Volvo Cars of North America, LLC



October 27, 2009

Volvo Drive Rockleigh, NJ 07647 201 768 7300 www.volvocars.us

Mr. D Scott Yon, Chief Vehicle Integrity Division Office of Defects Investigation NVS-212pco PE09-039

Mr. Yon,

This letter and its enclosure contain additional information that was mistakenly omitted in Volvo Cars of North America's October 21, 2009 response to your September 4, 2009 request for information relating to PE09-039. The enclosed CD contains 6 addition field reports which were included in the data base in response to request 2 but overlooked in our hard copy response to request 4.

In addition you will find a copy of the request for confidentiality that was forwarded to the Office of Chief Council, attention Mr. Otto Matheke.

We apologize for any inconvenience this may have caused and welcome further discussion on this matter with you and your staff.

Sincerely,

Adam Kopstein

Manager, North American Product Safety and Compliance

Volvo Cars of North America, LLC PO Box 914 1 Volvo Drive Rockleigh, NJ 07647 USA

John Kopen



Rockleigh, NJ 07647 201-768-7300 www.volvocars.com

October 23, 2009

Mr. Otto Matheke National Highway Traffic Safety Administration, Office of Chief Counsel, 1200 New Jersey S.E. West Building W14-227 Washington, D.C. 20590

Dear Mr. Matheke,

This letter and its enclosures are submitted by Volvo Cars of North America, LLC (VCNA) in response to questions 8, 9 and 11 to NHTSA's September 4th request for information relating to Preliminary Evaluation PE09-039. Volvo's response to the PE can be found in the following enclosures.

The information being submitted here is considered by Volvo to be confidential and an affidavit supporting that claim is enclosed. We firmly believe that release of this confidential information would compromise Volvo's position and make public Volvo vehicle specific information that could be used by our competitors as per 512.15(b). This is based on the knowledge that competitors may or may not have similar components in use within their products.

This confidential information includes engineering drawings containing production data specifically determined to be confidential as per 49 CFR Part 512 Appendix B(1). In addition, changes made by the supplier to the components are proprietary to the supplier and manufacturer and is not customarily released to the public.

Therefore, we request that the confidential information be treated within the meaning of confidential business information pursuant to 5USC 552(b)(4) and Section 112(e) of the National Traffic and Motor Vehicle Safety Act of 1966 as amended and implemented in 49 CFR Part 512.

In accordance with 49 CFR 512.4(a)(1) the top of each page containing confidential information has been marked "Confidential Business Information" or "Entire Page Confidential Business Information" (the drawings are marked so that "Confidential Business Information" is also seen in the document.)

If you have any questions, please contact me at (201) 768-7300 or Vinny D'Auria of my staff at (201) 768-7300 ext. 4789.

Sincerely yours,

VOLVO CARS OF NORTH AMERICA, LLC

Adam Kopstein

Manager, Product Safety and Compliance

Enclosure

CD ROM

Certificate in support of request for confidentiality

Public and Confidential documents

Page 1 of 3 **VOLVO**



Volvo Car Corporation TIE - Technical Information Exchange

TIE - Report

Status Date 2002-09-Ref US - 102696 Status In Progress

Partner 6 US 0002 FTS (FIELD TECH SPECIALIST) Issue Date 2002-08-Issuer U022385

VCNA 15

Resp. Partner 3 US 7510 Volvo Cars North View Local

America

Title Raw fuel odor when exiting vehicle

Concern Area Vehicle Report Sub Concern Area Vehicle Report Support Requested Support Not Needed

Tag Incident Flag N Urgent N

Function Group* 2349(miscellaneous)

Symptom Code 2A ODOR

Vehicle List

Туре	Chassis	MY	VIN	LicPlate	Variant	Mileage	Plant	МС	Structure Week	Issue Date	Primary Vehicle*
184	0271989	2002	YV1TS92D121		1849252251	1710	21			2002- 08-15	Υ

Reference TAG Follow up

Karp Volvo

Problem Solved

Observed Problem List

Cause Code	Fault Type	Problem experienced by				
27 POOR SEAL,LEAKAGE	Permanent	Customer				

Repeat Repair Date[yyyy-mm-dd] 2099-12-30 Repeat Repair

Part Available

Part No Part Serial No Date 9141498(O-RING)

Parts Occurrence List

Part Description Part Decision Dates

DTC List

Bill Mayhew / tie@volvocars.com / 123456789 / 2002-09-23 15:43:51

Håkan Dahlin hdahlin@volvocars.com +46 31 3251792 2002-09-04 14:34:43

Bill

Please change the the orings and put a new one on .

