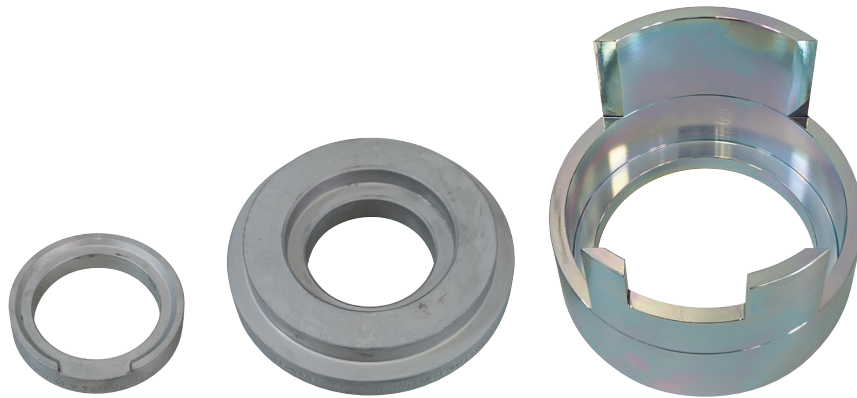


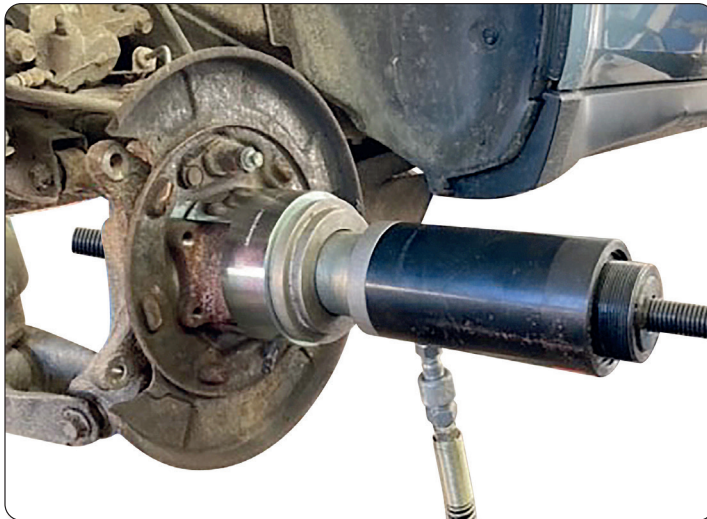


KL-2211-111

SUBARU Rear Axle Wheel Bearing Tool



Operating instructions EN
⚠ Read and understand before use!



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EN

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EN

1. FOR YOUR SAFETY



Read and understand these operating instructions **before using** the wheel bearing tool, and observe all safety and warning instructions! Misuse can result in **DEATH** or **SEVERE INJURIES** ! These operating instructions are an integral part of the wheel bearing tool. Keep them at a safe place for future reference, and always pass them on to subsequent users of the wheel bearing tool! The wheel bearing tool complies with the recognised rules of technology as well as the relevant safety regulations!

1.1 Target group

These operating instructions are **exclusively** intended for skilled personnel in specialised motor vehicle workshops!

The wheel bearing tool **may only be** used by skilled personnel in specialised motor vehicle workshops who are familiar with the basic regulations on work safety and accident prevention!

➤ **Never** allow unauthorised, inexperienced persons, minors and children, or persons with limited physical, sensory, and mental abilities to use the wheel bearing tool!

1.2 Obligations of the owner

Pursuant to the German Ordinance on Industrial Safety and Health (*BetrSichV*), employers are obliged to provide their employees with safe work equipment in accordance with the recognised rules of technology and the relevant safety regulations!

➤ The owner of the wheel bearing tool **must** ensure that **only** trained personnel in specialised vehicle workshops use the wheel bearing tool!

➤ The owner of the wheel bearing tool **must** ensure that the instructions for use are available to the user and that the user has completely read and understood the instructions for use **before** using the wheel bearing tool!

➤ The owner of the wheel bearing tool **must** ensure that the user is familiar with the basic regulations on work safety and accident prevention, and that the personal protective equipment is available to him/her!

1.3 Intended use

The wheel bearing tool ...

