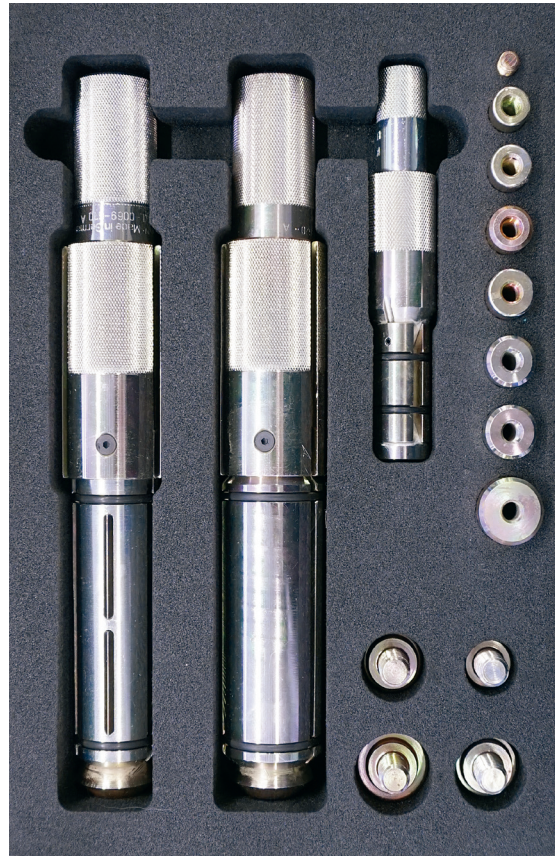


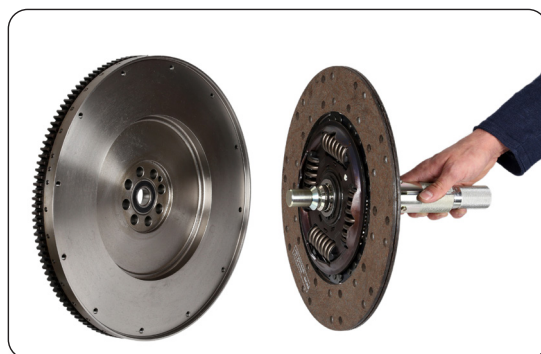


# KL-0069-67 E / -6 A / -7 A

## Clutch Centring Tool in Foam Insert



**Operating instructions** EN  
 Read and understand before use!



[www.gedore-automotive.com](http://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

Version 2 - 08/2021

0069-67E\_EN210807.indd



ENGLISH

EN

EN

## Manufacturer's address

GEDORE Automotive GmbH

Breslauer Straße 41 // 78166 Donaueschingen - GERMANY

☎ +49 (0)771/83223-71 // ✉ info.gam@gedore.com

## Imprint

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**, Donaueschingen (GERMANY)

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

[www.gedore-automotive.com](http://www.gedore-automotive.com)



# Contents

<b>1. Basic safety instructions</b> .....	<b>4</b>
1.1 Target group .....	4
1.2 Intended use .....	4
1.3 Misuse/abuse .....	4
1.4 Personal protective equipment .....	4
1.5 Handling .....	5
1.6 Basic warnings .....	5
1.7 Work environment .....	5
<b>2. Product description</b> .....	<b>6</b>
2.1 KL-0069-67 E - Clutch centring tool .....	6
2.2 Scope of delivery .....	6
2.3 Specifications .....	6
<b>3. Preparations</b> .....	<b>7</b>
3.1 Checking the scope of delivery .....	7
3.2 Preparing the tool .....	7
3.3 Preparing the vehicle .....	7
<b>4. Typical application</b> .....	<b>8</b>
4.1 Centring of a <u>single</u> -disc clutch .....	8
4.2 Centring of a <u>double</u> -disc clutch .....	9
<b>5. Care and storage</b> .....	<b>10</b>
<b>6. Maintenance and repair by the GEDORE Automotive Service Center</b> .....	<b>10</b>
<b>7. Environmentally friendly disposal</b> .....	<b>10</b>

## 1. Basic safety instructions

### ⚠ WARNING

Read and understand the operating instructions before you start using the clutch centring tool. Misuse can lead to **moderate** or **minor injuries**.

