

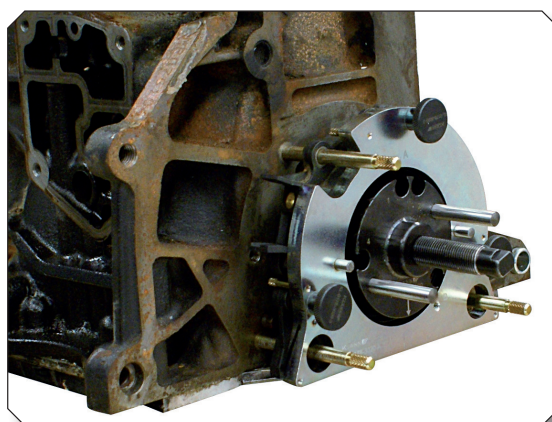


KL-0178-310 K

Mounting Tool for Sealing Flange



Product information EN
⚠ Read and understand before use!



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 06/2023

KL-0178-310K (EN230508).indd

PRODUCT DESCRIPTION

KL-0178-310 K - Mounting tool for sealing flange

Suitable for crankshaft sealing flanges with shaft seal ring and position encoder wheel, e.g. with VW, Audi, Seat, Skoda, Cupra, Ford and MAN with 1.0 + 1.5 TSI and 1.6 + 2.0 TDI engines.

Particularly for shaft seal ring: 04L103171E, 04C103170G, 04C103170H, 04E103170A, 04E103170AE, 04E103170B, 04E103170D, 04E103170L, 04E103170M, 04E103170Q, 04L103171, 04L103173A, 05E103170, VWN3CA6K292EA, 2586691

Installed with engine code: CHPA, CHPB, CHYA, CHYB, CHZA, CHZB, CHZC, CHZD, CHZG, CHZJ, CHZL, CJZA, CJZB, CKFB, CKFC, CLHA, CLHB, CMBA, CNHA, CNHC, CPGA, CPTA, CPVA, CPVB, CPWA, CRBB, CRBC, CRBD, CRFA, CRFC, CRFD, CRFZ, CRGA, CRGB, CRKA, CRKB, CRLB, CRLC, CRLD, CRMB, CRUA, CRVA, CRVC, CRVD, CSUA, CSUB, CSUD, CSUE, CUA, CUKB, CUNA, CUPA, CUUA, CUUB, CUUC, CUUD, CUUE, CUUF, CUVA, CUVB, CUVC, CUVD, CUVE, CUWA, CUXA, CVCA, CVNA, CWVA, CWVB, CXEB, CXEC, CXFA, CXGA, CXGB, CXGC, CXGD, CXHA, CXHB, CXHC, CXMA, CXSA, CXSB, CXXA, CXXB, CYKA, CYKB, CYKC, CYLA, CYVA, CYVB, CZCA, CZDA, CZEA, CZHA, CZJA, DADA, DAFA, DASA, DASB, DASC, DAUA, DAUB, DAVA, DAWA, DBBA, DBGA, DBGB, DBGC, DBKA, DCXA, DCYA, DCYB, DCZA, DDAA, DDCA, DDCB, DDDA, DDYA, DDYB, DEJA, DEJB, DEKA, DELA, DESA, DETA, DETB, DEUA, DEUB, DEUC, DFCA, DFEA, DFEB, DFFA, DFGA, DFGB, DFGC, DFHA, DFLA, DFLD, DFMA, DFSA, DFSB, DFSC, DFSD, DFSE, DFSF, DFTA, DFTB, DFTC, DFUA, DFVA, DGCA, DGDA, DGDB, DGTA, DGTB, DGTC, DGTD, DGTE, DHSB, DJGA, DKJA, DKLA, DKRF, DLTA, DLTC, DLUB, DMZA, DMZB, DMZD, DNAA, DNAB, DNAC, DNAD, DNAE, DREB, DREC

Alternative tool: VW T10134 + T10578

For a quick and professional installation of the crankshaft sealing flange on the gear side. Its particular design thereby ensures an exact pressing of the shaft seal ring with position encoder wheel. A faulty installation that could lead to errors in the motor control unit as well as to leaks and damage of the new sealing flange is prevented.

