

PE06-013
VOLVO
5/5/2006
ATTACHMENT
PART 2 OF 3

Field Report
Serial # 377511
 mileage: 14,111 4/8/2005

Lafon Tim (othy)

From: Spradlin Warren
Sent: Wednesday, April 26, 2006 10:59 AM
To: Lafon Tim (othy)
Subject: FW: VHD wheel equipment

Warren E. Spradlin
Volvo Trucks North America Inc
Product Reliability Engineer
4881 Cougar Trail Road, PO Box 1126
Dublin Va 24084, USA

Phone 540-674-7384
Fax 540-674-7204
Warren.Spradlin@Volvo.Com

-----Original Message-----

From: Ravitsky Robert
Sent: Friday, May 20, 2005 8:27 AM
To: Spradlin Warren
Subject: RE: VHD wheel equipment

Warren,
The first occurrence, they needed to be replaced due to fretting on the mounting surface. This time, the wheels are reusable. We retrieved the wheels from the customer and will send them along with the spacers.
Thank you,

Bob Ravitsky
District Service Manager, Northeast Region
610-746-6510
610-746-6511 fax
robert.ravitsky@volvo.com

-----Original Message-----

From: Spradlin Warren
Sent: Friday, May 20, 2005 8:24 AM
To: Ravitsky Robert
Cc: Rose Bob; Schlottmann Guenter
Subject: RE: VHD wheel equipment

Hello Bob,

I would like the spacers returned to TMAC/Spradlin.

If you have reviewed the wheels and have agreed with the dealer/customer they need to be replaced, then return the wheels. Are the wheels effected to the degree you believe they should be replaced?

Also know, I have strongly urged our engineers to remove spacers from our vehicles in Production and make them unavailable for any future orders.

Warren E. Spradlin
Volvo Trucks North America Inc
Product Reliability Engineer
4881 Cougar Trail Road, PO Box 1126
Dublin Va 24084, USA

Phone 540-674-7384
Fax 540-674-7204
Warren.Spradlin@Volvo.Com

-----Original Message-----

From: Ravitsky Robert
Sent: Thursday, May 19, 2005 3:29 PM
To: Spradlin Warren
Subject: Re: VHD wheel equipment

Warren,
This truck had a total of five spacers on it. All four inner spacers and the 1/f drive axle spacer between the wheels. These have good evidence of temperature concerns. Would you like the dealer to send the damaged aluminum wheels back as well (less the tires of course)?

Bob Ravitsky
District Service Manager, Northeast Region
610-746-6510
610-746-6511 fax

Sent from my BlackBerry Wireless Handheld

-----Original Message-----

From: Spradlin Warren <warren.spradlin@volvo.com>
To: Ravitsky Robert <robert.ravitsky@volvo.com>
CC: Rose Bob <robert.rose@volvo.com>; Lytton Duane <duane.lytton@volvo.com>
Sent: Wed May 18 08:36:47 2005
Subject: RE: VHD wheel equipment

Hello Bob,

I researched the bills and did not find a plastic wheel spacer called out. When you review the vehicle, determine if any spacers are present and have them removed and properly retorque to specified 475 +/-25 FT Lbs. Also check to see if the customer specified spacers in the order. Send any spacers to TMAC/Spradlin. Do not return tires should they be involved.

MQR 7581-572 and QJ 774-2 are in the system. I believe Engineering will be removing all spacers from VHD production. If you see further field issues, please let me know. We will continue to involve Gunita in our investigation.

Thanks

Warren E. Spradlin
Volvo Trucks North America Inc
Product Reliability Engineer
4881 Cougar Trail Road, PO Box 1126
Dublin Va 24084, USA

Phone 540-674-7384
Fax 540-674-7204
Warren.Spradlin@Volvo.Com

-----Original Message-----

From: Ravitsky Robert
Sent: Tuesday, May 17, 2005 8:13 PM
To: Spradlin Warren; Rose Bob
Subject: VHD wheel equipment

Warren,

When I gave you the information on the last VHD with the loose wheel equipment, I mentioned one that I had passed off earlier as a "maintenance" issue. That truck is back again with another loose wheel end. The chassis is VHD-377571. I originally saw this one while at the dealer for another concern on 4/8/05 with 14,111 miles. L/F drives were loose. They fixed that and torqued all the rest of them. Now the R/S rear came loose. See siebel case number 1-79387903. Current mileage 17,833. Give me a call in the AM. I will be stopping at that dealer for other business on Wednesday.

Thank you,

Bob Ravitsky
District Service Manager, Northeast Region
610-746-6510
610-746-6511 fax
robert.ravitsky@volvo.com

Field Report



SR Number : 1-79387903

Account Name :

Priority : Medium

Date Opened : 05/17/2005 02:25:21PM

Severity : 3-Medium

Owner :

Date Closed :

Customer Ref. ID :

Status : Open

Serial No : 4V5KC9GH45N377571

Description :

Dealer first reported L/F drive axle wheels loose and broken stud on 4/8/05. I was at dealer and viewed this. It was decided that it might be a maintenance concern and the customer was billed for the repairs. Mileage on that day was 14,111. I have attached pictures 1 through 4 documenting this. Dealer reportedly replaced ALL drive axle lug nuts at the time of this repair. The truck came back today with the R/S rear drive wheels loose and another broken stud. Apparently the only spacer that was on the wheel and was between the drum and the inner wheel. Current mileage is 17,833

Activities



05/17/05 08:50:11PM UT0908A

Appointment

1-79387903



1-79387903



1-79387903



USATC RAIL PAC NW (711)

N WESS

SR Number : 1-84610109 Account Name : BEYER BROS Priority : Medium
 Date Opened : 6/29/2006 8:28:59PM Severity : 2-High Owner : XXXXXXXXXX
 Date Closed : Customer Ref. ID : Status : Open
 Serial No : 4V5KC9GH15N XXXXXXXXXX

Description :

Dealer reports customer complaint of drive wheels coming off. Customer had repaired on the road. Dealer has two wheels that are fitted. Truck is to be in dealer on Friday, 7/7/06. I advised dealer to check torque on all wheel nuts then remove all drive wheels & tires, remove all spacers, tag all spacers with original location, replace any questionable parts and torque all wheel nuts to specification. Dealer to advise.

Activities

Date	Time	User	Activity	Status	Comments	
07/05/06	07:00:44PM	UT0908A	RAVITSKY	Correspondence	In Progress	Dealer contact
Spoke with Bill Dubois this morning. They checked the torques on all the drives before disassembling. They were all tight, most likely from the tire vendor that did the road service (\$1,183.84 is the bill). They removed all the wheels and found the L/S front drive hub damaged due to the wheels nearly coming off. They report that the remaining hubs are ok but show signs of wheels loose. They are to replace the affected hub and wheels and oil axle. There were three spacers on this truck. He has them labeled as to what position they were in. All wheels to be reinstalled without spacers, torqued, and parts to be shipped to Warren Spradlin.						

12/02/05 03:58:31PM

Email - Outbound

Done

Assignment
Notification

Byer Brothers - Fairview, NJ

Efrain Armenteros
201.854.4317
#377558

I proactively called this customer for 2004 Model Year and he inquired about the \$1800 that he evidently paid road service when this was worked on in 06/05; he states that Byer Brothers told him the repair would be under warranty and they would reimburse him for the what he paid the roadside service. Customer said he's very happy with truck and with service, but was asking about this. Thanks

The following service request has been assigned to you:

Service Request Number: 1-84810109

Date Opened : 6/29/2005 6:20:58 PM

Severity : 2-High

Priority : Medium

Product : VHD64F

Abstract : VHD loose wheels

Description : Dealer reports customer complaint of drive wheels coming off. Customer had repaired on the road. Dealer has two wheels that are fitted. Truck is to be at dealer on Friday, 7/1/06. I advised dealer to check torque on all wheel nuts then remove all drive wheels & tires, remove all spacers, tag all spacers with original location, replace any questionable parts and torque all wheel nuts to specification. Dealer to advise.

Field Report

Service Request

VPSS

SR Number : 1-85763701

Account Name : BEYER BROS

Priority : Medium

Date Opened : 7/12/05 1:47:16PM

Severity : 1-Critical

Owner :

Date Closed :

Customer Ref. ID :

Status : Open

Serial No : 4V5KC9GH85N

Description :

Dealer reports drive wheels came off truck. Dealer towed truck in. The L/S rear drive wheels come off and reportedly almost hit two cars on Rt 87 in NJ. After bringing the truck in the shop, it was found that the R/F drive hub had some broken studs. Dealer trying to get parts to get this truck up and running. I advised to air freight whatever is needed. Dealer to advise.

