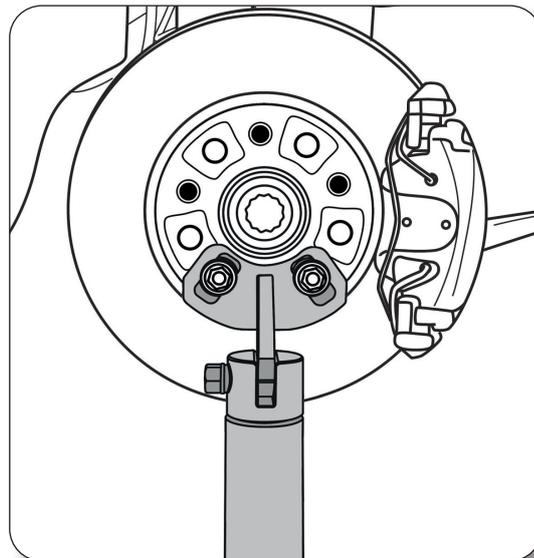




Operating Instructions

(Translation of the Operating Instructions)

Support device VAS 6931/1



- Deutsch DE
- العربية AR
- Български BG
- Português BRA
- 中文 (简体) CN
- Čeština CS
- Dansk DA
- Ελληνικά EL
- English EN
- Español ES
- Eesti ET
- فارسی FA
- Suomi FI
- Français FR
- עברית HE
- Magyar HU
- Italiano IT
- 日本語 JA
- 한국어 KO
- Hrvatski KR
- Lietuvių LT
- Latviešu LV
- Македонски MK
- Español MX
- Nederlands NL
- Norsk NO
- Polski PL
- Português PT
- Română RO
- Русский RU
- Slovenský SK
- Slovenščina SL
- Srpski SR
- Svenska SV
- Türkçe TR
- 中文 (繁體) TW
- Українська UK
- English US**

www.gedore-automotive.com

GEDORE Automotive GmbH

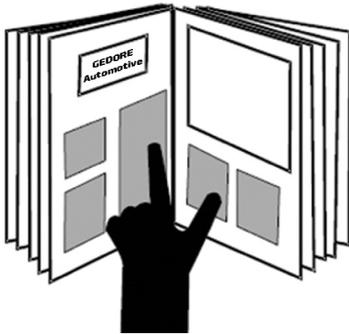
Breslauer Straße 41
78166 - Donaueschingen
Postfach 1329
78154 Donaueschingen - GERMANY

☎ +49 (0) 771 / 8 32 23-0
☎ +49 (0) 771 / 8 32 23-90
✉ info.gam@gedore.com
🌐 gedore-automotive.com

GEDORE TOOLS, INC.

Only for USA, Canada & Mexico / Sólo para EE.UU., Canadá y México
Seulement pour les USA, le Canada et le Mexique
7187 Bryhawke Circle, Suite 700
North Charleston, SC 29418, USA

☎ +1-843 / 225 50 15
☎ +1-843 / 225 50 20
✉ info@gedoretools.com
🌐 gedore.com



English

US



Masthead

In the course of improvement and adaptation to the state of the art, we reserve the right to make changes with regard to appearance, dimensions, weights and properties, and performance.

This does not imply any claim to correction or subsequent delivery of already delivered products. Deletions can be made at any time without any legal claim arising.

Instructions for use and safety are not binding. They never substitute for any legal or trade association regulations.

We do not accept any liability for printing errors.

Any reproduction, in whole or in part, requires the prior written consent of **GEDORE Automotive GmbH**.

All rights reserved worldwide.

