

Pulling Device with Hydraulic Cylinder, for Silentbloc Ø 64mm



KL-1002-21 A



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Table of Contents**Page**

1. Essential Safety Notices	4
1.1 Safety Notices and Warnings.....	4
1.2 Personal Protective Equipment.....	4
1.3 Intended Use	5
1.4 Safe and Proper Use.....	5
1.5 Work Environment	5
1.6 Appropriate Users.....	5
2. Product Description.....	6
2.1 KL-1002-21 A - Pulling Device with Hydraulic Cylinder, for Silentbloc Ø 64 mm.....	6
3. Preparatory Work.....	6
3.1 Checking the Delivery (Fig. 1).....	6
3.2 Preparing the Tool.....	6
3.3 Preparing the Vehicle	6
4. Silentbloc Removal, Silentbloc Installation	7
4.1 Silentbloc Removal.....	7
4.2 Silentbloc Installation.....	7
5. Care and Storage	8
6. Accessories	8
7. Maintenance and Repair by the GEDORE Automotive Service Centre	8
8. Spare Parts List.....	8
9. Environmentally Safe Disposal	8

1. Essential Safety Notices

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

This instruction manual is part of the pulling device for silentbloc. Keep the instruction manual in a safe place for future reference and pass it on to subsequent users of the pulling device for silentbloc.

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
	DANGER	Indicates a hazardous situation which, if not avoided, may result in serious or fatal injuries .
	CAUTION	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 for silentbloc or its functioning, or to objects in its vicinity.

⚠ DANGER

When removing and installing silentblocs, there is a 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.

⚠ CAUTION

The tool can cause injuries if dropped.

- Always wear safety shoes/boots.
- Use safety belt **KL-0040-2590** to prevent tool from falling.

ATTENTION

- Lubricate pull spindle with molybdenum disulphide paste **KL-0014-0030** (accessory).

1.2 Personal Protective Equipment

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

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



SAFETY GLOVES must be worn when using the pulling device for silentbloc.

- Working with the pulling device for silentbloc 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 for silentbloc.

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

1.3 Intended Use

- ⚠** The pulling device for silentbloc is only designed to be used for the removal and installation of silentblocs.
The pulling device for silentbloc may only be used for the purpose and in the manner as described in this 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 pulling device for silentbloc.

- ⚠** Misuse can result in extremely severe injuries or even death.
 - NEVER overload the pull spindle.
 - DO NOT use any impact wrench nor any extensions!
 - ALWAYS replace all damaged and worn parts prior to using the tool.
 - ONLY use Original GEDORE Automotive spare parts and accessories on the pulling device for silentbloc.

1.5 Work Environment

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

- The workplace should be clean and tidy.
- The workplace should 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 for silentbloc.

Purchasers/employers purchasing the pulling device for silentbloc MUST ensure that any person using the pulling 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 pulling device for silentbloc for reference at all times.

Fig. 1: KL-1002-21 A

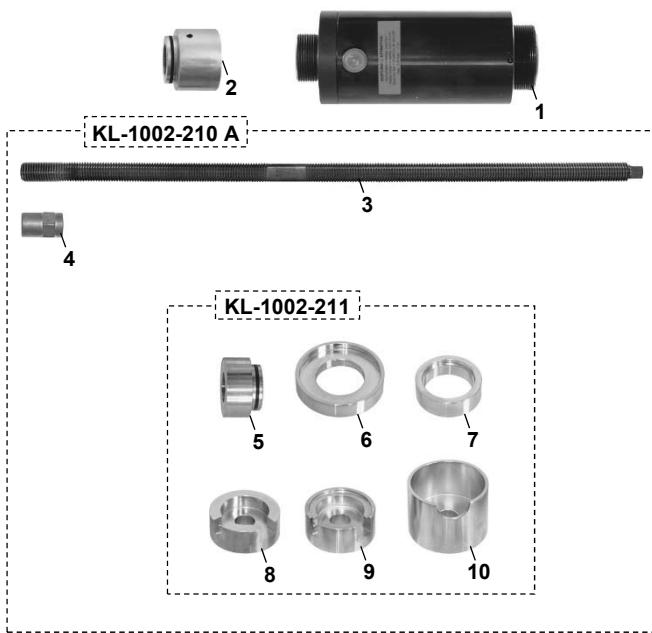


Fig. 2: Silentbloc and Leaf Spring Bearing Bracket.



