

KL-0178-30K



KL-0178-30 K Mounting Tool for sealing flange with integrated sender wheel

Suitable for VW Audi, Seat, Skoda, Mitsubishi engines.

Field of application

Designed for the quick and professional installation of the transmission-sided crankshaft sealing flange with integrated sender wheel.

Advantages

- Substantial time savings



Specifications and notes

- Any work on vehicles should only be performed by qualified personnel observing and complying with the directions, provisions, and safety regulations issued by the vehicle manufacturer.
- Only the vehicle manufacturer's data apply to all work done on the vehicle.
- All specific vehicle data stated herein are supplied under reserve and without commitment.
- Before putting the tool into operation, visually check and make sure that it is not damaged.



It is imperative to observe the following points:

- Before starting work, read the Product Information carefully and make sure you have understood it correctly.
- Never strike the tool with a hammer!
- Always keep the tool clean. To lubricate spindles and threads, use Molybdenum Disulphide Paste **KL-0014-0030** only.
- Use KLANN original spare parts only.

Fig. 1 Sealing flanges with integrated sender wheel
(transport lock at 5'clock position)

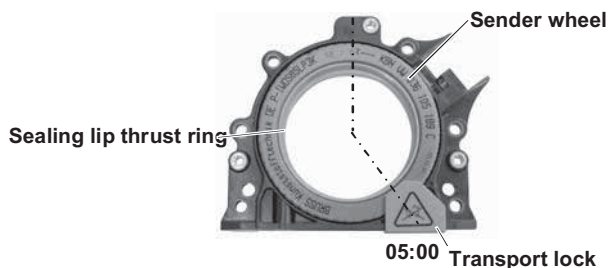
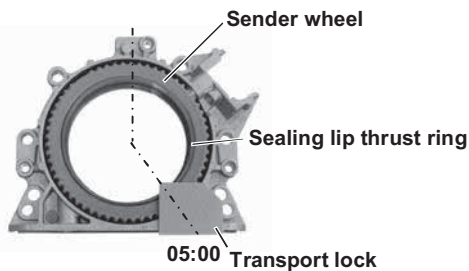


Fig. 2 Sealing flanges with integrated sender wheel
(transport lock at 12'clock position)

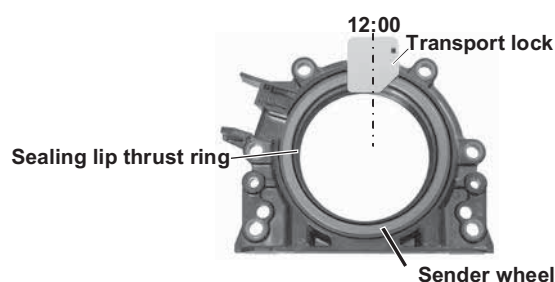
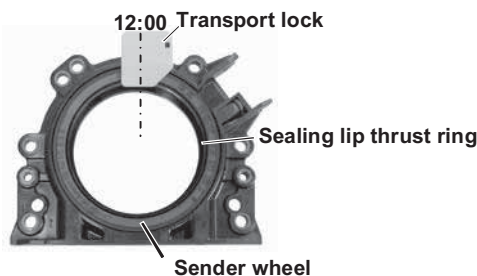
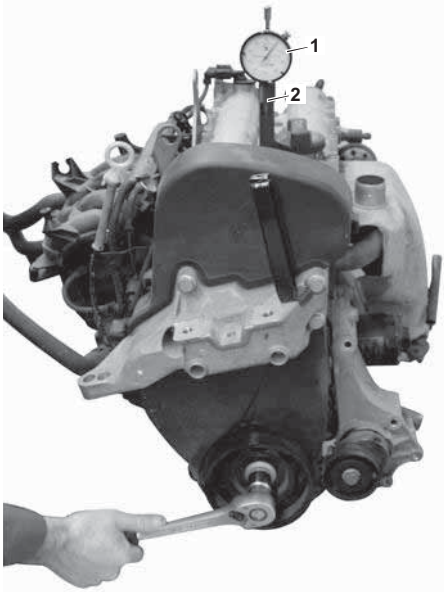


Fig. 3 Set Cylinder 1 to TDC.