Field Report w/o Assessment.

Lafon Tim (othy)

Report Anyway.

From: Spradlin Warren
Sent: Wednesday, April 26, 2006 11:02 AM
To: Lafon Tim (othy)
Subject: FW: VHD wheels

Warren E. Spradlin
Volvo Trucks North America Inc
Product Reliability Engineer
4881 Cougar Trail Road, PO Box 1126
Dublin Va 24084, USA

Phone 540-674-7384
Fax 540-674-7204
Warren.Spradlin@Volvo.Com

—Original Message—

From: Ravitsky Robert
Sent: Monday, June 27, 2005 12:10 PM
To: Spradlin Warren
Cc: Rose Bob
Subject: VHD wheels

Warren,
FYI....I have another one. 5127D called and chassis 377586, 20,000 miles, had rears come loose. Currently, they only have the wheels as the truck was repaired on the road by a vendor. I have them contacting the customer to get it in. I will advise when this happens.

Bob Ravitsky
District Service Manager, Northeast Region
610-746-8510
610-746-8511 fax
robert.ravitsky@volvo.com

Copy Field Report
380640

Wheel Spacer

Spradlin Warren

From: Reese Johnny
Sent: Tuesday, March 01, 2005 11:04 AM
To: Spradlin Warren
Subject: RE: OE335 RMA

Warren,
Rep for Gunitite that visited dealer & found spacer causing failure was Steven Howse.
Thanks,
J. Reese

-----Original Message-----

From: Spradlin Warren
Sent: Tuesday, March 01, 2005 8:45 AM
To: Reg A Pete (E-mail)
Cc: Schaefer Skip; Reese Johnny; Lytton Duane
Subject: OE335 RMA

Hello Reg,

Attached below is the first actual report and photos received about vehicle SN 380640, received Oct 2004. I will send more photos we made at TMAC of materials sent in from additional occurrences of stud breakage.

Application: Dump Truck. VHD64B model.

Duty cycle: Haul sand, gravel, asphalt within 200 miles of Montgomery Al

Actual weigh tickets: None provided.

The Gunitite Representative covering Alabama visited the site. Our representative, Johnny Reese told me a plastic spacer was found and remove from the drive wheels. Per VTNA records, no plastic spacer was called out by the bills of materials. Normal torque required By VTNA is 475 +/-25 Ft Lbs.

Example hubs/studs have shipped as of 05-02-28. Please let us know your findings after material is reviewed.

Thanks

Warren E. Spradlin
Volvo Trucks North America Inc
Product Reliability Engineer
4881 Cougar Trail Road, PO Box 1126
Dublin Va 24084, USA

Phone 540-674-7384
Fax 540-674-7204
Warren.Spradlin@Volvo.Com

-----Original Message-----

From: Reese Johnny
Sent: Friday, October 22, 2004 12:37 PM
To: Spradlin Warren
Cc: Marsh Wes (ley)
Subject: FW:

Warren,

As per our conversation. Dealer 5367d in Montgomery, Al. replaced R/Rear Rear wheel studs. Two studs were found broken. Dealer replaced all to repair correctly. All were replaced (pressed in) & torqued with wrench to assure proper tightness. Approx. 3 hours later customer called & advised them that studs had broken again. Vehicle S/N VHD64, 380640, Miles 18301, Dis. 8/6/04. See pictures attached that dealer sent.

Thanks,

J. Reese

-----Original Message-----

From: eman449@bellsouth.net [mailto:eman449@bellsouth.net]

Sent: Friday, October 22, 2004 11:12 AM

To: Reese Johnny

Subject:

From: eman449@bellsouth.net

To: Johnny.reese@memo.macktrucks.com

Date: Fri, 22 Oct 2004 11:12:32 -0400

Thanks,

Emanuel Owens

Capital Volvo Trucks

185 West Blvd.

Montgomery, Al. 36108

334-262-8856 ph.

334-262-8081 fax

1-800-247-5673 watts



2 1/2



100

100

100

100

100

100



Field Report

SR Number: 1-75299638 Account Name: VOLUNTEER VOLVO AND GM TRUCKS Priority: Medium
 Date Opened: 4/13/2006 2:38:45PM Severity: 3-Medium Owner: [REDACTED]
 Date Closed: 6/12/2006 4:40:43PM Customer Ref. ID: Status: Closed
 Serial No: 4V5KC9GH05N [REDACTED]

Description:

Tech reports the Customer is having to Tighten all the Drive Axle Wheel. Customer Reports the Wheel Legs are Working Loose since the Unit was Purchased. Tech found Aluminum Shavings in the Wheel. Appears to be from the Wheel's Rubbing Together. Suggested to Contact the OEM for Direction to Address this Issue.

Activities

04/21/06 04:13:45PM UT0101D [REDACTED]

Appointment

I contacted Warren Spading on this. Warren advised to put together without the spacers and ship the spacers in with the filled parts.
 Dan Bodart

Market Quality Report: 7581-572

Created Date 2005-04-28
Subject VHD Wheel Spacer
Responsible GSO Chassis
QJ Function Group
QJ Sequence No
Connection/Closed
date
Issuer Name Warren Spradlin
Issuer Mail warren.spradlin@volvo.com
Function Group 7712
Unplanned Stop Yes

Component

Causelng Part Number 20448893, 8084858,
 8084880
Causelng Part Description Loose wheel nuts,
 alumin. wheels
Defect Code 33 Loose

Replaced Parts

Cost Material 4626
Cost Labour 937
Number of Vehicles 2112
Estimated Failure Rate .38

Vehicles Concerned

Type	Ch.No	Operation Code	Rep Date	Milage	Component Serial No	Claim references
N	381665		050412	10200		073686/5794D

Dealer Information

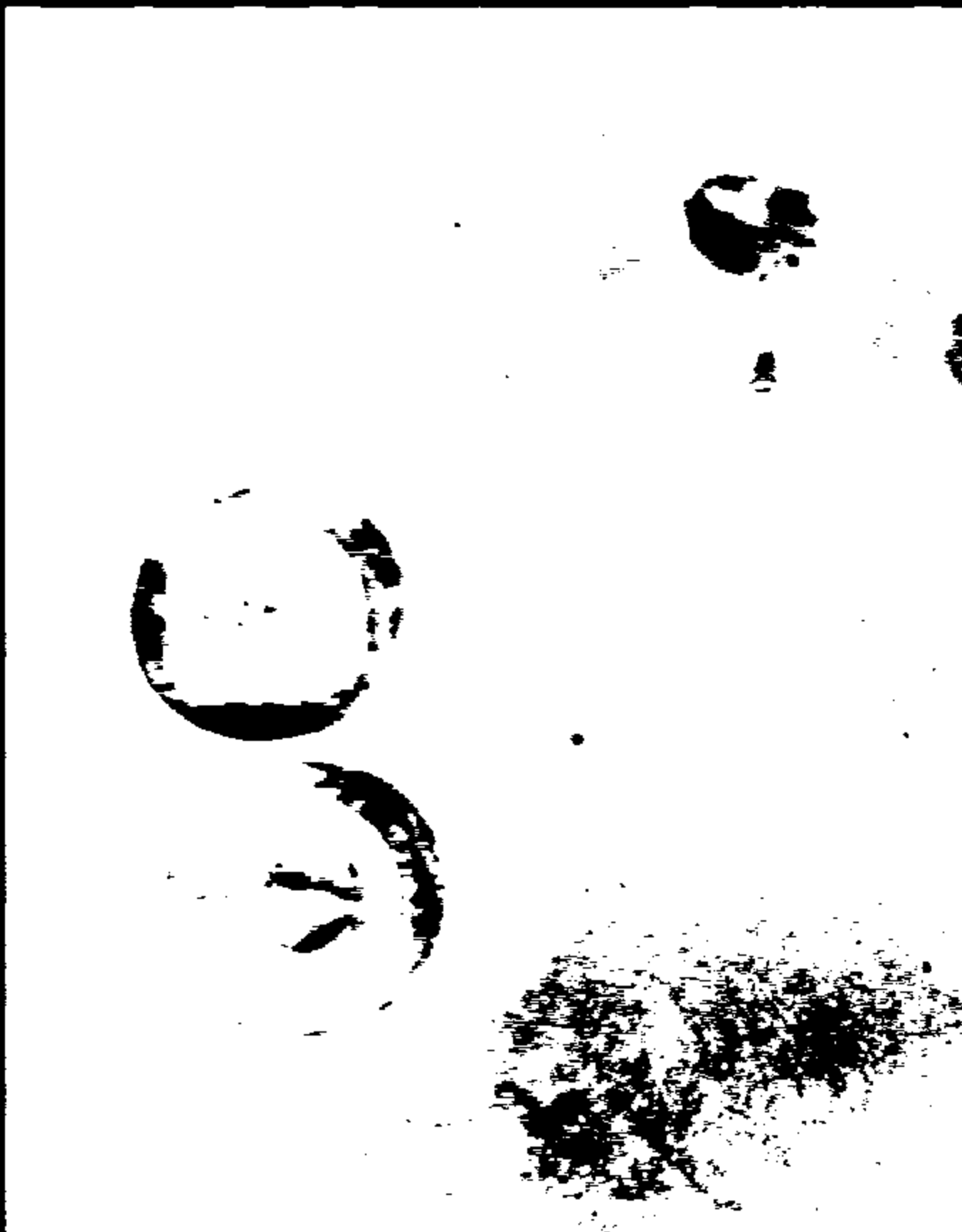
Dealer Name Volunteer Volvo &
 GMC
Dealer No 5794d
Contact Name Don Bodart
Dealer Address 6814 Wilbanks Rd,
 Knoxville, Tn 37912
Tel no 865-688-4300
Fax no
E-mail