➤ **may only** be used to pull off screwed wheel bearing units on the rear axle of a SUBARU vehicle!

➤ **may only** be used on vehicles as specified in **Chapter 2. - Product description!**

➤ **may only** be used up to a **max. load of 17 tonnes!**

➤ **may only** be used with a manual drive or a manually operated **GEDORE Automotive** hydraulic cylinder/pump combination with a pressure gauge for safe pressure control!

➤ **may only** be used in the way described in these operating instructions!

⚠ Any other use can result in **DEATH** or **SEVERE INJURIES** !

1.4 Reasonably foreseeable misuse

The wheel bearing tool ...

➤ **must never** be used to remove and install silent blocks!

➤ **must never** be used for purposes other than those for which it is intended!

➤ **must never** be used with a drive other than that intended for it!

➤ **must never** be used with a machine-operated hydraulic cylinder/pump combination!

➤ **must never** be used for batch processing with many forcing processes within a few minutes!

➤ **must never** be used with a bridged, modified, or removed safety device!

➤ **must never** be modified, converted, or used for other purposes without authorisation!

⚠ Use the wheel bearing tool **always** as intended. Any other use can result in **DEATH** or in **SEVERE INJURIES**!

1.5 Personal protective equipment

For your safety, **always** wear personal protective equipment when using the wheel bearing tool! The wheel bearing tool can bring about mechanical hazards, such as crushing, cutting and shock injuries.



Always wear **EYE PROTECTION** (for example to DIN EN 166, OSHA 29 CFR 1910.133, ANSI Z87) when using the wheel bearing tool to protect yourself against flying parts or particles!

When using the wheel bearing tool, flying parts or particles can cause **SEVERE INJURIES** to your eyes!



Always wear **PROTECTIVE GLOVES** (for example to DIN EN 388, OSHA 29 CFR 1910.138, ANSI 105) when using the wheel bearing tool to protect yourself against sharp edges and crushing between parts!

When working with the wheel bearing tool, sharp edges and crushing between parts can cause **SEVERE INJURIES** to your hands!



Always wear **SAFETY SHOES** (for example to DIN EN ISO 20345, OSHA 29 CFR 1910.136, ANSI Z41) when using the wheel bearing tool to protect yourself against dropping parts!

When working with the wheel bearing tool, dropping parts can cause **SEVERE INJURIES** to your feet and toes!

EN

1.6 Labelling of the warnings

Warnings warn of potential hazards. Always observe these warnings to avoid **DEATH** or **INJURIES**!

For better differentiation, warnings in these operating instructions are classified as follows:

Warning sign	Meaning
	Indicates a hazardous situation which, if not avoided, could cause DEATH or SEVERE INJURIES .
	Indicates a hazardous situation which, if not avoided, could cause MODERATE or MINOR INJURIES .
	Indicates a situation which, if not avoided, can cause damage to the tool or an object in its vicinity.
	Note on important information and useful tips.

1.7 Basic warnings

WARNING - Danger to life from MISUSE

MISUSE can cause the wheel bearing tool to slip, break and thus drop or be hurled about. This can cause **DEATH** or **SEVERE INJURIES**!

- Read and understand these operating instructions **before using** the wheel bearing tool, and observe all safety and warning instructions for **safe use**!
- Always** work with the wheel bearing tool in accordance with the basic regulations on work safety and accident prevention!
- Only** use the wheel bearing tool as described in these operating instructions!
- Always** observe the vehicle-specific application procedures in the vehicle manufacturer's repair guide!
- Never** use the wheel bearing tool if it is damaged or has loose parts or unauthorised modifications!
- Never** use the wheel bearing tool with a machine-operated drive or a machine-operated hydraulic cylinder / pump combination!
- Use the wheel bearing tool **exclusively** with a manual drive or a manually operated **GEDORE Automotive** hydraulic cylinder / pump combination with a pressure gauge for reliable pressure control!
- Never** use the wheel bearing tool for batch processing with many forcing processes within a few minutes!
- Always** wear your personal protective equipment (*safety goggles, protective gloves, safety shoes*) during work!
- Never** hit the wheel bearing tool with a hammer or anything similar!

