pulling device. Store the instruction manual in a safe place for any further use and give it to the subsequent users of the pulling device.

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	Indicates a hazardous situation which, if not avoided, may result in serious or fatal injuries.		
A	CAUTION	DN Indicates a hazardous situation which, if not avoided, may result in moderate or minor injuries .		
	ATTENTION	Indicates a situation which, if not avoided, may result in possible damage to the pulling device or its functioning, or to objects in its vicinity.		

\Lambda DANGER

When removing and installing silentblocs, there is the risk that the tool could break and fall to pieces. This will lead to parts becoming projectiles.

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

- A falling tool can cause injuries.
- · Always wear safety shoes/boots.

ATTENTION

Risk of damage to 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.
- Only the vehicle manufacturer's data apply to any work that is carried out on the vehicle.

1.2 Personal Protective Equipment

ALWAYS wear personal protective equipment when using the pulling device. The pulling 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 objects must be worn when using the pulling device.

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



SAFETY GLOVES must be worn when using the pulling device.

• Working with the pulling 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 pulling device.

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

1.3 Intended Use

A The pulling device is designed only for the removal and installation of solid metal silentblocs having a Ø of 50 mm.

The pulling device may only be used in accordance with the instructions specified in this manual.

• Any other use can result in severe 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 pulling device.

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

- NEVER overload the pulling device.
- Always check the pulling device prior to EACH use in order to ensure that it is in good order and condition.
- Damaged or worn parts MUST be replaced prior to using the pulling device.
- ONLY use the original spare parts and accessories from GEDORE Automotive on the pulling device.

1.5 Work Environment

Work with the pulling device should only be carried out in a safe work environment.

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

1.6 Appropriate Users

This instruction manual is designed for technicians in workshops.

DO NOT allow children to use the pulling device.

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



2. Product Description

2.1 KL-1002-25 Pulling Device with Hydraulic Cylinder, for Silentbloc with Ø 50 mm

Suitable for solid metal silentblocs with Ø50 mm, for example for those fitted to Renault Midlum, Premium, Magnum.

The **KL-1002-25** pulling device is used in conjunction with a hydraulic pump thus enabling the quick, safe and professional removal and installation of solid metal silentblocs with Ø50 mm. Removal and installation of the silentblocs can be carried out on a work bench or in-situ on the vehicle if space conditions allow.

Pos.	Part No.	Description
1	KL-0040-2500	Hydraulic cylinder
2	KL-0039-1003	Retainer adaptor for hydraulic cylinder
3	KL-0039-1920-1	Pull spindle, M20
4	KL-0040-3009	Clamping nut, M20
5	KL-1011-1001	Support sleeve, long, Ø 62 mm
6	KL-1002-2501	Pressure piece, Ø 40.5 mm
7	KL-1002-2502	Pressure piece, Ø 42.3 mm

2.2 Technical Data

3. Preparatory Work

Before the first commissioning of the pulling device for silentbloc, 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 (Fig. 1)

3.2 Preparing the Vehicle.

Loosen and/or remove components as may be necessary.

3.3 Preparing the Tool.

1. ATTENTION

Risk of damage to pressure piece "6" or "7".

• It is important to know that there are two different metal silentblocs with the recessed shoulders having different diameters.

To determine the correct pressure piece, measure the diameter of the recessed shoulder on both metal silentblocs, on the one to remove as well as on the one to install. (Fig. 2)

Diameter of the recessed shoulder	Pressure piece
40 mm	6
42 mm	7

- Screw pull spindle "3" into hydraulic cylinder "1". Screw retainer adaptor "2" onto hydraulic cylinder "1". (Fig. 3)
- 3. Fasten safety belt **KL-0040-2590** (accessory) to hydraulic cylinder "1". (Fig. 4)



4. Metal Silentbloc Removal/Installation

The following instructions describe the procedure of removing and installing a metal silentbloc.

4.1 Metal Silentbloc Removal.

- 1. ATTENTION
 - Risk of damage to support sleeve "5".
 - Be sure to align support sleeve "5" so as to enable the silentbloc to be removed without risk of collision.
 - The contact surface of support sleeve "5" must rest level on the supporting surface of the bearing housing. Please note that the minimum contact surface consists of two points which are level with each other and staggered by 180°.
 - Mount tool as shown in Fig. 6.
- 2. Use safety belt KL-0040-2590 (accessory) to prevent tool from falling.
- 3. Connect hydraulic cylinder "1" to hydraulic pump (accessory).

