

LASER[®]

**Volkswagen / Audi
Crankshaft Seal Installer Tool**



Part No: 4795

4795

Crankshaft Seal Installer Tool

OEM Tool Code: T10017

This Crankshaft Seal Installer tool is specifically designed for VAG vehicles with 16v 1.4 and 1.6 engines including:

Seat Arosa 1.4, Ibiza 1.4, Cordoba 1.4, Leon 1.4/1.6, Toledo 1.4/1.6, and Inca 1.4 16v

Skoda Facia 1.4, Fabia II 1.6, Octavia 1.4 and Roomster 1.4 16v

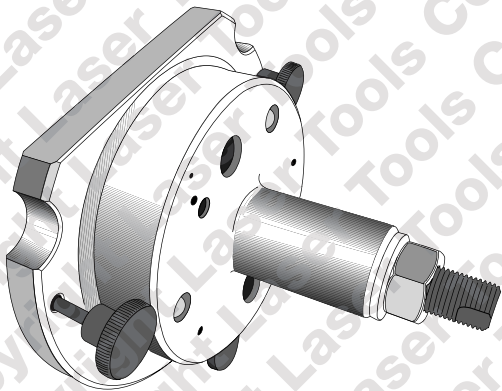
Volkswagen Lupo 1.4/1.6, Polo 1.4/1.6, Polo Classic 1.4, Golf/Bora 1.4/1.6, Beetle 1.4, Caddy 1.4 16v

Other Tools Required:

Torque Wrench 5-60Nm

3 X Hexagonal Bolts M6 X 35mm

Vernier Gauge (or straight edge and feeler gauges).



Removing the crankshaft seal housing

The flywheel end oil seal is integral with the oil seal housing and speed sender, and is supplied with a new timing ring. If the oil seal is faulty, the whole assembly must be renewed. This **Crankshaft Seal Installer Tool 4795** is required to press the new seal housing assembly into position. Note that removing the oil seal will also remove the serrated timing ring from the end of the crankshaft and care must be taken to refit the ring in its exact position.

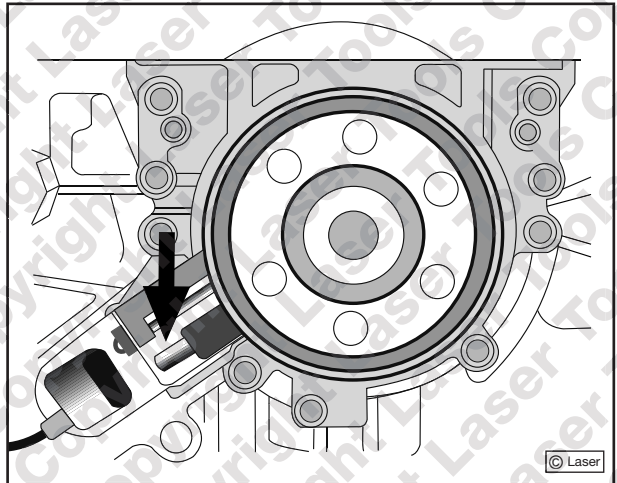
Remove the flywheel or driveplate (as applicable).

Set the engine to TDC.

Remove the sump.

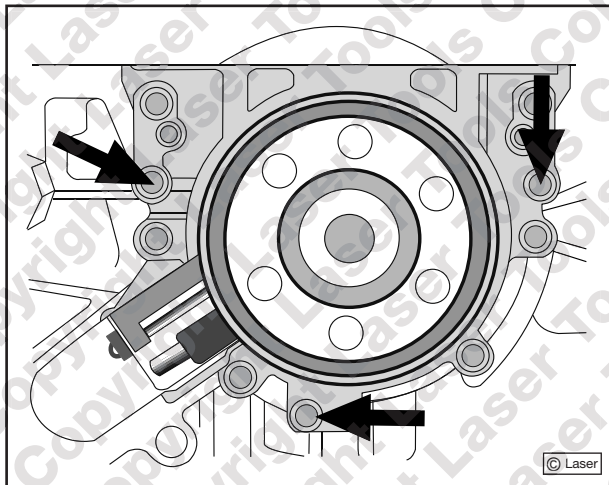
Disconnect the wiring spur from the engine speed sender on the oil seal housing (**ARROW**), then unbolt and remove the sender and recover the rubber grommet.

Unscrew the housing securing bolts and remove them. Discard the bolts as new ones must be used on reassembly.



The seal housing assembly is pressed off using three M6 bolts screwed into the threaded holes provided (**ARROWS**).