© **Copyright by GEDORE Automotive GmbH, Germany**

We refer to our general terms and conditions, which can be found in the imprint at:

www.gedore-automotive.com

Contents

- 1. FOR YOUR SAFETY 4**
 - 1.1 Target group 4
 - 1.2 Intended use 4
 - 1.3 Reasonably foreseeable misuse 4
 - 1.4 Personal protective equipment 4
 - 1.5 Labeling of the warnings 5
 - 1.6 Basic warnings 5
 - 1.7 Basic safety instructions 6
 - 1.8 Obligations of the owner 6
 - 1.9 Work environment 6
- 2. Product description 7**
 - 2.1 VAS 6931/1 - Support device 7
 - 2.2 Scope of delivery 7
 - 2.3 Specifications 7
- 3. Preparation 8**
 - 3.1 Checking the scope of delivery 8
 - 3.2 Preparing the tool 8
 - 3.3 Preparing the vehicle 8
- 4. Typical application 9**
 - 4.1 Installing the support device 9
 - 4.2 Removing the support device 10
- 5. Care and storage 11**
- 6. Maintenance and repair 11**
- 7. Overview of the single parts 11**
- 8. Environmentally friendly disposal 11**
- 9. Manufacturer's address 11**
- 10. EC Declaration of conformity 12**



1. FOR YOUR SAFETY

⚠ WARNING

Read and understand these operating instructions **before** using the support device and observe all safety and warning instructions. Misuse can result in **DEATH** or **SEVERE INJURIES** !

These operating instructions are an integral part of the support device. Keep them at a safe place for future reference, and always pass them on to subsequent users of the support device.

1.1 Target group

These operating instructions are **exclusively** intended for skilled personnel in specialized motor vehicle workshops.

The support device **may only be** used by skilled personnel in specialized motor vehicle workshops who are familiar with the basic regulations on work safety and accident prevention.

- **Never** allow unauthorized persons or minors to use the support device.

1.2 Intended use

The support device ...

... **may only** be used for supporting and fixing the wheel suspension via the wheel hub, for removal and installation of the spring strut, the axle steering as well as for adjusting the design position on the chassis.

... **may not** be used for wheel hubs with a hole circle diameter of 5x100 mm, 5x112 mm, 5x120 mm, and 5x130 mm .

... **may only** be used together with the engine and gearbox jack - **VAS 6931** or **VAG 1383A**.

... **may only** be used to a **max. load of 600 kg!**

... **may only** be used as described in these operating instructions.

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

1.3 Reasonably foreseeable misuse

The support device ...

... **must never** be used for lifting and supporting the vehicle.

... **must never** be used for direct supporting without securing via the wheel hub.

... **must never** be used without insufficient securing with only one wheel bolt in the wheel hub.

... **must never** be used with an inadmissible and machine-driven engine and gearbox jack.

... must never be modified or converted in an unauthorized way.

⚠ The support device **may only** be used in a way as described in **Chapter 1.2 - Intended use**. Any other use can result in **DEATH** or **SEVERE INJURIES** !

1.4 Personal protective equipment

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



Always wear **EYE PROTECTION** (see DIN EN 166, OSHA 29 CFR 1910.133, ANSI Z87) when using the support device to protect yourself against flying parts or particles.

- When using the support device, flying parts or particles can cause **injuries to your eyes!**



Always wear **PROTECTIVE GLOVES** (see DIN EN 388, OSHA 29 CFR 1910.138, ANSI 105) when using the support device to protect yourself against sharp edges and crushing between parts.

- When working with the support device, sharp edges and crushing between parts can cause **injuries to your hands!**



Always wear **SAFETY SHOES** (see DIN EN ISO 20345, OSHA 29 CFR 1910.136, ANSI Z41) when using the support device to protect yourself against falling parts.

- When working with the support device, falling parts can cause **injuries to your feet and toes!**

1.5 Labeling of the warnings

For better differentiation, warnings in these operating instructions are classified as follows:	
Warning sign	Meaning
 WARNING	Indicates a hazardous situation which, if not avoided, could cause DEATH or SEVERE INJURIES .
 CAUTION	Indicates a hazardous situation which, if not avoided, could cause MODERATE or MINOR INJURIES .
 ATTENTION	Indicates a situation which, if not avoided, can cause damage to the tool or an object in its vicinity.
	Reference to useful information and tips.

1.6 Basic warnings

WARNING - Hazard from MISUSE

The support device can break and slide off in the event of misuse, which can cause parts to be ejected and the vehicle to fall down. This can result in **DEATH** or **SEVERE INJURIES!**

It is therefore **essential** to read and understand these operating instructions **before using** the support device, and to observe all safety and warning instructions.