The operating instructions are part of the clutch centring tool. Keep these operating instructions at a safe place for future reference, and always pass them on to subsequent users of the clutch centring tool.

### 1.1 Target group

These operating instructions are intended to be used by skilled personnel in motor vehicle workshops.

**Never** allow unauthorised persons or minors to use the clutch centring tool.

The purchaser of the clutch centring tool **must** ensure that the user has read and understood the operating instructions completely before he uses the clutch centring tool.

The operating instructions **must** be available at all times to the user of the clutch centring tool.

### 1.2 Intended use

The clutch centring tool is **only used** for centring clutch discs.

The clutch centring tool **may only** be used by skilled personnel in motor vehicle workshops.

The clutch centring tool **may only be used** in the way described in the operating instructions.

- Any other use can cause **moderate** or **minor injuries!**

### 1.3 Misuse/abuse

**Never** subject the clutch centring tool to technical modifications, additions, or conversions which could have even the slightest effect on safety!

- **Always** read and observe all warnings, safety instructions and other instructions for the operation and maintenance of the clutch centring tool!
- The clutch centring tool **may only** be used in the way described in **Chapter 1.2 - Intended use**, any other use can cause **moderate** or **minor injuries!**

### 1.4 Personal protective equipment

**Always** wear your personal protective equipment when you use the clutch centring tool. The clutch centring tool can bring about mechanical hazards, such as crushing, cutting, and shock injuries.



**EYE PROTECTORS** (see OSHA 29 CFR 1910.133 and ANSI Z87) **must** be worn when using the clutch centring tool, to protect against flying objects.

- Particles can be ejected when working with the clutch centring tool and cause severe injuries to your eyes.



**PROTECTIVE GLOVES** **must** be worn when using the clutch centring tool.

- Working with the clutch centring tool can cause skin abrasions and crushing.



**SAFETY SHOES** with anti-slip sole and steel toe cap (see OSHA 29 CFR 1910.136 and ANSI Z41) **must** be worn when using the clutch centring tool.

- Dropping parts can cause injuries to feet and toes.

## 1.5 Handling




### ⚠ CAUTION

Observe the following safety precautions to avoid injuries and material damage as a result of misuse and unsafe handling of the clutch centring tool. Misuse can cause **moderate** or **minor injuries**.

- Before using the clutch centring tool, it is **essential** to observe the **basic warnings** given in **Chapter 1.6!**
- Check the clutch centring tool for perfect condition **before each use**; defective or worn parts **must** be replaced before use!
- Use only genuine **GEDORE Automotive** spare parts and accessories for the clutch centring tool.

## 1.6 Basic warnings

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

Warning sign	Signal word	Meaning
	<b>WARNING</b>	<b>Indicates</b> a hazardous situation which, if not avoided, could cause <b>severe or even fatal injuries</b> .
	<b>CAUTION</b>	<b>Indicates</b> a hazardous situation which, if not avoided, could cause <b>moderate or minor injuries</b> .
	<b>CAUTION</b>	<b>Indicates</b> a situation which, if not avoided, can cause damage to the tool, its functions, or an object in its vicinity.
	<b>Note / tip</b>	<b>Note</b> on important information and useful tips for use.

### ⚠ CAUTION

When using the clutch centring tool, or when assembling clutches, various parts can fall down and **cause moderate or minor injuries**.

- Never leave the clutch centring tool with clutch disc unattended on the flywheel.
- Never stand underneath the clutch centring tool with clutch disc if it is loose on the flywheel.
- The storage place for the clutch centring tool must be sufficiently large and protect the tool set from dropping.
- Prior to each use, visually inspect the clutch centring tool to ensure that it is not damaged!
- Never use the clutch centring tool if it is damaged or has other abnormalities.
- Ensure that work on vehicles is carried out always in compliance with the instructions and safety regulations of the vehicle manufacturer!
- Wear personal protective equipment (*safety goggles, protective gloves, safety shoes*).
- Use **only genuine GEDORE Automotive** spare parts and accessories.

