EA11003EN-00001[0]

From: Non-responsive content removed

To: CC:

 Date:
 26.09.2008 17:53:00

 Subject:
 Documents for Q offensive

Attachments: Non-responsive content r Audi CP4 Übersicht Akltivitäten gegen Triebwerksschäden 24-09-2008.ppt

Audi CP4 Q-Gespräch Übersicht Aktivitäten gegen Triebwerksschäden 22-09-

2008.ppt

Document.pdf

Non-responsive content r Audi CP4 Provokationsversuch mit n i O Laufrollen 24-09-2008.pdf

Liste Triebwerkschäden CP4 26 09 08.xls

Hello Non-responsive content removed

I have finally assembled all the documents required for Monday's teleconference:

- * Measures by Bosch Development (already contained in the report, but updated)
- * Short continuous test with faulty cam roller and GDK650
- * Measures by Bosch Development
- * Graphics showing failures involving drivetrain damage
- * Latest list of failures

for discussion of breakdowns at 02.10.08!

>With best regards

Non-responsive content removed

AUDI AG

85045 Ingolstadt

Non-responsive content removed

http://www.audi.com

Domicile/Sitz: Ingolstadt

Court of Registry/Registergericht: District Court of Ingolstadt

Commercial Register No./HRB Nr.: 1

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Chairman/Vorsitzender), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer, Axel Strotbek, Werner Widuckel

Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail zu.

Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.

EA11003EN-00101[0]

From: Non-responsive content removed

To:

CC:

Date: 2/6/2009 4:33:00 PM Subject: CP4 robustness

Attachments: Bemerkung zur Robustheit CP4.doc

Hi both,

What do you think of my comment on the Bosch slide?

Kind regards

>

Non-responsive content removed

AUDI AG

Non-responsive content remove d

http://www.audi.com

Domicile/Sitz: Ingolstadt

Court of Registry/Registergericht: Local court Ingolstadt

Commercial Register No./HRB Nr.: 1

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael

Dick, Frank Dreves, Peter Schwarzenbauer, Axel Strotbek, Werner Widuckel

Important note: The above information is automatically added to this e-mail.

This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.

Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.

From: Non-responsive content removed

To:

CC:

legally binding upon AUDI AG.

>

Date: 18.03.2010 13:22:39

Topic: Re: Initial start times for all common rails from

Attachments: Erststartzeiten Diesel R4 V6 Werk .xls (Initial start times for Diesel R4

V6 NSU Plant)

>	
>From: Non-responsive content removed	
>Sent: Tuesday, February 10, 2009, 10:04 AM	
>ToNon-responsive content removed	
>Cc Non-responsive content removed	ĺ
Cubicate Initial start times for all someone valle from NCII	ļ
>Subject: Initial start times for all common rails from NSU	
>Hello all,	
> lend all,	
>Here are the current initial start times for all common rails from Non-responsive content removed	
>It has been observed that the initial start times for 2l common rail have also significantly decreased!	?
>	
>	
>	
> With best wishes,	
>	
Non-responsive content removed	
>AUDI AG	
Non-responsive content	
removed	
>74148 Neckarsulm	
Non-responsive content removed	
>	
>	
>http://www.audi.com	
>	
>Sitz/Domicile: Ingolstadt	
>Registergericht/Court of Registry: Ingolstadt municipal court	
>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, Michael	اد
Dick, Frank Dreves, Peter Schwarzenbauer, Axel Strotbek, Werner Widuckel	600
>	
>Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und	
lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail zu.	
>Important Notice: The above information is automatically added to this e-mail. This addition does no	t
constitute a representation that the content of this e-mail is legally relevant and/or is intended to be	

EA11003EN-00121[0]

Non-responsive content removed To:

CC:

Date: 2/12/2010, 8:46:58 AM

Subject: Re: Draft slide

Attachments: EHP2 4769 VN6235 Motormesungen.pdf

Hello

Please find enclosed the shown slides from the task force on the subjects of turned tappet with kerosene.

I will send you the pictures on the subject of "quality pumps from ", which show preliminary damage, as soon as they are arrive at our Bosch/Audi exchange drive!

Regards,

Best regards

Non-responsive content removed

74148 Neckarsulm

Non-responsive content removed

http://www.audi.com

Domicile/Sitz: Ingolstadt Court of Registry/Registergericht: Amtsgericht Ingolstadt

Commercial Register No./HRB Nr.: 1

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer, Axel Strotbek, Werner Widuckel

Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail für AUDI AG

Non-responsive content removed From:

Thursday, February 11, 2010, 5:42 PM Sent:

To: Non-responsive content removed

Cc:

Draft slide Subject:

Hello

Please find enclosed the requested slide on the tappet measurements for the W19 engine.

Best regards / mit freundlichen Grüßen

Robert Bosch GmbH

Non-responsive content removed

70442 Stuttgart GERMANY www.bosch.com

Non-responsive content r emoved

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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

EA11003EN-00129[0]

From: Non-responsive content removed

To:

CC:

Date: 1/25/2011, 5:48:26 PM **Subject:** Damage sequence

Attachments: ehp 0443 Schadensablauf Bremsplatte k2.pdf

Are you familiar with this from the AUDI CP4 task force, or do you not read stuff like that?

Best regards,



Subject: Commissioning CP4 in the Engine Plant, Cold Test

1) Test sequence VW R4, CP4.1

- The target test sequence for presented by Audi at the end of March 2008 is basically in line with Bosch requirements
- The startup phase, 1,000 rpm without rail pressure, is to be reduced to the minimum possible time and is currently OK at < 10 seconds.
- 2) Further test bench procedure, recommendation from Audi/Bosch, 10.4.2008:
- Bosch/Audi/ (Wednesday, early shift), Aud to provide the interface, Bosch Measurement Technology (each party to be responsible for their own costs) Target date 04.2008
- Development/Test Bench Technology in will attend during measurement, so that it will be able to carry out these measurements itself on the other test benches
- VW Test Technology in Non-responsive content removed were to take part in the meeting
- 3) Exchange of information relating to CP4 requirements
- A local meeting will be held in after the measurement results are available, involving Bosch Development, the plant and QM, target date 05.2008
- 4) Permanent saving of test bench test parameters
- Check to establish that the present offering in relation to documentation from meets requirements, V: Bosch, date 04.2008
- Costs are to be clarified between and Audi
- 5) Hot test
- If the schedule allows, the hot test is also to be measured on the Wednesday afternoon, following the same procedure as for the cold test as described above



	CAG 035227	CAG 036236
Setup time	18.03.08 5:19	18.03.08 8:23 AM
Vacuum pump assembly time	18.03.08 7:16 AM	18.03.08 9:57 AM
High-pressure fuel pump assembl	18.03.08 7:43 AM	18.03.08 10:34 AM
Rail mounting time	18.03.08 7:47 AM	18.03.08 10:38 AM
Rail fastening time	18.03.08 7:50 AM	18.03.08 10:40 AM
Wire harness	None	None
Fueling time	18.03.08 8:26 AM	18.03.08 11:26 AM
Cold test time	18.03.08 8:26 AM	18.03.08 11:26 AM
Cold test result	Not OK: noises, starting	Not OK: noises, starting
	torque too high	torque too high
Rework	Disassembly during cold	Disassembly during cold tes

EA11003EN-00243[0] From: Non-responsive content removed To: CC: Date: 6/2/2009, 1:43:20 PM CP4 robustness Subject: Re Attachments: 0664 EHP4 Audi, Kraftstoffqualität 686 V02 EHP CP4 Robustheit.pdf Hi all, Please find attached the documents that Mr. presented at the last technical discussion. With best wishes Non-responsive content rem Non-responsive content remo Domicile/Sitz: Ingolstadt Court of Registry/Registergericht: Amtsgericht Ingolstadt Commercial Register No./HRB Nr.: 1 Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer, Axel Strotbek, Werner Widuckel Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH. Wichtiger Hinweis: Die vorgenannten Ang den Rechtscharakter der E-Mail für AUDI AG zu. Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf From: Thursday, May 07, 2009, 11:44 AM Sent: / CP4 robustness Subject: Hello For your information, as promised yesterday. Please treat it confidentially - the slide is still in process - thank you!

Best regards / mit freundlichen Grüßen

Non-responsive content remo ved

Robert Bosch GmbH

Non-responsive content removed

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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 To:

CC:

Date: 18/02/2008 14:24:23

Subject: Minutes and attachments for CP4 technical discussion on 13/02/2008 in

Attachments: 882801 Protokoll CP4 Fachgespräch am 13 02 08 bei pd

Übersicht DL-Ppen für Audi.pdf

CP4 Audi 080213.pdf

Gentlemen,

Please find attached the minutes and attachments from the CP4 technical discussion on 13/02/2008.

<<882801 Protokoll CP4 Fachgespräch am 13 02 08 bei pdf>>

Slide attachment

Kind regards

Robert Bosch GmbH

Non-responsive content removed

Robert Bosch GmbH, registered office: Stuttgart, registration court: local court Stuttgart HRB 14000 Chairman of the board Hermann Scholl; management: Franz Fehrenbach, Siegfried Dais; Bernd Bohr, Wolfgang Chur, Rudolf Colm, Gerhard Kümmel, Wolfgang Malchow, Peter Marks; Volkmar Denner, Peter Tyroller

Topic:

AUDI is planning to use the Piezo common rail system on the US market with a water separator without level sensor, possibly without water separator

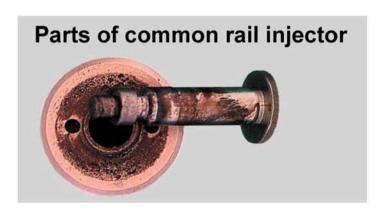
RB requirements for use on the US market:

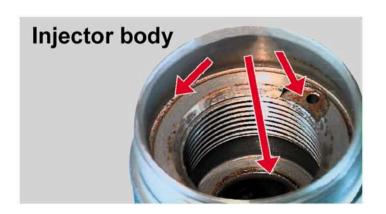
- > use of a water separator with level sensor
- > emptying of the water separator in the service

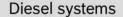


Use of water separators

- Is essential to maintain the water separator in order to avoid water entering the system
 - → Ensure via feedback in the in the estate
- > Examples of corrosion on the injectors





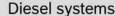




Justification of the RB requirement:

- On the US market, depending on the customer, CRIN2 shows up to 4000 ppm malfunctions due to corrosion in the injectors. The use of a water separator with level sensor and warning lamp drastically reduces the frequency of malfunctions with CRIN2.
- From the wcf test ¹¹ it is known that the CRI3.x is more sensitive than the CRIN2 to water in the fuel → Failure rate » 4000 ppm is to be expected for the CRI3.x on the US market if a water separator is not used!
- The wcf test 1) shows that the 4 cylinder HFPF reacts more sensitively to water in the fuel than other cylinder HFPF
 - → Malfunctions are to be expected on the US market if water separators are not used!
- In accordance with the Tread Act legislation in the USA, a recall is necessary after a specific number of malfunctions has been recorded.

1) water contaminated fuel test: Pass information for the weak point analysis regarding corrosion; fuel without corrosion inhibitors with 1% free water (of which 90% is distilled water and 10% is synthetic seawater), NACE class C







Knowledge from previous US applications:

- Customers with water separators and level sensors have <u>no</u> field complaints with regard to corrosion
- Field situation with various customers without level sensors shows, depending on the customer, the following situations on account of corrosion:
 - Constant c. 10 SF/1000 vehicle since A/2004
 - C. 12.5% of all injector complaints of a customer are corroded products
 - In 2006, approx. 2500 complaints due to corrosion (basis of around 200 000 vehicles)



Water separator strategy (from TCD 0 449 D00 005)

- General requirement for water separators for Bosch common rail injection systems, if the fuel quality cannot be assured in accordance with DIN EN 590
- Degree of separation in accordance with DS requirements (≥93% from 2% emulsion with max. rate of flow, for more details refer to DIN ISO 4020, part 1;
- > Storage volume dependent on consumption and country, at least 200 ml
- Response threshold for water level sensors with half-filled water storage reservoir
- > Water level sensor with warming lamp and fault entry in the fault memory





Diesel systems

From Persons responsible Phone Fax

October 23, 2009 No. 990158

Protocol

Recipient participant; Currently Non-responsive content removed Invited

Audi participant:



Line Non-responsive content re moved Protocol Organis

Date/location October 21, 2009 14:00 - Audi Non-responsive content removed middle meeting room

Technical discussion r.e. high-pressure fuel pump cylinder spe-Topic cial topic - robustness of the 4 cylinder HFPF/water separation

1. Use of CRS in the rest of the world

On account of returns from various markets, Audi is unsure about the use of the 4 cylinder HFPF worldwide. Audi"s Quality Assurance Department is not prepared to approve further use of the 4 cylinder HFPF if the failure situation does not improve.

The technical discussion r.e. the 4 cylinder HFPF at this agreed date. Further meetings Audi/Bosch with top level on October 27, 2009 and together with Volkswagen on December 08, 2009 Non-responsive content re

2. Robustness of the 4 cylinder HFPF - films

See enclosure

Malfunctions as a result of lubrication capability/viscosity/water were detected by Bosch on the 4 cylinder HFPF and the 3 cylinder HFPF/CP1H - irrespective of the drive concept. Bosch considers the drive concept of the 4 cylinder HFPF to be superior to that of the CP1H - CP3 drive concepts.

There is always a dependence on fuels which could present a risk, depending on the country and time of year.

Customer sample can be ordered with robustness package as of February 2010 (see film 24). Note: The price of the robustness package option is established based on the pass in 2010.

A vehicle validation (see film 25) is necessary for the approval in the target



Diesel systems



Persons responsible Non-responsive content remove





October 23, 2009 no. 990158

Protocol

Technical discussion r.e. high-pressure fuel pump cylinder special topic robustness of the 4 cylinder HFPF/water separation

markets/target clusters and it would be practical for this to be carried out using edge parts, as mid-layer pumps cannot be used due to the wide safety reserve.

3. Water separator (Non-responsive content removed

In the laboratory test, the fuel filters with water separators currently being used by Audi comply with the Bosch TCD.

In the vehicle (random sample), manually introduced water is partially dissolved again in the fuel flow. A remedy would be e.g. a "water trap", i.e. deflector for the separated water and disconnection from the fuel flow.

Tests were carried out with UIP, CP1H with CP & CP3.3 with CP. Bosch believes that the results cannot be transferred to CP4 with electric fuel pump, as the filter is run through much more often.

The current standard for the measurement of the degree of water separation is currently being revised, the new ISO16332 (new draft prov. E.2009) will take into consideration innovations with regard to the proportion of biodiesel, desulphurised fuel etc.. Bosch will draw upon this ISO for the fuel properties in the forthcoming TCD.

Audi has requested a representation of the changes - new/old TCD

Audi will clarify the further procedure internally.

4. Rail pressure deviation after cold start with B10

Audi has repeatedly established that with a cold shut-down of a vehicle (Q5 technology demonstrator) with fuel B10, the flow volume of the cylinder HFPF with a cold shut-down reduces on the CFPP of the fuel and rail pressure deviation is detected. The hypothesis is the clogging of the metering unit filter with the paraffin flakes in the pipe volume after the fuel filter up to the cylinder HFPF.

The current Audi requirements on the cold shut-down have not been achieved in this test.

Audi will draw up an internal fuel road map with the possible procedures. Bosch has asked that we prepare the topic for the next FG (within the scope of the CRI-FG or the cylinder HFPF FG or special meeting)

Non-responsive content removed

From: Non-responsive content removed

To:

CC:

Date: 2/13/2010, 4:49:22 PM

Subject: Re: Water separators in U.S. vehicles (such as VW Jetta, Audi A3)

Attachments: Total 2008 11 28.xls

Hello

What our colleague wrote is definitely not correct.

In the SGS fuel survey, the ASTM 4176 conducts an optical assessment of appearance and impurities.

If the result is "w", this means free water.

One possible objection could be that when the correct sampling method (discharge several liters first) is used, free water from the filling nozzle, for example, is not recorded.

ran numerous vehicles in the U.S., however, and checked the water separator regularly. They found nearly nothing. You can mention the file to Bosch, but please do not forward it.

The poor Nace ratings are a fact.

Regards,

Zohren, Frank (EAD/1) From:

Sent: Monday, February 08, 2010, 10:07 AM

To: Garbe, Thomas, Dr. (EADA)

Schumacher, Stefan (EADA/6); Krause, Andreas (EAD/1) Cc:

Subject: Re: Water separators in U.S. vehicles (such as VW Jetta, Audi A3)

Dear Thomas,

Is what our colleague from the South writes true?

I think Bosch wants to get us to reintroduce a water separator in the U.S., or withdraw the warranty.

Best wishes,

Frank

Non-responsive content removed From:

Sent: Tuesday, February 02, 2010, 7:37 PM

Non-responsive content removed

Subject: Re: Water separators in U.S. vehicles (such as VW Jetta, Audi A3)

Hello

EA11003EN-00329[1]

Free water is not recorded in the fuel surveys, which means the statement regarding free water is not sound/representative.

In addition, the corrosion protection additivation in U.S: markets is low (= poor NACE rating), which means free water can guickly result in corrosion attack.

Best regards / mit freundlichen Grüßen

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

GERMANY www.bosch.com

Non-responsive content rem oved

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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: Monday, February 01, 2010, 12:12 PM
Non-responsive content removed

Non-responsive content removed

Subject: Re: Water separators in U.S. vehicles (such as VW Jetta, Audi A3)

Hello Mi

As we discussed at the HPP workshop in 12/08/2009, the Diesel vehicles in the U.S. were not equipped with a water separator.

The Audi A3 launched without water separators.

Water separators have not been used in VW vehicles since May 2009.

An evaluation of fuel analyses from SGS (see "SGS World Wide Fuel Survey") from the U.S. market does not show anything noteworthy with regard to water content.

Therefore, the use of a water separator system is not needed.

If you have any other questions, please feel free to contact me.

Best regards,

Non-responsive content removed

EA11003EN-00329[2]

VOLKSWAGEN AG Domicile/Sitz: Wolfsburg

Court of Registry/Registergericht: Amtsgericht Braunschweig

HRB Nr./. Commercial Register No.: 100484

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Ferdinand Piëch

Vorstand/Board of Management: Martin Winterkorn (Chairman/CEO), Francisco J. Garcia Sanz, Jochem Heizmann, Horst Neumann, Hans

Dieter Pötsch

Important notice : The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.

<u>Wichtiger Hinweis:</u> Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail für VOLKSWAGE AG zu.

Important note: This email is confidential and is for the intended recipient only. Access, disclosure, copying or distribution on any of it by anyone else is prohibited and may be a criminal offense. Please delete if obtained in error and email confirmation to the sender.

Wichtiger Hinweis: Dieses E-Mail ist vertraulich und nur für den angegebenen Empfänger bestimmt. Zugriff, Bekanntmachung, Vervielfältigung oder Verbreitung des Inhalts von Dritten ist verboten und kann eine kriminelle Handlung sein. Bitte löschen Sie dieses E-Mail, wenn Sie nicht der Empfänger sind und benachrichtigen Sie den Absender.

In case of transfering sensitive information the VOLKSWAGEN AG reserves the right to take out the patent.

Bei der Uebermittlung schutzfaehiger Informationen behält sich die VOLKSWAGEN AG alle Rechte fuer den Fall der Patenterteilung vor.

From: Non-responsive content removed

Sent: Monday, February 01, 2010, 7:04 AM

Non-responsive content removed

Subject: Re: Water separators in U.S. vehicles (such as VW Jetta, Audi A3)

Hello ,

I'm afraid I have not been able to find an answer yet.

During the next project meeting, could you please present the information that led you to eliminate the water separator in the CRS3.2 system (EFP, with CP4)?

Please also send me the date from which the water separator was eliminated.

Note:

We will examine a 4-cylinder NDKL with a 6-cylinder NDKL on the test bench and examine the subject of water impact there as well.

Thank you.

Best regards / mit freundlichen Grüßen

Non-responsive content rem oved

Robert Bosch GmbH

Non-responsive content removed

GERMANY www.bosch.com

Non-responsive content rem oved

EA11003EN-00329[3]

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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: Thursday, November 19, 2009, 1:36 PM

Non-responsive content removed

Subject: Re: Water separators in U.S. vehicles (such as VW Jetta, Audi A3)

Hello Non-responsive content removed

Could you please confirm (or have confirmed) that the current 4-cylinder vehicles no longer have water separators?

Or does this only apply to certain vehicle types, that is: the Audi A3 has a water separator, the Jetta hasn't had a water separator since x.xx?

< Message: VW_R4_2.0I_EU5_low_CRS3.2 (1.Gen): Filter or water separator >> If an overview of this is available, it would surely help the discussion.

Best regards / mit freundlichen Grüßen

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

GERMANY www.bosch.com

Non-responsive content re moved

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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: Thursday, November 12, 2009, 4:20 PM
To: Non-responsive content removed

Subject: Water separators in U.S. vehicles (such as VW Jetta, Audi A3)

Hello Mr.

Do the current VW U.S. vehicles (such as VW Jetta, Audi A3, ...) have water separators?

If not, were water separators installed in the past?

If so, when did the conversion take place - that is, when are the water separators present?

If one was ever installed, where was it positioned?

Thank you.

Best regards / mit freundlichen Grüßen

EA11003EN-00329[4]

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

GERMANY www.bosch.com

Non-responsive content removed

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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

USA	VW 351780085	Fuel	WL 1	66596	08.08.2007	10.09.2007	100 ml	PRO 5470	PRO07-00912.004					
USA	VW351780088	Fuel from filter	3LDP18102 / WL1	74453	24.06.2007	10.09.2007	100 ml	PRO 5471	PRO07-00912.005	<i></i>				
USA	VW351780088	Fuel Filter Drain	WL1	80172	30.07.2007	10.09.2007	100 ml	PRO 5472	PRO07-00912.006					
USA	VW351780088	Fuel from filter	3LDP18102 / WL1	90273	15.08.2007	10.09.2007	100 ml		3 PRO07-00912.007	$A \longrightarrow V$				
USA	VW351780088	Fuel sample	3LDP18102 / WL1	96954	23.08.2007	10.09.2007	100 ml	PRO 5474	PRO07-00912.008					
USA	VW351780089	888	WL1		17.08.2007	10.09.2007	100 ml	_	PRO07-00911.001	838.0	6,5	zu wenig Probe	405	<0.1
USA	VW351780091	Fuel from filter	3LDP18101 / WL1	76895	30.07.2007	10.09.2007	100 ml		PRO07-00911.002	847,8	<5	zu wenig Probe	409	<0.1
USA	VW351780091	Fuel / Water in filter	3LDP18101 / WL1		30.07.2007	10.09.2007	100 ml		7 PRO07-00911.003	846,9	<5	zu wenig Probe	451	<0.1
USA	VW351780091	Fuel from filter	3LDP18101 / WL1		07.08.2007	10.09.2007	100 ml			844,6	<5	zu wenig Probe	501	<0.1
USA	VW351780092	Fuel Filter Drain	WL1		30.07.2007	10.09.2007	100 ml		9 PRO07-00912.009					
USA	VW351780092	Fuel from filter	3LDP18095 / WL 1		08.08.2007	10.09.2007	100 ml		PRO07-00912.010					
USA	VW351780092	Fuel sample	3LDP18095 / WL 1		15.08.2007	10.09.2007	100 mi		PRO07-00912.011				$\overline{}$	
USA	76 Station	Ultra Low Sulfur Diesel Fuel Sample	GQZ-1 / Pump #1 / 15650 Sherman Way		23.08.2007	10.09.2007	500 ml		PRO07-00912.012				$\overline{}$	
USA	To otation	Ultra Low Sulfur Diesel Fuel Sample	GOZ-1		04.09.2007	17.09.2007	500 ml		PRO07-01068.001	$A \longrightarrow V$			$\overline{}$	
USA		Diesel	GQZ-1 / 76 Station / Sherman Way / Haskell		11.09.2007	01.10.2007	100 ml		B PRO07-01068.002					
USA		Diesel	GQZ-1 / # 1 Pump / Sherway / Haskell		21.09.2007	01.10.2007	500 ml		PRO07-01068.002	Λ				
USA	VW351780088	Diesel 15 ppm	3LD P18102 / WL1 / 60k		04.09.2007	22.10.2007	100 ml	_					$A \leftarrow$	1
USA	VW351780088	EQT Fuel Sample	prior to emission test		12.09.2007	22.10.2007	11			A - J				1
USA	VW351780089	Diesel Fuel	50k / WL1		28.07.2007	22.10.2007	100 ml		7 PRO07-01066.005	848,6	8.7	Tu wonia Proba	362	<0.1
USA	VW351780089 VW351780089		100000000		02.10.2007	22.10.2007	100 mi		PRO07-01067.001	848,6	6.0	zu wenig Probe	384	<0.1
USA		Fuel sample	prior E-Lab		_		100 ml			844,4	6,0	41,1	384	<0.1
	VW351780090	Fuel from filter	3LD B17263 / WL1 / 50k		25.09.2007	22.10.2007		-	PRO07-01068.006	$A \longrightarrow V$			4	1
USA	VW351780090	Diesel from water separetor	WL1 / 60k		10.10.2007	22.10.2007	100 ml	The second second second	PRO07-01068.007	$A \longrightarrow I$			4	4
USA	VW351780090	Fuel (pre filter)	3LD B17263 / WL1 / 50k		15.10.2007	22.10.2007	11			4				
USA	VW351780091	Diesel 15 ppm	3LD P18101 / WL1 / 50k		04.09.2007	22.10.2007	100 ml		PRO07-01067.003	843,8	<5	zu wenig Probe	372	<0.1
USA	VW351780091	Diesel 15 ppm	3LD P18101 / WL1 / 96k service		03.10.2007	22.10.2007	100 ml	_	PRO07-01067.004	842,2	<5	zu wenig Probe	440	<0.1
USA	VW351780091	Diesel 15 ppm	NPW / EOT sample from tank		16.10.2007	22.10.2007	11			842,0	5,8	48,2	581	<0.1
USA	VW351780092	Diesel	4 Section 1		03.10.2007	22.10.2007	11	-	5 PRO07-01067.010	$A \longrightarrow T$		4	4——	
USA	VW351780092	Diesel 15 ppm	3LD / WL1 / 50k		08.10.2007	22.10.2007	100 ml		6 PRO07-01067.011	$A \longrightarrow T$	4	4	4	
USA	VW351780093	Diesel 15 ppm	3LD 17088 / WL1 / 82.5k service	_	25.09.2007	22.10.2007	100 ml		7 PRO07-01067.012	$A \longrightarrow r$	4	4	4	
USA	VW351780093	Diesel 15 ppm	3LD D18 / WL1 / 60k		09.10.2007	22.10.2007	100 ml			$A \longrightarrow \mathcal{I}$	4	4	4	4
USA	VW351780093	Fuel (pre filter)	3LD B17088 / WL1		15.10.2007	22.10.2007	11		9 PRO07-01067.014	$A \longrightarrow I$	4	4	4——	
USA	VW35090064	Diesel fuel filter sample	No. 28724; Type of Veh: Golf; No. Of doors; 4; per test plan @ 45 K		15.12.2007	04.02.2008	100 mL		7 PRO08-00293.001	4	4	4	<u> </u>	4
USA	VW351780085	Fuel 5K sample	3LD-18100; Station; KL4		20.10.2007	04.02.2008	100 mL		B PRO08-00293.002	$A \longrightarrow V$	4	4	4 ——'	4
USA	VW351780085	Fuel Drain sample	3LD-18100; Station: KL4		25.10.2007	04.02.2008	100 mL			4	4		4——	
USA	VW351780085	Fuel sample	Station: KL4		14.11.2007	04.02.2008	100 mL	_	PRO08-00293.004	4	4	4	4 ——"	
USA	VW351780085	Fuel sample filter	3LD PI8 100; Station: KL4		27.11.2007	04.02.2008	100 mL		1 PRO08-00293.005		4			
USA	VW351780092	Fuel water drain	3LD-18095; Station; KL4		24.10.2007	04.02.2008	100 mL	_	2 PRO08-00293.006		4		4——	
USA	VW351780092	Fuel from filter Charge	3LD-18095; Station: KL4		24.10.2007	04.02.2008	100 mL		3 PRO08-00293.007		4	4		
USA	VW351780092	Fuel from filter	3LD PI8 095; Station: KL4		03.11.2007	04.02.2008	100 mL		4 PRO08-00293.008	4	4			
USA	VW351780092	Fuel sample	KL4	142637	14.11.2007	04.02.2008	100 mL	PRO 6575	5 PRO08-00293.009	<i></i>	4 L			
USA	VW351780093	Diesel 15 ppm	Related to cold start problems ; Gas Line, Steese Hwy, Pump #5 #1;-50pp; ultra low sulphur		15.12.2007	04.02.2008	1 L	PRO 6576	6 PRO08-00293.010					
USA	VW351780091	Fuel	CBE-000-538 / KL4	128733	28.01.2008	22.02.2008	50 ml	PRO 6716	6 PRO08-00293.011					
USA	VW351780092	Fuel	WL4	155283	24.01.2008	22.02.2008	50 ml	PRO 6717	7 PRO08-00293.012					
USA	VW351780093	Fuel Filter Sample	KL4	117335	28.01.2008	22.02.2008	50 ml	PRO 6718	B PRO08-00293.013					
USA	VW351780091	4 5	Engine Nr.: 3LD / 18101 / Eng. Km.: 50933 km	162388 km		12.11.2008	11	PRO 9195	5 PRO08-00922.001					
USA	VW351780091	Fuel 15 ppm Diesel	Engine Nr.: CBE 000 538 / WL 1	174917 km	30.06.2008	12.11.2008	100 ml	PRO 9196	6 PRO08-00922.002					
USA	VW351780091	Fuel "Water" Drain	WL 1	191331 km	20.08.2008	12.11.2008	125 ml	PRO 9197	7 PRO08-00922.003					
USA	VW351780091	Fuel Filer Drain	Engine Nr.: CBE 000 538 / WL 1 / Kombi Channel 40: Fuel Filter Drain / Kombi Channel 41: 96 000 km Ser	207569 km	24.09.2008	12.11,2008	125 ml	PRO 9198	B PRO08-00922.004					
USA	VW351780091	4 2	E.O.T	211461 km	120	12.11.2008	- 11	PRO 9199	9 PRO08-00922.005					
USA	VW351780093	4 8 1	Engine Nr.: CBE 000 541 / Eng. Km.: 42615 km	142642 km	398	12.11.2008	11	PRO 9200	PRO08-00922.006					
USA	VW351780093	Fuel Sample from Filter	Engine Nr.; CBE 000 541 / WL 1		25.06.2008	12.11.2008	100 ml							
USA	VW351780093	Fuel Filter Drain Sample	Engine Nr.: CBE 000 541 / WL 1		16.07.2008	12.11.2008	100 ml		2 PRO08-00922.008				4	
USA	VW351780093	Fuel Sample from Fuel Filter	Engine Nr.: CBE 000 541 / WL 1	197398 km	28.08.2008	12.11.2008	125 ml	000 0000	3 PRO08-00922.009		4			1