Screw bolts alternately (maximum half-turn for each bolt) into seal housing and press seal housing together with sender timing ring off the crankshaft.



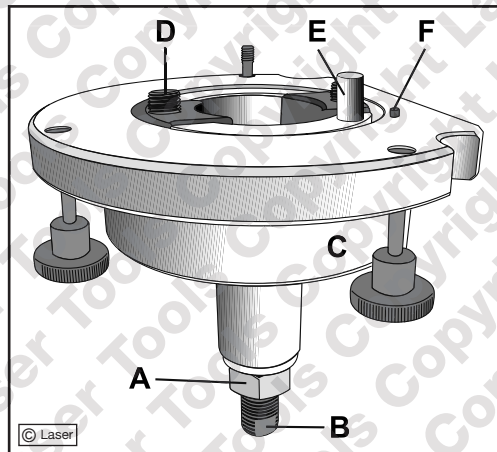
Attaching the seal housing assembly with sender timing ring to the Installer Tool 4795.

Gradual introduction of a new generation of sealing housings with PTFE seal (Teflon). The sealing housing with spring ring will continue to be available as a spare part. When fitting a new seal/housing be careful to use the same type as removed.

- The seal/housing with PTFE sealing ring is equipped with a sealing lip support ring; this support ring serves the function of a fitting sleeve and may not be removed prior to installation.
- Sealing housing and sender ring must not be separated or moved after removal from packaging.
- The sender ring of a sealing housing with spring ring has an Elastomer coating on the sealing surface to crankshaft. This coating must never come into contact with dirt or grease.

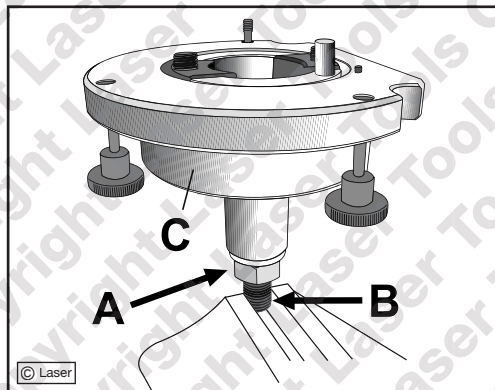
- The sender ring is held in its installation position by a locating pin (**F** in diagram on page 6) on Installer Tool 4795.
- Sealing housing and seal are one unit and must be replaced together with the sender ring only.
- The Installation Tool 4795 maintains its installation position to the crankshaft via a guide pin (**E** in diagram on page 6) which is inserted into a threaded hole in the drive plate.

- A — Hex nut
- B — Clamping surface on threaded spindle
- C — Installation Tool 4795
- D — Allen Socket head bolt
- E — Guide pin
- F — Locating pin

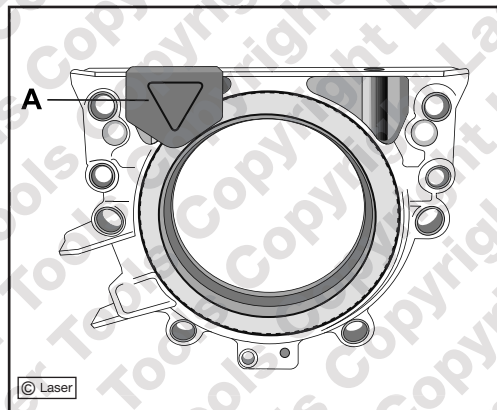


Screw in the large hex nut **B** to just before the clamping surfaces **A** of the threaded spindle.

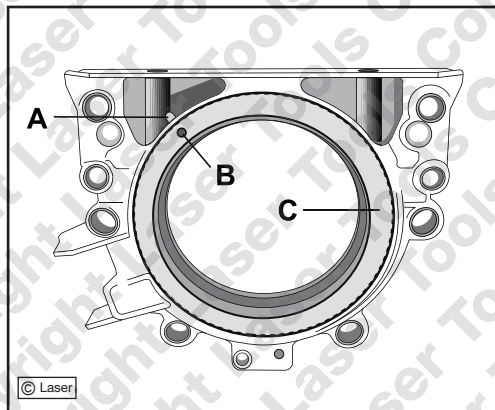
Clamp Installer Tool 4795 to a vice (clamping surfaces **B** on threaded spindle). Press tool housing **C** down so that it lies on large hex nut **A** (arrow). Screw large hex nut up threaded spindle until inner part of tool is level with tool housing.



Before fitting the new seal housing, check that the hole in the timing ring is aligned with the TDC mark on the seal housing. A plastic clip (A) holds the ring in the correct position, this must be removed.