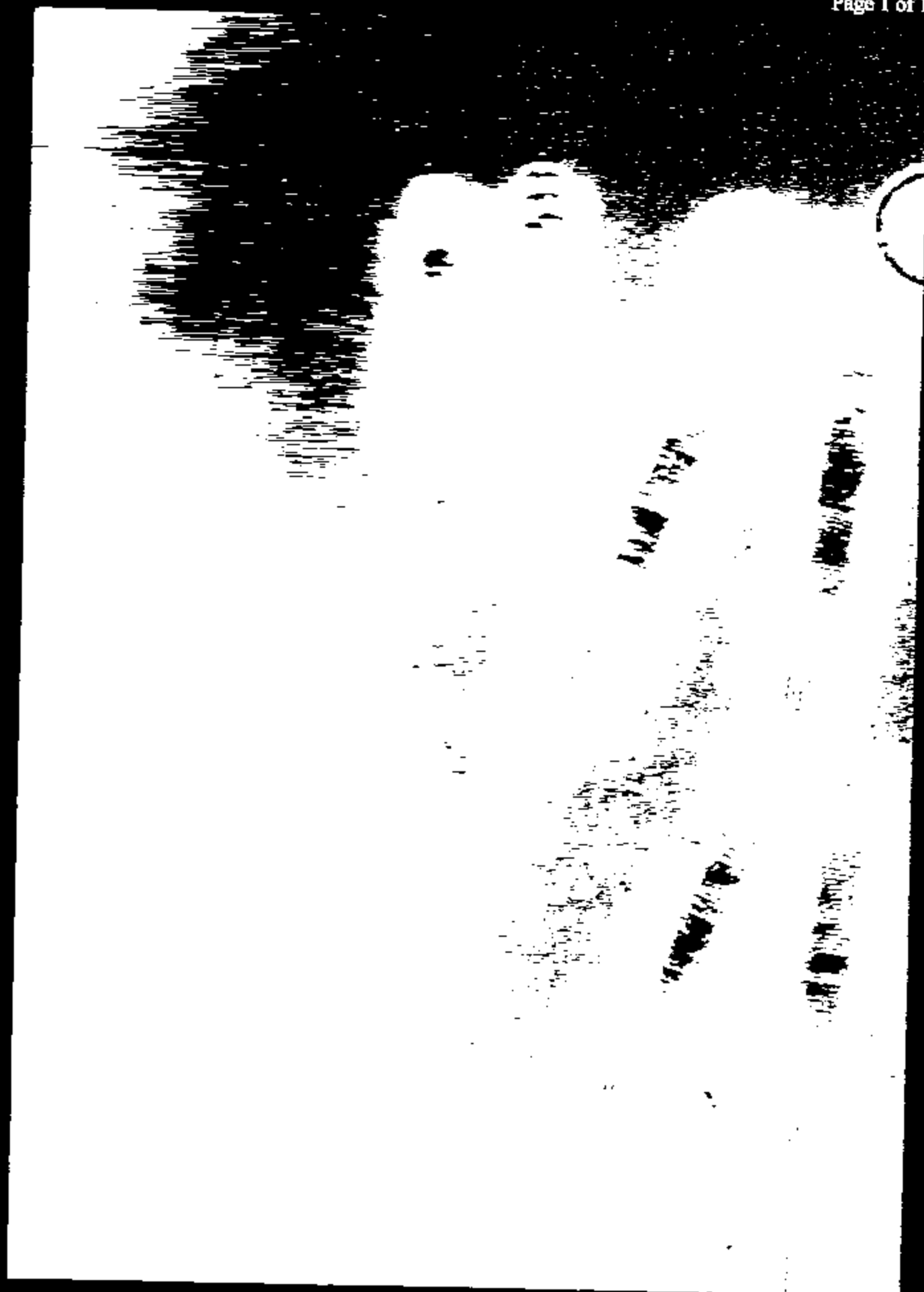
Problem Description

05-04-29. SR1-75289838, SR1-48844346, SR1-76826107,

Wheel spacer, P/N 20448893, Sales codes 7741, 7742, in build combination with aluminum wheels. VHD vocational duty applications such as dump truck, sand hauling, etc. reported to cause wheel joint to loosen. Plastic spacer, intended to isolate dissimilar metals, aluminum, iron, sandwiched between drum and wheel, gets thinner and brings about wheel nut and stud loosening. Wheel stud breakage, exhibit classic low stress, high cycle, fatigue characteristics associated with low bolt tension. Customer inconvenience including vehicle towing and repeat claims 020157/5367D, 201570/5367D. Emerging issue, low volume, high cost claims result. Request Engineering review of design and provide correction to include elimination of spacer if necessary.

Comments







Lafon Tim (othy)

From: Starnes Alan
Sent: Wednesday, April 26, 2006 12:40 PM
To: Lafon Tim (othy)
Subject: FW: Photos

-----Original Message-----

From: Spradlin Warren
Sent: Tuesday, May 03, 2005 10:40 AM
To: Doyal Jim
Cc: Starnes Alan
Subject: FW: Photos

Hello Jim,

The parts from claim 073686/ dealer 5794D arrived TMAC 050502. I am having the actual wheel spacers forwarded to you. The spacers are P/N 20448893, marked Volvo. See photos below. These are used on all vehicles, VHD and VN2 line at the moment.

I understand the desire to separate dissimilar metals however, this goes against the rule of thumb to not place parts in the stud/wheel nut sandwich which can move and compromise the joint.

This is same parts vehicle SN 381685, as 7581-572 MQR

Warren E. Spradlin
Volvo Trucks North America Inc
Product Reliability Engineer
4881 Cougar Trail Road, PO Box 1126
Dublin Va 24084, USA

Phone 540-674-7384
Fax 540-674-7204
Warren.Spradlin@Volvo.Com

-----Original Message-----

From: Moran Stewart
Sent: Tuesday, May 03, 2005 10:05 AM
To: Spradlin Warren
Subject: Photos

Hi Warren,

Attached are your photos.

