Subject: FW: Material scan into repository 10304297
Date: Wednesday, March 10, 2010 9:42:33 AM
Attachments: 10304297PAR.pdf

Sent: Tuesday, March 09, 2010 1:47 PM

,
Can the attached pdf file (police accident report) be added to the private repository associated with VOQ 10304297?

Crash Investigator
Special Crash Investigations
Currently on detail to ODI
work: 202-366-1757
cell: 202-441-2926

U.S. Department of Transportation
National Highway Traffic Safety Administration
NVS-411 Room W53-498
1200 New Jersey Ave, S.E.
Washington, DC 20590

10304297

EQ--10304297-6760

MAR9 503

MAIL REPORTS TO:
Iowa Department of Transportation
Office of Driver Services
P.O. Box 9204
Des Moines, Iowa 50306-9204

Iowa Department of Transportation
INVESTIGATING OFFICERS REPORT OF MOTOR VEHICLE ACCIDENT

Law Enforcement Case Number: 09-36614

Legal Intervention? ☐ Private Property? ☐

LOCATION

Date of Accident	Time of Accident	County	Accident occurred within corporate limits of (city)
11/30/2009	16:39 Hrs.	Woodbury - 97	Sioux City - 7057

If accident occurred outside of city limits show general vicinity: "N/A" of nearest city "N/A"

On Road, Street, or Highway: "N/A" | At Intersection with: "N/A"

Note: Unless accident occurred at an intersection which is completely described above, use the space below to give the exact location from a milepost or definable intersection, bridge, or railroad crossing, using two distances and directions if necessary.

Distance	Direction		Distance	Direction	
"N/A"	"N/A"	and	"N/A"	"N/A"	of

Milepost Number: "N/A" Or Definable Intersection, bridge, or railroad crossing: "N/A"

Location Literal Description: SB/WB US 6020 / US 20 and Interstate 6029

X-Coordinate: 00322489

Y-Coordinate: 04704834

If Divided Highway, Provide Route (Cardinal) Travel Direction: "N/A"

UNIT 001

Driver's Name - Last [redacted] First [redacted] Middle [redacted] Suffix Phone [redacted]

Address [redacted] City OSMOND State NE Zip [redacted]

Date of Birth	Driver's License Number	Citation Charge Code 1	Citation Charge 1
09/02/1960	[redacted]	Citation Charge Code 2	Citation Charge 2
Gender: Female	State: NE	Class: O	Endorsements: NONE	Restrictions: NONE	Citation Charge Code 3	Citation Charge 3
Alcohol Test Given? 1 - None	Test Results:	Drug Test Given? 1 - None	Test Results:	Citation Charge Code 4	Citation Charge 4

Seating Position 01 | Injury Status 1 | Occupant Protection 2 | Airbag Deployment 3 | Airbag Switch Status 3 | Ejection 1 | Ejection Path 1 | Trapped 1

Transported to: MERCY MEDICAL | Transported by: SIOUXLAND PARAMEDICS INC.

Owner's Name - Last [redacted] First [redacted] Middle [redacted] Suffix | Owner Company Name

Address [redacted] City OSMOND State NE Zip [redacted]

Insurance Co. Name | Insurance Policy # | License Plate # [redacted] | State NE | Year 2010

VIN No.	Year	Make	Model	Style	Tow #	Approximate Cost to Repair or Replace
JTEBM42A2[redacted]	2006	Toyota - TOYT	HIGHLANDER	LIMITED	YES	

Initial Travel Direction 4 | Vehicle Action 07 | Speed Limit 55 | Point of Initial Impact 01 | Most Damaged Area 07 | Extent of Damage 5 | Underride/ Override 1 | Private? ☒ | $25,000.00

Total Occupants 1 | Traffic Controls 06 | Vehicle Config. 01 | Cargo Body Type 01 | Vehicle Defect 01 | Driver Condition 1 | Vision Obscured 01 | Contributing Circumstances, Driver (up to two) 09,21

SEQUENCE OF EVENTS | First Event 13 | Second Event 21 | Third Event | Fourth Event | Most Harmful Event (by vehicle) 21

Commercial Trailer License Plate # | Attached to Power Unit: | State | Year | Attached to Trailer Unit: | State | Year | Emergency Vehicle Type 1 | Emergency Status 3

Carrier Name | Address | City | State | Zip

US DOT # or MC # | Number of Axles | Gross Vehicle Weight Rating | Placard # | Hazardous Materials Released?

