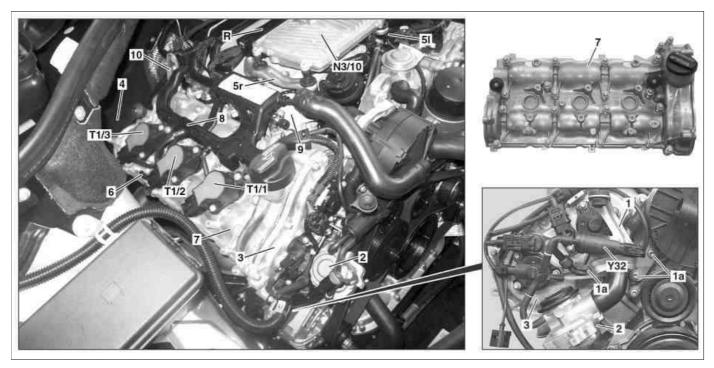
### ENGINES 272, 273 in MODEL 164, 251



P01.20-2147-09

#### Shown on engine 272

1	Bracket	
1a	Bolts	

2 Air shutoff valve

3 Front cover

4 Cover

5l Left control unit bracket

5r Right control unit bracket

6	Ground cable
7	Cylinder head cover
8	Feed duct

9 Resonance intake manifold

10 Engine lifting eye

R Plug connection

N3/1 T1/1 T1/2 T1/3	Cylinder 1 ignition coil Cylinder 2 ignition coil
T1/2 T1/3	Cylinder 2 ignition coil Cylinder 3 ignition coil
Y32	Air pump switchover valve

区 采	Remove/install		
<b>(b)</b>	Information on preventing damage to electronic components due to electrostatic discharge		AH54.00-P-0001-01A
(1)	Notes on avoiding damage to ignition system		AH15.10-P-0002-01V
1	Turn key in ignition lock to position "0"	i Vehicles with Keyless Go, code 889: Press Keyless Go start/stop button repeatedly until ignition is switched off.	
2	Remove air filter housing		AR09.10-P-1150GZA
3	Remove bolts (1a) and remove bracket (1) for front engine cover with air pump switchover valve (Y32)	[Nm]	*BA01.30-P-1009-01O
4	Remove right air shutoff valve (2)		AR14.30-P-7200GZA
5	Remove front cover (3) on the right cylinder head		AR01.30-P-5700GZC
6	Remove ignition coils for right cylinder bank		AR15.12-P-2003GZA
7	Remove cover (4) on centrifuge		AR01.20-P-2100GZA
		Nm	*BA01.30-P-1008-01O
8	Remove connector (R) on ME-SFI [ME] control unit (N3/10)		
9	Disconnect ME-SFI [ME] control unit (N3/10) from left control unit bracket (5l) and right control unit bracket (5r) and place to one side	i Do (N3/10) <b>not</b> detach connector on ME-SFI [ME] control unit.	
10	Remove right control unit bracket (5r)	Nm	*BA07.08-P-1002-01A
11	Detach ground line (6) from cylinder head cover (7)	Nm	*BA01.30-P-1010-01O
12	Detach feed line (8) from resonance intake manifold (9), cylinder head cover (7) and right rear motor suspension lug (10)	Place feed channel (8) to one side.	
		Nm	*BA15.18-P-1001-01B
		Nm	*BA15.18-P-1002-01B

		Nm	*BA15.18-P-1003-01B
13	Loosen bolts for cylinder head cover (7) in reverse order of tightening procedure and remove them	Engine 272	AR01.20-P-5014-03VA
		Engine 273	AR01.20-P-5014-03SX
		Nm	*BA01.30-P-1004-01O
14	Pry off cylinder head cover (7) from cylinder	To avoid damaging sealing surfaces, do	
	head carefully	not hit the tool for prying off between cylinder head cover (7) and cylinder head.	
		installation: Apply sealant to cylinder head cover (7).	
i	Notes on sealant path for cylinder head cover	Engine 272	AH01.30-P-1000-08V
i		Engine 273	AH01.30-P-1000-08SX
		<b>3</b>	*112589002500
		Loctite sealant 5970	*BR00.45-Z-1013-01A
<b></b>	Clean		
15	Clean sealing surfaces at cylinder head and a cylinder head cover (7)	Do not use any sharp-edged tools or abrasive paper as this will damage the sealing surfaces.	AR01.00-P-0050-01A
		Loctite 7200	*BR00.45-Z-1038-04A
		Cleaning spray, Loctite 7063 (150ml)	*BR00.45-Z-1046-04A
16	Install in the reverse order		
<b>1</b>	Checking		
⚠ Danger!	Risk of accident caused by vehicle starting off by itself when engine is running. Risk of	Secure vehicle to prevent it from moving by itself.	AS00.00-Z-0005-01A
	injury caused by contusions and burns during starting procedure or when working near the engine as it is running	Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	
17	Conduct engine test run and check engine for leaks whilst it is running		

## Nm Cylinder head

Number	Designation				Engine 272	Engine 273
BA01.30-P-1004-01O	Bolt, cylinder head cover to cylinder head	M7	Stage 1	Nm	12	12
			Stage 2	Δ°	90	90
BA01.30-P-1008-01O	Bolt of centrifuge cover to cylinder head	M6		Nm	9	9
BA01.30-P-1009-01O	Bolt, switchover valve bracket to cylinder head	M6		Nm	9	9
BA01.30-P-1010-01O	Bolt, ground line to cylinder head cover	M6		Nm	9	9

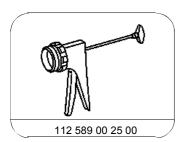
## Nm Control unit

Number	Designation		Engine 272	Engine 273
BA07.08-P-1002-01A	Bolt, control unit bracket to resonance intake manifold	Nm	8	8

# Nm Engine wiring harness

Number	Designation	Engine 272	Engine 273

BA15.18-P-1001-01B	Bolt, feed duct to resonance intake manifold	Nm	8	8
BA15.18-P-1002-01B	Bolt, feed duct to cylinder head cover	Nm	8	8
BA15.18-P-1003-01B	Bolt, feed duct to engine lifting eye	Nm	8	8



Squeeze gun

#### Repair materials

Number	Designation	Order number
BR00.45-Z-1013-01A	Loctite sealant 5970	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	Cleaning spray, Loctite 7063 (150ml)	A 001 986 71 71 10