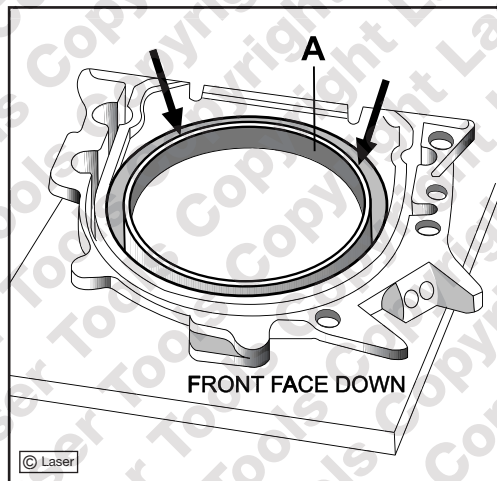
Locating hole **B** on timing ring **C** must align with TDC mark **A** on seal housing.



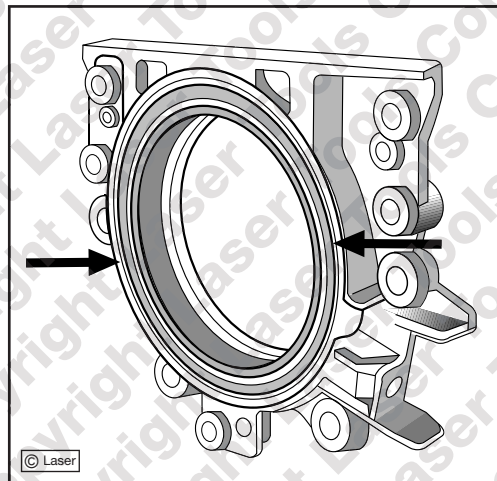
NOTE: The timing ring must not be taken out of the seal housing or turned.

Place seal housing with front side down on a clean, flat surface.

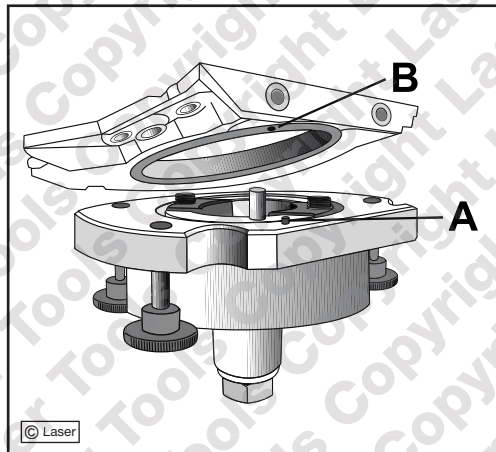
Push sealing lip support ring **A** downwards in direction of arrows until it lies on flat surface.



Upper edge of timing ring and front edge of seal housing must align (**arrows**).

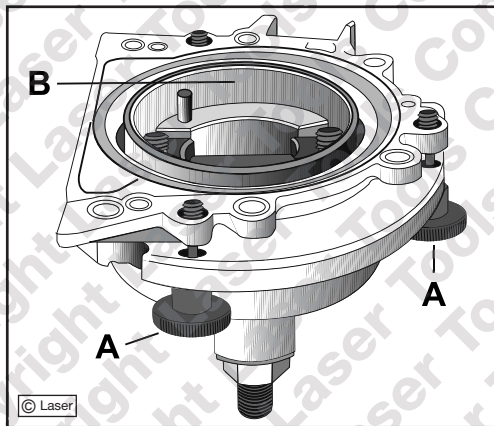


Place seal housing with front side onto Installer Tool 4795 – ensure that tool locating pin **A** can be inserted into timing ring hole **B**.



NOTE: Ensure seal housing lies flat on Installer Tool 4795.

Push seal housing and support ring for sealing lip **B** against surface of Installer Tool 4795 while tightening the three knurled screws **A**, so that locating pin cannot slide out of timing ring hole.



NOTE: When installing seal housing, ensure that timing ring remains fixed in Installer Tool.

Attaching Installer Tool 4795 with seal housing to crankshaft flange.