⚠ WARNING - Danger to life from OVERLOAD

MISUSE can cause the wheel bearing tool to slip, break and thus drop or be hurled about. This can cause **DEATH** or **SEVERE INJURIES!**

- ✔ **Never** exceed the **maximum loading capacity** of the wheel bearing tool!
- ✔ **Never** use the wheel bearing tool if it is damaged or has loose parts or unauthorised modifications!
- ✔ **Never** use the wheel bearing tool with a machine-operated drive or a machine-operated hydraulic cylinder / pump combination!
- ✔ Use the wheel bearing tool **exclusively** with a manual drive or a manually operated **GEDORE Automotive** hydraulic cylinder / pump combination with a pressure gauge for reliable pressure control!
- ✔ **Never** use the wheel bearing tool for batch processing with many forcing processes within a few minutes!
- ✔ **Always** wear your personal protective equipment (*safety goggles, protective gloves, safety shoes*) during work!

⚠ CAUTION - Danger of injury from DROPPING

There is a risk of the wheel bearing tool **DROPPING** during preparation and use. This can cause **MEDIUM** or **LIGHT INJURIES!**

- ✔ Avoid dropping the wheel bearing tool **at all costs**, especially when it is under load!
- ✔ **Always** make sure that the wheel bearing tool is securely attached to the spring!
- ✔ **As a precaution**, secure the wheel bearing tool against dropping, for example using the safety retaining belt - **KL-0040-2590** or the mounting device - **KL-0040-258 A**
- ✔ **Never** leave the wheel bearing tool unattended in loaded condition on the wheel bearing!
- ✔ Put down the wheel bearing tool **safely** to prevent it from dropping (for example on a workbench)!
- ✔ **Always** wear your personal protective equipment (*safety goggles, protective gloves, safety shoes*) during work!

ATTENTION - Risk of DAMAGE

Vehicle, wheel bearing, and wheel bearing tool can be **DAMAGED**.

- ✔ **Always** observe vehicle-specific application procedures in the repair guide of the vehicle manufacturer.
- ✔ **Never** use the wheel bearing tool for batch processing with many forcing processes within a few minutes!
- ✔ **Never** clamp the wheel bearing tool in a vice.

1.8 Basic safety instructions

For your safety, **always** observe the following safety precautions when using the wheel bearing tool in order to avoid injuries and material damage caused by misuse or unsafe handling.

- ✔ Read and understand these operating instructions **before using** the wheel bearing tool, and observe all safety and warning instructions for **safe use!**
- ✔ **Always** observe the vehicle-specific application procedures in the vehicle manufacturer's repair guide!
- ✔ **Always** work with the wheel bearing tool in accordance with the basic regulations on work safety and accident prevention!
- ✔ **Never** use the wheel bearing tool when you are tired or under the influence of alcohol, drugs, or medicaments!
- ✔ **Before each use**, check the wheel bearing tool **carefully** for damage, loose parts, or unauthorised modifications. **Never** use it if you notice any such deficiencies!
- ✔ Use **only genuine GEDORE Automotive** spare parts and accessories!
- ✔ **Before using** the wheel bearing tool, make sure that **no** unauthorised persons are in the immediate environment!
- ✔ **Always** observe the **max. loading capacity** when using the wheel bearing tool, and **never** exceed it!
- ✔ **Always** keep hair, clothing, and gloves away from moving parts!
- ✔ **Never** use the wheel bearing tool with an unauthorised drive. Drive it **only** with an approved drive!
- ✔ **Always** wear your personal protective equipment (*safety goggles, protective gloves, safety shoes*) during work!
- ✔ Interrupt your work **immediately** if you are unsure about using the wheel bearing tool, and contact **GEDORE Automotive GmbH if necessary!**
- ✔ **Always** use the perforated disc set as intended. Non-compliance will invalidate any warranty claim and may significantly reduce its durability!

1.9 Work environment

For your safety, **only** use the wheel bearing tool in a safe working environment.

- ✔ The workplace **must** be clean and tidy.
- ✔ The workplace **must** be sufficiently large and illuminated.
- ✔ The workplace **must** be on a solid and non-skidding floor.
- ✔ The workplace **must** be safeguarded against access of unauthorised persons.
- ✔ The workplace **must** have a room temperature between -10°C and +40°C.