Country Carthurber Singer-Humber States Labeling	C	Milesge (Cer) Milesge (SE)	ов Туре	Kambi Charvel	Kanth Chavel	×	Kantil Channel Konthi Channel	Sampling Date Arrival	Date Sample	Sample Emple Number Humber-CCLAS	Dr. Anati SGS Harage Frate Principal	FADAL Arms SCAL representation (School)	Feire Premokrafie On 614M	Rempeted Oil (Mate) Descript			_ <u>Bernet</u> 07 pc			TEN ANTAGO DININ JANGGO-INJ	Cayed On Service Institut
156. VOX 3637900000	New of sergie.	5450 km 11997 km 12946 km 12046 km 8571 km 25846 km	Fights Tage 5W 50 Fluchs Title 5W 30 SETS Pughs Title 5W 30 Fluchs Title 5W 50 Fluchs Title 5W 50	1				06.09.2007 29.04 14.03.2007 29.04 14.09.2007 29.04 19.01.2007 29.04 06.09.2007 29.04	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	#90-4229 PROST-50481307 #90-4230 PROST-50481300 #90-4231 PROST-50481300 #90-4231 PROST-50481300 #90-4231 PROST-50481300 #90-4231 PROST-50481300 #90-4231 PROST-50481300	13 02 92 -03 23 43	0.1 -0.1 -0.1 0.1 0.2 0.0 0.5	2.59 0.51 7.45 -0.51 0.55 0.41	9,8 9,4 90,1 9,5 9,4 9,6	Dec Accessed Dec Color Dec Color	3 1 792 709 2 0 1120 914 3 1 1050 660 0 8 750 757 2 0 1050 666 2 0 855 746	93 1540 8 8 10 2999 5 9 10 2960 8 9 4 1730 5 0 7 2170 7 9 5 1710 9 0		2 12 2 6 2 8 3 1 3 1 2 9 3 1 3 1 2 7		-2000 -2000
GAR - VAN MOTTMONT - XCETTAS ESS. 500 mm - 100 m		20044 km 30,752 km 44709 km 44795 km 312458 km 3124789	Fuchs Title 5W-38 Eschs Title 5W-30 Fuchs Title 5W-30 Fuchs Title 5W-30 Fuchs Title 5W-30 Fuchs Title 5W-30	NA.	Seeta Charcel 41 - 10 Seeta Charcel 41 - 10 Seeta Charcel 41 - 24 Seeta Charcel 41 - 24 Seeta Charcel 41 - 14			08-09-2007 23-04 18-03-2007 23-04 02-04-2007 23-04 02-34-2007 23-04 18-24-2007 23-04 21-13-2006 27-04	2007 100 H 2007 100 H 2007 100 H 2007 100 H 2007 100 H 2007 100 H	PRO 4230 PRO07 00480 008 PRO 4340 PRO07 00480 009 PRO 4341 PRO07 00480 017 PRO 4343 PRO07 00480 017 PRO 4343 PRO07 00480 017 PRO 4344 PRO07 00480 017	42 42 41 14	0.1 0.2 0.4 0.1 0.2 +0.1	-60 0) 9.51 9.79 -60 01 9.80 9.22	-0.1 0.4 0.8 -0.1 6.5 0.2	\$\frac{9}{40}\$ \$\frac{5}{21}\$ \$\frac{9}{2}\$	0 0 775 688 1 0 761 622 2 8 775 683 0 9 732 787 1 2 750 630 1 8 875 792	7 1594 5 0 4 1590 4 2 5 1790 5 0 2 1770 5 9 4 1990 6 0 8 1970 7 8		1 2 1 1 2 1 1	5.09 5.25 6.00 5.76 6.11 5.24	
USA CRETMET USA USA CR		6002 yes 9164 mis 3190 mis 5447 mis 11556 mis 2842 mis 14532 mis 5624 mis 14622 mis 16240 mis	INSTITUTES					27.12,2000 27.04 06.01,2007 27.04 21.12,2000 27.04 28.12,2000 27.04 06.01,2007 27.04 14.00,2007 27.04	2007 100 ml 2007 100 ml 2007 100 ml 2007 100 ml 2007 100 ml 2007 100 ml	PRO 4346 PROOT 00506-000 PRO 4347 PROOT 01558-000 PRO 4347 PROOT 01152-00 PRO 4349 PROOT 01152-00 PRO 4350 PROOT 01152-00 PRO 4351 PROOT 01152-00 PRO 4351 PROOT 01152-00	49	9,5	3.AA 3.60	13	24 80 18 0 8 70 st 21 0 s	0 0 0/5 710 3 0 1000 558		20 8 264 0 0 24 8 254 0 6	3 1	5.00	
GR		22276 cm. 2916 cm. 26654 cm. 6165 cm. 27564 cm. 2556 cm. 20766 cm. 15296 cm. 5021 cm. 22764 cm.	90' 20 9W 30 9W 30 9W 30					60.04.2007 27.04 16.04.2007 27.04 13.04.2007 27.04 18.04.2007 27.04 08.00.2007 27.04 18.00.2007 27.04	2007. 100 ml 2007. 100 ml 2007. 100 ml 2007. 100 ml 2007. 100 ml 2007. 100 ml	#90.4252 PR007.01112.005 #90.4253 PR007.01112.005 #90.4254 PR007.01112.005 #90.4254 PR007.01112.005 #90.4254 PR007.01112.015 #90.4251 PR007.01112.011											
GA		3151 on 3152 om 0104 om 0104 om 0104 om 0104 om 0104 om 01052 om 5252	VWSchooper Intone					21.12.2000 ET 64 27.12.2000 ET 64 95.81.2007 ET 64 12.01.2007 ET 64 06.03.2007 ET 64 13.00.2007 ET 64	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt	#90.4288											
USA CREMENT USA DEPOSICA CONTROL USA CREMENT USA CREME		\$1554 are \$770 are \$170 are \$170 are \$170 are \$170 are \$177 are \$1973 are \$1	intarel proper					18:04:2007 27:04 05:03:2007 27:04 12:03:2007 27:04 23:03:2007 27:04 28:03:2007 27:04	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 4285 PROOF 01132 019 PRO 4285 PROOF 01132 029 PRO 4270 PROOF 01132 029											
CAR		ed	nsive conter	nt remov	Konta Channel 41.5/A Norta Channel 41.5/A Sonta Channel 41.5/A			03.00 2007 27.04 03.00 2007 27.04 13.00 2007 27.04 51.00 2007 30.04 08.02 2007 30.04 07.00 2007 30.04	2007 100 or 2007 100 or 2007 100 or 2007 100 or 2007 100 or 2007 100 or 2007 100 or	PRO 4271 PRO07 01115 025 PRO 4272 PRO07 00380 004 PRO 4273 PRO07 00380 004 PRO 4283 PRO07 01114 003 PRO 4284 PRO07 01114 003 PRO 4284 PRO07 01114 003	#1 #1	-61 -01	3.18 3.05	9,4	35. 32 24 6 8 12 18 8 0 8	A 9 815 Tre	8 1930 8 b 4 1780 3 0	20 8 97 0 8 1 1 20 8 8	2 to	522 527	
USA VOYSSTROOM 24 K USA VOYSSTROOM SUZP14 100 16 K USA VOYSSTROOM SUZP14 100 16 K USA VOYSSTROOM SUZP12 10 16 K USA VOYS	New of caregos Of caregos before of disease	2522 km 2580 km 25000 km 17180 km 47180 km 27600 20055 km	Fusin Trac 9W-30 Fusin Trac 5W-30 Fusin Trac 5W-30 Fusin Trac 5W-30	Sunte channel 40: 135 Sontin channel 40: 107 Kontin channel 40: 20	Kools Charrel 41, 73 Sools Charrel 41, 80 Funds Charrel 41, 12 Sools Charrel 41, 13 Sools Charrel 41, 8			06.03,2007 30.04 08.03.2007 30.04 08.03.2007 30.04 23.03.2007 30.04 04.04.2007 30.04	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 4295 PROOF 01114-004 PRO 4295 PROOF 01114-005 PRO 4297 PROOF 01114-005 PRO 4299 PROOF 01114-005 PRO 4299 PROOF 01114-005 PRO 4300 PROOF 01114-005 PRO 4301 PROOF 01114-015											
G. V. VVII 3: 1 (1998) . 1 (1998)	1 rouge	42497 Nn 42497 Nn 19204 Are 18308 Nn 22971 Are 32508 41258 Are	Fuchs Tree 5W 30 Fuchs Tow 5W 30 Fuchs Tree 5W 30 5W 36	Scients, dracties 40, 86	Konto Charon A1, 23 Konto Charon A1, 5			25.04.2007 20.04 25.02.2007 30.04 01.03.2007 30.04 13.03.2007 30.04 00.04.2007 30.04	2007 100 H 2007 100 H 2007 100 H 2007 100 H 2007 100 H	PRO 4302 PROOF 01114-011 PRO 4302 PROOF 01114-012 PRO 4303 PROOF 01114-012 PRO 4305 PROOF 01114-014 PRO 4305 PROOF 01114-014 PRO 4307 PROOF 01114-014											
LSA VY993/379000 3-0,074.100 52.4 LSA VY993/379000 3-0,012.293 5.5 LSA VY993/3790000 3-0,012.293 5.5 LSA VY993/3790000 10.0 LSA VY993/379000 10.0 LSA VY993/37900 10.0 LSA VY993/3790 10.0 LSA VY993/	. Of sample	41936 No. 8343 No. 8523 No. 5442 No. 19673 No. 20095 No. 25440 No.	Fuchs Total 500 30 Fuchs Total 500 30 GH Fuchs Total 500 30 Fuchs Total 500 30 Fuchs Total 500 30	Continuous 40 NA	Konfe Charrel 41, 38 Sonfe Charrel 41, NA Konfe Charrel 41, NA Konfe Charrel 41, NA Konfe Charrel 41, 10			19.09.2007 30.04 09.01.2007 30.04 81.01.2007 30.04 07.02.2007 30.04 07.03.2007 80.04 17.61.2007 30.04	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt	PRO 4508 PROCEDURADE PRO 4509 PROCEDURADE PRO 4511 PROCEDURADE PRO 4515 PROCEDURADE PRO 4515 PROCEDURADE											
156	Oit sariste An Lot sariste oit sariste 30kom Alconom "Timet" oit sariste here of sariste	30551 No. 39007 Am 48197 Am 48197 Am 50097 Am 50097 Am	Fuchs Tran EM 30 GPI Fischs Tran EM 30 GFI Fuchs Tran 5W 30 Fuchs Tran 5W 30	Konti charret 40: 112	Special Charges 41, 10 Special Charges 41, 10			06.02 2007 30.04 16.02 2007 30.04 20.02 2007 30.04 28.02 2007 30.04 28.02 2007 30.04	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 4316 PRO07 01116 000 PRO 4316 PRO07 01116 000 PRO 4317 PRO07 01116 000 PRO 4317 PRO 4317 PRO 4318 PRO 4318 PRO 4318 PRO07 01116 000 PRO 4318 PRO 4318 PRO07 01116 000 PRO 4318 PRO 4318 PRO07 01116 000 PRO 4318 PRO 431											
John 19935-178000 3-D-P16-006 58-5	New of sample fresh of sample	##502 8th 79244 8et 79245 8th 79360 8et 88417 8et 82417 8et 8205 8th	Fuchs Tipe 589.30 GTs Fuchs Tipe 589.30 GTs	Soreta channel 42 0 Social channel 60, 74 Social channel 40, 60 Social channel 40, 111	Kontis Charral 41, 15 Kontis Charral 41, 9 Kontis Charral 41, 9 Kontis Charral 41, 27 Kontis Charral 41, 27 Kantis Charral 41, 37			20.00.2007 30.04 20.00.2007 30.04 30.00.2007 30.04 10.04.2007 30.04 10.04.2007 30.04	2007 100 HE 2007 100 HE 2007 100 HE 2007 100 HE 2007 100 HE	PRO 4320 PROOF 01134 (02) PRO 4321 PROOF 01134 (03) PRO 4322 PROOF 01134 (03) PRO 4324 PROOF 01134 (03) PRO 4324 PROOF 01134 (03) PRO 4325 PROOF 01134 (03) PRO 4326 PROOF 01134 (03)											
USA V995 TRANS USA US	Nexus angle and rights Of	25423 Am 27405 Am 25142 Am 31973 Am 1973 Am 1995 Am	Fuchs Tries SM 30 GT: Fuchs Tries SM: 30 Fuchs Tries SM: 30 Fuchs Tries SM: 30 Fuchs Tries SM: 30 Fuchs Tries SM: 30	Konda charred 40 na Konda charred 40 NA Konda charred 40 NZ Konda charred 40 NZ	Koets Charrel 41: In Sonts Charrel 41: In Sonts Charrel 41: In Sonts Charrel 41: In Sonts Charrel 41: In			22.10,2007 30.04 26.02.2007 80.04 07.09.2007 30.04 15,03.2007 30.04 16,03.2007 30.04	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt	PRO 4327 PROOF 01114-036 PRO 4308 PROOF 01114-033 PRO 4329 PROOF 01114-035 PRO 4330 PROOF 01114-046 PRO 4331 PROOF 01114-046 PRO 4332 PROOF 01114-046											
GA	seed ergins DE	4803 orb. 31515 Ket 24505 Am 43074 Am 56931 Am 56931 Am	Fuchs Title 5W 30	Noote charries 40, 85, Sontic charries 40, 212 Sontic charries 40, 140	North Charast 41, 19 Komfe Charast 41, 19 Komfe Charast 41, 29 North Charast 41, 29 Komfe Charast 41, 28	1624	onti Charriel 47.0 Spots Charriel 68. Into Charriel 47.0 South Charriel 68. Into Charriel 47.0 South Charriel 68. Into Charriel 47.0 South Charriel 68.	04.08, 11,04.2007 14.05, 02.04.2007 14.05, 06.04.2007 14.05, 01.05.2007 14.05, 01.05.2007 14.05	2007 100 HE 2007 100 HE 2007 100 HE 2007 100 HE 2007 100 HE 2007 100 HE	PRO 4303 PROOF 01114-043 PRO 4306 PROOF 01114-043 PRO 4306 PROOF 01514-043 PRO 4340 PROOF 01134-043 PRO 4341 PROOF 01030-003 PRO 4341 PROOF 01030-003	73 73 40.1	0,5	3.20 -0.07 3.88	13	01 05 0 0 0 0 4 0 0 0 0 42 17 0 0 0	0 0 1460 (100	3 200 1 8	b 1 21 0 0	1 1	5,64 6,64 6,25	
156 9990170000 NA 465 156 9990170000 NA 465 156 156 156 156 156 156 156 156 156 156	her of sengle CH sengle from refined a sand expresion. Mr. 25 - Thick Jeda Mr. 25 - Short Jeda Mr. 25 - Short Jeda Mr. 25 - Short Jeda			Kontruteret 42.0	Kontr. Charact. 61. II	50	min Cherrel AT 0 . Korda Cherrel Hit I	(6.04.2007 14.05, 18.05, 25.05, 01.06, 61.06	2007 100 HE 2007 100 HE 2007 500 HE 2007 500 HE 2007	PRO 4365 PROCE 01155 000 PRO 4365 PROCE 01155 000 PRO 4420 PROCE 01155 000 PRO 4421 PROCE 01155 000											
USA. 1056. 19003179099 N.O.417.007 S.O.417.007 S.O.417	Mr. 25 - Minck Jacks Alts 25 - Silver Jacks	#9872 No. 20863 No. 51727 No. 57731 No.	Fuchs Tran 5W 50 Fuchs Tran 5W 30	Scetti Charral 60, 177 Xorde charral 67, 0 Scetti charral 60, 50	Konta Charrel 41, NA Konta Charrel 41, 50 Konta Charrel 41, 5 Konta Charrel 41, 51	500 500	ola Charpel 47, N.A. Sureta Charpel 48, In etts Charpel 47, 0. Sonta Charpel 48, o etts Charpel 47, 0. Sonta Charpel 48, o etts Charpel 47, 0. Sonta Charpel 48, o	08.05.2007 01.06 14.05.2007 01.06 25.05.2007 01.06	2007 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 4426 PR007 01115 009 PRO 4427 PR007 01115 010	#1 22	101	-0.64 -0.7	10.1	0 6 0 0 0 34 23 11 6 8		9 1470 4 0 8 1990 5 8	3 0 1 0 4 7 1 3 3 0 0 0	2 0	5,60 5,60	
1564 - WHOSE T-ROOMS - SLIC PT-S FEE 1565 - WHOSE T-ROOMS - SLIC PT-S FEE 1566 - WHOSE T-ROOMS - SLIC PT-S FEE 1567 - WHOSE T-ROOMS - SLIC PT-S FEE 1567 - WHOSE T-ROOMS - SLIC PT-S FEE 1567 - WHOSE T-ROOMS - SLIC PT-S FEE 1568 - WHOSE T-ROOMS - SLIC PT-S FEE 1569 - WHOSE T-ROOMS - SLIC PT-S FEE 1560 - WHOSE T-ROOMS - SLIC PT-S		#7400 km #9002 km 0 #9072 km 30805 km #9750 km	Fushs Tow 5W-50 Fighs Tow 5W-50 Fushs Tow 5W-50 Fushs Tow 5W-50	Konto charres 40 54 Scotti charres 40 504 Konto charres 40 0 financio	Konds Chartel 41, 25 Sorbs Chartel 41, 56 Sorbs Chartel 41, 5 Sorbs Konds Chartel 41, 5 Sorbs Konds Chartel 41, 13 Sorbs Chartel 41, 13	538 538 537 538 538 538	met Charmel 47.0 Contex Charmel 48.0 met Charmel 47.0 Kontex Charmel 48.0	11.05.2007 81.06. 06.05.2007 81.06. 09.05.2007 81.06. 22.05.2007 81.06. 20.05.2007 81.06. 20.05.2007 81.06. 20.05.2007 81.06.	2007 100 ml 2007 100 ml 2007 100 ml 2007 100 ml 2007 100 ml 2007 100 ml 2007 100 ml	PRO 4426 PROOF 01115.012 PRO 4430 PROOF 01115.012 PRO 4430 PROOF 01115.012 PRO 4431 PROOF 00540.000 PRO 4432 PROOF 00540.000 PRO 4434 PROOF 00540.000 PRO 4434 PROOF 00540.000	3.8 -0.1	0,5 -0,1	9.65 -0.51	0.0 -0.1	90 0 4 0 1 0 0 0 0 0	Z 0 061 620 6 0 904 725		8 8 7 0 8		6.79 6.73	
Lank VPX947150001 35.0 F8394 Link VPX947150001 35.0 B17.004 Link VPX947150001 35.0 L1794 Link VPX947150001 35.0 L1794 Link VPX947160001 35.0 L1794 Link VPX947160001 35.0 L1793 Link VPX947160001 35.0 L1793 Link VPX947160001 35.0 L1793 Link VPX94716001 35.0 L1793 Link VPX947160001 35.0 L1793 Link VPX94716000 Link VPX94716000 Link VPX9471600 Link VPX9471600	Mr. 25 / Black Jacks Mr. 26 / Black Jacks	\$7697 km \$1759 km 41267 km 51727 km 63316 km 13717 km 17827 km	Fruits Trac 5W 50 Fults Trac 5W 50 Fults Trac 5W 50	Words charged 40: 122	Voods Charrel 41 41 Konds Charrel 41 34 Fresh (d Sergie Konds Charrel 41 7	, Yue	mbi Charcel 47: 0. Koote Charcel 48: 1 mbi Charcel 47: 0. Koote Charcel 48: 1 fresh of Seinele Fresh of Seinele 48: 1 Koote Charcel 48: 0. Koote Charcel 48: 1	29,05,3007 01,06 16,05,3007 01,06 14,05,2007 01,06 15,05,2007 01,06 5W22/07 72,06	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 500 mt 2007 500 mt	PRO 4435 PRO07 01135.015 PRO 4436 PRO07 01135.015 PRO 4436 PRO07 01135.015 PRO 4436 PRO07 01135.015 PRO 4436 PRO07 01135.016		- 0.0	9.27					8 6 7 0 0 1 4 9 D 0 0		522	
CAA	however, 100 line	50042 km 50043 km 64720 km 56578 km 56578 km 56518 km 54618 km	Prints Tree 5W-30	Special colorest 40, 56 Konta colorest 40, 65 Konta colorest 40, 147	Konta Chanal 41: 91 Konta Konta Chanal 41: 9 Konta / Konta Chanal 41: 40	Charlest 40: 0 500 Principal 40: AUP 10:00	unds Chernel 47.0 Viceda Chernel 48.0 ceta Chernel 47.0 Speta Chernel 48.0 ceta Chernel 47.0 Speta Chernel 48.0 ceta Chernel 47.0 Viceda Chernel 48.0	\$1.08.2007 13.07 81.08.2007 13.07 07.09.2007 13.07 91.26.2007 13.07 00.87.2007 13.07 00.87.2007 13.07	2007 100 ox 2007 100 ox 2007 100 ox 2007 100 ox 2007 100 ox 2007 100 ox	PRO 4627 PRO07 01115.020 PRO 4628 PRO07 01115.021 PRO 4629 PRO07 01115.022 PRO 4620 PRO07 06755.022 PRO 4621 PRO07 06755.022 PRO 4621 PRO07 06755.022	3.4 -(E) 0.5	0.2 -0.1	924 -000 9.44	6.3 -6.1 -6.5	57 7 3 6 9	U 0 501 548 0 0 540 886 0 0 504 518		# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1	5,20 3,94 4,62	
CSA	Sentas Atr. 25 / Stor. Julia Mr. 25 / Black Julia	57767 Mm 561851 Am 000000 Mm 57156 Am	Facts Tree SW 50 Facts Tree SW 50 Facts Tree SW 50	Konto (flumer 60, 60 Konto (flumer 60, 21	Koesti Charret 81: 15 Koesti C	Zamel Rt MF . Kur Zamel Rt MF . Kur	erbi Charcel 47-0. Soeth Charcel 48-1 erbi Charcel 47-0. Soeth Charcel 48-1 mbi Charcel 47-0. Soeth Charcel 48-1	91.85.2007 13.67 20.65.2007 13.67 97.06 17.06 17.06 17.06	2007 100 pt 2007 100 pt 2007 100 pt 2007 100 pt 2007 100 pt 2007 100 pt	PRO 4633 PROOF 01118 (N) PRO 4634 PROOF 01118 (N) PRO 5415 PROOF 01882 (N) PRO 5415 PROOF 01118 (N) PRO 5415 PROOF 01118 (N) PRO 5415 PROOF 01118 (N)	1.5	-03	6)	0.4	30. ts. 2 0 4			(B) W W 0	=	5.50	
USA V990179000 3,0017294 40X 404 40X 40X		93728 Am 93728 Am 71066 Am 80430 Am 80436 Am 60596 Am	Fresh Fruths Title SW 30 Fruths Title SW 30 Fruths Title SW 30 Fresh Fruths Title SW 30 Fresh Fruths Title SW 30 Fresh Fruths Title SW 30	Sunts chemet 46: 126	Sonds Charrel 41, 35	- 50	onto Charral AT. 6	00.08.2007 03.09 00.08.2007 03.09 10.08.2007 03.09 23.08.2007 03.09 23.08.2007 03.09 07.08.2007 03.09	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 5441 PROOF 01110 000 PRO 5440 PROOF 01110 011											
CAL VANDSTROOM S. 6F2410 AND C. 6F2410 AND C		56006 km 24653 km 74653 km 80172 km 90273 km 90273 km	Fresh Facts Toe: 5W 30 Fachs Toe: 5W 30 Fachs Toe: 5W 30 Fresh Facts Toe: 5W 30 Fresh Facts Toe: 5W 30 Facts Toe: 5W 30	Sunti charrel 40, 165 Santi charrel 40, 157	Konta Charrel 41. 51 Konta Charrel 41. 21	60	nth Charmi 47.0 Konto Charmi 48.0 Hith Charmi 47.0 Konto Charmi 48.0 Hith Charmi 47.0 Konto Charmi 48.0	24.06.2007 03.00 24.06.2007 03.00 50.07.2007 03.00 15.06.2007 03.00 13.06.2007 03.00	2007 100 HS 2007 100 HS 2007 100 HS 2007 100 HS 2007 100 HS	PRO 5448 PRO07 01310.012 PRO 5450 PRO07 01110.013 PRO 5450 PRO07 01110.014 PRO 5451 PRO07 01110.015 PRO 5451 PRO07 01110.015											
LSA VIRONI TROMIN B, DAT TOT IS. SE VIRONI TROMIN B, DAT T		74056 Ato, 81554 No. 94514 Ato 75805 Ato 82054 Ato, 95083 Ato	Fruits Title 599 30 Fruits Title 599 30	Cureto chaccas 40, 145 Sureto chaccas 40, 160 Kombi chaccas 40, 60	Konda Charriet 61, 17. Konda Charriet 61, 19. Konda Charriet 61, 64. Konda Charriet 61, 54. Konda Charriet 61, 55. Konda Charriet 61, 65.	Service Service	mbi Charral 47 0. Konta Charral 48 o mbi Charral 47 0. Konta Charral 48 o	20.07.2007 07.00 09.06.2507 07.00 17.07.2007 07.00 90.07.2007 07.00 14.08.2007 07.00 27.07.2007 07.00	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt	PRO 5454 PROCT 00000,001 PRO 5455 PROCT 00000,000 PRO 5455 PROCT 00000,000 PRO 5455 PROCT 00000,000 PRO 5456 PROCT 00000,000 PRO 5450 PROCT 01113,012	13 13 13 43 43	0.5	9.25 9.28 9.79 9.87 9.69	1.0	37 F 2 0 0 39 8 3 0 0 54 19 4 0 8 100 16 10 0 3 41 0 4 0 3	T IS 1945 F021 E IS DAS 160	8 2275 9 8 4 2000 0 0	1	3 1	6,77 4,91 4,91 4,94 4,72	
LGA VERSIT TRONGS 41A VERSIT TRONGS 56 CGA VERSIT TR	Ma 25 / Mack Jets Ma 25 / Mack Jets Ma 26 / Mack Jets	705641 No. 105541 No. 111564 No. 13910 No. 11562 No. 11561 No.	Fresh Fusts Trans SW 30 Fusts Trans SW 30 Fusts Transfer 30 GT1		- 10 C 31 C 21 C 0 C C 3		entic Charmel 47: 0 Soveta Charmel etc. o entir Charmel 47: 0 Assets Charmel 48: 1	18.08.2007 10.09, 08.08.2007 03.09 14.08.2007 03.09 10.09, 10.09 10.09	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt	PRO 5460 PROOF 01196,013 PRO 5461 PROOF 01196,023 PRO 5463 PROOF 0109,001 PRO 5464 PROOF 01090,001 PRO 5464 PROOF 01090,002 PRO 5464 PROOF 01090,002											
156 1528401 252 156 15	OEM OEM	13923 mb 10403 mb 4933 mb 00164 mb 5064 mb	Ospral					14.06.2007 10.00 01.08.2007 10.00 12.08.2007 10.00 00.08.2007 10.00 14.06.2007 10.00	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 5486 PROOF 91000 004 PRO 5487 PROOF 91000 005 PRO 5489 PROOF 91000 005 PRO 5489 PROOF 91000 005 PRO 5490 PROOF 91000 005 PRO 5491 PROOF 91000 005											
USA ISSENSI US		0024 rem 4502 cm 14703 cm 4502 cm 54703 rem 4502 cm 6575 rem 5550 rem 5550 rem 5570 rem 5520	SW 36 SW 30 Organi Organi Organi Organi					27.06.2007 10.09 21.06.2007 10.09 06.06.2007 10.09 13.06.2007 10.09 16.06.2007 10.09	2007 100 ref 2007 100 ref 2007 100 ref 2007 100 ref 2007 100 ref 2007 100 ref	PRO 5485 PROOF 01990 011 PRO 5495 PROOF 01990 011 PRO 5496 PROOF 01990 011 PRO 5496 PROOF 01990 011 PRO 5496 PROOF 01990 011 PRO 5496 PROOF 01990 011											
GBA CR27M022 USA		33045 Sen 3287 Ben 31722 cm 5064 cm 39051 cm 4092 cm 34755 cm 13607 cm 37043 Ben 3184 Ben	5W 40 2W 30 5W 50 5W 50 5W 50					27 (4 2007 10 09 15 (6 2007 10 09 01 (6 2007 10 00 25 24 2007 10 00 00 66 2007 10 00	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt	PRO 5409 PRO07 01000 017 PRO 5500 PRO07 01000 018 PRO 5501 PRO07 01000 019 PRO 5500 PRO07 01000 02 PRO 5500 PRO07 01000 02											
USA		#2006.000. 02.13 cm. 44213 cm. 10260 cm. 50064.000. 3742.000 50200.000. 50200.000. 50270.000.	EW 31 EW 31 EW 31					29.85-2007 10.00 04.85-2007 10.00 04.85-2007 10.00 26.86-2007 10.00	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 5664 PROOF 01980 922 PRO 5666 PROOF 01980 922 PRO 5667 PROOF 01980 922 PRO 5667 PROOF 01980 922 PRO 5668 PROOF 01980 922 PRO 5669 PROOF 01980 922 PRO 5649 PROOF 01980 922 PRO 5649 PROOF 01980 922											
USA CRESTNET USA C		20021 min 5565 26073 min 10010 min 19643 min 5607 min 20570 min 5602 min 24500 min 19500 min 27098 min 2666 min	6W 36 5W 31 5W 30 5W 90					00.09.2007 10.09, 07.06.2007 10.09, 15.05.2007 10.09, 14.05.2007 10.09	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 5611 PROOF 01000.000 PRO 5610 PROOF 01000.001 PRO 5610 PROOF 01000.001 PRO 5616 PROOF 01000.001 PRO 5616 PROOF 01000.001 PRO 5616 PROOF 01000.001											
