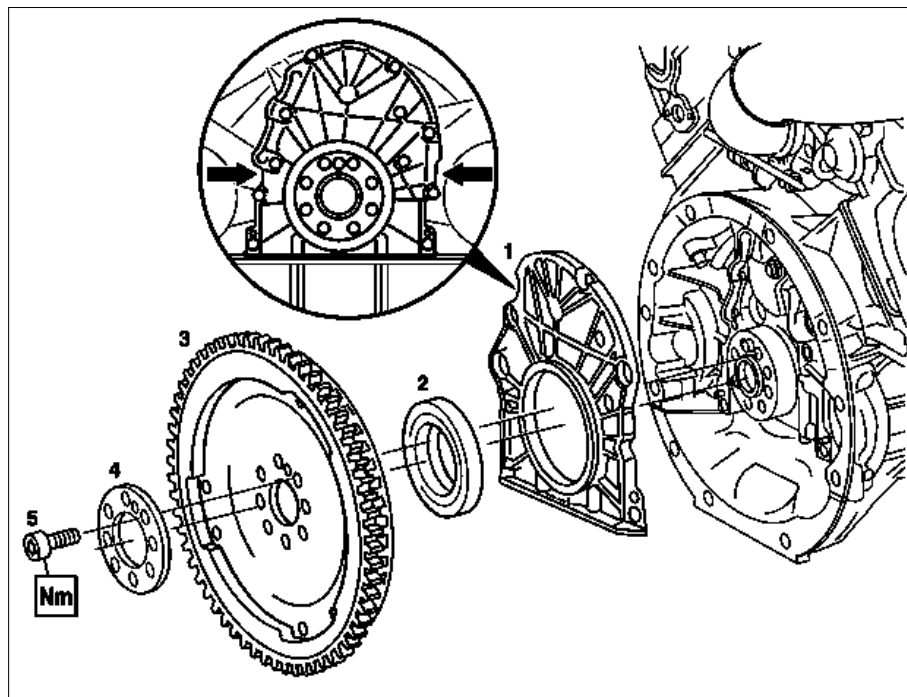


ENGINES 113.990 in MODEL 211.076 /276
ENGINES 113.991 in MODEL 215.374, 220.074 /174
ENGINES 113.995 in MODEL 230.472

- 1 End cover
- 2 Crankshaft radial seal
- 3 Flywheel
- 4 Washer
- 5 Bolt, flywheel



P03.20-2106-06

Modification notes

28.5.08	Clean sealing surfaces - added	Operation step 4	
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	Remove/install		
Danger!	Risk of death caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between columns of vehicle lift and position four support plates at vehicle lift support points specified by vehicle manufacturer.	AS00.00-Z-0010-01A
1	Remove automatic transmission	Model 211 Model 215, 220 Model 230	AR27.10-P-0500T AR27.10-P-0500I AR27.10-P-0500R
2	Remove flywheel (3)	Model 211, 215, 220 Model 230	AR03.30-P-8001C AR03.30-P-8001RVK
3	Remove the end cover (1)	Pry off end cover (1) carefully at both marked points with a slanted screwdriver (see arrows). Installation: The crankshaft radial sealing ring (2) cannot be exchanged at end cover (1). This end cover (1) is fitted at the factory and therefore must be replaced. Nm	*BA01.40-P-1004-01C
	Clean		
4	Clean sealing surfaces on cylinder crankcase, oil pan and end cover (1)	Do not use any sharp-edged tools or abrasive paper as this will damage the sealing surfaces. Loctite 7200 Loctite 7063 cleaning spray (150 ml)	AR01.00-P-0050-01A *BR00.45-Z-1038-04A *BR00.45-Z-1046-04A
5	Replace front crankshaft radial seal (2)	Installation: Circumference and lip of crankshaft radial sealing ring (2) as well as counter contact surface on crankshaft must be free of oil and grease, in order to guarantee proper function. Notes on sealant path on end cover with radial shaft seal Pay attention to fitted sleeves when pressing on end cover (1). Loctite 5970 sealant	AH01.40-P-1000-06A *BR00.45-Z-1013-01A
6	Install in the reverse order		

 Danger!	Risk of accident caused by vehicle starting off by itself when engine is running. Risk of injury caused by contusions and burns during starting procedure or when working near the engine as it is running Carry out engine test run	Secure vehicle to prevent it from moving by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A
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 Crankcase, timing case cover, end cover

Number	Designation	Engine 113.940/941/ 942/943/944/ 948/960/961/ 962/963/964/ 965/966/967/ 968/969/971/ 980/981/982/ 984/986/992/ 995		
BA01.40-P-1004-01C	End cover screw	Thread not pre-tapped	Nm	-
		Thread pre-tapped	Nm	10

 Crankcase, timing case cover, end cover

Number	Designation	Engine 113.987/ 988/990/ 991/993		Engine 113.989
BA01.40-P-1004-01C	End cover screw	Thread not pre-tapped	Nm	-
		Thread pre-tapped	Nm	8
				8

Repair materials

Number	Designation	Order number
BR00.45-Z-1013-01A	Loctite 5970 sealant	A 003 989 98 20
BR00.45-Z-1038-04A	Loctite 7200	Henkel Loctite Deutschland GmbH Arabellastrasse 17 81925 München Germany Tel. +49 899268-0 Fax + 49 899101978 www.Loctite.de
BR00.45-Z-1046-04A	Loctite 7063 cleaning spray (150 ml)	A 001 986 71 71 10