1.10 Emissions

Molybdenum disulphide paste and hydraulic oil can drip or escape when using the wheel bearing tool and thus pose a hazard to the environment.

- ✔ **Immediately** remove leaking hydraulic oil as well as excess molybdenum disulphide paste (using oil binding agents or a rag, for example).
- ✔ In case of skin contact with hydraulic oil, clean the affected area **immediately** with degreasing soap and water.
- ✔ Dispose of pollutants such as hydraulic oil and molybdenum disulphide paste in an **environmentally friendly** manner.
- ✔ Safety data sheets *as per (EC) Ordinance No. 1907/2006 about hydraulic oil (Alsus Hyd HLP 32) and molybdenum disulphide paste (MOLYKOTE(R) G-N PLUS PASTE)* can be found on the manufacturer's website in the internet (**World Wide Web**).

1.11 Maintenance

Perform maintenance on the wheel bearing tool **at regular intervals** and **only** when the tool is depressurised and/or de-energised! Poor and improper maintenance can damage the wheel bearing tool, thus causing **DEATH** or **SEVERE INJURIES!**

Prior to each use:

- ✔ **Prior to each use**, check the wheel bearing tool **carefully** for damage, loose parts or unauthorised modifications!
- ✔ **Prior to each use** of the wheel bearing tool, check the pull spindle for contamination and damage. If necessary, clean it and subsequently lubricate it **only** with molybdenum disulphide paste! (For example, **GEDORE Automotive** molybdenum disulphide paste - **KL-0014-0030**)

Recommended: Every 24 months:

- ✔ Have the wheel bearing tool professionally checked **every 24 months** by authorised **GEDORE Automotive GmbH** specialists!

1.12 Troubleshooting

Only perform troubleshooting on the wheel bearing tool when it is depressurised!

Problem: Hydraulic oil escapes from the hydraulic coupling between hydraulic cylinder and hand pump.

Reason: Hydraulic coupling contaminated or loose.

Remedy: Clean and retighten the hydraulic coupling. Top up lacking hydraulic oil (**HLP 32**) at the hand pump.

2. Product description

2.1 KL-2211-111 - SUBARU rear axle wheel bearing tool

Suitable for SUBARU Forester (SH, 2008-2013 / SJ, 2013-2019), Impreza IV (GP/GJ, 2011-2018), XV (2012-2018) and many more.

To professionally pull off the screwed wheel bearing unit on the rear axle. This requires the wheel hub to be pulled out first, using an impact extractor, for example! Using the 17-tonne hydraulic cylinder overcomes even heavily seized wheel bearing units. Removing the steering knuckle is not necessary here!

Necessary drive parts (to pull off the wheel bearing unit):

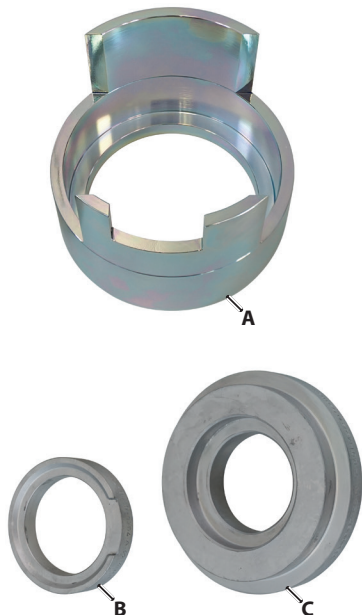
KL-0040-2500 - hydraulic cylinder 17 tonnes, **KL-0215-35 M25** - hydraulic pump, **KL-0039-1002** - retaining adapter for clamping nut, **KL-0039-1003** - retaining adapter for hydraulic cylinder, **KL-0039-2120** - pull spindle with quick-release nut M20

Recommended accessories: (to pull out the wheel hub):

KL-0049-300 - impact extractor 4.8kg, **KL-0174-545** - adapter, **KL-0174-240** - perforated disc, 3x **KL-0174-762** - pull bolt M12x1.25, 3x **KL-0174-701** - collar nut