Application

Mounting a sealing flange with integrated sender wheel.

Note: Application example on the sealing flange with transport lock at 5'clock position.

1. Unscrew spark plug of the 1st cylinder and mount TDC adjusting adaptor **Item 2** with dial gauge **Item 1**. Set crankshaft to TDC of 1st cylinder. (**Fig. 3**)

2. Remove transport lock from the new sealing flange. (The transport lock covers the fixing bore in the sender wheel.)

Note:

- Sealing lip thrust ring must not be taken out of the sealing flange.
- Do not twist sender wheel.

3. Place sealing flange onto a flat surface.

Note:

- Do not twist sender wheel.
- The sealing flange and the sealing lip thrust ring must rest flat on the surface; if necessary, press sealing flange or sealing lip thrust ring down a little. (**Fig. 4**)

4. Prepare pressure plate **Item 3** as displayed in **Fig. 5**. Screw spacer bolts **Item 3b** completely into the pressure plate **Item 3**.

Note: The correct positions of the spacer bolts result from the contour of the sealing flange.

5. Screw setscrew **Item 3** completely into the pressure plate. The position of the setscrew results from the position of the fixing bore in the sender wheel.

Note: The position of the setscrew **Item 3d** for the 5'clock position in the sender wheel is indicated in **Fig. 5**. If the fixing bore in the sender wheel is at 12'clock position, the setscrew **Item 3d** is to be screwed into the corresponding position of the pressure plate **Item 3**.

6. Place pressure plate **Item 3** on sealing flange and screw the three knurled screws **Item 3c** into the sealing flange hand-tight. (**Fig. 6**)

Note: The setscrew **Item 3d** must latch into the fixing bore of the sender wheel.

7. Clean crankshaft flange. (Oil and grease-free)

Fig. 4 Align sealing flange and sealing lip thrust ring.



Fig. 5 Screw spacer bolts and setscrew into pressure plate

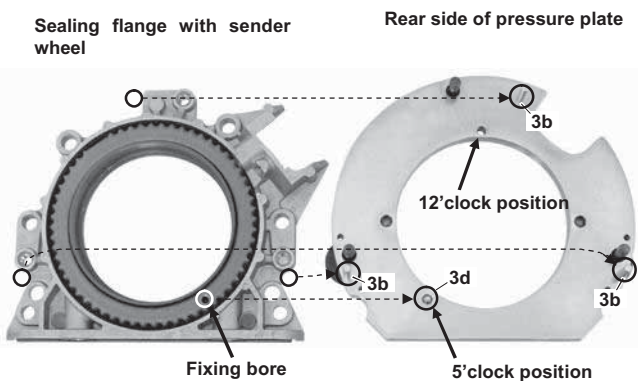


Fig. 6 Screw on pressure plate.

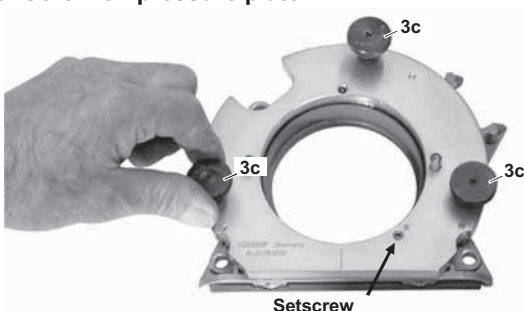


Fig. 7 Screw guide pins into engine block.

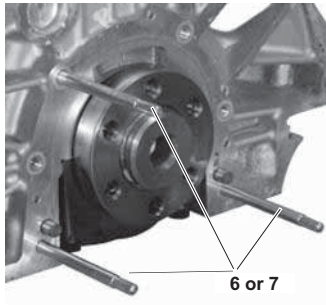


Fig. 8 Place sealing flange with pressure plate on guide pins.