### CAUTION

Risk of damaging the clutch centring tool and vehicle.

- Only the data and instructions issued by the vehicle manufacturer apply for any work on the vehicle.

## 1.7 Work environment

Safe work with the clutch centring tool set is only possible when the working environment is safe.

- The workplace **must** be clean and tidy.
- The workplace **must** be sufficiently large and protected.
- The workplace **must** be on a solid non-skidding floor.

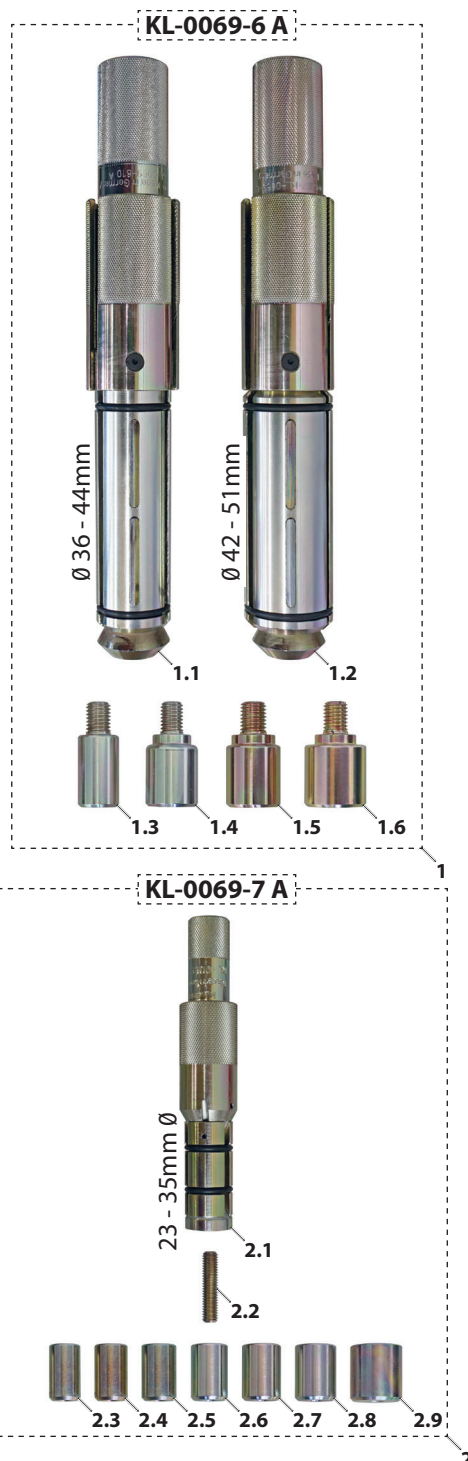
## 2. Product description

### 2.1 KL-0069-67 E- Clutch centring tool set in foam insert

Universal fit for transporters, commercial vehicles, and agricultural machinery with single and double disc clutches, with a hub diameter or 23 - 51 mm.

The clutch centring tool set enables the quick and professional centring of clutch disc(s). Centring is performed through the guide bearing in the crankshaft.

Storage system: KL-4990-9324 - Plastic case



### 2.2 Scope of delivery/spare parts:

Item	Part no.	Description	Qty
1	KL-0069-6 A	<b>Clutch centring tool Commercial vehicles + agricultural machinery</b>	1
1.1	KL-0069-610 A	Clutch centring pin size 1 36 / 44mm Ø	1
1.2	KL-0069-620 A	Clutch centring pin size 2 42 / 51 mm Ø	1
1.3	KL-0069-6001	Centring piece 20mm Ø	1
1.4	KL-0069-6002	Centring piece 25mm Ø	1
1.5	KL-0069-6003	Centring piece 27mm Ø	1
1.6	KL-0069-6004	Centring piece 30mm Ø	1
2	KL-0069-7 A	<b>Clutch centring tool for transporters</b>	1
2.1	KL-0069-710 R	Clutch centring pin 23 - 35mm diameter	1
2.2	KL-0069-5011	Grub screw M8 x 35mm	1
2.3	KL-0069-7001	Centring piece 15mm Ø	1
2.4	KL-0069-7002	Centring piece 16mm Ø	1
2.5	KL-0069-7003	Centring piece 17mm Ø	1
2.6	KL-0069-7004	Centring piece 18mm Ø	1
2.7	KL-0069-7005	Centring piece 19mm Ø	1
2.8	KL-0069-7006	Centring piece 20mm Ø	1
2.9	KL-0069-7008	Centring piece 25mm Ø	1
-	KL-4999-9001	Anchor nail 3.1 x 40mm	2
-	KL-4999-9072	Rating plate M044A-01	1
-	KL-0069-1090-1	Foam insert	1