UNIT 002

Driver's Name - Last [redacted] First [redacted] Middle F Suffix Phone [redacted]

Address [redacted] City MANNING State IA Zip [redacted]

Date of Birth	Driver's License Number	Citation Charge Code 1	Citation Charge 1
08/17/1944	[redacted]	Citation Charge Code 2	Citation Charge 2
Gender: Male	State: IA	Class: A,C	Endorsements: NONE	Restrictions: NONE	Citation Charge Code 3	Citation Charge 3
Alcohol Test Given? 1 - None	Test Results:	Drug Test Given? 1 - None	Test Results:	Citation Charge Code 4	Citation Charge 4

Seating Position 01 | Injury Status 5 | Occupant Protection 2 | Airbag Deployment 5 | Airbag Switch Status 3 | Ejection 1 | Ejection Path 1 | Trapped 1

Transported to: | Transported by:

Owner's Name - Last | First | Middle | Suffix | Owner Company Name: K B TRANSPORTATION INC

Address [redacted] City S SIOUX CITY State NE Zip [redacted]

Insurance Co. Name: HARCO INS | Insurance Policy # | License Plate # | State NE | Year 2010

VIN No.	Year	Make	Model	Style	Tow #	Approximate Cost to Repair or Replace
1FUJAPCK05[redacted]	2006	Freightliner - FRHT	SEMI	TRACTOR	YES	

Initial Travel Direction 4 | Vehicle Action 01 | Speed Limit 55 | Point of Initial Impact 01 | Most Damaged Area 01 | Extent of Damage 5 | Underride/ Override 1 | Private? ☒ | $220,000.00

Total Occupants 1 | Traffic Controls 01 | Vehicle Config. 09 | Cargo Body Type 02 | Vehicle Defect 01 | Driver Condition 1 | Vision Obscured 01 | Contributing Circumstances, Driver (up to two) 28

SEQUENCE OF EVENTS | First Event 21 | Second Event | Third Event | Fourth Event | Most Harmful Event (by vehicle) 21

Commercial Trailer License Plate # | Attached to Power Unit: | State NE | Year 2010 | Attached to Trailer Unit: 70X3342 | State NE | Year 2010 | Emergency Vehicle Type 1 | Emergency Status 3

Carrier Name: K B TRANSPORTATION INC | Address: 4700 DAKOTA AVE | City: S SIOUX CITY | State: NE | Zip: 68776

US DOT #: 320528 or MC # | Number of Axles: 3 | Gross Vehicle Weight Rating: 16000 | Placard # | Hazardous Materials Released? 2

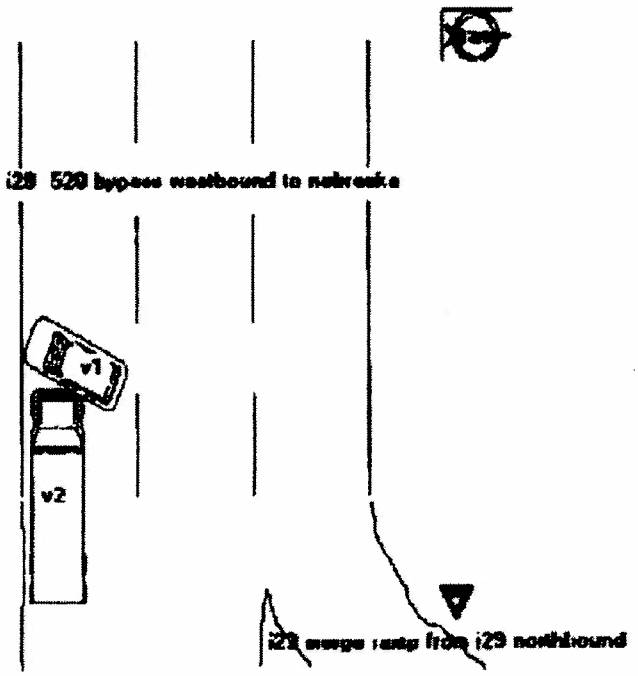
If Property other than vehicles damaged explain	Object Damaged	Estimate of Damage	Was owner or tenant notified?
	BRIDGE DECK	$10,000.00	Yes