- **Always** observe the **maximum load** and the safety and warning instructions of the engine and gearbox jack.
- **Only** use the support device as described in these operating instructions.
- Use the support device only together with the engine and gearbox jack **VAS 6931** or **VAG 1383A**.
- **Never** lift the vehicle using the support device.
- **Never** lift/lower the vehicle with a second lifting device while using the support device.
- **Never** hit the support device with a hammer or anything similar.
- **Always** wear your personal protective equipment (safety goggles, protective gloves, safety shoes) when working!

WARNING - Hazard from OVERLOAD

The support device can break if overloaded, which can cause parts to be ejected. This can result in **DEATH** or **SEVERE INJURIES!**

- **Never** exceed the **maximum load of 600 kg** of the support device.
- **Never** use the support device when it is damaged.
- **Always** wear your personal protective equipment (safety goggles, protective gloves, safety shoes) when working!

WARNING - Hazard from FALLING

The support device can fall down during transport and preparation. This can cause **SEVERE INJURIES!**

- Deposit the support device **safely** against falling down, for example on a workbench.
- **Always** wear your personal protective equipment (safety goggles, protective gloves, safety shoes) when working.

ATTENTION - Risk of DAMAGE

The vehicle and the support device compressor can be damaged.

- **Always** observe vehicle-specific application procedures in the vehicle manufacturer's repair guide.
- **Never** subject sensitive components on the vehicle to tension or pressure while working with the support device.

1.7 Basic safety instructions

For your safety, **always** observe the following safety instructions and precautions when using the support device in order to avoid injuries and material damage as a consequence of misuse and unsafe handling.

Read and understand these operating instructions **before** using the support device and observe all safety and warning instructions.

- **Always** observe vehicle-specific application procedures in the vehicle manufacturer's repair guide.
- **Always** work on the vehicle in accordance with the basic regulations on work safety and accident prevention.
- **Never** use the support device when you are tired or under the influence of alcohol, drugs, or medication!
- While working with the support device, make **absolutely** sure that **no** other persons are present in the direct working area.
- Check the support device for damage **before each use!**
- **Never** use the support device when it is damaged.
- Use **only genuine GEDORE Automotive** spare parts and accessories.
- **Never** lift/lower the vehicle with a second lifting device while using the support device on the vehicle.
- While working with the support device, it is **essential** to put other lifting devices out of operation and secure them against unintentional reconnection.
- **Always** tighten the screws on the support device manually using muscle power and **never** use a machine for this purpose.
- **Always** wear your personal protective equipment (safety goggles, protective gloves, safety shoes) when working!
- Interrupt your work **immediately** if you are unsure about using the support device, and contact **GEDORE Automotive GmbH if necessary!**

1.8 Obligations of the owner

The owner of the outrigger **must** ensure that **only** trained personnel in specialized vehicle workshops use the support device.

The owner of the support structure **must** ensure that the operating instructions are available to the user and that the user has completely read and understood the operating instructions **before** using the support structure.

The owner of the support structure **must** ensure that personal protective equipment is available to the user of the support structure.

The owner of the support device **must** ensure that the user of the support device is familiar with the basic regulations on work safety and accident prevention.

1.9 Work environment

For your safety, **only** use the support device in a safe working environment.