### 2.3 Specifications:

#### Fits coupling hub dia.:

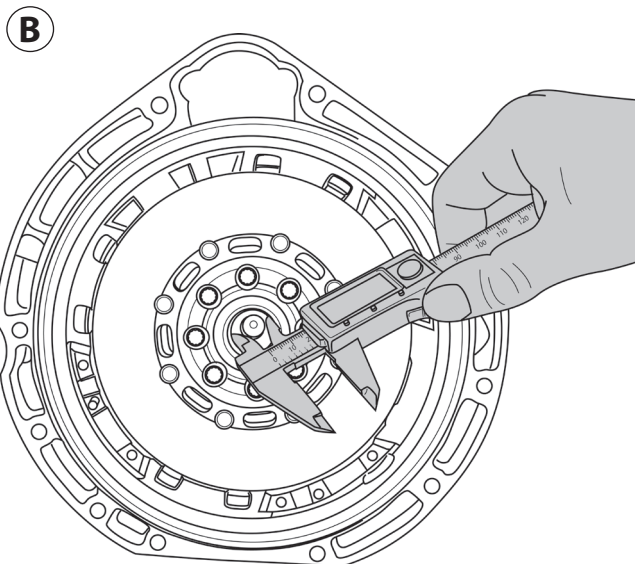
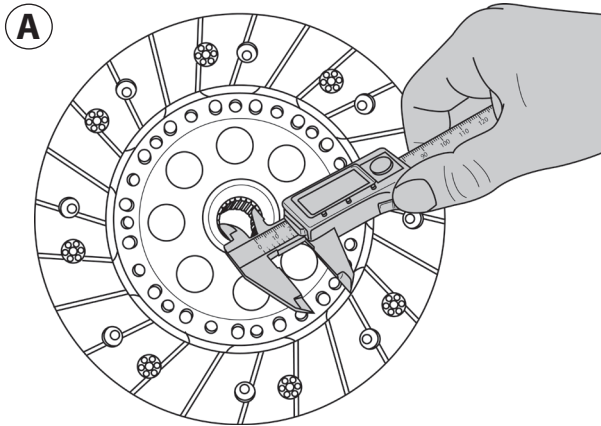
Clutch centring mandrel - KL-0069-710 R:.....23 - 35mm Ø

Clutch centring mandrel - KL-0069-610 A: .....36 - 44mm Ø

Clutch centring mandrel - KL-0069-620 A: .....42 - 51mm Ø



**Fig. 1:** Determine the suitable **coupling centring pin** with **centring piece**.



**Fig. 2:** 4.3 Assembling the clutch centring tool.

**Fits commercial vehicles + agricultural machinery**



**Fits vans**



### 3. Preparations

Prior to using the clutch centring tool for the first time, check and ensure 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

1. Depending on the coupling, a suitable **clutch centring pin** must be assembled with the corresponding **centring piece** ...

...measure the coupling hub diameter (**Fig. 1 A**), and select a suitable **clutch centring pin** , ...

- Clutch centring pin "1.1": ..... 36 - 44 mm Ø
- Clutch centring pin "1.2": ..... 42 - 51 mm Ø
- Clutch centring pin "2.1": ..... 23 - 35 mm Ø

... subsequently measure the guide bearing diameter (**Fig. 1 B**), and select a suitable **centring piece** .