Owner's Name - Last	First	Middle	Suffix	Company Owner Name
				IA DEPT OF TRANSPORTATION

Street or RFD	City	State	Zip Code
PO BOX 80065	SIOUX CITY	IA	51108

ACCIDENT ENVIRONMENT				ROADWAY CHARACTERISTICS Major Contributing Circumstance:		WORKZONE RELATED?	SEQUENCE OF EVENTS
Location of First Harmful Event	2	Weather Conditions (up to two)	61	Environment	1	No	
Manner of Crash/Collision	5			Roadway	01	Location	First Harmful Event of Crash (use codes 11-42 only) 21
Light Conditions	1	Surface Conditions	1	Type of Roadway Junction/Feature	17	Type	
						Workers Present?	

DIAGRAM



NARRATIVE

Describe what happened (refer to vehicles by number)

VEH 1 WAS MERGING ONTO THE I29 520 BYPASS TO GO WESTBOUND TOWARDS NEBRASKA. VEH 1 FAILED TO MAINTAIN CONTROL AND TRUCK THE GUARD MEDIAN. VEH 1 ALSO CROSSED INTO THE PATH OF VEH 2. VEH2 WAS WESTBOUND ON THE 520 AND STRUCK VEH 1 JUST AS IT STRUCK THE CENTER MEDIAN.
BOTH VEHICLES CAUGHT FIRE AND WERE TOTALLED.

WITNESS

Witness Name - Last	First	Middle	Suffix
[redacted]	[redacted]		

Address	City	State	Zip Code
[redacted]	HOMER	NE	[redacted]

Home Phone #	Work Phone #
[redacted]	[redacted]

WITNESS

Witness Name - Last	First	Middle	Suffix
[redacted]	[redacted]		

Address	City	State	Zip Code
[redacted]	HOMER	NE	[redacted]

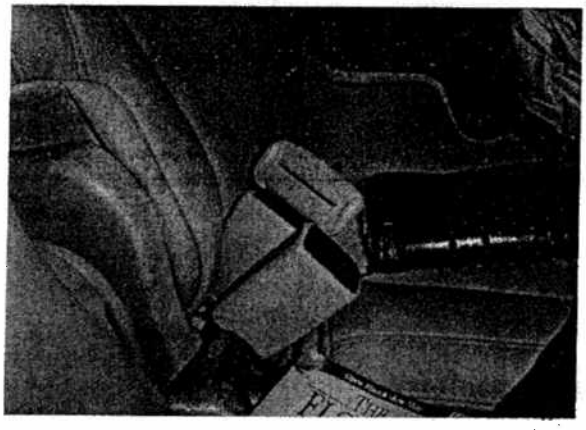
Home Phone #	Work Phone #
[redacted]	[redacted]

Officer	Badge No.	Time Officer Notified of Accident	Time Officer Arrived At Scene
HICKS MATT	8229	16:39 Hrs.	16:41 Hrs.

Name of Agency	Date of Report	Investigation made at scene?	T.I. #
Sioux City Police Department	11/20/2009	Yes	

Report Reviewed By:	Date Reviewed	Agency Specific	Other Technical Investigation Agency
Helmgartner, Ron	02/23/2010	D-9	

INTERIOR (continued):



driver's seating position had an additional airbag at the driver's knee level that also deployed. The left front and right front shoulder/lap restraint were stretched/ wavy and would not retract. When the buckles were placed in their respective latches they both clicked and held under load.