Best regards,

Stewart Moran
Supplier Warranty Recovery Specialist
Technical Material Analysis Center
4100 Bobwhite Boulevard
Pulaski, VA 24301
Ph.: 540-674-7939, Fax: 540-894-0496



P5030001.JPG



P5030002.JPG



P5030003.JPG



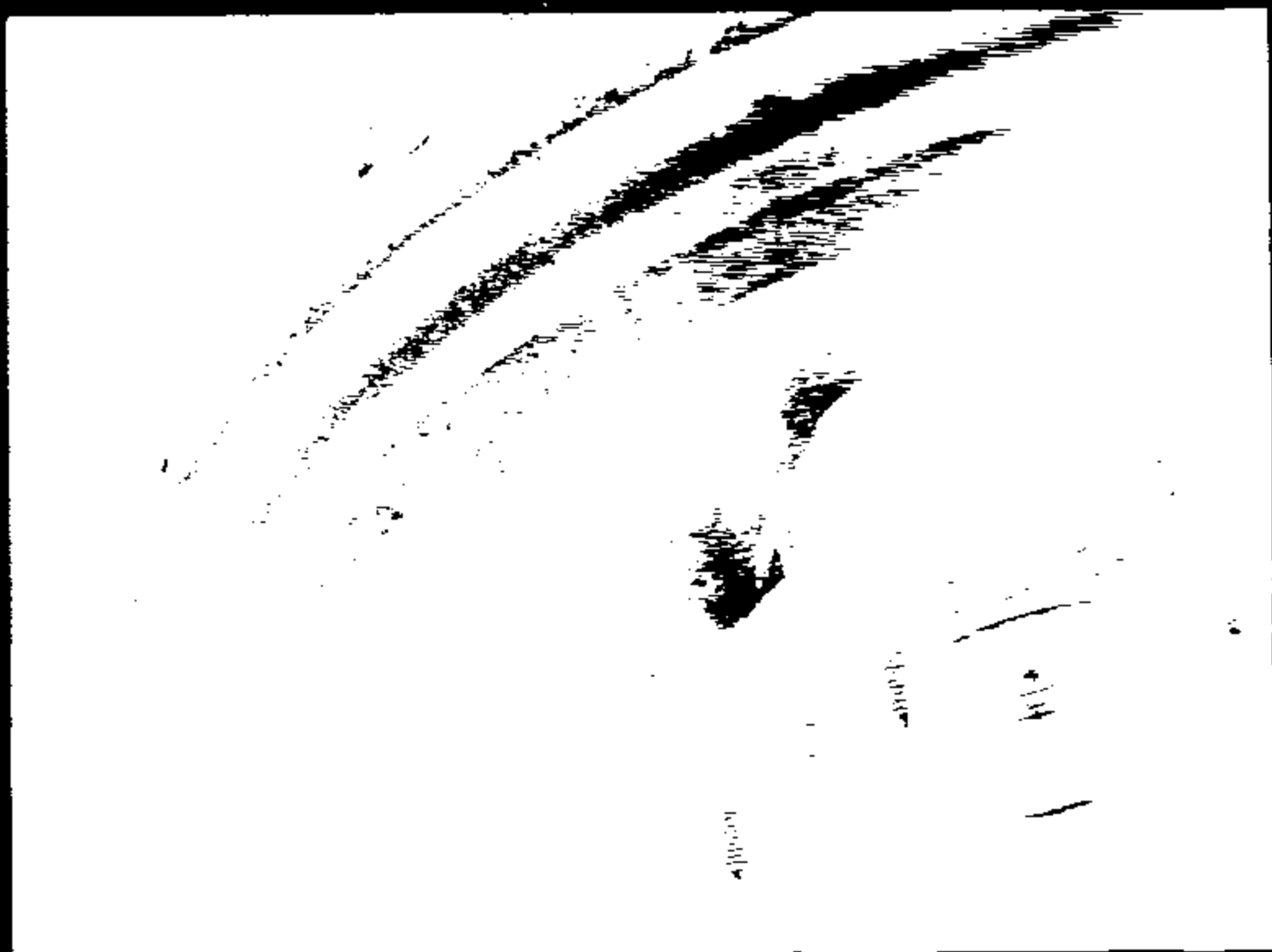
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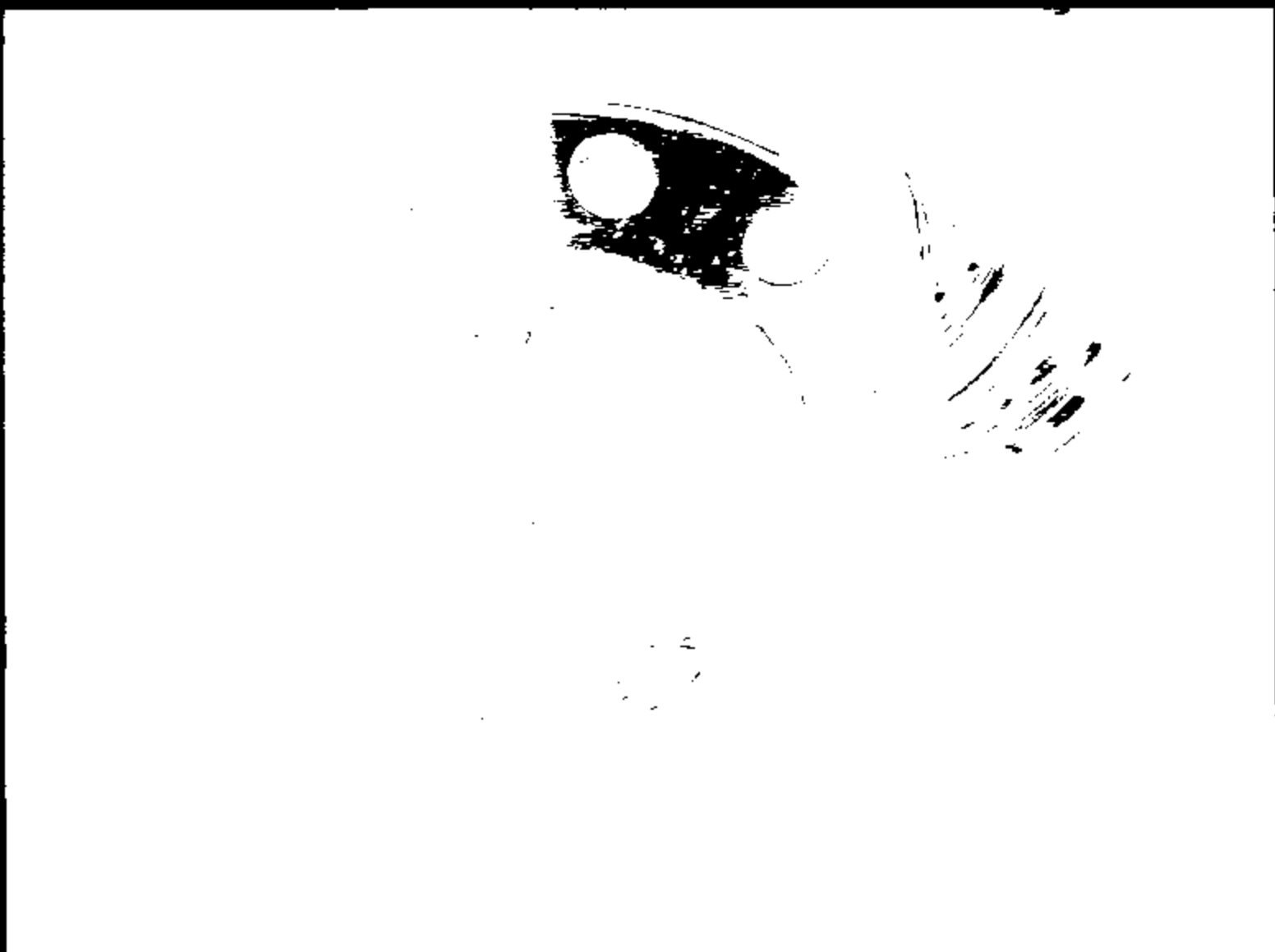