4. A DANGER

When removing silentblocs, there is the risk that the pull spindle could break and fall to pieces. This will lead to parts becoming projectiles.

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

ATTENTION

Risk of damage to pressure piece "6" or "7" and support sleeve"5". • Make sure that pressure piece "6" or "7" and support sleeve "5" are

- Make sure that pressure piece "6" or "7" and support sleeve "5" a
 positioned correctly.
- Operate hydraulic pump and remove silentbloc.

During the removal process, read and observe the force indicated on the pressure gauge of the hydraulic pump.

Note: Remember that the piston stroke of the hydraulic cylinder "1" is 45 mm. In case the piston stroke of the hydraulic cylinder should be insufficient, release pressure on cylinder, retighten clamping nut "4", then continue removal process.

4.2 Metal Silentbloc Installation.

1. ATTENTION

- Risk of damage to support sleeve "5" .
- The contact surface of the support sleeve must rest level on the supporting surface of the bearing housing. Please note that the minimum contact surface consists of two points which are level with each other and staggered by 180°.

Mount tool on locating bore as shown in Fig. 7. Make sure that support sleeve "5" and pressure piece "6" or "7" are positioned correctly. Note:

Observe the position and direction of installation of the silentbloc specified by the vehicle manufacturer.

Lubricate metal silentbloc with an appropriate mounting paste.

2. Connect hydraulic cylinder "1" to hydraulic pump (accessory).

3. A DANGER

When installing silentblocs, there is the risk that the pull spindle could break and fall to pieces. This will lead to parts becoming projectiles.

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

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

Note: Remember that the piston stroke of the hydraulic cylinder "1" is 45 mm. In case the piston stroke of the hydraulic cylinder should be insufficient, release pressure on cylinder, retighten clamping nut "4", then continue installation process.

- Stop the installation process as soon as the silentbloc is positioned correctly. This can be checked through the support sleeve inspection window. (Fig. 8)
- 5. Remove tool and reassemble vehicle according to the manufacturer's instructions.







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, lightly lubricate all metal parts after their 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 hydraulic cylinder KL-0040-2500

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

KL-0040-2590 Safety Belt

By fastening the safety belt **KL-0040-2590** to the vehicle and to the hydraulic cylinder **KL-0040-2500**, the latter is prevented from falling.

7. Maintenance and Repair by the GEDORE Automotive Service Centre

For safety reasons, as soon as damage is noticed on the pulling device, 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

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

8. Spare Parts List

Pos.	Part No.	Description	Qty.				
-	KL-1002-25	Pulling Device with Hydraulic Cylinder, for Silentbloc with Ø 50 mm	1				
	composed of:						
-	KL-1002-250	Pulling Device without Hydraulic Cylinder, for Silentbloc with Ø 50 mm	1				
1	KL-0040-2500	Hydraulic cylinder	1				
2	KL-0039-1003	Retainer adaptor for hydraulic cylinder	1				
Pos.	Part No.	Description	Qty.				
-	KL-1002-250	Pulling Device without Hydraulic Cylinder, for Silentbloc with Ø 50 mm	1				
	composed of:						
-	KL-1002-251	Pressure Piece/Sleeve Set, for Silentbloc Ø 50 mm	1				
3	KL-0039-1920-1	Pull spindle M20	1				
4	KL-0040-3009	Clamping nut	1				
Pos.	Part No.	Description	Qty.				
-	KL-1002-251	Pressure Piece/Sleeve Set, for Silentbloc Ø 50 mm	1				
	composed of:						
5	KL-1011-1001	Support sleeve, long, Ø 62 mm	1				
6	KL-1002-2501	Pressure piece, Ø 40.5 mm	1				
7	KL-1002-2502	Pressure piece, Ø 42.3 mm	1				

9. Environmentally Safe Disposal

Recycle/dispose of the pulling device and its packaging material in compliance with the legal rules and regulations in force.