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| **Fluids filling information** |
| **KDI 1903 M Workshop manual (Rev\_09.5)** |



Sommario

[1. TITOLO 1 2](#_Toc495648770)

[1.1. Asdfsdfsdf 2](#_Toc495648771)

[1.2. Asdfsdfsdfggg 2](#_Toc495648772)

# Fluids filling information

## Engine oil

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| Z_importante.jpg  **Important**       * Before proceeding with operation, read  [**Par. 3.3.2**](https://iservice.lombardini.it/jsp/Template2/manuale.jsp?id=283&parent=1136) . * Do not use the engine with the oil level below the minimum. |  |
| 1. Loosen the oil filler cap **A** or the oil filler cap **C** if the cap **A** is not accessible. 2. Add the type and amount of oil recommended ( [**Tab. 2.2**](https://iservice.lombardini.it/jsp/Template2/manuale.jsp?id=268&parent=1136) ). | 10.1.png **Fig 10.1** |
| 1. Remove the oil dipstick **B** and check that the level is up to but does not exceed the **MAX** . 2. If the oil level is not at **MAX** , insert more oil until the **MAX** level is reached as indicated on the dipstick. 3. Re-tighten the cap **A or C** .     **NOTE:** See the [**Par. 11.1**](https://iservice.lombardini.it/jsp/Template2/manuale.jsp?id=341&parent=1136) for the various configurations of the oil dipstick. | 10.2.png **Fig 10.2** |

## Coolant

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| Z_importante.jpg  **Important**       * Before proceeding with operation, read  [**Par. 3.3.2**](https://iservice.lombardini.it/jsp/Template2/manuale.jsp?id=283&parent=1136) . |  |
| 1. Screw the cap. **G** , replacing the copper gasket (Tightening torque of **50 Nm** ). | 10.3.png **Fig 10.3** |
| 1. Tighten the cap **E** , replacing the copper gasket **D** . | 10.4.png  **Fig 10.4** |
| 1. Refill the radiator with coolant (refer to [**Par. 2.6**](https://iservice.lombardini.it/jsp/Template2/manuale.jsp?id=281&parent=1136) for the liquid specifications). 2. Top liquid up until the pipes inside the radiator are covered by about 5 mm. 3. For engines equipped with separate expansion tank, pour in fluid until reaching the max level mark. 4. Loosen the screw **F** on the head **H** , release any air and tighten the screw **F** (Tightening torque of **8 Nm - Fig. 10.7** ). 5. Start the engine without the radiator cap **A** or the expansion tank ( **C** ) cap **B** . | Fig._10.5.jpg **Fig 10.5** |
| 1. Keep it running at idle speed until the cooling liquid level goes down and becomes steady (the waiting times varies according to the ambient temperature). 2. Stop the engine and allow it to cool. 3. If there is an expansion tank ( **C** ) top liquid up to the mark **MAX** . 4. Without expansion tank top liquid up until the pipes inside the radiator are covered by 5 mm. Do not overfill the radiator, but leave room for the coolant to expand. 5. Tighten the radiator cap **A** or the expansion tank ( **C** ) cap **B** .     Z_Avvertenza.jpg **Warning**       * Before starting make sure that the radiator cap and expansion tank cap, if present, are installed correctly to avoid spillage of liquid or vapour at high temperatures.  1. After a few hours of operation stop the engine and allow it to cool. Check and top up the coolant liquid. | 10.6.png **Fig 10.6** |
| 10.7.png  **Fig 10.7** | |