2.1.1 Scope of delivery

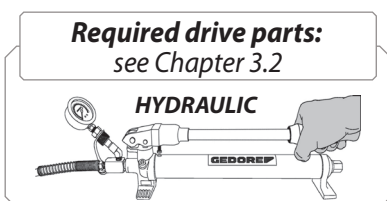
Item	Part no.	Description	Qty.
A	KL-2211-1112	SUBARU support sleeve	1
B	KL-0039-1264	Thrust ring Ø 64mm	1
C	KL-0039-1401	Bearing cover	1



2.1.2 Specifications

Max. load: 17t

Weight: 2.0kg



3. PREPARATION

⚠ WARNING

Misuse or **overloading** the wheel bearing tool can cause it to slip, break and thus drop or be hurled about. This can cause **DEATH** or **SEVERE INJURIES!**

✔ **Prior to using** the wheel bearing tool, read and understand **all** safety instructions and warnings listed in **Chapter 1** and **always observe** them **for safe use!**

✔ Use the wheel bearing tool **as intended** and described in these operating instructions. **Always** observe the vehicle-specific application procedures in the repair manual of the vehicle manufacturer!

✔ **Before each use**, check the wheel bearing tool **carefully** for damage, loose parts, or unauthorised modifications. **Never** use it if you notice any such deficiencies!

✔ **Always** wear your personal protective equipment (*safety goggles, protective gloves, safety shoes*) during work!

3.1 Checking the scope of delivery

Prior to using the wheel bearing tool, check to ensure that all the parts included in the scope of delivery (*see chapter 2.*) are present, and follow the instructions below.

3.2 Assembling drive parts

⚠ WARNING

Using a machine-operated drive can cause the wheel bearing tool to slip, break and thus drop or be hurled about. This can cause **DEATH** or **SEVERE INJURIES!**

✔ Use the wheel bearing tool **exclusively** with a manual drive or a manually operated **GEDORE Automotive** hydraulic cylinder / pump combination with a pressure gauge for reliable pressure control!

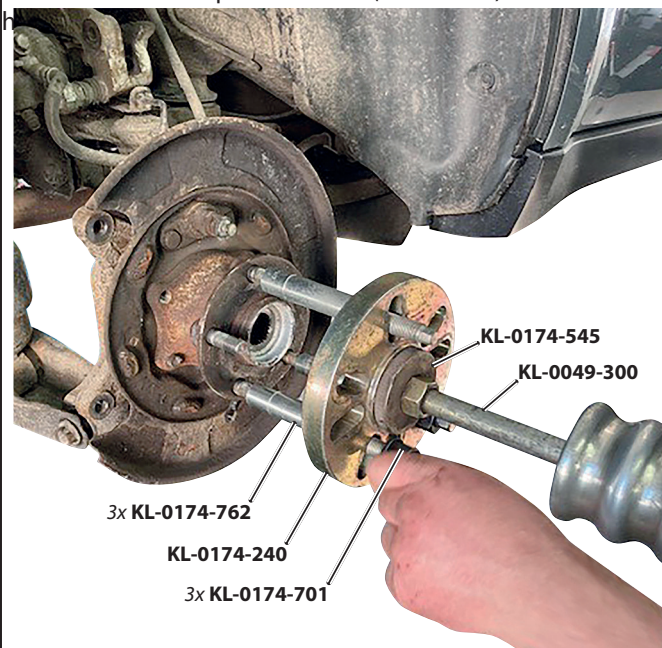
1) Assemble the required drive parts for the wheel bearing tool as shown in **📷 1.**

