

## Clutch Tool Set (Patented)



**4200 080 561**

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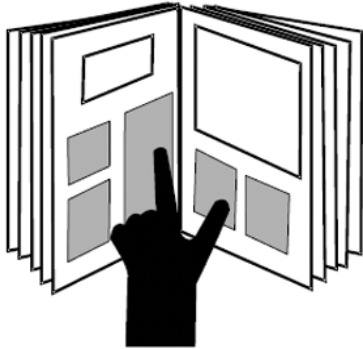
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## 1. Essential Safety Notices

-  Before using the clutch tool set, 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 tool set. Keep the Instruction Manual in a safe place for future reference and pass it on to subsequent users of the clutch tool set.  
 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	Sign reads	Signification
	<b>CAUTION</b>	Indicates a hazardous situation which, if not avoided, may result in <b>moderate</b> or <b>minor injuries</b> .
	<b>ATTENTION</b>	Indicates a situation which, if not avoided, may result in possible damage to the clutch tool set or its functioning, or to objects in its vicinity.

#### CAUTION

- A falling tool can cause injuries.  
 Risk of damage to pressure plate.  
 With clutches featuring a supplementary spring, there is a risk of the spring slipping out of place while pretensioning the clutch. This will affect the proper function of the clutch.
- Always wear safety shoes/boots.
  - When pretensioning the clutch with the clutch-pretensioning tool, be sure to stop turning the spindle as soon as the clutch cover rests evenly against the mounting surface of the flywheel.

#### CAUTION

- When assembling the clutch tool, there is a risk of parts being ejected at high speed.
- Always wear safety goggles.

#### ATTENTION

- Risk of damage to vehicle and tool.
- Lubricate spindle with molybdenum disulphide paste.
  - 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!
  - Always refer to the vehicle manufacturer's data and instructions as only these apply to all work that is carried out on the vehicle.

### 1.2 Personal Protective Equipment

ALWAYS wear personal protective equipment when using the clutch tool set. The clutch tool set 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 tool set.
- Particles may be ejected at very high speed while working with the clutch tool set and could cause serious injuries to your eyes.




- SAFETY GLOVES** must be worn when using the clutch tool set.
- Working with the clutch tool set 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 tool set.
- Falling parts can cause injuries to feet and toes.

### 1.3 Intended Use

-  The clutch tool set is designed for the professional removal and installation of both XTend clutches (Self-adjusting clutches) and conventional clutches, as well as for the centring of clutch discs.

The clutch tool set may only be used for the purpose and in the manner as described in this Instruction Manual.

- Any other use can result in MINOR or MODERATE injuries.

### 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 clutch tool set.

-  Misuse can result in MINOR or MODERATE INJURIES.

- ALWAYS check the clutch tool set prior to EACH use to ensure that it is in good order and condition.
- ALWAYS replace all damaged and worn parts prior to using the clutch tool set.
- ONLY use the original spare parts and accessories from GEDORE Automotive on the clutch tool set.

### 1.5 Work Environment

For safety reasons, work with the clutch tool set should only be carried out in a safe and secure work environment.

- The workplace should always be clean and tidy.
- The workplace should be sufficiently large and must be secured.

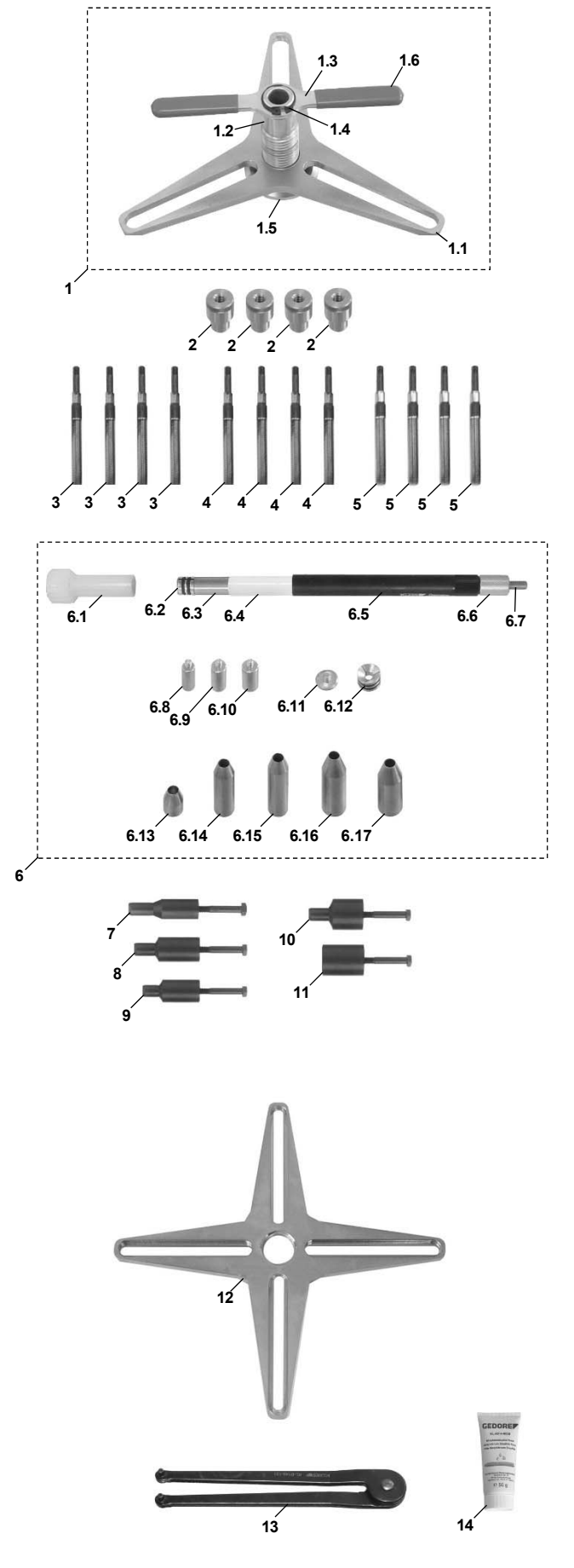
### 1.6 Appropriate Users

This Instruction Manual is designed for technicians/mechanics in workshops.

DO NOT allow children to use the clutch tool set.