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

2. Product description

2.1 VAS 6931/1 - Support device

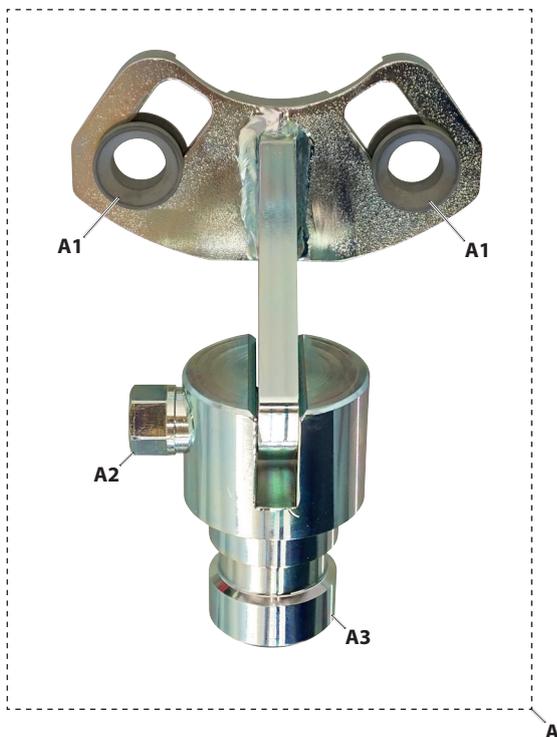
Universally fitting for wheel hubs with a hole circle diameter of 5x100 mm, 5x112 mm, 5x120 mm to 5x130 mm.

A loose or sagging wheel suspension can damage the brake hose, vehicle level sensor, cable connections, and the drive shaft.

Together with the engine and gearbox jack - **VAS 6931** or **VAG 1383A**, the support device enables the professional support and fixing of the wheel suspension, for example when removing and installing the spring strut, the axle control arms, and when adjusting the design position (*ZERO design position on the chassis*).

The support is provided by the wheel hub and thus ensures a reliable hold.

Due to its special design, the support device is adjustable in the camber angle. This allows precise lowering and lifting of the wheel suspension at different angles.



2.2 Scope of delivery:

Item	Part no.	Description	Qty.
A	VAS 6931/1	Support device	1
A1	-	Bushing	2
A2	-	Clamping screw	1
A3	-	Pin	1
-	-	USB flash drive (Operating instructions)	1
-	-	Leaflet for using the USB	1

2.3 Specifications:

Max. load: 600 kg
 Locating pin diameter: 36 mm
 Tilt angle: +/- 35°
 Mounting for wheel bolts: M14 / Spherical collar R13
 Overall height: 150 mm

Fig. 1: Preparing the support device.

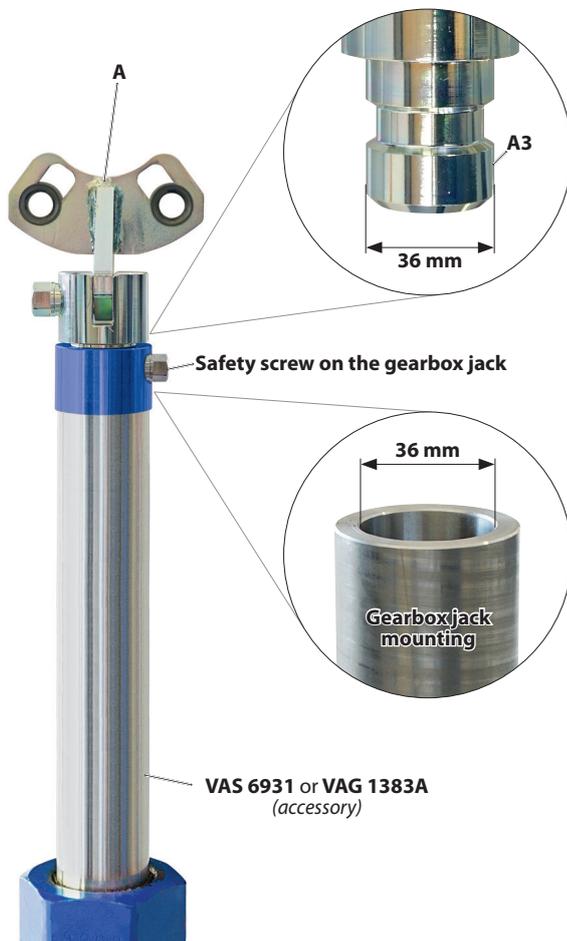


Fig. 2: Preparing the vehicle in accordance with the manufacturer specifications.



3. Preparation

⚠ WARNING

The support device may break during use, and ejected parts may result in **DEATH** or **SERIOUS INJURIES!**

- Carefully check the support device for damage **before each use!**
- **Never** use the support device when it is damaged.
- Use **only genuine GEDORE Automotive** spare parts and accessories.