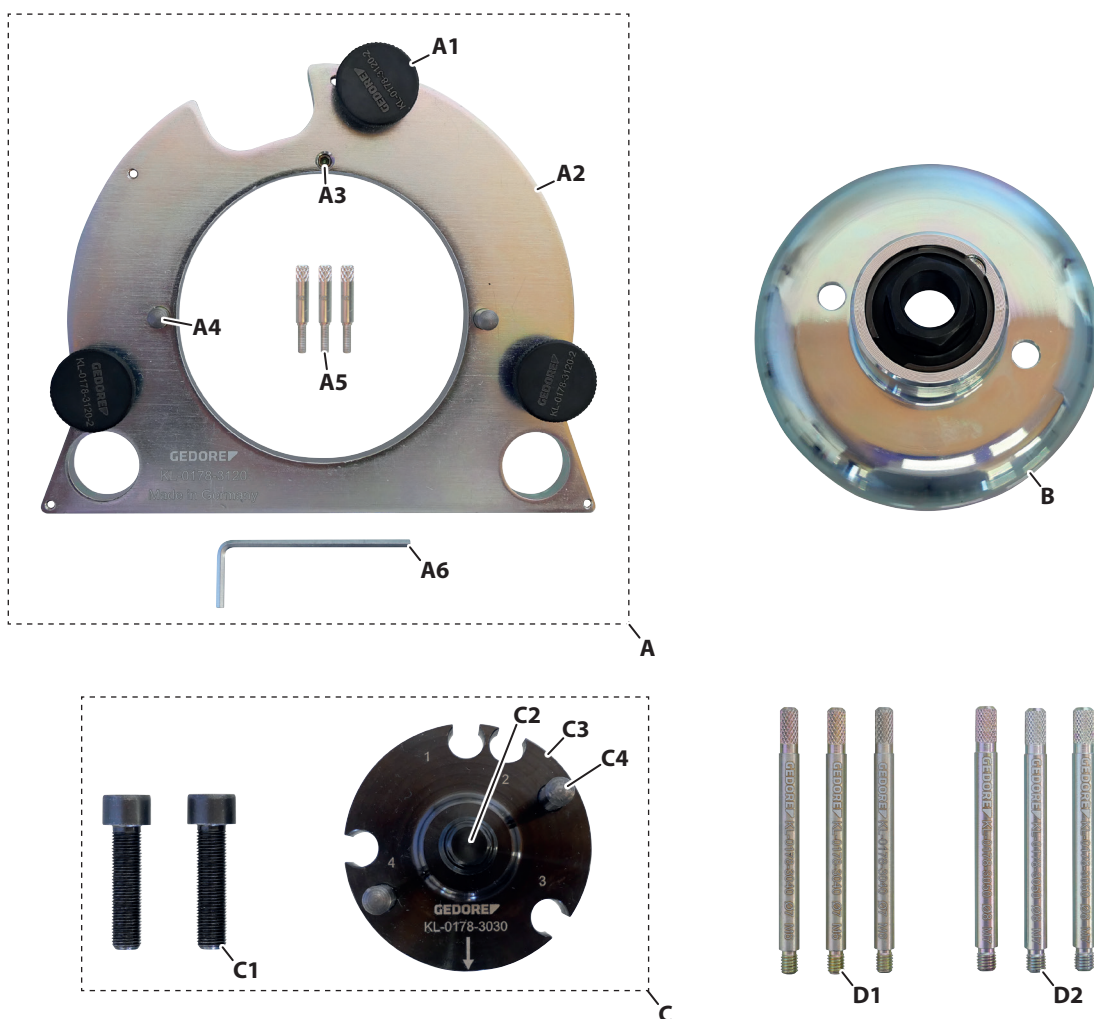
SAFETY INSTRUCTIONS AND REGULATIONS

- Read and understand this product information **before using** the special tool, as it serves to familiarise you with the special tool and thus ensures **safe use**!
- Use the special tool **as intended** and **always** carry out maintenance and repair work in compliance with the regulations on occupational safety and accident prevention as well as the vehicle manufacturer's instructions!
- Before each use**, check the special tool **carefully** for damage, loose parts, or unauthorised modifications. **Never** use it if you notice any such deficiencies!
- Before each use**, check the moving parts on the **special tool** for dirt, if necessary clean and lubricate it **exclusively** with molybdenum disulphide paste, for example **KL-0014-0030**!
- Always** wear your personal protective equipment, e.g. safety goggles, protective gloves, safety shoes, if necessary!
- Interrupt your work **immediately** if you are unsure about using the special tool, and contact **GEDORE Automotive GmbH** if necessary!
- Dispose of the special tool and its packaging material in an environmentally compatible way in accordance with the legal requirements. If necessary, ask your local authorities or **GEDORE Automotive GmbH** about environmentally friendly disposal options!

