Issue no. 1/2014: Peugeot DV6 turbocharged engines: essential steps for long-lasting damage repair

In case of damage to a 1.6 L HDI engine with turbocharger models 039TC17217000 or 039TC17308000, the following diagnostic and work steps must be performed in the exact sequence given here. Otherwise there is a significant risk that another failure will occur after the repair.

INITIAL INSPECTIONS

- Read out the failure memory
- Check the air mass flow meter
- Check the EGR sytem
- Check the exhaust sytem (catalyst DPF, etc.) for contamination or blockage
- Perform a DPF static regeneration
- Perform a VTG vacuum test
- Check the vacuum pump
- Remove the vacuum pump, clean it, and reinstall it with new gaskets
- Check the EGR valve
- Run an oil analysis for excessive fuel content
- Replace fuel injector gaskets and leakage oil lines
- Remove the exhaust gas system
- Check the exhaust gas after-treatment units
- Check the air intake system
- Measure the oil pressure
- Check that the turbo oil throughput is to manufacturer's specifications

REPAIR

- Drain the oil
- Install a new oil filter
- Fill with flushing oil

- Run the engine (per specification)
- Drain the flushing oil
- Remove the oil sump
- Replace the oil pick up pipe and strainer
- Clean and install the oil sump
- Remove the turbocharger
- Clean the air intake system
- Clean the exhaust system including EGR and catalyst
- Install the new turbocharger (see installation instructions)
- Replace the intercooler
- Install a new oil inlet line with new hollow bolts
- Install the new filter and fill with fresh engine oil (as per latest manufacturer's specifications)
- Check oil level with dipstick (NOTE: design has been changed by the manufacturer)
- Replace the air filter element and the crankcase ventilation system
- Check the oil throughput of the turbo
- Install a new oil return line
- Measure the oil pressure
- Check the heat shields
- Visually inspect and perform leak tightness test of all components
- Test drive
- Last but not least: please ensure that the wiper cover is correctly attached and is sealed tightly

Please note: The warranty for MAHLE components applies only if the procedure for damage repair described above is followed exactly. Failure to comply will void any warranty claims.