📷 1) *For other pressure plates see the GEDORE Automotive catalogue.*

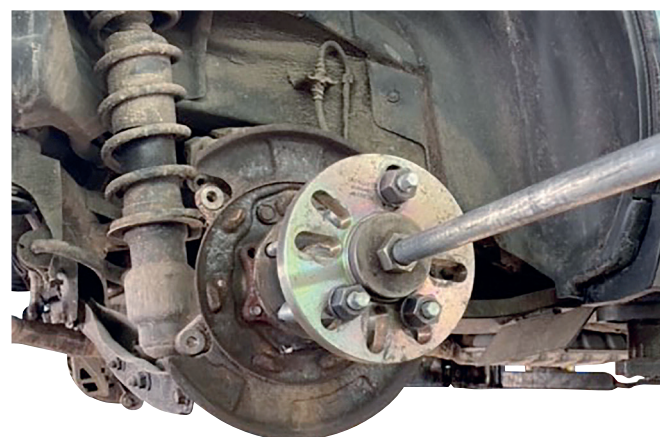
📷 1: Required drive parts



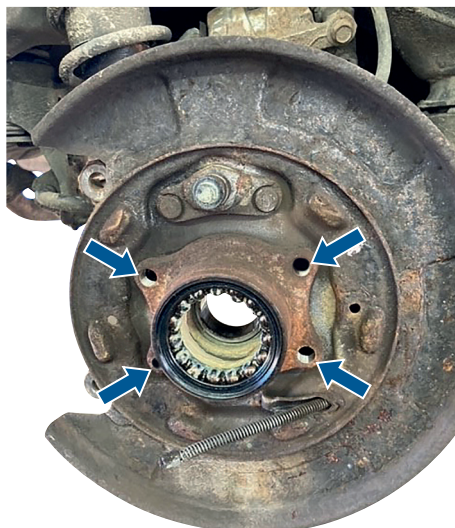
📷2: Mount the impact extractor (*accessories*) on the wheel



📷3: Pulling the wheel hub out of the wheel bearing unit



📷4: Unscrew the fastening screws of the wheel bearing unit.



3.3 Preparing the vehicle

- 1) Lift the vehicle safely and prepare all necessary parts for the subsequent work in accordance with the manufacturer's instructions.

For example:

Remove the wheel, loosen the central nut of the wheel bearing unit and pull out the drive shaft, remove the wheel hub from the wheel bearing unit (see, for example, **chapter 3.4 - Pulling out the wheel hub**) and unscrew the fastening screws of the wheel bearing unit **📷4**.

3.4 Pulling out the wheel hub with accessories

This typical application describes how to pull out the wheel hub from a wheel bearing unit on the rear axle of a SUBARU Forester.

- 📷**The following GEDORE Automotive accessories are required:

KL-0049-300 - impact extractor 4.8kg, **KL-0174-545** - adapter, **KL-0174-240** - perforated disc, 3x **KL-0174-762** - pull bolt M12x1.25, 3x **KL-0174-701** - collar nut

- 1) To start with, screw the three pull bolts [**KL-0174-762**] completely onto the wheel studs of the wheel hub as shown in **📷2** and tighten them to **15 Nm**.

- 2) Now mount the impact extractor [**KL-0049-300**] together with the adapter [**KL-0174-545**] and the perforated disc [**KL-0174-240**] on the pull bolts [**KL-0174-762**]. Secure them with the three flange nuts [**KL-0174-701**] and tighten the nuts with **15 Nm**.

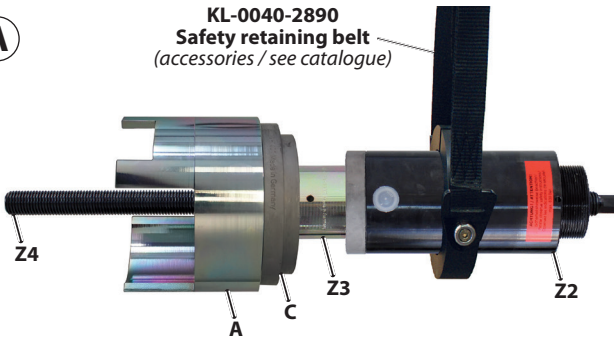
- 3) Using the impact extractor [**KL-0049-300**], pull the wheel hub out of the wheel bearing unit. **📷3**

- 📷**Next, unscrew the fastening screw of the wheel bearing unit **📷4**.

65: Preparing the hydraulic cylinder [Z2] as required.