**For clutch centring pins "1.1" + "1.2":**

- Centring piece "1.3": ..... 20mm Ø
- Centring piece "1.4": ..... 25mm Ø
- Centring piece "1.5": ..... 27mm Ø
- Centring piece "1.6": ..... 30mm Ø

**Clutch centring mandrel "2.1":**

- Centring piece "2.3": ..... 15mm Ø
- Centring piece "2.4": ..... 16mm Ø
- Centring piece "2.5": ..... 17mm Ø
- Centring piece "2.6": ..... 18mm Ø
- Centring piece "2.7": ..... 19mm Ø
- Centring piece "2.8": ..... 20mm Ø
- Centring piece "2.9": ..... 25mm Ø

2. Insert the **centring piece** on the **coupling centring mandrel** as shown in **Fig. 2**, clockwise.

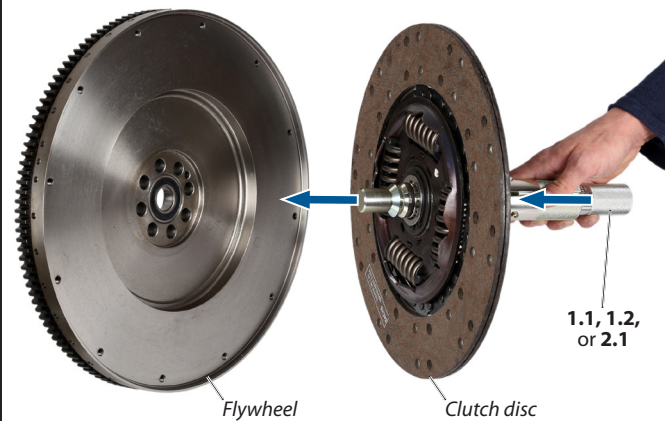
**Note:**

On the clutch centring pin "2.1", insert the corresponding centring piece "2.3" - "2.9" together with the grub screw "2.2".

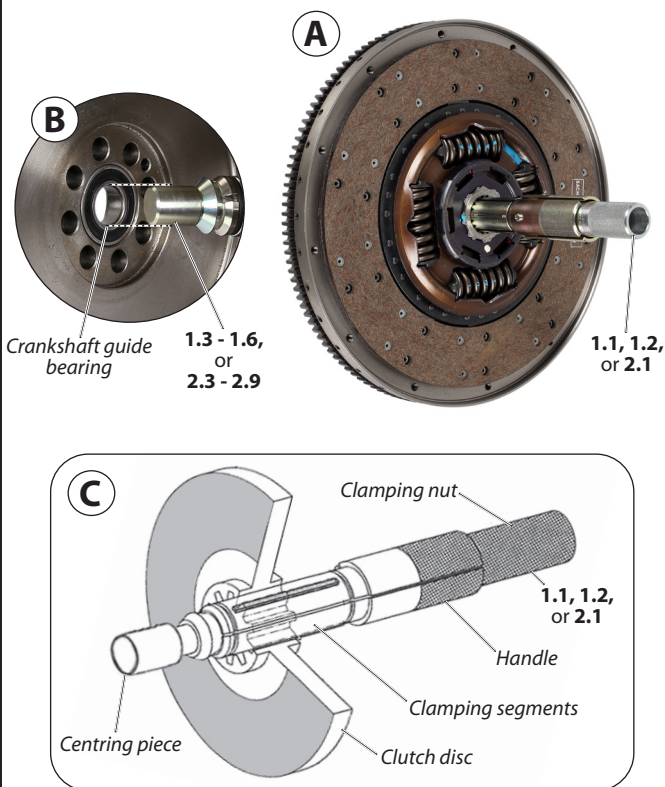
#### 3.3 Preparing the vehicle

1. Loosen or remove all necessary parts as specified by the manufacturer.

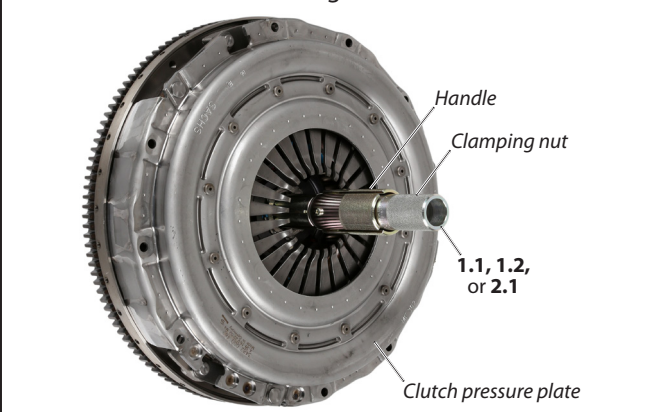
**Fig. 3:** Inserting clutch centring mandrel:



**Fig. 4:** Positioning and centring the clutch disc.



**Fig. 5:** Mount the clutch pressure plate, then remove centring tool.



## 4. Typical application

### 4.1 Centring of a single-disc clutch

This typical application describes the centring of a single-plate clutch in connection with the clutch centring mandrels "1.1", "1.2", or "2.1".

#### ⚠ CAUTION

The clutch centring tool and the clutch disc can fall. This can cause **moderate** or **light injuries**.

- **Never** leave the clutch centring tool with clutch disc unattended on the flywheel.
- **Never** stand underneath the clutch centring tool with clutch disc if it is loose on the flywheel.
- Wear personal protective equipment (safety shoes).

#### CAUTION

The clutch can be damaged.

- Mount the clutch disc in the correct orientation as specified by the manufacturer.

1. Insert the prepared clutch centring pin "1.1", "1.2" or "2.1" into the clutch disc in the correct position. (Fig. 3)

Then mount them together to the flywheel as shown in Fig. 4 A, so that the centring piece "1.3" - "1.6", or "2.3" - "2.9" is completely and properly seated in the crankshaft guide bearing (Fig. 4 B).

#### CAUTION

The clutch can be damaged.

- The clutch disc must be in complete and proper contact with the flywheel before centring.
- Fix the clutch centring pin only slightly hand-tight at the clutch disc.

2. Centre the clutch disc by holding the **handle piece** on the clutch centring pin "1.1", "1.2" or "2.1" against it, and tighten the **clamping nut** clockwise. (Fig. 4 C)

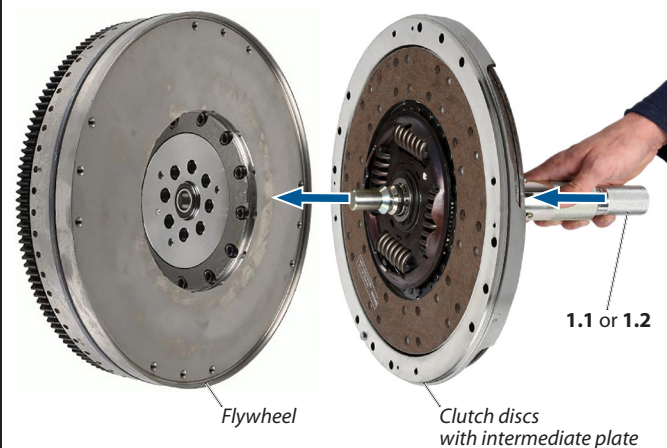
3. Mount the clutch pressure plate to the flywheel according to the manufacturer's specifications, and screw it down. (Fig. 5)

4. Release the clutch centring pin "1.1", "1.2", or "2.1" by counterholding the **handle piece** and loosening the **clamping nut** anticlockwise.

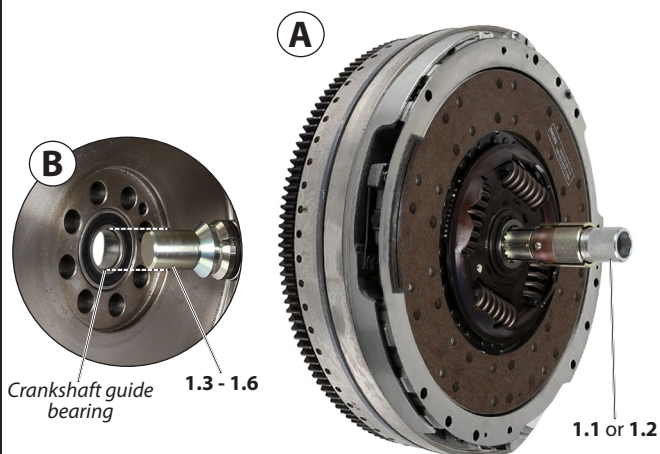
Then remove the clutch centring tool and make the other repairs on the vehicle according to the manufacturer's specifications.