Hello Mr Mayhew

I will transfere this to the design engineer ,for information

Håkan

Hello Joe,

Thank you for the report.

I will pass the information on to central.

BR Bill

Hello Hokan,

For your information.

BR Bill

Bill Mayhew / tie@volvocars.com / 123456789 / 2002-09-23 15:42:18

Thank you Mr Dahlin.

Bill

Håkan Dahlin / hdahlin@volvocars.com / +46 31 3251792 / 2002-09-04 14:34:43

Bill

Please change the the orings and put a new one on .

Hello Mr Mayhew

I will transfere this to the design engineer ,for information

Håkan

Bill Mayhew / tie@volvocars.com / 123456789 / 2002-09-03 18:02:07

Hello Joe,

Thank you for the report.

I will pass the information on to central.

BR Bill

Hello Hokan,

For your information.

BR Bill

Bill Mayhew / tie@volvocars.com / 123456789 / 2002-09-03 18:01:40

The following was copied from the corresponding LOCAL report:

Joseph Saunier / jsaunier@volvocars.com / 201 767 4759 / 2002-08-15 15:05:25

Customer complained of raw fuel smell when exiting the vehicle after a drive.

Technician raised car on lift a there was indication of fuel leak on the left side of the fuel tank. Technician found 2 o-rings installed under the left side fuel sending unit.

Removed 1 and re-installed sender-leak was repaired.

Joseph Saunier / jsaunier@volvocars.com / 201 767 4759 / 2002-08-15 15:05:25 Customer complained of raw fuel smell when exiting the vehicle after a drive.

Technician raised car on lift a there was indication of fuel leak on the left side of the fuel tank. Technician found 2 o-rings installed under the left side fuel sending unit.

Removed 1 and re-installed sender-leak was repaired.

Page 1 of 2 **VOLVO**



Volvo Car Corporation TIE - Technical Information Exchange

TIE - Report

Status Date 2002-10-Ref US - 103322 Status In Progress

Partner 6 US 0002 FTS (FIELD TECH SPECIALIST) Issue Date 2002-09-Issuer U020278 John Connell

VCNA 28

Resp. Partner 3 US 7510 Volvo Cars North

America

View Local

Title Fuel leak from pump unit

Concern Area Vehicle Report Sub Concern Area Vehicle Report Support Requested Support Not Needed

Tag Incident Flag N Urgent N

Function Group* 3862(level sensor; tilt sensor; acceleration)

Symptom Code 5E LEAKAGE

Vehicle List

Туре	Chassis	MY	VIN	LicPlate	Variant	Mileage	Plant	МС	Structure Week	Issue Date	Primary Vehicle*
384	0183481	2002	YV1RH58D322		3845832271	10	22			2002- 09-28	Υ

Reference TAG Follow up

Problem Solved

Observed Problem List

Cause Code	Fault Type	Problem experienced by				
10 DEFECT COMPONENT	Permanent	Customer				

Repeat Repair Repeat Repair Date[yyyy-mm-dd] 2099-12-30

Part Available

Part No 8683329(PUMP UNIT) Part Serial No Date

Parts Occurrence List

Part Description	Part Decision Dates
Part requested by SC PFU	2002-10-11
Part received at SC TMA	2002-10-31

DTC List

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Attachments

File Name	File Size			
Mvc-028s.jpg	19450			

Bill Mayhew / tie@volvocars.com / 123456789 / 2002-10-11 23:46:50 Hello John,

Thank you for the report and pictures.

Please send the pump unit to TMA orange label with a copy of the TR.

BR Bill

Hello Hokan,

For your information.

Please advise us if you want us to send you this pump for analysis.

BR Bill

Bill Mayhew / tie@volvocars.com / 123456789 / 2002-10-11 23:46:21

The following was copied from the corresponding LOCAL report:

John Connell / jconnel8@volvocars.com / 2 017 687 300 / 2002-09-28 16:12:37

When the dealer filled the gas tank at delivery the customer noticed a fuel smell coming from vehicle. The fuel was leaking at the fitting from the pump. A picture is attached showing the split in the line/fitting from the pump.

Replacing the pump corrected the problem.

John Connell / tie@volvocars.com / 123456789 / 2002-09-28 16:12:37

When the dealer filled the gas tank at delivery the customer noticed a fuel smell coming from vehicle. The fuel was leaking at the fitting from the pump. A picture is attached showing the split in the line/fitting from the pump.

Replacing the pump corrected the problem.

