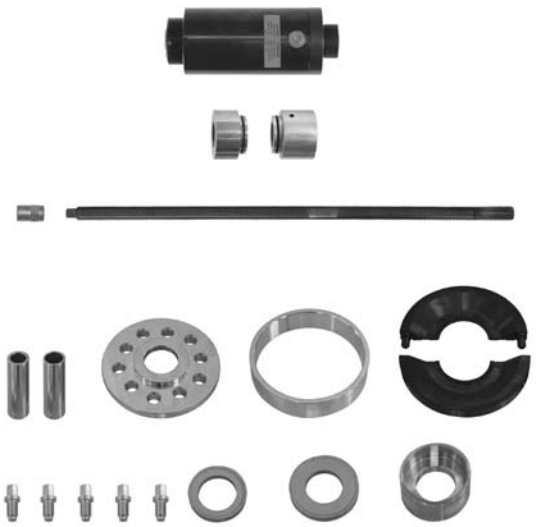
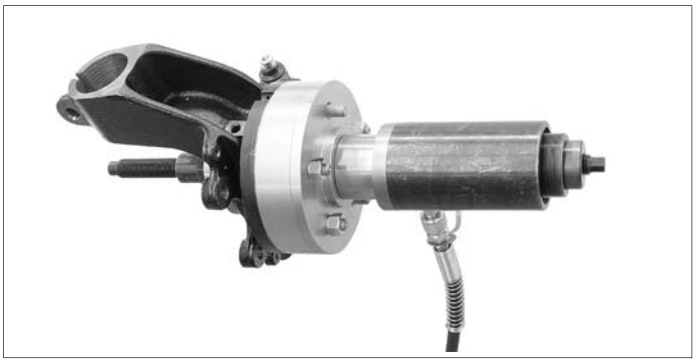
GEDORE

TOOLS FOR LIFE

Wheel Bearing Tool, Ø78 mm and Ø82 mm, with hydraulic cylinder



KL-0041-46 D
KL-0041-460
KL-0041-461



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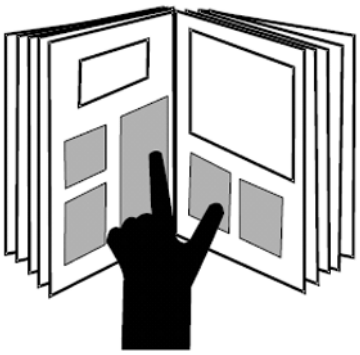

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1. Essential Safety Notices

⚠ Before using the wheel bearing tool, it is imperative to read and understand the instruction manual. Misuse can lead to SERIOUS or FATAL INJURIES.
This instruction manual is part of the wheel bearing tool. Store the instruction manual in a safe place for any further use and give it to the subsequent users of the wheel bearing tool.
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
⚠	**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 wheel bearing tool or its functioning, or to objects in its vicinity.

⚠ **DANGER**

When removing and installing wheel bearings, 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 tool.
- 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 tool.

⚠ **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.
- Only the vehicle manufacturer's data apply to any work on the vehicle.

1.2 Personal Protective Equipment

ALWAYS wear personal protective equipment when using the wheel bearing tool. The wheel bearing tool 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 wheel bearing tool.

- Particles may be ejected at high speed while working with the wheel bearing tool and could cause serious injuries to your eyes.

SAFETY GLOVES must be worn when using the wheel bearing tool.

- Working with the wheel bearing tool 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 wheel bearing tool.

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

1.3 Intended Use

⚠ The wheel bearing tool should only be used for installing wheel hub bearing units on vehicles with bearing-Ø78 mm, e.g. Ford Focus II, C-Max (from 10/03 onwards); Mazda 3 (from 10/03 until 06/09) Volvo C30, C70 II, S40 II, V50, and vehicles with bearing-Ø82 mm, e.g. Ford S-Max (from 2006 onwards), Galaxy (from 2006 onwards), Mondeo IV (from 2006 onwards); Volvo S60 II, S80 II, V60, V70 III (from 10/2007 onwards), XC60, XC70 II.

The wheel bearing tool 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 wheel bearing tool:

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

- NEVER overload the wheel bearing tool.
- Always check the wheel bearing tool prior to EACH use to ensure that it is in good order and condition.
- Damaged or worn parts MUST be replaced prior to use.
- ONLY use Original GEDORE AUTOMOTIVE spare parts and accessories on the wheel bearing tool.