Fig. 3: Hydraulic Cylinder, Pull Spindle, Adaptor.



Fig. 4: Fixing the safety belt to hydraulic cylinder.



2. Product Description

2.1 KL-1002-21 A - Pulling Device with Hydraulic Cylinder, for Silentbloc Ø 64mm

Suitable for Renault Magnum/Premium/Midium.

The KL-1002-21 A pulling device is used in conjunction with a hydraulic pump, thus allowing for the quick, safe and professional removal and installation of the silentblocs having a Ø of 64mm as found on leaf spring bearing brackets. 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 (17t)
2	KL-0039-1003	Retaining Adaptor for Hydraulic Cylinder
3	KL-0039-1920-1	Pull Spindle, M20
4	KL-0040-3009	Clamping Nut, M20
5	KL-0039-1002	Retaining Adaptor for Clamping, Nut M20
6	KL-1002-2102	Support Ring (silentbloc installation)
7	KL-1002-2103	Pressure Piece (silentbloc removal)
8	KL-1002-2101 A	Pressure Piece (silentbloc installation)
9	KL-1002-2105	Pressure Piece (silentbloc installation)
10	KL-1002-2104 A	Support Sleeve, short, (silentbloc removal)

2.2 Technical Data

Maximum load capacity of the hydraulic cylinder: 17t
Maximum load capacity of the pull spindle: 20t

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 Tool

1. Screw pull spindle "3" into hydraulic cylinder "1".
Screw retaining adaptor "2" on hydraulic cylinder "1".
(Fig. 3)
2. Fix safety belt KL-0040-2590 to hydraulic cylinder "1".
(Fig. 4)

3.3 Preparing the Vehicle

Loosen and/or remove components/parts as may be necessary.

Fig. 5: Removing a silentbloc.

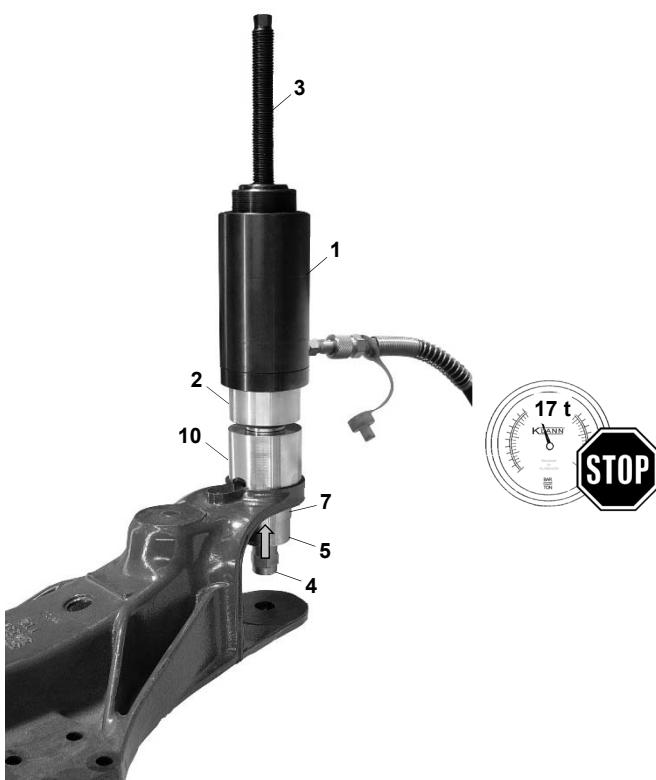
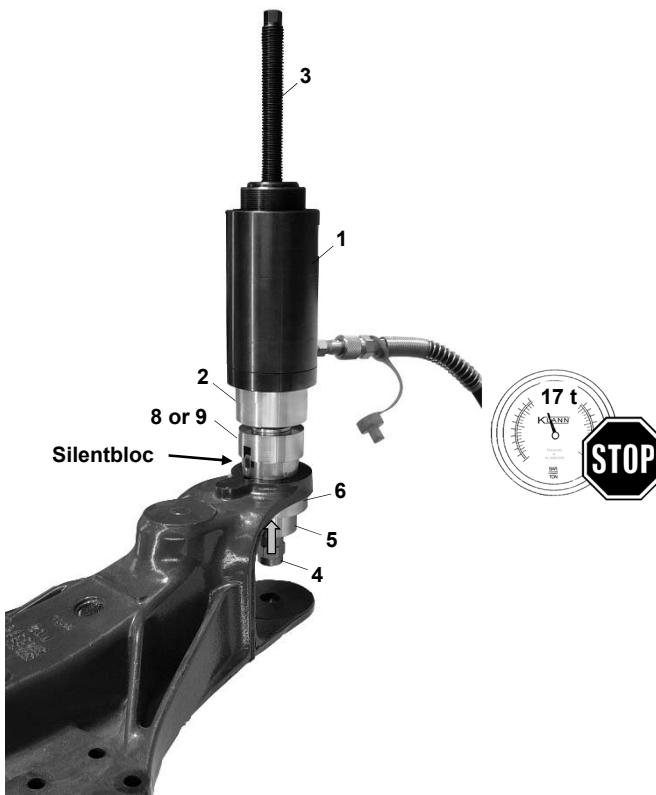