Purchasers/employers purchasing the clutch tool set MUST ensure that any person using the clutch tool set has read and understood this Instruction Manual prior to using the tool set. This Instruction Manual MUST be made available to the users of the clutch tool set for reference at all times.

Fig. 1: 4200 080 561



## 2. Product Description

### 4200 080 561 - Clutch Tool Set (Patented)

The clutch tool set is designed for the professional removal and installation of XTend clutches (Self-adjusting clutches) and conventional clutches, as well as for the centring of clutch discs.

This clutch tool set not only prevents unintentional readjustment of the XTend clutch during installation but also any deformation of the clutch cover when mounting both an XTend and conventional clutch.

The clutch aligner can generally be used for the centring of clutch discs, also with engines that do not feature a pilot bearing in the crankshaft, as well as on engines where the crankshaft bore  $\varnothing$  is greater than the clutch disc hub  $\varnothing$ . The two clamping-/centring elements ensure, on the first clamping element ( $\varnothing$  15-28mm) the accurate centring in the clutch disc, and on the second element ( $\varnothing$  12-28mm) the accurate centring in the pilot bearing, respectively the crankshaft bore.

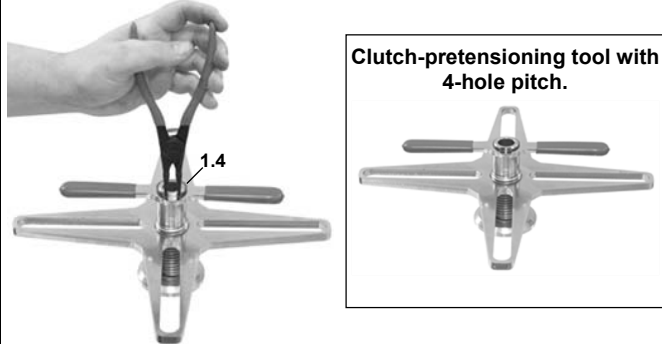
Pos.	Part No.	Description
<b>1</b>	KL-0500-401	Clutch-Pretensioning Tool
1.1	KL-0500-4001	Base Plate (3-hole pitch)
1.2	KL-0500-4002	Spindle
1.3	KL-0500-4003	Lever
1.4	KL-0032-0012	Circlip
1.5	KL-0500-4005	Thrust Piece
1.6	KL-0500-4004	Protective Handle, 15x6mm (2 units)
<b>2</b>	KL-0500-4006	Knurled Nut (4 units)
<b>3</b>	KL-0500-4007	Threaded Bolt, M6 (4 units)
<b>4</b>	KL-0500-4008	Threaded Bolt, M7 (4 units)
<b>5</b>	KL-0500-4009	Threaded Bolt, M8 (4 units)
<b>6</b>	KL-0500-405	Clutch Aligner
6.1	KL-0069-0006	Clamping Cone, Size 2, 22mm
6.2	KL-0500-4053	Set of Clamping Elements, $\varnothing$ 15.5mm
6.3	KL-0500-4056-1	Sliding Cone, $\varnothing$ 15mm, 30mm long
6.4	KL-0069-0005	Clamping Cone, Size 1, 15mm
6.5	KL-0500-4051	Base Body Tube
6.6	KL-0500-4103	Knurled Nut
6.7	KL-0500-4052	Clamping Screw
6.8	KL-0500-4057-1	Centring Pin, $\varnothing$ 12mm
6.9	KL-0500-4057-2	Centring Pin, $\varnothing$ 14mm
6.10	KL-0500-4057-3	Centring Pin, $\varnothing$ 15mm
6.11	KL-0500-4055	Cone Adaptor
6.12	KL-0500-4054	Set of Clamping Elements, $\varnothing$ 20mm
6.13	KL-0500-4056-2	Sliding Cone, $\varnothing$ 15mm, 40mm long
6.14	KL-0500-4056-3	Sliding Cone, $\varnothing$ 15mm, 67mm long
6.15	KL-0500-4056-4	Sliding Cone, $\varnothing$ 15mm, 75mm long
6.16	KL-0500-4056-6	Sliding Cone, $\varnothing$ 18mm, 75mm long
6.17	KL-0500-4056-5	Sliding Cone, $\varnothing$ 18mm, 67mm long
<b>7</b>	KL-0500-11	Clutch-Centring Pin, $\varnothing$ 15/23mm
<b>8</b>	KL-0500-12	Clutch-Centring Pin, $\varnothing$ 15/28mm
<b>9</b>	KL-0500-15	Clutch-Centring Pin, $\varnothing$ 15/26.5mm
<b>10</b>	KL-0500-21	Clutch-Centring Pin, $\varnothing$ 15/32.5mm
<b>11</b>	KL-0500-22	Clutch-Centring Sleeve, $\varnothing$ 32.5mm
<b>12</b>	KL-0500-4011	Base Plate (4-hole-pitch)
<b>13</b>	KL-0149-131	Pin-Type Face Spanner
<b>14</b>	KL-0014-0030	Molybdenum Disulphide Paste

### 2.1 Technical Data

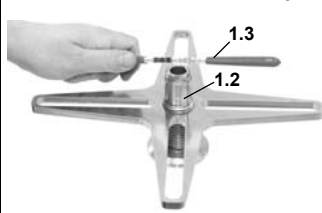
Weight: .....7.0kg

Fig. 2: Re-tooling the clutch-pretensioning tool.

**“A”** Remove circlip.



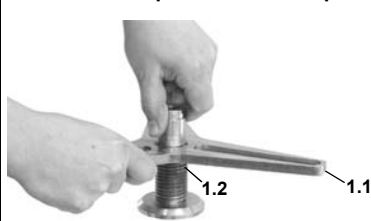
**“B”** Remove lever from spindle.



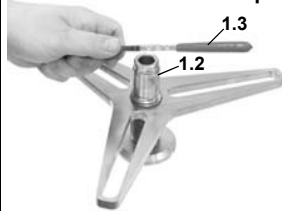
**“C”** Unscrew spindle from base plate.



