



N5

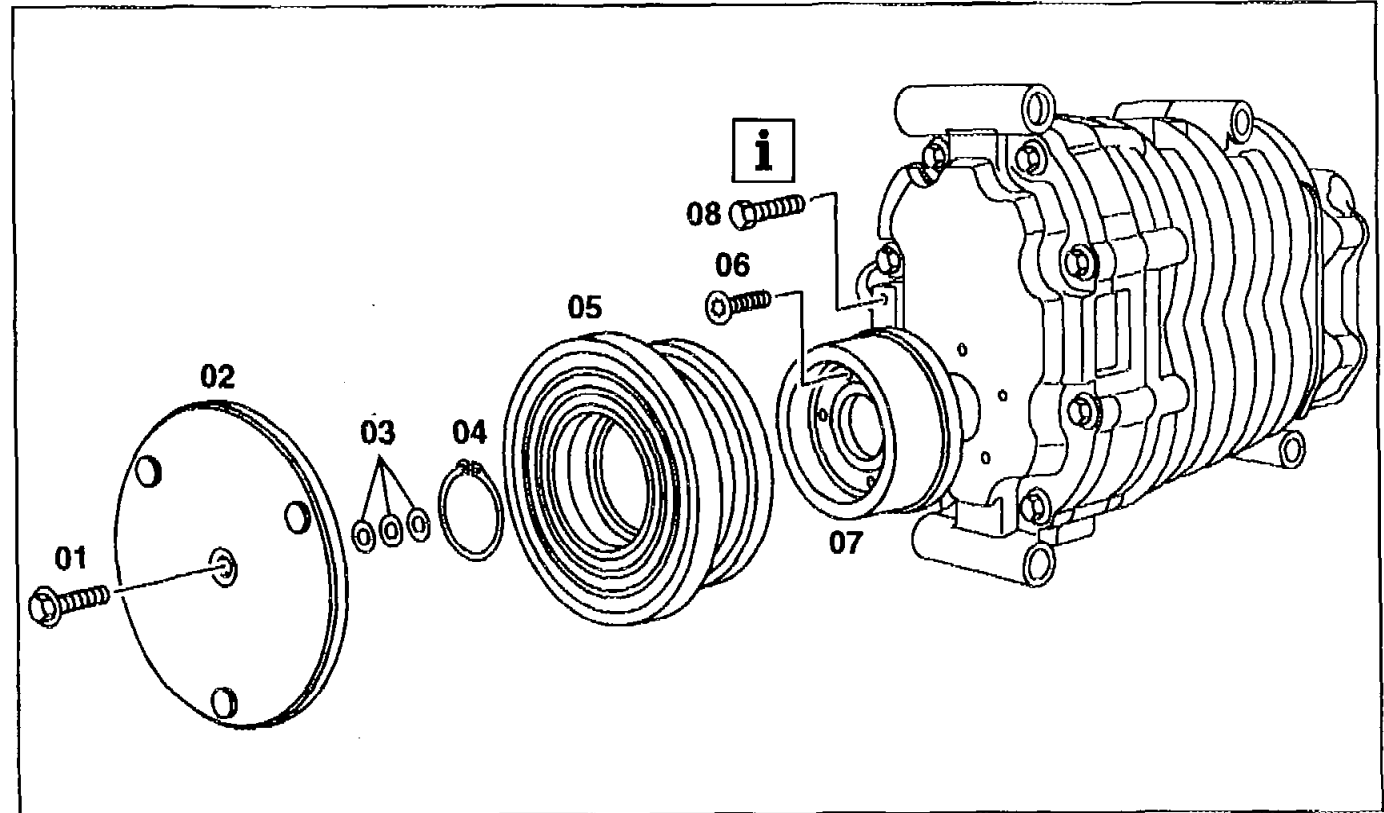
AR09.50-P-4786A

Removing and installing electromagnetic clutch for compressor

16.8.94

ENGINE 111.943 /944 /947 /973 /975

- 01 Central bolt
- 02 Plastic disk (clutch hub)
- 03 Shims
- 04 Tapered locking ring
- 05 Bearing body with belt pulley
- 06 Screw (coil body to housing)
- 07 Coil body
- 08 Bolt (cable clamping bar)












