

Modification notes

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|---------|---|---|---------------------|
| 28.7.09 | Value modified: Engine oil, Specifications for service products | Engine 272.920/921/922/923/940/941/942/943/944/945/946/947/949/951/952/960/961/963/964/965/966/967/968/969/970/972/973/974/980/982/983/984/985/988 Engine 272.911/948/950/971/975/977/991 | *BF18.00-P-1001-01M |
|---------|---|---|---------------------|

| | | | |
|-----------------------|--|--|---|
| | Remove | | |
| 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 |
| 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 |
| 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 | 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 |
| | Notes on avoiding damage through contamination and foreign objects | | AH00.00-P-5000-01A |
| | | Only replace the engine oil when the engine is at normal operating temperature. | |
| 1 | Start engine | Allow engine to warm up until coolant and engine oil have reached operating temperature. | |
| 2 | Turn off engine | The vehicle must be horizontal otherwise all the engine oil cannot be extracted or drained which can lead to an incorrect oil filling with consequential damage. | |
| 3 | Open engine hood Opening engine hood, moving to upright position and closing | | AR88.40-P-1000EW |
| 4 | Empty oil filter housing and replace oil filter element | Engine 272 Engine 273 Drain pan gotis://S_18.1_08.0 Screw cap to oil filter housing Socket | AP18.00-P-0101-06V AP18.00-P-0101-06SX *BA18.20-P-1001-01O *103589020900 |
| 5.1 | Pull oil dipstick out of guide tube and drain engine oil using engine oil extractor | When extracting the engine oil. Engine oil extractor - mobile gotis://S_18.1_02.0 | AP18.00-P-0101-02Z |
| 5.2 | Remove rear section of lower engine compartment paneling Remove/install bottom engine compartment paneling | When draining the engine oil by removing the drain screw. | AR61.20-P-1105EW |
| 6 | Remove drain screw from oil pan and drain engine oil | When draining the engine oil by removing the drain screw. | |
| | Install | | |
| 7.1 | Detach engine oil extractor and insert oil dipstick into the guide tube | After suctioning off the engine oil. | |
| 7.2 | Screw in drain screw | When draining the engine oil by removing the drain screw. Replace sealing ring. Oil drain screw to oil pan | *BA01.45-P-1001-01M |
| 8 | Pour in engine oil Specified and approved quality grades and viscosity classes conforming to SAE at enduring low outside temperatures Notes concerning extension of the oil change interval Service Information: Engine oil change Specified engine oils (service) | Use only approved engine oils. Engine oil filling capacity * Not for USA, Japan | AH18.00-P-1000-01BA AH18.00-P-0102-01A *BF18.00-P-1001-01M SI18.00-P-0011A BP00.40-P-0000-00A |

| | | | |
|-----------|--|--|--|
| BB | Approved engine oils (service) | | BB00.40-P-0226A |
| | Checking | | |
| 9 | Conduct engine test run and check engine for leaks | Only raise rpm 10 seconds after the engine has started. | |
| 10 | Turn off engine | | |
| AR | Install rear section of the lower engine compartment paneling Remove/install bottom engine compartment paneling | When draining the engine oil by removing the drain screw. Only install rear section of lower engine compartment paneling after completing all maintenance operations. | AR61.20-P-1105EW |
| | Checking | | |
| 12 | Check the engine oil with the oil dipstick approx. 5 minutes after switching off the engine at operating temperature, correct if necessary | The vehicle must be on a level surface otherwise false measurements will occur. Insert oil dipstick up to the end stop in the guide tube and leave it there for at least 3 s. | |
| AR | Close engine hood Opening engine hood, moving to upright position and closing | | AR88.40-P-1000EW |
| | Reset service indicator Notes concerning extension of the oil change interval | | AP00.20-P-0042EW AH18.00-P-0102-01A |

Oil filter

| Number | Designation | | Engine 272 | Engine 273 |
|--------------------|------------------------------------|----|------------|------------|
| BA18.20-P-1001-01O | Threaded cap to oil filter housing | Nm | 25 | 25 |

Oil pan

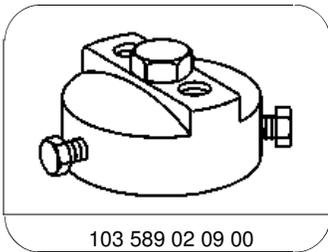
| Number | Designation | | Engine 272 | Engine 273 |
|--------------------|----------------------------|----|------------|------------|
| BA01.45-P-1001-01M | Oil drain screw to oil pan | Nm | 30 | 30 |

Engine lubrication

| Number | Designation | | Engine 272.920/921/922/923/ 940/941/942/943/944/ 945/946/947/949/951/ 952/960/961/963/964/ 965/966/967/968/969/ 970/972/973/974/980/ 982/983/984/985/988 | Engine 272.911/948/ 950/971/975/ 977/991 |
|--------------------|--|--------|--|--|
| BF18.00-P-1001-01M | Engine oil Filling capacity without oil filter | Liters | - | - |
| | Filling capacity with oil filter | Liters | 8,0 | 7,0 |
| | Specifications for service products | Sheet | - | - |
| | | Sheet | BB00.40-P-0229-03A | BB00.40-P-0229-03A |
| | | Sheet | BB00.40-P-0229-05A | BB00.40-P-0229-05A |

 **Engine lubrication**

| Number | Designation | Engine |
|--------------------|--|--|
| BF18.00-P-1001-01M | Engine oil Filling capacity without oil filter | Liters - |
| | Filling capacity with oil filter | Liters 8.5 |
| | Specifications for service products | Sheet BB00.40-P-0229-01A |
| | | Sheet BB00.40-P-0229-03A |
| | | Sheet BB00.40-P-0229-05A |



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Wrench socket