The intended purpose of these tools is for repairing, servicing and maintaining engines. Prager & Co. KG does not accept any liability for incorrect use of any of these products. Prager & Co. KG cannot be held responsible for any damage to personnel, property or equipment when using these tools.

No. 6680 - Crankshaft Seal Installer Tool, Audi / VW

- **for 1.4 / 1.6 L petrol engines and 1.6 / 2.0 L Common-Rail diesel engines**
- **for almost all models from Audi, Seat, Skoda and Volkswagen**
- **for installing the crankshaft seal with transmitter wheel when repairing engine leaks or general maintenance**

Note: For vehicles with high mileage this service operation can be carried out proactively during repairs on clutch or transmission, for which the same extensive preparatory work is required.

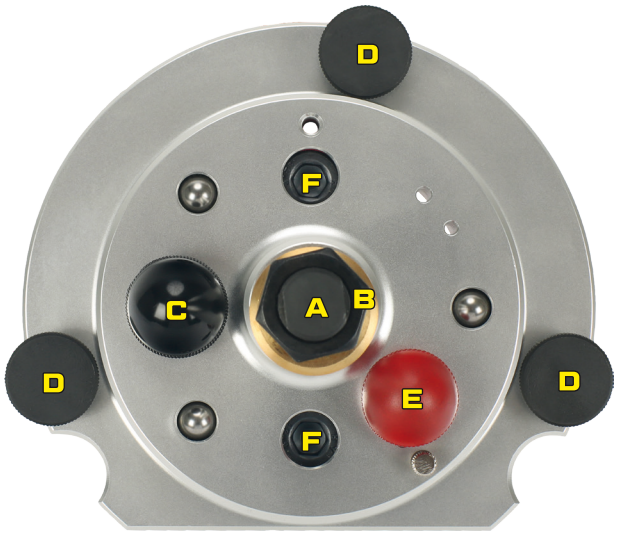


for engine codes:
AHW, AKQ, APE, AXP, AZV, BAG, BCA, BLS, BKD, BKP, BLP, BLF, BMA, BMN, BMR, BNA, BRF, BUD, BXW, CAAA, CAAB, CAAC, CAAD, CAAE, CAGA, CAGB, CAGC, CAHA, CAHB, CAXC, CAYA, CAYB, CAYC, CAYD, CAYE, CBAA, CBAB, CBAC, CBBA, CBBB, CBDA, CBDB, CBDC, CCHA, CCHB, CDBA, CDCA, CEGA, CFCA, CFFA, CFFB, CFFE, CFFD, CFGB, CFGC, CFGD, CFHA, CFHB, CFHC, CFHF, CFHD, CFJA, CFJB, CGGA, CGGB, CGLA, CGLB, CGLC, CGLD, CJAA, CJCA, CJCB, CJCC, CJCD, CKUB, CKUC, CKTB, CKTC, CLCA, CLCB, CLJA, CLLA, CLLB, CLNA, CMFA, CMFB, CMGA, CMGB, CMSA, CNEA, CNFA, CNFB, CSHA, CSLB

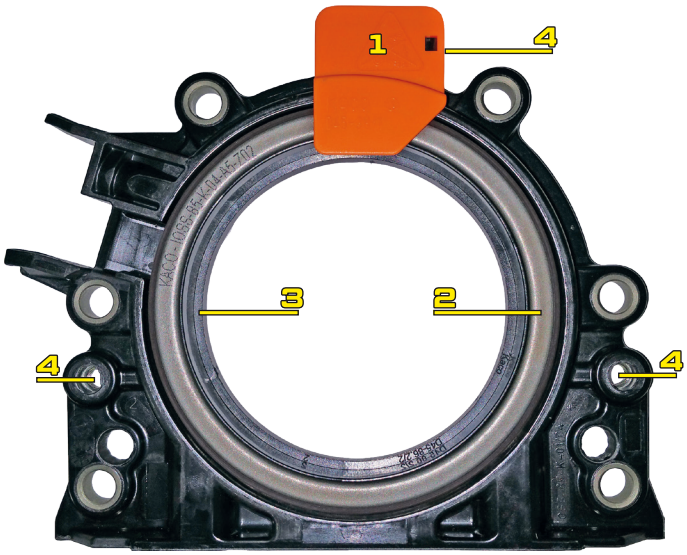
Attention:
Additional tools are required for the repair. We also strongly recommend referring to the vehicle manufacturer's repair manuals.