1.5 Work Environment

Work with the wheel bearing tool 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 wheel bearing tool.

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

Fig. 1: **KL-0041-46 D**

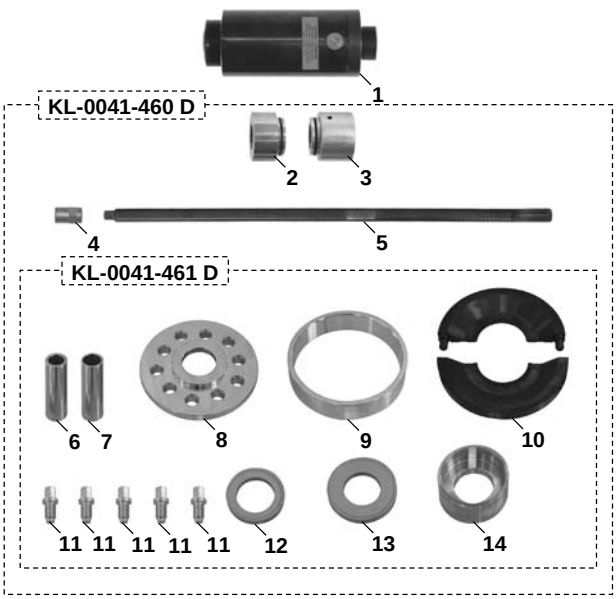


Fig. 2: **Wheel Hub Bearing Unit Removal.**

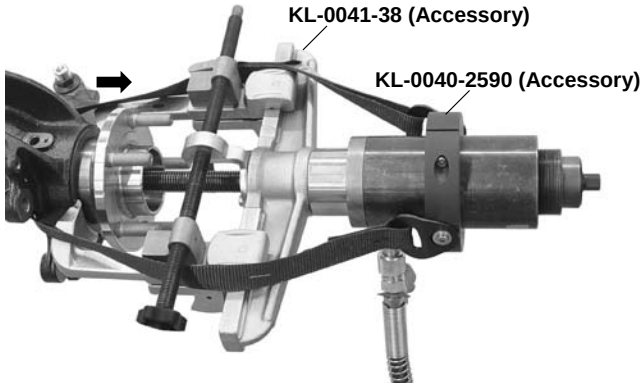


Fig. 3: **Wheel Hub Bearing Units**

Wheel nut system (Technique 1)

Wheel bolt system (Technique 2)

2. Product Description

2.1 KL-0041-46 D - Wheel bearing tool

Ø78 mm and Ø82 mm, with hydraulic cylinder

Suitable for vehicles with bearing-Ø78 mm, e.g. Ford Focus II, C-Max (from 10/03 onwards); Mazda 3 (from 10/03 until 06/09) Volvo C30, C70 II, S40 II, V50

and vehicles with bearing-Ø82 mm, e.g. Ford S-Max (from 2006 onwards), Galaxy (from 2006 onwards), Mondeo IV (from 2006 onwards); Volvo S60 II, S80 II, V60, V70 III (from 10/2007 onwards), XC60, XC70 II.

Designed for the professional installation of wheel hub bearing units in-situ on the vehicle. Due to its special design, this tool ensures that during the installation process the applied pressing force will only be distributed on the outer bearing race and not on the wheel hub. This prevents damage to the bearing.

Note: A hydraulic pump is needed to drive the hydraulic cylinder **KL-0040-2500**.

Pos.	Part No.	Description	Make and Model			
			Focus, C30, C70 S40, V50	Mazda 3	S-Max, Galaxy Mondeo	S60, S80, V60, V70, XC60, XC70
			Wheel nuts			Wheel bolts
1	KL-0040-2500	Hydraulic cylinder	X	X	X	X
2	KL-0039-1002	Retainer adaptor for clamping nut	X	X	X	X
3	KL-0039-1003	Retainer adaptor for hydraulic cylinder	X	X	X	X
4	KL-0040-3009	Clamping nut	X	X	X	X
5	KL-0039-1920-1	Pull spindle	X	X	X	X
6	KL-0041-4601	Guide sleeve Ø29.5 mm			X	X
7	KL-0041-4602	Guide sleeve Ø26.3 mm	X	X		
8	KL-0041-4608 D	Cover	X	X	X	
9	KL-0041-4607	Housing	X	X	X	
10	KL-0041-4600 D	Clamping jaws (pair) Ø78 mm	X	X	X	X
11	KL-0041-3931	Pressure screw M14x1.5 (5 pcs.)				X
12	KL-0039-1272	Pressure ring Ø72 mm				X
13	KL-0039-1288	Pressure ring Ø88 mm	X		X	X
14	KL-0039-1682	Support sleeve Ø82 mm		X		