MA CRESSON		31833 om 7413 om 92133 om 4524 om 14850 om 16431 om 2098 om 8025 om 2098 om 1037 om 20917 om	5W 30 5W 30 5W 30					\$1.05.0007 01.00 \$1.05.2007 01.05 10.05.2007 01.00 20.05.2007 10.00 02.06.2007 10.00	2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms 2007 100 ms	PRO 3617 PRO07 01000.000 PRO 3616 PRO07 01000.000 PRO 3616 PRO07 01000.001 PRO 3620 PRO07 0100.006 PRO 3621 PRO07 0100.005 PRO 3621 PRO07 0100.005											
USA CREMINE USA CR		36671 mm 5207 mm 4025 mm 5207 mm 5207 mm 5207 mm 5207 mm 52091 mm						11.07.2007 10.00 20.07.2007 10.00 00.00.2007 10.00 18.00.2007 10.00 04.00.2007 17.00 17.00	2007 100 m8 2007 100 m8 2007 100 m8 2007 100 m8 2007 100 m8 2007 100 m8	PRO 5620 PROOF 01000.041 PRO 5624 PROOF 01000.041 PRO 5626 PROOF 01000.042 PRO 5626 PROOF 01000.044 PRO 5636 PROOF 01001.001 PRO 5636 PROOF 01001.002	83	6.0	243	43	- 65 38 10 0 9 9 66 55 10 0 0 0	1. 8 509 508	4 1500 3 9 1 1400 3 h	7. 0. 28. 0. 2. 7 0. 25. 0. 0.	1 1	E.00	
USA CRUTAGE USA CRETARIA USA USA	Mr. 25 / Marin Jerta Mr. 25 / Minis Jerta Mr. 20 / Minis Jerta Mr. 26 / Shore Jerta Mr. 26 / Shore Jerta	14764 (rits 15404	- Contract					04.09.2007 17.09 17.09.2007 81.10 24.09.2007 81.10 17.09.0007 91.10	2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt 2007 100 mt	#90 5557 PRO07 01116.022 PRO 5556 PRO07 01116.022 PRO 5650 PRO07 01116.025 PRO 5651 PRO07 01116.025 PRO 5652 PRO07 01116.025 PRO 5653 PRO07 01116.025 PRO 5770 PRO07 01626.001											
CRA		54747 om 54747 om 79577 om 84694 om 90067 om 93136 om	200 201 200 200 200 201 200 201 200 201					27.09.2007 16.10. 24.09.2007 16.10. 11.09.2007 16.10. 24.09.2007 16.10. 24.09.2007 16.10.	2007 50 set 2007 50 set 2007 50 set 2007 50 set 2007 50 set	PRO 8771 PRO07 01601.000 PRO 5772 PRO07 01601.000 PRO 3773 PRO07 01601.000 PRO 5774 PRO07 01601.000 PRO 5775 PRO07 01600.000											
GR259600 GR259600 GR259600 GR259600 GR259600 GR259600 GR2596000 GR259600000 GR2596000 GR25960000 GR25960000 GR25960000 GR2596000000 GR25960000 GR25960000000000000 GR2596000000000000000000000000000000000000		26500 m/s 2162 mm 16513 mm 2571 mm 2671 mm 5600 mm 26726 mm 10075 mm 26736 mm 4750 mm	5W 39 5W 39 5W 39 5W 30 5W 30					01.09.2007 16.10. 11.09.2007 16.10. 36.09.2007 16.10. 07.09.2007 16.10. 19.09.2007 16.10. 08.19.2007 16.10.	2007 50 set 2007 50 set 2007 50 set 2007 50 set 2007 50 set 2007 50 set	PRO 57% PROCEDURES. PRO 5779 PROCEDURES. PRO 5779 PROCEDURES. PRO 5779 PROCEDURES. PRO 5780 PROCEDURES. PRO 5781 PROCEDURES. PRO 5781 PROCEDURES. PRO 5781 PROCEDURES.											
USA NOSMANII USAA NO		19373 vin. 4408 vin. 25781 vin. 4408 vin. 25080 vin. 38798 vin. 38798 vin. 38798 vin. 31008 vin. 31008 vin.	200 300 200 300 200 300 200 300					01 06 2007 16.10. 17.09.2007 10.10. 04.19.2007 16.10. 20.08.2007 16.10. 13.06.2007 16.10. 24.09.2007 16.10.	2007 50 sst 2007 50 sst 2007 50 sst 2007 50 sst 2007 50 sst 2007 50 sst	PRO 5790 PROOF GERRALES PRO 5794 PROOF GERRALES PRO 5794 PROOF GERRALES PRO 5796 PROOF GERRALES PRO 5794 PROOF GERRALES PRO 5794 PROOF GERRALES											
DEA NOTEMBER		24550 mm 44172 mm 5620 mm 19624 mm 19635 mm 19635 mm 19635 mm 19637 mm	100 30 uniquest record of uniquest record of uniquest 100 30 100 30					06.19.2007 16.10. 06.19.2007 16.10. 06.19.2007 16.10. 04.09.2007 16.10. 12.09.2007 16.10. 21.09.2007 16.10.	2007 50 rel 2007 50 rel 2007 50 rel 2007 50 rel 2007 50 rel 2007 50 rel	PRO 5799 PROST 01505 SD PRO 5794 PROST 01505 SD											
LGA		5001 / mis 50080 mm 16731 mm 4643 / mis 16945 mm 20513 mm 16275 mm 20477 mm 2060 mm	Instanti Inspired record of the col- origanal record of Sec. col- tive col-					24.59.2867 Ht.10 02.19.2967 Ht.10 01.19.2867 Ht.10 24.59.2867 Ht.10 06.09.2807 Ht.10	2007 50 set 2007 50 set 2007 50 set 2007 50 set 2007 50 set	#90 578											
100	Freeti Oit	5000 cm 20500 65200 90004 73240 90000	Shell Styles Frote Tree SW 80		Konth Chanal 41: 112 Konth Chanal 41: 11 Konth Chanal 41: 11 Konth Chanal		eki Chanal 47, 499 Kunti Chanal 48, 1	29:58.2007 No.10. 5 On.10.2007 82.10. 20:08.2007 82.10. 04:09.2007 82.10. 04:10.2007 82.10. 04:10.2007 82.10.	2007 50.08 2007 50.04 2007 50.04 2007 50.08 2007 50.08	PRO 5862 PRO07 0103 007 PRO 5811 PRO07 01103 007 PRO 5812 PRO07 01103 007 PRO 5813 PRO07 01103 007 PRO 5814 PRO07 01103 007 PRO 5814 PRO07 01103 007	50 50 60 60 60										
Graph 1990 1790	Water OR 60'S Gooder secrete G12 60'S G0 frest OR frest OR	105900 100004 100004 8.1593 8.1450 8.1450	Fuchs Tipe SW 80 Fuchs Tipe SW 80 Fuchs Tipe SW 90	100000000000000000000000000000000000000	Konta Charrel 41, 24 Konta Charrel 41, 73			22.10 22.10 28.07.2007 22.10 25.09.2007 22.10	2007 50 mt 2007 50 mt 2007 50 mt	PRO 3816 PRO07 01116,000 PRO 3816 PRO07 01116,004 PRO 3816 PRO07 01116,004 PRO 3819 PRO07 01016,004 PRO 5820 PRO07 01016,004 PRO 5821 PRO07 01116,004	41	the state of	8.56 1.52	10.1 0.7	6 0 to 0 d	0 0 500 500 1 0 550 500	3 1500 S 0 3 1600 2 0	7 7 7 7	1 0	5.71	
Lista (1990) 29000 S.D. S.	Feat Of	9091 9791 9009 9009 9009 9005 10076	Fuchs Tree 5W 30 Fuchs Tree 5W 30	Surefu (Facces) 40: 129	Konda Charral 41, 10 Konda Charral 41, 34		eki Charriel 47-184. Koreki Charriel 60 M	04 09 2007 22 10 04 09 2007 22 10 04 10 2007 22 10 06 10 2007 22 10	2007 50 HI 2007 50 HI 2007 50 HI 2007 50 HI	PRO SACE PROOF 01191.000 PRO SACE PROOF 01001.000 PRO SACE PROOF 01001.000 PRO SACE PROOF 01001.000 PRO SACE PROOF 01101.001	-01 -14 -14	101 101 101	9.74 9.30 9.45	(0.1 9.3 4.5	0 0 0 0 0 17 0 1 0 9 10 0 3 0 3	0 8 540 000 8 9 540 570 0 8 806 550	2 1500 6 9 3 1600 6 9 3 1600 7 8	3 8 8 8 8 1 4 1 9 8 2 8 4 0 4	1 1	5,70 5,30 8,07	
1993 1990	Missipe OR French DE Senton, French OR Senton, Missipe OR	121506 45733 85738 56450 96420 20.12.2165	Profes Title 5W 30 Fuchs Title 5W 30					25.09.2007 22.10 25.09.2007 22.10 01.19.2007 22.10 09.19.2007 22.10	2007 50 mi 2007 50 mi 2007 50 mi 2007 50 mi	PRO 5829 PRO07-01196-062 PRO 5830 PRO07-01196-064											
USA 2005/20098 8-0-24100 USA 2005/20098 8-0-24100 USA 2005/20098 8-0-2100 USA 2005/20098 8-0-21000 USA 2005/2005/20098 8-0-21000 USA 2005/2005/2009 USA 2005/2005/2005/2005/2005/2005/2005/2005		00504 08006 002441 (18480 126733 128971	Fuchs Train 5W 30 Fuchs Train 5W 30 Fuchs Train 5W 30 Cascod 80T 5W 30 General 80T 5W 30 Fuchs Train 5W 30		Sentscherent 41:22 Sentscherent 41:32			27.11.2007 32.02 27.11.2007 32.02 95.01.2008 32.02	2008 50 HB 2008 50 HB 2008 50 HB	#80 6699 PRODE CODE OF REGISTERS OF PRODE CODE OF REGISTERS OF REGISTE	85 -61	.01 .0.1	3.73	#) %	41. 79 49 0 2 110 7s 4s 0 1	1 17 859 580 2 5 506 625	7 1790 12 9 9 1865 11 1	7 30 X 160 U T	2.	6.75	
1-0-0. VPSS3.7-00009 B.CPT Moreon 1-0-0. VPSS3.7-00009 B.CPT Moreon 1-0-0. VPSS3.7-00009 B.CPT MOREON 1-0-0. VPSS3.7-000000 B.CPT MOREON 1-0-0. VPSS3.7-000000 B.CPT MOREON 1-0-0. VPSS3.7-000000 B.CPT MOREON 1-0-0. VPSS3.7-000000 G.CRT MOREON 1-0-0. VPSS3.7-00000 G.CRT MOREON 1-0-0. VPSS3		100048 140073 140093 150093 150093 117305	Fuchs Title 5W-30 Fuchs Title 5W-30 Fuchs Title 5W-30 Cashed 80T 600 JA 5W-30 Cashed 80T 800 58030 Cashed 80T 800 58030 Cashed 80T 800 A 5W-30 Cashed 80T 800 A 5W-30	Sometichers (40.40	Gebichmel 41.28			20.11.2007 22.02 20.11.2007 22.02 24.01.2008 22.02 08.01.0008 22.02	2008 50 set 2008 50 set 2008 50 set	PRO 6197 PROBE SOST SET PRO 6197 PROBE SOST SET PRO 6198 PROBE SOST SET PRO 6198 PROBE SOST SET PRO 6199 PROBE SOST SET PRO 6191 PROBE SOST SET PRO 6193 PROBE SOST SET PRO 6193 PROBE SOST SET PRO 6193 PRO 66 SOST SET PRO 6193 PRO 6193 PRO 66 SOST SET PRO 6193 PRO 619											
USA VWSS1780005 USb,Q,18109 US	neparate of security resource of security	117358 325535 56506 336173 16366 19791 28556	Central BOT 909 LA 5W 50 5W36 BOT 909 Flucts Tiles 5W 30 BOT 909 5R/50 5W 38 Central BOT 909 LA 5W 36 Central BOT 909 LA 5W 36	Sonts (facult 40, 81, 10, 100, 100, 100, 100, 100, 100,	Contrateced ATTR Sents Charmel ATTR			17.11.2007 22.02 07.02.2006 22.02 15.02.2008 06.06 03.03.2008 06.06 14.03.2008 06.06	2008 50 rel 2008 50 rel 2008 100 rel 2008 100 rel 2008 100 rel	PRO 6714 PRO06.00201.014 PRO 6715 PRO06.00262.003 PRO 73/15 PRO 73/14 PRO 73/14	14	40.1	100	Δ1.	41 26 16 n. n		8. 1799 A s		1 1	UI	
USA		3036 2006 2006 2007 2007 3647 4068 4504	Secret BOT 100 LA Fin 36 SW 30 SW 30 Central BOT 100 LA Fin 30 Gestal BOT 100 LA Fin 30					28.00.2008 00.00. 12.102.2008 00.00. 19.102.2008 00.00. 20.02.2008 00.00. 00.03.2008 00.00. 12.03.2008 00.00. 21.03.2008 00.00.	2008 100.05 2008 100.06 2008 100.06 2008 100.06 2008 100.06 2008 100.06 2008 100.06	PRO 7310 PRO 7310 PRO 7310 PRO 7320 PRO 7321 PRO 7321											
Single Stones S		45064 45073 54054 62015 6275 5052 15270	Central BOT 1601 LA 549 30 Central BOT 1601 LA 549 30 Central BOT 1601 LA 549 30 Central BOT 1601 LA 548 30 EAV-36					29.03.2008 29.06. 07.04.2008 09.06. 21.06.2008 96.06. 09.06. 09.06. 27.02.2008 96.06.	2008 100 or 2008 2008 100 or 2008 100 or 2008 2008 2008 2008 2008 2008 2008 200	#90 Tabl #90 Tabl #90 Tabl #90 Tabl #90 Tabl											
USA PS/MR/09 150A 1		2000 34178 20062 35744 20062 24573 24692	Central Scri Deb LA Set 36 Central Scri Deb LA Set 36 Central Scri Deb LA Set 36 Central Scri Deb LA Set 36 Set 30 Set 30 Central Scri Deb LA Set 36 Central Scri Deb LA Set 30 Central Scri Deb LA Set 30					11.01.2008 06.06. 51.01.2008 06.06. 01.05.2008 06.06. 00.05.2008 06.06. 15.02.2008 06.06. 21.02.2008 06.06.	2008 50 set 2008 50 set 2008 50 set 2008 50 set 2008 100 set 2008 100 set	#80.758. #80.759. #80.759. #80.759. #80.759. #80.759.											
Mail		36345 46327 45498 43996 15090 27548	Central BOT 1899 LA five 36 Central BOT 1899 LA five 36 Central BOT 1899 LA five 36 Central BOT 1899 LA five 36 Feb. 39 Feb. 39					25.50,2008 06,06, 17.50,2008 06,06, 17.50,2008 06,06, 26,30,2008 06,06, 02,34,2008 06,06, 15,52,2008 06,06, 26,30,2008 06,06,	2008 50 mt 2008 100 mt 2008 50 mt 2008 100 mt 2008 50 mt 2008 50 mt	FRO 728 PRO 7397 PRO 7397 PRO 7398 PRO 7398 PRO 7398 PRO 7340											
150A-025		25001 20766 30001 30001 30640 45011 14945	Cannot BOT 100 LA 198 30 Cannot BOT 100 LA 198 30 Cannot BOT 100 LA 50 30 500 30					17.00.2008 06.06. 07.04.2008 06.06. 36.04.2008 06.06. 22.05.2008 06.06. 102.06.2008 66.06. 25.02.2008 66.06.	2009 100 of 2008 50 of 2008 50 or 2008 50 or 2008 50 or 2008 100 or	P90 7342 P90 7341 P90 7344 P90 7345 P90 7347											
USA 25064005 ISBA		90091 20091 24981 20092 26575 36675 47427	DW 301 Central BOT 300 LA 399 301					21.02.2008 01.06. 21.02.2008 01.06. 21.02.2008 01.06. 11.02.2008 01.06. 07.04.2008 01.06. 27.04.2008 01.06.	2009 25.16 2009 50 set 2008 100 set 2008 50 set 2008 50 set 2008 50 set	PRO 756 PRO 759 PRO 759 PRO 755 PRO 755 PRO 755 PRO 755											
LOSA 1409/M000. LISA 1999/M077. LISA 1409/M077. LISA 1409/M077. LISA 1409/M077. LISA 1409/M079.		49010 14902 14972 11888 20589 16079	Central BOT 609 LA 596 36 Central BOT 609 LA 596 36 Central BOT 609 LA 596 36 596 39 597 39					50.05.2008 06.06. 05.02.2008 06.06. 26.03.2008 96.06. 24.04.2008 06.06. 11.02.2008 06.06. 11.02.2008 06.06.	2008 25 ml 2008 100 ml 2008 50 ml 2008 50 ml 2008 100 ml	PRO 7365 PRO 7356 PRO 7356 PRO 7358 PRO 7359 PRO 7369											
USA P059400 USA		21298 24779 80728 34909 30734 15606	PW 39 Central BOT 909 LA Feb 30 Central BOT 909 LA Feb 30 Central BOT 909 LA Feb 30 Central BOT 909 LA Feb 30					18.02.2008 06.06. 21.03.2008 06.06. 51.03.2008 06.06. 23.04.2008 06.06. 09.06.2008 06.06. 12.02.2008 06.06.	2008 50 HI 2008 50 HI 2008 50 HI 2008 50 HI 2008 50 HI 2008 100 HI	#60.7961 #60.7962 #80.7366 #80.7366 #80.7366											
1994 - SSSMENT - 1994 -		20151 24927 36240 36394 36490 5650 5650	Device Soft April 2011 A See See Control Soft A See See See See See See See See See S					21.02.2008 06.06. 28.02.2008 06.06. 11.01.2008 06.06. 21.01.2008 06.06. 07.04.2008 06.06. 22.05.2008 06.06.	2008 50 mt 2008 100 mt 2008 50 mt 2008 60 mt 2008 25 mt 2008 25 mt	PRO 7367 PRO 7368 PRO 7378 PRO 7370 PRO 7372 PRO 7372 PRO 7372											
USA H1594611. USA H1594611. USA H1594611. USA H1594611. USA H1594614. USA H1594614. USA H1594615. USA H1594615.		16094 16029 4730 4730 5152 5182 4927	Central BOT 100 LA 5W 50 Central BOT 100 LA 5W 50 Central BOT 100 LA 5W 50 Central BOT 100 LA 5W 50 Indicate Indicate Indicate					08.00.2008 06.06. 19.03.2008 06.06. 09.04.2008 06.06. 07.03.2008 06.06. 12.03.2008 06.06. 04.04.2008 06.06.	2009 50 ml 2008 100 ml 2008 100 ml 2008 100 ml 2008 100 ml	PRO 7324 PRO 7325 PRO 7327 PRO 7327 PRO 7329											
USA POSSANT USA HOSSANS USA HOSSANS USA HOSSANS USA HOSSANS USA HOSSANS		10009 4562 12094 5369 12293 14756	Cestrol BOT 100 LA Rei 30 195/818 Cestrol BOT 100 LA Rei 30 Cestrol BOT 100 LA Rei 30 Cestrol BOT 100 LA Rei 30					16.05,2008 00.06 16.04,2008 00.06 16.05,2008 00.06 04,04,2008 00.06 16.04,2008 00.06	2006 50 M 2008 50 M 2008 50 M 2008 50 M 2008 50 M	PRO 7360 PRO 7361 PRO 7362 PRO 7364 PRO 7364 PRO 7364											
100.4 1-00000000 100.4		10047 #5.962 #8548 #697 #651 10541	Central BOT 900 LA 500 50 Describ BOT 900 LA 500 50 Central BOT 900 LA 500 50 SIGNA Central BOT 900 LA 500 30 Describ BOT 900 LA 500 30 Describ BOT 900 LA 500 30					02 04 2008 06 06 16:05 2008 06:06 20:05 2008 06:06 28:04 2008 06:06 16:05 2008 06:06 24:14 2008 06:06	2008 25 ml 2009 100 ms 2009 100 ms 2009 100 ms 2009 50 ms 2009 50 ms	PRO TIME PRO TIME PRO TIME PRO TIME PRO TIME PRO TIME PRO TIME											
USA 14590001 USA 1509001 USA 15090001 USA 1509001 USA		1600) 5018 10436 5075 5019 5019	Cested SOT 900 LA 589 30 Cested SOT 900 LA 599 30 Cested SOT 900 LA 599 30 SOCIAL Cested SOT 900 LA 599 30 Cested SOT 900 LA 599 30					20.05.2008 06.06. 21.05.2008 06.06. 20.05.2008 06.06. 20.05.2008 06.06. 24.05.2008 06.06. 24.05.2008 06.06.	2008 50 H 2008 50 H 2008 50 H 2008 50 H 2008 50 H	#60.7391 #60.7394 #60.7395 #60.7395 #60.7397											
Libit 1959/4012 Libit 1959/4012 Libit 1959/4013 Libit 1959/4013 Libit 1959/4019 Libit 1959/4		65128 76596 76595 46927 55278 55000	Central BOT 1899 LA 599 (A) Central BOT 1899 LA 596 (A)					04.06.2008 14.07 11.06.2008 04.07 17.06.2008 14.07 00.06.2008 14.07 16.06.2008 14.07 18.06.2008 14.07	2008 80 ms 2008 70 ms 2008 60 ms 2008 40 ms 2008 75 ms	PRO 7756 PRO 7767 PRO 7758 PRO 7758 PRO 7770 PRO 7771											
156 H559409 166 H559409 16		56376 61917 56190 54790 2000 24446 80246	Central BOT 1000 LA Set Jilli Central BOT 1000 LA Set Jilli			3		09,08,2008 34,07 91,06,2008 14,07 95,06,2008 14,07 14,05,2008 34,07 04,06,2008 34,07 15,06,2008 14,07 16,06,2008 14,07	2008 50 mt 2008 50 mt 2008 50 mt	PRO 7778 PRO 7778 PRO 7777											
Link (199481) Link (199485)		10046 10008 41727 80059 8034 45564 80020	Central BOT 100 LA Bin 30 Central BOT 100 LA Bin 30					19.06.2008 14.07 14.07.2009 12.07 21.07.2009 12.07 31.07.2009 12.07 31.07.2009 12.07 51.07.2009 12.07 (0.09.2009 12.07	2008 00 H 2008 100 H 2008 50 H 2008 110 H 2008 100 H	PRO 8000 PRO 8000 PRO 8000 PRO 8000 PRO 8040											
565 - 659869 (5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		80720 7052 46/175 446/17 946/17 546/1 146/8	Central BOT see, A Ser Je; Central BOT see, IA Ser Je; Central BOT yee, IA ser se (search BOT see), IA see se (search BOT see), IA See se					14.67.2698 92.07 22.67.2096 92.07 21.67.2098 92.07 22.67.2098 92.07 22.67.2098 92.07 24.67.2098 92.07	2008 100 ms 2008 100 ms 2008 100 ms 2008 100 ms 2008 100 ms 2008 100 ms	PRO NA1 PRO NA1 PRO NA1 PRO NA1 PRO NA1 PRO NA1 PRO NA1											
156 1509401 156 1509401 156 1509401 156 1509401		9651 9592 44622 M5902 35126 4622	Central BOT 100 LA 549 30 Central BOT 100 LA 549 30 Central BOT 100 LA 549 30 Central BOT 100 LA 549 30 (Market					15.07.2008. 12.07 25.07.2008. 12.07 25.06.2008. 12.07 25.06.2008. 12.07 25.06.2008. 12.07 20.06.2008. 12.07	2008 100 mt 2008 100 mt 2008 00 mt 2008 00 mt 2008 00 mt	#50,8047 #50,8048 #50,8049 #50,8650 #50,8651 #50,8651											
GRA FORMERS		4514 77004 1906 (4104 7906 4677 75768	CAMPA DOT SON LA DES SE CAMPA BOTT SON LA DES SE					01.07.2008 12.07 10.07.2008 12.07 07.07.2008 12.07 23.08.2008 12.07 23.08.2008 12.07 02.07.2008 12.07 02.07.2008 12.07	2008 50 set 2008 50 set 2008 50 set	PRO MISS PRO MISS PRO MISS											
.5A V914000000 0F3 065 056 .5A V9130400004 .5A V9131700005	Of Sergis Do Of Sergis To Of Sergis To Of Sergis To Of Sergis To	39961 95969 16200 590664 117038 69669	Cestel BOT 309 LA EW 36 Cestel BOT 809 LA EW 36 Cestel PSC-00000 Futo SAOs BOT 809 LA Futo Time 5W 30	ricente Chartne 40, 161 Kombi Chartnel 40, 259 Kombi Chartnel 40, 111 Kombi Chartnel 40, 141 Kombi Chartnel 40, 148	Konti Charrel 41: 64 Konti C Sonti Charrel 41: 182 Konti C Konti Charrel 41: 44 Konti C	Charriet 45: N/A Forst Charriet 45: Kin Februar 45: N/B Gor	to Chernel 47, NA Scott Chernel 48, ty to Chernel 47, 500 scotts Chernel 48, 1 tots Chernel 47 0 Scotts Chernel 48, on the Chernel 47 0 Scotts Chernel 48, o	9 29 10 2007 12 11 10 20 2008 12 11 19 10 2007 12 11	2009 50 mt 2008 100 mt 2008 100 mt 2008 100 mt	PRO 5004 PRO 5005 PRO 5005 PRO 5006 PRO 5007 PRO06 (0500 00)	4.0	-0.1	- 12	0.92	70 9 4 9 9	8 8 660 520	5 (40) 5 9			4.46	
100 100	Of Sergin Tax	14.1750 15.1760 16.1761 16.1761 17.4817 18.028 19.1301	General BOT LA SWIND General BOT 6Wine General BOT 900 Birche General BOT 900 Birche General BOT 900 Birche General BOT 900 Birche General BOT 4A Birche	Sett Garra 45.77	Konto Charriet 41, 20 Konto C	Cornel (C. A.P. Sternet)	esti Chamail 47 6. Specia Chamail 48. s	28.02,2008 12.11 20.03.2008 12.11 04.64.2008 12.11 30.06.2008 12.11 22.27,2008 12.11 20.06.2008 12.11	2008 100 ord 2008 100 ord 2008 100 ord 2008 100 ord 2008 100 ord 2008 100 ord	PRO 1008 PROCE 00001.000 PRO 1009 PROCE 00001.000 PRO 1011 PROCE 00001.001 PRO 1011 PROCE 00001.001 PRO 1011 PROCE 00001.001 PRO 1011 PROCE 00001.001	(f)	-01 -01 -01 -01 -01 -01	928 920 940 942 924 947	0,17 0,12 0,42 6,4 0,27	159	1 0 040 700 1 0 900 730 3 0 900 710 2 3 950 713 0 0 000 730 0 0 000 730 0 0 000 730	7 1600 4 0 8 1700 9 9 8 1700 8 2 6 1600 4 1 4 1600 2 9 8 1600 2	12 0 49 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 2 1 2 1 1 1 1	5,40 5,65 3,64 4,26 5,47	
USA	Of Tensity Tag Of Service Tag Of Service Tag Of Service Tag Of Service Tag Of Service Tag	197331 1790449 207569 152007 130757 550080 160556	Gested BOT LA 59/30 Gested BOT 59/30 Gested BOT 59/30 Gested BOT 59/30 Gested BOT 59/30	Spirital Charmel 40: 27	Konto Charast 41, 20. Konto Charast 41, 20. Sonto Charast 41, 114. Konto Charast 41, 114. Konto Charast 41, 114.	Faired 46, NA Sur	mile Chartel 47.0 Konth Chartel 48.0 mile Chartel 47.0 Konth Chartel 48.0 mile Chartel 47.6 Konth Chartel 48.0	20.08.2008 12.11 08.00.2008 12.11 24.08.2008 12.11 20.00.2008 12.11 16.06.2008 12.11	250h 125 ne 2008 100 ne 250h 125 ne 250h 100 ne 250h 100 nel	PRO 9214 PRO96 00923 000 PRO 9218 PRO06 00923 000 PRO 9215 PRO06 00923 010 PRO 9217 PRO 9218 PRO 9218	9.7 9.7 8.5	40.1 40.1 40.3	3.50	0,45	48 18 4 0 8 34 8 1 0 0 42 8 8 0 0	8 8 908 200 6 0 900 210 8 9 900 200	6 1800 3 0 4 1600 3 0	5 0 25 0 0 3 6 6 6 6 4 9 19 9 6	1 1	534	
USA VW951790000 CBE 000 541 USA VW951790000 CBE 000 541 USA VW951790000 CBA 000 USA VW951790000 CBA 000	Fresh have Od Gergele OH Stangele Tau OH Stangele Tau Fresh have Of Gergele OH Stangele Tau OH Stangele Tau OH Stangele Tau Fresh have OH Stangele	172395 172395 181675 181675 187865	Plent Central BOT 59/00 Central BOT LA 56/00 Central BOT LA 56/00 Central BOT SWIL LA 56/00 Central BOT SWIL LA 56/00 Central BOT SWIL LA 56/00 Central BOT LA 56/00	Sonti Charrel 40: 160	Korels Charriel #1:21	500	into Charmill 47, NA Scotts Charmill 48, to sets Charmill 47, 0. Xoots Charmill 48, to list Charmill 47, NA Scotts Charmill 48, to	16.07,2008 12.11 16.07,2008 12.11 6 60.06,2008 12.11 28.08,2008 12.11	2008 100 HS 2008 100 HS 2008 100 HS 2008 100 HS 2008 125 HS	#90 9023 #90 9024 #90 9025 #90 9025											
166A W#311780000 GR 000541	Of Sergir Tag	167356	Central BOT LA Serso Central BOT LA Serso					28-38-2008 SZ 11	2008 125.09	J. PRO 1027							to il li				