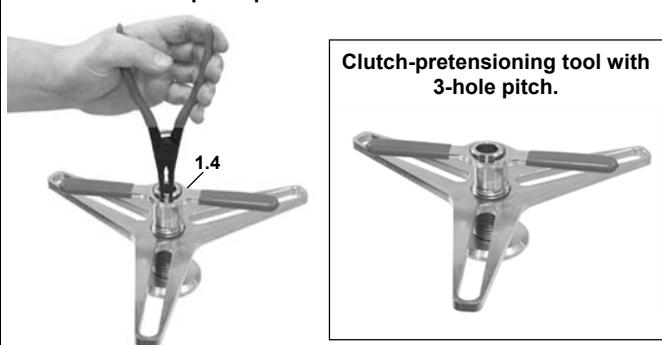
**“D”** Screw spindle into base plate.



**“E”** Place lever onto spindle.



**“F”** Mount circlip on spindle.



### 3. Preparatory Work

Before the first commissioning of the clutch tool set, 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 Tool

Lubricate thread of spindle “1.2” with molybdenum disulphide paste “14”.

#### 3.3 Re-tooling the Clutch-Pretensioning Tool

To re-tool the clutch-pretensioning tool from a 4-hole pitch tool to a 3-hole pitch tool, follow the instructions below.

##### 1. CAUTION

When removing circlip “1.4”, there is a risk that it could be ejected a very high speed.

- Always wear safety goggles.

Remove circlip “1.4” from spindle “1.2”. (For example, using the GEDORE circlip pliers 8000 A 2 [Code 6701540]) (Fig. 2 A)

2. Remove lever “1.3” from spindle “1.2”. (Fig. 2 B)

3. Unscrew spindle “1.2” from base plate “1.2”. (Fig. 2 C)

4. Screw spindle “1.2” into base plate “1.1”. (Fig. 2 D)

5. Place lever “1.3” on spindle “1.2”. (Fig. 2 E)

##### 6. CAUTION

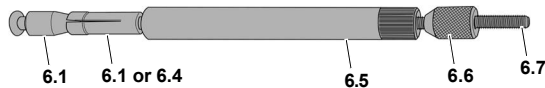
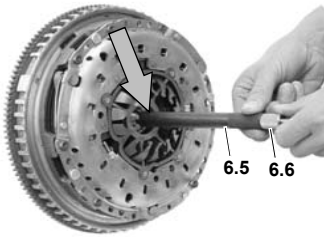
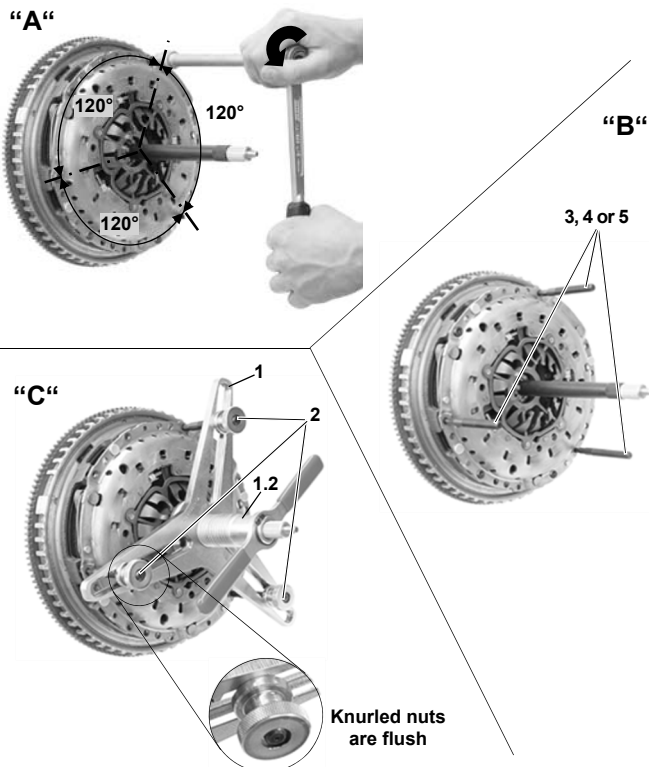
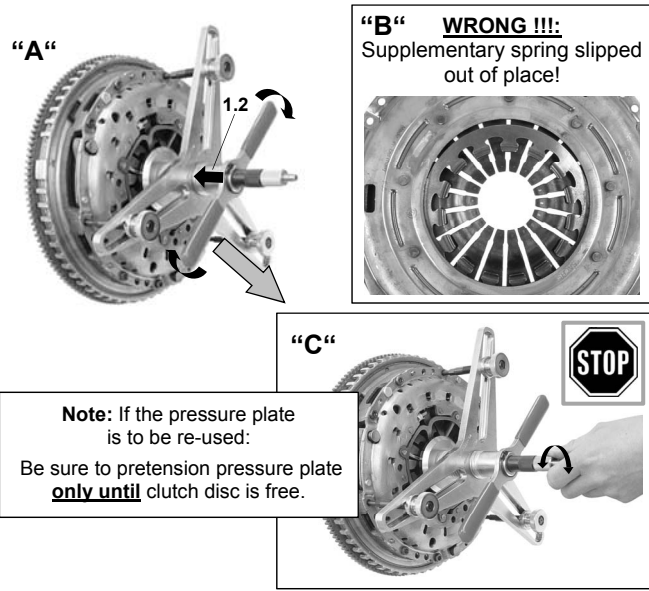
When mounting circlip “1.4”, there is a risk that it could be ejected a very high speed.

- Always wear safety goggles.

Mount circlip “1.4” on spindle “1.2”. (Fig. 2 F)

##### Note:

To re-tool the clutch-pretensioning tool from a 3-hole pitch to a 4-hole pitch tool, proceed as described above, but with the base plates in reverse order.

**Fig. 3: Assembling the clutch aligner.**

**Fig. 4: Insert clutch aligner and fix it.**

**Fig. 5: Unscrew clutch pressure plate fastening screws, replace with threaded bolts, mount clutch-pretensioning tool.**

**Fig. 6: Compress diaphragm spring.**


**Note:** If the pressure plate is to be re-used:  
Be sure to pretension pressure plate only until clutch disc is free.

## 4. Removing the XTend Clutch, Assembling the Clutch Aligner, Installing the XTend Clutch

### 4.1 Removing the XTend Clutch

The following instructions describe the procedure of removing a clutch pressure plate and a clutch disc on the example of a clutch featuring 6 fastening screws using the 3-hole pitch tool.

