



04/2018

Clutch Aligner Kit



KL-0069 K
KL-0069-5 K

EN

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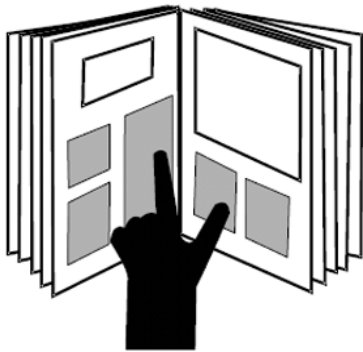
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Table of Contents

1. Essential Safety Notices	4
1.1 Safety Notices and Warnings	4
1.2 Personal Protective Equipment	4
1.3 Intended Use	4
1.4 Work Environment.....	4
2. Product Description.....	5
KL-0069-5 K Clutch Aligner Kit.....	5
Technical Data.....	5
3. Preparatory Work.....	5
4. Example of Use	6
5. Care and Storage	7
6. Maintenance and Repair by the GEDORE Automotive Service Centre.....	7
7. Environmentally Safe Disposal.....	7

1. Essential Safety Notices


⚠ Before using the clutch aligner kit, it is imperative that you read and understand the Instruction Manual. Misuse can result in **minor or moderate injuries**.

This Instruction Manual is part of the clutch aligner kit. Keep the Instruction Manual in a safe place for further reference and pass it on to subsequent users of the clutch aligner kit.

All vehicle-specific 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	Signal Word	Meaning
	CAUTION	Indicates a hazardous situation which, if not avoided, could result in moderate or minor injuries .
	ATTENTION	Indicates a situation which, if not avoided, may result in possible damage to the clutch aligner kit or its functioning, or to objects in its vicinity.

⚠ CAUTION

When installing clutches, heavy components are susceptible to becoming loose and falling.

When centring clutches, there is a risk of moderate or minor injuries if the tool is not used properly.

- ALWAYS wear safety shoes/boots.
- NEVER use the clutch aligner to pre-tension the clutch pressure plate.
- NEVER leave the clutch aligner with clutch disc and pressure plate unsecured and unattended in the vehicle.

1.2 Personal Protective Equipment

ALWAYS wear personal protective equipment when using the clutch aligner. The clutch aligner 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/parts must be worn when using the clutch aligner.

- Particles may be ejected at very high speed while working with the clutch aligner and could cause serious injuries to your eyes.



SAFETY GLOVES must be worn when using the clutch aligner.

- Working with the clutch aligner 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 clutch aligner.

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

1.3 Intended Use

⚠ The clutch aligner kit is **only** designed for the centring of clutch discs.

The clutch aligner kit may **only** be used for the purpose and in the manner as described in this Instruction Manual.

The clutch aligner kit may **only** be used in professional workshops specialised in passenger car repairs.

- Any other use can result in severe injuries.

1.4 Work Environment

For safety reasons, work with the clutch aligner kit 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 must be secured.

KL-0069-5 K

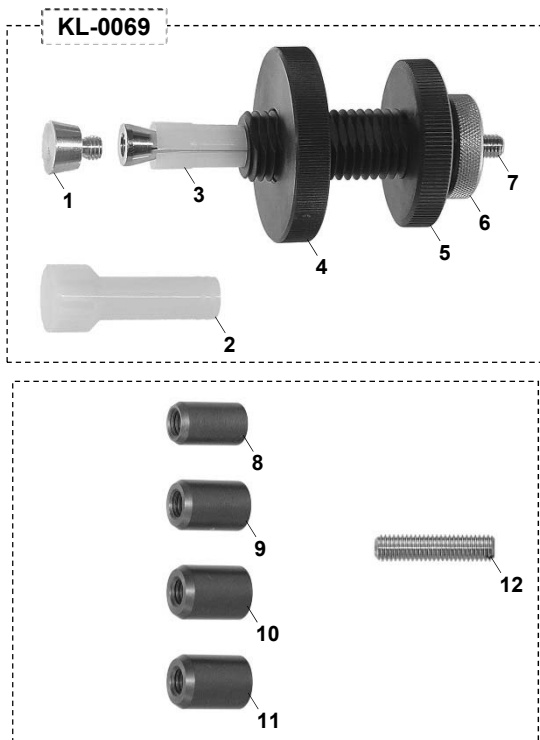


Fig. 1: Preparing the clutch aligner.