VOLVO Page 1 of 4



Volvo Car Corporation TIE - Technical Information Exchange

TIE - Report

Status Date 2003-06-Ref US - 108366 Status Updated

Partner 6 US 0002 FTS (FIELD TECH SPECIALIST) Issue Date 2003-05-Issuer U0M0236 Ebba Mansson

VCNA 29

Resp. Partner 3 US 7510 Volvo Cars North View Local

America

Title Gas pump, leaking due to crack in plastic

Concern Area Vehicle Report Sub Concern Area Vehicle Report Support Requested Support Not Needed

Tag Incident Flag N Urgent N

Page 2 of 4 **VOLVO**

Function Group* 2340(fuel tank, fuel lines, evaporator system)

CSC*

Symptom Code 5H WARNING LAMP LIT

Vehicle List

	Гуре	Chassis	MY	VIN	LicPlate	Variant	Mileage	Plant	МС	Structure Week	Issue Date	Primary Vehicle*
2	275	0039920	2004	YV1CZ59H041		2755937271	201	21		ソロロスエケ	2003- 05-29	Υ

Reference

TAG Follow up

Problem Solved

Observed Problem List

Cause Code	Fault Type	Problem experienced by
02 PERFORMED REPAIR	Permanent	Customer

Repeat Repair

Repeat Repair Date[yyyy-mm-dd] 2099-12-30

Part Available

Part No 0(N/A)

Part Serial No Date

Parts Occurrence List

Part Description	Part Decision Dates
Part requested by SC PFU	2003-06-18

DTC List

Control Module	Code	Fault Type		
ECM	400D	Permanent		

Attachments

File Name	File Size		
leaking pump.ppt	74752		
leaking pump.ppt	74752		

Bill Mayhew / tie@volvocars.com / 123456789 / 2003-06-30 16:55:42

Håkan Dahlin hdahlin@volvocars.com +46 31 3251792 2003-06-23 09:00:09

Hi Bill

Please send this pump to me with a copy of this TR

// Håkan

Hello Ebba,

Thank you for the report and the picture.

Please send the fuel pump to TMA orange label with a copy of the TR.

I will pass the information on to central.

BR Bill

Hello Håkan,

We will have this pump at TMA if you want it for analysis.

BR Bill

Håkan Dahlin / hdahlin@volvocars.com / +46 31 3251792 / 2003-06-23 09:00:09

Hi Bill

Please send this pump to me with a copy of this TR

// Håkan

Håkan Dahlin / hdahlin@volvocars.com / +46 31 3251792 / 2003-06-19 08:28:23

Hi Bill

Please send the material to me with a copy of this TR

// Håkan

Bill Mayhew / tie@volvocars.com / 123456789 / 2003-06-18 19:42:31

Hello Ebba,

Thank you for the report and the picture.

Please send the fuel pump to TMA orange label with a copy of the TR.

I will pass the information on to central.

BR Bill

Hello Håkan,

We will have this pump at TMA if you want it for analysis.

BR Bill

Bill Mayhew / tie@volvocars.com / 123456789 / 2003-06-18 19:42:18

The following was copied from the corresponding LOCAL report:

Ebba Mansson / emansson@volvocars.com / 201 768 7300 / 2003-05-29 00:47:59

Hello!

After customer filled up car warning light came on for leak detection.

Tech found DTC ECM 400C small leak. Used a smoke machine but could not find leak.

I forced tech too try it again. Could not find any smoke under car but it smelled from gas.

We took out the back seat of the car. Since the tank was full the smoke machine did not work. But we could see gas on the fuel pump and a small crack in the plastic. See pictures.

I have the pump if anyone wants it.

BR

EBBA

Ebba Mansson / tie@volvocars.com / 123456789 / 2003-05-29 00:47:59

Hello!

After customer filled up car warning light came on for leak detection.

Tech found DTC ECM 400C small leak. Used a smoke machine but could not find leak.

I forced tech too try it again. Could not find any smoke under car but it smelled from gas.

We took out the back seat of the car. Since the tank was full the smoke machine did not work. But we could see gas on the fuel pump and a small crack in the plastic. See pictures.

I have the pump if anyone wants it.

BR

EBBA

Page 1 of 2 **VOLVO**



Volvo Car Corporation TIE - Technical Information Exchange

TIE - Report

Status Date 2004-04-Ref US - 113701 Status Updated

Partner 6 US 0002 FTS (FIELD TECH SPECIALIST) Issue Date 2004-04-Issuer R4229W01 Boyd Stowe

VCNA 02

Resp. Partner 3 US 7510 Volvo Cars North

America

View Local

Title Fuel leak at left tank sender - '04 S80.