Scope of supply/overview of single components

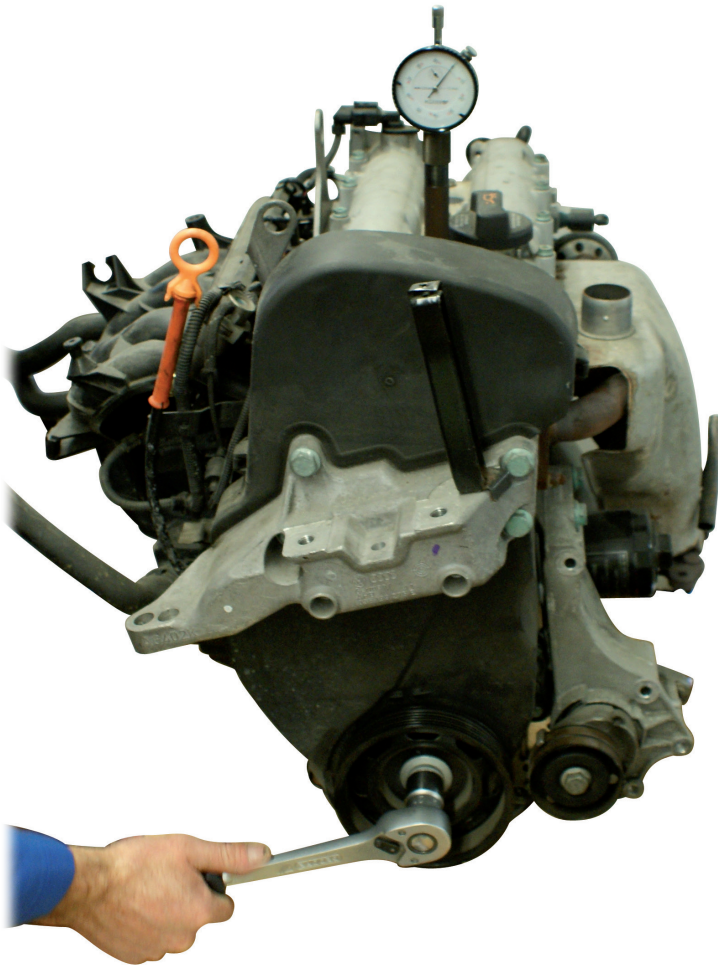
Item	Part no.	Description	Qty.
A	KL-0178-3120	Pressure plate	1
A1	KL-0178-3120-2	Knurled screw M6	3
A2	KL-0178-3120-1	Pressure plate single	1
A3	KL-0178-3020-2	Grub screw M5	1
A4	KL-0280-1303	Straight pin \varnothing 6 x 18mm	2
A5	KL-0178-3020-5	Spacer bolt	3
A6	GEDORE 42 2.5	Hexagon L key	1
-	KL-0178-3120-3	O-ring	1
B	KL-0178-3010	Housing with nut	1
C	KL-0178-3030	Flange with spindle	1
C1	KL-0178-3030-3	Cheese-head screw M10x1 x 40mm	2
C2	KL-0178-3030-1	Spindle M16 x 1.5mm	1
C3	KL-0178-3030-2	Flange	1
C4	KL-0178-3030-5	Straight pin \varnothing 8 x 60mm	2
D1	KL-0178-3040	Guide bolts \varnothing 7mm	1
D2	KL-0178-3050	Guide bolts \varnothing 8mm	1
-	KL-0178-3190	Plastic case with insert	1

EN



PREPARATION

📷1: Prepare engine, for example put the 1st cylinder on OT ...

