






















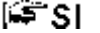














AP18.00-P-0101R	Engine oil and filter change	23.12.05
-----------------	------------------------------	----------

ENGINE 113.990 in MODELS 211.076 /276

	Remove		
 Danger!	Risk of death caused by vehicle slipping or toppling off of the lifting platform.	Align vehicle between the columns of the lifting platform and position the four support plates at the lifting platform support points specified by the vehicle manufacturer.	AS00.00-Z-0010-01A
 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 running engine	Secure vehicle to prevent it from moving by itself. Wear closed and snug-fitting work clothes. Do not grasp hot or rotating parts.	AS00.00-Z-0005-01A
 Danger!	Risk of injury to skin and eyes caused by handling hot or glowing objects.	Wear safety gloves, protective clothing and safety glasses, if necessary.	AS00.00-Z-0002-01A
	Only replace engine oil when the engine is at operating temperature		
1	Empty the oil filter housing and replace oil filter element		AP18.00-P-0101-06EF
			BA18.20-P-1001-01D
		 Socket wrench bit	103 589 02 09 00
2.1	Pull out stop plug of oil dipstick guide tube and extract engine oil	 Model 211.076/276: Do not extract engine oil The complete engine oil quantity cannot be extracted due to the divided oil sump. When completely refilling there is the threat of engine damage	AP18.00-P-0101-02Z
		 Engine oil extractor	WH58.30-Z-1007-16A
2.2	Remove lower engine compartment paneling	 Only required when draining the engine oil by unscrewing the oil drain screws.	

		Model 211: Remove the rear section only.	
 AR	Detaching and attaching lower engine compartment paneling	Model 211	AR61.20-P-1105T
3.1	Unscrew oil drain screw and drain engine oil	 Model 211.076/276: Always unscrew both oil drain screws, otherwise the total engine oil quantity is not drained. When completely refilling there is the threat of engine damage	
	Install		
4.1	Detach engine oil extractor and insert stop plug into oil dipstick guide tube	 Only required after extracting the engine oil.	
4.2	Screw in oil drain screws	 Only required when draining the engine oil by unscrewing the oil drain screws.	
 BT	Measure concerning oil drain screw	 Model 211.076/276: Observe technical information otherwise leaks can occur at the oil drain screws.	BT01.45-P-7500-01R
		 Install new sealing rings.	
		 Oil drain plug to oil pan	BA01.45-P-1003-01B
5	Pour in engine oil	 Use only approved engine oils	
	Specified and approved quality grades and viscosity classes conforming to SAE at enduring low outside temperatures		AH18.00-P-1000-01BA
	Notes concerning extension of the oil change interval		AH18.00-P-0102-01A
			BF18.00-P-1001-01H
 SI	Service Information: Engine oil change		SI18.00-P-0011A
 BB	Specified engine oils (service) - survey		BB00.40-P-0223-02A
 BB	Approved engine oils (service)	Passenger cars engines	BB00.40-P-0226A

	Checking		
6	Conduct engine test run and check the engine for leaks	 Only raise engine speed after the oil pressure indicator lamp has gone out.	
7.1	Install lower engine compartment paneling	 Only required after draining the engine oil by unscrewing the oil drain screws.	
		 Install lower engine compartment paneling after all maintenance operations have been completed.	
 AR	Detaching and attaching lower engine compartment paneling	Model 211	AR61.20-P-1105T
8.1	Check oil level	 Checking oil level with a workshop oil dipstick.	
 AR	Check oil level	Engine 113.990 in model 211	AR18.00-P-3035-01O
8.2	Check oil level	 Checking the oil level over the control system.	
 AR	Perform adjustments to the control system	Model 211.076/276	AR54.30-P-1000-02OPT

 **Oil pan**

Number	Designation			Engines 113.967/969	Engine 113.990
BA01.45-P-1003-01B	Oil drain screw to oil pan	M14	Nm	30	30

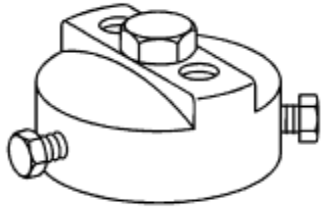
 **Oil filter**

Number	Designation		Engine 113.990
BA18.20-P-1001-01D	Screw cap at oil filter	Nm	25

 **Engine lubrication**

Number	Designation			Engine 113.990
BF18.00-P-1001-01H	Engine oil	Filling capacity with oil filter	Liters	8.5

	Filling capacity without oil filter	Liters	8.0
	Specifications for Operating Fluids	Sheet	-
		Sheet	-
		Sheet	BB00.40-P-0229-05A



103 589 02 09 00

Wrench socket

Commercially available tools (see Workshop Equipment Manual)

Number	Designation	Make (e.g.)	Order number
WH58.30-Z-1007-16A	Engine oil extractor	Deutsche Tecalemit Am Metallwerk 11 33659 Bielefeld, Germany	1.386950.2