From: Non-responsive content removed

To:

CC:

Date: 7/29/2009 11:51:52 AM

Topic: 8D reports piston seizure for IKB 733242 (4VW221)

Attachments: 8D-Bericht-4VW221.pdf

Gentlemen,

Attached please find the signed 8D report for the following case: IKB 733242 QT no Non-responsive content removed

With best wishes

Non-responsive content remo ved

Robert Bosch GmbH

Non-responsive content re moved

70442 Stuttgart GERMANY www.bosch.com

Non-responsive content remove d

Domicile: Stuttgart, Court of Registry: District Court Stuttgart, HRB 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

Date: 02.09.2010 09:02:51

Thema: Components to the analysis Attachments: 31.08.10--US07-Teileanlieferung.xls

31.08.10-Voranalyse HD-Pumpen US07.xls 01 09 10-Voranalyse HD-Pumpen doc.pdf Voranalysen US07 -Bauteile doc.pdf

Hello

I send you the list with the components in (with 1st analysis)

to the analysis have come.

1. Analyisis High -Pressure Pump

Mit freundlichen Grüßen/ Regards

Non-responsive content removed

>******************

>Volkswagen Sachsen GmbH

>Sitz/Domicile: Zwickau

>Registergericht/Court of Registry: Amtsgericht Chemnitz

>HRB Nr./. Commercial Register No.: 1666

>Vorsitzender des Aufsichtsrats/Chairman of the Supervisory Board: Jochem Heizmann

>Geschäftsführer/Executive Directors: Frank Löschmann (Sprecher/Managing Director), Henry Mehnert, Robert Stauß

>

>Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail zu.

>Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon

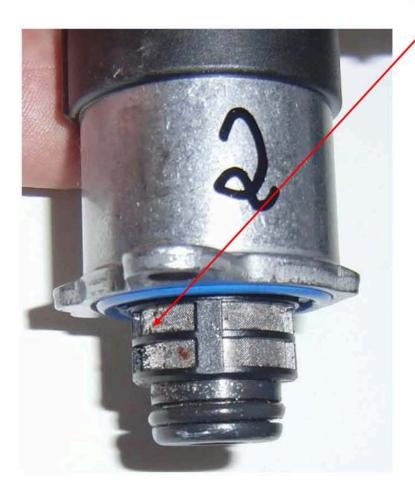
EA11003EN-00703[1]

JH.

>

P pump no. 2





HP pump no. 2

Chips deposits metering unit strainer and in the pump chamber below metering unit

P pump no. 24
probable drivetrain damage



HP pump no. 24

Chips deposits metering unit strainer and in the pump chamber below metering unit



1	ysis logs, finding ports, 8D-report
2	
4 11-Aug-10 VTH600-464 - hollow screw 3VWJL7AT/A GARGESES 11-Aug-10 VTH600-464 - hollow screw 3VWJL7AT/A GARGESES 15-Aug-10 VTH600-464 - hollow screw 3VWJL7AT/A GARGESES 7/AT/A GARGESES 7/AT	
5	
6 16-Aug-10 0X_130.756. A - IPP pump	
6 6 16 Aug-10 05, 130,756, A - HP pump	
7.77 16-Aug-10 001,130,755. A - HP pump 3VWAL7ADA CAR030669 7.676 P0087 - rail system pressure to low Demonstrative method to low Demonstr	
9 16 Aug-10 03.145,736,F - Ol return line 3VWALTAJOA CJA039898 7.078 P0087 - rail system pressure to lebetrical testing OK 91/2010 - HOM laboratory 16 Aug-10 03L906,051 - pressure sensor (rail)	
19 16-Aug-10 03L-130.089 - Rui ASSY 3WALTALZA CLA023968 7.078 P087 - rail system pressure too electrical testing OK Component handover to Boach in WK Sel-10 16-Aug-10 03L-130.089 - Rui ASSY 3WALTALZA CLA023968 7.078 P087 - rail system pressure too electrical testing OK Component handover to Boach in WK Sel-10 16-Aug-10 03L-130.031.R - HP line 3WMLTALZA CLA023968 16677 leaking, leaky Visual check OK 91/2010 - HOM laboratory 16-Aug-10 03L-130.031.R - HP line 3WMLTALZA CBE027427 17441 leaking, leaky Visual check OK 91/2010 - HOM laboratory 16-Aug-10 03L-130.031.R - HP line 3WMLTALZA CBE027427 17441 leaking, leaky Visual check OK 91/2010 - HOM laboratory 16-Aug-10 03L-130.031.R - HP line 3WMLTALZA CBE027427 17441 leaking, leaky Visual check OK 91/2010 - HOM laboratory 16-Aug-10 03L-130.031.R - HP line 3WMLTALZA CBE027427 17441 leaking, leaky Visual check OK 91/2010 - HOM laboratory 16-Aug-10 03L-130.031.R - HP line 3WMLTALZA CBE027427 17441 leaking, leaky Visual check OK 91/2010 - HOM laboratory 16-Aug-10 03L-130.031.R - HP line 3WMLTALZA CBE02125 28086 HP linjector line leaking, leaky Visual check OK 91/2010 - HOM laboratory 18-Aug-10 03L-130.031.R - HP line 3WMLTALZA CBE02125 28086 HP linjector line leaking, leaky Visual check OK 91/2010 - HOM laboratory 18-Aug-10 03L-130.031.R - HP line 3WMLTALZA CLA023748 3474 HP linjector line leaking, leaky Visual check OK 91/2010 - HOM laboratory 18-Aug-10 03L-130.031.R - HP line 3WMLTALZA CLA023707 6.977 Chips in the fuel system odertical testing OK 03L-130.031.R - HP line	
16-Aug-10 30L-103.051- pressure sensor (rail)	
16-Aug-10 057.130.764.H - pressure control valve 06E027820 35024 P0087 - rail system pressure too Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K79 CBE027820 35024 P0087 - rail system pressure too Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K79 CBE027828 10677 leaking, leaky Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K89 CBE027827 17441 leaking, leaky Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K39 CBE027427 17441 leaking, leaky Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K39 CBE028417 19808 HP injector line leaking, leaky Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K19 CBE088417 19808 HP injector line leaking, leaky Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K19 CBE081205 28086 HP injector line leaking, leaky Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line 3VWRL71K19 CBE081205 28086 HP injector line leaking, leaky Visual check OK 9/12010 - HOM laboratory 16-Aug-10 06E.130.301.R - HP line WVWRL7AJAA CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/12010 - HOM laboratory 06E.130.755. A - HP pump 3VWRL7AJAA CJA025707 6.977 Chips in the fuel system 06E0000000000000000000000000000000000	
13 16-Aug-10 03L130.301.R - HP line 3VWRL71K79 CBE027820 10677 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 16 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 16 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 16 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 17 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 17 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 17 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 18 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 18 leaking, leaky Vsual check OK 91/2010 - HOM laboratory 19 leaking, leaky 19 leaking,	
16-Aug-10 03L-130.301.R - HP line 3VWRL71KS9 CBE027688 10677 leaking, leaky Visual check OK 911/2010 - HCM laboratory	
15 16-Aug-10 03L.130.301.B - HP line 3VWAL71K99 CBE027427 17441 leaking, leaky Visual check OK 9/1/2010 - HOM laboratory 17441 leaking, leaky Visual check O	
16 16-Aug-10 03L.130.301.R - HP line 3VWRL71K39 CBE027427 17441 leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HQM laboratory 190. HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HQM laboratory 190. HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HQM laboratory 190. HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HQM laboratory 190. HQM laboratory 190. HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HQM laboratory 190. HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 190. HQM lab	
17 16-Aug-10 03L130.301.R - HP line 3VWRL71KX9 CBE008417 19808 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 28086 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.R - HP line WVWDM7AJ6A CJA013220 11868 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 03L130.301.B - HP line WVWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory 19 16-Aug-10 04 16-A	
18 16-Aug-10 03L130.301.R - HP line 3VWRL71K19 CBE081205 28086 HP injector line leaking, leaky Visual check OK 9/1/2010 - HOM laboratory 19 16-Aug-10 03L130.301.R - HP line WWWDM7AJ6A CJA013220 11868 HP injector line leaking, leaky Visual check OK 9/1/2010 - HOM laboratory 20 16-Aug-10 03L130.301.B - HP line WWWRL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HOM laboratory 21 1-Sep-10 03L130.301.B - HP line WWWL7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HOM laboratory 22 1-Sep-10 03L130.0755. A - HP pump 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system electrical testing OK - 0.5 h test stand run OK Sich O example follow metering unit strainer and in the pump chamber below metering unit strainer and in the pump ch	
19 16-Aug-10 03L.130.301.R - HP line WVWDM7AJ6A CJA023483 3474 HP injector line leaking, leaky Visual check OK 9/1/2010 - HQM laboratory Visual check OK 9/1	
20 16-Aug-10 03L.130.301.B - HP line WVWRL7AJAA 21 1-Sep-10 03L.130.755. A - HP pump 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system Chips in the fuel system Chips in the fuel system CJA025707 6.977 Chips in the fuel system CJA025707 6.977 Chips in the fuel system Component handover to Bosch in WK 36/10 03L.130.089 - Rail ASSY 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system Chips in the fuel system Chips in the fuel system CJA025707 6.977 Chips in the fuel system CJA025707 6.977 Chips in the fuel system Chips in the fuel system Chips collectical testing OK Chips collection at metering unit strainer without complaint; metering unit strainer without complain	
21 1-Sep-10 03L.130.755. A - HP pump 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system chamber below metering unit strainer without complaint; metering unit strainer without complaints without com	
21 1-Sep-10 03L.130.755. A - HP pump 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system metering unit - electr. OK 36/10 22 1-Sep-10 03L.130.089 - Rail ASSY 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system electrical testing OK 03L.906.051 - Component handover to Bosch in WK 36/10 23 1-Sep-10 4X - 03L.130.277.A - injector 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system electrical testing OK + 0.5 h test stand run OK Chips in the fuel system Chips in the fuel system chips in the pump chamber below metering unit strainer without complaint; no deposits in the pump chamber below metering unit strainer without complaint; no deposits in the pump chamber below metering unit strainer without complaint; no deposits in the pump unit release. Component handover to Bosch in WK 36/10 Chips in the fuel system Chips in the fuel system chips in the pump chamber below metering unit strainer without complaint; no deposits in the pump unit strainer without complaint; no deposits in the pump deposits in the pump and the pump chamber below metering unit strainer without complaint; no deposits in the pump deposits in the pump punit strainer without complaint; no deposits in the pump deposits in the fuel system electrical testing OK - 0.5 h test pump chamber below metering unit strainer without complaint; no deposits in the pump pump chamber below metering unit strainer without complaint; no deposits in the fuel system electrical testing OK - 0.5 h test pump chamber below metering unit strainer without complaint; no deposits in the fuel system electrical testing OK - 0.5 h test pump chamber below metering unit strainer without complaint; no deposits in the fuel system electrical testing OK - 0.5 h test pump chamber below metering unit strainer without complaints in the pump chamber below metering unit strainer without complaints in the pump	
22 1-Sep-10 03L.130.089 - Rail ASSY 3VWPL/AJXA CJA025707 6.977 Chips in the fuel system electrical testing OK Bosch in WK 36/10 23 1-Sep-10 4X - 03L.130.277.A - injector 3VWPL7AJXA CJA025707 6.977 Chips in the fuel system electrical testing OK electrical testing OK Parts are OK - no further analyses 24 1-Sep-10 03L.130.755. A - HP pump WVWNM7AJXA CJA042995 3.103 Chips in the fuel system electrical testing OK Component handover to Bosch in WK 36/10 25 1-Sep-10 03L.130.089 - Rail ASSY WVWNM7AJXA CJA042995 3.103 Chips in the fuel system electrical testing OK 03L.906.051 - Component handover to Bosch in WK 36/10 26 1-Sep-10 4X 03L.130.089 - Rail ASSY WWWNM7AJXA CJA042995 9.103L.906.051 - Component handover to Bosch in WK 36/10	
24 1-Sep-10 03L.130.755. A - HP pump WWWNM7AJXA CJA042995 3.103 Chips in the fuel system Chips in the fuel system Stand run OK Stand ru	
24 1-Sep-10 03L.130.755. A - HP pump WVWNM7AJXA CJA042995 3.103 Chips in the fuel system strainer and in the pump chamber below metering unit - PTD Component handover to Bosch in WK 36/10 25 1-Sep-10 03L.130.089 - Rail ASSY WVWNM7AJXA CJA042995 3.103 Chips in the fuel system electrical testing OK 03L.906.051 - Component handover to Bosch in WK 36/10 03L.906.051 - Compon	
25 1-Sep-10 03L.130.099 - Hall ASSY WWWMM/AJXA CJA042995 3.103 Chips in the fuel system electrical testing OK Bosch in WK 36/10 26 1 Sep-10 4X 02 130.377 A injector WWWMM/AJXA XA CLIPACTOR CLIPACTOR CONTROL CONTRO	

Ser. no.	VIN no.	Bosch Material	Serial no. Bosch	ProdDat Bosch	KM- LL (Mileage)	Engine no.	CP4 date	VIN no.	Customer complaint	Preliminary analysis	Cause:	Analysis Bosch
2	3VWTL7AJ1AN	445.010.508	BPT0831	25.11.2009	5.119	CJA030072	Non-responsive con	3VWTL7AJ1AM	Engine does not start, metallic chips metering unit	Chips collection at strainer metering unit and in the pump chamber below metering unit		
6	3VWRL7AJ7AN	445.010.508	BPT0143	17.09.2009	6.638		tent remo ved	3VWRL7AJ7AM	Engine does not start, restart	externally without complaint; metering unit strainer without complaint; no deposits in the pump chamber below metering unit	t.b.d.	
7	3VWAL7AJ2AN	445.010.508	BPT 1100	18.07.2009	7.078	CJA003968		3VWAL7AJ2AM	P0087 - rail system pressure too low	externally without complaint; metering unit strainer without complaint; no deposits in the pump chamber below metering unit	t.b.d.	
21	3VWPL7AJXAN	445.010.508	BPT 00074	03.11.2009	6.977	CJA025707		3VWPL7AJXAM	Chips in the fuel system	externally without complaint; metering unit strainer without complaint; no deposits in the pump chamber below metering unit	t.b.d.	
24	WVWNM7AJXA	445.010.508	BPT 0361	13.02.2010	3.103	CJA042995		WVWNM7AJXAV	Chips in the fuel system	Chips collection at strainer metering unit and in the pump chamber below metering unit	PTD	

= after June 20, 2009 clean-date motor no. CJAA005303





From: Non-responsive content removed Non-responsive content removed "Martinez-Banuelos, Ramon \(GQM-2/3\)" <ramon.martinez-banuelos@volkswagen.de> To: "Zohren, Frank \(EADE\)" < frank.zohren@volkswagen.de> CC: Date: 11/3/2010 10:20:25 AM FW: Analysis reports high-pressure pumps Bosch - (US07) Topic: 03.11.10-4VW549 Zwischenbericht.pdf Attachments: 03.11.10--4VW552 Zwischenbericht.pdf 03.11.10--4VW551 Zwischenbericht.pdf 03.11.10--4VW550 Zwischenbericht.pdf 02.11.10--4VW564 Zwischenbericht.pdf 02.11.10--4VW563 Zwischenbericht.pdf 02.11.10--4VW577 Zwischenbericht.pdf 02.11.10--4VW562 Zwischenbericht.pdf 02.11.10--4VW561 Zwischenbericht.pdf 02.11.10--4VW559 Zwischenbericht.pdf 02.11.10--4A560 Zwischenbericht.pdf 02.11.10---8D-Bericht 4VW563.pdf For information! Kind regards >From: Non-responsive content removed >Sent: Wednesday, November 03, 2010 6:53 AM >To: Non-responsive content removed >Subject: Analysis reports high-pressure pumps Bosch - (US07) >Dear Non-responsive content removed >Attached please find the reports from Bosch. >Please enter these reports in my table. > >With best wishes

Non-responsive content removed

From: Non-responsive content removed

To: CC:

Date: 12/3/2010 3:58:22 PM

Topic: RE: RP1 Failure USA _BC / QTS 3833800

Attachments: 4A970 Zwischenbericht.pdf

Dear

Yes, it came up, for results of standard findings see set of slides in the Appendix:

- Overflow valve jams because of deposits in the entire pump
- Functional test not OK, no overflow quantity

Visual finding with development (focus on guide rollers)

We did not find any base plate / brake plate on the guide rollers. The results of the fuel investigation and deposits analysis are still pending.

There is a visual abnormality (regular cross-stripes) on the camshaft, which is being clarified by the development.

I will be readily available for your queries.

I wish you a nice weekend and a pleasant holiday. Have a nice trip!

With best wishes

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

Postfach 30 02 20 70442 Stuttgart GERMANY www.bosch.com

Non-responsive content removed

Domicile: Stuttgart, Court of Registry: District Court Stuttgart, HRB 14000;

Chairman of the supervisory board: Hermann Scholl; Management: Franz Fehrenbach, Siegfried Dais;

Bernd Bohr, Rudolf Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks, Peter Tyroller; Stefan Asenkerschbaumer, Uwe Raschke, Wolf-Henning Scheider

From: Non-responsive content removed

Sent: Thursday, December 02, 2010 5:06 PM

To: Non-responsive content removed

Subject: RE: RP1 Failure USA BC / QTS 3833800

... and did it come up?

With best wishes



From: Non-responsive content removed

Sent: Friday, November 26, 2010 4:58 PM

To: Non-responsive content removed

Subject: RE: RP1 Failure USA _BC / QTS 3833800

Dear Mr.

We have received the pump. I have planned it for our round of analysis on Tuesday together with the development.

With best wishes

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

Postfach 30 02 20 70442 Stuttgart GERMANY www.bosch.com

Non-responsive content remov

Domicile: Stuttgart, Court of Registry: District Court Stuttgart, HRB 14000;

Chairman of the supervisory board: Hermann Scholl; Management: Franz Fehrenbach, Siegfried Dais;

Bernd Bohr, Rudolf Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks, Peter Tyroller; Stefan Asenkerschbaumer, Uwe Raschke, Wolf-Henning Scheider

Sent: Friday, November 19, 2010 2:58 PM
Non-responsive content removed
Subject: RP1 Failure USA _BC / QTS 3833800
Hello All,
This RP1 Failure USA_BC pump is being dispatched today to the Feuerbach plant.
Please analyze it as quickly as possible with RB Development.
This is probably (as per QTS) the second pump at 5649 miles/km; the first one in the QTS is
not recorded.
As per SAGA there is a first RP1 accounting for this vehicle at 3882 miles/km in GS-2 please clarify.
Veh. no. SA miles or km
Non-responsive content removed
10
5649
Non-responsive content removed
10
3882
Have a nice weekend!
With best wishes
Non-responsive content removed

Date: 1/19/2011 5:55:08 PM Topic: FW: 8D reports high-pressure pumps Bosch Attachments: Non-responsive content removed 12.01.11-Datenstand HD-Pumpen.pdf 8D-Bericht 4VW816.pdf 8D-Bericht 4VW822.pdf 8D-Bericht 4VW830.pdf 8D-Bericht 4VW834.pdf 8D-Bericht 4VW835.pdf 8D-Bericht 4VW836.pdf >From: Non-responsive content removed >Sent: Thursday, January 13, 2011 7:59 AM Non-responsive content removed >Subject: 8D reports high-pressure pumps Bosch >Dear Mr. Non-responsive content removed >Attached are the latest 8D reports from Bosch. >8D reports of high-pressure pumps: USA no. (see table): No. 10; 82; 89; 93; 94; 95 >All these high-pressure pumps had drivetrain damage (PTD). >The analysis done by Bosch showed the cause as not-OK fuel - as proof, deposits were found inside the high-pressure pump. >Bosch's responsibility was rejected because of consequential damage. >The manufacturing date of all these high-pressure pumps is before the last measurements taken by Bosch (anti-wear package 1) >

>The analyses done by Bosch did not show any defects in the components - all the injectors are fully

"functional".