Prior to using the support device, check that all parts of the scope of delivery are available. Follow the instructions below.

3.1 Checking the scope of delivery.

3.2 Preparing the tool.

⚠ WARNING

The support device can break if an unauthorized gearbox jack is used or if it is mounted incorrectly, and ejected parts can cause **DEATH** or **SERIOUS INJURIES!**

The support device may fall down during the preparation and cause **SERIOUS INJURIES** to the feet!

- **Exclusively** use the engine and gearbox jack **VAS 6931** or **VAG 1383A**.
- **Fully** insert the support device into the engine and gearbox jack mounting.
- **Always** secure the support device against falling out with the safety screw on the engine and gearbox jack.
- **Always** wear your personal protective equipment (safety goggles, protective gloves, safety shoes) when working!

1. Insert the support device [A] as shown in **Fig. 1** with its journal [A3] into the engine and gearbox jack mounting. Afterwards, secure the support device against falling out by tightening the locking screw on the motor and gearbox jack. (**Fig. 1**)

3.3 Preparing the vehicle.

1. Lift the vehicle safely according to the manufacturer's instructions and loosen or prepare all necessary parts. (**Fig. 2**)

For example:

Remove the wheels and prepare **two** wheel nuts.

Fig. 3: Screw the support device to the wheel hub.

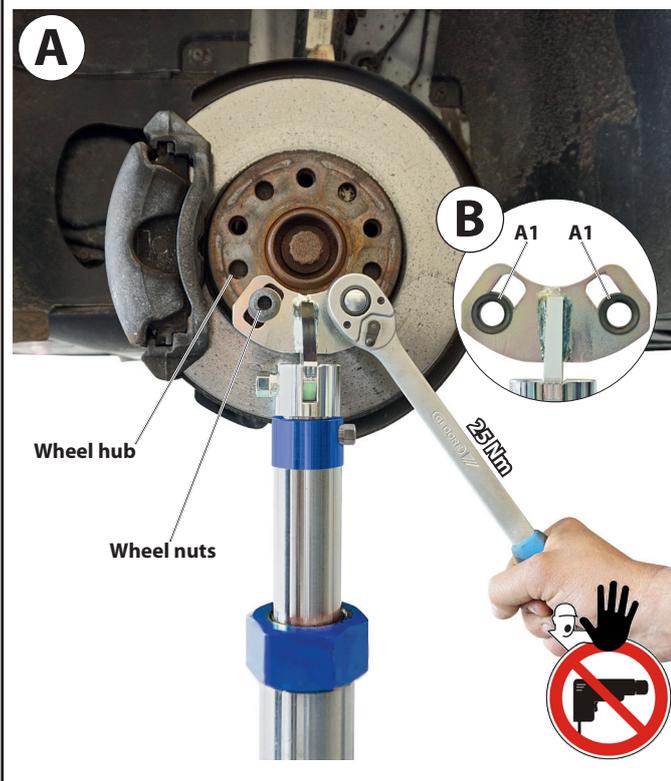
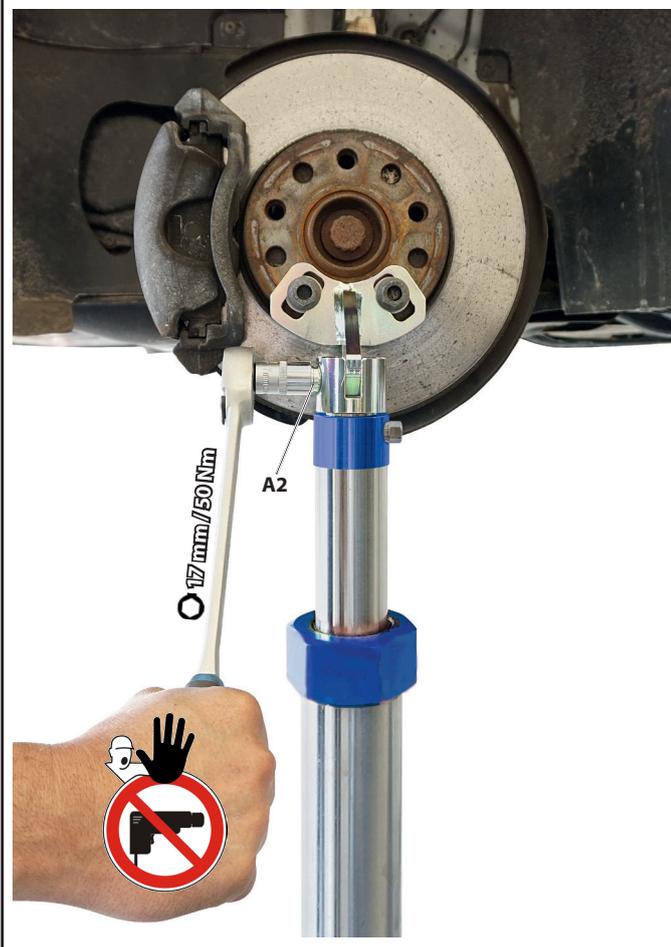