Fig. 6: Installing a silentbloc.



4. Silentbloc Removal, Silentbloc Installation

The following instructions describe the procedure of removing and installing a silentbloc on the leaf spring bearing bracket.

4.1 Silentbloc Removal.

1. Assemble/mount tool as shown in **Fig. 5**.
2. Connect hydraulic cylinder “1“ to hydraulic pump (accessory).
3. **DANGER**
When removing the silentbloc, there is a risk that the pull spindle “3“ could break and fall to pieces. This will lead to parts becoming projectiles.
 - Observe and do not exceed the maximum load capacity of pull spindle “3“.
 - 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 “7“ and support sleeve “10“. • Make sure that pressure piece “7“ and support sleeve “10“ are correctly seated.

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

4.2 Silentbloc Installation.

1. Assemble/mount tool as shown in **Fig. 6**.
Note: Observe the position/direction of installation of the silentbloc specified by the vehicle manufacturer.
2. Connect hydraulic cylinder “1“ to hydraulic pump (accessory).
3. **DANGER**
When installing the silentbloc, there is a risk that the pull spindle “3“ 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 “3“.
 - 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 “8“ or “9“, support ring “6“ and to the silentbloc.

• Make sure that the appropriate pressure piece “8 or 9“, support ring “6“ as well as the silentbloc are correctly seated.

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

4. Stop the installation process as soon as the silentbloc is correctly positioned.
5. Remove the pulling device, check the position of the silentbloc and reassemble the vehicle in accordance with 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, slightly lubricate all metal parts after their use and store them in a clean and dry place.