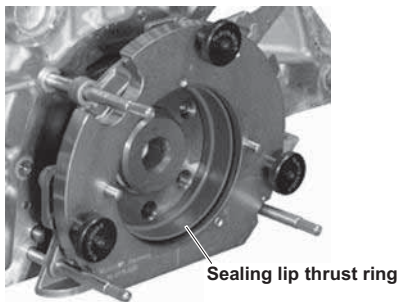


Fig. 9 Position flange on crankshaft.

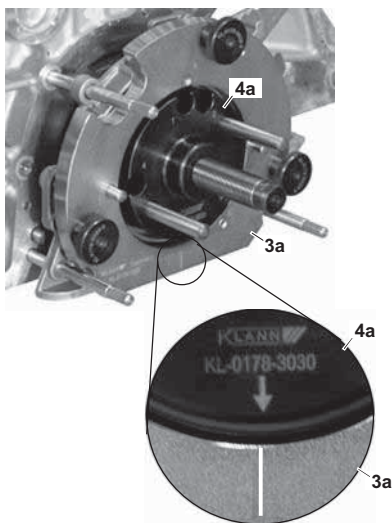
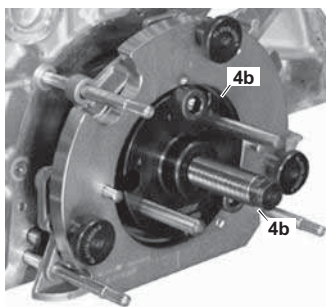


Fig. 10 Fasten flange to crankshaft.



8. Mount matching guide pins **Item 6** ($\varnothing$ 7 mm) or **Item 7** ($\varnothing$ 8 mm) as displayed in **Fig. 7**.

Note: The $\varnothing$ of the guide pins results from the screw thread $\varnothing$ in the engine block.

9. Slide pressure plate with sealing flange onto the guide pins only as far as that the sealing flange does **still not** touch the crankshaft. (**Fig. 8**)

Note: The sealing lip thrust ring must not be displaced by the crankshaft stub shaft.

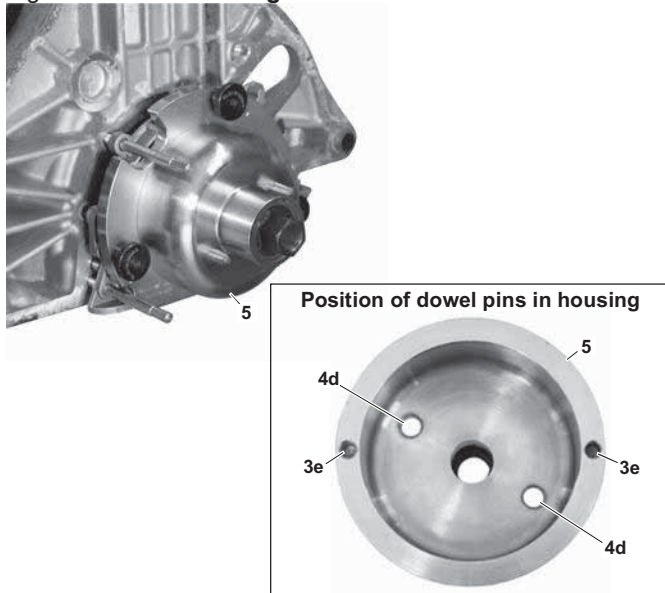
10. Place flange **Item 4a** onto the crankshaft so that the arrow on the flange **Item 4a** aligns with the line on the pressure plate **Item 3a** (**Fig. 9**)

11. Screw flange **Item 4a** with the hexagon socket screws **Item 4b** onto the crankshaft. (**Fig. 10**)

Note: The positions of the hexagon socket screws **Item 4b** result from the position of the flange **Item 4a** relative to the pressure plate **Item 3a**.