2.2Technical Data

Maximum load capacity of the pull spindle: ..... 20 t

Maximum load capacity of the hydraulic cylinder:..... 17 t

3. Preparatory Work

Before the first commissioning of the wheel bearing tool, 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 all necessary components.
Use wheel hub puller **KL-0041-38** (accessory) to remove the wheel hub bearing unit. **(Fig. 2)**

Note: Use safety belt **KL-0040-2590** (accessory) to prevent tool from falling.

Technique 1 (wheel nuts)

Fig. 4: **Mount clamping jaws.**

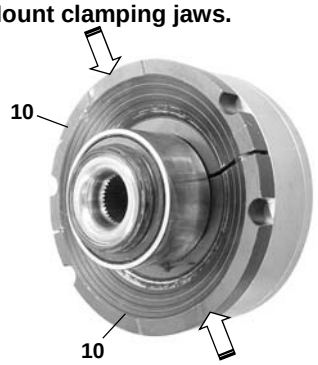


Fig. 5: **Mount tool.**

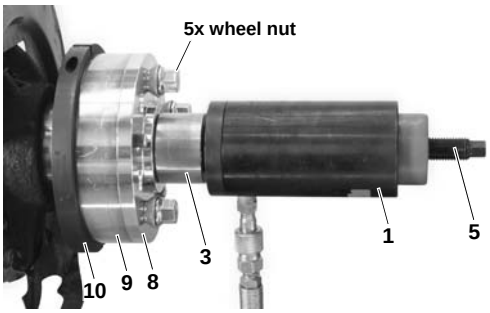
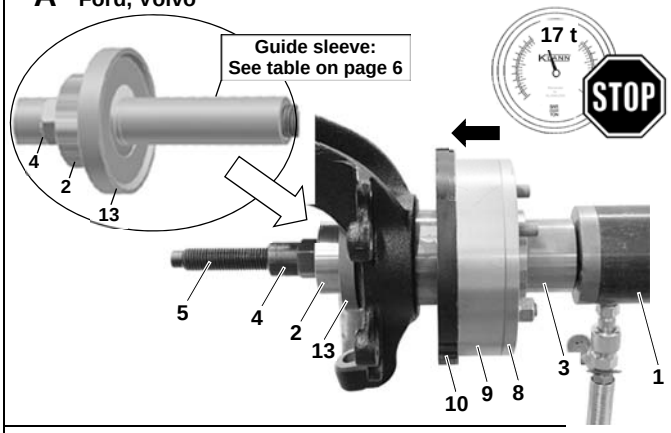
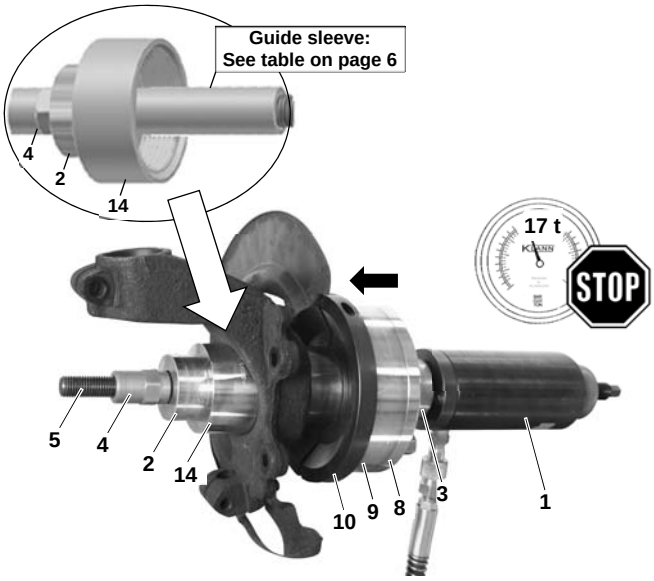


Fig. 6: **Install Wheel Hub Bearing Unit.**

"A" Ford, Volvo



"B" Mazda 3



4. Wheel Hub Bearing Unit Installation

These instructions describe the procedure of installing a wheel hub bearing unit.