Fig. 4: Lock the camber angle adjustment.



4. Typical application

This application example describes the supporting and fixing of a wheel suspension using an engine and gearbox jack. The basic vehicle-specific application sequence is described in the repair guide of the vehicle manufacturer.

4.1 Installing the support device.

⚠ WARNING

*The support device may break in the event of misuse or incorrect installation, and ejected parts can cause **DEATH** or **SERIOUS INJURIES!***

- **Always** fasten the support device to the wheel hub using **two** wheel bolts.
- **Never** lift/lower the vehicle with a second lifting device while using the support device on the vehicle.

1. Screw the support device to the wheel hub using two wheel bolts through the bushes [A1], and in the correct position as shown in **Fig. 3 A+B**.

① Fasten the wheel bolts with 25 Nm.

⚠ WARNING

*The wheel suspension can suddenly tip over if the support device is incorrectly fixed. This can cause **SERIOUS INJURIES!***

- **Always** attach the camber angle adjustment to the support device before starting the work on the heel suspension.
2. Fasten the camber angle adjustment; for this, fasten the locking screw [A2] clockwise with **50 Nm**. (**Fig. 4**)

Fig. 5: Carry out the repair work on the vehicle in accordance with the manufacturer's specifications.



Fig. 6: Relieve the support device and remove it from the wheel hub.



⚠ WARNING

Very high forces act when supporting wheel suspensions. The support structure may break if overloaded or misused; ejected parts and falling of the vehicle may result in **DEATH** or **SERIOUS INJURIES**.

- **Always** work on the vehicle in accordance with the basic regulations on work safety and accident prevention.
- **Never** exceed the **maximum load** of the support device of **600 kg**.
- **Always** observe the **maximum load** and the safety and warning instructions of the engine and gearbox jack.
- **Never** use the support device to lift and support the vehicle.
- **Never** lift/lower the vehicle with a second lifting device while using the support device on the vehicle.
- While working with the support device, it is **essential** to put other lifting devices out of operation and secure them against unintentional reconnection.
- Always wear your personal protective equipment (safety goggles, protective gloves, safety shoes) when working!

⚠ ATTENTION

The vehicle can be damaged.

- **Never** subject sensitive components on the vehicle to tension or pressure while working with the support device.

3. Carry out the repair work on the vehicle in accordance with the manufacturer's specifications. (Fig. 5)

4.2 Dismounting the support device.

⚠ WARNING

The wheel suspension can suddenly come down when loosening the wheel bolts on the support device, this can lead to **SERIOUS INJURIES** from sharp edges and crushing between parts!

- **Completely** relieve the support device before loosening the wheel nuts.

