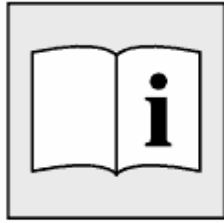
**Special tools required:**

- 11 8 190
- 11 8 200
- 11 8 210

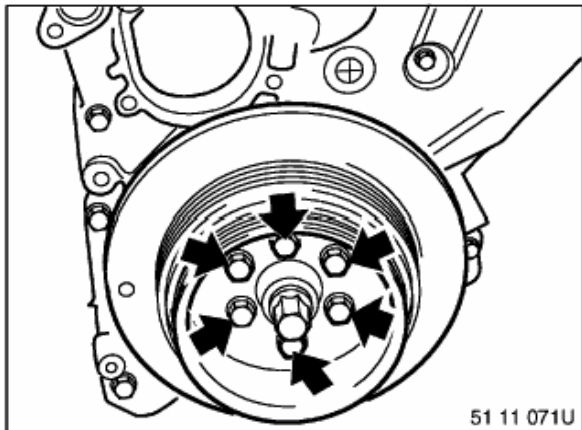
**Necessary preliminary tasks:**

- Unscrew and remove splash guard.
- Remove fan impeller with fan clutch and fan cowl
- E83/E85/E60: Remove fan cowl with electric fan
- Remove A/C compressor drive belt
- Remove alternator drive belt

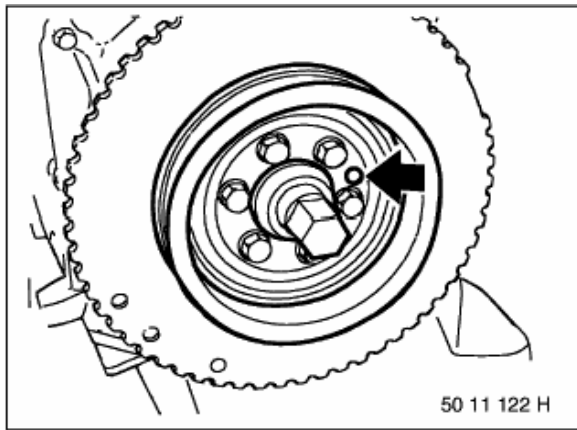
**Important!**

Risk of damage.

Protect cooler against damage.

**Version 1**

Vibration damper and hub for vibration damper are two parts:
Unscrew vibration damper bolts and take off vibration damper.



Version 1

Vibration damper and hub for vibration damper are two parts:

Installation:

Align locating bore in vibration damper to dowel pin.

Install and tighten down screws.

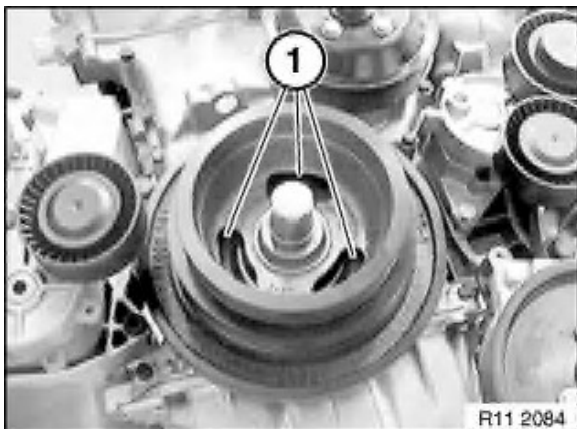
Tightening torque 11 23 3AZ .



Version 2

Vibration damper and hub for vibration damper are one part:

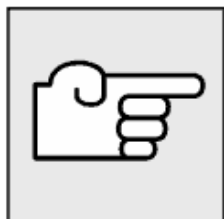
Screw special tool 11 8 190 to special tool 11 8 200 .