Technique 1 (Wheel Nuts)

1. ***ATTENTION***
   Risk of damage to pair of clamping jaws **"10"** and wheel hub bearing unit.
   - Make sure that clamping jaws **"10"** are correctly positioned on the wheel hub bearing unit.

     Mount clamping jaws **"10"** to wheel hub bearing unit as shown in **Fig. 4**.

2. Mount tool to wheel bearing housing and secure with wheel nuts as shown in **Fig. 5 and 6**.
   Note: Do not tighten the wheel nuts.

3. Connect hydraulic cylinder **"1"** to hydraulic pump (accessory).

4. ⚠ **DANGER**
   When installing wheel hub bearing units with the aid of the hydraulic cylinder **KL-0040-2500** (accessory), 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 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.

     Operate hydraulic pump and install wheel hub bearing unit. **(Fig. 6)**
     During the installation process, read the required force on the pressure gauge of the hydraulic pump.

5. Stop the installation process as soon as the wheel hub bearing unit has reached its correct position.

6. Remove tool from wheel bearing housing. Check position of wheel hub bearing unit and reassemble vehicle according to the manufacturer's directions and instructions.

Technique 2 (wheel bolts)

Fig. 7: **Mount clamping jaws.**

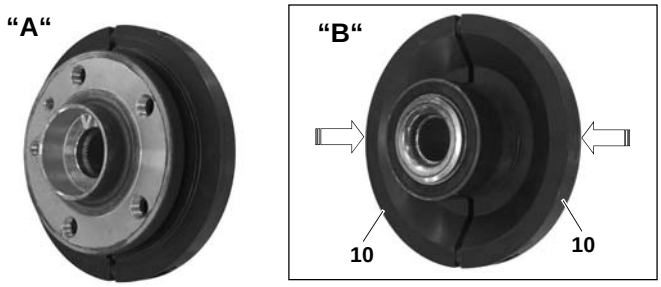
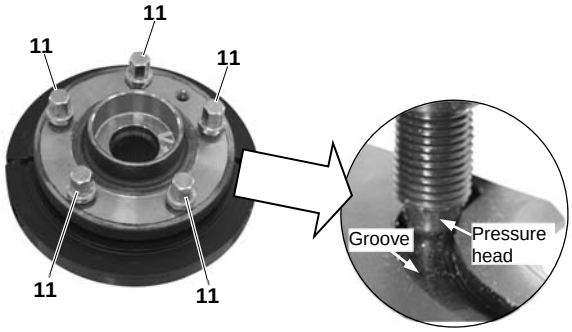


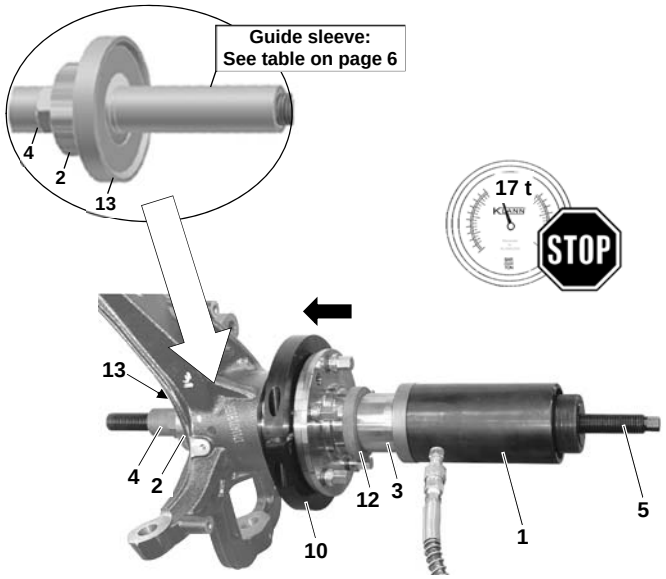
Fig. 8: **Mount pressure screws.**

"A" Uniformly screw pressure screws into wheel hub.



"B" Uniformly tighten pressure screws by hand.