The intended purpose of these tools is for repairing, servicing and maintaining engines. Prager & Co. KG does not accept any liability for incorrect use of any of these products. Prager & Co. KG cannot be held responsible for any damage to personnel, property or equipment when using these tools.

Mounting tool



Crankshaft seal ring



	Description of mounting tool
A	Spindle
B	Hex nut
C	Guide pin for diesel engine (black)
D	Knurled-head screws 3x
E	Guide pin for petrol engine (red)
F	Hexagon socket screw 2x

	Description of crankshaft seal ring
1	Safety clip (here at 12 o´clock)
2	Transmitter wheel
3	Sealing lip supporting ring (remains in the tool)
4	Thread hole 3x for disassembly (1x hide)

Attention:
Additional tools are required for the repair.
We also strongly recommend referring to the vehicle manufacturer's repair manuals.

This tool was designed to replace the crankshaft seal flange (transmission side) on the specified engines. This is necessary because the sealing flange is fitted with a PTFE sealing ring and has a sensor gear that must be aligned with the crankshaft.

This tool is equivalent to the tool specified by the vehicle manufacturer for the relevant engine repairs.

Work preparation:

Remove the transmission, flywheel, and, if applicable, the intermediate plate. Follow the manufacturer's instructions when doing so. Remove the oil pan and the engine speed sensor.

Removal of old crankshaft seal ring:

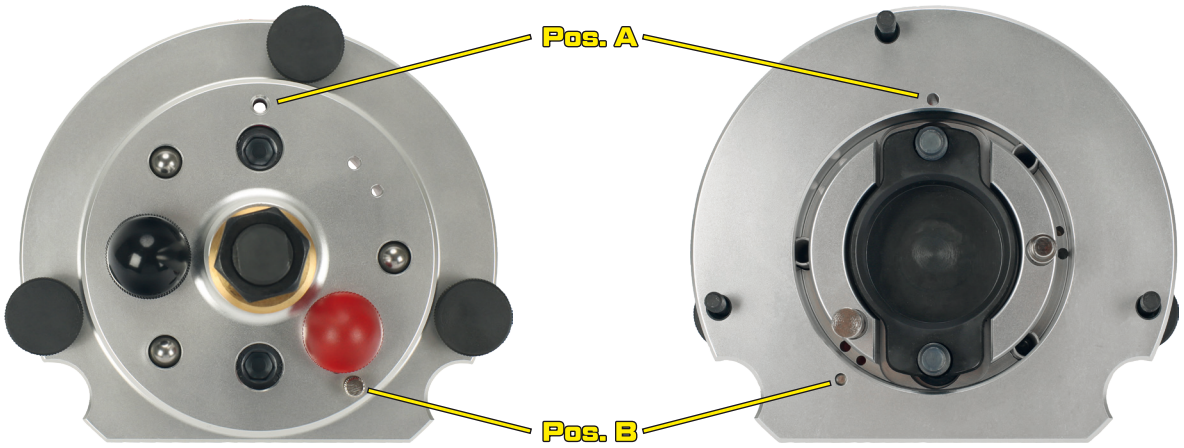
Remove the fixing screws of the sealing flange. Screw M6 x 35 mm screws (not included) into the threaded holes (4) in the sealing flange until they are in contact with the motor block. Then tighten the screws alternately by no more than ½ turn to press the flange with the sensor gear off the crankshaft.

Do not use a screwdriver or similar tool to pry it off. This could damage the sealing surface.

Installation of new crankshaft seal ring with transmitter wheel:

The sealing flange and transmitter wheel can only be replaced together as a single unit. The sealing flange with PTFE sealing ring is supplied with a support ring that serves as a mounting sleeve. The support ring must not be removed. It remains in the tool after installation and is removed only at that point. The sealing flange and the transmitter wheel must not be disassembled or twisted. The transmitter wheel is held in its installation position by a guide pin on the tool.

The Condor assembly tool is designed to combine two of the manufacturer‘s tools into one. This means that the position of the guide pin must be set. The manufacturer‘s repair manual specifies which tool is required for which engine. It is OEM-No. T10134 or OEM-No. T10017.



For OEM-No. T10134 mount guide pin in pos. **A**
For OEM-No. T10017 mount guide pin in pos. **B**
The position of the guide pin is also indicated by the crankshaft seal ring with transmitter wheel.
On the transmitter wheel there is a hole under the safety clip.