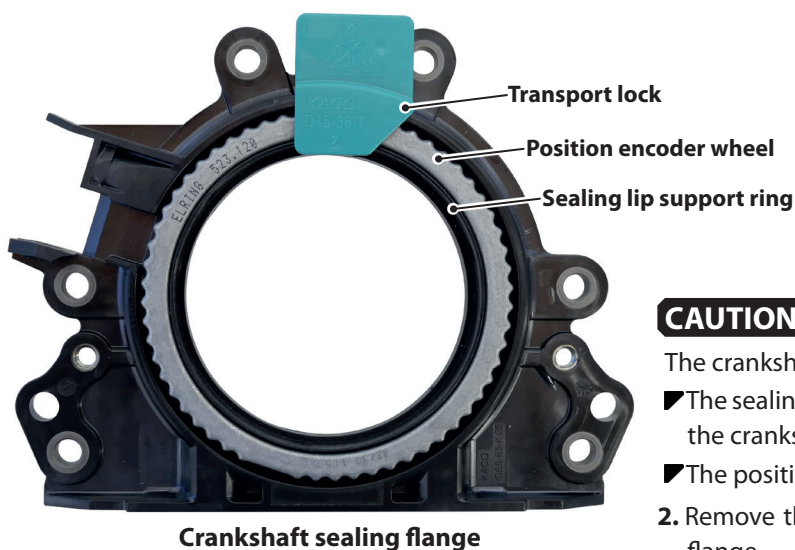


1. Safely lift the vehicle and prepare all necessary parts for the following work in accordance with the manufacturer's specifications's.

For example:

Remove the old crankshaft sealing flange and put the 1st cylinder to the upper dead centre (OT) according to the manufacturer's specifications...

📷2: Prepare the crankshaft sealing flange e.g. remove transport lock...



CAUTION

- The crankshaft sealing flange may be damaged.
- ▶ The sealing lip support ring must in now way removed from the crankshaft sealing flange before installation!
 - ▶ The position encoder wheel must not be twisted!
2. Remove the transport lock on the new crankshaft sealing flange.

4. TYPICAL APPLICATION

This application example describes the pressing of a crankshaft sealing flange with shaft seal ring and position encoder wheel on the gear side onto a crankshaft.

3: Prepare the pressure plate [A] accordingly depending on the crankshaft sealing flange...

CAUTION

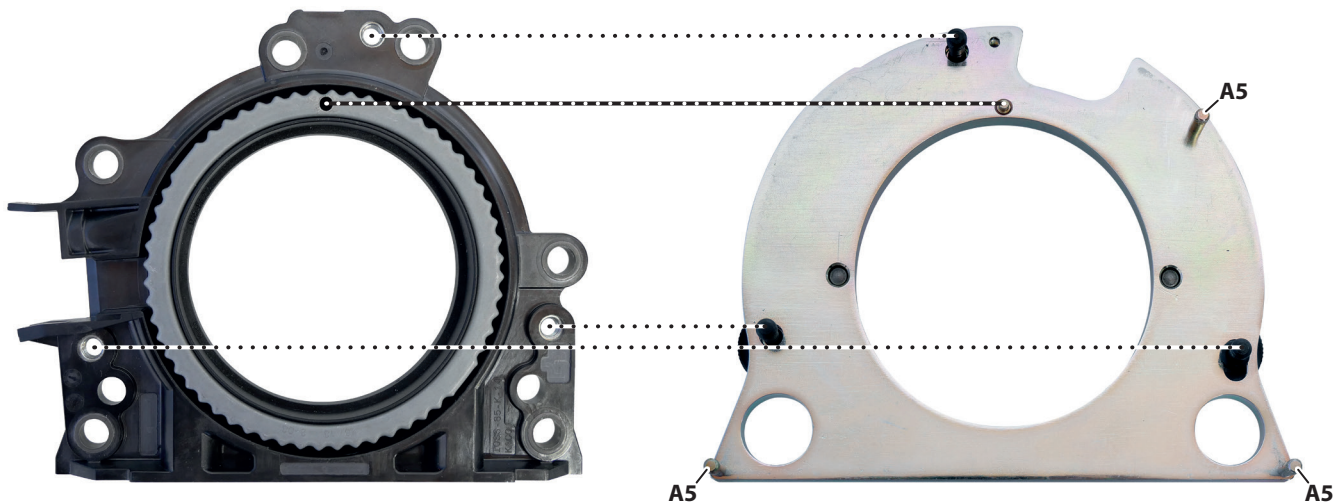
The crankshaft sealing flange may be damaged during installation.

