

From: Non-responsive content removed
To:
CC:

Date: 15 Oct. 2009 13:26:05
Topic: Re: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Hello Non-responsive content removed

We have looked into your approach.

I have no fault log entries on the cylinder pressure sensor for the two vehicles with HPFP failure in EG endurance testing (Q7 xxx229, Q7 xxx390).

Some info on the correct interpretation of the function "Cylinder-Pressure-Guided Combustion Timing Control":

- 1) This function is used to compensate for the impact of "bad fuel" on combustion. The term "bad fuel" refers to a low cetane number.
- 2) A fault log entry only results if there is a faulty signal due to an electrical or mechanical cause. Operation with a low cetane number is thus not recorded as a fault log entry.

It is not possible to discern any correlation whatsoever between cetane number and other characteristics such as water content and lubricity from the fuel analyses that I am aware of, 2008 Fuel Survey etc.

Bottom line: This function unfortunately does not help us in the analysis.

Sincerely,

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AUDI AG

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www.audi.com

Sitz/Domicile: Ingolstadt
Registergericht/Court of Registry: Amtsgericht Ingolstadt
HRB Nr./Commercial Register No.: 1
Vorsitzender des Aufsichtsrats/Chairman of the Supervisory Board: Martin Winterkorn
Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen,
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From: Non-responsive content removed

Sent: Tuesday, 13 October 2009 14:29

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Subject: FW: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Good day Non-responsive content removed

The use of "bad" fuel (water, cetane ...) can trigger a fault message in the [engine] control unit.
(I have understood that the application of this label is up to the customer)

In my opinion, it would be worthwhile to check whether there is any correlation between fault code
(where available) and CP4 drive train failure.

At the moment, I don't know whether the fault [code] is erased or is documented as to time.
If so, the fault log entry at time X and failure at time Y would give us an understanding of the late failures.

Can you check out / discuss this approach?

Many thanks,

Best regards,

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Robert Bosch GmbH

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Domicile: Stuttgart, Court of Registry: Amtsgericht Stuttgart, Commercial Register no. 14000;
Chairman of the Supervisory Board: Hermann Scholl; Management: Franz Fehrenbach, Siegfried
Dais; Bernd Bohr, Rudolf Colm, Volkmar Denner, Gerhard Kümmel, Wolfgang Malchow, Peter
Marks, Peter Tyroller; Uwe Raschke

From: Non-responsive content removed

Sent: Friday, 9 October 2009 11:24

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Subject: Re: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Hello everybody,

In the current Diesel System, the fault path DTC_PosMCctIDvtMax is activated for the two cylinders (4 and 5) that are equipped with cylinder pressure sensors. However, only fault category 1 is used. That is, a fault is registered in the control unit, but the light is not activated. Such faults are thus only discovered in the workshop and are not recognized by the driver.

Best regards,

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Robert Bosch GmbH

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Dais; Bernd Bohr, Rudolf Colm, Volkmar Denner, Gerhard Kümmel, Wolfgang Malchow, Peter
Marks, Peter Tyroller; Uwe Raschke

From: Non-responsive content removed

Sent: Friday, 9 October 2009 10:37

To: Non-responsive content removed

Subject: FW: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

From: Non-responsive content removed

Sent: Friday, 2 October 2009 10:01

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Subject: FW: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Hello Non-responsive content removed

For the current U.S. failures (field, testing), can you folks also read out these "fault codes" and draw inferences as to fuel quality?

Best regards,

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Robert Bosch GmbH

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From: Non-responsive content removed
Sent: Thursday, 24 September 2009 09:13
To: Non-responsive content removed
Cc: Non-responsive content removed
Subject: FW: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Hello Non-responsive content removed

Your query:
See below for reply.

Best regards,

BeQIK

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Von: Non-responsive content removed
Sent: Thursday, 24 September 2009 8:49 AM
To: Non-responsive content removed
Subject: FW: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Hello
Here is the info from the IAV diagnostics experts.

Your suspicion as to water in the diesel fuel seems to bear out.
The customer should try switching gas stations ...

As background info:
Because of the questionable fuel quality in the United States, we have 4 BERU cylinder pressure sensors in the 4-cylinder BIN5 engine (integrated in the glow plug) which can sense and track the combustion timing.
In this case, however, the fuel seems to be so bad that the regulator is stretched to the limit (triggered fault path DTC_PosMCCTIDvtMax_0 - 3).

Regards,
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From: Non-responsive content removed
Sent: Wednesday, 23 September 2009 16:45
To: Non-responsive content removed
Subject: Reply: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Hello, Non-responsive content removed

P020A - D = Cylinder 1 (2, 3, 4) injection timing out of tolerance
The DTC is: PosMCcTlDvtMax_0 - 3 PosMCcTlDvtMin_0 - 3

Fault possibilities: fuel type / quality (if all values measured in measured value block 143 are outside of the limit values (ca. -5...-25°); carbon-fouled or leaky injector; lack of compression

Sincerely,

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IAV GmbH

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IAV GmbH, Sitz/Registered Office: Berlin, Registergericht/Registration Court:
Amtsgericht Charlottenburg, Registernummer/Company Registration Number: HRB 21 280,
Geschäftsführer/Managing Directors: Kurt Blumenröder, Michael Schubert, Dr. Rüdiger Goyk

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23 Sept. 2009 11:23

Topic: VW Jetta BIN5 SW K3NH: Fehlereintrag Fault log 1.pdf

Hello Non-responsive content removed

Do you know the fault code?

I unfortunately can't find it in your April list; could I have a more recent one?

Background:

Fault log entry encountered by a BOSCH employee in the USA in a Jetta with SW K3NH.

Cause of fault = ? (water in the fuel, wiring harness, CSC-P)

Mit freundlichen Grüßen / Best regards / Sincères Salutation / Selamlar

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Robert Bosch GmbH

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