Fig. 9: **Mount tool.**
Install wheel hub bearing unit



Technique 2 (Wheel Bolts)

7. ***ATTENTION***
   Risk of damage to pair of clamping jaws **"10"** and wheel hub bearing unit.
   - Make sure that clamping jaws **"10"** are correctly positioned on the wheel hub bearing unit.

   Mount clamping jaws **"10"** to wheel hub bearing unit as shown in **Fig. 7**.

8. Uniformly screw in pressure screws **"11"** into wheel hub until the pressure heads of the screws engage and fit the groove of the clamping jaws **(Fig. 8 A)**. By hand, uniformly tighten pressure screws in a crosswise sequence. **(Fig. 8 B)**.
   Note: If necessary, check to make sure that screws are level with each other using a vernier calliper.

9. Mount tool to wheel bearing housing as shown in **Fig. 9**.

10. Connect hydraulic cylinder **"1"** to hydraulic pump (accessory).

11. ⚠ **DANGER**
    When installing wheel hub bearing units with the aid of the hydraulic cylinder **KL-0040-2500** (accessory), 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 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.

    Operate hydraulic pump and install wheel hub bearing unit. **(Fig. 9)**
    During the installation process, read the required force on the pressure gauge of the hydraulic pump.

12. Stop the installation process as soon as the wheel hub bearing unit has reached its correct position.

13. Remove tool from wheel bearing housing. Check position of wheel hub bearing unit and reassemble vehicle according to the manufacturer's directions and instructions.

5. Care and Storage

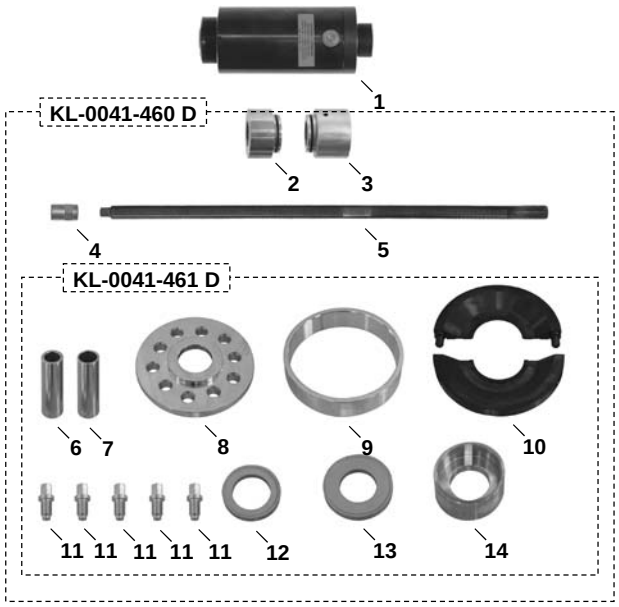
ATTENTION: Petroleum ether and chemical solvents can damage plastic parts. Always clean all parts after their use with a clean cloth only.
In order to protect against corrosion, lightly lubricate all metal parts after their use and store them in a clean and dry place.

Fig. 10: **Accessory: KL-0215-35 M25**

Fig. 11: **Accessory: KL-0041-380**

Fig. 12: **Accessory: KL-0040-2590**

Fig. 13: **Spare parts: KL-0041-46 D**



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**.

KL-0041-380 Wheel Hub Puller with Adjusting Spindle, without Hydraulic Cylinder (German Utility Model)

The wheel hub puller: **KL-0041-380** enables the quick, safe, and accurate extraction of wheel hub bearing units or wheel hubs. For this, the hydraulic cylinder **KL-0040-2500** and pull spindle M20 x 550 mm **KL-0039-1920-1** are necessary. Even bonded, seized or corroded wheel hub bearing units or wheel hubs are no longer an issue thanks to this tool.

Due to its special design, the wheel hub puller allows the extraction of a wide range of different wheel hubs equipped with diameters of up to 250 mm.

Note: The plates **KL-0041-3821** and **KL-0041-3822** are used as distance adjustment plates. They are needed if during the removal of a wheel hub it is necessary to support on the rear side of the hooks and if the supporting surface is not even.

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 wheel bearing tool, immediate steps must be taken to prevent it from being used. For professional checking and repair of the tool, please contact the GEDORE AUTOMOTIVE Service Centre.

Address:
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Breslauerstr. 41
DE-78166 Donaueschingen
Phone: +49 (0)771 83 22 371
Email: service@gedore-automotive-online.de
For additional information concerning the use of our wheel bearing tool, please contact the GEDORE AUTOMOTIVE Service Centre.

