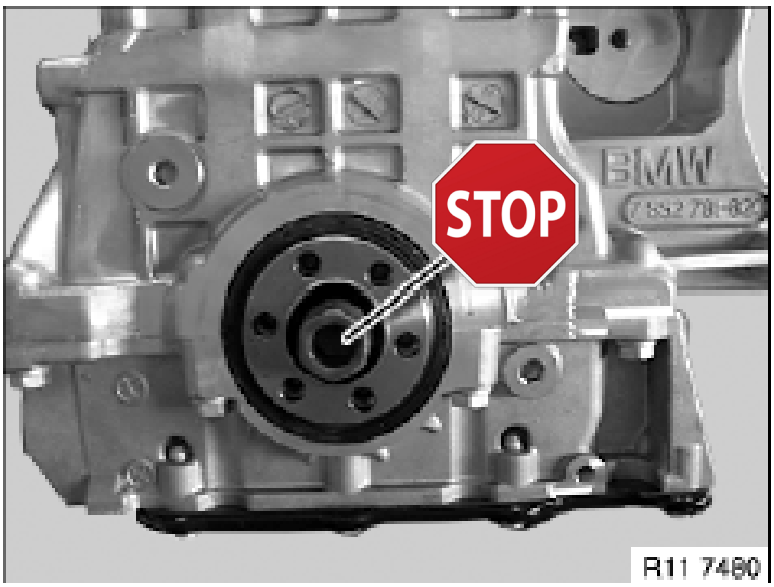
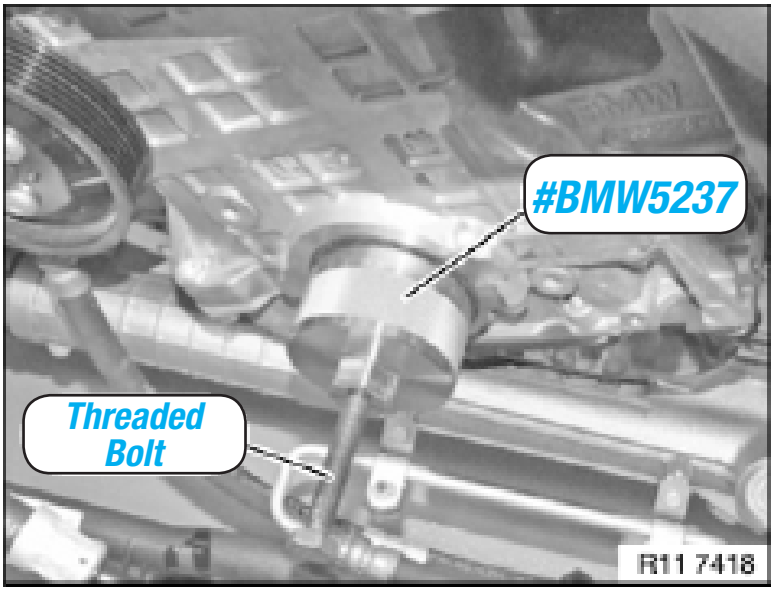
-Remove vibration absorber.



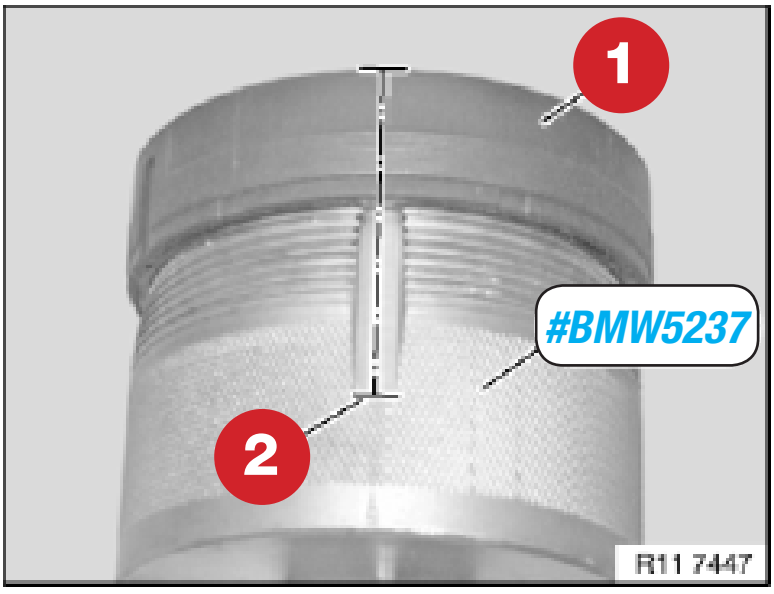
IMPORTANT!