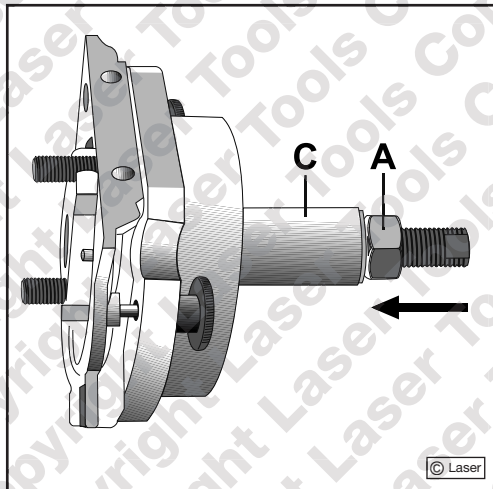
Crankshaft flange must be free of oil and grease.

Check that the engine is still at TDC.

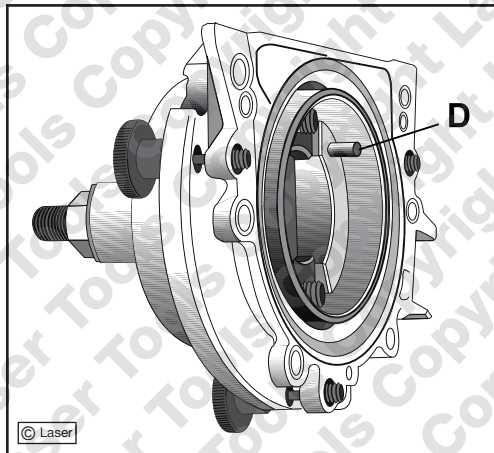
Screw large hex nut **A** to end of threaded spindle.

Press threaded spindle of Installer Tool 4795 in direction of **arrow**, until large hex nut **A** lies against installer housing **C**.

Align **flat edge** of Installer Tool 4795 on **sump side** of crankcase sealing surface and fit the tool and new seal housing assembly over the crankshaft and onto the cylinder block.

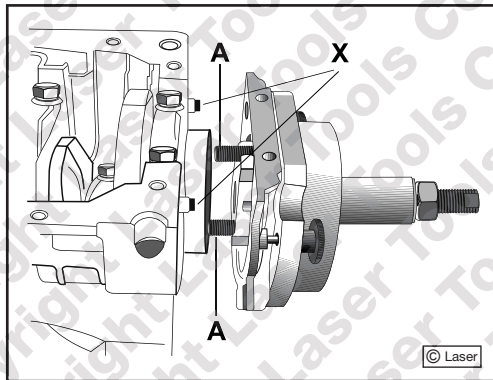


The Installer Tool 4795 guide-pin **D** is guided into threaded hole in crankshaft during the fitting sequence. This ensures the timing ring reaches its final installation position.



Secure tool and new seal housing assembly to crankshaft flange with the Allen-headed bolts **A**.

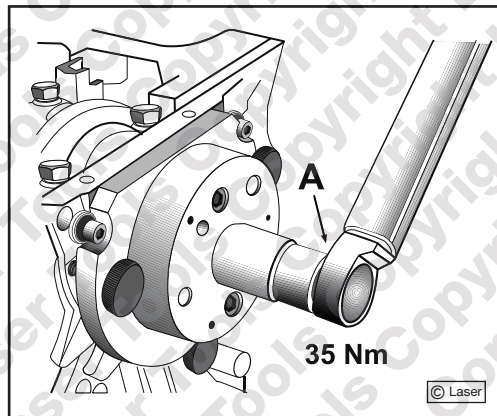
To guide the seal housing, screw two M6 X 35mm bolts into cylinder block (**X**).



NOTE: Screw Allen-headed bolts **A** into crankshaft flange (approximately 5 full turns).

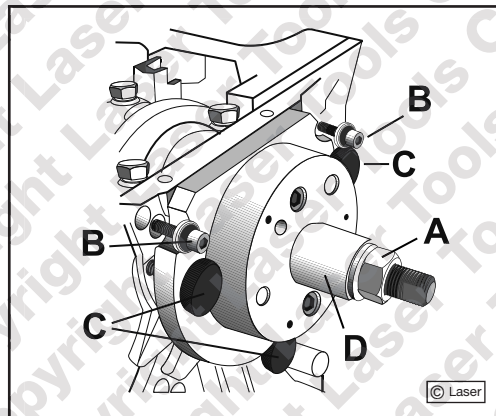
Screw large hex nut **A** up threaded spindle until it lies against the tool housing. Then tighten this large hex nut to **35 Nm**, this will press the timing ring onto the crankshaft.

After tightening the hex nut, there must be a small air gap between the seal housing and the cylinder block.