**Fig. 6:** Inserting clutch centring mandrel:



**Fig. 7:** Positioning and centring the clutch disc.



### 4.2 Centring a double-disc clutch

This typical application describes the centring of a double-plate clutch in connection with the clutch centring mandrel "1.1" or "1.2"

#### ⚠ CAUTION

The clutch centring tool and the clutch discs with intermediate plate can fall. This can cause **moderate** or **light injuries**.

- **Never** leave the clutch centring tool with clutch discs unattended on the flywheel.
- **Never** stand underneath the clutch centring tool with clutch discs if it is loose on the flywheel.
- Wear personal protective equipment (safety shoes).

#### CAUTION

The clutch can be damaged.

Position the clutch discs with intermediate plate on the flywheel in the correct orientation as specified by the manufacturer!

1. Insert the prepared clutch centring pin "1.1", or "1.2" into the clutch discs with intermediate plate. (**Fig. 6**)

Then assemble them to the flywheel as shown in **Fig. 7 A**, so that the centring piece "1.3" - "1.6", is completely and properly seated in the crankshaft guide bearing (**Fig. 7 B**).

#### CAUTION

The clutch can be damaged.

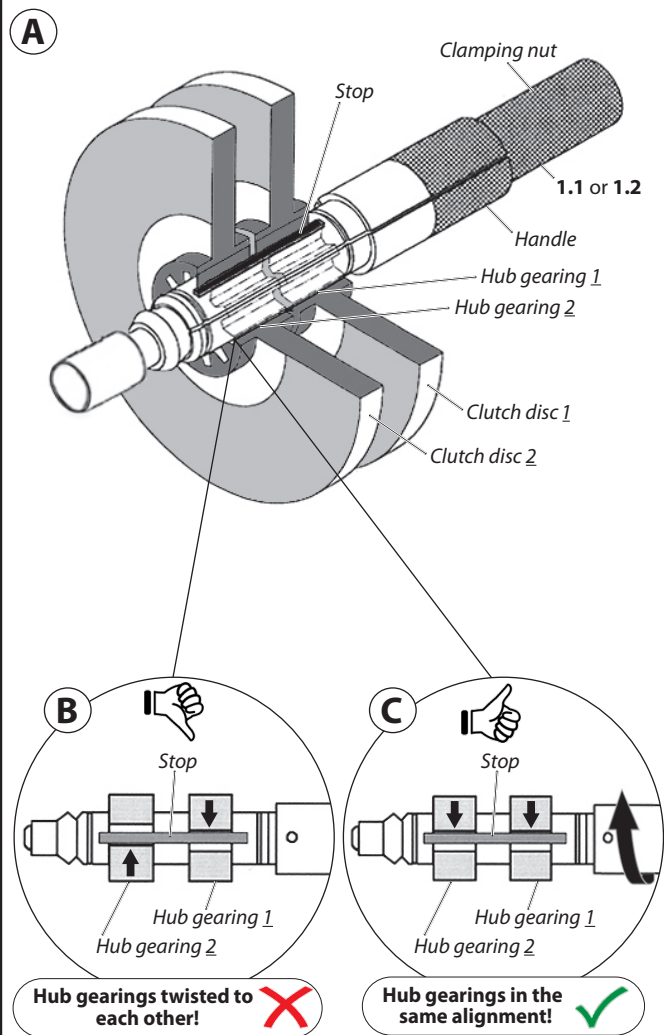
- The clutch disc must be in complete and proper contact with the flywheel before centring.
- Fix the clutch centring pin only slightly hand-tight to the clutch disc.

2. Centre the clutch discs by counterholding the **handle piece** on the clutch centring pin "1.1" or "1.2", and tighten the **clamping nut** clockwise. (**Fig. 7 C**)

#### ⓘ Note:

Fix the **clutch centring pin** only slightly so that the clutch discs with intermediate plate can still be turned back and forth on the **clamping segments** with a little force by hand. (**Fig. 7 C**)

**Fig. 8:** Align the hub gearing according to the coupling.



**Note:**

The **next step** is only necessary for coupling designs with separate hub gearing on the coupling discs. (Fig. 8 A)

**CAUTION**

Risk of damaging the clutch and the gear unit.

