

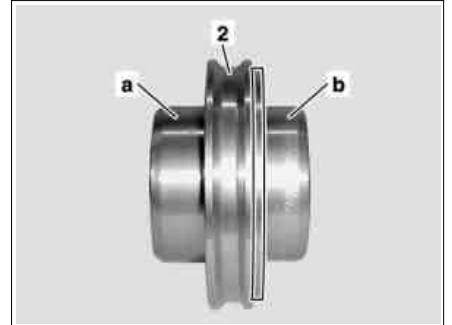











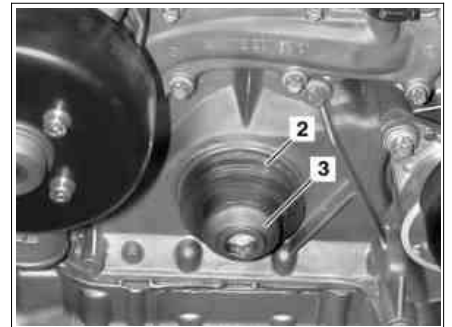
Sleeve

- 1 Deburr edge of mounting bore for crankshaft radial sealing ring at timing case cover.
- 2 Push the crankshaft radial sealing ring onto the side (a) of the  sleeve (2).
 Circumference and sealing lip of crankshaft radial seal as well as the mating contact surface on the vibration damper must be free of oil and grease.









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- 3 Align groove of  sleeve (2) to the Woodruff key of the crankshaft.
 Turn to ensure that the slot in the  sleeve (2) is aligned with the Woodruff key in the crankshaft.
- 4  Push sleeve (2) onto crankshaft and press in crankshaft radial sealing about 2 mm.
  If necessary, knock in sleeve (2) with light blows from a hammer until it is possible to insert the central bolt (3).
- 5  Draw in sleeve (2) with central bolt (3) as far as the stop.
- 6  Detach sleeve (2).
 The crankshaft radial sealing ring must be positioned at right angles to the crank journal otherwise proper sealing is not assured.



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

Shown on engine 112

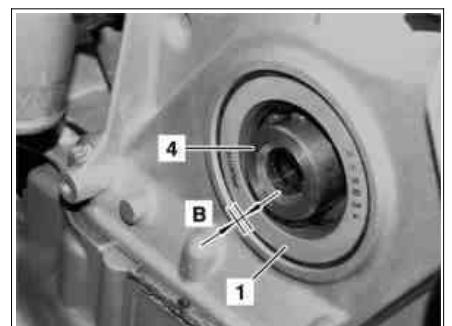
-  Repair size 1 is identified by a 3 mm wide shoulder on the contact surface.
- 7  Turn sleeve (2) and push onto the crankshaft with side of repair size 1 (b).
 Turn to ensure that the slot in the  sleeve (2) is aligned with the Woodruff key in the crankshaft.
- 8  Draw in sleeve (2) with central bolt (3) as far as the stop.
- 9  Detach sleeve (2).



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Shown on engine 112

- 10 Check installation location of the crankshaft radial sealing ring (1) to the crankpin (4).
 The crankshaft radial sealing ring (1) must be positioned at right angles to the crank journal (4) otherwise proper sealing is not assured.
 The installation depth (B) of the crankshaft radial sealing ring (1) is preset through the  sleeve (2) and must not be altered subsequently.



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Shown on engine 112