1. Raise vehicle and loosen and/or remove parts/components as necessary. (Gearbox has been removed)
2. Assemble clutch aligner as shown in **Fig. 3**.  
**Note:** For the determination of the suitable clamping cone "6.1" or "6.4" for the clutch disc, please refer to **Section 4.2 on page 10**.  
For the centring in the crankshaft no additional components are needed.
3. Insert clutch aligner into centre bore of clutch disc and fix it. To do this, firmly hold base body tube "6.5" in place and turn knurled nut "6.6" clockwise. (**Fig. 4**)
4. Unscrew 3x fastening screws (at an angle of 120° to each other) from clutch pressure plate. (**Fig. 5 A**).
5. Replace by screwing 3x threaded bolts "3", "4" or "5" into flywheel. When screwing in the threaded bolts, ensure that these are level with each other (same screw-in depth). (**Fig. 5 B**). (Observe thread sizes M6, M7 and M8!)  
**Note:** Mark position of clutch pressure plate relative to flywheel.

6. With spindle "1.2" in turned-back position, place clutch-pretensioning tool "1" onto the three threaded bolts "3", "4" or "5". Then, screw on knurled nuts "2" until these fit flush with the end of the threaded bolts. (**Fig. 5 C**)

### 7. Attention

Risk of damage to pressure plate.

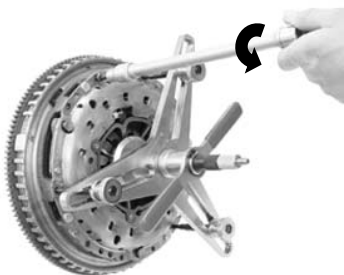
- With clutches featuring a supplementary spring, there is a risk of the spring slipping out of place when pretensioning the clutch. (**Fig. 6 B**) This will affect the proper function of the clutch if the pressure plate is re-used.

Pretension pressure plate by turning spindle "1.2" clockwise. Stop turning the spindle **immediately as soon as** clutch disc is free. (**Fig. 6 A**)

**Note:** You can check that clutch disc is free by rotating the clutch aligner. (**Fig. 6 C**)

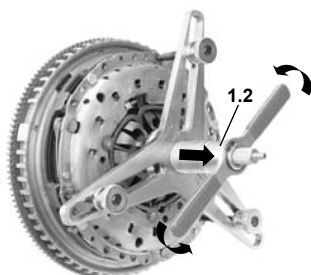


Fig. 7: Unscrew fastening screws.



8. Unscrew remaining fastening screws from clutch pressure plate. (Fig. 7)

Fig. 8: Relieve diaphragm spring.



9. Turn spindle "1.2" counter-clockwise until diaphragm spring is relieved. (Fig. 8)

Fig. 9: Remove knurled nuts and clutch-pretensioning tool.



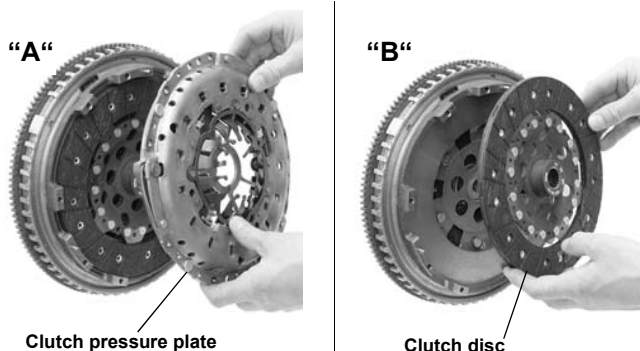
10. Remove knurled nuts "2" and clutch-pretensioning tool "1". (Fig. 9)

Fig. 10: Remove clutch aligner and threaded bolts.



11. To release clutch aligner, loosen knurled nut "6.6". Remove clutch aligner from clutch disc centre bore.

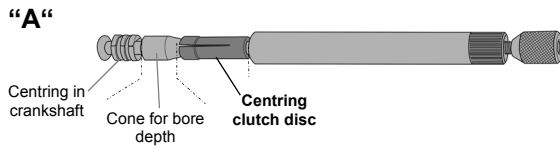
Fig. 11: Remove clutch pressure plate and clutch disc.



12. Remove threaded bolts "3", "4" or "5". (Fig. 10)

13. Remove clutch pressure plate and clutch disc from flywheel. (Fig. 11 A and 11 B)

Fig. 12: Determine suitable clamping cone for the respective clutch disc.



Identify the inner diameter of the clutch disc.

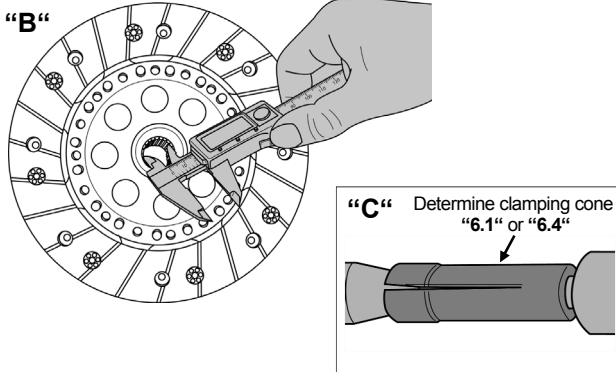
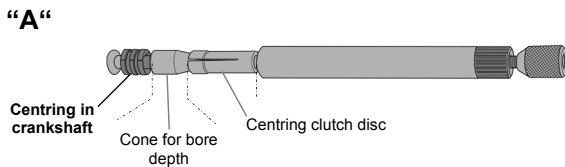
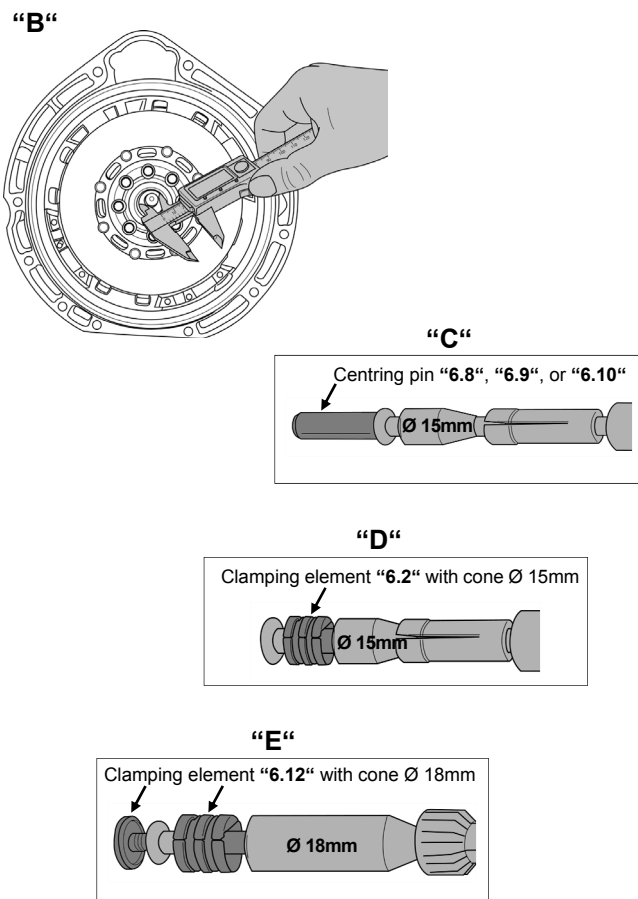