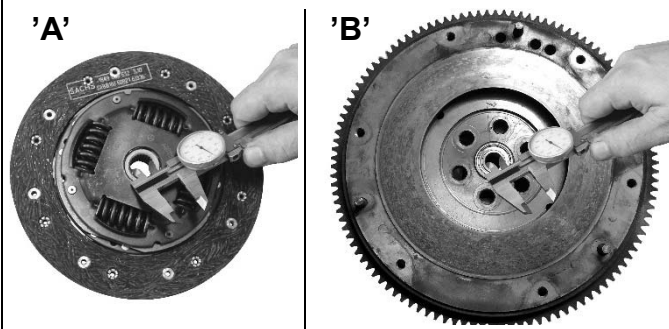
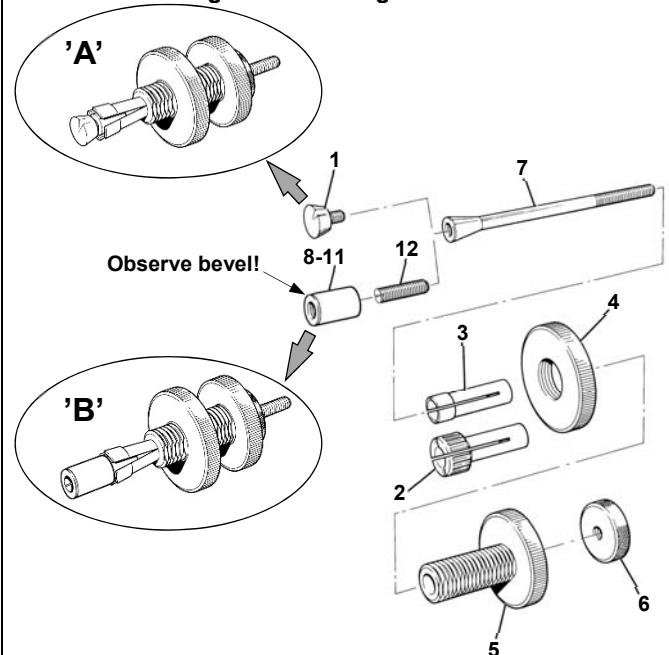


Fig. 2: Establishing the components/ assembling the clutch aligner.



2. Product Description

KL-0069-5 K Clutch Aligner Kit

Applicable to vehicles both with and without a pilot/guide bearing in the crankshaft, with clutch discs having a hub \varnothing ranging from 15-29mm, and pilot/guide bearing \varnothing from 12-16mm respectively.

For the quick centric alignment of the clutch disc to the pressure plate, the flywheel respectively. The special design of the tool provides for the perfect centring of the clutch.

Pos.	Part No.	Description	Qty
-	KL-0069-5 K	Clutch Aligner Kit	1
<i>composed of:</i>			
-	KL-0069	Clutch Aligner	1
-	KL-0069-5010 A	Set of Centring Sleeves	1
-	KL-0069-5030	Plastic Storage Case (empty)	1

Pos.	Part No.	Description	Qty
-	KL-0069	Clutch Aligner	1
<i>composed of:</i>			
1	KL-0069-0050	Conical Adaptor	1
2	KL-0069-0006	Clamping Cone, Size 2, 22mm	1
3	KL-0069-0005	Clamping Cone, Size 1, 15mm	1
4	KL-0069-5002	Lock Nut	1
5	KL-0069-0001	Base Body	1
6	KL-0069-5003	Clamping Nut	1
7	KL-0069-5004	Clamp Screw	1