>8D reports - injectors: USA no. (see table): No. 62; 90; 92

>Please translate for Mr. — Thank you

From:

To:

Non-responsive content removed

> >With best wishes >Non-responsive content removed > ***************** >Volkswagen Sachsen GmbH >Domicile/Head office: Zwickau >Court of Registry: Amtsgericht Chemnitz >HRB no./. Commercial Register no.: 1666 >Chairman of the Supervisory Board: Jochem Heizmann >Executive Directors/Managing Directors: Frank Löschmann (Sprecher/Managing Director), Henry Mehnert, Robert Stauß > >Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation of the legal character of the e-mail. >Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH. >

EA11003EN-00712[0]

Ser.	No. USA	Vehicle identification	HP Data Bosch	HP Data Bosch	HP Data Bosch	KM LL (Mileage)	Engine No.	CP4 date	Customer complaint	Results of Pre - analysis	further components for Complaint	Comments activities from Preliminary analysis	Analysis Bosch	Analysis Bosch
ť	10	Non-respon	02240709	BPT1133	0007	28,756	CJA010361	8/7/2009 C,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Inappropriate fuel - 8D report - 1/12/2011
2	400	sive conte nt removed	04130210	BPT0234	Without	18,121	CJA024847	2/16/2010 S,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	
3	20		04170410	BPT0468	Without	7,375	CJA056043	4/28/2010 S,C	does not start - P0087 - fuel syst pr too low	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components were not analyzed because metal chips	Handover for analysis / 8D report - 12/7/2010	
4	28		01040310	BPT0267	Without	8,084	CJA046361	3/15/2010 S,C	P0087 - Fuel System pressure too low	Plug of the HP pump broken-v.m.	1 x change filter 1 x Fuel filter	accompanying components were not analyzed because metal chips	Handover for analysis / 8D report - 12/7/2010	
5	29		01080909	BPT0250	0007	15,976	CJA016478	9/17/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	
6	39		04300310	BPT0048	Without	4,868	CJA051563	4/8/2010 S,C	P0087 - Fuel System pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components were not analyzed because metal chips	Handover for analysis / 8D report - 12/7/2010	
7	50		01301009	BPT0240	0007	787	CJA025097	11/10/2009 C,C	Metal chips in fuel system	no metal chips metering unit found , filter checked - suspicion of particles	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	
8	62		04190410	BPT0430	Without	3,112	CJA056466	4/30/2010 S,C	no output	no metal chips metering unit found , filter checked - suspicion of particles	4 x injectors	For further analysis the 4 injectors were given to Bosch	Handover for analysis / 8D report - 12/7/2010	8D-report available about the injectors - all OK 1/3/2011
9	73		02060210	BPT0909	Without	10,234	CJA041107	2/17/2010 S,C	Metal chips in fuel system	no metal chips metering unit found , filter checked - suspicion of particles	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	
10	81		04240909	BPT0839	0007	15,542	CJA019335	10/5/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	
11	82		04240609	BPT0400	0007	15,293	CJA005671	6/30/2009 C,C	P0087- and metal chips in system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
12	83	-	02051109	BPT1352	0007	2,931	CJA026490	11/17/2009 C,C	Does not start - electr.	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	
13	84		01090110	BPT1242	Without	12,389	CJA035025	1/20/2010 S,C	P0087 - Fuel System pressure too low	no metal chips metering unit found , filter checked - suspicion of particles		7 pc1	Handover for analysis / 8D report - 12/7/2010	
14	85		04110509	BPT0798	0006	22,726	CJA003401	5/27/2009 C,C	Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components were not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	
15	86		01050110	BPT1386	Without	8,953	CJA033742	1/14/2010 S,C	P0087 - Fuel system pressure too low metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	
16	88		02280410	BPT1037	Without	23	CJA056684	4/30/2010 S,C	P0087 - Fuel System pressure too low	no metal chips metering unit found , filter checked - suspicion of particles			Handover for analysis / 8D report - 12/7/2010	
17	89		01170909	BPT1336	0007	20,922	CJA017951	9/24/2009 C,C	Metal chips in Fuel system, P013B	PTD - Metal wear in metering unit pump chamber and strainer		For further analysis the 4 injectors were given to Bosch	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
18	90	-	02151009	BPT0930	0007	7,684	CJA023120	10/27/2009 C,C	no output	no metal chips metering unit found , filter checked - suspicion of particles	4 x injectors		Handover for analysis / 8D report - 12/7/2010	8D-report available about the injectors - all OK 1/3/2011
19	91		04130210	BPT0347	Without	11,335	CJA042927	2/26/2010 S,C	P0087/P0088 - Fuel System pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors		Handover for analysis / 8D report - 12/7/2010	
20	92		01171009	BPT0891	0007	20,902	CJA023595	10/29/2009 C,C	Metal chips in Fuel system	no metal chips metering unit found , filter checked - suspicion of particles	2x injectors	For further analysis the 4 injectors were given to Bosch	Handover for analysis / 8D report - 12/7/2010	8D-report available about the injectors - all OK 1/3/2011
Ser. no.	No. USA	Vehicle identification No.	HP Data Bosch	HP Data Bosch	HP Data Bosch	KM LL (Mileage)	Engine No.	CP4 date	Customer complaint	Results of Preliminary analysis	Further components for complaint	Comments activities from Preliminary analysis	Analysis Bosch	Analysis Bosch
21	93	3VWRL7AJ5AM057501	02020909	BPT0447	0007	19,355	CJA015510	9/12/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer	4x Injectors 1x Distributor rail 1x Holder inline EFP	accompanying components were not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report -1/12/11

EA11003EN-00712[1]

22	94	Non-respon	01090509	BPT1015	0006	42,541	CJA003123	5/25/2009 C.C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
23	95	sive conte nt removed	02190110	BPT0056	Without	9,280	CJA037049	1/29/2010 S,C	P0087 - Fuel System pressure too low Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components were not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report -1/12/11
24	96		01120509	BPT1015	0006	38,984	CJA003834	6/4/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components were not analyzed because metal chips are in the system		
25	97		01180909	BPT1167	0007	10,156	CJA018611	9/30/2009 C,C	Starts poorly - metal chips in the filter	no metal chips metering unit found , filter checked - suspicion of particles	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	
26	98		01301009	BPT0900	0007	5,882	CJA025311	11/10/2009 C,C	P0087 - Fuel System pressure too low	no metal chips metering unit found , filter checked - suspicion of particles	4 x injectors, 1 x Pressure control valve	Pressure control valve for analysis given to Bosch	Handover for analysis / 8D report - 12/7/2010	
27	100		4260809	BPT0311	0007	13,694	CJA014411	9/7/2009 C,C	P0087 - Fuel System pressure too low	PTD - Metal wear in ZME pump room - delivered without ZME	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	
28	104		1070809	BPT0767	0007	38,082	CJA011934	8/20/2009 C,C	Dismantled by changing the engine - complaint unknown	no metal chips metering unit found , HP pump change through engine change			Handover for analysis / 8D report - 12/7/2010	
29	82		2021009	BPT0345	0007	8,400	CJA020853	10/13/2009 C,C	Leakages	no metal chips at the metering unit strainer and pump chamber found			Handover for analysis / 8D report 05.01.11-	
30	99		2180310	BPT0433	Without	6,996	CJA049352	3/29/2010 S,C	Engine does not start - P0877	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors		Handover for analysis / 8D report 05.01.11-	
31	102		4030909	BPT0849	0007	9,551	CJA015659	9/12/2009 C,C	Vibration and sounds	no metal chips at the metering unit strainer and pump chamber found			Handover for analysis / 8D report 05.01.11-	
32	105		1150909	BPT0169	0007	16,311	CJA017656	9/23/2009 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer	1		Handover for analysis / 8D report 05.01.11-	

Attachments: 8D-Bericht 4VW815.pdf 8D-Bericht 4VW819.pdf 8D-Bericht 4VW817.pdf 8D-Bericht 4VW818.pdf 13.01.11-8D-Bericht 4VW827.pdf 13.01.11-8D-Bericht 4VW820.pdf 13.01.11-8D-Bericht 4VW826.pdf >Sent: Wednesday, January 19, 2011 7:40 AM Non-responsive content removed >Subject: 8D reports high-pressure pumps Bosch >Dear Mr. >Attached are the latest 8D reports from Bosch. >8D reports of high-pressure pumps: USA no. (see table): No. 20; 28; 29; 81; 83; 84; 86; 85; 16; 91; 96;100 >All these high-pressure pumps had drivetrain damage (PTD). >These drivetrain damage - complaints were acknowledged by Bosch. >Corrective actions were initiated. >The manufacturing date of all these high-pressure pumps is before the last measurements taken by Bosch (robustness package 1) >>The diesel fuel samples from USA -Non-responsive content removed Non-responsive content removed >were analyzed by the Inolab laboratory. I will request for the analysis reports and send them to you. >Since the data volume is very high, I will distribute the 8D reports in 2 mails. >Please translate for Mr. - Thank you >With best wishes Non-responsive content removed >> >Volkswagen Sachsen GmbH >Domicile/Head office: Zwickau >Court of Registry: Amtsgericht Chemnitz >HRB no./. Commercial Register no.: 1666 >Chairman of the Supervisory Board: Jochem Heizmann >Executive Directors/Managing Directors: Frank Löschmann (Managing Director/Speaker), Henry Mehnert, Robert Stauß >Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail. >Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this email is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

Non-responsive content removed

FW: 8D reports high-pressure pumps Bosch

From:

Topic:

To:

Date: 1/19/2011 5:55:33 PM

From: Non-responsive content removed To:

CC:

Date: 2/16/2011 7:32:10 PM

Topic: FW: 8D reports high-pressure pumps Bosch - Part 2

Attachments: 13.01.11-8D-Bericht 4VW828.pdf

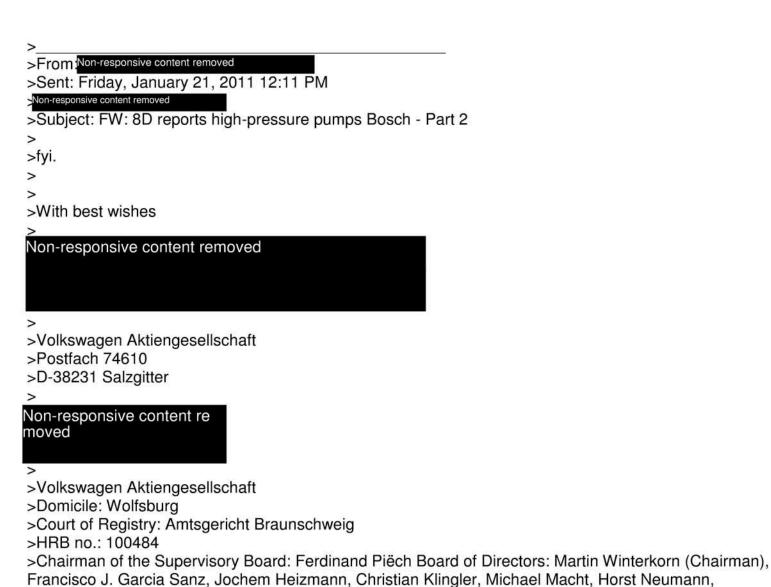
8D-Bericht 4VW837.pdf

14.01.11-8D-Bericht 4VW840.pdf 14.01.11-8D-Bericht 4VW829.pdf 14.01.11-8D-Bericht 4VW832.pdf

Have a look at Point D4 in the 8D reports.

It is actually written there that the CP4 failures are caused, amongst other things, by pump defects and therefore we urgently need anti-wear packages in order to handle the pump deficits!

Best wishes,



Hans Dieter Pötsch, Rupert Stadler

```
>Important note: The above information is automatically added to this e-mail.
This addition does not constitute a representation of the legal character of the e-mail.
>
>
>From: Non-responsive content removed
>Sent: Wednesday, January 19, 2011 7:58 AM
Non-responsive content removed
>Subject: 8D reports high-pressure pumps Bosch - Part 2
>Dear Mr. Non-responsive content removed
>Attached are the 8D reports from Bosch. - part 2
>
>With best wishes
>Non-responsive content removed
>
>Volkswagen Sachsen GmbH
>Domicile/Head office: Zwickau
>Court of Registry: Amtsgericht Chemnitz
>HRB no./. Commercial Register no.: 1666
>Chairman of the Supervisory Board: Jochem Heizmann
>Executive Directors/Managing Directors: Frank Löschmann (Sprecher/Managing Director), Henry
Mehnert, Robert Stauß
>Important note: The above information is automatically added to this e-mail.
This addition does not constitute a representation of the legal character of the e-mail.
>Important Notice: The above information is automatically added to this e-mail. This addition does not
constitute a representation that the content of this e-mail is legally relevant and/or is intended to be
legally binding upon Volkswagen Sachsen GmbH.
```

From: Non-responsive content removed

To: CC:

Date: 2/17/2011 12:02:17 PM

Topic: Report

Attachments: 4vw825 8D Bericht1.pdf

4vw825 unterschrieben.pdf

Dear Mr.



as requested

Dear Mr.

Please find attached, as discussed, the more urgent of the two mentioned cases.

The file "4vw825_unterschrieben.pdf" contains 2 scanned pages with signature, however, one sentence is lost because of pagination:

"Deposits were found at the following parts:

- Camshaft lateral surface" ...)

which is the reason for the 2nd PDF with the unsigned 8D, with the same contents, but in 3 pages.

With best wishes

Non-responsive content removed

Non-responsive content removed

Volkswagen Sachsen GmbH

Domicile/Sitz: Zwickau

Court of Registry/Registergericht: Amtsgericht Chemnitz

HRB no./. Commercial Register no.: 1666

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Hubert Waltl

Executive Directors/Geschäftsführer: Hans-Joachim Rothenpieler (Speaker/Managing Director),

Henry Mehnert, Robert Stauß

Important note: The above information is automatically added to this e-mail.

This addition does not constitute a representation of the legal character of the e-mail.

Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

From: Non-responsive content removed To:

CC:

Non-responsive content re moved

Date: 3/23/2011 8:26:10 AM

Topic: 8D reports Bosch high-pressure pumps

Attachments: 15.03.11-8D-Bericht 4VW923.pdf

23.03.2011- Voranalyse- HD-Pumpen US07.pdf

15.03.11-8D-Bericht 4VW924.pdf 15.03.11-8D-Bericht 4VW928.pdf 15.03.11--8D-Bericht 4VW926.pdf 15.03.11--8D-Bericht 4VW937.pdf 15.03.11--8D-Bericht 4VW936.pdf

Dear Mr. Non-responsive content removed

Attached are more 8D reports from Bosch for the delivered high-pressure pumps from USA. Data has been incorporated in the table.

Total: 6 x 8D reports; Cause: 6 x improper fuel

With best wishes

Non-responsive content removed

Non-responsive content removed

>***************

Volkswagen Sachsen GmbH

Domicile/Sitz: Zwickau

Court of Registry/Registergericht: Amtsgericht Chemnitz

HRB no./. Commercial Register no.: 1666

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Hubert Waltl

Executive Directors/Geschäftsführer: Hans-Joachim Rothenpieler (Speaker/Managing Director),

Henry Mehnert, Robert Stauß

Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation of the legal character of the e-mail. Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

Ser.	No	Vehicle identification	HP Data	HP Data	HP Data	KM LL	Engine No	CP4 date	Customer complaint	Results of Pre - analysis	Further components	Comments activities from		
no.	No. USA	Vehicle identification No.	Bosch	Bosch	Bosch	(Mileage)	Engine No.	CP4 date	Customer complaint		Complaint	pre-analysis	Analysis Bosch	Analysis Bosch
1	10	Non-respons ive content	02240709	BPT1133	0007	28,756	CJA010361	8/7/2009 C,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Inappropriate fuel - 8D report - 1/12/2011
2	16	removed	04130210	BPT0234	Without	18,121	CJA024847	2/16/2010 S,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/14/2011
3	20		04170410	BPT0468	Without	7,375	CJA056043	4/28/2010 S,C	does not start - P0087 fuel - system pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
4	28		01040310	BPT0267	Without	8,084	CJA046361	3/15/2010 S,C	P0087 - Fuel System pressure too low	Plug of the HP pump broken - v.m PTD	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
5	29		01080909	BPT0250	0007	15,976	CJA016478	9/17/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
6	39		04300310	BPT0048	Without	4,868	CJA051563	4/8/2010 S,C	P0087 - Fuel System pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
7	50		01301009	BPT0240	0007	787	CJA025097	11/10/2009 C,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
8	62		04190410	BPT0430	Without	3,112	CJA056466	4/30/2010 S,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	For further analysis the 4 injectors were given to Bosci	8D report about the Injectors available - all OK 1/3/2011	
9	73		02060210	BPT0909	Without	10,234	CJA041107	2/17/2010 S,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
10	81		04240909	BPT0839	0007	15,542	CJA019335	10/5/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
11	82a		04240609	BPT0400	0007	15,293	CJA005671	6/30/2009 C,C	P0087- and metal chips in system	PTD - Metal wear in metering unit pump chamber and strainer		P0087	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
12	83		02051109	BPT1352	0007	2,931	CJA026490	11/17/2009 C,C	Does not start - electr. fault	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
13	84		01090110	BPT1242	Without	12,389	CJA035025	1/20/2010 S,C	P0087 - Fuel System pressure too low - 5 faults	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
14	85		04110509	BPT0798	0006	22,726	CJA003401	5/27/2009 C,C	Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
15	86		01050110	BPT1386	Without	8,953	CJA033742	1/14/2010 S,C	P0087 - Fuel system pressure too low metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective action deployed - 01/13/11
16	88		02280410	BPT1037	Without	23	CJA056684	4/30/2010 S,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
17	89		01170909	BPT1336	0007	20,922	CJA017951	9/24/2009 C,C	Metal chips in Fuel system, P013B	PTD - Metal wear in metering unit pump chamber and strainer		For further analysis the 4 injectors were given to Bosci	8D report about the <i>Injectors</i> available - all OK - 1/3/2011	Deposits - inappropriate fuel - 8D report - 1/12/11
18	90		02151009	BPT0930	0007	7,684	CJA023120	10/27/2009 C,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	Handover for analysis / 8D report - 12/7/2010	8D report about the <i>Injectors</i> available - all OK 1/3/2011	No defect verified - HP pump - 8D report - 01/25/11

Page 1

EA11003EN-00717[1]

	E				TC :	1 1		1	1	P0087/P0088 - Fuel	1	d u injectore	accompanying components		Top o bear on a co
	19	91	Non-respon sive conte	04130210	BPT0347	Without	11,335	CJA042927	2/26/2010 S,C	Variation and the control of the con	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/14/11
	20	92	nt removed	01171009	BPT0891	0007	20,902	CJA023595	10/29/2009 C,C	Metal chips in Fuel system	no metering unit metal chips found, filter checked - particles are suspected	2x injectors	For further analysis the 2 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	HP pump - no defect verified - 8D report 1/25/2011
2	21	93		02020909	BPT0447	0007	19,355	CJA015510	9/12/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer	4 x injector 1 x distributor rail 1 x holder inline EFP	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
100	22	94		01090509	BPT1015	0006	42,541	CJA003123	5/25/2009 C.C	Engine does not start	PTD - Metal wear in metering unit pump chamber and		N.	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
	23	95		02190110	BPT0056	Without	9,280	CJA037049	1/29/2010 S,C	P0087 - Fuel System pressure too low Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report -1/12/11
2000	24	96		01120509	BPT1015	0006	38,984	CJA003834	6/4/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
	25	97		01180909	BPT1167	0007	10,156	CJA018611	9/30/2009 C,C	Starts poorly - metal chips in the filter	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	8D report - Corrosion deposits - fuel OK - 2/1/11
	26	98		01301009	BPT0900	0007	5,882	CJA025311	11/10/2009 C,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked -	4 x injectors, 1 x Pressure control valve	Pressure control valve for analysis Handed over to Bosch	Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
Wat of	27	100		04260809	BPT0311	0007	13,694	CJA014411	9/7/2009 C,C	P0087 - Fuel System pressure too low	PTD - Metal wear in ZME pump room - delivered without ZME	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
0000	28	104		01070809	BPT0767	0007	38,082	CJA011934	8/20/2009 C,C	Dismantled by changing the engine - complaint unknown	no metering unit metal chips found, HP pump change by changing the engine			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
	29	82		02021009	BPT0345	0007	8,400	CJA020853	10/13/2009 C,C	Leakages	no metal chips at the ZME sieve and pump room found			Handover for analysis / 8D report 05.01.11-	No defect verified - 8D report 1/21/11
	30	99		02180310	BPT0433	Without	6,996	CJA049352	3/29/2010 S,C	Engine does not start - P0877	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report 05.01.11-	Inappropriate fuel - 8D repor - 1/21/11
2	31	102		04030909	BPT0849	0007	9,551	CJA015659	9/12/2009 C,C	Vibration and sounds	no metal chips at the metering unit strainer and pump			Handover for analysis / 8D report 05.01.11-	8D report - no defect verified - 2/1/2011
	32	105		01150909	BPT0169	0007	16,311	CJA017656	9/23/2009 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report 05.01.11-	8D report - PTD by Bosch accepted - corrective actions deployed - 3/8/2011
	_					sta	rting from 1/	1/2011							
	33	126	Non-respon	02020909	BPT0143	0007	20,859	CJA015246	9/11/2009 C,C	P0087 - metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report 3/1/11
100	34	127	sive conte nt removed	04140708	BPT0836	0005	32,025	CBE008173	7/23/2008	Check lamp on, metal chips	Brown particles can be seen in the metering unit room and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D repor - 2/28/11
	35	128		04190410	BPT0483	Without		CJA056376	4/29/2010	Engine does not start, glow plug check lamp on P0087 - metal chips	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
500	36	129		01160808	BPT0464	0005	38,705	CBE015576	9/9/2008 C,C	Engine does not start again - metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D repor 3/1/11
	37	130		04090410	BPT0086	Without	20,283	CJA033742	1/14/2010 S,C	,	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D repor - 2/28/11
	38	131		04251109	BPT0898	0007	8,414	CJA029969	12/7/2009 S,C	Engine does not start again - metal chips in the filter	no metal chips at the ZME sieve and pump room found			Handover for analysis / 8D report - 2/9/2011	No defect verified - 8D report 3/22/2011

Page 2

EA11003EN-00717[2]

39	А	Non-respons	01201209	BPT0321	Without	15,109	CJA033033	1/11/2010 S,C	Metal chips fuel filter	no metal chips at the metering unit strainer and		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/22/2011
40	20	ive content removed	02220110	BPT0226	Without	11,955	CJA038037	2/3/2010 S,C	Sounds - 21 fault stored control device	pump chamber found brownish deposits - metering unit absent!	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
41	61		02051009	BPT0007	Without	19,773	CJA039871	2/11/2010 S,C	P0191, P0087 - generator Fuel pressure	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	
42	105		02140508	BPT0927	0004		CJA017656	9/23/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer - brownish colouring	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
43	109		04020810	BPT0039	Without	9	CJA078570	8/11/2010 S,C	Leaking - fuel loss	Leakage at shaft sealing ring - known problem		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
44	110		04140209	BPT0304	0006		CJA018611	9/3/2009 C,C	Engine stalls - switch gear 1 to 2	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report - 3/22/2011
45	111		06030810	BPT1020	Without	176	CJA078881	8/12/2010 S,C	Leaking at the HP pump front side	Oil seal leakage - known problem		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
46	112		02240909	BPT1189	Without	32,250	CJA020378	1/12/2009 C,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/22/2011
47	113		02150110	BPT0368	Without	19,955	CJA036555	1/27/2010 S,C	Does not start - goes out	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
48	114		02020110	BPT0021	Without	20,193	CJA033014	1/11/2010 S,C	P009, P0183 - Valve f. fuel dos.	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
49	115		01071009	BPT1305	0007	5,655	CJA012541	8/26/2009 C,C	Does not start, deposits in the HP pump	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report - 3/22/2011
50	118		04110509	BPT0732	Without	19067	CJA003440	5/25/2009 C,C	Metal chips fuel filter	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	
51	119		04240909	BPT0739	0007	3055	CJA019260	10/5/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber - delivered without metering unit		Handover for analysis / 8D report - 2/22/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 3/22/2011
52	120		01140809	BPT0672	Without	20,000	CJA013216	8/28/2009 C,C	Does not start, after filling the fuel	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	
53	121		04230610	BPT1301	Without	150	CJA070452	7/8/2010 S,C	P0087 - mechan, defect, filter chips	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report - 3/22/2011
54	122		04020608	BPT0210	Without	44,922	CJA006136	7/11/2008 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	
55	123		02050809	BPT0688	0007	24,254	CJA011284	8/18/2009 C,C	P0087 - Filter chips	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
56	124		02020210	BPT0345	Without	2289	CJA021338	10/15/2009 C,C	P0087 - Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer	delivered without metering unit	Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
57	125		02180709	BPT1107	Without	10,441	CJA051959	4/12/2010 S,C	P0087 - Engine does not start	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	

Page 3

EA11003EN-00717[3]

EA11003EN-00717[4]

EA11003EN-00717[5]

EA11003EN-00717[6]

EA11003EN-00717[7]

EA11003EN-00717[8]

EA11003EN-00717[9]

Page 11 22.03.2011 22.03.2011

EA11003EN-00717[10]

EA11003EN-00717[11]

		l				l .		I .				i .
		l				l .		I .				i .
						I .						 i
												 i

Page 13 22.03.2011 22.03.2011

EA11003EN-00717[12]

EA11003EN-00717[13]

Г															
- 1		l		l		l	I			I .			l	1 !	1
- 1		l		l		l	I			I .			l	1 !	1
- 1		I		l	l	I	I	I	l .	l l			l	1 1	1

EA11003EN-00717[15]

Page 17 22.03.2011 22.03.2011

EA11003EN-00717[16]

- 1												
- 1		l				l		I .			í I	i
- 1		l				l		I .			í I	i
- 1		l				l .		I .			(I	i .

Page 19 22.03.2011 22.03.2011

EA11003EN-00717[18]

Page 20 22.03.2011 2000 22.03.2011

EA11003EN-00717[19]

EA11003EN-00717[20]

- 1															-
- 1			l					l	l .		I .				i .
- 1					l			ı	I .				I .	 	 i
- 1					l			ı	I .				1	 	 i
- 1					ı			ı	I .				1	 	 i

EA11003EN-00717[21]

EA11003EN-00717[22]

EA11003EN-00717[23]

- 1													-
- 1	l	ı			 ı	l	1				ı	I	 1
- 1	l	ı			 ı	I	1				ı	I	 1
- 1	l	ı			 ı	I	1				ı	I	 1
- 1	l	1			 1	1			 		1		 i

Page 25 22.03.2011 2000 22.03.2011

EA11003EN-00717[24]

EA11003EN-00717[25]

EA11003EN-00717[26]

			l					l .			I .					(I	i .
								I .								(I	i
			l					l .			I .					(I	i .
1 1	1	I				1	1	1		1			1	1 1		4 I	i

EA11003EN-00717[27]

Page 29 22.03.2011 2000 22.03.2011

EA11003EN-00717[28]

EA11003EN-00717[29]

г													
- 1	l					I .			I .				 4
- 1	l					I .			I .				 4
- 1	l					I .			I .				 4
- 1	I	1			 	 1		1	ı	l			 4

Page 31 22.03.2011 22.03.2011

EA11003EN-00717[30]

EA11003EN-00717[31]

- [
- 1		l		l			l		I .			l	1 !	1
- 1		l		l			l		I .			l	1 !	i .
- 1		l		l			l		I .			l	1 !	1

EA11003EN-00717[33]

Page 35 22.03.2011 22.03.2011

EA11003EN-00717[34]

1					I .						 I
1					I						 l
1					I .						 I
1					I .						 I

From: Non-responsive content removed To: CC:

Ion-responsive content removed

Date: 3/4/2011 10:57:38 AM

Topic: High-pressure pumps analysis 2.0I-103kW CR Us07

Attachments: 04.03.11-Analyse HD-Pumpen-Chemnitz.pdf

28.02.11-8D-Bericht 4VW910.pdf 28.02.11-8D-Bericht 4VW908.pdf 01.03.11-8D-Bericht 4VW913.pdf 01.03.11-8D-Bericht 4VW912.pdf

Dear Mr. Non-responsive content removed

Attached are the analysis status and 8D reports for the high-pressure fuel pumps delivered to

With best wishes

Non-responsive content remove d

Non-responsive content removed

>*****************

Volkswagen Sachsen GmbH

Domicile/Sitz: Zwickau

Court of Registry/Registergericht: Amtsgericht Chemnitz

HRB no./. Commercial Register no.: 1666

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Hubert Waltl

Executive Directors/Geschäftsführer: Hans-Joachim Rothenpieler (Speaker/Managing Director),

Henry Mehnert, Robert Stauß

Important note: The above information is automatically added to this e-mail.