Do not release central bolt.
If the central bolt is released, the sprockets of the timing chain and the oil pump will no longer be non-positively connected to the crankshaft. Intake and exhaust camshafts can turn in relation to crankshaft.
Risk of damage!



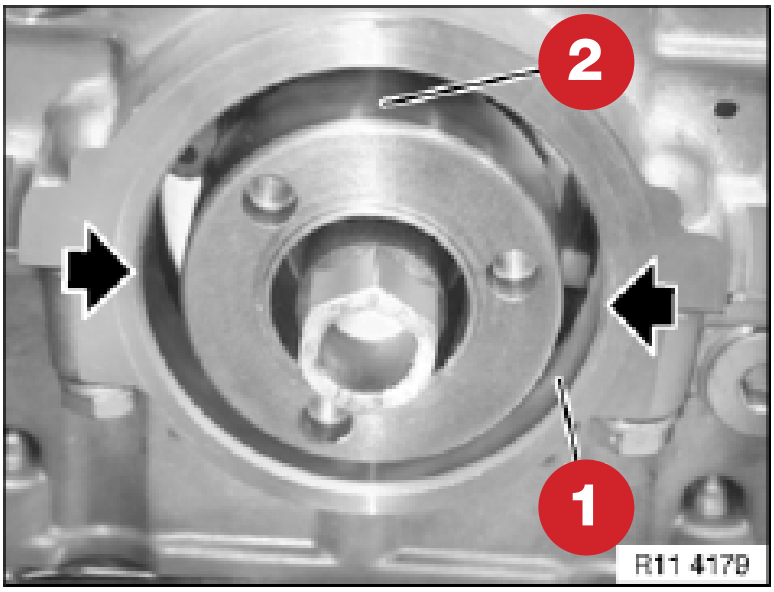
Screw #BMW5237 to 80 Nm into crankshaft seal.
Screw in threaded bolt to release the crankshaft seal from housing.

Repeat the operation several times if necessary.



Carefully saw open crankshaft seal (1) at cutting line (2).
Remove crankshaft seal (1) from #BMW5237.

*This repair info is based off BMW factory repair info.



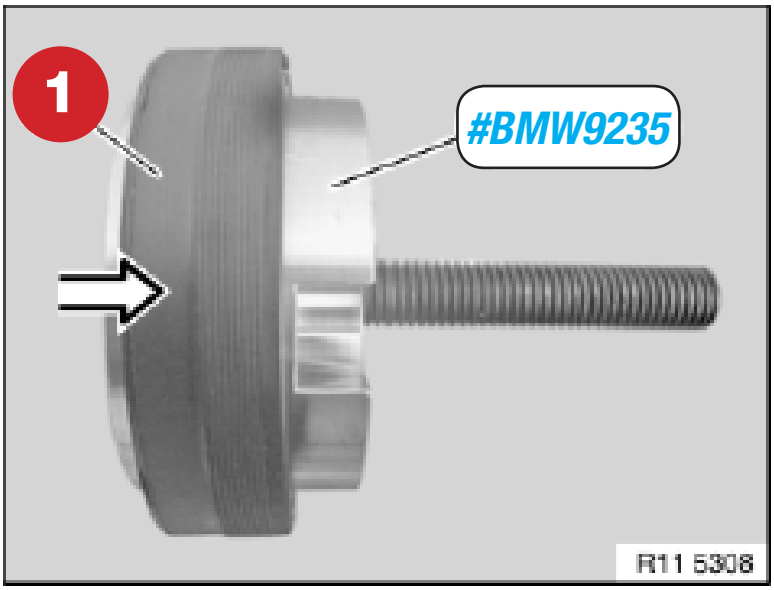
IMPORTANT!

The following text describes installation and sealing between the engine block and crankshaft seal. The engine block will not be leak proof at the outside of the crankshaft seal if you fail to comply with the individual work steps and the work sequence.