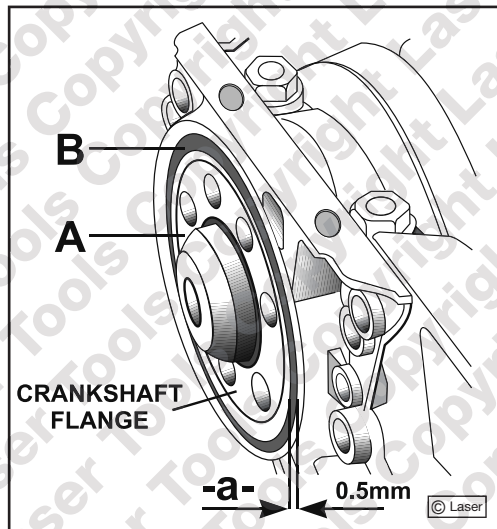


Unscrew large hex nut **A** to end of threaded spindle, then remove the two guide bolts **B** from cylinder block.

Unscrew the three knurled screws **C** out of housing. Pull assembly tool **D** back to large hex nut **A** (only for sealing housing with spring ring).



Note: If the seal housing has a PTFE sealing ring, completely unbolt the Installer Tool 4795 and remove the sealing lip support ring.



The timing ring is in the correct position on the crankshaft if a gap **-a-** = 0.5 mm exists between crankshaft flange **A** and timing ring **B**.

Set vernier gauge on crankshaft flange. Measure distance **-a-** between crankshaft flange and timing ring. This can also be checked with a straight edge placed across crankshaft flange and feeler gauge(s) used to measure the clearance.

If measurement **-a-** is too small, re-press the timing ring (see section on page 15).

If dimension **-a-** is correct:

Fit the new housing securing bolts.

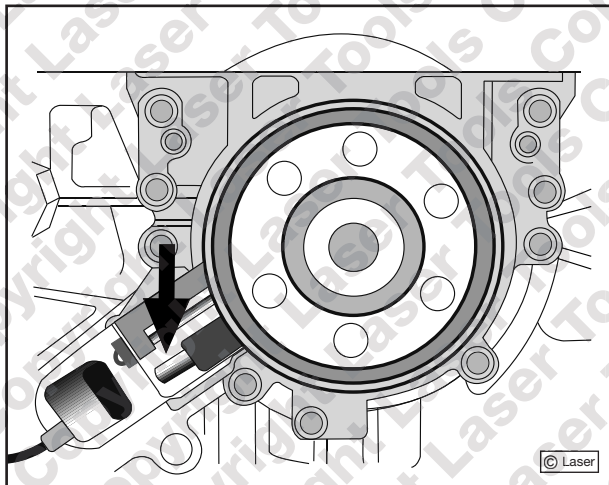
Tighten these new housing securing bolts to **12 Nm** using alternate and diagonal sequence.

Insert the crankshaft speed sender and tighten the securing bolt to 5 Nm.

Refit sump.

Refit intermediate plate.

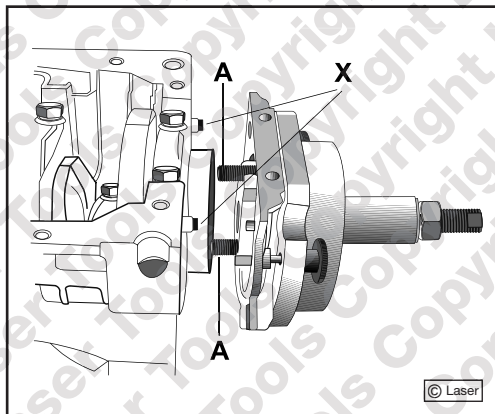
Refit flywheel / drive plate using new bolts. Tighten securing bolts to 60 Nm + one-quarter turn (90°).



Re-pressing timing ring (if required)

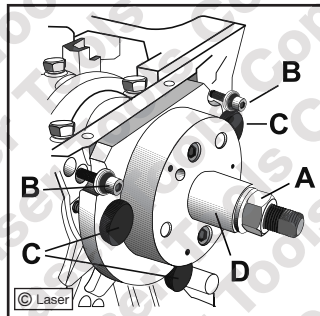
Re-attach Installer Tool 4809 to crankshaft flange using the Allen-headed bolts **A**. Hand tighten these bolts.

Push Installer Tool 4809 by hand to sealing flange.



Screw large hex nut **A** onto threaded spindle by hand until it is in contact with tool body **D**.

Tighten large hex nut **A** to to **40 Nm** using torque wrench.



Check installation position of timing ring on crankshaft again (refer to page 13).

If dimension -a- is too small again, tighten large hex nut **A** to to **45 Nm** using torque wrench and check installation position of timing ring on crankshaft again.



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Guarantee

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