Fig. 13: Identify components for the centring in the crankshaft.



Identify inner Ø of the centre bore.



## 4.2 Determination of Components and Assembling of the Clutch Aligner

The following instructions describe how to determine the appropriate tool components for the correct assembling of the clutch aligner.

There are three tool components that need to be identified for the assembling of the necessary clutch aligner:

- **Clamping cone** for clutch disc.
- **Components for centring** in the crankshaft.
- **Sliding cone with suitable length.**

**Note:** For the centring of **BMW XTend** clutches (clutch design with locking piece) you will need to use one of the clutch-centring pins “7” - “11” as appropriate. (See **point 5** of this section)

### 1. Determine suitable clamping cone for the respective clutch disc. (Fig. 12 A and 12 B)

Measure inner diameter of clutch disc and select suitable clamping cone “6.4” (Size 1: 15-22mm) or clamping cone “6.1” (Size 2: 22-28mm). (Fig. 12 C)

### 2. Identify suitable components for the centring in the crankshaft. (Fig. 13 A and 13 B)

2.1 With inner Ø of 12mm, 14mm and 15mm:  
Use centring pin “6.8” (Ø 12mm), “6.9” (Ø 14mm) or “6.10” (Ø 15mm) as appropriate. (Fig. 13 C)

2.2 With inner Ø of 15.5-21mm:  
Use clamping element “6.2” (Ø 15.5-21mm).

**Note:** Use clamping element “6.2” in conjunction with sliding cone “6.12”, “6.13”, “6.14” or “6.15” (Ø 15mm). (Fig. 13 D)

2.3 With inner Ø of 22-28mm:  
Use clamping element “6.12” (Ø 20-28mm).

**Note:** Use clamping element “6.12” with cone adaptor “6.11” and in conjunction with sliding cone “6.16” or “6.17” (Ø 18mm). (Fig. 13 E)

Fig. 14: Identify necessary length of sliding cone.

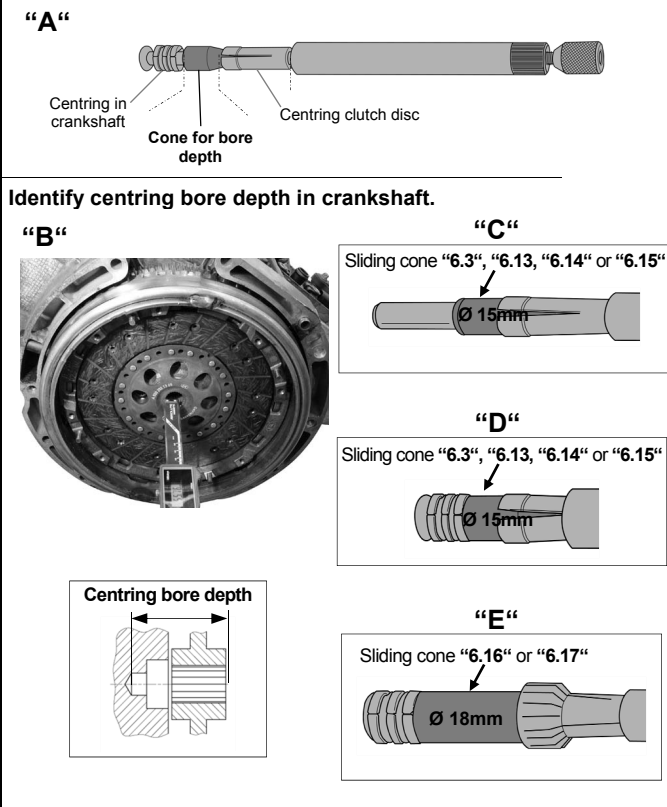
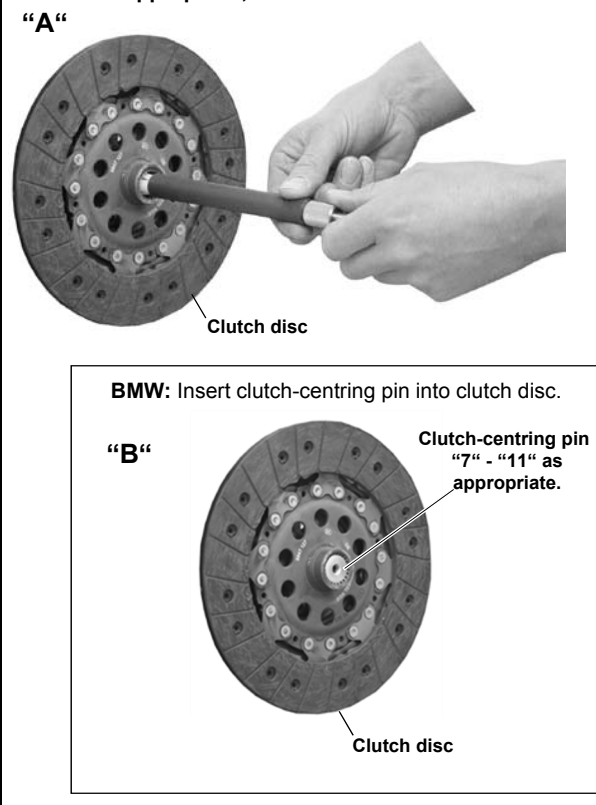


Fig. 15: Assembled clutch aligner.