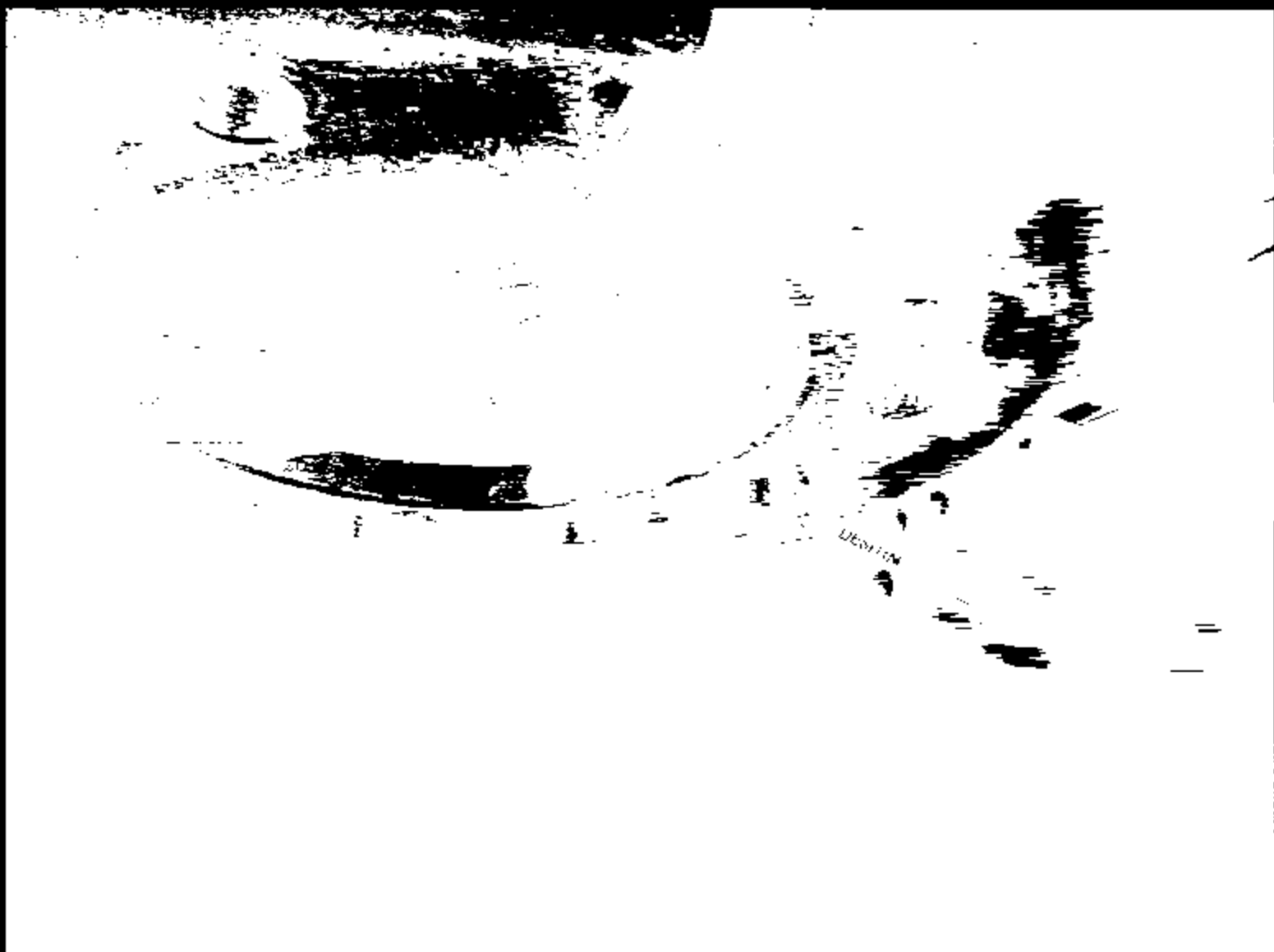
P5030005.JPG











Service Request Activity (All)

VPSS

SR Number : 1-85231401 Account Name : HAZARD VOLVO & GMC TRUCK Priority : Medium
 Date Opened : 7/8/2006 4:04:05PM Severity : Owner :
 Date Closed : 7/21/2006 7:01:46AM Customer Ref. Id : Status : Closed
 Serial No : 4V5KC9GH25N

Description :

two problems first has lug nuts getting loose on right side rear axle one wheel has already come off and hi truck second problem is axle studs are loosening on rear rear drive side studs are loose I can spin washers on studs nuts have never been touched have more to this story call from 7 to 4pm Sat

Activities

Date	Time	User	Activity	Status	Comments
07/08/06	11:58:50AM	UT1958V	Assessment	Done	follow up Instructed tech remove spacers between wheel and brake drum and tech also stated that he had stud broken on right side instructed tech to replace all 10 studs on that hub and torque to spec and contact DSM for warranty after he gets back from vacation
07/10/06	03:29:03PM	UT00145	REGISTERED CUSTOMER	Dealer Service Request	Acknowledged PR Response 050719. Apologize for delay-traveling on co.business. Your action and photos good. Torque axle flange nuts to 275+-25 Ft Lbs. Torque wheel nuts to 475 +- 25 Ft Lbs. Remove any plastic spacer and recheck torque before driving 100 miles. Thanks
07/10/06	03:32:19PM		Email - Outbound	Done	1-85231401 Hello Keith, See my activity entered. Good pictures thanks. I have given proper torques and you are to check any similar units in the fleet for any loosening. Also remove wheel spacers, replace all wheel wheel studs, and retorqure before 100 miles.