12. Check TDC setting cylinder 1 again and correct if necessary.

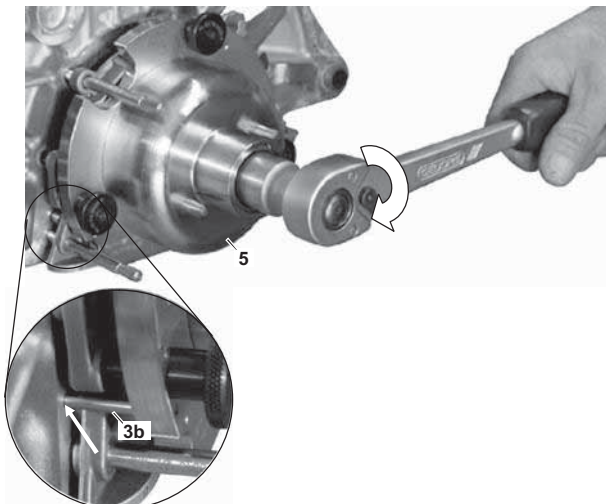
Fig. 11 Place on housing.



13. Place housing **Item 5** onto the flange with spindle **Item 4** and the pressure plate **Item 3** so that all four dowel pins **Item 4d** (flange) and **Item 3e** (pressure plate) latch into the housing **Item 5**. (Fig. 11)

Note: If the housing **Item 5** does not fit onto the dowel pins **Item 4d** (flange) and **Item 3e** (pressure plate), the TDC setting of the crankshaft is wrong and must be corrected.

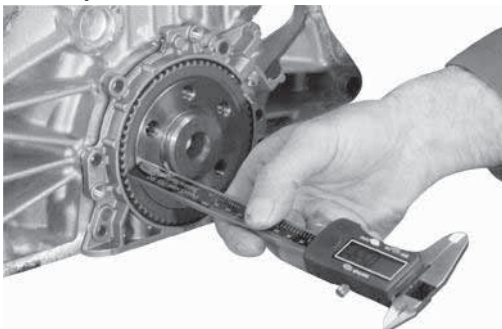
Fig. 12 Screw housing with nut onto spindle.



14. Screw housing **Item 5** onto the flange with spindle **Item 4** by turning the shoulder nut, until the spacer bolts **Item 3b** of the pressure plate **Item 3a** are at the engine block. (Fig. 12)

Note: The sealing flange is still not placed on the engine block and still has approx. 1 mm separation distance.

Fig. 13 Check position of sender wheel.

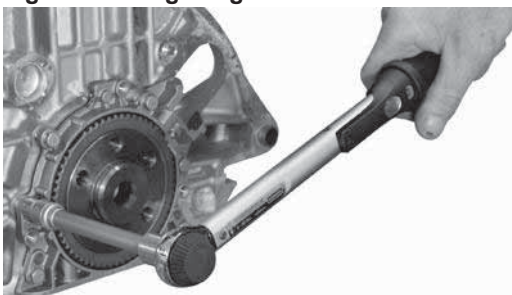


15. Remove tool and sealing lip thrust ring.

16. Check position of the sender wheel according to the manufacturer's specifications and instructions. (Fig. 13)

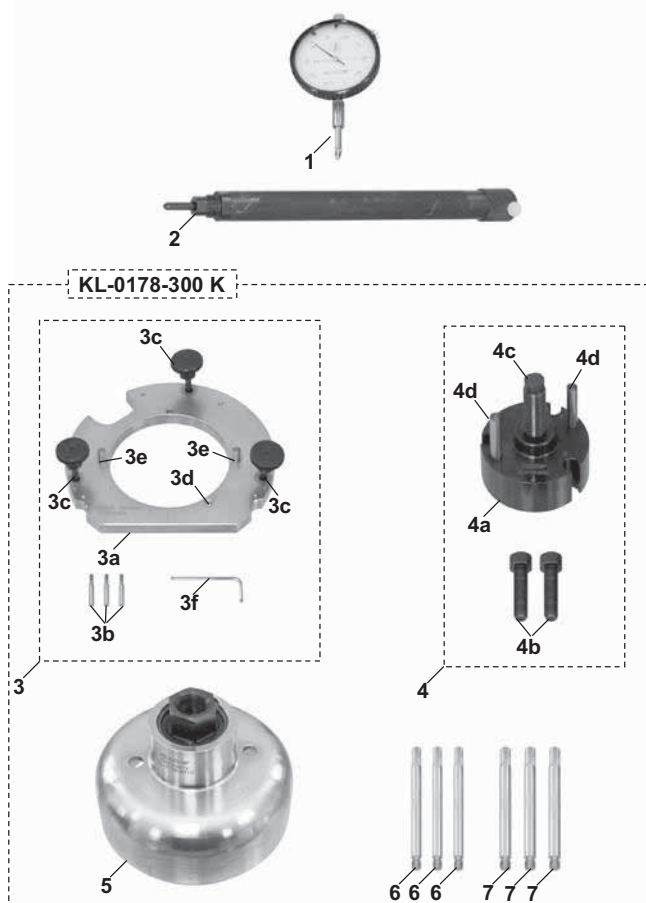
17. Lightly screw in the fixing screws of the sealing flange alternately crosswise, until the flange completely fits on the engine block