▼ The pressure plate [A] may only be used when **all three** spacer bolts [A5] have been mounted properly!

1. Screw the the three **spacer bolts [A5]** accordingly at the pressure plate [A] depending on the crankshaft sealing flange (**variant 1 or 2**).

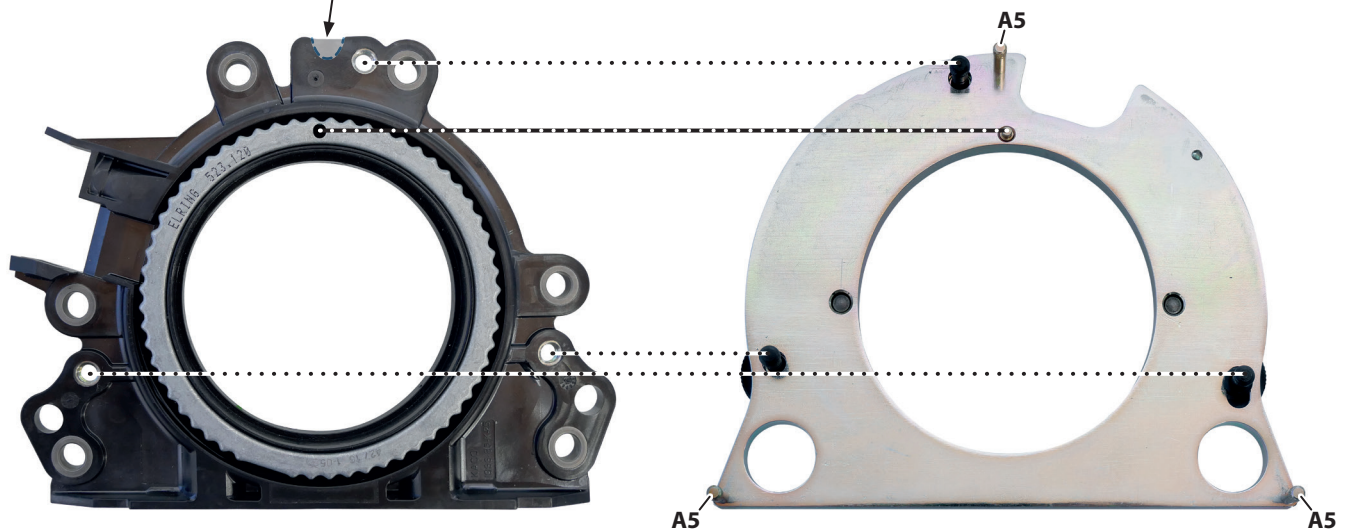
① The **spacer bolts [A5]** serve as a stop later during assembly and are in contact with the engine block when the correct installation position of the crankshaft sealing flange is reached.

Variant 1

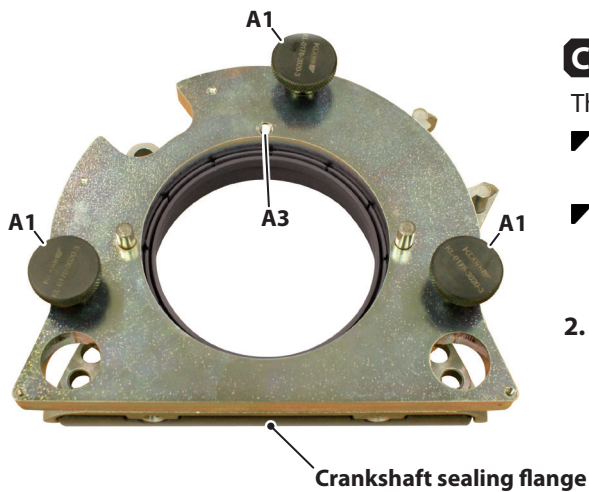


Variant 2

① On various crankshaft sealing flanges, this protruding lug must be adjusted slightly, e.g. by milling it out, in order to position the upper spacer bolt [A5] correctly.