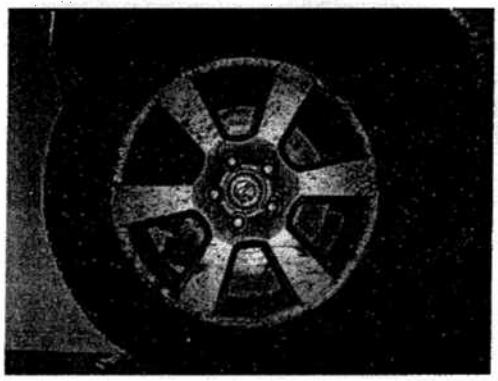
The left rear lap/shoulder restraint was cut across its width and the buckle was found secured in the latch. The right rear and middle rear shoulder/lap restraint was found fully retracted and did not show any unusual wear.

TIRES:

*Damage to wheels and tires were referenced as if looking at the face of a clock, with the wheel's valve stem in the 12 o'clock position.

LEFT FRONT:

Make: Kumho
Model: Solus KR21
Size: P235/65R17 103T
Pressure: Deflated
Tread Depth: 6/32 inch

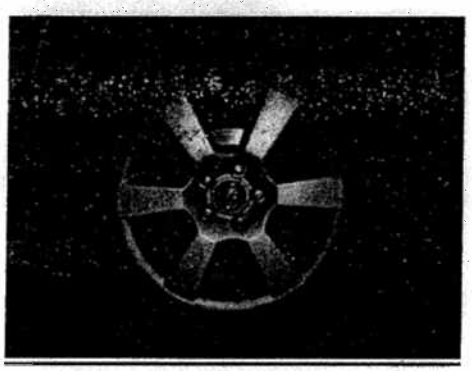


There was a 2-inch laceration to the outer sidewall at the 11 o'clock position. There were heavy abrasions and gouging around the outer perimeter of the rim. The outer face of the sidewall was covered with what appeared to be dried battery fluid, green in color.

LEFT REAR:

Make: Kumho
Model: Solus KR21
Size: P235/65R17 103T
Pressure: 28 PSI
Tread Depth: 7/32 inch

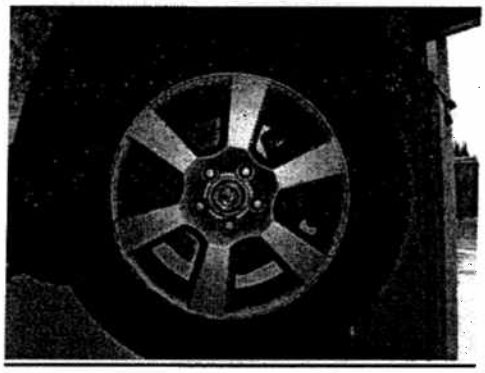
TIRES (continued):



The left rear tire appeared to be in good condition with scuffs/dirt across the entire outer face of the tire and wheel assembly.

RIGHT FRONT:

Make:	Kumho
Model:	Solus KR21
Size:	P235/65R17 103T
Pressure:	28 PSI
Tread Depth:	6/32 inch

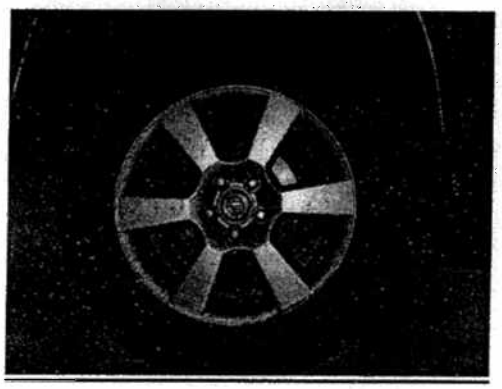


The right front tire appeared to be in good condition with no remarkable collision damage.

TIRES (CONTINUED):

RIGHT REAR:

Make:	Kumho
Model:	Solus KR21
Size:	P235/65R17 103T
Pressure:	30 PSI
Tread Depth:	7/32 inch



The right rear tire appeared to be in good condition with no remarkable collision damage.