Fig. 16: Insert clutch aligner, or clutch-centring pin as appropriate, into clutch disc.



3. Identify necessary length of sliding cone. (Fig. 14 A and 14 B)

3.1 With centring pin “6.8” (Ø 12mm), “6.9” (Ø 14mm) or “6.10” (Ø 15mm):  
Use sliding cone “6.3”, “6.13”, “6.14” or “6.15” (Ø 15mm) depending on the length needed. (Fig. 14 C)

3.2 With clamping element “6.2” (Ø 15.5-21mm):  
Use sliding cone “6.3”, “6.13”, “6.14” or “6.15” (Ø 15mm) depending on the length needed. (Fig. 14 D)

3.3 With clamping element “6.12” (Ø 20-28mm):  
Use sliding cone “6.16” or “6.17” (Ø 18mm) depending on the length needed. (Fig. 14 E)

4. Assemble clutch aligner with the identified components. (Fig. 15 shows an example)

5. Insert assembled clutch aligner into clutch disc centre bore. (Fig. 16 A)

**Note:** With BMW XTend clutches (clutch design with locking piece), you will need to insert one of the clutch-centring pins “7”-“11” (without screw) as appropriate into clutch disc centre bore. (Fig. 16 B)

Fig. 17: Insert clutch aligner and clutch disc into flywheel.



Fig. 18: Tighten clutch aligner.

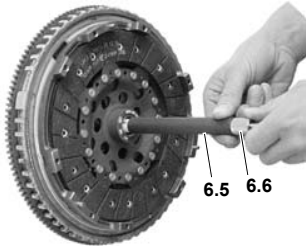


Fig. 19: Position clutch pressure plate.

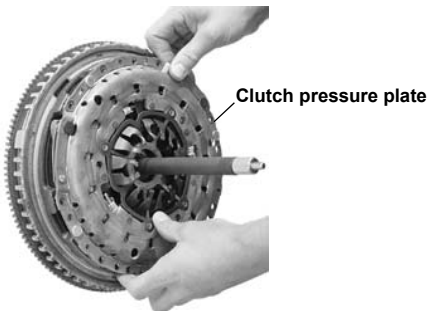


Fig. 20: Screw in threaded bolts.

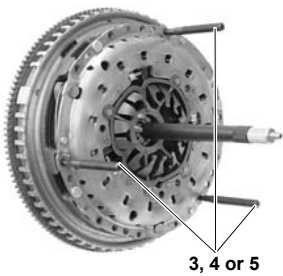
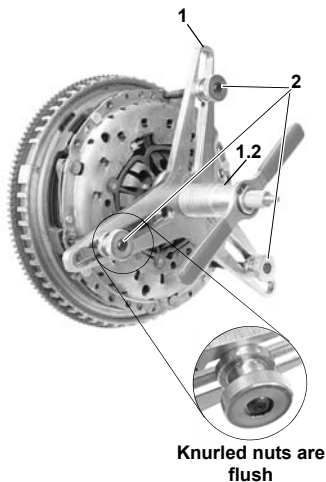


Fig. 21: Mount clutch-pretensioning tool.



### 4.3 Installing the XTend Clutch

The following instructions describe the procedure of centring a clutch disc (new or used) and installing a clutch pressure plate *without* locking piece (new or used) on the example of a clutch with 6 fastening screws using the 3-hole pitch tool.

**Note:** For instructions on the installation of a XTend clutch pressure plate *with* locking piece, please refer to page 14.

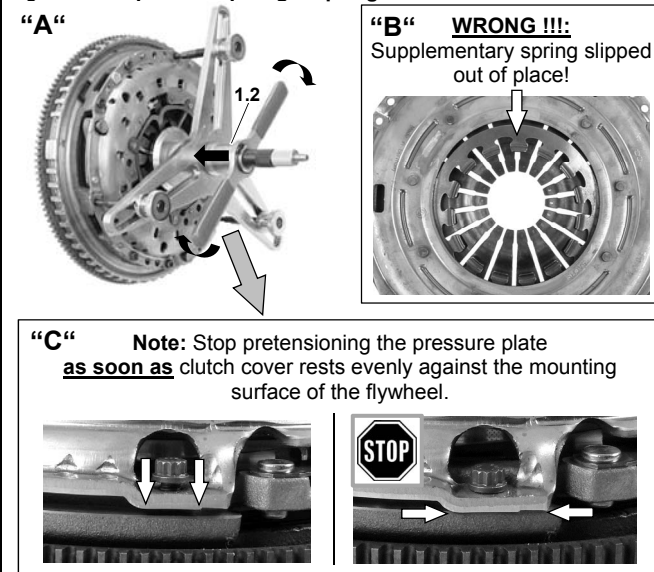
14. Insert clutch aligner "6" (or with **BMW** XTend clutches: one of clutch-centring pins "7"-**"11"** without screw) along with clutch disc into flywheel. (Fig. 17)

15. Tighten clutch aligner. To do this, firmly hold base body tube "6.5" in place and turn knurled nut "6.6" clockwise. The clutch disc is thereby being centred relative to the flywheel. (Fig. 18)

16. Apply clutch pressure plate against flywheel. (Fig. 19)  
**Note:** If a used clutch is to be re-installed, observe position mark of clutch pressure plate relative to flywheel made upon removal.

17. Screw 3x threaded bolts "3", "4" or "5" into flywheel. When screwing in the threaded bolts, ensure that these are level with each other (same screw-in depth). (Fig. 20) (Observe thread sizes M6, M7 and M8!)

18. With spindle "1.2" in turned-back position, place clutch-pretensioning tool "1" onto the 3 threaded bolts "3", "4" or "5". Then, screw on knurled nuts "2" until these fit flush with the end of the threaded bolts. (Fig. 21)

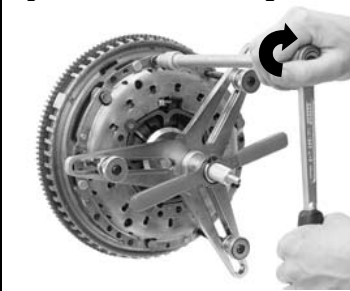
**Fig. 22: Compress diaphragm spring.**

**19. Attention**

Risk of damage to pressure plate.