4: Screw the pressure plate [A] on the crankshaft sealing flange in the correct position...

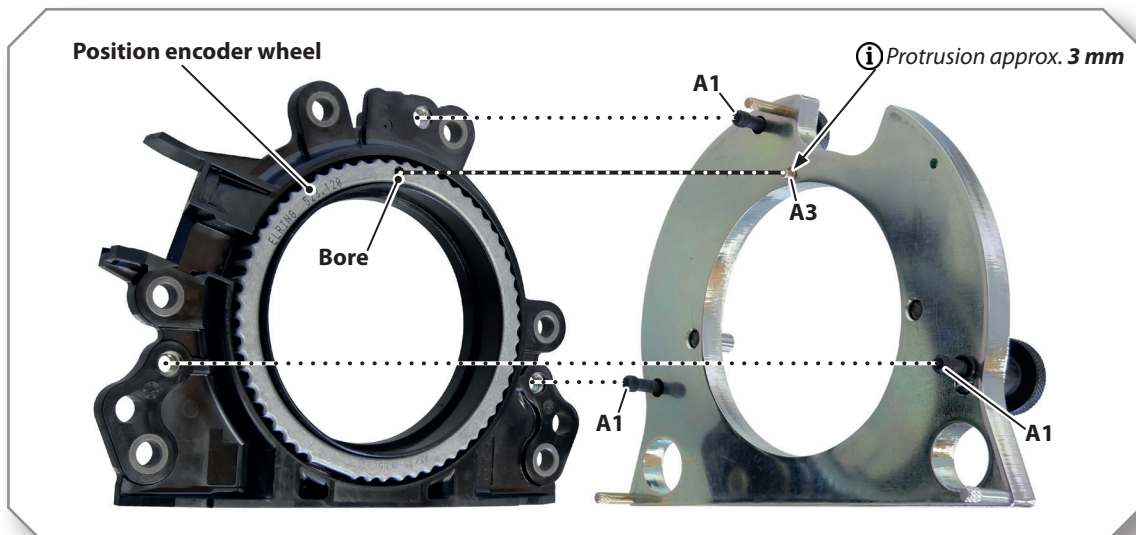


CAUTION

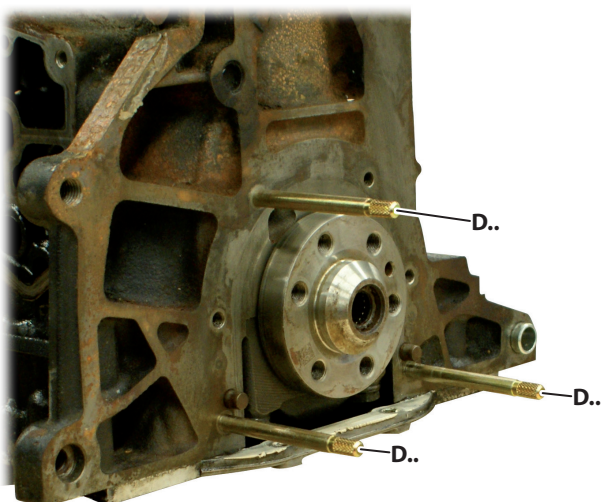
The crankshaft sealing flange may be damaged.

- ✔ The threaded pin [A3] must engage cleanly in the hole on the position encoder wheel when the pressure plate [A] is mounted!
- ✔ The threaded pin [A3] must protrude by about **3 mm** from the pressure plate [A]; if necessary, correct this using the angled screwdriver [A6]!

2. Place the pressure plate [A] on the crankshaft sealing flange as shown and screw in the three knurled screws [A1] alternately, hand-tight.