P09.50-0204-05

	Removing, installing		
1	Remove compressor	Always replace electromagnetic clutch complete	AR09.50-P-4705A C5



2	Clamp compressor at front at bottom attachment eye in a vice using protective jaws	ⓘ Centering hole must not be damaged	
3 WF	Apply 12 V to connector of magnetic clutch Adapter cable for electromagnetic clutch at compressor	ⓘ Engine 111.944/975	201 589 00 99 00 WF58.50-P-4781-01A F18
4	Wrap poly-V-belt around belt pulley and hold tight		
5	Remove central bolt (01)	ⓘ Installation: Always replace (microencapsulated) during final installation after setting gap Nm	BA09.50-P-1002-01A
6	Disconnect source of voltage		
7	Lift off clutch hub (02)	ⓘ If tight, hub can be pressed off with an M8 bolt ⓘ Inspect input shaft in turbocharger housing for shims which have dropped off and for foreign bodies or cover over	
8	Make up shims (03) with caliper gage to a total size of approx. 0.9 mm		
9	Insert shims into clutch hub and fit onto input shaft with old central bolt	ⓘ Use a cross-head screwdriver etc. for guiding the shims	
10	Apply 12 V at connector of magnetic clutch	ⓘ	201 589 00 99 00

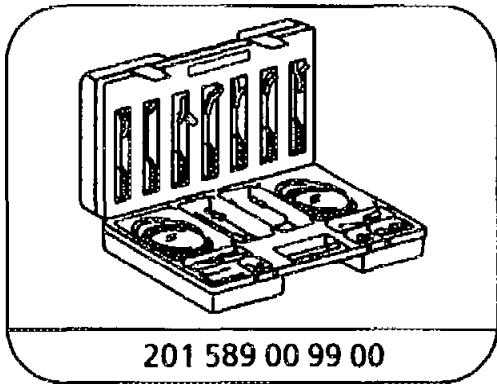
 WF	Adapter cable for electromagnetic clutch at compressor	Engine 111.944/975	WF58.50-P-4781-01A F18
11	Use feeler gage to check gap at the 3 rivets	 Calculate actual value from the 3 readings, compare with specified value (gap). Aim for lower limit value	BE09.50-P-1001-01A
12	Set specified value by removing or inserting shims; repeat steps (5-17) if necessary	 Installation: Always replace central bolt (microencapsulated) during final installation after setting gap	
13	Remove tapered locking ring (04)	 Installation: chamfer should point up	
14	Pull off bearing body (05) with belt pulley		
15	Take off securing tab of cable guide	 Installation: Ensure correctly installed; risk of squeezing cables	
16	Remove coil body (07)	  	WH58.30-Z-1017-06A WH58.30-Z-1018-06A BA09.50-P-1003-01A
17	Install in the reverse order		
18	Carry out at least 20 engaging operations during operational check in vehicle to wear in clutch friction surface	 Briefly blip throttle from idling speed to approx. 3000 rpm. Final assessment only possible after 100-120 engagement operations (noises)	

Electromagnetic coupling

Number	Designation	Engine 111.943/ 944/947/ 973/975
BE09.50-P-1001-01A	Gap mm	0.25-0.40

Nm Compressor

Number	Designation	Engine 111.943/ 944/947/ 973/975
BA09.50-P-1002-01A	Central bolt for electromagnetic clutch hub	Nm 17
BA09.50-P-1003-01A	Coil body to housing	Nm 4



Electrical connection set

Commercially available tools (see Workshop Equipment Manual)

Number	Designation	Make (e.g.)	Order number
WH58.30-Z-1017-06A	Internal torx screwdriver bit T20 length 70 mm	Stahlwille Eduard Wille GmbH & Co Lindenallee 27 D-42331 Wuppertal 12	1292-T 20
WH58.30-Z-1018-06A	1/4 " connector for screwdriver bit	Stahlwille Eduard Wille GmbH & Co Lindenallee 27 D-42331 Wuppertal 12	412