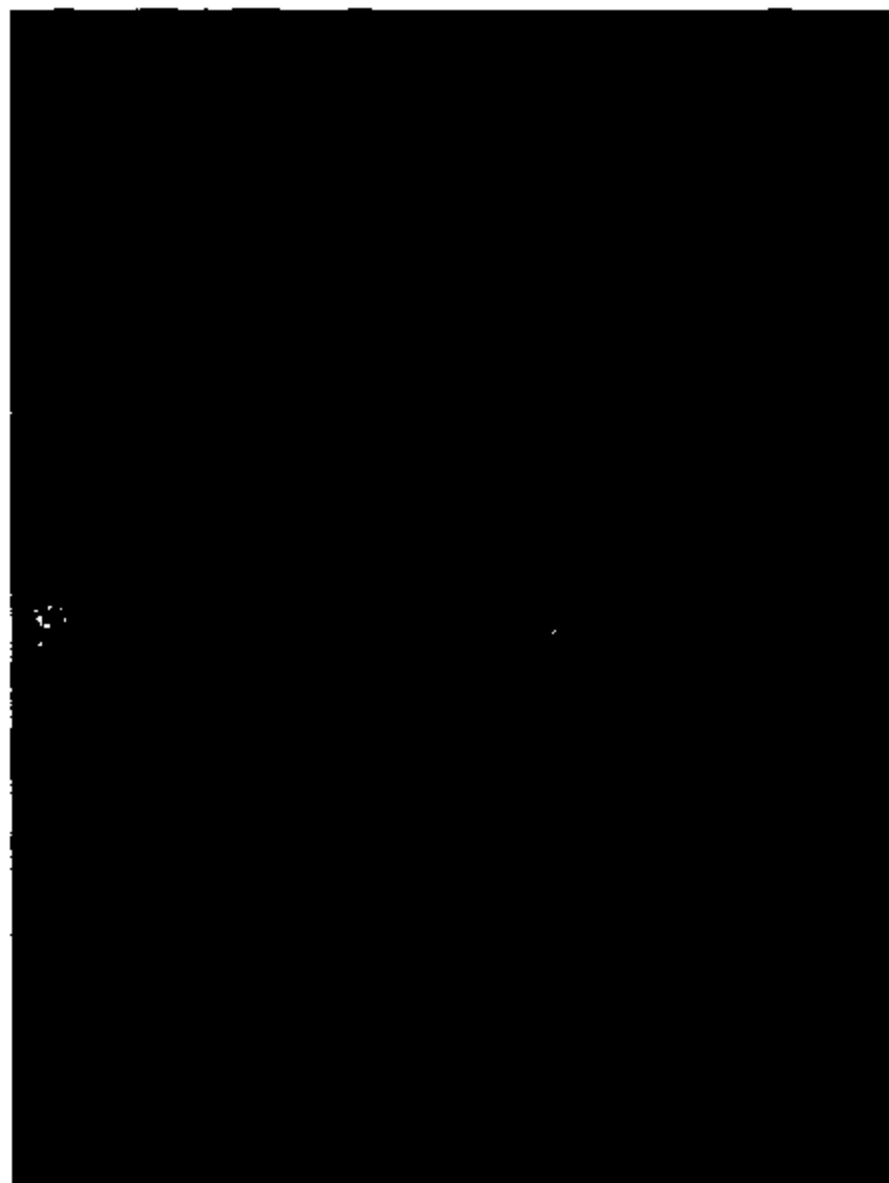




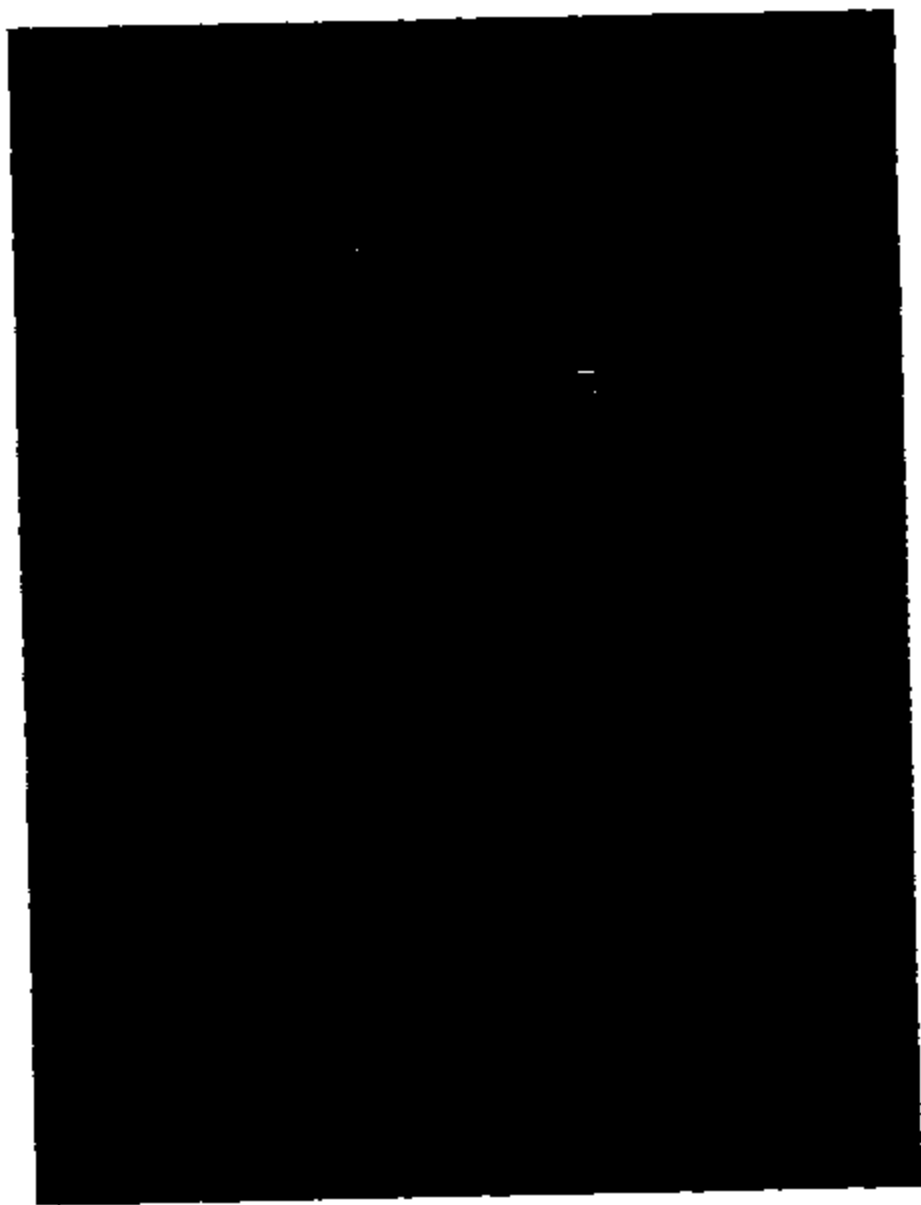












() Property Damage

[REDACTED]

WLS

Tuesday, August 16, 2005

VOLVO TRUCKS NORTH AMERICA INC
PO BOX 26115
GREENSBORO, NC 27402-6115

LEGAL DEPT.
SEP 06 2005

Re: UNKNOWN
VIN: 4V5KC9GH25N [REDACTED]
Year: 05
Make: VOLVO
Model: VHD UMP
Our Insured: [REDACTED]
Address: [REDACTED]
Phone No.: ASHLAND CITY, TN [REDACTED]
Our Claim No: [REDACTED]
Date of Loss: JUN 14 05
Damages: \$ 8,900.76

NOTICE OF SUBROGATION CLAIM

Please accept this letter as formal notice of our subrogation rights in regard to the above-captioned claim. Demand is hereby made upon you for payment of Progressive's damages and those of Progressive's insured.

Our investigation indicates damages to our insured's vehicle was a direct result of a manufacturer's defect in the wheel assemble causing the wheel hub to come off and the related damages. Enclosed please find all supporting documentation.

Please acknowledge receipt of my subrogation demand and forward your payment of \$ 8,900.76 to my attention, payable to "Progressive Mountain Laurel Assurance Company Insurance Company, as subrogee of WALKER TRUCKING & EX", and mail to my attention at PO Box 89440, Cleveland, OH 44101.

You can contact me at the number listed below should you need additional documentation or care to discuss this claim.

Thank you for your anticipated cooperation.

Mountain Laurel Assurance Company



Frank A. Stein AIC
Subrogation Representative
(440) 603-7319

**ASSURE**

08/22/2005

Reported to Hotline: Set as Today 08/18/2005 02:01 PM	Named Insured: [REDACTED]	Insp. State: Tennessee
Claim # [REDACTED]	Rate Manual: 9Y	CV: Yes SPECIALTY GUL
Adjuster: WILLIAM ORRAN N-458-7408 D-666-381-7408 F-616-888-1088	Claim office Address: 555 MARRIOTT DR. - SUITE 500 NASHVILLE, TN 37214	Date of Loss: 08/14/2005

Insured Assignment Type:2308

Vehicle Owner: [REDACTED]	Phone# [REDACTED]	
Alternate Contact: STANLEY THOMAS	Phone# [REDACTED]	Garage Zip: 37015
Year: 05	Make: VOLVO	Model: VHD
Vin Number: 4V5KC9GH25N [REDACTED]	Plate# H10 2545	Color: RED
PD/UMPD Limit:	Stated Amount: 80000	Deductible: 1000
Driveable: ☒	Policy State: TN	

Damage description: NONDRIVE/ROOF/RT REAR/REAR TOP OF TRUCK AND THE CAB

Vehicle location: VOLVO POLK AV NASHVILLE TN PHONE#6152599500

Assignment Info.

Comments: COVERAGES CLEARED/ LIAB PENDING

Field Specialist Info.

Date of F/S Contact: Set as Today 08/18/2005 06:30:10 PM	Date of Inspection/Review: Set as Today 08/18/2005 04:15:00 PM	Complete Date: Set as Today 08/22/2005 07:18:18 PM
Inspection Zip: 37210 *Make sure accurate for the Zip you inspected unit.	Air Fare:	Days assignment to: Inspect: -0.0 Complete: 6.1
Description of Inspected Vehicle	Body Type: 1 (Use drop down list, do not type code. ie, 01 is not acceptable, use 1)	Tractor
Is there drive train, mechanical or structural damage to the vehicle or is there damage to specialty equipment?	☒ Yes ☐ No	

Estimate:

2009 Total: \$8,453.13	Rental / Downtime: \$0.00	Rental/Downtime Days: 0	Settlement/ Depreciation: \$0.00	LKQ/After Market: \$0.00	Other Estimate: \$0.00
Total Loss:					
Total Loss: ● ●	ACV: \$76,290.00	Towing: \$0.00	Storage: \$0.00	Storage Days: 0	Other Costs: \$0.00
Salvage Disposal:	Salvage: \$0.00			Net Salvage: 0	Net Salvage / ACV: 0%

Exit Print Edit E-Mail Report

Commercial Vehicle Field Specialist Report

STATED AMOUNT: \$

REPAIRABLE ☒		TOTAL LOSS	
ESTIMATE: \$ <u>8453.13</u>			ESTIMATE
AGREED PRICE: \$ _____		AGREED	PRICE
TOW: \$ <u>Pending invoice</u>		ACV	
		TOW	
GROSS LOSS: \$ _____		GROSS	LOSS:
DEDUCTIBLE: \$ <u>1000.00</u>		DEDUCTIBLE:	
SIU involved: yes no			
Lien Holder: _____			
Phone #: _____			
NET LOSS \$ _____		NET LOSS \$ _____	

STORAGE: \$ _____	PER DAY: \$ _____
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REMARKS _____

Progressive

Estimate

Estimate Prepared by: EDDIE BRYANT

Accident Date: 06/14/2005

Date of Loss: 06/14/2005

Arrival Date: 06/17/2005

Type of Loss: Collision

Policy Number:

Claim Number: 056079460

Appraised for: PROGRESSIVE

SHANE ORRAND

Date: 06/22/2005

Estimate#:

Insured:

Company:

Contact:

Appraised for:

Company: PROGRESSIVE

Contact: SHANE ORRAND

Address: 555 MARIOTT DR, SUITE 500

City, State, Zip Code: NASHVILLE, TN. 37214

Telephone, Fax: 615-391-7408 615-884-1066

Body Shop:

Company: NACARATO VOLVO

Address: 1111 POLK AVE

City, State, Zip Code: NASHVILLE, TN. 37210

Year 2005		Make VOLVO			Model VHD			Color RED		Trim	
Unit Number				License Plate #		Mileage		Serial#VIN# 4V5KC9GH25N			
Sep	Seq	Qty	Labor Type	Labor Op	Description	Part Type	Part Number	List Price	Extended Price	Labor Units	
	1	1	Mech	Rem/Rep	RIGHT OUTER WHEEL(POLISHED)	New		\$385.34 T	\$385.34	1.0*	
	2	1	Mech	Rem/Rep	RIGHT OUTER TIRE 24.5 MICHELIN XDA HT	New		\$469.21 T	\$469.21	*	
	3				Betterment: Parts Only			30.00%		*	
	4	1	Mech	Rem/Rep	RIGHT INNER WHEEL	New		\$336.57 T	\$336.57	1.0*	
	5	1	Mech	Rem/Rep	RIGHT INNER TIRE 24.5 MICHELIN XDA HT	New		\$469.21 T	\$469.21	*	
	6				Betterment: Parts Only			30.00%		*	
	7	10	Mech	Rem/Rep	WHEEL STUDS	New		\$6.18 T	\$61.80	1.5*	

Sup	Seq	Qty	Labor Type	Labor Op	Description	Part Type	Part Number	Unit Price	Extended Price	Labor Units
	8	1	Mech	Rem/Rep	RIGHT REAR FRONT WHEEL HUB	New		\$158.97 T	\$158.97	1.0*
	9	1	Mech	Rem/Rep	RIGHT REAR FRONT BRAKE DRUM	New		\$102.80 T	\$102.80	.7*
	10	1	Body	Rem/Rep	Door R	New		\$1,098.70 T	\$1,098.70	6.6*
	11	1	Ref	Ref	Refinish Door Outside R	Exist		T		2.4
	12	1	Ref	Ref	Add for Jambs & Interior Refinish Door Outside R R	Exist		T		.7
	13	1	Body	Rem/Rep	Weatherstrip, Door R	New		\$57.43 T	\$57.43	.9*
	14	1	Body	Rem/Rep	Seal, Door R	New		\$41.62 T	\$41.62	.9*
	15				Deduct for Overlap					.9*
	16	1	Body	Rem/Rep	Glass, Door R	New		\$100.44 T	\$100.44	3.6#*
	17				Deduct for Overlap					3.6*
	18	1	Body	Rem/Rep	Mirror R	New		\$407.65 T	\$407.65	.7*
	19	1	Body	Rem/Rep	Mirror, Side View R	New		\$79.77 T	\$79.77	.3*
	20	1	Body	Rem/Rep	Stabilizer, Upper R	New		T		.2
	21	1			INCLUDED IN MIRROR PRICE					*
	22	1	Body	Rem/Rep	Bracket, Mirror R	New		T		.5#
	23	1			INCLUDED IN MIRROR ASSEMBLY					*
	24	1	Body	Rem/Rep	Visor Assy, Sun	New		\$237.94 T	\$237.94	1.6*
	25	1	Ref	Ref	Refinish Sun Visor Complete	Exist		T		3.5
	26	1	Body	Repair	roof	Exist		T		4.0*
	27	1	Frame	Repair	TRACK REARS	Exist		T		3.0*
	28	1	Ref	Ref	Refinish Roof Panel	Exist		T		3.8
	29				Paint Materials				\$312.00	

* - Judgement Item

- Labor Note Applies

Labor

Body	19.3	Hrs @	\$64.00	\$1,235.20
Refinish	10.4	Hrs @	\$64.00	\$665.60
Mechanical	18.7	Hrs @	\$84.00	\$1,570.80
Frame	3.0	Hrs @	\$70.00	\$210.00
Labor Total				\$3,681.60

Parts

Parts Subtotal	\$4,007.45
Less Adjustments	(\$281.52)
Parts Total	\$3,725.93

Additional Costs

Addl Costs/Ops Total	\$312.00
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2005 VOLVO VHD

Tax

Labor Tax	@	9.25%	\$340.54
Parts Tax	@	9.25%	\$370.68
Add. Costs Tax	@	9.25%	\$28.86
Tax Total			\$740.08

Totals

Deduct for Overlap	(\$288.00)
Sub Total:	\$8,453.13
Customer Resp.	\$1,307.57

Net Total**\$7,145.56**

The above is an estimate based on our inspection and does not cover any additional parts or labor which may be required after the work has started. Occasionally, worn or damaged parts are discovered which may not be evident on the first inspection. Because of this, the above prices are not guaranteed. Quotations on parts and labor are current and subject to change.

 Body Shop Manager Signature - Agreed Price

 Days to Repair

2005 VOLVO VHD

Progressive

Vehicle Inspection

Inspected by: EDDIE BRYANT

Appraised for: PROGRESSIVE
SHANE ORRAND

Accident Date: 06/14/2005

Date of Loss: 06/14/2005

Date: 06/22/2005

Estimate#:

Arrival Date: 06/17/2005

Policy Number:

Type of Loss: Collision

Claim Number: 056079460

Year 2005	Make VOLVO	Model VHD	Color RED	Trim	License H10 2545	Serial#/VIN# 4V5KC9GH 666
Wheelbase NA		Unit Number	Habomatar	Engine Hours	Odometer NOT AVAILABLE	

Engine

Make VOLVO	Model VED12	Horsepower 465	Pur.Date/Amount	☐ Gas ☒ Diesel
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Transmission

Make EATON	Model RTO16908LL	Speeds 10
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Front Axle

Capacity 20000	Steering Gear	☒ Power ☐ Manual
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Rear Axle

Make	Model RT46-160	Axle Ratio 4.30	☐ Single ☐ Tandem ☒ Tri Axle
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Rear Suspension

Make VOLVO T/RIDE	Type CONSTRUCTION	Capacity 46000
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Brakes

☐ Hydraulic	☒ Air	☐ Vacuum Assist
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Fuel Tanks

No. 2	Capacity 100	☒ Aluminum ☐ Steel	☐ Polished ☐ Painted ☐ Step ☐ Saddle
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Fifth Wheel

Make NONE	☐ Fixed	☐ Slider ☐ Manual ☐ Air
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Front Wheels

☒ Aluminum ☐ Polished	☐ Steel ☐ Chrome ☐ Painted
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Rear Wheels

☒ Aluminum ☐ Polished	☐ Steel ☐ Chrome ☐ Painted
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Front Tires

Size 22.5	☐ Recaps ☒ Radials	LRFO 16/32 % LRRO 16/32 % LRFI 16/32 % LRFI 16/32 %
Make RF 11/32		

Rear Tires

Size 24.5	☐ Recaps ☒ Radials	RRFO 16/32 % RRRO 16/32 % RRFI 16/32 % RRRI 16/32 %
Make MICHLEIN LF 11/32		

Cab

☐ COE ☒ Conv. ☐ Sleeper	Sleeper Size/Type NONE
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Equipment

☒ Wet Kit ☒ A/C	☐ Winter/Operator Pts ☐ Heated Mirror
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Exterior

#Colors RED	☐ Special Paint ☐ Custom Pin Stripe ☐ Murals
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Frame

☐ Aluminum ☒ Steel	☐ Heat Treated ☒ Std. Length ☐ Extended ☒ Reinforced
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Prior Damage

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Notes

ACV BASED ON NADA FROM A 2004 MODEL AS 05 NOT LISTED ACV ——— \$76200.00

Estimated Parts Total

\$3,725.93

Inspected by

 Date _____ Signature _____

Field Report

Service Request Activity (All)

SR Number: 1-78828107 Account Name: BROWN'S Priority: Medium
 Date Opened: 4/28/2006 7:48:41PM Severity: 2-High Owner: [REDACTED]
 Date Closed: Customer Ref. Id: Status: Open
 Serial No: 4V3K89GH55N [REDACTED]

Description:

Dealer reports customer complaint of drive wheels loosening. Reportedly three instances of road service to tighten/replace loose wheels. Dealer went to pick truck up at customer location and wheels were loose again. Upon inspection at dealer, all hubs show signs of wear on the outside edge of the machined area where the outside wheel sits. R/L front drive lower brake shoe worn down due to alleged wheel equipment coming off. L/S front drive brake drum had apparent contact with road surface. Dealer to replace all drive side hubs, studs, wheels (due to stud hole wear) and both front drums. This truck reportedly had wheels torqued at PDI and a retorque (mileage uncertain at this juncture).