PHOTOGRAPHS:

I used a Sony DSC-P8 digital camera to obtain photographs of the Lexus during this vehicle inspection. The photographs were copied to a compact disc and are stored with the original investigation.

SUPPLEMENTAL

VEHICLE DESCRIPTION AND DAMAGE:

On December 18, 2008, at 1010 hours, I inspected Vehicle #2 (V-2, Mercedes) at the U.S. Tow[1] storage yard.

VEHICLE #2 (V-2) – Mercedes S550 Black

Year:	2007
Make:	Mercedes
Model:	S550
License:	[redacted]
VIN:	WDDNG71X37A[redacted]
Engine:	8 cylinders
Transmission:	Automatic
Color:	Black
Odometer:	Unable to be determined (electronic-no power)
Speedometer:	Unable to be determined (electronic-no power)

Registered Owner

[redacted]

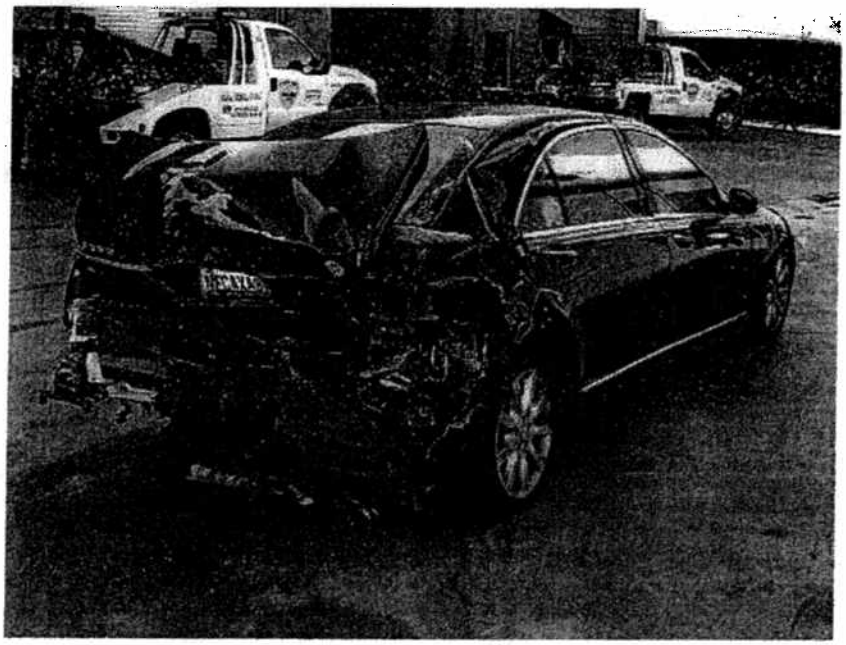
San Gabriel, CA [redacted]

[1] U.S. Tow, 12710 Cerise Avenue, Hawthorne, CA 90250 (310) 970-7100

PREPARER'S NAME AND I.D. NUMBER	DATE	REVIEWER'S NAME	DATE
M. Nasir 17096	12-18-08		

REV. 1-95 13644

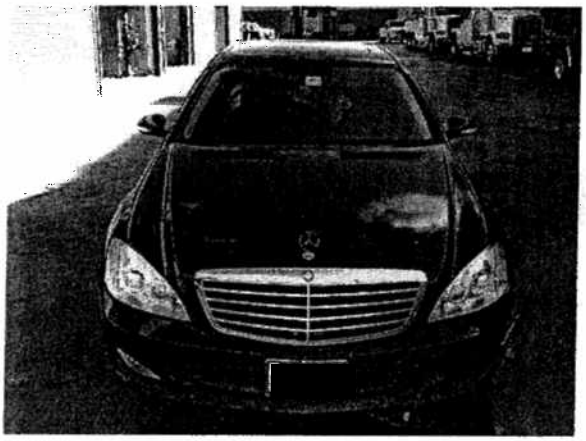
DAMAGE OVERVIEW:



Vehicle #2 sustained major contact damage to its rear. The primary direction of force was from back to front.