Fig. 14 Tighten sealing flange.

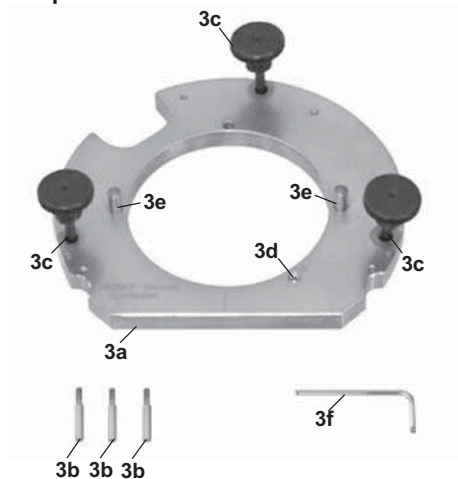


18. Screw fixing screws onto the engine block according to the manufacturer's specifications and instructions. (Fig. 14)

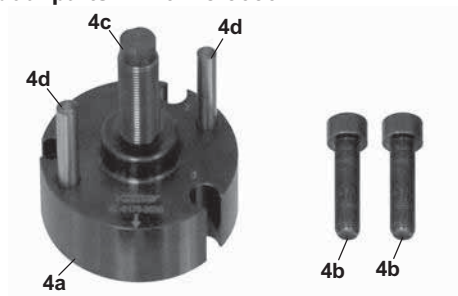
Scope of delivery: KL-0178-30



Individual parts: KL-0178-3020



Individual parts: KL-0178-3030



Scope of delivery

Item	Article No.	Designation	Qty.
	KL-0178-30 K	Mounting Tool for sealing flange with integrated sender wheel	1
<i>bestehend aus:</i>			
	KL-0178-300 K	Mounting Tool for sealing flange with integrated sender wheel without dial gauge	1
1	KL-0128-1	Dial gauge Ø58 mm	1
2	KL-1681-111	Adaptor M14 x 1.25 for TDC adjustment	1

Item	Article No.	Designation	Qty.
	KL-0178-300 K	Mounting Tool for sealing flange with integrated sender wheel without dial gauge	1
<i>Consisting of:</i>			
3	KL-0178-3020	Pressure plate	1
4	KL-0178-3030	Flange with spindle	1
5	KL-0178-3010	Housing with shoulder nut	1
6	KL-0178-3040	Guide pin Ø7 mm	3
7	KL-0178-3050	Guide pin Ø8 mm	3
	KL-0178-3090	Plastic storage case (not shown)	1

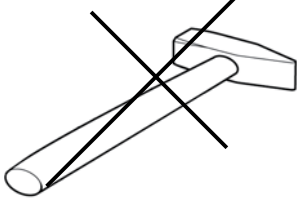
Item	Article No.	Designation	Qty.
3	KL-0178-3020	Pressure plate	1
<i>Consisting of:</i>			
3a	KL-0178-3020-1	Pressure plate	1
3b	KL-0178-3020-5	Spacer bolts	3
3c	KL-0178-3020-3	Knurled screw M6	3
3d	KL-0178-3020-2	Setscrew M5	1
3e	KL-0280-1303	Dowel pin Ø6 x 18 mm	2
3f	KL-0178-3029	Hexagon socket key for setscrew	1