• If couplings are designed with separate hub gearing, these **must be** aligned with each other; otherwise the gearbox input shaft cannot be inserted. (Fig. 8 B + C)

2. Align the clutch discs with separate hub gearing to each other.

For this, counterhold both clutch plates by hand, and, at the same time, turn the clutch centring pin "1.1" or "1.2" clockwise over the **handle** until both clutch plates turn with the **stop** or the **hub toothing**. (Fig. 8 A + C)

Then slightly tighten the **clamping nut** on the **coupling centring pin** in clockwise direction.

4. Mount the clutch pressure plate to the flywheel according to the manufacturer's specifications, and screw it down. (Fig. 9)

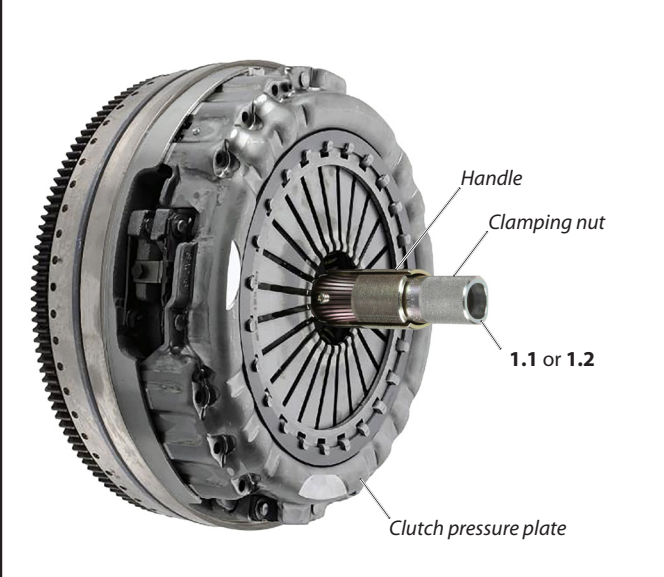
5. Release the clutch centring pin "1.1" or "1.2" by counterholding the **handle piece** and loosening the **clamping nut** anticlockwise.

Then remove the clutch centring tool and make the other repairs on the vehicle according to the manufacturer's specifications.

## 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.

**Fig. 9:** Mount the clutch pressure plate and remove the centring tool afterwards.



## 6. Maintenance and repair by the GEDORE Automotive Service Centre

**WARNING:** For safety reasons, ensure that damaged special tool is no longer used. Only specifically trained personnel are allowed to carry out professional inspection and repair. Improper repair of the special tool can cause **moderate** or **minor injuries**.

Please contact **GEDORE Automotive GmbH**  
**Breslauer Str. 41 // 78166 Donaueschingen**

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

## 9. Environmentally compliant disposal

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



## **GEDORE-Werkzeugfabrik GmbH & Co. KG**

Remscheider Straße 149  
42899 - Remscheid  
Postfach 120361  
47873 Remscheid  
GERMANY

### **Vertrieb DEUTSCHLAND**

☎ +49 (0) 2191 / 596-0  
☎ +49 (0) 2191 / 596-230  
✉ info@gedore.com  
🌐 www.gedore.com

### **Sales INTERNATIONAL**

☎ +49 (0) 2191 / 596-910  
☎ +49 (0) 2191 / 596-911  
✉ info@gedore.com  
🌐 www.gedore.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  
🌐 www.gedoretools.com

**Worldwide GEDORE service centers and offices are listed on the Internet at: [www.gedore.com](http://www.gedore.com)**

## **GEDORE Automotive GmbH**

Breslauer Straße 41  
78166 - Donaueschingen  
Postfach 1329  
78154 Donaueschingen  
GERMANY

### **Vertrieb DEUTSCHLAND**

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



**[www.gedore-automotive.com](http://www.gedore-automotive.com)**