FRONT:

The left front fog light was displaced. The left side marker light was displaced. The left edge of the front bumper was cracked and displaced outwards. Debris and dirt were found covering the lower half of the entire width of the front bumper.



LEFT SIDE:

The plastic skin on the trailing edge of the side member was cracked and displaced. The plastic inner lining in front of the left rear wheel well had a 12-inch tear. The left rear door's upper trailing edge was displaced outwards. The left rear quarter panel sustained an 18-inch vertical crease at a point 8 inches below the left outer trailing edge of the rear window.

REAR:

The rear end of Vehicle #2 sustained substantial rear end damage, with the majority of damage being to the right rear. The rear bumper was pushed inwards and to the right, with the rear end inducing damage to the right rear axle by displacing it forward. The trailing edge of the trunk lid was pushed downwards and the leading portion was displaced vertically. The rear window was shattered, predominantly concentrated on the lower passenger side. The

REAR (continued):

casing for the spare tire was torn and the spare tire was displaced from the vehicle. The right exhaust tip was pushed forward and was found adjacent to the rear of the lower portion of the right rear tire. The deepest point of intrusion to the rear was to a point in line with the rear of the right rear seat.

RIGHT SIDE:

The "C"-pillar sustained two areas of induced damage. The lower portion of the "C"-pillar sustained a vertical crease at a point above the trailing edge of the right rear door. The second damaged area of the "C"-pillar was an outwards buckling at a point approximately 8 inches above the rear window. The right rear door was displaced downwards and outwards. The frame above the right rear door was buckled slightly inwards. The right front door was unable to be opened due to induced damage.

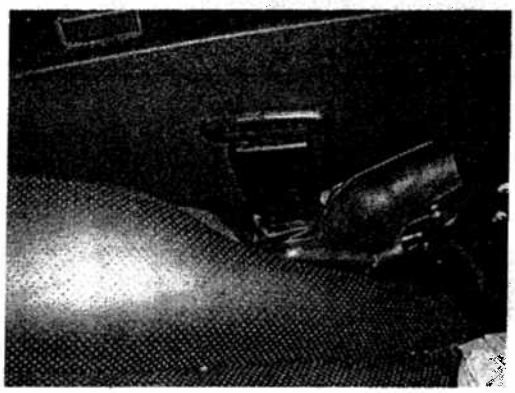
PREPARER'S NAME AND I.D. NUMBER	DATE	REVIEWER'S NAME	DATE
M. Nasir 17096	12-18-08		

REV. 1-95 13644

TOP:

The roof had an approximate 1 foot section of waviness and warping above the passenger's side "B"-pillar, between the door frame and trailing right edge of the sunroof.

INTERIOR:



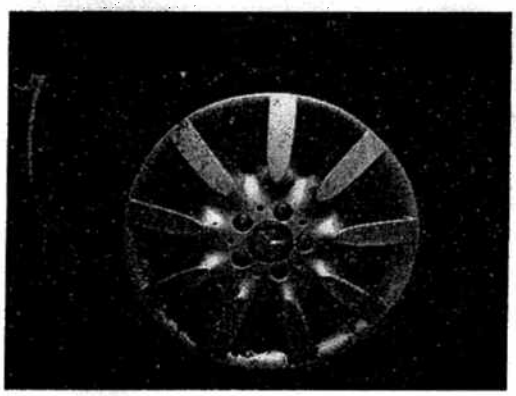
The Mercedes has five seating positions. All seating positions, including the middle rear, were equipped with lap/shoulder restraints. The front seating positions were also equipped with a Supplemental Restraint System (SRS) consisting of frontal airbags. Both airbags were not deployed. The driver's restraint was found cut across its width and was laying on the driver's seat. The buckle of the driver's restraint was found in the latch and would not eject. The latch housing was cracked open and displaced. The driver's seat backrest was displaced from the lower seat rest on the right side, reclining the driver's seat. All other safety restraints were found retracted in their housing with no signs of unusual wear. The right rear and left rear safety restraint were fully retracted and locked and would not extend. The left rear seat sustained induced damage and was displaced upwards and to the front of the vehicle.