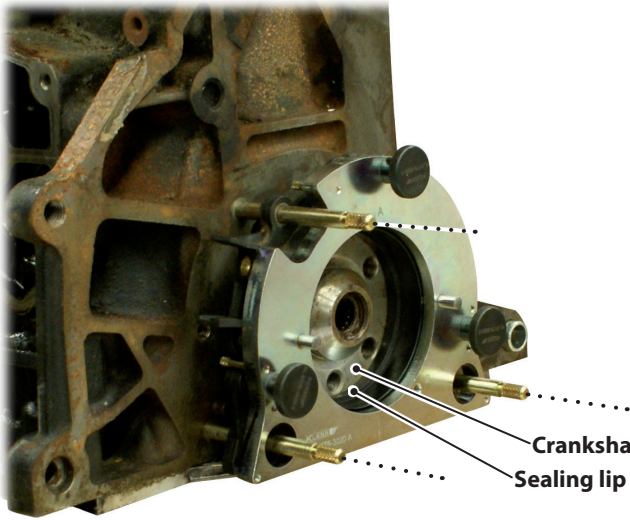
5: Screw in suitable guide bolts [D..] on the motor block...



3. Clean the sealing surfaces on the engine block and then screw in three matching guide bolts [D..] hand-tight, depending on the thread \varnothing (M7 or M8).

ⓘ Depending on the manufacturer's specifications, apply sealing dimensions if necessary.

6: Place pressure plate [A] with crankshaft sealing flange on the guide pin [D..]...



CAUTION

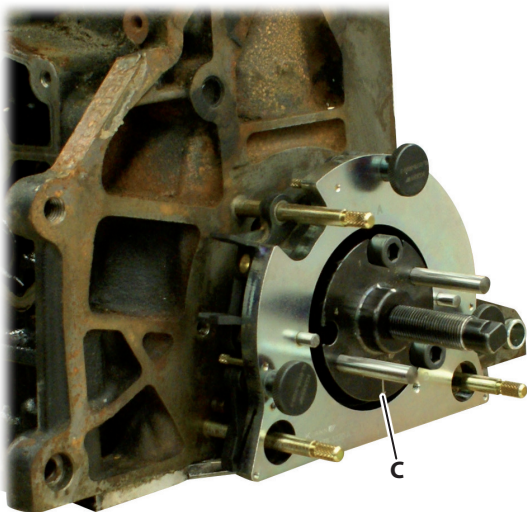
The crankshaft sealing flange may be damaged.

▼ The sealing lip support ring must not be displaced before assembly!

- Place the pressure plate [A] with the crankshaft sealing flange on the guide bolt [D..], but only so far that the sealing lip support ring just touches the crankshaft.

EN

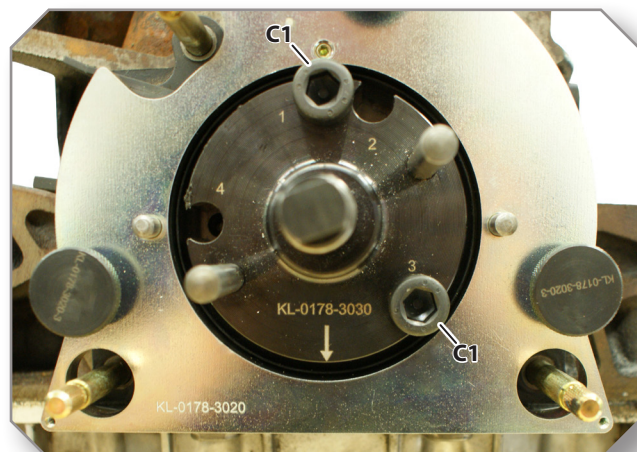
7: Screw the flange [C] to the crankshaft in the correct position...



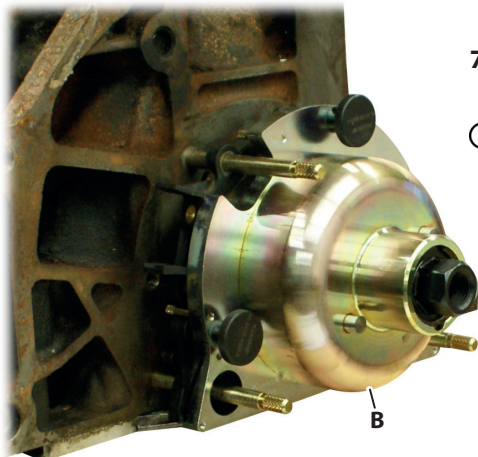
- Place the flange [C] on the crankshaft so that the arrow on it points downwards and screw it on using the two cheese-head screws [C1].

ⓘ Tighten the cheese-head screws [C1] with **5Nm**.