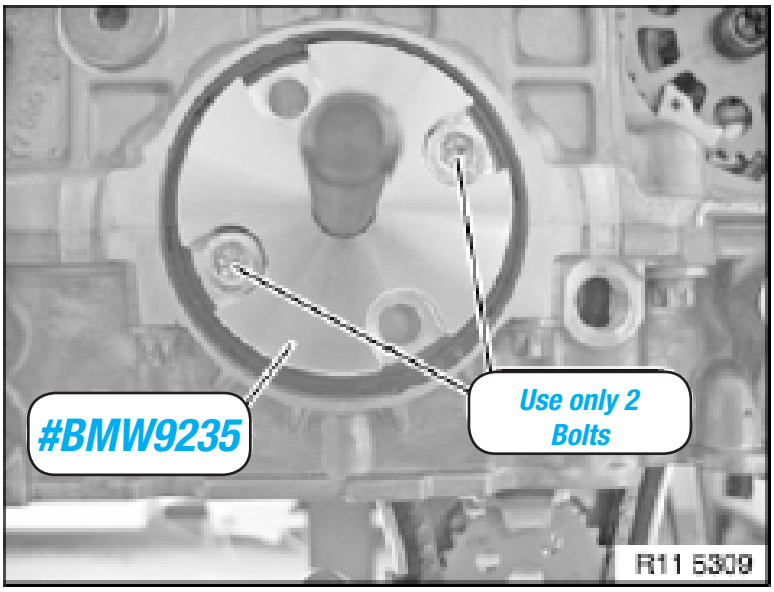
Installation note:

Clean sealing surface (1) and degrease thoroughly in area of housing partition.
Apply a light coat of oil to running surface (2) of crankshaft seal.

Image shown is a N42 engine.



Push radial shaft seal (1) onto #BMW9235 carefully in direction of arrow on the special tool.

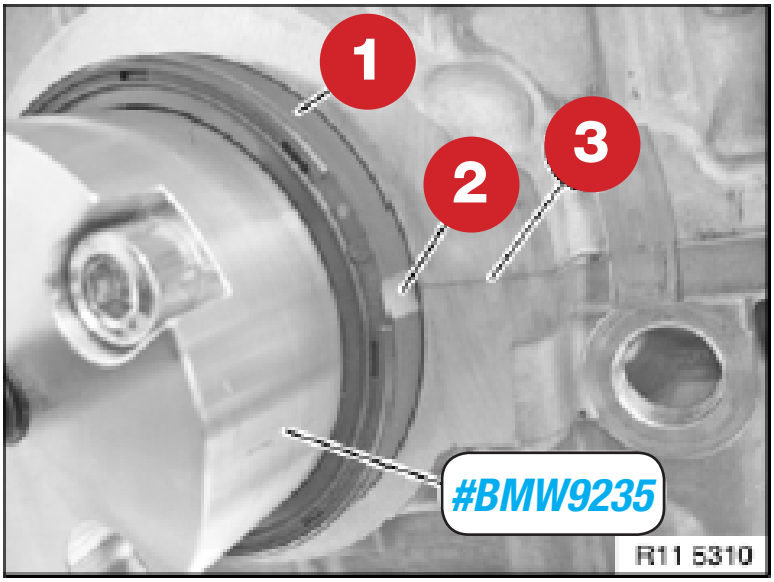


IMPORTANT!

The #BMW9235 can only be fastened with 2 opposite bolts. Determine hole pattern on special tool.