Version 2

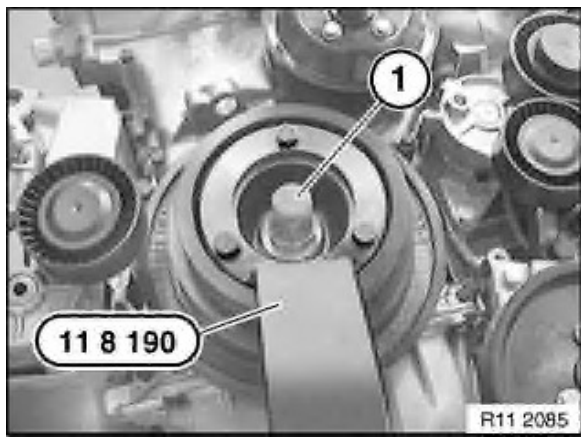
Note:

Special tool 11 8 200 must snap into place in openings (1).



Version 2

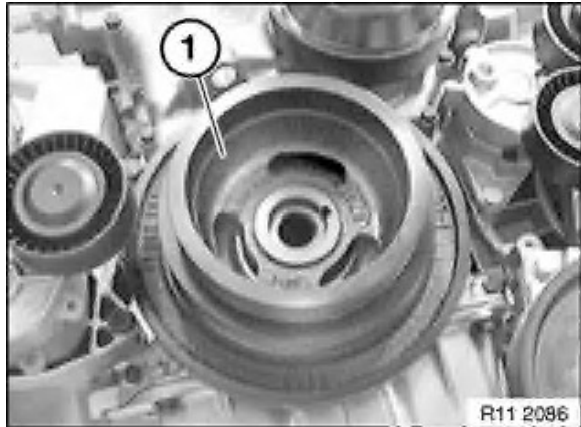
When releasing and tightening down central bolt, grip special tool 11 8 190 with assistance of a second person.



Version 2

Insert special tool 11 8 200 in openings on vibration damper and turn counterclockwise so that counter-supports snap into place on vibration damper.

Release central screw (1).



Version 2

Feed out special tools 11 8 190 / 11 8 200 .

Remove central screw and washer.

Carefully detach vibration damper (1) by hand.

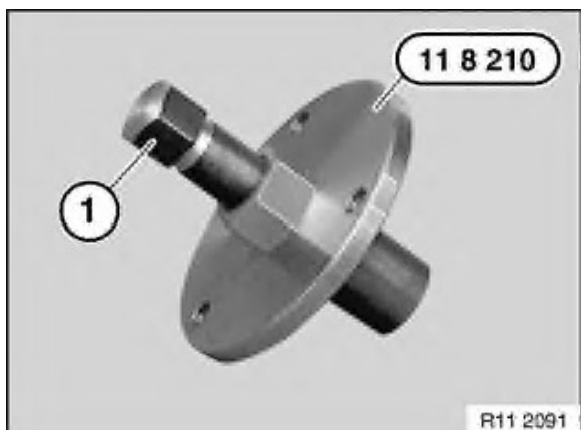


Version 2

Note:

If vibration damper cannot be detached by hand:

Insert special tool 11 8 200 in openings on vibration damper and turn clockwise so that counter-supports snap into place on vibration damper.

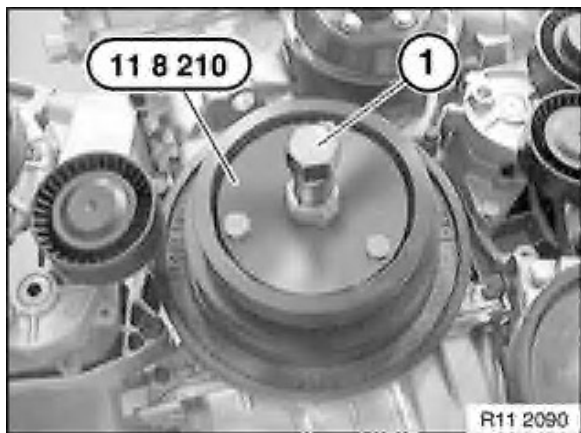


Version 2

Screw out spindle (1) on special tool 11 8 210 as far as possible.

Z3 only:

Screw in spindle (1) on special tool 11 8 210 approx. 15 mm and screw out again only after installation between special tool 11 8 200 and cooler.



Version 2

Important!

