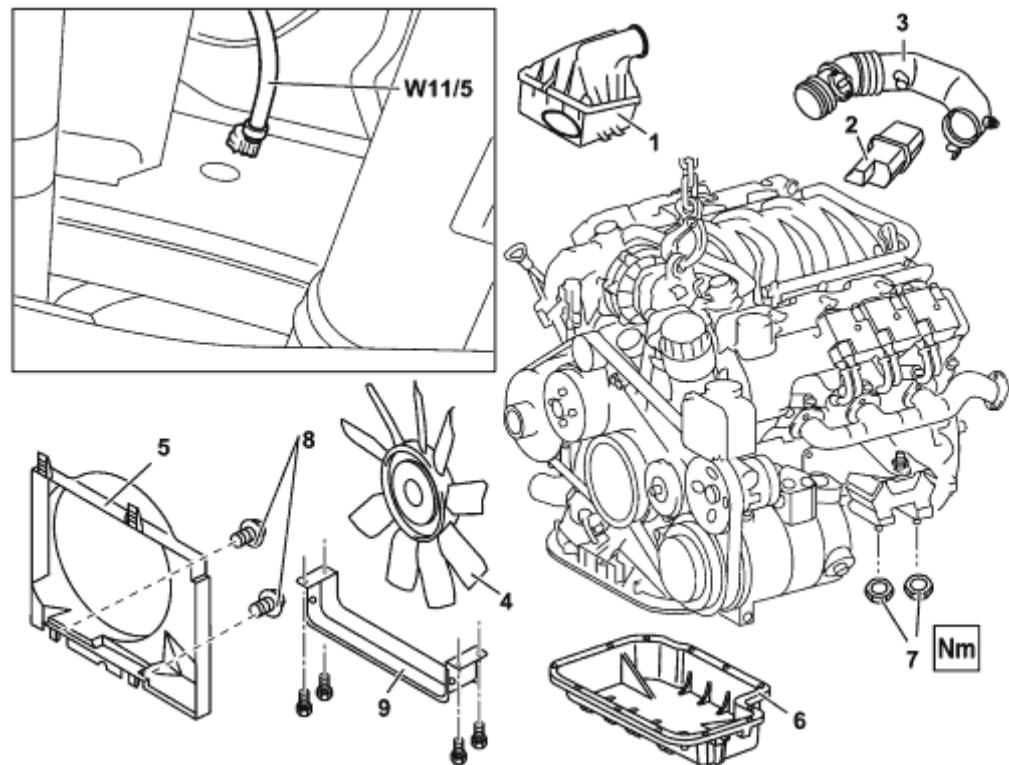


AR01.45-P-7555V	Remove/install bottom part of oil pan	15.5.97
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ENGINE 112.942 in MODEL 163.154  
ENGINE 112.970 in MODEL 163.157  
ENGINE 113.942 in MODEL 163.172

### Shown on engine 112






- 1 Air cleaner housing
- 2 Resonance body
- 3 Resonance pipe
- 4 Viscous fan
- 5 Fan shroud
- 6 Bottom part of oil pan
- 7 Nuts
- 8 Bolts
- 9 Air baffle
- W11/5 Engine ground strap/body




P01.45-2014-06

Also detach the coolant overflow tank w/hoses attached prior to lifting eng .

	Remove/Install		
		External torx set	<a href="#">001 589 76 09 00</a>
1	Remove engine trim panel		
2	Remove viscous fan (4)	Right-hand thread!	<a href="#">AR20.40-P-5660C</a>
3.1	Remove fan shroud (5).	Only Engine 112.942 /970.	
		Unscrew bolts (8) at bottom of fan shroud.	
4.1	Remove air guide (9)	Only Engine 113.942.	
5	Drain and collect engine oil		<a href="#">BA01.45-P-1003-01B</a>
			<a href="#">BF18.00-P-1001-01H</a>
6	Unscrew nuts (7) at front suspension carrier	Before unbolting the left engine mount, press oil line of power steering out of fixture.	
			<a href="#">BA22.10-P-1001-01L</a>
7	Remove resonance pipe (3) and resonance body (2)	Do not damage the plastic strap. The resonance pipe is attached at the rear at the intake manifold with a plastic plate. Disconnect connector of hot film mass air flow sensor (HFM) and unscrew resonance pipe at cylinder head cover.	
		Engine 112.942/970.	<a href="#">AR07.07-P-1454A</a>
		Engine 112.912/946.	<a href="#">AR07.07-P-1454MV</a>