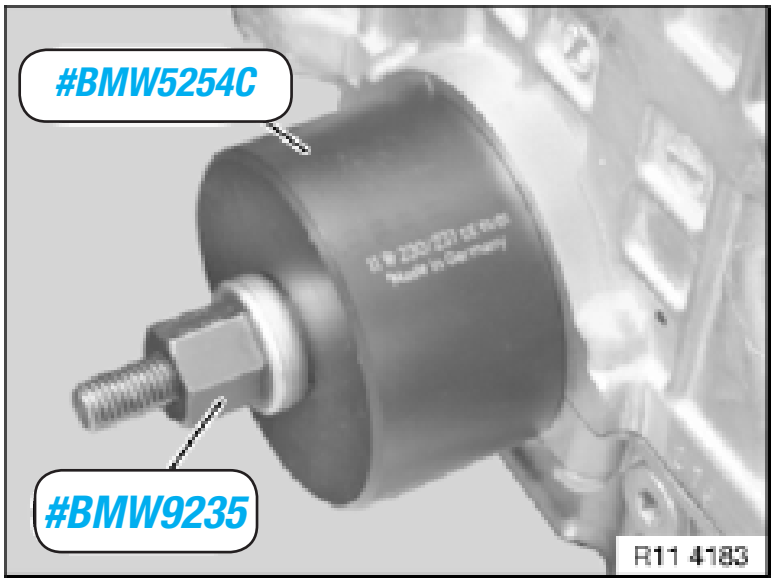
Attach #BMW9235 with supplied bolts onto crankshaft.

**This repair info is based off BMW factory repair info.*

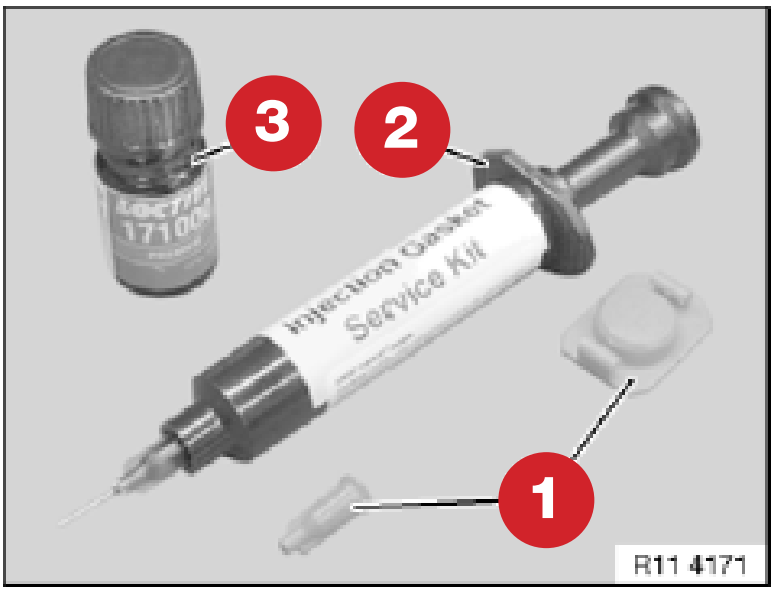


Align groove (2) of radial shaft seal (1) centred to the housing partition (3).

Important!
After installation, the grooves must be filled with sealing compound.

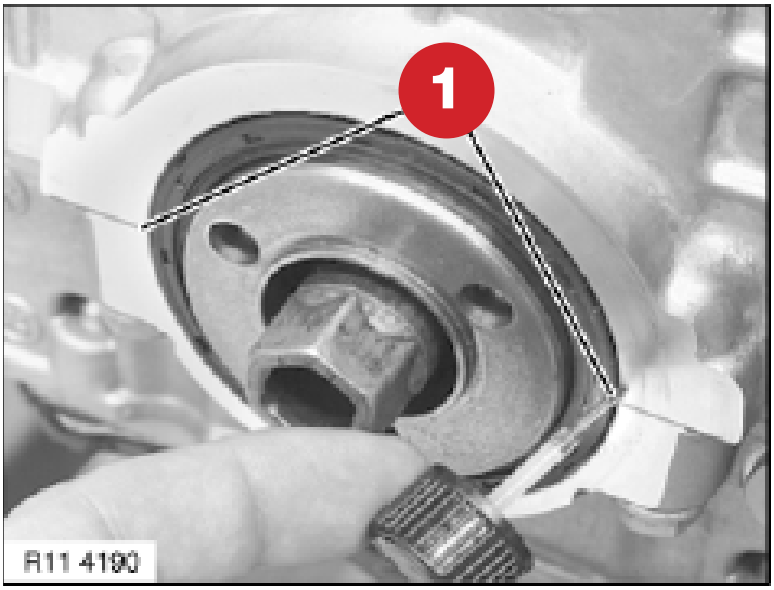


Draw in radial shaft seal with #BMW5254C in conjunction with the #BMW9235 until flush.