8. Spare Parts List

Pos.	Part No.	Description	Qty.
	KL-0041-46 D	**Wheel bearing tool with hydr. cyl.**	**1**
	bestehend aus:		
	KL-0041-460 D	**Wheel bearing tool without hydr. cyl.**	**1**
1	KL-0040-2500	Hydraulic cylinder 17 t	1

Pos.	Part No.	Description	Qty.
	KL-0041-460 D	**Wheel bearing tool without hydr. cyl.**	**1**
	bestehend aus:		
	KL-0041-461 D	**Upgrade Kit Volvo, Ford, Mazda**	**1**
2	KL-0039-1003	Retainer adaptor for hydraulic cylinder	1
3	KL-0039-1002	Retainer adaptor for clamping nut	1
4	KL-0040-3009	Clamping nut, M20	1
5	KL-0039-1920-1	Pull spindle M20	1

Pos.	Part No.	Description	Qty.
	KL-0041-461 D	**Upgrade Kit Volvo**	**1**
	bestehend aus:		
6	KL-0041-4602	Guide sleeve Ø26.3 mm	1
7	KL-0041-4601	Guide sleeve Ø29.5 mm	1
8	KL-0041-4608 D	Cover	1
9	KL-0041-4607	Housing	1
10	KL-0041-4600 D	Clamping jaws (pair) Ø78 mm	1
11	KL-0041-3931	Pressure screw M14x1.5	5
12	KL-0039-1272	Pressure ring Ø72 mm	1
13	KL-0039-1288	Pressure ring Ø88 mm	1
14	KL-0039-1682	Pressure-/support sleeve (short) Ø82 mm	1

9. Environmentally Safe Disposal

Dispose of the wheel bearing tool and its packaging material in compliance with the legal rules and regulations in force.

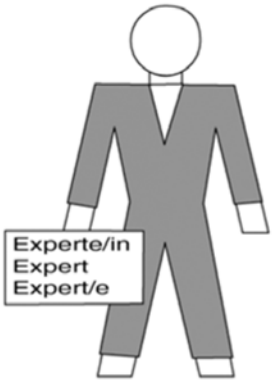
Notizen:

GEDORE
WERKZEUGE FÜRS LEBEN

(de) **Produkt-Information komplett durchlesen und verstehen.**

(en) **Carefully read the Product Information and make sure you have understood it correctly.**

(fr) **Lisez entièrement l'information produit et assurez-vous de l'avoir bien comprise.**



(de) **Vorschriften und Hinweise beachten**

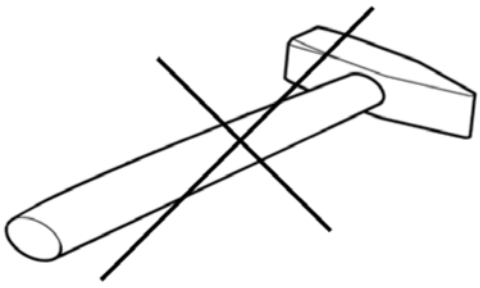
(en) **Observe warnings and notes**

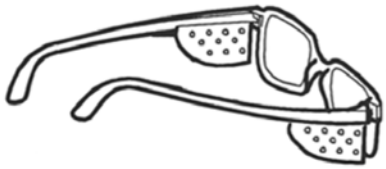
(fr) **Respecter les prescriptions et les remarques.**

(de) **Sicherheitsvorkehrungen treffen**
- Werkzeug mit Sicherheitshaltegurt gegen Herunterfallen sichern.
- Schutzausrüstungsvorgaben der Berufsgenossenschaft beachten.

(en) **Ensure all safety measures are in place to avoid injury/potential hazards**
- Secure the hydraulic cylinder with a safety belt to prevent it from falling.
- Always follow the procedures and precautions within the operator instruction manual; failure to do this could result in serious injury and could invalidate your warranty and insurance.

(fr) **Prendre toutes les mesures de sécurité nécessaires**
- Sécuriser le cylindre hydraulique contre les chutes à l'aide de la sangle de sécurité.
- Respecter les prescriptions du Syndicat Professionnel en matière d'équipements de protection.





(de) **Pflege und Reinigung**

(en) **Care and cleaning**

(fr) **Entretien et nettoyage**

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