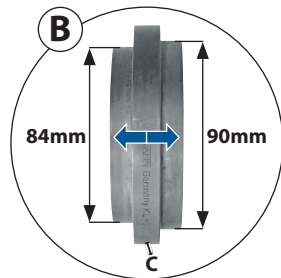
A

KL-0040-2890
Safety retaining belt
(accessories / see catalogue)



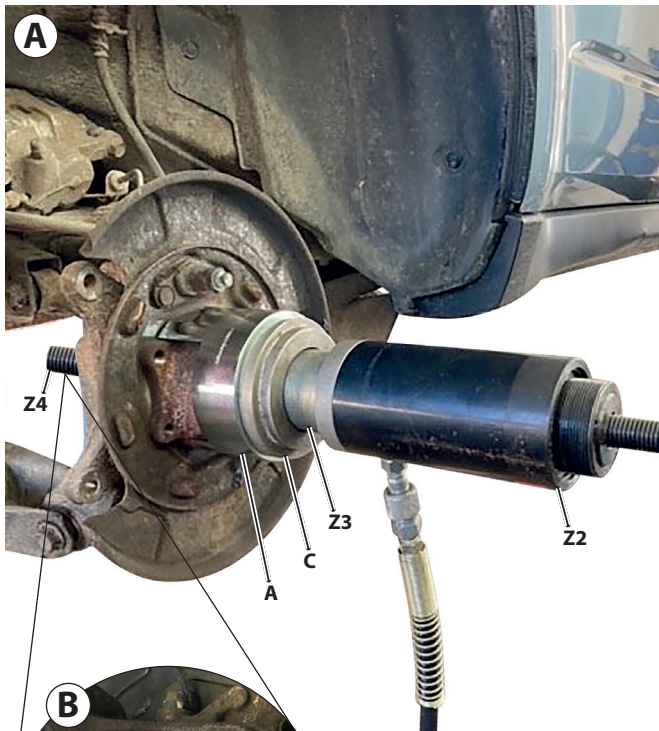
B

84mm 90mm

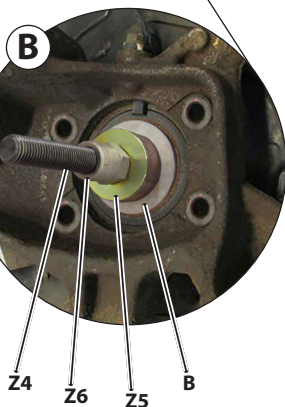


66: Mount the wheel bearing tool on the wheel bearing

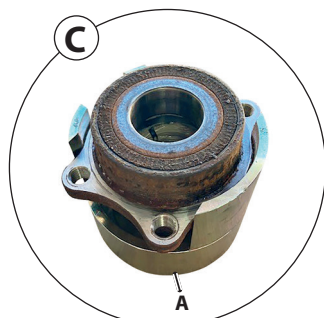
A



B



C



3.5 Preparing the tool

- 1) Prepare the hydraulic cylinder [Z2] for the further work as shown in **65A**.
- i** Ensure that the bearing cover [C] is aligned properly with the support sleeve [A] **65B**.
- i** The safety retaining belt - **KL-0040-2590**, which is available as an accessory, or the mounting device - **KL-0040-258 A** makes it possible to secure the wheel bearing tool against dropping.

4) TYPICAL APPLICATION (pulling off the screwed wheel bearing unit)

This typical application describes the process of pulling a screwed wheel bearing unit off the steering knuckle on the rear axle of a SUBARU Forester.

ATTENTION

There is a risk of damaging the wheel bearing tool!

- Align the support sleeve [A] such that its contact is full-surface and level and that the wheel bearing unit can be pulled out without collision.

CAUTION

There is a risk of the wheel bearing tool dropping when the wheel bearing unit is pulled off. This can cause **MEDIUM** or **LIGHT INJURIES!**

- As a precaution, secure the wheel bearing tool on the vehicle against dropping, for example using the safety retaining belt - **KL-0040-2590** or the mounting device - **KL-0040-258 A!**

