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| **Information on adjustments** |
| **KDI 3404 TM Workshop Manual (Rev. 08.2)** |



Sommario

[1. TITOLO 1 2](#_Toc495648770)

[1.1. Asdfsdfsdf 2](#_Toc495648771)

[1.2. Asdfsdfsdfggg 2](#_Toc495648772)

# Information on adjustments

## 'Waste Gate' opening valve regulation

Z_importante.jpg **Important**

* Before proceeding with operation, read [**Par. 3.3.2**](https://iservice.lombardini.it/jsp/Template2/manuale.jsp?id=814&parent=1545) .
* Regulation must not be carried out with the engine running.
* During the procedure in **point 5** , pay special attention not to bend rod **H** .

1. Disconnect the hose **A** from the turbocharger, and connect a pressure gauge **B** (scale from 0 to 5 bar).
2. Connect the gauge **B** to the network of compressed air, interposing a pressure reducer **C** .
3. Position dial gauge **D** in such a way that feeler **F** rests onthe Waste Gate rod control valve extremity **H** (point **E** ).
4. By using gradually the reduction gear C send the air to the Waste Gate actuator control L in order to move rod H forward by 1 mm (value M to check on dial gauge D). Pressure read on gauge B must be: 2500 mbar.
5. If pressure is less or more than the indicated value, proceed as follows: - Undo lock nut G from rod H.

- Remove the retainer cotter pin (point **E** ) and disconnect rod **H** from the Waste Gate control lever.  
- Tighten (to increase) / or loosen (to decrease) pressure of the ring nut of rod **H** until reaching the corrected calibration.  
- Redo lock nut **G** .  
- Reconnect rod **H** and assemble the cotter pin point **E** .

 **Fig 12.1**

## Air filter check

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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=814&parent=1545) . | |
| 1. Hose **A** must be completely clean and not damaged. 2. Air filter cartridge **B** and its housing **C** must be completely clean and free from impurities. | 12.2.jpg **Fig 12.2** |

## Oil steam separator check

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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=814&parent=1545) . | |
| 1. Loosen clamp **B** and remove hose **C** from hose **A** . 2. Remove rapid fitting **D** from separator **A** . 3. Start the engine at idle speed or without a load and check if air comes out from unions **A1** and **A2** .   **NOTE:** If what is described in **Point 3** does not occur, proceed with cleaning or replacing oil separator **A** and accurately clean all connecting hoses, and repeat the operation from **Point 3.** | 12.3.jpg **Fig 12.3** |

## Rubber hoses and manifolds check

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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=814&parent=1545) . | |
| The check is carried out by applying slight deflection or bending along the tube/hose and next to the hose clamps.   Components must be replaced if they have clear signs of cracks, tears, cuts, leaks, or do not retain a certain degree of elasticity.   1. Check the condition of all hoses and rubber tubes highlighted in red in **Fig. 12.4 - 12.5** . 2. Check whether there are any leakages of air, refrigerant, oil or fuel next to their connections.   **NOTE** : Refer to the technical documentation of the machine for components that are not shown in the figure. | 12.4.jpg **Fig 12.4** |
| 12.5.jpg **Fig 12.5** |

## Oil leak check

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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=814&parent=1545) . | |
| Check that there are no leakages next to area **A** .   1. Start the engine at idle speed or without a load and check whether there are any leakages next to area  **A.** 2. It is anyhow necessary to also check the seals of all main components and their surface contact, such as: - crankcase and gasket (side 1 a PTO) - oil sump and exhaust caps     - cylinder head and its assembled components    - rocker arm cover    - Timing system carter and gasket (side 2 a PTO) - oil dipstick housing or rod support tube.      **NOTE:** Perform the checks described in **Points 1 and 2** periodically and during maintenance procedures. It is also necessary to check for leakages on the components that are not listed.  If necessary, disassemble the components that have a leakage and investigate the possible cause.    The components must be replaced otherwise they do notguarantee their sealing. | 12.6.jpg **Fig 12.6**12.7.jpg **Fig 12.7** |

## Oil pressure check

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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=814&parent=1545) . | |
| 1. Replace the oil dipstick **A** with a thermocouple **B** **(Fig. 12.8).**      1. Unscrew and remove the oil pressure switch **C** and screw on a 10 bar pressure gauge in its seat **(Fig. 12.10)** .      1. Start the engine at idle speed and without a load, check the oil pressure value according to the oil temperature **(Fig. 12.9** ).   **NOTE** : The graph in **Fig. 12.9** illustrates the pressure line with speed of 1000 Rpm.   1. If the pressure values are below the values indicated in **Fig. 12.9** , check to identify the cause of the problem.   12.7.jpg  **Fig. 12.9** | 12.8.jpg  **Fig. 12.8**  12.10.jpg  **Fig. 12.10** |