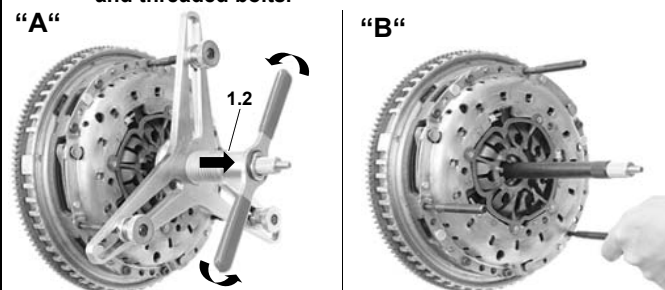
With clutches featuring a supplementary spring, there is a risk of the spring slipping out of place when pretensioning the clutch. **(Fig. 22 B)** This will affect the proper function of the clutch.

- Using the clutch-pretensioning tool "1", pretension pressure plate. Be sure to stop pretensioning the pressure plate as soon as the clutch cover rests evenly against the mounting surface of the flywheel. **(Abb. 22 C)**.

Pretension pressure plate by turning spindle "1.2" clockwise. Stop turning the spindle **immediately as soon as** the clutch pressure plate makes contact with the flywheel. **(Fig. 22 A)**.

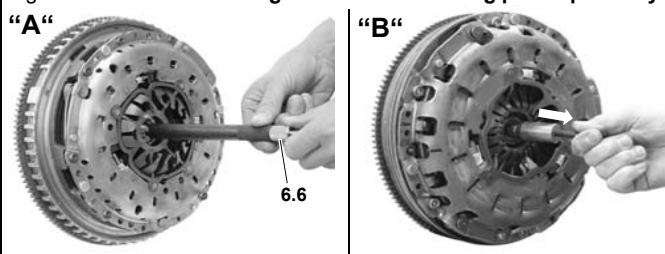
**Fig. 23: Screw in fastening screws.**


20. Screw 3x fastening screws of clutch pressure plate into the three free threaded holes of the flywheel and tighten to the specified tightening torque (according to the manufacturer's instructions) **(Fig. 23)**

**Fig. 24: Remove knurled nuts, clutch-pretensioning tool and threaded bolts.**


21. Turn spindle "1.2" counter-clockwise until diaphragm spring is relieved. **(Fig. 24 A)**.

22. Remove knurled nuts "2", clutch-pretensioning tool "1" and threaded bolts "3", "4" or "5" from flywheel. **(Fig. 24 B)**

**Fig. 25: Remove clutch aligner or clutch-centring pin respectively.**


23. Release clutch aligner by loosening the knurled nut "6.6" and remove from the clutch disc centre bore. **(Fig. 25 A)**

With **BMW XTend** clutches, insert and tighten corresponding screw in suitable clutch-centring pin "7"-**"11"**, remove clutch-centring pin. **(Fig. 25 B)**

**Fig. 26: Screw in and tighten clutch pressure plate fastening screws.**


24. Screw in the 3 remaining clutch pressure plate fastening screws. Tighten down all six screws to the specified tightening torque (according to the manufacturer's instructions). **(Fig. 26)**

Fig. 27: Clutch pressure plate with locking piece.



Fig. 28: Clutch-centring pin in clutch disc.

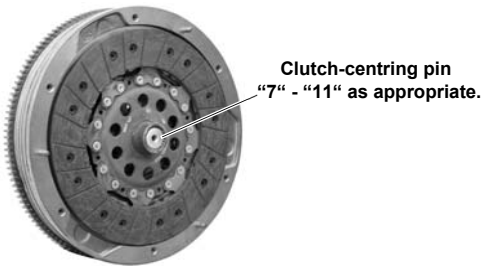


Fig. 29: Secure clutch pressure plate with screws.



Fig. 30: Unscrew locking piece.



Fig. 31: Remove clutch-centring pin.



#### 4.4 Installing the XTend Clutch (with Locking Piece)

The following instructions describe the procedure of centring a clutch disc and installing a new clutch pressure plate that comes fitted with a locking piece. (Fig. 27)

#### CAUTION

Keep in mind that locking piece is under mechanical stress.

- The locking piece must only be removed after the clutch pressure plate has been securely bolted down.

1. Select one of the clutch-centring pins "7"- "11", depending on the hub diameter, pilot bearing in flywheel and clutch disc.

2. Apply clutch disc against flywheel.

3. Through the hub profile of the clutch disc, insert suitable clutch-centring pin "7" - "11" without screw into the pilot bearing of the flywheel.

**Note:** The appropriate clutch-centring pin "7" - "11" must fit flush with the hub profile of the clutch disc. (Fig. 28)