Fig. 7: Accessory: KL-1002-1010


Maximum load capacity of the M20 pull spindle: 20t

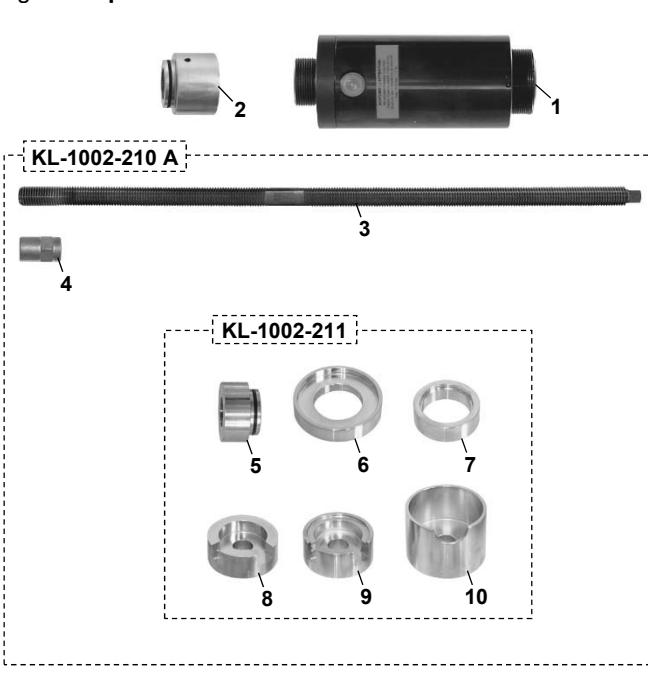
Fig. 8: Accessory: KL-1002-1020


Maximum load capacity of the M16 pull spindle: 13t

Fig. 9: Accessory: KL-0215-35 M25


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 specifically adapted to our **KL-0040-2500** hydraulic cylinder (17t).

Fig. 10: Accessory: KL-0040-2590

Fig. 11: Spare Parts: KL-1002-21 A


6. Accessories

KL-1002-1010 - Drive Set M20

for Hydr. Cyl. with 89mm Retaining Ø

This drive set is needed if the **KL-1002-21 A** silentbloc tool set is to be used with a hydraulic cylinder other than one from **GEDORE Automotive**.

Pos.	Part No.	Description	Qty.
-	KL-1002-1010	Drive Set M20 for Hydr. Cyl. with 89mm Retaining Ø	1
composed of:			
2 (N1)	KL-1002-1011	Retaining Adaptor for Hydr. Cyl. with 89mm Retaining Ø	1
3 (N1)	KL-1002-1012-1	Pull Spindle, M20 to UNC 1"-8	1
4 (N1)	KL-0040-3009	Clamping Nut, M20	1

KL-1002-1020 - Drive Set M16

for Hydr.Cyl. with 89mm Retaining Ø

This drive set is needed if the **KL-1002-21 A** silentbloc tool set is to be used with a hydraulic cylinder other than one from **GEDORE Automotive**.

Pos.	Part No.	Description	Qty.
-	KL-1002-1020	Drive Set M16 for Hydr. Cyl. with 89mm Retaining Ø	1
composed of:			
2 (N2)	KL-1002-1011	Retaining Adaptor for Hydr. Cyl. with 89mm Retaining Ø	1
3 (N2)	KL-1002-1016-1	Pull Spindle, M16 to UNC 1"-8	1
4 (N2)	KL-0039-1916-3	Clamping Nut, M16	1

KL-0215-35 M25 - Hydraulic Hand Pump

The **KL-0215-35 M25** hydraulic hand pump is used to drive the hydraulic cylinder **KL-0040-2500**.

KL-0040-2590 - Safety Belt

By fixing 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 for silentbloc, 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**.

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

8. Spare Parts List

Pos.	Part No.	Description	Qty.
-	KL-1002-21 A	Pulling Device with Hydraulic Cylinder, for Silentbloc with Ø 64mm	1
composed of:			
-	KL-1002-210 A	Pulling Device without Hydraulic Cylinder, for Silentbloc with Ø 64mm	1
1	KL-0040-2500	Hydraulic Cylinder (17t)	1
2	KL-0039-1003	Retaining Adaptor for Hydraulic Cylinder	1
Pos.	Part No.	Description	Qty.
-	KL-1002-210 A	Pulling Device without Hydraulic Cylinder, for Silentbloc with Ø 64mm	1
composed of:			
-	KL-1002-211	Pressure Piece/Sleeve Set	1
3	KL-0039-1920-1	Pull Spindle, M20	1
4	KL-0040-3009	Clamping Nut, M20	1
Pos.	Part No.	Description	Qty.
-	KL-1002-211	Pressure Piece/Sleeve Set	1
composed of:			
5	KL-0039-1002	Retaining Adaptor for Clamping Nut, M20	1
6	KL-1002-2103	Pressure Piece (silentbloc removal)	1
7	KL-1002-2102	Support Ring (silentbloc installation)	1
8	KL-1002-2101 A	Pressure Piece (silentbloc installation)	1
9	KL-1002-2105	Pressure Piece (silentbloc installation)	1
10	KL-1002-2104 A	Support Sleeve, short (silentbloc removal)	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.