Pos.	Part No.	Description	Qty
-	KL-0069-5010 A	Set of Centring Sleeves	1
<i>composed of:</i>			
8	KL-0069-5012	Centring Sleeve, 12mm	1
9	KL-0069-5013	Centring Sleeve, 14mm	1
10	KL-0069-5014	Centring Sleeve, 15mm	1
11	KL-0069-5015	Centring Sleeve, 16mm	1
12	KL-0069-5011	Grub Screw, M8x35mm	1

KL-0069 K Clutch Aligner

Applicable to vehicles without pilot/guide bearing in the crankshaft, with clutch discs having a hub \varnothing ranging from 15-29mm.

Like the **KL-0069-5 K**, however supplied without the set of centring sleeves **KL-0069-5010**.

Technical Data:

Clamping range (of size 1 clamping cone): 15-22mm

Clamping range (of size 2 clamping cone): 22-29mm

3. Preparatory Work

1. Identify appropriate clamping cone for clutch disc. (**Fig. 1 A**)
For this, measure hub \varnothing of clutch disc and choose suitable clamping cone '2' or '3'.
2. Applies to vehicles with pilot bearing:
Identify centring sleeve. (**Fig. 1 B**)
For this, measure inner \varnothing of pilot bearing and choose suitable centring sleeve from '8'-'11'.
Observe the mounting position and orientation, respectively the bevel, of appropriate centring sleeve '8'-'11', see **Fig. 2!**
3. Determine components/assemble appropriate clutch aligner
 - for vehicles without pilot/guide bearing:
see Fig. 2 A, then, proceed to **Section 4.1**
 - for vehicles with pilot/guide bearing:
See Fig. 2 B, then, proceed to **Section 4.2**

Fig. 3: Inserting the clutch aligner and securing it via the clamping nut.

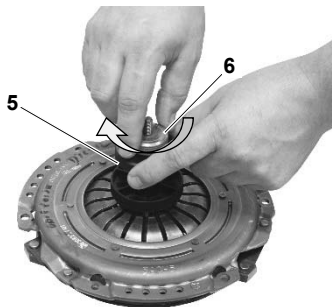


Fig. 4: Turning the lock nut until it slightly touches the pressure plate.

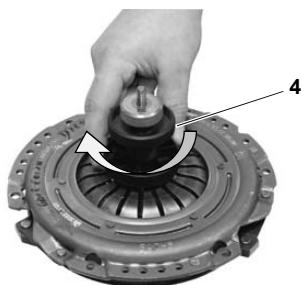


Fig. 5: Aligning the clutch disc.

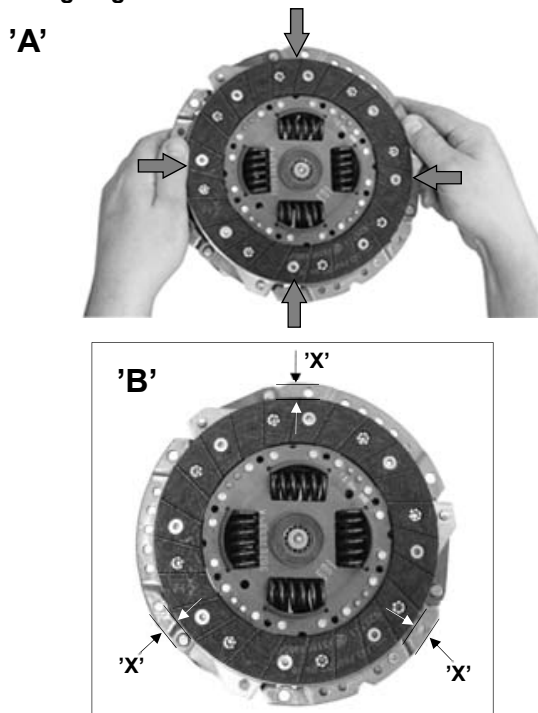
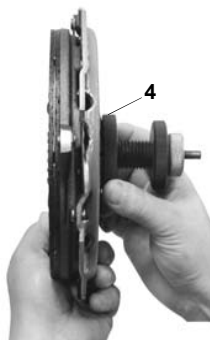


Fig. 6: Tightening down the lock nut.