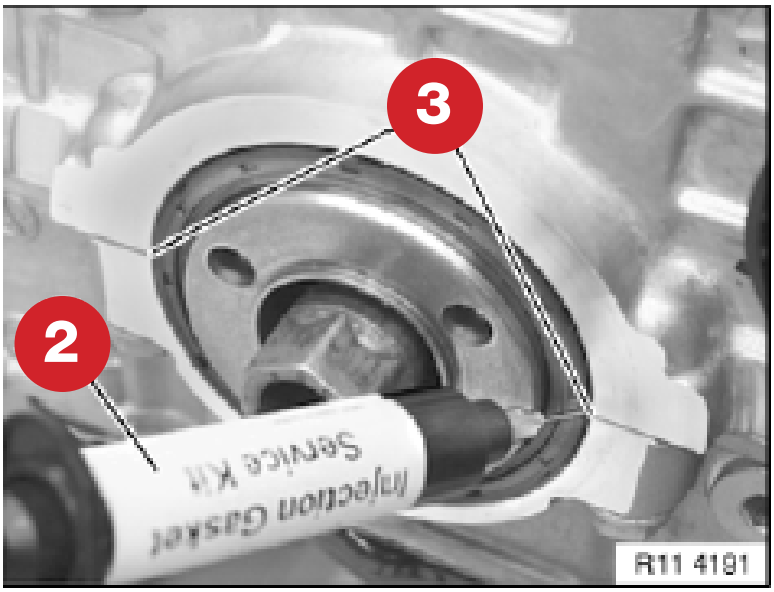
Installation note:
Use primer 1.3 and liquid seal 1.4.
Prepare liquid sealing compound (1) in special tool 11 4 370 .
Remove sealing caps (1) from injector (2).
Screw on metering needle.
Insert piston for pressing out.
Syringe (2) contains the sealing compound Loctite, manufacturer's number 128357.
Bottle (3) contains the primer Loctite, manufacturer's number 171000.

*This repair info is based off BMW factory repair info.



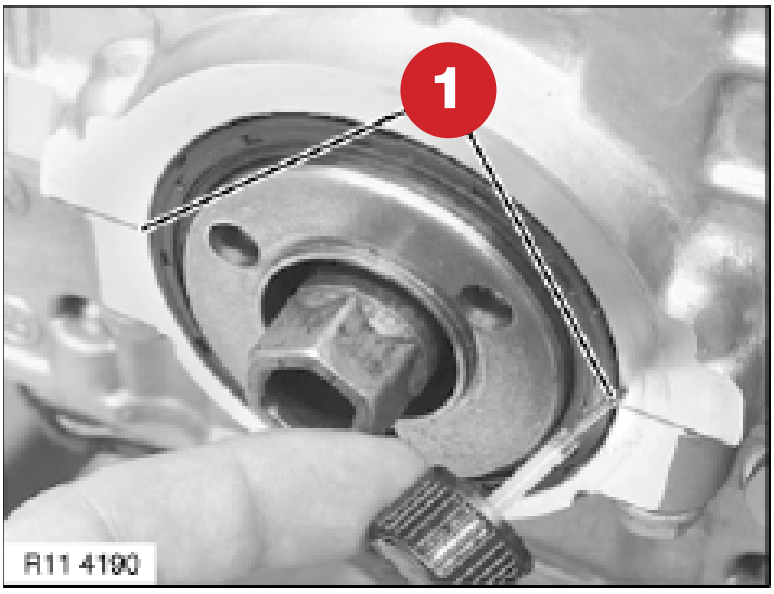
Before filling with sealing compound:
Moisten brush with Loctite primer, manufacturer's number 171000. Insert brush as far as possible into grooves (1) on crankshaft seal in order to coat housing partition on engine block.

Image shown is a N42 engine.



Using syringe (2), fill both grooves (3) flush with Loctite sealing compound, manufacturer's number 128357.

Image shown is a N42 engine.



<u>Note:</u>
Loctite primer, manufacturer's number 171000, binds the Loctite sealing compound, manufacturer's number 128357, and prevents leakage.
Coat surface of sealing compound in both grooves (1) with Loctite primer, manufacturer's number 171000.

Image shown is a N42 engine.

*This repair info is based off BMW factory repair info.