Concern Area Vehicle Report Sub Concern Area Vehicle Report Support Requested Support Not Needed

Incident Flag N Urgent N Tag

Function Group* 2349(miscellaneous)

Symptom Code 2A ODOR

Vehicle List

Туре	Chassis	MY	VIN	LicPlate	Variant	Mileage	Plant	МС	Structure Week	Issue Date	Primary Vehicle*
184	0350821	2004	YV1TS92D441		1849252251	589	21		しついいススン	2004- 04-02	Υ

Reference TAG Follow up 67786 - L.H.

Problem Solved

Observed Problem List

Cause Code	Fault Type	Problem experienced by	
15 WRONGLY FITTED, WRONGLY CONNECTED	Permanent	Customer	

Repeat Repair Repeat Repair Date[yyyy-mm-dd]

Part Available

Part No Part Serial No Date 9141498(O-RING)

Parts Occurrence List

Part Description Part Decision Dates

DTC List

Bill Mayhew / tie@volvocars.com / 123456789 / 2004-04-23 21:41:34

Hello Boyd,

Thank you for the report.

I am passing the information on to central.

BR Bill

Hello Håkan,

Please show this report to the supplier so that they can put controls in place to prevent this from happening again.

BR Bill

Bill Mayhew / tie@volvocars.com / 123456789 / 2004-04-23 21:41:29

Hello Boyd,

Thank you for the report.

I am passing the information on to central.

BR Bill

Hello Håkan,

Please show this report to the supplier so that they can put controls in place to prevent this from happening again.

BR Bill

Bill Mayhew / tie@volvocars.com / 123456789 / 2004-04-23 21:41:06

The following was copied from the corresponding LOCAL report:

Boyd Stowe / voc.techservmanager@prodigy.net / 281 823 5000 / 2004-04-02 03:16:53

Customer complained of a fuel smell when the tank is full. I pressurized the fuel tank and found fuel leaking from the left side fuel level sender. The hold down nut was tight. I removed the left sender and found that one of the wires for the level sensor(one of the thin gauge red wires) was caught between the oring and the sender during assembly, causing the leak. The wire was not harmed. I replaced the oring, reinstalled the sender carefully, and retested with no other problems.

Boyd Stowe / tie@volvocars.com / 123456789 / 2004-04-02 03:16:53

Customer complained of a fuel smell when the tank is full. I pressurized the fuel tank and found fuel leaking from the left side fuel level sender. The hold down nut was tight. I removed the left sender and found that one of the wires for the level sensor(one of the thin gauge red wires) was caught between the oring and the sender during assembly, causing the leak. The wire was not harmed. I replaced the oring, reinstalled the sender carefully, and retested with no other problems.

Page 1 of 2 **VOLVO**



Volvo Car Corporation TIE - Technical Information Exchange

TIE - Report

Status Date 2005-05-Ref US - 119386 Status In Progress

View Local

Partner 6 US 0002 FTS (FIELD TECH SPECIALIST) Issue Date 2005-03-Issuer R4229W01 Boyd Stowe

VCNA 11

Resp. Partner 3 US 7510 Volvo Cars North

America

Title Fuel pump unit cracked at top and leaking.

Concern Area Vehicle Report Sub Concern Area Vehicle Report Support Requested Support Not Needed

Tag Incident Flag N Urgent N

Function Group* 3862(level sensor; tilt sensor; acceleration)

Symptom Code 2A ODOR

Vehicle List

Туре	Chassis	MY	VIN	LicPlate	Variant	Mileage	Plant	МС	Structure Week	Issue Date	Primary Vehicle*
384	0046645	2001	YV1RS61R812		3846132291	37475	22		1200111	2005- 03-11	Υ

TAG Follow up

Reference 79933 - Wang

Problem Solved

Observed Problem List

Cause Code	Fault Type	Problem experienced by
27 POOR SEAL, LEAKAGE	Permanent	Customer

Repeat Repair Repeat Repair Date[yyyy-mm-dd]

Part Available

Part No Part Serial No Date 30722630(PUMP UNIT)

Parts Occurrence List

Part Description Part Decision Dates

DTC List

Boyd Stowe / tie@volvocars.com / 123456789 / 2005-03-11 20:05:27

Customer complained of a fuel smell coming from engine area. Checked and found that fuel pump assembly was cracked and leaking at the top near the pressure line fitting. Leaking when pump is running and system is under pressure. Replaced pump and rechecked with no other problems. New pump is obviously an improved version - top section of pump unit is yellow in color.

