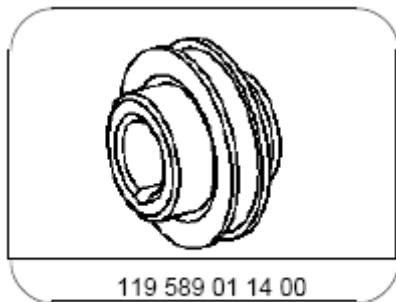


Pliers


Fig. 22: Identifying Pliers (000 589 51 37 00)
Courtesy of MERCEDES-BENZ USA


INSTALL FRONT CRANKSHAFT RADIAL SEAL - AR03.20-P-3000-01B

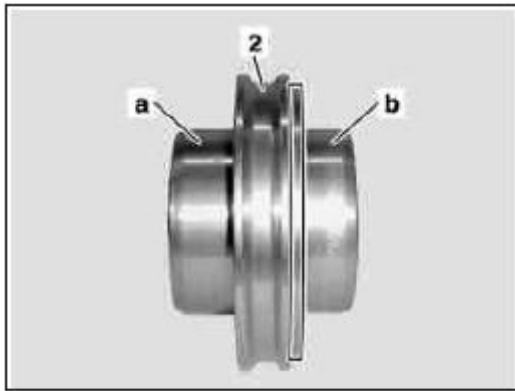


Sleeve

Fig. 23: Identifying Sleeve (119 589 01 14 00)
Courtesy of MERCEDES-BENZ USA










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).

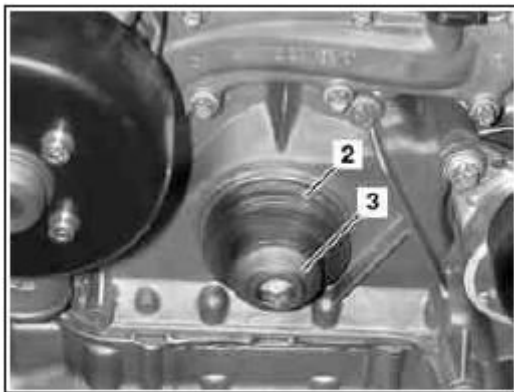
 Circumference and sealing lip of crankshaft radial seal as well as the mating contact surface on the vibration damper must be free of oil and grease.



P03.20-2065-01

Fig. 24: Identifying Crankshaft Radial Sealing Ring Side Of Sleeve
 Courtesy of MERCEDES-BENZ USA

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.



P03.20-2059-01

Fig. 25: Identifying Sleeve And Central Bolt

Courtesy of MERCEDES-BENZ USA

Shown on engine 112

Repair size 1 is identified by a 3 mm wide shoulder on the contact surface.

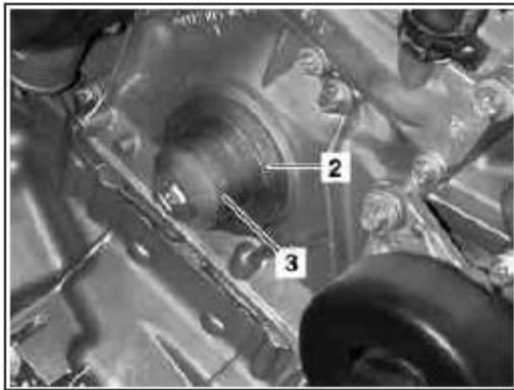
7. Turn sleeve (2) and push onto the crankshaft with side of repair size 1 (b).

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).

Shown on engine 112



P03.20-2060-01

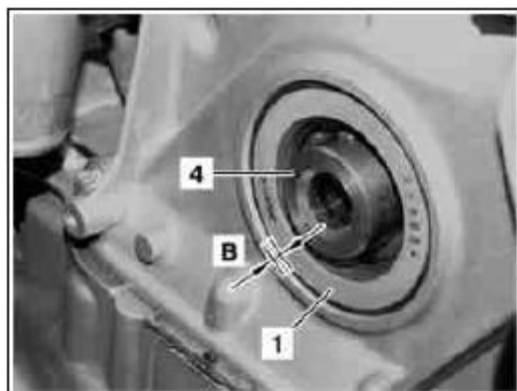
Fig. 26: Identifying Sleeve With Central Bolt
Courtesy of MERCEDES-BENZ USA

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.

Shown on engine 112



P03.20-2061-01

Fig. 27: Identifying Depth Of Crankshaft Radial Sealing Ring
Courtesy of MERCEDES-BENZ USA

REPLACE FRONT CRANKSHAFT RADIAL SEAL RING - AR03.20-P-3000B

ENGINE 112.945 in MODEL 463.209 /232 /233 /244 /245 /250

ENGINE 112 in MODEL 129

ENGINE 113.962 in MODEL 463.206 /240 /241 /247 /248 /249 /254

ENGINE 113 in MODEL 210, 208, 202, 163, 129









ENGINE 113.982 in MODEL 463.243 /246

Shown on Engine 112 in Model 129

2011 Mercedes-Benz G55

ENGINE Crank Assembly - G-Class (463)

Fig. 28: Identifying Front Crankshaft Radial Seal Ring Components
 Courtesy of MERCEDES-BENZ USA

☒ ☒	Remove/install		
1	Remove engine compartment paneling	Model 129, 208, 210	AR61.20-P-1105AB
		Model Series 163	AR61.20-P-1105GH
2.1	Remove air guide	Model 163 with Engine 113.942	
3	Remove viscous fan (1)	 Right-hand thread!	AR20.40-P-5660C
4	Remove the fan shroud (3).	 On Model 163 unscrew bolts at bottom of fan shroud.	
		Model 463	AR20.40-P-6800V
5	Remove poly V-belt (2)	 Installation: Lock tensioning device with a drift or pin (diameter 5 mm).	AR13.22-P-1202B
6	Remove vibration damper (belt pulley) (5)	Model 129, 463 Model 163, 202, 210 with Engine 113	AR03.30-P-1600C
7	Remove crankshaft radial seal (7)	 Do not damage crankshaft and mounting hole for crankshaft radial seal. Use a clean cloth as a base. Circumference and sealing lip of the crankshaft radial seal as well as the mating contact surface on the vibration damper must be free of oil and grease. Do not coat radial seal with sealant	
		 Removal: Press out with screwdriver. Installation: Install front crankshaft radial seal.	AR03.20-P-3000-01B
		 Insertion tool	Fig. 29
		 Sleeve	Fig. 30
8	Install in the reverse order		
 Danger!	Risk of accident from vehicle starting off by itself when engine running. Risk of injury	Secure vehicle to prevent it from moving off by itself. Wear closed and close-	AS00.00-Z-0005-01A