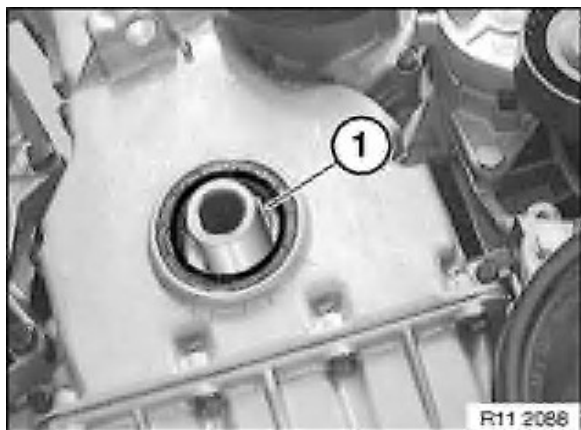
Risk of damage.

Protect cooler against damage.

Carefully install special tool 11 8 210 .

Screw special tool 11 8 210 to special tool 11 8 200 .

Detach vibration damper by turning spindle (1) on special tool 11 8 210 .

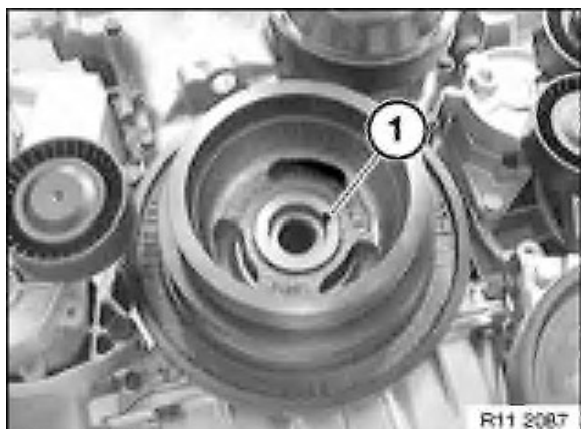


Version 2

Installation:

Check featherkey (1) for damage and correct installation position.

Replace radial seal in lower timing case cover.

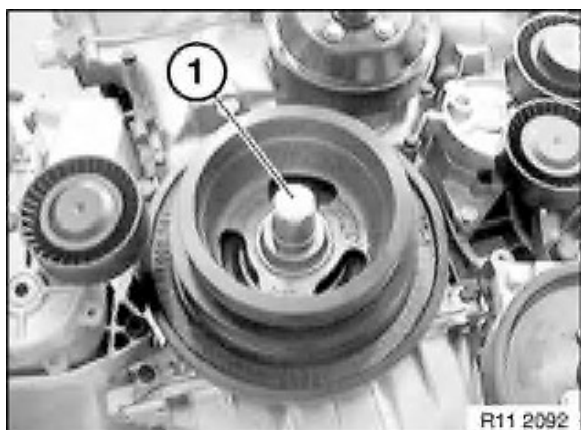


Version 2

Installation:

Align groove (1) in vibration damper to featherkey.

Fit vibration damper.



Version 2

Installation:

Replace central screw (1).

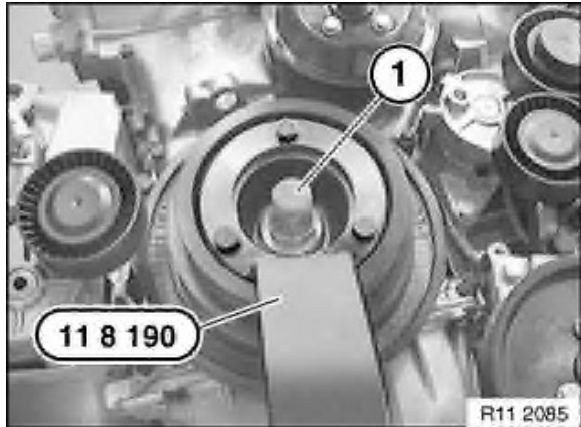
Install central screw and washer.



Version 2

Installation:

Screw special tool 11 8 190 to special tool 11 8 200 .



Version 2

Insert special tool 11 8 200 in openings on vibration damper and turn clockwise so that counter-supports snap into place on vibration damper.

Tighten down central screw (1).

Tightening torque, 11 23 2AZ .