Activities

Date Opened	Owner	Customer	Activity	Status	PR Response	Description
04/28/06 09:20:17AM	UT00145	REGISTERED CUSTOMER	Dealer Service Request	Acknowledged	PR Response	060428. Per our telephone call you will replace hubs, wheel nuts, remove all spacers, torque wheel nuts using crossing pattern to 475+-25Ft Lbs.. You will insure vehicle is returned within 100 miles and retorque the new wheel equipment. Spradlin
04/28/06 09:26:38AM		SPRADLIN	Email - Outbound	Done	1-78828107	Hello Bob, Please see and follow my instructions in the activity, carefully. Send parts to TMAC...especially the plastic spacer. Reassemble without the spacer.

From: Ravitsky Robert
Sent: Wednesday, April 27, 2005 6:39 PM
To: Jim Titus (E-mail)
Cc: Spradlin Warren
Subject: TEV

Jim,

As per our discussion during my visit today referencing chassis 394085, 7,832 miles, replace the four drive axle hubs (with studs), wheel nuts, wheels, remove all spacers, torque wheel nuts using crossing pattern to 475+25Ft Lbs.. You will insure vehicle is returned within 100 miles and retorque the new wheel equipment.

Send all failed parts as discussed to:

Volvo Trucks North America, Inc.
Technical Material Analysis Center
4100 Bobwhite Blvd.
Pulaski, VA 24301
Attn: Warren Spradlin

Do not wait until prompted by warranty to ship the parts. Please ship as soon as the repair is completed.

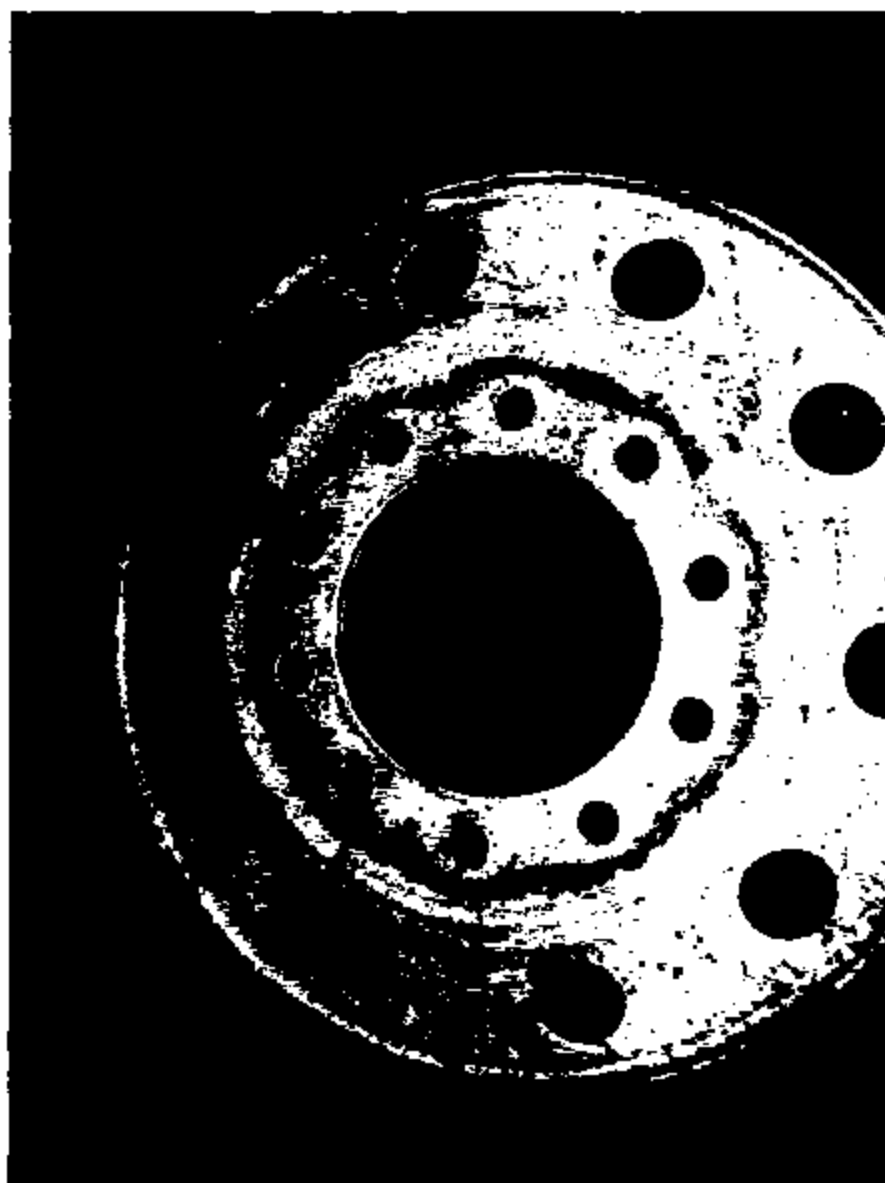
Thank you,

Bob Ravitsky
District Service Manager, Northeast Region
610-748-8510
610-748-8511 fax
robert.ravitsky@volvo.com











Field Report

VPSS

SR Number : 1-82540207

Account Name :

Priority : Medium

Date Opened : 6/10/2008 12:14:21PM

Severity : 2-High

Owner :

Date Closed :

Customer Ref. Id :

Status : Open

Serial No : 4V5K99GH75N

Description :

Dealer reported yesterday that this chassis was broken down on the highway with the rear drive wheels off. This caused some dump body damage as well. They had to send a technician out to the site to install new studs while the wrecker was supporting the truck as it was loaded and could not be towed that way. The weight slip indicated 76,000 lbs and the truck is registered for 60,000 lbs. At the shop, the dealer removed the rear drives and found two spacers. Both spacers were in between the drum and the inner wheel. They are to remove the remaining drive wheels and advise as to what was found.

Field Report

VPSS

SR Number : 1-90428001 Account Name : O'NEA TRUCK CENTER Priority : Medium
 Date Opened : 9/7/2006 9:38:14PM Severity : 1-Critical Owner :
 Date Closed : 11/28/2006 12:08:29PM Customer Ref. ID : Status : Closed
 Serial No : 4V5K99GH85N

Description :

Loose wheels on rear of truck. Inspected all wheels for proper torque found none to be at specs and I will be replacing the right rear rear hub assembly. Inspected and torque to specs. Cup in R/R Hub was not seated correctly parts will be shipped to Warren Spradlin asap. Wheels where as follows
 Left front rear- No Torque on retaining nut.
 Left rear rear- No Torque Nut was hand tight
 Right rear rear- too much torque on outer nut 800 foot lbs inside nut was not in contact with bearing
 Right forward rear outer nut was at 400 foot lbs inside nut was hand tight and could be remove with your hand

Activities

Date/Time	Activity	Status	Request	Response	Comments
09/08/06 01:58:45PM	UT00148		Dealer Service Request	Acknowledged	PR Response
					060808. Ref SN 394131, Assembly date 05-01-25, Date in service 05-02-09, Miles 909, hub BOM 77320-K01437, p/n 20458281mid and 20458283 rear rear.

The report below shows several faults:

1. The Gunite hub appears to have the bearing cup improperly seated in the hub.
2. The inner or bearing nut was found loose. The jam nut was also over-tightened at about 800 ft lbs. Specification for final torque per SB773-008 is 300-400 ft lbs for dual type washer and 200-275 ft lbs for long washer.
3. I believe many of the abs warning light reports and some of the recent wheel looseness issues with VHD may be accounted for as above for this type wheel end.
4. Doug Williams, SPP was informed of this issue by conference call on 060907, and is checking the records and tool logs on his end.

Please take appropriate action.

Warren

Field Report

SR Number: 1-85263601

Account Name:

Priority: Medium

Date Opened: 7/12/2006 8:08:47PM

Severity: 2-High

Owner:

Date Closed:

Customer Ref. ID:

Status: Open

Serial No: 4V5K39GH15N

Description:

Dealer reports drive wheels falling off. Attached are pictures of the truck as it arrived at the dealership. The F&S rear drives were unseparable. All ten studs were broken off. Brake spider damaged. Truck is fully loaded. Dealer to inspect the remaining wheel nut torques when they are able to get it to where they can get the weight off the chassis to do so. Note: the dealer had removed all wheel spacers prior to delivery of the chassis. They torque wheel nuts to 540 ft. lbs. I will have another set of studs removed and sent to Reliability for metallurgical analysis.