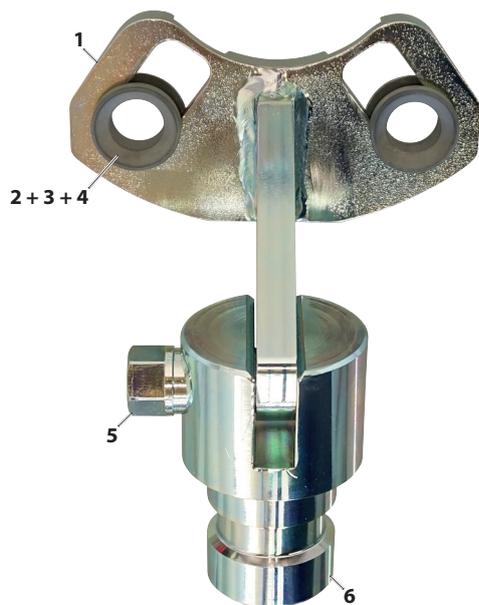
1. After completion of the work, completely relieve the support device using the gearbox jack.

Then unscrew both wheel bolts on the support device. (Fig. 6)

Fig. 7: Perform further work on the vehicle according to the manufacturer's instructions.



Overview of the single parts: VAS 6931/1



2) Loosen the locking screw on the engine and gearbox jack and remove the support device.

3. Perform further work on the vehicle according to the manufacturer's instructions. (Fig. 7)

5. Care and storage

CAUTION: Benzene and chemical solvents can damage plastic parts. After each use, clean all parts with a clean cloth only. To protect them against corrosion, lightly rub all metal parts after use with an anti-corrosion oil or wax that is suitable for tool care. Keep the special tool in a dry and clean place.

6. Maintenance and repair

WARNING: For safety reasons, ensure that a damaged special tool is no longer used. A professional inspection and repair may only be carried out by specially trained specialist personnel at GEDORE Automotive GmbH. Improper repair of the special tool can result in **DEATH** or **SEVERE INJURIES**.

7. Overview of the single parts

VAS 6931/1 - Support device

Item	VAS no.	GAM no.	Description	Qty.
A / -	VAS 6931/1	KL-0145-130 VAG	Support device	1
1	-	KL-0145-1301 VAG	Wheel hub fork	1
A1 / 2	-	KL-0145-1302	Bushing	2
3	-	KL-0145-1303	Shim washer 20x28x1	2
4	-	KL-0145-1304	Retaining ring SW20	2
A2 / 5	-	KL-0145-1306	Clamping screw	1
A3 / 6	-	KL-0145-1305	Pin	1
-	-	KL-0145-130/80 Z	USB flash drive (<i>Operating instructions</i>)	1
-	-	KL-0028-13/81 Z	Leaflet for using the USB	1

8. Environmentally compliant disposal

Dispose of special tool and packaging material in accordance with the legal requirements in an environmentally friendly manner.

9. Manufacturer's address

GEDORE Automotive GmbH

Breslauer Straße 41 // 78166 Donaueschingen - GERMANY

Phone: +49 771 83223 -71 // E-mail: info.gam@gedore.com

10. EC Declaration of conformity

In accordance with *EC Machinery Directive 2006/42/EC dated 17 May 2006, Appendix II A*

Name and address of the manufacturer

GEDORE Automotive GmbH
Breslauer Straße 41
78166 Donaueschingen - GERMANY

We herewith declare that the *load suspension device* that is described below:

Product designation: Support device

Series / type designation: VAS 6931/1

complies with all relevant provisions of the *Machinery Directive 2006/42/EC*.

Applied harmonized EN standards:

DIN EN ISO 12100 *Safety of machinery - Basic concepts, general principles for design – Risk assessment and risk reduction*

DIN EN 1494 *Mobile or movable jacks and associated lifting equipment*

The technical documentation was prepared in accordance with *Annex II - Part A* of the *Machinery Directive 2006/42/EC* and can be submitted to the market surveillance authority responsible on request.

Additional information:

The *load suspension device* may only be put into operation when it has been determined that the *load hoist* in which the *load handling attachment* is to be installed complies with the basic requirements of the *Machinery Directive 2006/42/EC*.

Authorized representative of GEDORE Automotive GmbH
for the compilation of all technical documents: *Head of Design*

Donaueschingen, 12.08.2020



GEDORE Automotive GmbH
Telefon 0771/83223-0 - Fax 0771/83223-90
Postfach 13 29 - 78154 Donaueschingen
i. V. Anette Hagen-Krebs, Change Management Officer, GEDORE Automotive GmbH