Mazda CX5 - warning message "System check required" and error code P06DE read out

Data sheet	
Manufacturer	Mazda
Vehicle model	CX5 GH/KE with automatic transmission
Engine	2.2 16V CDI Skyactiv-D
Engine code	SH-Y4
Year of manufacture	2013-2017
Error code	P06DE
Symptoms	Warning message displayed: system check required; poor acceleration behaviour; vehicle goes into limp-home mode; error code P06DE / engine oil pressure sensor mechanical fault
Recommended tool	mega macs X

Important safety note

Technical information and practical tips have been compiled by HELLA in order to provide professional support to vehicle workshops in their day-to-day work. The information provided on this website is intended for use by suitably qualified personnel only.

Warning message in the instrument cluster indicating system check required and error code P06DE issued

If the error message "System check required" is displayed in the instrument cluster on the above-mentioned vehicle models and at the same time the error code P06DE is read out, this could be caused by a defect in the injector seals. As a result of thermal loads, the injectors can loosen over time, a situation which leads to a reduction in the sealing pressure.

In this case, combustion gases escape at the injector sealing discs and enter the valve cover through the injector shaft. These exhaust gases then mix with the engine oil there and form a carbonaceous residue. Such impurities in turn enter the oil circuit and clog the intake pipe or the filter element (strainer) of the oil pump. The resulting drop in oil pressure is recognised by the switch and stored as an error code in the error memory.

If, during troubleshooting, no defect has been diagnosed with the oil pressure switch or in the engine lubrication system, the injector seals and the filter element should be checked and replaced if necessary. At the same time, the sediments/deposits are to be removed and the engine oil replaced.

Please always observe the maintenance and repair instructions provided by the vehicle manufacturer when carrying out such work!

This defect may also occur in other vehicle models that have the same type of engine design/ equipment.

Repair notes

Continuing to drive with this defect can lead to engine damage as a result of the low level of lubrication. The vehicle manufacturer has since replaced such injector seals with modified components. When carrying out these repairs, it is therefore important to ensure that the modified seals and/or the necessary repair kit are used. After completion of the repair, the relevant error memory entries in the individual control units are to be deleted.

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