4. Apply clutch pressure plate against flywheel. Tighten down all fastening screws to the specified torque. (Fig. 29)

5. Using a suitable tool, unscrew locking piece and remove. (Fig. 30)

6. Insert and tighten screw in clutch-centring pin, remove from clutch. (Fig. 31)

### 5. Care and Storage

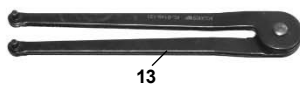
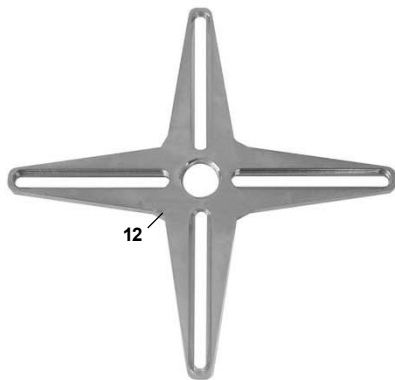
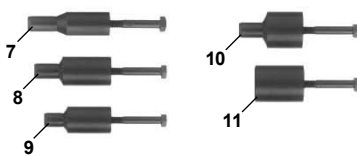
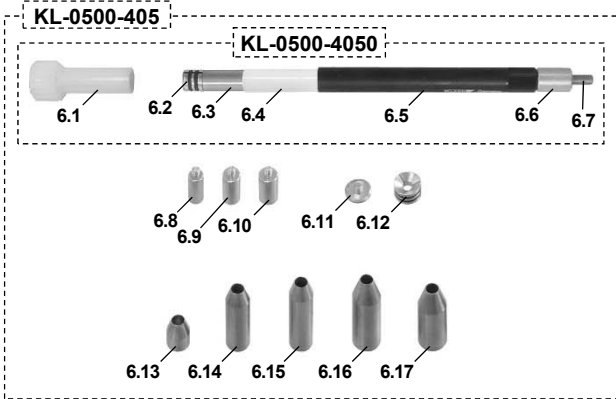
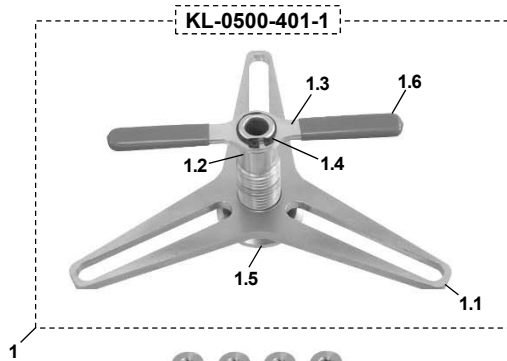
**ATTENTION** Petroleum ether and chemical solvents can damage plastic parts. Always clean all parts after their use with a clean cloth only. In order to protect against corrosion, lightly lubricate all metal parts after their use with oil and store them in a clean and dry place.

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

For safety reasons, as soon as damage is noticed on the clutch tool set, immediate steps must be taken to prevent it from being used. For professional inspection and repair of the clutch tool set, please contact the GEDORE Automotive Service Centre.

**Address:** GEDORE Automotive GmbH  
Breslauerstr. DE-78166 Donaueschingen  
Phone: +49 (0)771 83 22 371/ Email: info@gedore-automotive.com  
For additional information concerning the use of our clutch tool set, please contact the **GEDORE Automotive Service Centre**.

Spare Parts: 4200 080 561



## 7. Spare Parts List

Pos.	Part No.	Description	Qty
-	<b>4200 080 561</b>	<b>Clutch Tool Set</b>	<b>1</b>
<i>composed of:</i>			
1	<b>KL-0500-401-1 ZF</b>	<b>Clutch-Pretensioning Base Tool</b>	<b>1</b>
2	KL-0500-4006	Knurled Nut	4
3	KL-0500-4007	Threaded Bolt, M6	4
4	KL-0500-4008	Threaded Bolt, M7	4
5	KL-0500-4009	Threaded Bolt, M8	4
6	<b>KL-0500-405</b>	<b>Clutch Aligner</b>	<b>1</b>
7	KL-0500-11	Clutch-Centring Pin, Ø 15/23mm	1
8	KL-0500-12	Clutch-Centring Pin, Ø 15/28mm	1
9	KL-0500-15	Clutch-Centring Pin, Ø 15/26.5mm	1
10	KL-0500-21	Clutch-Centring Pin, Ø 15/32.5mm	1
11	KL-0500-22	Clutch-Centring Sleeve, Ø 32.5mm	1
12	KL-0500-4011 ZF	Base Plate (4-hole-pitch)	1
13	KL-0149-131	Pin-Type Face Spanner	1
14	KL-0014-0030	Molybdenum Disulphide Paste	1
Not shown	KL-0500-4590/81 ZF	Sticker for Storage Case	1
Not shown	KL-0500-4590/82 ZF	Bar Code Sticker	1
Not shown	KL-0500-8090-3	Storage Case Lock, black	2
Not shown	KL-0500-4590-1 B	Plastic Storage Case	1

Pos.	Part No.	Description	Qty
1	<b>KL-0500-401-1 ZF</b>	<b>Clutch-Pretensioning Base Tool</b>	<b>1</b>
<i>composed of:</i>			
1.1	KL-0500-4001 ZF	Base Plate (3-hole pitch)	1
1.2	KL-0500-4002	Spindle	1
1.3	KL-0500-4003	Lever	1
1.4	KL-0032-0012	Circlip A28	1
1.5	KL-0500-4005	Thrust Piece	1
1.6	KL-0500-4004	Protective Handle, 15x6mm	2
Not shown	KL-0500-1007	Set of Steel Balls	1
Not shown	KL-0500-1008	Circlip A24	1

Pos.	Part No.	Description	Qty
6	<b>KL-0500-405</b>	<b>Clutch Aligner</b>	<b>1</b>
<i>composed of:</i>			
6.1	KL-0069-0006	Clamping Cone, Size 2, 22mm	1
-	<b>KL-0500-4050</b>	<b>Guide Tube (complete)</b>	<b>1</b>
6.8	KL-0500-4057-1	Centring Pin, Ø 12mm	1
6.9	KL-0500-4057-2	Centring Pin, Ø 14mm	1
6.10	KL-0500-4057-3	Centring Pin, Ø 15mm	1
6.11	KL-0500-4055	Cone Adaptor	1
6.12	KL-0500-4054	Set of Clamping Elements, Ø 20mm	1
6.13	KL-0500-4056-2	Sliding Cone, Ø 15mm, 40mm long	1
6.14	KL-0500-4056-3	Sliding Cone, Ø 15mm, 67mm long	1
6.15	KL-0500-4056-4	Sliding Cone, Ø 15mm, 75mm long	1
6.16	KL-0500-4056-6	Sliding Cone, Ø 18mm, 75mm long	1
6.17	KL-0500-4056-5	Sliding Cone, Ø 18mm, 67mm long	1

Pos.	Part No.	Description	Qty
-	<b>KL-0500-4050</b>	<b>Guide Tube (complete)</b>	<b>1</b>
<i>composed of:</i>			
6.2	KL-0500-4053	Set of Clamping Elements, Ø 15.5mm	1
6.3	KL-0500-4056-1	Sliding Cone, Ø 15mm, 30mm long	1
6.4	KL-0069-0005	Clamping Cone, Size 1, 15mm	1
6.5	KL-0500-4051	Base Body Tube	1
6.6	KL-0500-4103	Knurled Nut	1
6.7	KL-0500-4052	Clamping Screw	1

## 8. Environmentally Safe Disposal

Recycle/dispose of the clutch tool set and its packaging material in compliance with the legal rules and regulations in force.

# **GEDORE**

WERKZEUGE FÜRS LEBEN

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