This addition does not constitute a representation of the legal character of the e-mail.

Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

This is unregistered version of Total HTML Converter

Ser.	No. USA	Vehicle identification No.	HP Data Bosch	HP Data Bosch	HP Data Bosch	KM LL (Mileage)	Engine No.	CP4 date	Customer complaint	Results of Pre - analysis	Further components for Complaint	Comments activities from pre-analysis	Analysis Bosch	Analysis Bosch
1		Non-respon	02240709	BPT1133	0007	28,756	CJA010361	8/7/2009 C,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	1x change filter 1x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Inappropriate fuel - 8D report - 1/12/2011
2		sive conte nt removed	04130210	BPT0234	Without	18,121	CJA024847	2/16/2010 S,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/14/2011
3	20		04170410	BPT0468	Without	7,375	CJA056043	4/28/2010 S,C	does not start - P0087 - fuel syst pr too low	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Ws Bosch accepted Corrective actions deployed - 1/13/2011
4	28		01040310	BPT0267	Without	8,084	CJA046361	3/15/2010 S,C	P0087 - Fuel System pressure too low	Plug of the HP pump broken - v.m PTD	1x change filter 1x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Ws Bosch accepted Corrective actions deployed - 1/13/2011
5	29		01080909	BPT0250	0007	15,976	CJA016478	9/17/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	1x change filter 1x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
6	39		04300310	BPT0048	Without	4,868	CJA051563	4/8/2010 S,C	P0087 - Fuel System pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	
7	50		01301009	BPT0240	0007	787	CJA025097	11/10/2009 C,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	
8	62		04190410	BPT0430	Without	3,112	CJA056466	4/30/2010 S,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	For further analysis the 4 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	
9	73		02060210	BPT0909	Without	10,234	CJA041107	2/17/2010 S,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
10	81		04240909	BPT0839	0007	15,542	CJA019335	10/5/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
11	82a		04240609	BPT0400	0007	15,293	CJA005671	6/30/2009 C,C	P0087- and metal chips in system	PTD - Metal wear in metering unit pump chamber and strainer		P0087	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
12	83		02051109	BPT1352	0007	2,931	CJA026490	11/17/2009 C,C	Does not start - electr. fault	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
13	84		01090110	BPT1242	Without	12,389	CJA035025	1/20/2010 S,C	P0087 - Fuel System pressure too low - 5 faults	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
14	85		04110509	BPT0798	0006	22,726	CJA003401	5/27/2009 C,C	Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
15	86		01050110	BPT1386	Without	8,953	CJA033742	1/14/2010 S,C	P0087 - Fuel system pressure too low metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer		metal emperate mare operation	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective action deployed - 01/13/11
16	88		02280410	BPT1037	Without	23	CJA056684	4/30/2010 S,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
17	89		01170909	BPT1336	0007	20,922	CJA017951	9/24/2009 C,C	Metal chips in Fuel system, P013B	PTD - Metal wear in metering unit pump chamber and strainer		For further analysis the 4 injectors were given to Bosch	8D report about the <i>Injectors</i> available - all OK - 1/3/2011	Deposits - inappropriate fuel - 8D report - 1/12/11
18	90		02151009	BPT0930	0007	7,684	CJA023120	10/27/2009 C,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	Handover for analysis / 8D report - 12/7/2010	8D report about the <i>Injectors</i> available - all OK 1/3/2011	No defect verified - HP pump - 8D report - 01/25/11

19 91	Non-respon sive conte	04130210	BPT0347	Without	11,335	CJA042927	2/26/2010 S,C	P0087/P0088 - Fuel System pressure too low - 5 faults	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/14/11
20 92	nt removed	01171009	BPT0891	0007	20,902	CJA023595	10/29/2009 C,C	Metal chips in Fuel system	no metering unit metal chips found, filter checked - particles are suspected	2x injectors	For further analysis the 2 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	HP pump - no defect verified - 8D report 1/25/2011
21 93		02020909	BPT0447	0007	19,355	CJA015510	9/12/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer	4 x injector 1 x distributor rail 1 x holder inline EFP	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
22 94		01090509	BPT1015	0006	42,541	CJA003123	5/25/2009 C.C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
23 95		02190110	BPT0056	Without	9,280	CJA037049	1/29/2010 S,C	P0087 - Fuel System pressure too low Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report -1/12/11
24 96		01120509	BPT1015	0006	38,984	CJA003834	6/4/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
25 97		01180909	BPT1167	0007	10,156	CJA018611	9/30/2009 C,C	Starts poorly - metal chips in the filter	no metering unit metal chips found, filter checked - particles are suspected	1x change filter 1x Fuel filter		Handover for analysis / 8D report - 12/7/2010	8D report - Corrosion deposits - fuel OK - 2/1/11
26 98		01301009	BPT0900	0007	5,882	CJA025311	11/10/2009 C,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors, 1 x Pressure control valve	Pressure control valve for analysis Handed over to Bosch	Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
27 100		04260809	BPT0311	0007	13,694	CJA014411	9/7/2009 C,C	P0087 - Fuel System pressure too low	PTD - Metal wear in ZME pump room - delivered without ZME	1x change filter 1x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
28 104		01070809	BPT0767	0007	38,082	CJA011934	8/20/2009 C,C	Dismantled by changing the engine - complaint unknown	no metering unit metal chips found, HP pump change by changing the engine			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
29 82		02021009	BPT0345	0007	8,400	CJA020853	10/13/2009 C,C		no metal chips at the ZME sieve and pump room found			Handover for analysis / 8D report 05.01.11-	No defect verified - 8D report - 1/21/11
30 99		02180310	BPT0433	Without	6,996	CJA049352	3/29/2010 S,C	Engine does not start - P0877	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report 05.01.11-	Inappropriate fuel - 8D report - 1/21/11
31 102		04030909	BPT0849	0007	9,551	CJA015659	9/12/2009 C,C	Vibration and sounds	no metal chips at the metering unit strainer and pump chamber			Handover for analysis / 8D report 05.01.11 -	8D report - no defect verified - 2/1/2011
32 105		01150909	BPT0169	0007	16,311	CJA017656	9/23/2009 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report 05.01.11-	

starting from 1/1/2011

33	126	Non-respon	02020909	BPT0143	0007	20,859	CJA015246	9/11/2009 C,C	P0087 - metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 3/1/11
34	127	sive conte nt removed	04140708	BPT0836	0005	32,025	CBE008173	7/23/2008	Check lamp on, metal chips	Brown particles can be seen in the metering unit room and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
35	128		04190410	BPT0483	Without		CJA056376	4/29/2010	Engine does not start, glow plug check lamp on P0087 metal chips	PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
36	129		01160808	BPT0464	0005	38,705	CBE015576	9/9/2008 C,C	Engine does not start again - metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report - 3/1/11
37	130		04090410	BPT0086	Without	20,283	CJA033742	1/14/2010 S,C		PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
38	131		04251109	BPT0898	0007	8,414	CJA029969	12/7/2009 S,C	Engine does not start again - metal chips in the filter	no metal chips at the metering unit strainer and pump chamber found	Handover for analysis / 8D report - 2/9/2011	
39	А		01201209	BPT0321	Without	15,109	CJA033033	1/11/2010 S,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found	Handover for analysis / 8D report - 2/22/2011	

EA11003EN-00719[2]

_													
40	20	Non-respon	02220110	BPT0226	Without	11,955	CJA038037	2/3/2010 S,C	Sounds - 21 fault stored control device	brownish deposits - metering unit absent!	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
41	0.4	sive conte nt removed	02051009	BPT0007	Without	19,773	CJA039871	2/11/2010 S,C	P0191, P0087 - generator Fuel pressure	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	
42	105		02140508	BPT0927	0004		CJA017656	9/23/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer - brownish colouring	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
43	109		04020810	BPT0039	Without	9	CJA078570	8/11/2010 S,C	Leaking - fuel loss	Leakage at shaft sealing ring - known problem		Handover for analysis / 8D report - 2/22/2011	
44	110		04140209	BPT0304	0006		CJA018611	9/3/2009 C,C	Engine stalls - switch gear 1 to 2	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
45	111		06030810	BPT1020	Without	176	CJA078881	8/12/2010 S,C	Leaking at the front side HP pump	Oil seal leakage - known Problem		Handover for analysis / 8D report - 2/22/2011	
46	112		02240909	BPT1189	Without	32,250	CJA020378	1/12/2009 C,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
47	113		02150110	BPT0368	Without	19,955	CJA036555	1/27/2010 S,C	Does not start - goes out	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	
48	114		02020110	BPT0021	Without	20,193	CJA033014	1/11/2010 S,C	P009, P0183 - Valve f. fuel dos.	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	
49	115		01071009	BPT1305	0007	5,655	CJA012541	8/26/2009 C,C	Does not start, deposits in the HP pump	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
50	118		04110509	BPT0732	Without	19067	CJA003440	5/25/2009 C,C	Metal chips fuel filter	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	
51	119		04240909	BPT0739	0007	3055	CJA019260	10/5/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber - delivered without metering unit		Handover for analysis / 8D report - 2/22/2011	
52	120		01140809	BPT0672	Without	20,000	CJA013216	8/28/2009 C,C	Does not start, after filling the fuel	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	
53	121		04230610	BPT1301	Without	150	CJA070452	7/8/2010 S,C	P0087 - mechan. fault, filter chips	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	
54	122		04020608	BPT0210	Without	44,922	CJA006136	7/11/2008 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	
55	123		02050809	BPT0688	0007	24,254	CJA011284	8/18/2009 C,C	P0087 - Filter chips	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
56	124		02020210	BPT0345	Without	2289	CJA021338	10/15/2009 C,C	P0087 - Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer	delivered without metering unit	Handover for analysis / 8D report - 2/22/2011	
57	125		02180709	BPT1107	Without	10,441	CJA051959	4/12/2010 S,C	P0087 - Engine does not start	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	

From: To:

CC:

Non-responsive content removed

Non-responsive content removed

3/15/2011 12:43:21 PM Date:

Topic: 8D reports high-pressure fuel pump analysis

08.03.11--8D-Bericht 4VW850.pdf Attachments:

08.03.11--8D-Bericht 4vw825.pdf 08.03.11--8D-Bericht 4vw824.pdf

09..03.2011- Voranalyse- HD-Pumpen US07.pdf

Dear Mr. Non-responsive content removed

Attached are the pending 8D reports from Bosch. Data is incorporated in the table.

With best wishes

Non-responsive content removed

Volkswagen Sachsen GmbH

Domicile/Sitz: Zwickau

Court of Registry/Registergericht: Amtsgericht Chemnitz

HRB no./. Commercial Register no.: 1666

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Hubert Waltl

Executive Directors/Geschäftsführer: Hans-Joachim Rothenpieler (Speaker/Managing Director),

Henry Mehnert, Robert Stauß

Important note: The above information is automatically added to this e-mail.

This addition does not constitute a representation of the legal character of the e-mail.

Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

09..03.2011-

Ser.	No. USA	Vehicle identification No.	HP Data Bosch	HP Data Bosch	HP Data Bosch	KM LL (Mileage)	Engine No.	CP4 date	Customer complaint	Results of Pre - analysis	Further components for Complaint	Comments activities from pre-analysis	Analysis Bosch	Analysis Bosch
1	10	Non-respons	02240709	BPT1133	0007	28,756	CJA010361	8/7/2009 C,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Inappropriate fuel - 8D report 1/12/2011
2	16	ive content removed	04130210	BPT0234	Without	18,121	CJA024847	2/16/2010 S,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/14/2011
3	20		04170410	BPT0468	Without	7,375	CJA056043	4/28/2010 S,C	does not start - P0087 - fue syst pr too low	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
4	28		01040310	BPT0267	Without	8,084	CJA046361	3/15/2010 S,C	P0087 - Fuel System pressure too low	Plug of the HP pump broken - v.m PTD	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
5	29		01080909	BPT0250	0007	15,976	CJA016478	9/17/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
6	39		04300310	BPT0048	Without	4,868	CJA051563	4/8/2010 S,C	P0087 - Fuel System pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
7	50		01301009	BPT0240	0007	787	CJA025097	11/10/2009 C,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
8	62		04190410	BPT0430	Without	3,112	CJA056466	4/30/2010 S,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	For further analysis the 4 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	
9	73		02060210	BPT0909	Without	10,234	CJA041107	2/17/2010 S,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
10	81		04240909	BPT0839	0007	15,542	CJA019335	10/5/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
11	82a		04240609	BPT0400	0007	15,293	CJA005671	6/30/2009 C,C	P0087- and metal chips in system	PTD - Metal wear in metering unit pump chamber and strainer		P0087	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
12	83		02051109	BPT1352	0007	2,931	CJA026490	11/17/2009 C,C	Does not start - electr. fault	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
13	84		01090110	BPT1242	Without	12,389	CJA035025	1/20/2010 S,C	P0087 - Fuel System pressure too low - 5 faults	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
14	85		04110509	BPT0798	0006	22,726	CJA003401	5/27/2009 C,C	Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
15	86		01050110	BPT1386	Without	8,953	CJA033742	1/14/2010 S,C	P0087 - Fuel system pressure too low metal chip in the filter	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective action deployed - 01/13/11
16	88		02280410	BPT1037	Without	23	CJA056684	4/30/2010 S,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
17	89		01170909	BPT1336	0007	20,922	CJA017951	9/24/2009 C,C	Metal chips in Fuel system, P013B	PTD - Metal wear in metering unit pump chamber and strainer		For further analysis the 4 injectors were given to Bosch	8D report about the <i>Injectors</i> available - all OK - 1/3/2011	Deposits - inappropriate fuel - 8D report - 1/12/11
18	90		02151009	BPT0930	0007	7,684	CJA023120	10/27/2009 C,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	Handover for analysis / 8D report - 12/7/2010	8D report about the <i>Injectors</i> available - all OK 1/3/2011	No defect verified - HP pump - 8D report - 01/25/11

Page 1

EA11003EN-00721[1]

19	91	Non-respons ive content	04130210	BPT0347	Without	11,335	CJA042927	2/26/2010 S,C	P0087/P0088 - Fuel System pressure too low - 5 faults	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/14/11
20	92	removed	01171009	BPT0891	0007	20,902	CJA023595	10/29/2009 C,C	Metal chips in Fuel system	no metering unit metal chips found, filter checked - particles are suspected	2x injectors	For further analysis the 2 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	HP pump - no defect verified - 8D report 1/25/2011
2	93		02020909	BPT0447	0007	19,355	CJA015510	9/12/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer	4 x injector 1 x distributor rail 1 x holder inline EFP	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
23	94		01090509	BPT1015	0006	42,541	CJA003123	5/25/2009 C.C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
23	95		02190110	BPT0056	Without	9,280	CJA037049	1/29/2010 S,C	P0087 - Fuel System pressure too low Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report -1/12/11
24	96		01120509	BPT1015	0006	38,984	CJA003834	6/4/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
25	97		01180909	BPT1167	0007	10,156	CJA018611	9/30/2009 C,C	Starts poorly - metal chips in the filter	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	8D report - Corrosion deposits - fuel OK - 2/1/11
26	98		01301009	BPT0900	0007	5,882	CJA025311	11/10/2009 C,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors, 1 x Pressure control valve	Pressure control valve for analysis Handed over to Bosch	Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
2	7 100		04260809	BPT0311	0007	13,694	CJA014411	9/7/2009 C,C	P0087 - Fuel System pressure too low	PTD - Metal wear in ZME pump room - delivered without ZME	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
28	104		01070809	BPT0767	0007	38,082	CJA011934	8/20/2009 C,C	Dismantled by changing the engine - complaint unknown	no metering unit metal chips found, HP pump change by changing the engine	34,330 (1,525)		Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
25	82		02021009	BPT0345	0007	8,400	CJA020853	10/13/2009 C,C	Leakages	no metal chips at the ZME sieve and pump room found			Handover for analysis / 8D report 05.01.11-	No defect verified - 8D report - 1/21/11
30	99		02180310	BPT0433	Without	6,996	CJA049352	3/29/2010 S,C	Engine does not start - P0877	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report 05.01.11-	Inappropriate fuel - 8D report - 1/21/11
3	102		04030909	BPT0849	0007	9,551	CJA015659	9/12/2009 C,C	Vibration and sounds	no metal chips at the metering unit strainer and pump chamber found			Handover for analysis / 8D report 05.01.11-	8D report - no defect verified - 2/1/2011
33	105		01150909	BPT0169	0007	16,311	CJA017656	9/23/2009 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report 05.01.11 -	8D report - PTD by Bosch accepted - corrective actions deployed - 3/8/2011
					sta	rting from 1/1	/2011		-	10 0			·	-
33	126	1011100000110	02020909	BPT0143	0007	20,859	CJA015246	9/11/2009 C,C	P0087 - metal chips in fuel system	PTD - Metal wear in metering un pump chamber and strainer	it		Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report - 3/1/11
34	127	ive content removed	04140708	BPT0836	0005	32,025	CBE008173	7/23/2008	Check lamp on, metal chips	Brown particles can be seen in the metering unit room and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
	-			1							1	·		1

Page 2

33	126	Non-respons	02020909	BPT0143	0007	20,859	CJA015246	9/11/2009 C,C	P0087 - metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report - 3/1/11
34	127	ive content removed	04140708	BPT0836	0005	32,025	CBE008173	7/23/2008	Check lamp on, metal chips	Brown particles can be seen in the metering unit room and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
35	128		04190410	BPT0483	Without		CJA056376	4/29/2010	Engine does not start, glow plug check lamp on P0087 - metal chips	PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
36	129		01160808	BPT0464	0005	38,705	CBE015576	9/9/2008 C,C	Engine does not start again - metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report - 3/1/11
37	130		04090410	BPT0086	Without	20,283	CJA033742	1/14/2010 S,C		PTD - Metal wear in metering unit pump chamber and strainer	Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
38	131	-	04251109	BPT0898	0007	8,414	CJA029969	12/7/2009 S,C	Engine does not start again - metal chips in the filter	no metal chips at the ZME sieve and pump room found	Handover for analysis / 8D report - 2/9/2011	

EA11003EN-00721[2]

39	A	Non-respons	01201209	BPT0321	Without	15,109	CJA033033	1/11/2010 S,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber		Handover for analysis / 8D report - 2/22/2011
40	20	ive content removed	02220110	BPT0226	Without	11,955	CJA038037	2/3/2010 S,C	Sounds - 21 fault stored control device	brownish deposits - metering unit absent!	4 x injectors	Handover for analysis / 8D report - 2/22/2011
41	61		02051009	BPT0007	Without	19,773	CJA039871	2/11/2010 S,C	P0191, P0087 - generator Fuel pressure	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011
42	105		02140508	BPT0927	0004		CJA017656	9/23/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer - brownish colouring	4 x injectors	Handover for analysis / 8D report - 2/22/2011
43	109		04020810	BPT0039	Without	9	CJA078570	8/11/2010 S,C	Leaking - fuel loss	Leakage at shaft sealing ring - known problem		Handover for analysis / 8D report - 2/22/2011
44	110		04140209	BPT0304	0006		CJA018611	9/3/2009 C,C	Engine stalls - switch gear 1 to 2	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011
45	111		06030810	BPT1020	Without	176	CJA078881	8/12/2010 S,C	Leaking at the front side HP pump	Oil seal leakage - known problem		Handover for analysis / 8D report - 2/22/2011
46	112		02240909	BPT1189	Without	32,250	CJA020378	1/12/2009 C,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011
47	113		02150110	BPT0368	Without	19,955	CJA036555	1/27/2010 S,C	Does not start - goes out	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011
48	114		02020110	BPT0021	Without	20,193	CJA033014	1/11/2010 S,C	P009, P0183 - Valve f. fuel dos.	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011
49	115		01071009	BPT1305	0007	5,655	CJA012541	8/26/2009 C,C	Does not start, deposits in the HP pump	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011
50	118		04110509	BPT0732	Without	19067	CJA003440	5/25/2009 C,C	Metal chips fuel filter	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011
51	119		04240909	BPT0739	0007	3055	CJA019260	10/5/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber - delivered without metering unit		Handover for analysis / 8D report - 2/22/2011
52	120		01140809	BPT0672	Without	20,000	CJA013216	8/28/2009 C,C	Does not start, after filling the fuel	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011
53	121		04230610	BPT1301	Without	150	CJA070452	7/8/2010 S,C	P0087 - mechan, fault, filter chips	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011
54	122		04020608	BPT0210	Without	44,922	CJA006136	7/11/2008 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011
55	123		02050809	BPT0688	0007	24,254	CJA011284	8/18/2009 C,C	P0087 - Filter chips	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	Handover for analysis / 8D report - 2/22/2011
56	124		02020210	BPT0345	Without	2289	CJA021338	10/15/2009 C,C	P0087 - Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer	delivered without metering unit	Handover for analysis / 8D report - 2/22/2011
57	125		02180709	BPT1107	Without	10,441	CJA051959	4/12/2010 S,C	P0087 - Engine does not start	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011

EA11003EN-00721[3]

EA11003EN-00721[4]

EA11003EN-00721[5]

EA11003EN-00721[6]

09..03.2011- xls

EA11003EN-00721[7]

EA11003EN-00721[8]

Page 9 09..03.2011-

EA11003EN-00721[9]

EA11003EN-00721[10]

														-
	ı	1	ı			ı	l				I		(I	4
	ı	1	ı			ı	I				I		(I	4
	ı	1	ı			ı	l				l		(I	4
	ı	1	1			1	ı				ı		(I	1

EA11003EN-00721[12]

Page 14

EA11003EN-00721[13]

ı																
- 1	l	l	l		l		l	l	l	l	l		l		1 1	i I
- 1	l	l	l		l		l	l	l		l		l		1 1	i I
- 1	1	ı	1		ı	ı	ı		ı	ı	I		I .		4 1	i I

EA11003EN-00721[15]

EA11003EN-00721[16]

- 1													
- 1	l	ı	I		ı	l	ı				1	I	 1
- 1	l	ı	I		ı	l	ı				ı	I	 1
- 1	l	ı	I		ı	l	ı				ı	I	 1
- 1	l	ı	I .		ı	ı	ı				ı	I	 i

EA11003EN-00721[18]

09..03.2011- xls

- 1													7
- 1	l	l	l .	l		l	l .		l			l	
- 1	l	l	l .	l		l	l .		l			l	
- 1	l	l	l .	l		l	l		l				

EA11003EN-00721[21]

EA11003EN-00721[22]

- 1													7
- 1	l	l	l .	l		l	l .		l			l	
- 1	l	l	l .	l		l	l .		l			l	
- 1	l	l	l .	l		l	l		l				

EA11003EN-00721[24]

EA11003EN-00721[25]

- 1													
- 1	l	1	I		I	I	ı				ı	I	 1
- 1	l	1	I		I	I	ı				1	I	 1
- 1	l	1	I		I	I	ı				1	I	 1
- 1	l		I .		I	ı	ı				ı	I	 i

EA11003EN-00721[27]

EA11003EN-00721[28]

- 1															
- 1	1			I		I .	I .								l
- 1	l .			l		l	l .		I					l I	
- 1	1			I		I .	I .								l

EA11003EN-00721[30]

- 1													
- 1	l	1	I		I	I	ı				ı	I	 1
- 1	l	1	I		I	I	ı				1	I	 1
- 1	l	1	I		I	I	ı				1	I	 1
- 1	l		I		I	ı	ı				ı	I	 i

EA11003EN-00721[33]

EA11003EN-00721[34]

EA11003EN-00721[35]

										4 I
										4 1
										4 1
										4 1
										4 I
										4 1

From: Non-responsive content removed To:

Non-responsive content removed

CC:

Date: 3/22/2011 9:58:35 AM

Topic: 8D reports high-pressure fuel pump US07

Attachments: 22.03.2011- Voranalyse- HD-Pumpen US07.pdf

22.03.11--8D-Bericht 4VW933.pdf 22.03.11-8D-Bericht 4VW932.pdf 22.03.11--8D-Bericht 4VW911.pdf 22.03.11--8D-Bericht 4VW921.pdf 22.03.11--8D-Bericht 4VW925.pdf 22.03.11--8D-Bericht 4VW929.pdf 22.03.11--8D-Bericht 4VW934.pdf

Dear Mr. Non-responsive content removed

Attached are more 8D reports from Bosch for the defective high-pressure pumps (delivery to

Total: = 7 reports, of these 4 x no defect verified (TNF); 2 x incorrect fuel; 1 x Bosch acknowledged defect.