4. Example of Use

4.1. Aligning the clutch disc centrally with the pressure plate.

The following instructions describe the procedure of centring a clutch disc to the pressure plate.

1. **⚠ CAUTION**
When installing clutches, heavy components are susceptible to becoming loose and falling.
 - Always wear safety shoes/boots.

Place pressure plate onto clutch disc and insert assembled clutch aligner into bore of clutch disc. (Fig. 3)
2. While counter-holding base body '5', hand-tighten clamping nut '6' as shown in Fig. 3.
3. Turn lock nut '4' until it slightly touches the pressure plate. (Fig. 4)
4. Centrally align clutch disc on pressure plate as shown in Fig. 5 A, while making sure that the measured dimension 'x' is the same size on all three partial areas as shown in Fig. 5 B.
5. Keep clutch disc in the centrally aligned position and fix it to pressure plate by tightening down lock nut '4'. (Fig. 6)
6. **⚠ CAUTION**
When installing clutches, heavy components are susceptible to becoming loose and falling.
When centring clutches, there is a risk of moderate or minor injuries if the tool is not used properly.
 - ALWAYS wear safety shoes/boots.
 - NEVER use the clutch aligner to pre-tension the clutch pressure plate.
 - NEVER leave the clutch aligner with clutch disc and pressure plate unsecured and unattended in the vehicle.

Mount pressure plate along with clutch disc to flywheel in accordance with the manufacturer's instructions.
7. Slacken clamping nut '6'; withdraw clutch aligner from pressure plate/clutch disc assembly.

Fig. 7: Inserting the clutch aligner and securing it via the clamping nut.

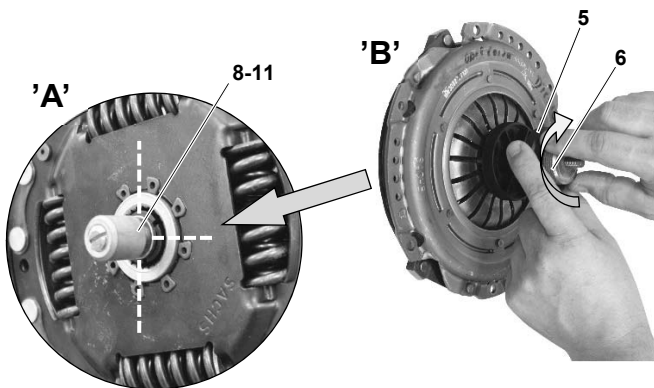


Fig. 8: Turning the lock nut until it slightly touches the pressure plate.