Is the safety clip in position 12 o’clock mount guide pin in pos. **A**
Is the safety clip in position 5 o’clock mount guide pin in pos. **B**

Screw the hex nut (B) onto the spindle until it is just short of the spindle‘s clamping surface. Clamp the mounting tool in a vise using the clamping surface of the spindle. The mounting surface must face upward. Use protective jaws when doing so.

Press down the mounting bell to the hex nut (**B**). Turn the hex nut on the spindle until the inner and outer part of the mounting tool are on the same level.

Take off the safety clip (**1**) from the new crankshaft sealing flange. Under the safety clip there is a hole in the transmitter wheel which has to be in one line with the mark of the housing.

Do not rotate the transmitter wheel or take it out.

Place the sealing flange with the transmitter wheel, with the outer side facing down, on a flat, clean surface. Press the sealing lip support ring downward until it rests on the surface. The upper edge of the transmitter wheel must be aligned with the edge of the sealing flange on the outer side. Place the sealing flange with the outer side facing down on the mounting tool. Ensure that the guide pin is correctly installed according to the manufacturer’s instructions and that the bore of the transmitter wheel engages with it. Tighten the knurled screws (D) while pressing the sealing flange and the sealing lip support ring downward.
Tighten the knurled screws (D) until the transmitter wheel is securely held in place on the locking pin.
Remove the mounting tool with the sealing flange from the vise. Tighten the hex nut all the way to the end of the threaded spindle (beyond the clamping surface). Push the spindle (A) back into the housing of the mounting tool until the nut (B) rests against the housing.

The crankshaft flange must be oil-free and clean.
The engine must be at TDC (top dead center) in cylinder 1.

Align the installation tool with the flange mounted on it, placing the flat side of the tool against the sealing surface of the oil pan. Secure the installation tool to the crankshaft flange using the two hex socket screws (F), tightening them approximately 5 turns.
Secure the sealing flange to the engine block for guidance using two M7 x 35 mm screws (not included) through the holes on the left and right edges of the oil pan

Push the mounting tool onto the crankshaft by hand until the seal lip support ring is in contact with the crankshaft flange. Insert the guide pin (C = black for diesel / E = red for gasoline) into the hole in the crankshaft.
The transmitter gear is now in its final installation position.

The other guide pin (C = black for diesel / E = red for gasoline) must not be inserted into the crankshaft.

Tighten the two hex socket screws (F) by hand until they are secure. Hand-tighten the hex nut until it comes into contact with the mounting tool. Using a torque wrench, tighten the hex nut according to the manufacturer's specifications (be sure to follow the current manufacturer's specifications, as the values have been updated).
After tightening, there must still be a small air gap between the engine block and the sealing flange.
Loosen the hex nut (B) until it reaches the end of the threaded spindle (A) (over the clamping surface).
Remove the two M7 x 35 mm screws. Unscrew the three knurled screws (D) from the sealing flange.
Unscrew the two hex socket screws (F) and remove the mounting tool. Remove the sealing lip support ring from the mounting tool.

Check that the transmitter wheel is installed in the correct position. The transmitter wheel must be 0.5 mm lower than the crankshaft flange. Check using a caliper.

If the 0.5 mm dimension is not achieved, the encoder wheel must be re-pressed.
See "Re-pressing the Encoder Wheel" at the end of this manual.

Position the mounting bolts of the sealing flange and tighten them in a crisscross pattern to the torque values specified by the manufacturer (usually 15 Nm).
Install the engine speed sensor and tighten it to the specified torque.
Install the oil pan, intermediate plate (if applicable), flywheel, and transmission according to the manufacturer's instructions.

Re-pressing the transmitter wheel:

Hand-tighten the installation tool to the crankshaft flange using the hex socket screws (F).
The hex nut (B) must be fully unscrewed from the spindle (A) during this process. Slide the installation tool onto the sealing flange by hand. Tighten the hex nut (B) by hand until it rests against the installation tool.
Retighten the hex nut (B) to the torque specified by the manufacturer (usually 5 Nm higher).

Check the correct installation position of the transmission wheel again. The transmission wheel must be 0.5 mm deeper than the crankshaft flange. Check this with a caliper.

If the 0.5 mm dimension has not yet been reached, repeat the re-pressing process using the torque specified by the manufacturer for this purpose.