

Technical in-dept Analysis for turbo 753420-5005S and 49173-07506 PSA 1.6HDi Applications

PSA 1.6HDi Applications

Since this engine was designed to operate at high temperatures, It is highly recommended the use of the absolute best lubricants and in order to keep its characteristics optimal, inside the turbo inlet oil pipe has been inserted a **filter and an integrated heat exchanger**.

However there is a **downside** to this; some cases indicate that if the engine has been operated with the **oil level below normal limits**, high concentrations of carbon in the oil may occur. This can lead to clogging of the filter in the inlet pipe, the oil exchanger and the main oil filter, which cause premature failure of the turbo.

This can happen from 40/50,000 km forward.

Experience to date suggests that carbon deposits in this application **are particularly difficult to remove**.

To minimize the risk of further turbo failures, below are some suggestions that the installer should **SERIOUSLY** consider:

- ***The oil inlet hose, fittings and filters on the fittings need to be replaced (See photo)***
- ***The oil pump and the peach connected to it should be removed and cleaned thoroughly***
- ***The oil exchanger and the filtering device must be removed and cleaned, check that the engine injector seals are not burnt or damaged and replace them***
- ***The oil flow should be checked as follows:***
 - Or place the turbo on the engine leaving the oil return hose disconnected.
 - Or install a longer oil return hose to control the oil flow into a separate container, start the engine and let it idle for 60 seconds, then turn off the engine.
 - Or measure the volume of oil in the container which should be at least 0.3 liters of oil.
 - Repeat the test two or three times to confirm correct oil flow.
 - Drive the vehicle for 40/50 km and replace the oil filter again.

Even after the operations mentioned above **there is no certainty** of removing all the carbon residues inside the engine