With best wishes

Non-responsive content removed

Non-responsive content removed

>***************

Volkswagen Sachsen GmbH Domicile/Sitz: Zwickau

Court of Registry/Registergericht: Amtsgericht Chemnitz

HRB no./. Commercial Register no.: 1666

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Hubert Waltl

Executive Directors/Geschäftsführer: Hans-Joachim Rothenpieler (Speaker/Managing Director), Henry Mehnert, Robert Stauß

Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation of the legal character of the e-mail. Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

EA11003EN-00723[0]

Se		Vehicle identification	HP Data	HP Data	HP Data	KM LL (Mileage)	Engine No.	CP4 date	Customer complaint	Results of Pre - analysis	Further components for Complaint		2 3 3 2 42	Andreid Breed
1		Non-respon sive conte	02240709	Bosch BPT1133	0007	28,756	CJA010361	8/7/2009 C,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	pre-analysis accompanying components are not analyzed because metal chips are in the system	Analysis Bosch Handover for analysis / 8D report - 12/7/2010	Analysis Bosch Inappropriate fuel - 8D report - 1/12/2011
2	16	nt removed	04130210	BPT0234	Without	18,121	CJA024847	2/16/2010 S,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/14/2011
3	20		04170410	BPT0468	Without	7,375	CJA056043	4/28/2010 S,C	does not start - P0087 - fuel syst pr too low	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
4	28		01040310	BPT0267	Without	8,084	CJA046361	3/15/2010 S,C	P0087 - Fuel System pressure too low	Plug of the HP pump broken - v.m PTD	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
5	29		01080909	BPT0250	0007	15,976	CJA016478	9/17/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
6	39		04300310	BPT0048	Without	4,868	CJA051563	4/8/2010 S,C	P0087 - Fuel System pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
7	50		01301009	BPT0240	0007	787	CJA025097	11/10/2009 C,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter	7-03-5-0-50	Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
8	62		04190410	BPT0430	Without	3,112	CJA056466	4/30/2010 S,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	For further analysis the 4 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	
9	73		02060210	BPT0909	Without	10,234	CJA041107	2/17/2010 S,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
10	81		04240909	BPT0839	0007	15,542	CJA019335	10/5/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
11	82a		04240609	BPT0400	0007	15,293	CJA005671	6/30/2009 C,C	P0087- and metal chips in system	PTD - Metal wear in metering unit pump chamber and strainer		P0087	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
12	83		02051109	BPT1352	0007	2,931	CJA026490	11/17/2009 C,C	Does not start - electr. fault	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
13	84		01090110	BPT1242	Without	12,389	CJA035025	1/20/2010 S,C	P0087 - Fuel System pressure too low - 5 faults	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
14	85		04110509	BPT0798	0006	22,726	CJA003401	5/27/2009 C,C	Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
15	86		01050110	BPT1386	Without	8,953	CJA033742	1/14/2010 S,C	P0087 - Fuel system pressure too low metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective action deployed - 01/13/11
16	88		02280410	BPT1037	Without	23	CJA056684	4/30/2010 S,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
17	89		01170909	BPT1336	0007	20,922	CJA017951	9/24/2009 C,C	Metal chips in Fuel system, P013B	PTD - Metal wear in metering unit pump chamber and strainer		For further analysis the 4 injectors were given to Bosch	8D report about the <i>Injectors</i> available - all OK - 1/3/2011	Deposits - inappropriate fuel - 8D report - 1/12/11
18	90		02151009	BPT0930	0007	7,684	CJA023120	10/27/2009 C,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	Handover for analysis / 8D report - 12/7/2010	8D report about the <i>Injectors</i> available - all OK 1/3/2011	No defect verified - HP pump - 8D report - 01/25/11

									P0087/P0088 - Fuel	D	4 v injectore	accompanying components		
19	91	Non-respon sive conte	04130210	BPT0347	Without	11,335	CJA042927	2/26/2010 S,C		PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/14/11
20	92	nt removed	01171009	BPT0891	0007	20,902	CJA023595	10/29/2009 C,C	Metal chips in Fuel system	no metering unit metal chips found, filter checked - particles are suspected	2x injectors	For further analysis the 2 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	HP pump - no defect verified - 8D report 1/25/2011
21	93		02020909	BPT0447	0007	19,355	CJA015510	9/12/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer	4 x injector 1 x distributor rail 1 x holder inline EFP	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
22	94		01090509	BPT1015	0006	42,541	CJA003123	5/25/2009 C.C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer		_	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
23	95		02190110	BPT0056	Without	9,280	CJA037049	1/29/2010 S,C	P0087 - Fuel System pressure too low Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report -1/12/11
24	96		01120509	BPT1015	0006	38,984	CJA003834	6/4/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
25	97		01180909	BPT1167	0007	10,156	CJA018611	9/30/2009 C,C	Starts poorly - metal chips in the filter	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 : Fuel filter	4	Handover for analysis / 8D report - 12/7/2010	8D report - Corrosion deposits - fuel OK - 2/1/11
26	98		01301009	BPT0900	0007	5,882	CJA025311	11/10/2009 C,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors, 1 x Pressure control valve	Pressure control valve for analysis Handed over to Bosch	Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
27	100		04260809	BPT0311	0007	13,694	CJA014411	9/7/2009 C,C	P0087 - Fuel System pressure too low	PTD - Metal wear in ZME pump room - delivered without ZME	1 x change filter 1 :	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
28	104		01070809	BPT0767	0007	38,082	CJA011934	8/20/2009 C,C	Dismantled by changing the engine - complaint unknown	no metering unit metal chips found, HP pump change by changing the engine			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
29	82		02021009	BPT0345	0007	8,400	CJA020853	10/13/2009 C,C	Leakages	no metal chips at the ZME sieve and pump room found			Handover for analysis / 8D report 05.01.11-	No defect verified - 8D report - 1/21/11
30	99		02180310	BPT0433	Without	6,996	CJA049352	3/29/2010 S,C	Engine does not start - P0877	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report 05.01.11-	Inappropriate fuel - 8D report - 1/21/11
31	102		04030909	BPT0849	0007	9,551	CJA015659	9/12/2009 C,C	Vibration and sounds	no metal chips at the metering unit strainer and pump chamber found			Handover for analysis / 8D report 05.01.11-	8D report - no defect verified - 2/1/2011
32	105		01150909	BPT0169	0007	16,311	CJA017656	9/23/2009 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report 05.01.11-	8D report - PTD by Bosch accepted - corrective actions deployed - 3/8/2011
					sta	rting from 1/1	/2011							
33	126	Non-respon	02020909	BPT0143	0007	20,859	CJA015246	9/11/2009 C,C	P0087 - metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report 3/1/11
34	127	sive conte nt removed	04140708	BPT0836	0005	32,025	CBE008173	7/23/2008	Check lamp on, metal chips	Brown particles can be seen in the metering unit room and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
35	128		04190410	BPT0483	Without		CJA056376	4/29/2010	Engine does not start, glow plug check lamp on P0087 - metal chips	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
36	129		01160808	BPT0464	0005	38,705	CBE015576	9/9/2008 C,C	Engine does not start again - metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report 3/1/11
37	130		04090410	BPT0086	Without	20,283	CJA033742	1/14/2010 S,C		PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
38	131		04251109	BPT0898	0007	8,414	CJA029969	12/7/2009 S,C	Engine does not start again - metal chips in the filter	no metal chips at the ZME sieve and pump room found			Handover for analysis / 8D report - 2/9/2011	No defect verified - 8D report - 3/22/2011

EA11003EN-00723[2]

39	А	Non-respon	01201209	BPT0321	Without	15,109	CJA033033	1/11/2010 S,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/22/2011
40	20	sive conte nt removed	02220110	BPT0226	Without	11,955	CJA038037	2/3/2010 S,C	Sounds - 21 fault stored control device	brownish deposits - metering unit absent!	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
41	61		02051009	BPT0007	Without	19,773	CJA039871	2/11/2010 S,C	P0191, P0087 - generator Fuel pressure	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	
42	105		02140508	BPT0927	0004		CJA017656	9/23/2009 C,C	1	PTD - Metal wear in metering unit pump chamber and strainer - brownish colouring	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
43	109		04020810	BPT0039	Without	9	CJA078570	8/11/2010 S,C	Leaking - fuel loss	Leakage at shaft sealing ring - known problem		Handover for analysis / 8D report - 2/22/2011	
44	110		04140209	BPT0304	0006		CJA018611	9/3/2009 C,C	Engine stalls - switch gear 1 to 2	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report 3/22/2011
45	111		06030810	BPT1020	Without	176	CJA078881	8/12/2010 S,C	Leaking at the front side HP pump	Oil seal leakage - known problem		Handover for analysis / 8D report - 2/22/2011	
46	112		02240909	BPT1189	Without	32,250	CJA020378	1/12/2009 C,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/22/2011
47	113		02150110	BPT0368	Without	19,955	CJA036555	1/27/2010 S,C	Does not start - goes out	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	
48	114		02020110	BPT0021	Without	20,193	CJA033014	1/11/2010 S,C	P009, P0183 - Valve f. fuel dos.	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	
49	115		01071009	BPT1305	0007	5,655	CJA012541	8/26/2009 C,C	Does not start, deposits in the HP pump	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report 3/22/2011
50	118		04110509	BPT0732	Without	19067	CJA003440	5/25/2009 C,C	Metal chips fuel filter	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	
51	119		04240909	BPT0739	0007	3055	CJA019260	10/5/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber - delivered without metering unit		Handover for analysis / 8D report - 2/22/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 3/22/2011
52	120		01140809	BPT0672	Without	20,000	CJA013216	8/28/2009 C,C	Does not start, after filling the fuel	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	
53	121		04230610	BPT1301	Without	150	CJA070452	7/8/2010 S,C	P0087 - mechan. fault, filter chips	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report 3/22/2011
54	122		04020608	BPT0210	Without	44,922	CJA006136	7/11/2008 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	
55	123		02050809	BPT0688	0007	24,254	CJA011284	8/18/2009 C,C	P0087 - Filter chips	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
56	124		02020210	BPT0345	Without	2289	CJA021338	10/15/2009 C,C	P0087 - Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer	delivered without metering unit	Handover for analysis / 8D report - 2/22/2011	
57	125		02180709	BPT1107	Without	10,441	CJA051959	4/12/2010 S,C	P0087 - Engine does not start	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	

From: To:

CC:

lon-responsive content removed

Non-responsive content removed

3/24/2011 9:36:51 AM Date:

Topic: 8D reports Bosch high-pressure pumps US07 Attachments: 24.03.2011- Voranalyse- HD-Pumpen US07.pdf

> 24.03.11--8D-Bericht 4VW930.pdf 24.03.11--8D-Bericht 4VW940.pdf 24.03.11--8D-Bericht 4VW939.pdf 24.03.11--8D-Bericht 4VW938.pdf

Dear Mr. Non-responsive content removed

Attached are more 8D reports from Bosch.

3 x improper fuel 1 x no trouble found

With best wishes

Non-responsive content removed

>**************** Volkswagen Sachsen GmbH

Domicile/Sitz: Zwickau

Court of Registry/Registergericht: Amtsgericht Chemnitz

HRB no./. Commercial Register no.: 1666

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Hubert Waltl

Executive Directors/Geschäftsführer: Hans-Joachim Rothenpieler (Speaker/Managing Director),

Henry Mehnert, Robert Stauß

Important note: The above information is automatically added to this e-mail.

This addition does not constitute a representation of the legal character of the e-mail.

Wichtiger Hinweis: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

This is unregistered version of Total HTML Converter

EA11003EN-00725[0]

Ser		Vehicle identification	HP Data	HP Data	HP Data	KM LL	Engine No.	CP4 date	Customer complaint	Results of Pre - analysis	Further components	Comments activities from	4	
no	. USA	No.	Bosch	Bosch	Bosch	(Mileage)		er nelen er felige	The second contract of		for Complaint	pre-analysis	Analysis Bosch	Analysis Bosch
1	10	Non-respons ive content	02240709	BPT1133	0007	28,756	CJA010361	8/7/2009 C,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Inappropriate fuel - 8D report - 1/12/2011
2	16	removed	04130210	BPT0234	Without	18,121	CJA024847	2/16/2010 S,C	Metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/14/2011
3	20		04170410	BPT0468	Without	7,375	CJA056043	4/28/2010 S,C	does not start - P0087 fuel - system pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
4	28		01040310	BPT0267	Without	8,084	CJA046361	3/15/2010 S,C	P0087 - Fuel System pressure too low	Plug of the HP pump broken - v.m PTD	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
5	29		01080909	BPT0250	0007	15,976	CJA016478	9/17/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
6	39		04300310	BPT0048	Without	4,868	CJA051563	4/8/2010 S,C	P0087 - Fuel System pressure too low	PTD - Metal wear in metering unit pump chamber and strainer	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
7	50		01301009	BPT0240	0007	787	CJA025097	11/10/2009 C,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	Deposits- inappropriate fuel - 8D report - 3/8/2011
8	62		04190410	BPT0430	Without	3,112	CJA056466	4/30/2010 S,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	For further analysis the 4 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	
9	73		02060210	BPT0909	Without	10,234	CJA041107	2/17/2010 S,C	Metal chips in fuel system	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
10	81		04240909	BPT0839	0007	15,542	CJA019335	10/5/2009 C,C	P0087 - Fuel system pressure too low does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
11	82a		04240609	BPT0400	0007	15,293	CJA005671	6/30/2009 C,C	P0087- and metal chips in system	PTD - Metal wear in metering unit pump chamber and strainer		P0087	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
12	83		02051109	BPT1352	0007	2,931	CJA026490	11/17/2009 C,C	Does not start - electr. fault	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted - corrective action deployed - 1/13/2011
13	84		01090110	BPT1242	Without	12,389	CJA035025	1/20/2010 S,C	P0087 - Fuel System pressure too low - 5 faults	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
14	85		04110509	BPT0798	0006	22,726	CJA003401	5/27/2009 C,C	Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by M/s Bosch accepted Corrective actions deployed - 1/13/2011
15	86		01050110	BPT1386	Without	8,953	CJA033742	1/14/2010 S,C	P0087 - Fuel system pressure too low metal chips in the filter	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective action deployed - 01/13/11
16	88		02280410	BPT1037	Without	23	CJA056684	4/30/2010 S,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report - 01/25/11
17	89		01170909	BPT1336	0007	20,922	CJA017951	9/24/2009 C,C	Metal chips in Fuel system, P013B	PTD - Metal wear in metering unit pump chamber and strainer		For further analysis the 4 injectors were given to Bosch	8D report about the <i>Injectors</i> available - all OK - 1/3/2011	Deposits - inappropriate fuel - 8D report - 1/12/11
18	90		02151009	BPT0930	0007	7,684	CJA023120	10/27/2009 C,C	no output	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors	Handover for analysis / 8D report - 12/7/2010	8D report about the <i>Injectors</i> available - all OK 1/3/2011	No defect verified - HP pump - 8D report - 01/25/11

Handover for analysis / 8D report - 2/9/2011

No defect verified - 8D report - 3/22/2011

38 131

04251109

BPT0898

0007

8,414

CJA029969

12/7/2009 S,C

						1			P0087/P0088 - Fuel	PTD - Metal wear in metering	4 x injectors			8D report - PTD by M/s Bosch
19	91	Non-respon sive conte	04130210	BPT0347	Without	11,335	CJA042927	2/26/2010 S,C	System pressure too low - 5 faults	unit pump chamber and strainer	10000444 42 FE FESTIVATE TO FE	accompanying components are not analyzed because metal chips are in the	Handover for analysis / 8D report - 12/7/2010	accepted Corrective actions deployed - 1/14/11
20	92	nt removed	01171009	BPT0891	0007	20,902	CJA023595	10/29/2009 C.C	Metal chips in Fuel system	no metering unit metal chips found, filter checked - particles are suspected	2x injectors	For further analysis the 2 injectors were given to Bosch	8D report about the Injectors available - all OK 1/3/2011	HP pump - no defect verified - 8D report 1/25/2011
21	93		02020909	BPT0447	0007	19,355	CJA015510	9/12/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer	4 x injector 1 x distributor rail 1 x holder inline EFP	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
22	94		01090509	BPT1015	0006	42,541	CJA003123	5/25/2009 C.C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report - 1/12/11
23	95		02190110	BPT0056	Without	9,280	CJA037049	1/29/2010 S,C	P0087 - Fuel System pressure too low Does not start - lamp on	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the system	Handover for analysis / 8D report - 12/7/2010	Deposits - inappropriate fuel - 8D report -1/12/11
24	96		01120509	BPT1015	0006	38,984	CJA003834	6/4/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
25	97		01180909	BPT1167	0007	10,156	CJA018611	9/30/2009 C,C	Starts poorly - metal chips in the filter	no metering unit metal chips found, filter checked - particles are suspected	1 x change filter 1 x Fuel filter		Handover for analysis / 8D report - 12/7/2010	8D report - Corrosion deposits - fuel OK - 2/1/11
26	98		01301009	BPT0900	0007	5,882	CJA025311	11/10/2009 C,C	P0087 - Fuel System pressure too low	no metering unit metal chips found, filter checked - particles are suspected	4 x injectors, 1 x Pressure control	Pressure control valve for analysis	Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
27	100		04260809	BPT0311	0007	13,694	CJA014411	9/7/2009 C,C	P0087 - Fuel System pressure too low	PTD - Metal wear in ZME pump room - delivered without ZME	1 x change filter 1 x Fuel filter	accompanying components are not analyzed because metal chips are in the	Handover for analysis / 8D report - 12/7/2010	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
28	104		01070809	BPT0767	0007	38,082	CJA011934	8/20/2009 C,C	Dismantled by changing the engine - complaint unknown	no metering unit metal chips found, HP pump change by changing the engine			Handover for analysis / 8D report - 12/7/2010	No defect verified - 8D report 01/25/11
29	82		02021009	BPT0345	0007	8,400	CJA020853	10/13/2009 C,C	Leakages	no metal chips at the ZME sieve and pump room found			Handover for analysis / 8D report 05.01.11-	No defect verified - 8D report - 1/21/11
30	99		02180310	BPT0433	Without	6,996	CJA049352	3/29/2010 S,C	Engine does not start - P0877	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	accompanying components are not analyzed because metal chips are in the	Handover for analysis / 8D report 05.01.11-	Inappropriate fuel - 8D report - 1/21/11
31	102		04030909	BPT0849	0007	9,551	CJA015659	9/12/2009 C,C	Vibration and sounds	no metal chips at the metering unit strainer and pump chamber found			Handover for analysis / 8D report 05.01.11-	8D report - no defect verified - 2/1/2011
32	105		01150909	BPT0169	0007	16,311	CJA017656	9/23/2009 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer			Handover for analysis / 8D report 05.01.11-	8D report - PTD by Bosch accepted - corrective actions deployed - 3/8/2011
					star	rting from 1/1	/2011							1.
33	126	Non-respon	02020909	BPT0143	0007	20,859	CJA015246	9/11/2009 C,C	P0087 - metal chips in fuel system	PTD - Metal wear in metering unit pump chamber and strainer	t		Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report 3/1/11
34	127	sive conte nt removed	04140708	BPT0836	0005	32,025	CBE008173	7/23/2008	Check lamp on, metal chips	Brown particles can be seen in th metering unit room and strainer	e		Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11
35	128	nt romoved	04190410	BPT0483	Without		CJA056376	4/29/2010	Engine does not start, glow plug check lamp on P0087 - metal chips	PTD - Metal wear in metering uni pump chamber and strainer	t		Handover for analysis / 8D report - 2/9/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 1/14/20
36	129		01160808	BPT0464	0005	38,705	CBE015576	9/9/2008 C,C	Engine does not start again - metal chips in the filter	PTD - Metal wear in metering uni pump chamber and strainer	t		Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel / 8D report 3/1/11
37	130		04090410	BPT0086	Without	20,283	CJA033742	1/14/2010 S,C		PTD - Metal wear in metering uni pump chamber and strainer	t		Handover for analysis / 8D report - 2/9/2011	Inappropriate fuel - 8D report - 2/28/11

Engine does not start again

- metal chips in the filter

no metal chips at the ZME sieve

and pump room found

EA11003EN-00725[2]

3	9	Non-respons	01201209	BPT0321	Without	15,109	CJA033033	1/11/2010 S,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/22/2011
4	0 2	ive content removed	02220110	BPT0226	Without	11,955	CJA038037	2/3/2010 S,C	Sounds - 21 fault stored control device	brownish deposits - metering unit absent!	4 x injectors	Handover for analysis / 8D report - 2/22/2011	Shake Charles (Shake)
4	1 6		02051009	BPT0007	Without	19,773	CJA039871	2/11/2010 S,C	P0191, P0087 - generator Fuel pressure	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	
4	2 10	5	02140508	BPT0927	0004		CJA017656	9/23/2009 C,C		PTD - Metal wear in metering unit pump chamber and strainer - brownish colouring	4 x injectors	Handover for analysis / 8D report - 2/22/2011	
4	3 10		04020810	BPT0039	Without	9	CJA078570	8/11/2010 S,C	Leaking - fuel loss	Leakage at shaft sealing ring - known problem		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
4	4 11	<mark>)</mark>	04140209	BPT0304	0006		CJA018611	9/3/2009 C,C	Engine stalls - switch gear 1 to 2	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report - 3/22/2011
4	5 11		06030810	BPT1020	Without	176	CJA078881	8/12/2010 S,C	Leaking at the HP pump front side	Oil seal leakage - known problem		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
4	6 11	2	02240909	BPT1189	Without	32,250	CJA020378	1/12/2009 C,C	Metal chips fuel filter	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/22/2011
4	7 11		02150110	BPT0368	Without	19,955	CJA036555	1/27/2010 S,C	Does not start - goes out	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
4	8 11	•	02020110	BPT0021	Without	20,193	CJA033014	1/11/2010 S,C	P009, P0183 - Valve f. fuel dos.	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
4	9 11	5	01071009	BPT1305	0007	5,655	CJA012541	8/26/2009 C,C	Does not start, deposits in the HP pump	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report - 3/22/2011
5	0 11	• · · · · · · · · · · · · · · · · · · ·	04110509	BPT0732	Without	19067	CJA003440	5/25/2009 C,C	Metal chips fuel filter	PTD - Metal wear in metering unit pump chamber		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/24/2011
5	1 11		04240909	BPT0739	0007	3055	CJA019260	10/5/2009 C,C	Does not start	PTD - Metal wear in metering unit pump chamber - delivered without metering unit		Handover for analysis / 8D report - 2/22/2011	8D report - PTD by Bosch accepted - corrective actions deployed - 3/22/2011
5	2 12		01140809	BPT0672	Without	20,000	CJA013216	8/28/2009 C,C	Does not start, after filling the fuel	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/24/2011
5	3 12		04230610	BPT1301	Without	150	CJA070452	7/8/2010 S,C	P0087 - mechan. defect, filter chips	no metal chips at the metering unit strainer and pump chamber found		Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report - 3/22/2011
5	4 12	2	04020608	BPT0210	Without	44,922	CJA006136	7/11/2008 C,C	Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer		Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/24/2011
5	5 12	<u> </u>	02050809	BPT0688	0007	24,254	CJA011284	8/18/2009 C,C	P0087 - Filter chips	PTD - Metal wear in metering unit pump chamber and strainer	4 x injectors	Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
5	6 12		02020210	BPT0345	Without	2289	CJA021338	10/15/2009 C,C	P0087 - Engine does not start	PTD - Metal wear in metering unit pump chamber and strainer	delivered without metering unit	Handover for analysis / 8D report - 2/22/2011	Inappropriate fuel - 8D report - 3/23/2011
5	7 12		02180709	BPT1107	Without	10,441	CJA051959	4/12/2010 S,C	P0087 - Engine does not start	no metal chips at the metering unit strainer and pump chamber found	4 x injectors	Handover for analysis / 8D report - 2/22/2011	No defect verified - 8D report - 3/24/2011

From: Non-responsive content removed To:

CC:

lon-responsive content remove

Date: 3/30/2011 6:08:45 AM

Topic: 8D report high-pressure pump US07 - engine 2.0I-103kw TDI CR

Attachments: 30.03.11--8D-Bericht 4VW841.pdf

Dear Mr. Non-responsive content removed

Attached is one more 8D report of high-pressure pumps, which were delivered to

With best wishes

Non-responsive content removed

Non-responsive content removed

>***************

Volkswagen Sachsen GmbH

Domicile/Sitz: Zwickau

Court of Registry/Registergericht: Amtsgericht Chemnitz

HRB no./. Commercial Register no.: 1666

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Hubert Waltl

Executive Directors/Geschäftsführer: Hans-Joachim Rothenpieler (Speaker/Managing Director),

Henry Mehnert, Robert Stauß

Important note: The above information is automatically added to this e-mail.

This addition does not constitute a representation of the legal character of the e-mail.

Important Notice: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Volkswagen Sachsen GmbH.

From: To: CC:

Non-responsive content removed

Date: 4/4/2011 3:43:13 PM

Topic: Results of findings CP4.1 - 7 pumps from VW Development

Attachments: 8D-Bericht 4VW951.pdf

8D-Bericht 4VW952.pdf 8D-Bericht 4VW953.pdf 8D-Bericht 4VW954.pdf 8D-Bericht 4VW955.pdf 8D-Bericht 4VW956.pdf 8D-Bericht 4VW957.pdf

Dear Mr.

Attached please find the 8D reports for the 7 CP4.1, which you handed over to us on 3/23/2011 in

Summary

- 7 pumps with drivetrain damage
- in all the pumps we could see indications of a fuel being used that did not conform to the specifications
- --> brownish deposits on different components (e.g. intake valve, sealing disc on the intake valve, spring seat, metering unit adjustment ring, roller support, overflow valve pistons)

--> 8Ds rejected due to customer error

VIN: 3VWCL71K9N VIN: 3VWTL81K99 VIN: 3VWTL71K09 VIN3VWAL71K49N VIN: 3VWRL71L89 VIN:3VWTL71K19N VIN: 3VWAL71K59

With best wishes

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

Postfach 30 02 20 70442 Stuttgart GERMANY www.bosch.com

Non-responsive content removed

Domicile: Stuttgart, Court of Registry: District Court Stuttgart, HRB 14000; Chairman of the supervisory board: Hermann Scholl; Management: Franz Fehrenbach, Siegfried Dais; Bernd Bohr, Rudolf Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks,





From: Non-responsive content removed

To: CC:

Date: 6/21/2011 4:09:10 PM

Topic: FW: Analysis results Bosch high-pressure pumps

Attachments: 8D-Bericht 4VW977.pdf

8D-Bericht 4VW979.pdf 8D-Bericht 4VW978.pdf

Ablehnung von Triebwerksschäden.msg

FYI

From: Non-responsive content removed
Sent: Tuesday, June 21, 2011 3:46 PM
To: Non-responsive content removed

Cc:

Subject: Analysis results Bosch high-pressure pumps

Hello Mr.

In the past few weeks Bosch has again received via VW **Exercise** 3 pieces of high-pressure pumps CP4.1 / TT no. 03L 130 755A for analysis.

Attached are the 8D reports:

Allow me to add one more comment to this;

All pumps were found to have drivetrain damage.

Historically, such cases were normally part of Bosch's responsibility, when

customer influence could not be proved beyond doubt. This process was changed owing to intensive work done by a task force for AUDI.

The result of this work is that pumps always get drivetrain damage when they are operated outside the technical customer document. This can, for instance, be the initial filling, prefilling, type and quality of fuel parameters. Such parameters are outside our sphere of influence, therefore such cases are now not the responsibility of BOSCH This process is being used in this way since May 2011 and does not affect the old cases.

Please see here the attached mail, in which Bosch has officially informed the component champion at VW about the process Further central communication with Bosch about this process will also be done via Mr.

With best wishes

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

Postfach 33 33 38023 Braunschweig GERMANY www.bosch.com

Non-responsive content rem oved

Domicile: Stuttgart, Court of Registry: District Court Stuttgart, HRB 14000; Chairman of the supervisory board: Hermann Scholl; Management: Franz Fehrenbach, Siegfried Dais; Bernd Bohr, Rudolf Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks, Peter Tyroller; Stefan Asenkerschbaumer, Uwe Raschke, Wolf-Henning Scheider



EA11003EN-0073000 Non-responsive content removed

Date:

Topic: Rejection of drivetrain damage

Dear Mr. Non responsive content re

Our studies suggest that the drivetrain damage occur only when the CP4s are operated beyond the technical customer document. The results of these studies were presented and discussed in detail with Audi in the task force.

For this reason we reject the complaints with the fault pattern "drivetrain damage", as long as it is caused by a fault for which Bosch is not responsible.

With best wishes

Non-responsive content removed

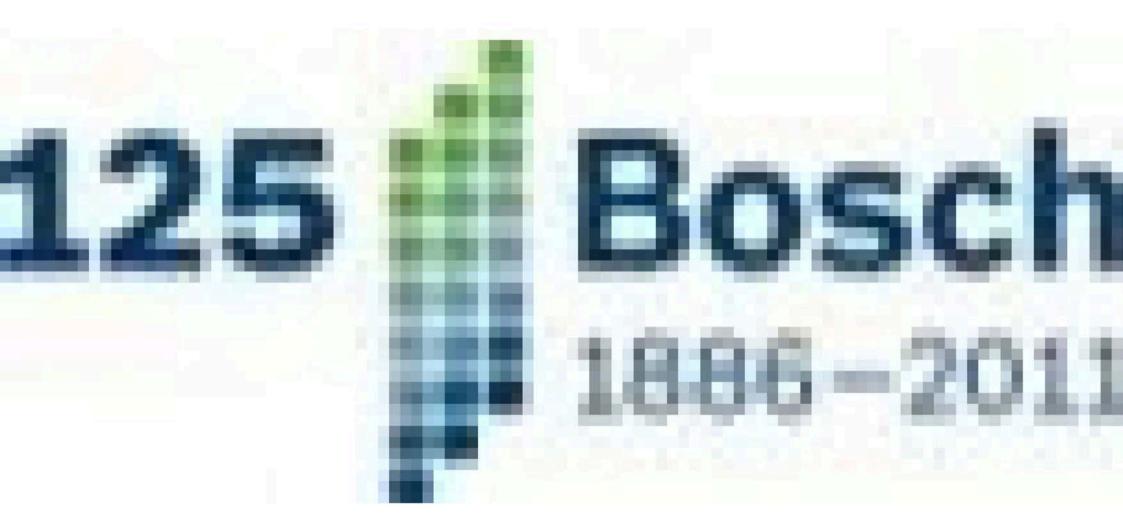
Robert Bosch GmbH
Non-responsive content remove

Non-responsive content removed

Domicile: Stuttgart, Court of Registry: District Court Stuttgart, HRB 14000; Chairman of the supervisory board: Hermann Scholl; Management: Franz Fehrenbach, Siegfried Dais; Bernd Bohr, Rudolf Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks, Peter Tyroller; Stefan Asenkerschbaumer, Uwe Raschke, Wolf-Henning Scheider







From: Non-responsive content removed

To: CC: Date:

8/18/2011 3:31:00 PM

Topic: FW: IQIS:230003310149_Info_1

You can scrap the pumps!