- Check again the correct position of the upper dead centre (OT) on the 1st cylinder and correct, if necessary.

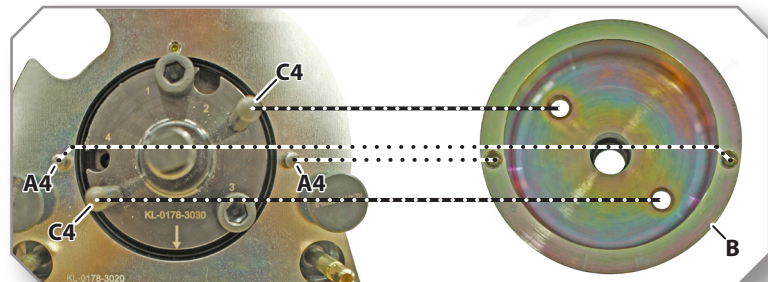


8: Place the housing [B] in the correct position on the assembly tool...

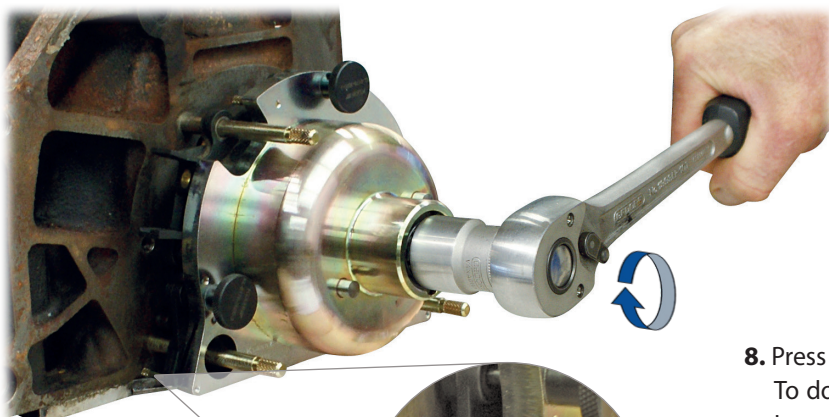


7. Place the housing [B] on the assembly tool so that **both** dowel pins [A4] and **both** dowel pins [C4] fully engage in the **four** holes on the housing [B].

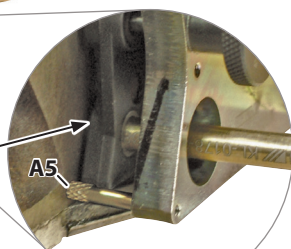
ⓘ If the housing [B] does not fit over the dowel pins [A4] and [C4], the position of the upper dead centre (OT) on the 1st cylinder is incorrect and must be corrected.



9: Press the crankshaft sealing flange on the crankshaft...



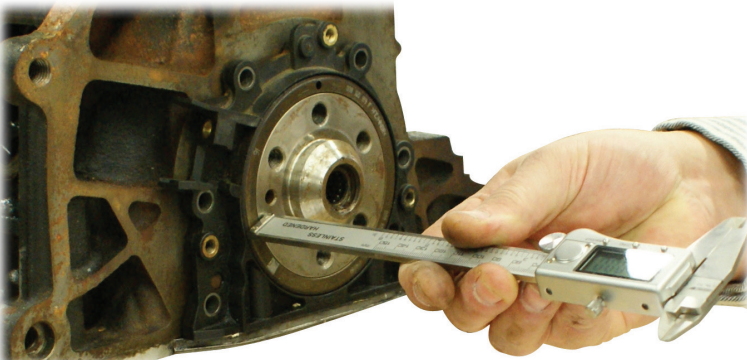
Distance approx. 1 mm



8. Press the crankshaft sealing flange on the crankshaft. To do this, turn the flanged nut (Ø 22mm) on the housing [B] clockwise until the spacer bolts [A5] are in contact with the engine block.

ⓘ After pressing on, the crankshaft sealing flange should still be about **1 mm** from the engine block.

10: Check the position of the crankshaft sealing flange according to the manufacturer's specifications...



9. Remove the assembly tool and finally check the position of the crankshaft sealing flange according to the manufacturer's specifications.

ⓘ Continue all further work on the engine according to manufacturer's specifications, such as screwing on the crankshaft sealing flange.