Item	Article No.	Designation	Qty.
4	KL-0178-3030	Flange with spindle	1
<i>Consisting of:</i>			
4a	KL-0178-3030-2	Flange	1
4b	KL-0178-3030-3	Hexagon socket screw M10x1 x 40 mm	2
4c	KL-0178-3030-1	Spindle M16 x 1.5	1
4d	KL-0178-3030-5	Dowel pin Ø8 x 60 mm	2

Produkt-Information komplett durchlesen und verstehen.



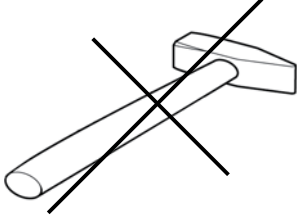
Pflege und Reinigung.



Carefully read the Product Information and make sure you have understood it correctly.



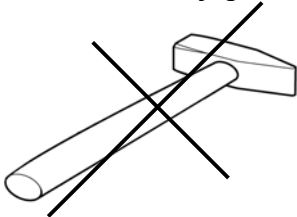
Care and cleaning.



Lisez entièrement l'information produit et assurez-vous de l'avoir bien comprise.



Entretien et nettoyage.



Vorschriften und Hinweise

- Arbeiten an Fahrzeugen nur durch Fachpersonal unter Beachtung der Hinweise, Vorschriften und Sicherheitsvorschriften des Fahrzeugherstellers durchführen!
- Für alle Arbeiten am Fahrzeug gelten nur die vom Fahrzeughersteller vorgegebenen Daten.
- Alle angegebenen fahrzeugspezifischen Daten erfolgen unter Vorbehalt.
- Vor Inbetriebnahme durch Sichtprüfung überzeugen, dass das Werkzeug keine Beschädigung aufweist.



Folgende Punkte sind unbedingt zu beachten:

- Vor Arbeitsbeginn Produkt-Information komplett durchlesen und verstehen.
- Niemals mit einem Hammer auf das Werkzeug schlagen.
- Werkzeug stets sauber halten. Als Schmiermittel für Spindeln und Gewinde ausschließlich Molybdändisulfid Paste **KL-0014-0030** verwenden.
- Generell dürfen nur KLANN Original-Ersatzteile verwendet werden.



Warnings and Notes

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- Only the vehicle manufacturer's data apply to all work done on the vehicle.
- All specific vehicle data stated herein are supplied without commitment.
- Before putting the tool into operation, visually check that it is not damaged.



It is imperative to observe the following points:

- Before starting work, read the Product Information carefully and make sure you have understood it correctly.
- Never strike the tool with a hammer!
- Always keep the tool clean. To lubricate spindles and threads use only Molybdenum Disulphide Paste **KL-0014-0030**.
- Only KLANN original spare parts are recommended.



Prescriptions et remarques

- Toutes interventions sur les véhicules doivent impérativement être effectuées par du personnel qualifié, tout en respectant les recommandations, prescriptions et consignes de sécurité du constructeur du véhicule.
- Pour tous les travaux réalisés sur le véhicule, seules les données indiquées par le constructeur du véhicule sont valables.
- Toutes les caractéristiques mentionnées spécifiques aux véhicules sont données sous réserve.
- Avant la mise en service, contrôler visuellement que l'outil ne présente pas d'endommagement.



Les points suivants sont impérativement à respecter:

- Avant de démarrer les travaux, lisez entièrement l'information produit et assurez-vous de l'avoir bien comprise.
- Ne frappez jamais l'outil avec un marteau !
- Maintenez l'outil toujours dans un état de propreté. Graissez les tiges et les filetages exclusivement avec de la pâte de bisulfure de molybdène **KL-0014-0030**.
- Généralement, vous ne devez utiliser que des pièces de rechange originales KLANN.