Page 1 of 3 **VOLVO**



Volvo Car Corporation TIE - Technical Information Exchange

TIE - Report

Status Date 2007-07-Ref US - 131701 Status In Progress

Partner 6 US 0002 FTS (FIELD TECH SPECIALIST) Issue Date 2007-06-Issuer U023708 Robert Duewall

VCNA 28

Resp. Partner 3 US 7510 Volvo Cars North

America

View Local

Title New fuel pumps will not build pressure

Concern Area Vehicle Report Sub Concern Area Vehicle Report Support Requested Support Not Needed

Tag Incident Flag N Urgent N

Function Group* 2331(fuel pump; feed pump)

Symptom Code

Vehicle List

Туре	Chassis	MY	VIN	LicPlate	Variant	Mileage	Plant	МС	Structure Week	Issue Date	Primary Vehicle*
384	0157329	2002	YV1RS61R322		3846132291	123318	22		1200210	2007- 06-28	Υ

Reference TAG Follow up

Problem Solved

Observed Problem List

Cause Code	Fault Type	Problem experienced by

Repeat Repair Date[yyyy-mm-dd] 2099-12-30 Repeat Repair

Part Available

Part No 30769013(PUMP UNIT) Part Serial No Date

Parts Occurrence List

Part Description	Part Decision Dates
Part received at SC TMA	2007-07-25

DTC List

Control Module Code **Fault Type**

Attachments

File Name	File Size
DSC00728.JPG	56014
DSC00728.JPG	56014

Robert Duewall / tie@volvocars.com / 123456789 / 2007-06-30 21:29:24

I believe the pump in the photo that does work is the new style that has been out since 2005. The pump that does not work has the same part number but is plumbed differently. If the pump has not been changed since 2005, then possibly some of these pumps have been improperly boxed.

I had already requested the parts be sent to you.

Thanks,

Robert

Richard Reina / rreina@volvocars.com / 1-201-7674815 / 2007-06-29 14:30:11 Hello Håkan,

We have asked that both fuel pumps be returned to us. Are you interested in getting this material?

BR, Richard

Richard Reina / rreina@volvocars.com / 1-201-7674815 / 2007-06-29 14:29:03

The following was copied from the corresponding LOCAL report:

Richard Reina / rreina@volvocars.com / 1-201-7674815 / 2007-06-29 14:28:04

Hi Robert,

Thanks for the TR. This pump is a 'newer' design, but we have been selling it since late 2005, so it appears that the design did not change very recently.

We'd like to have all the material. Please send both pumps to TMA via orange label, attention Richard Reina, and please include a printout of this TR. Thank you.

BR, Richard

Robert Duewall / rduewall@volvocars.com / 2 017 687 300 / 2007-06-28 08:26:26

Customer was smelling fuel in and around car.

Fuel pump was leaking fuel. The nipple was cracked.

Tech installed new fuel pump 30769013. (new style pump, later version)

Car would not start with new pump. Pressed Schrader valve on rail and no fuel came out.

Tech installed a second pump with same results. (also a new style pump, later version).

Tech searched parts inventory and found a new style pump but earlier design - see photos.

After installing this pump the car started and ran ok.

Note: the later version pump and ejector was placed in a pan of water and run with direct 12 v. Water would barely run out of the pressure port that goes to the rail, but a large volume of water was pumped out of the ejector line back into the cup. The earlier version was also tested and water would come out of the pressure port with much greater pressure and volume.

I am not sure if this is an isolated issue with 2 bad pumps or if there is a design problem with the later version pumps. I believe these are the pumps that will be used in the upcoming recall. I believe we need to verify that the latest pumps are ok.

Richard Reina / rreina@volvocars.com / 1-201-7674815 / 2007-06-29 14:28:04 Hi Robert,

Thanks for the TR. This pump is a 'newer' design, but we have been selling it since late 2005, so it appears that the design did not change very recently.

We'd like to have all the material. Please send both pumps to TMA via orange label, attention Richard Reina, and please include a printout of this TR. Thank you.

BR, Richard

Robert Duewall / tie@volvocars.com / 123456789 / 2007-06-28 08:26:26

Customer was smelling fuel in and around car.

Fuel pump was leaking fuel. The nipple was cracked.

Tech installed new fuel pump 30769013. (new style pump, later version)

Car would not start with new pump. Pressed Schrader valve on rail and no fuel came out.

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Note: the later version pump and ejector was placed in a pan of water and run with direct $12\ v$. Water would barely run out of the pressure port that goes to the rail, but a large volume of water was pumped out of the ejector line back into the cup. The earlier version was also tested and water would come out of the pressure port with much greater pressure and volume.

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