



This Service Information bulletin supersedes SI B13 02 10 **dated April 2010**.

NEW designates changes to this revision

SUBJECT

Gasoline and Diesel Fuel Quality Detection with ISTA D

MODEL

All with the N52K engine

NEW All with the N54 engine from 03/08 production

E90, E70 X5 with M57Y engine

INFORMATION I

NEW With the release of ISTA D 2.19, it is possible to perform a gasoline quality determination on N52K-equipped vehicles and on some N54-equipped vehicles by using the test plan S1214_NGKQE – "Fuel Quality Detection".

NEW Note:

The "Fuel Quality Detection" test plan will work on N54 vehicles equipped with MSD81 DME (from 03/08 production) and programmed to the integration level 09-12-501 or higher.

This test plan can be accessed by selecting the path: Service Function; Drive; Engine Electronics; Read Measure Values; Fuel quality.

The gasoline octane number (AKI) evaluation is based on the knock sensor's adaptation values and is displayed in three quality levels (low, medium and high), corresponding to the octane ratings of commercially available fuels.

Lower octane fuels may cause reduced engine performance, lower fuel economy and increased engine noise level (pre-ignition knocking).

The "Fuel Quality Detection" test provides a total record of fuel grades (knock resistance) used during the vehicle's service, as well as octane number evaluation for the last five full fuel tanks (with recorded mileage for each refueling).

In the near future, a similar test plan will be available for other engine (DME) variants.

INFORMATION II

With the release of ISTA D 2.19 and ISTA/P 2.37.0, the diesel fuel cetane number can be evaluated on E90 and E70 M57Y-equipped vehicles by using the test plan B1365_D7USQUAL-DDE 7.3 M57 – "Fuel Quality Output".

This test plan can be found by selecting the path: Service Function; Drive; Diesel Electronics (US version); Read Measure Values; Fuel quality.

The cetane number measures how readily the diesel fuel starts to burn under high compression conditions. Fuel

with a lower cetane number may decrease engine starting performance; reduce smoothness of operation; and increase smoke emissions and noise level.

The "Fuel Quality Output" test plan provides a counter reading of three fuel grades (poor, moderate and good), which corresponds to the frequency of use. The quality reading counter can be reset after the test plan is performed, or will be set to 0 after the DDE reprogramming.

WARRANTY INFORMATION

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