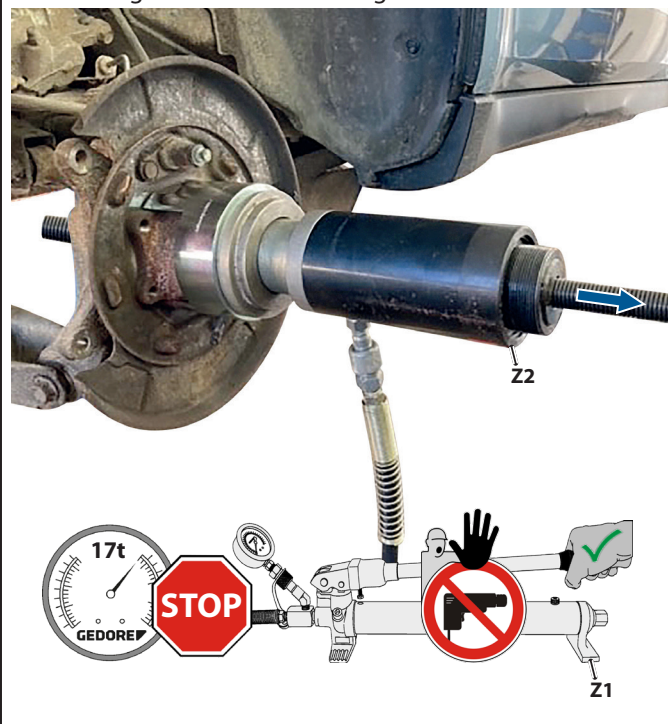
- 1) Position the hydraulic cylinder [Z2] with all the necessary components on the wheel bearing unit, as shown in **6A+B** and screw the clamping nut [Z6] completely onto the pull spindle [Z4].

WARNING

There is the risk of the wheel bearing tool breaking when a machine-operated drive is used. Parts flying about can cause **DEATH** or **SEVERE INJURIES**.

- Use the wheel bearing tool exclusively with a manually operated **GEDORE Automotive** hydraulic cylinder/pump combination with a manometer for reliable pressure control!
- 2) Connect the hydraulic pump [Z1] with the hydraulic cylinder [Z2].

📷7: Pulling off the wheel bearing unit.



📷8: Wheel bearing unit removed.



⚠️ CAUTION

There is a risk of the wheel bearing tool dropping when the wheel bearing unit is pulled off. This can cause **MEDIUM** or **LIGHT INJURIES!**

▶ **As a precaution**, secure the wheel bearing tool on the vehicle against dropping, for example using the safety retaining belt - **KL-0040-2590** or the mounting device - **KL-0040-258 A!**

⚠️ WARNING

When forcing off the wheel bearing unit, there is a risk of the pull spindle breaking and parts being hurled about. This can cause **DEATH** or **SEVERE INJURIES**.

▶ **Never** exceed the **maximum load** of the wheel bearing tool of **17 tonnes!**

▶ **Constantly** watch the pressure on the pressure gauge of the hydraulic pump [Z1] while you are pulling off.

▶ **Never** stand in the axial extension of the pull spindle [Z4] while you are pulling off.

3) While you are operating the hydraulic pump [Z1], watch the pressure on the pressure gauge and pull the wheel bearing unit off the steering knuckle. 📷7+8

ⓘ The maximum stroke of the hydraulic cylinder [Z2] is 50mm! As soon as this value is reached: Interrupt the forcing process, relieve the pressure at the hydraulic pump [Z1], re-tighten the clamping nut [Z6] until it is fully applied, and continue the forcing process.

4) Remove the wheel bearing tool and carry out the further work on the vehicle in accordance with the manufacturer's instructions.

5. CARE AND STORAGE

⚠️ ATTENTION

Improper care and storage can damage the wheel bearing tool. **Never** immerse the wheel bearing tool in water, solvents, or other cleaning liquids. After use, clean all parts **only** with a dry and clean cleaning cloth. To protect against corrosion, rub all metal parts with a tool care oil or wax. Store the wheel bearing tool and the operating instructions at a dry and clean place.

6) REPAIR

⚠️ WARNING

For safety reasons, ensure that a damaged wheel bearing tool is no longer used! Professional inspection and repair may only be carried out by specially trained specialist personnel at **GEDORE Automotive GmbH**. Improper repair can result in **DEATH** or **SEVERE INJURIES**.

7. ENVIRONMENTALLY COMPLIANT DISPOSAL

Dispose of the wheel bearing tool and the packaging material in an environmentally compatible way in accordance with the legal requirements. If necessary, ask your local authorities about environmentally friendly disposal options.