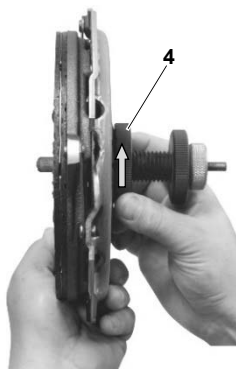
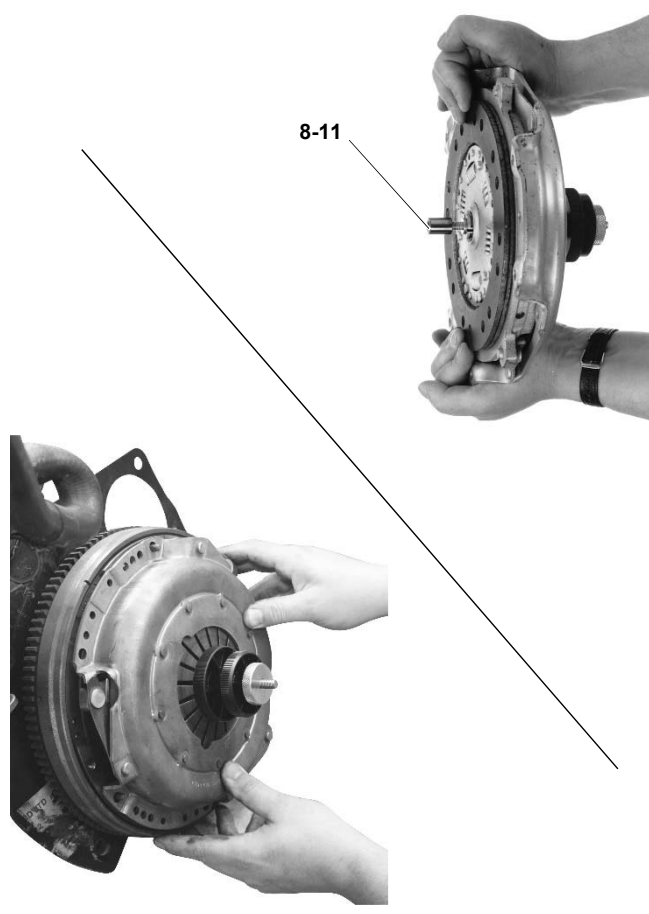


Fig. 9: Mounting the pressure plate with clutch disc to flywheel in accordance with the manufacturer's instructions.



4.2. Aligning the clutch disc centrally with the flywheel.

The following instructions describe the procedure of centring a clutch disc to the flywheel.

- CAUTION**

When installing clutches, heavy components are susceptible to becoming loose and falling.

 - Always wear safety shoes/boots.

Place pressure plate onto clutch disc, insert assembled clutch aligner into bore of clutch disc. (Fig. 7 B)

- Fit clamping cone '2', or '3' as appropriate. To do this, counter-hold base body '5' and hand-tighten clamping nut '6' as shown in Fig. 7 B.

NOTE: Make sure that clamping cone '2' or '3' fits flush with the clutch disc. (Fig. 7 A)

- Turn lock nut '4' until it slightly touches the pressure plate. (Fig. 8)

- CAUTION**

When installing clutches, heavy components are susceptible to becoming loose and falling.

When centring clutches, there is a risk of moderate or minor injuries if the tool is not used properly.

 - ALWAYS wear safety shoes/boots.
 - NEVER** use the clutch aligner to pre-tension the clutch pressure plate.
 - NEVER** leave the clutch aligner with clutch disc and pressure plate unsecured and unattended in the vehicle

Mount pressure plate with clutch disc to flywheel in accordance with the manufacturer's instructions. While doing so, ensure that appropriate centring sleeve '8'-'11' is properly inserted into the pilot bearing. (Fig. 9)

- Slacken clamping nut '6'. Withdraw clutch aligner from pressure plate/clutch disc assembly.

5. Care and Storage

ATTENTION Petroleum ether and chemical solvents can damage plastic parts. After use, always clean all parts with a clean cloth only.

In order to protect against corrosion, lightly lubricate all metal parts with oil after use and store them in a clean and dry place.

6. Maintenance and Repair by the GEDORE Automotive Service Centre.

For safety reasons, as soon as damage is noticed on the tool, 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.

Address: GEDORE Automotive GmbH
Breslauerstr. DE-78166 Donaueschingen
Phone: 0771 83 22 371 // Email: info.gam@gedore.com
For additional information concerning the use of our tool, please contact the GEDORE Automotive Service Centre

7. Environmentally Safe Disposal

Recycle/dispose of the tool and its packaging material in an environmentally sound manner in compliance with the legal rules and regulations in force.

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