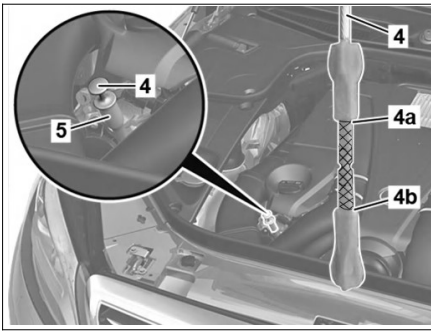


Engine 111, 112, 113, 133, 152, 156, 157, 177, 178, 266, 270, 271, 272, 273, 274, 276.8/9, 278, 279, 607, 611, 612, 626, 628, 629, 640, 642, 646, 651

Modification notes

|            |  |  |  |
|------------|--|--|--|
| 13.03.2019 | In the case of maintenance step 1 "Allow the engine to warm up", the information "Engine oil temperature ≥ 90 °C or > 100 °C" is replaced by "Coolant temperature at least 80 °C". |  |  |
|------------|--|--|--|



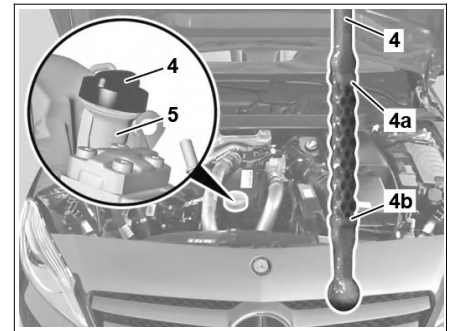
P18.00-2455-01

**Shown on engine 278.9 in model 222.1**

4 Oil dipstick \_\_\_\_\_  
 4a max. \_\_\_\_\_  
 4b min. \_\_\_\_\_  
 5 Oil-dipstick guide tube \_\_\_\_\_

**Shown on engine 607.9 in model 176.0**

4 Oil dipstick \_\_\_\_\_  
 4a max. \_\_\_\_\_  
 4b min. \_\_\_\_\_  
 5 Oil-dipstick guide tube \_\_\_\_\_



P18.00-2385-01

|           |  |  |                    |
|-----------|--|--|--------------------|
| ⚠ Warning | <b>Risk of accident</b> from vehicle starting off by itself when engine running. <b>Risk of injury</b> (bruises and burns) resulting from working on the engine while it is being started or when it is running. | Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.   | AS00.00-Z-0005-01A |
| ⚠ Caution | <b>Risk of injury</b> to skin and eyes due to handling of engine oil. <b>Risk of poisoning</b> caused by swallowing engine oil   | Wear protective gloves, protective clothing and safety glasses. Do not fill engine oil into beverage containers.   | AS18.00-Z-0001-01A |
| ◀         | <b>Check</b>   |  |                    |
| 1         | Run engine to warm it up.  | i Coolant temperature at least 80 °C.  |                    |
| 2         | Switch off engine.   | i Engine 178<br>Before switching off the engine, allow it to idle in drive program C for at least 30 s.  |                    |
| 3         | Pull oil dipstick (4) out of oil dipstick tube (5) and wipe using a lint-free cloth.   | i The oil dipstick(4) and oil-dipstick guide tube(5) can be located at the front or rear of the engine, depending on the model series involved.  |                    |
| 4         | Check engine oil level using oil dipstick (4).   | ⚠ Always insert oil dipstick (4) into oil dipstick tube (5) up to end stop. Damage can otherwise occur.<br>i Insert oil dipstick (4) up to end stop in oil dipstick tube (5) and leave there for at least 3 seconds to 5 seconds. The level should be in the hatched area between the MIN. (4b) and MAX. (4a) markings on the oil dipstick (4). The oil filling capacity between Min. (4b) and Max. (4a) is approx. 1.0 l.<br>i Dry sump engine<br>Check engine oil level within 2 min after switching off engine. |                    |
|           | <b>If the engine oil level is too high or too low, correct it</b>  |  |                    |
| 5<br>BB   | Correct engine oil level.<br>Authorized engine oils (service)  |  | BB00.40-P-0226A    |

|    |  |   |                 |
|----|--|---|-----------------|
| SI | Service Information: Engine oil change | <p>Model 117, 156, 166, 172, 176, 190, 197, 204, 205, 207, 212, 213, 217, 218, 222, 231, 238, 242, 246, 253, 292, model 164.1## #A as from 193232, model 164.8## #A as from 192868, model 169.### #J as from 386540, model 171.### #F as from 149734, model 203.### #R as from 251655, model 203.0## #A as from 938312, model 203.2## #F as from 885750, model 203.7## #A as from 944805, model 209.3## #F as from 216791, model 209.4## #T as from 078925, model 211.### #B as from 081230, model 211.### #X as from 220604, model 216.### #A as from 002778, model 219.### #A as from 097557, model 221.### #A as from 104927, model 230.### #F as from 129725, model 245.### #J as from 169768, model 251.0## #A as from 046500, model 251.1## #A as from 046570, model 463 with engine 113, 157, 273, 279, 642</p>  | SI18.00-P-0011A |
| SI | Service Information: Engine oil change | <p>Model 129, 163, 170, 208, 210, 215, 220, model 164.1## #A up to 193231, 164.8## #A up to 192867, 169.### #J up to 386539, 171.### #F up to 149733, 203.### #R up to 251654, 203.0## #A up to 938311, 203.2## #F up to 885749, 203.7## #A up to 944804, 209.3## #F up to 216790, 209.4## #T up to 078924, 211.### #A, 216.### #A up to 002777, 219.### #A up to 097556, 221.### #A up to 104926, 230.### #F up to 129724, 245.### #J up to 169767, 251.0## #A up to 046499, 251.1## #A up to 046569, model 463 with engine 112, 612, 628</p> <p><b>1</b> Check engine oil level again after correcting engine oil level. For this, repeat operation steps 3 and 4.</p> <p>If the engine oil level is too low,</p> <p style="text-align: center;">↓</p> <p>Add enough engine oil until the level is in the hatched area between the MIN. (4b) and MAX. (4a) markings on the oil dipstick (4).</p> <p>If the engine oil level is too high,</p> <p style="text-align: center;">↓</p> <p>Extract enough engine oil until the level is in the hatched area between the MIN. (4b) and MAX. (4a) markings on the oil dipstick (4).</p> | SI18.00-P-0011B |