8	Fit on engine supporting frame		<a href="#">AR33.10-P-0100-01BV</a>
		 Engine lifting device for ML-class	<a href="#">WH58.30-Z-1013-07A</a>
9	Raise engine	 Ensure that the rear of the engine does not touch the body! Do not overstretch coolant lines and engine ground strap/body (W11/5), if necessary remove engine ground strap/body (W11/5).	
10	Unbolt bottom part of oil pan (6)		<a href="#">BA01.45-P-1002-01B</a>
11	Remove bottom part of oil pan (6)	 <b>Installation:</b> Clean sealing surfaces, apply sealing compound to the sealing surfaces with a bead of 2.0 mm ± 0.5 mm! The sealant must be applied within 10 minutes! The silicone bead must not be spread!	<a href="#">BR00.45-Z-1015-01A</a>
	Notes on application of sealant to oil pan	Engine 112	<a href="#">AH01.45-P-0001-01C</a>
		Engine 112.912/946.	<a href="#">AH01.45-P-0001-01E</a>
12	Install in the reverse order		

 Oil pan

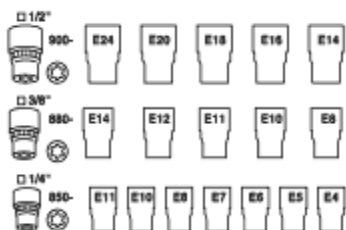
Number	Designation			Engine 112	Engines 113.942/965/981
BA01.45-P-1002-01B	Self-tapping bolt of oil pan to oil pan	Thread not pretapped	Nm	14	14
		Thread pretapped	Nm	10	10
BA01.45-P-1003-01B	Oil drain plug to oil pan	M14	Nm	30	30

 Engine mounts, engine supports

Number	Designation			Engines 112, 113
BA22.10-P-1001-01L	Bolt of front engine mounts to front axle carrier		Nm	35

 Engine lubrication


Number	Designation			Engine 112	Engine 113.942
BF18.00-P-1001-01H	Engine oil	Filling capacity with oil filter	Liters	8.0	8.0
		Filling capacity without oil filter	Liters	-	-
		Specifications for Operating Fluids	Sheet	<a href="#">BB00.40-P-0229-01A</a>	<a href="#">BB00.40-P-0229-01A</a>
			Sheet	<a href="#">BB00.40-P-0229-03A</a>	<a href="#">BB00.40-P-0229-03A</a>
			Sheet	<a href="#">BB00.40-P-0229-05A</a>	<a href="#">BB00.40-P-0229-05A</a>



001 589 76 09 00

External Torx set

**Commercially available tools** (see Workshop Equipment Manual)

Number	Designation	Make (e. g.)	Order number
WH58.30-Z-1013-07A	Engine lifting device for ML-class	SPX (Europe) AG Kent-Moore Division attn.: Mr Hodel Oberneuhofstr. 1 CH-6340 Baar Fax:+4141/761-43-43 Fax:+4141/761-07-27   SPX Corporation OE Tool+Equipment 28635 Mound Road warren, MI 48092 Tel: 1-800-345-2233 Fax: 1-800-578-7375	0334.01

**Auxiliary repair materials**

Number	Designation	Order number
BR00.45-Z-1015-01A	Loctite sealant 5970	A 003 989 98 20 10