With best wishes

From: Sent: Thursday, August 18, 2011 3:21 PM

RE: IQIS:230003310149_Info_1

Thanks very much

We can scrap the pumps.

From:

Sent: Thursday, August 18, 2011 3:51 AM

Non-responsive content removed

Hello

You can reject the pump as per the warranty.

Do you want to have the pump back? (this will cost); or can I scrap it? Substantial deposits in the interior; even RP1 doesn't help here, although the effectiveness of RP1 is very high.

From: Non-responsive content removed Sent: Wednesday, August 17, 2011 3:47 PM
To: Non-responsive content removed
Cc: CP4 complaints

Subject: IQIS:230003310149_Info_1

Hello.

I am sending you hereby the information about the analysis of the CP4.2 pump mentioned above.

Customer	RB TT no.	Customer TT no.	IQIS	FD	S. no.	Compl. text	KM	Country of failure	Reference no.:	QTS no.	Finding
AUDI	059 130755 BC	0445.010.613	230003310149	24.06.10	BPT 0423	No specification from AUDI	15385	US	IGG000007	4116860	Drivetrain damage

Analysis (done in FeP):

- Packaging OK, protective covers absent. - Fuel sample not available

- Chips and deposits in inflow/outflow pipes not OK
 NRV spring holder offset OK -> CH R=3.61 mm CH L=3.61 mm
 NRV spring R and L visual check OK. Chips and deposits at metering unit not OK.

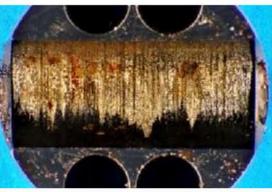
Pump dismantled:

- Vacuum testing CH R OK vacuum testing CH L not OK, because HP piston - roller support running surface R and L completely worn-out not OK. is sluggish
- NoWe running surface worn-out not OK
 Flange and housing bearing bush fused not OK
- All internal pump parts with deposits not OK

Drivetrain damage, deposits on all parts

Pictures:











CC:

To:

Date: 8/19/2011, 3:26:00 PM Subject: APS 8/22/11 NEW Attachments: APS 22.08.2011.pptx

Hi all,

Please find attached the document for the APS meeting on Monday, 08/22/11.

Best regards



Domicile/Sitz: Ingolstadt

Court of Registry/Registergericht: Amtsgericht Ingolstadt

Commercial Register No./HRB Nr.: 1

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael

Dick, Frank Dreves, Peter Schwarzenbauer, Thomas Sigi, Axel Strotbek

Important note: The above information is automatically added to this e-mail.

This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon Audi AG.

Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse

auf den Rechtscharakter

dei E-iviali zu.
From: Non-responsive content removed Sent: Thursday, August 04, 2011, 1:39 PM To: Non-responsive content removed Cc:
Subject: Re: CP4.2 field etc.
Hello ,
As we discussed, please send invitations to a technical meeting ASAP.
And please make sure my boss has time, too ;-)
Best regards Non-responsive content removed
From: Non-responsive content removed Sent: Thursday, August 04, 2011, 10:09 AM To: Non-responsive content removed Subject: Re: CP4.2
Non-responsive content remo ved
I thought of you yesterday on my way home from \blacksquare (it was my first working day after 2 ½ weeks of vacation), why? à see below!
I've received many lists like this; some of the part numbers are incorrect.
We've already examined 43 of the pumps and notified Non-responsive content removed, because he stopped the action after around 300 – 500 cars (see attachment).
Our definitive proposal from the CP4 Task Force today is to continue the action with additional measures; I still have to coordinate it with Non-responsive content removed etc.
We know the following since yesterday:
· It is essential that the pump be "inserted in the TDC position" when installed at the workshop; just 1 wrong tooth will have a major influence on large rotational fluctuations in the belt drive (2-3 teeth are extremely critical; according to current information, even an OK status could be an accompanying

EA11003EN-01177[1]

cause for increased

EA11003EN-01177[2]

in

CP4.2 failures in the Audi W19 !!! (we know this from a field visit, for example; it surely also occurs

other markets). è The action documents must definitely point this out; a reference to RLF or GFS isn't enough !!!

In addition to the pump, install the EU6 or W24 tensioner (057 109 243 M) !!!

Best regards



From: Non-responsive content removed

Sent: Thursday, August 04, 2011, 2:35 AM

To: Non-responsive content removed

Subject: CP4.2



Have a look at the list, shipped pumps from from the action, BK pumps are included, but I can't tell you whether any are really there; perhaps it would make sense to have a look when they get here.

Otherwise, everything else is fine here in the way we have permanent summer, but probably only just this month, then fall will begin again.

Regards,

best regards

Best regards

Non-responsive content removed





From: Non-responsive content removed

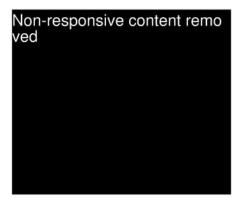
Sent: Tuesday, November 15, 2011, 7:02 PM
To:
Cc: Non-responsive content removed

Subject: HPP drivetrain damage

Hello

Are there any new findings on this subject?
Was activation of terminal 15 recommended for better venting of the pump?
The subject is on the agenda again, for the ZP7 meeting on 11/22/2011.
Thanks in advance for your information.

Best regards



EA11003EN-01540[0]

From: Non-responsive content removed To:

Date: 10/19/2011, 3:49:30 PM Subject: Re: HPP drivetrain damage

Attachments: Status SW-Maßnahmen im KVS.pdf



There are no changes to the existing series.

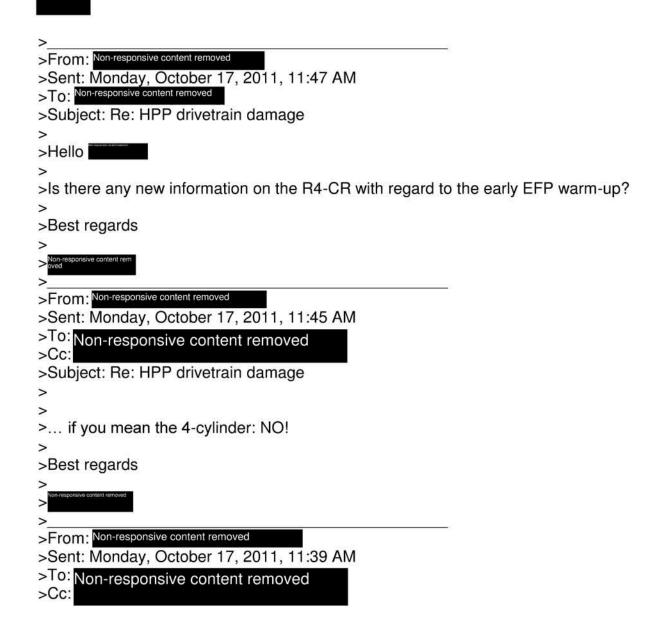
CC:

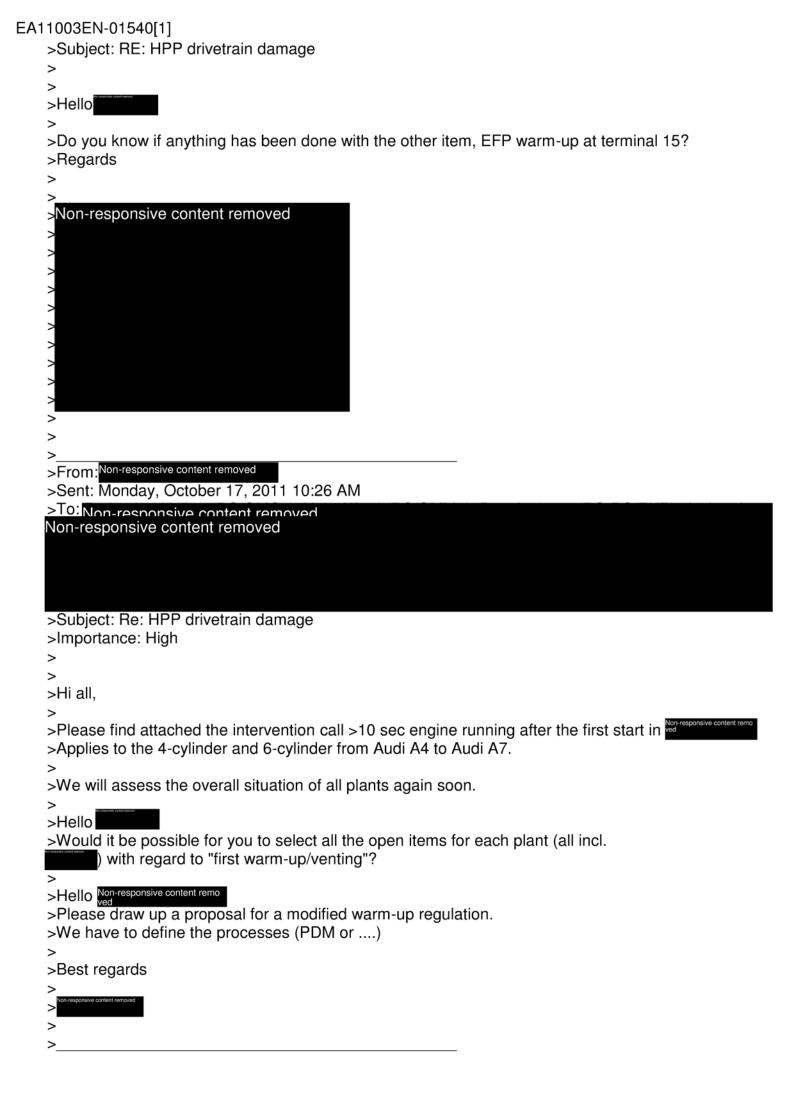
The first fuel stage must be vented and BOSCH then recommends 10s engine running. Energizing terminal 15 is no help here, since venting has been more than sufficient, and was not implemented.

You are already well familiar with our status on this subject through my boss,

ion-responsive content removed

Regards





```
EA11003EN-01540[2]
    >From: Non-responsive content removed
    >Sent: Monday, October 17, 2011, 9:30 AM
    >To: Non-responsive content removed
    >Subject: FW: HPP drivetrain damage
    >Importance: High
    >From: Non-responsive content removed
    >Sent: Monday, October 10, 2011 1:48 PM
    >To: Non-responsive content removed
    >Subject: Re: HPP drivetrain damage
    >Importance: High
    >
    >
    >Hello
    >Since 10/07/11, all employees in production (B and C series) have been instructed that each
    vehicle receive 10sec engine running with the first engine start.
    >
    >
    >Best regards
    Non-responsive content removed
    >
    >
    >
    >From: Non-responsive content removed
    >Sent: Friday, September 23, 2011 4:25 PM
    >To: Non-responsive content removed
    Non-responsive content removed
    >Subject: Re: HPP drivetrain damage
    >
    >
    >Hello
    >The engine first start was reduced to approx. 3sec engine running at the inspection center
    (A14) due to insufficient suction and odor nuisance.
    >In the interim, the suction system performance has been optimized.
    >We will carry out a trial run for one day on Tuesday over all 3 shifts.
    >10 sec engine running for all TDIs.
    >If the employees do not complain (no odor nuisance), we can change the engine running
    to 10 sec.
    >If there are complaints, we will have to find a solution together with the planning department.
    >
    >Best regards
    >Non-responsive content removed
```



Dear Sir/Madam,

EHP 0717

Please find attached the minutes of the last CP4 technical discussion. Due to the late distribution and the next pending technical discussion, the distribution is being made without prior coordination.

opt-c-schicht.pdf

EA11003EN-01542[1]

Attachments

- 1) DL overview
- 2) W36
- 3) Opt. tappet assembly
- 3) C-layer

Best regards / mit freundlichen Grüßen



Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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

EA11003EN-01568[0]

From: Non-responsive content removed

To:

CC:

Date: 1/29/2010, 1:38:29 PM

Subject: Re: Bosch warranty decisions for (e.g., here: V12-TDI)

Kind regards,

Non-responsive content removed

Head of Product Technology, Diesel Engines

AUDI AG

85045 Ingolstadt

Non-responsive content removed

http://www.audi.com

Domicile/Sitz: Ingolstadt

Court of Registry/Registergericht: Amtsgericht Ingolstadt

Commercial Register No./HRB Nr.: 1

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer,

Axel Strotbek, Werner Widuckel

Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.

<u>Wichtiger Hinweis:</u> Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail für AUDI AG zu.

From: Non-responsive content remov

Sent: Friday, January 29, 2010, 1:35 PM

Non-responsive content removed

Subject: Re: Bosch warranty decisions for (e.g., here: V12-TDI)

Hello

The answer from od Non-responsive content remov

Yes

From: Non-responsive content removed

Sent: Thursday, January 28, 2010, 5:53 PM

Non-responsive content removed

Subject: Re: Bosch warranty decisions for (e.g., here: V12-TDI)

Hello de Non-responsive content remove

Attached for your information:

Bosch denies warranty coverage for the high-pressure pump failure in okay.

EA11003EN-01568[1]

In addition, the warranty decision contains the note: Pump not approved for the manufacture man

Do you think this would be a topic for 02/12?

Kind regards,

Non-responsive content removed

Head of Product Technology, Diesel Engines

AUDI AG

85045 Ingolstadt

Non-responsive content removed

http://www.audi.com

Domicile/Sitz: Ingolstadt

Court of Registry/Registergericht: Amtsgericht Ingolstadt

Commercial Register No./HRB Nr.: 1

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer, Axel Strotbek, Werner Widuckel

Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.

<u>Wichtiger Hinweis:</u> Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail für AUDI AG zu.

From: Non-responsive content removed

Sent: Thursday, January 28, 2010, 8:40 AM

Non-responsive content removed

Subject: Re: Bosch warranty decisions for e.g., here: V12-TDI)

Hello loved Non-responsive content removed

BOSCH CRS systems are generally approved for diesel fuel according to the European EN590 standard. Approvals under the U.S. ASTM D975 standard are also possible, but the lower lubricity must be compensated for by using a Low Lubricity Package.

The most important properties in which fuels outside of Central Europe differ from those described in the named standards are

- Lubricity
- Particle content
- Water content

EA11003EN-01568[2]

With regard to

- With regard to lubricity, fuel surveys indicate that
 - only 30% of samples comply with EN590
 - and 40% of samples are worse than ASTM D975

As a result, the use of a Low Lubricity Package is mandatory here.

- With regard to water and particle intrusion, it is known that these factors are much greater in than in Central Europe (due to the poorer road conditions) that that filtration and water separation, which are entirely sufficient in our environment, are not sufficient in in most cases; the vehicle-specific location of the tank ventilation plays a major role here
- Therefore, a country-specific trial must also be provided for before we can grant a
 vehicle-specific approval (side note: it would be nice to have a trial in every other country, to take
 all country specifics into account; in any case, Non-responsive content removed
 at least the typical countries)

Finally, a few statements resulting from the fact that fuel samples from the complaint-related vehicles were standard-compliant:

- Fuel variances, particularly those regarding lubricity, do not result in the spontaneous failure of our components, since such cases are taken into account in the robustness reserve, which is also guaranteed
- However, ongoing operation with non-standard-compliant fuels may result in preliminary damage, which then may result in more serious damage in the course of further operation (this can be the case even if standard-compliant fuel is used after the initial damage)
- Therefore, a single fuel sample is not significant; a large number of damaged vehicles with standardized fuel would be required before one could draw the conclusion that the fuel in a specific country was unsuitable

As a result of the above statements, we conclude that the rejection of complaints from the market was the correct decision.

Best regards / mit freundlichen Grüßen

Non-responsive content removed

Robert Bosch GmbH

Non-responsive content removed

www.bosch.com

Non-responsive content remove

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 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, From: Non-responsive content removed

Sent: Monday, January 25, 2010, 6:23 PM

Non-responsive content removed

Subject: Re: Bosch warranty decisions for (e.g., here: V12-TDI)

Importance: High

Hello Mr.

From the warranty decision below, I presume that BOSCH has generally not approved the CP 4.2

This statement is completely new to me and I request that you either confirm or deny it explicitly!

Until now, I understood your "official" letter (see file) that you link your warranty with operation of the pump with fuels of EN 590 quality. And the sample did not show any deviations in this case!

And until a deviation is proven, there is no foundation for rejecting the warranty!

So:

Either change the guarantee decision or provide plain language from Bosch to our Executive Board members with regard to prohibited markets!

Please provide feedback.

Best regards

Non-responsive content removed

AUDI AG

85045 Ingolstadt

Non-responsive content removed

http://www.audi.com

Domicile/Sitz: Ingolstadt

Court of Registry/Registergericht: Amtsgericht Ingolstadt

Commercial Register No./HRB Nr.: 1

Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkorn

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer,

Axel Strotbek, Werner Widuckel

Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding upon AUDI AG.

Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail für AUDI AG zu.

From: Non-responsive content removed

Friday, January 22, 2010, 4:07 PM Sent:

Non-responsive content removed To:

(e.g., here: V12-TDI) **Subject:** Re: Bosch warranty decisions for

Hello

Yes!

The sample was completely nondescript with 43.8 mg/kg water, no RME.

Best regards / mit freundlichen Grüßen

Robert Bosch GmbH

PO box 30 02 20 70442 Stuttgart **GERMANY** www.bosch.com

Tel. 0711/811-41746

Non-responsive content removed From:

Friday, January 22, 2010, 1:55 PM Sent:

To:

Subject: Re: Bosch warranty decisions for (e.g., here: V12-TDI)

Hello

Is there a fuel analysis as well?

Best regards

8D-Report-Nr: 000182010 Compl. date: 20.01.2010 USERID ---- PROBLEM DESCRIPTION --

Customer complaint: No info from AUDI----Bosch finding: R :Ro

Ile(R) Running surface -- ground down ----

---- CAUSES OF FAULT ---

- ---- Pump drive damage----~ Pump not approved for because diesel fuels there do not fulfill the requirements of EN590.

~~ Since no RB responsibility was determined, the

8D was terminated at D4.

---- IMMEDIATE MEASURES --

Assess the damage ~ Through drive damage task force.~ Analyze and compare the damage with other pump drive damage.

- CORRECTION MEASURES -----

empty D5 Step

----Original message----

From Non-responsive content removed

Sent: Thursday, January 21, 2010, 12:56 AM To: Non-responsive content removed

EA11003EN-01568[5]

Subject: BNR information to damage processor T 21 G NI

Dear damage processor,

The 8D reports for the following QTS complaints were completed by the vendor the previous day and you may now check and process them further.

Sincerely yours

AUDI AG Non-responsive content removed

Supp.-No. Supplier name BNR Part number Part name BSCHL FSCHL Recognized origin 00001283 30 ROBERT BOSCH GMBH 0003524481 05A 130 755 B HIGH PRESSURE PUMP TFK04 N FIELD

Non-responsive content removed

Date: 4/4/2011, 10:55:35 AM

Re: Rating catalog LR, RS, CS Subject:

I believe we are talking at cross purposes

If a pump that can handle air is demanded, we will deliver it (you know that we're working on it)
The current status is that we exclude the delivery of free air in the pump inlet in the TCD. And that is the foundation of our delivery contract, to which Audi did not reject.
You also know that the entire trials at Bosch took place without air.

The standard in the U.S. is 300 ppm instead of 200 ppm water. Our drivetrain can handle that.

This is the foundation of our TCD and we guarantee it. Poor results are obtained if water content is significantly higher

In my estimation, the water problem is a local problem at most, but not a general problem.

We also need an amplification factor for air: Poor fuel conditions, gasoline, aged biodiesel, ... with the poor friction value from oxide abrasion and the poor friction value of the fuel and/or lubricating film thickness from the viscosity, this can prevent the warm-up of the roller.

In the case of gasoline, the risk of outgassing must also be added. This can only be prevented by significantly increasing the internal pump pressure. But we also have potential with the discussion on a low pressure circuit from last week (increase of the opening pressure)

Best regards / mit freundlichen Grüßen

Robert Bosch GmbH

Non-responsive content re moved

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 14000;
Chairman of the Supervisory Board: Hermann Scholl; Managing Directors: Franz Fehrenbach, Siegfried Dais;
Bernd Bohr, Rudolf Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks, Peter Tyroller; Stefan Asenkerschbaumer, Uwe Raschke, Wolf-Henning Scheide

FROM: MONDAY, APRIL 04, 2011, 9:34 AM

Non-responsive content removed

SUBJECT: RE: RATING CATALOG LR, RS, CS

IMPORTANCE: LOW

Good morning 1)

If Bosch does not allow free air in the pump, then I have to ask why the pump cannot be run air-free.

- According to the U.S. standard, even more water than 200 ppm is possible; we discussed this recently; in this case, you have a problem in the U.S..
- We/you did not find any high water content in our factory fuels, nor in our German field fuels; the brown linings occur even at low water content, which means the pump is not suitable for standardized fuels. You continue to shift the problem from the pump to us and our customers. 3)

We will have to discuss it on Wednesday anyway. Bosch has yet to provide the chain of evidence for your claims.

Best regards

Roland Nilp QA Engine Product Technology

Diesel Injection Systems

AUDI AG I/GQ-221

85045 Ingolstadt Tel +49-841-89-34582 Fax +49 (0) 841 89-8434582

Mobile:+49 (0) 172 918 51 71 mailto:Roland.Nilp@AUDI.DE

http://www.audi.com

Domicile/Sitz: Ingolstadt

Court of Registery Registergericht: Amtsgericht Ingolstadt
Commercial Register No./HRB Nr.: 1
Chairman of the Supervisory Board/Vorsitzender des Aufsichtsrats: Martin Winterkom

Vorstand/Board of Management: Rupert Stadler (Vorsitzender/Chairman), Ulf Berkenhagen, Michael Dick, Frank Dreves, Peter Schwarzenbauer,

Axel Strotbek

Important note: The above information is automatically added to this e-mail. This addition does not constitute a representation that the content of this e-mail is legally relevant and/or is intended to be legally binding.

Wichtiger Hinweis: Die vorgenannten Angaben werden jeder E-Mail automatisch hinzugefügt und lassen keine Rückschlüsse auf den Rechtscharakter der E-Mail für

AUDI AG

EA11003E N-01580[1] Non-responsive content removed

MONDAY, APRIL 04, 2011, 7:19 AM

Non-responsive content removed

SUBJECT: RE: RATING CATALOG LR, RS, CS



The Rating catalog is a catalog that was coordinated with me and

Each of the scenarios was developed systematically, based on cause-effect relationships, and coordinated with the TCD / FMEA Your example can be compared directly with the TCD 1 We do not allow any free air in the pump in the TCD, which secures the pump

2 We allow 200 ppm of water in the TCD and we know that hydroxides can occur at higher water content

We also know that when oxides and hydroxides are created on the roller, the abrasion can be deposited on the roller contact, significantly worsening the coefficient of friction As a result, the conditions for brake plates and drivetrain damage are given

Therefore, there is no reason to modify the catalog from RB's point of view. We also continue to maintain an internal catalog of indicators that provides us with information on non-standardized fuels, This catalog enables us to explain very well how much water was present in the pump and for how long.

Once the air trials are finished, we will be able to supplement the catalog for air as well.

Best regards / mit freundlichen Grüßen

Robert Bosch GmbH

Non-responsive content re moved

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 14000; Chairman of the Supervisory Board: Hermann Scholl; Management: Franz Fehrer Bernd Bohr, Rudolf Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks, I ar Tyroller; Stefan Asenkerschbaumer, Uwe Raschke, Wolf-Henning Scheider nbach, Siegfried Dais;

FROM:

SENT.

FRIDAY, APRIL 01, 2011 1:51 PM TO

BOECKING FRIEDRICH (DS-PC/ENP); SCHORR DIETMAR (DS-PC/EHP5)

Non-responsive content removed

SUBJECT: RE: RATING CATALOG LR, RS, CS

I hereby object to the individual ratings in the rating catalog, because your red rating gives the impression that a serious fault (heavy wear and tear) is present. Example: brown roller - whether the roller is discolored 50% or 100% does not have any impact on its function, in my opinion. Reason: QA uses the R7 brown roller in a warranty decision to reject the pump as a >>customer error<<.

Please add the rating catalog to the task force agenda, in addition to the topic of diagnosis, for Wednesday, 04/06.

Have a nice weekend!

Best regards

FROM: Non-responsive content removed

FRIDAY, APRIL 01, 2011, 12:51 PM

To Non-responsive content removed

Hello

As requested, please find attached the rating catalog for LR, RS and CS.

Best regards / mit freundlichen Grüßen

Robert Bosch GmbH

Non-responsive content remove

www.bosch.com

Non-responsive c ontent removed

Headquarters: Stuttgart, Court of Registry: Amtsgericht Stuttgart, HRB 14000;
Chairman of the Supervisory Board: Hermann Scholi; Managing Directors: Franz Fehrenbach, Siegfried Dais;
Bernd Bohr, Rudoff Colm, Volkmar Denner, Wolfgang Malchow, Peter Marks, Peter Tyroller; Stefan Asenkerschbaumer, Uwe Raschke, Wolf-Henning Scheider

SENT:

Non-responsive content removed THURSDAY, MARCH 31, 2011, 4:14 PM

To: Non-responsive content removed SUBJECT: RE: IQIS: 230003167314 INFO

Hello

Please let me know the drive folder or send me the rating catalogs for

- Brown discoloration
- Position lines / brake plates
- Etc.

Hello

Audi believes that they cannot blame us for the 7 rating. Please keep the pump – we have to clarify this.

And it has nothing to do with the customer complaint anyway.

Thank you.

Best regards

FROM:

Non-responsive content removed
TUESDAY, MARCH 29, 2011, 7:08 PM

Non-responsive content removed

Non-responsive content removed

SUBJECT: IQIS:230003167314_INFO

Here is information about the analysis of the HP-CP4.1

Analysis - (carried out in FeP)

- Packaging OK, 02/172011 (Ug)
- Fuel sample approx. 3 m. taken too little for analysis
 Supply/return positioners OK
- Depression depth 3.60 mm - Visual inspection of spring OK
- Bubble test OK
- Nowe rotation check OK
 Torque MU bolts OK 02/18/2011 (Sen)
- Visual inspection of tightness on computer bench OK 03/08/2011 (Lp)
 Disassembly of cylinder head and visual inspection of all drive parts: NOT OK => brown discoloration / corrosion on roller R7

- Functional check (3x) OK

We have to reject the complaint for this reason.

Further handling of the pump is subject to customer decision

Regards

Non-responsive content removed

Non-responsiv e content rem oved

Non-responsive content removed

KUNDE	TTNr	IQIS	FD	SNr.	Beanst. Text	[KM]	Ausfall- land	Rezerenz Nr:	QTS Nr:	Befund
AUDI	0445.010.507	230003167314	16.11.09	BPT 1157	FZG springt nicht mehr an	106484	DE	IGG000007008-001	3926077	Korrosion an der Laufrolle

EA11003EN-01582[0]