TIRES:

*Damage to wheels and tires were referenced as if looking at the face of a clock, with the wheel's valve stem in the 12 o'clock position.

LEFT FRONT:

Make:	Continental
Model:	Conti Pro Contact
Size:	P225/45R18 99H
Pressure:	Deflated
Tread Depth:	7/32 inch

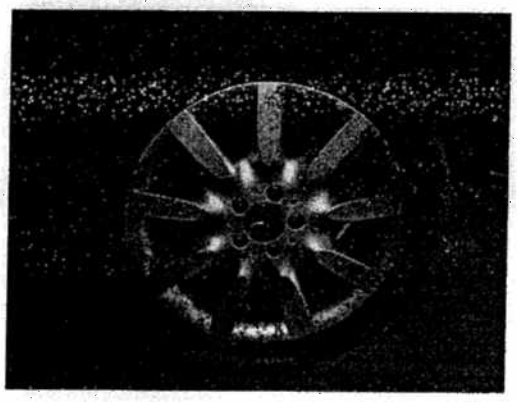


There was a 1/2-inch gouge on the outer sidewall of the tire at the 11 o'clock position. The outer face of the tire and wheel was covered in dirt and debris.

LEFT REAR:

Make:	Continental
Model:	Conti Pro Contact
Size:	P225/45R18 99H
Pressure:	24 PSI
Tread Depth:	7/32 inch

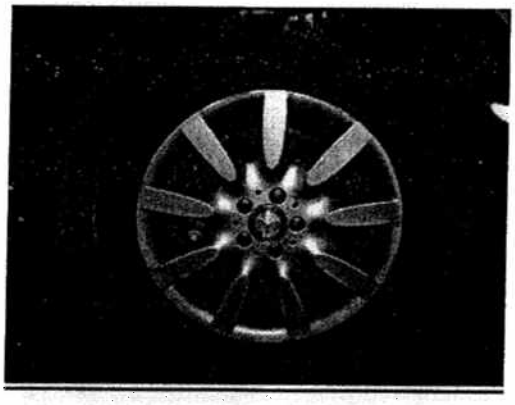
TIRES (continued):



The left rear tire appeared to be in good condition and was covered in dried mud, dirt, and debris on its outer face.

RIGHT FRONT:

Make:	Continental
Model:	Conti Pro Contact
Size:	P225/45R18 99H
Pressure:	22 PSI
Tread Depth:	7/32 inch



There was an area of abrasions approximately 2 inches long at the 12 o'clock position of the outer rim's circumference that appeared old. There was a partial laceration to the sidewall of the tire at the 3 o'clock position, approximately 2 inches long.

TIRES (CONTINUED):

RIGHT REAR:

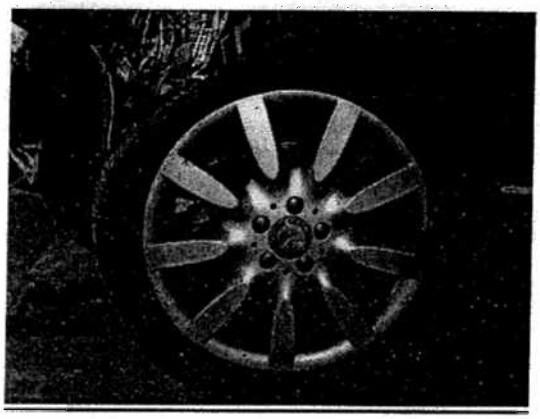
Make: Continental

Model: Conti Pro Contact

Size: P225/45R18 99H

Pressure: Deflated

Tread Depth: 6/32 inch



The right rear tire was deflated with the rear portion of the Mercedes pushed up against the width of the tread.

PHOTOGRAPHS:

I used a Sony DSC-P8 digital camera to obtain photographs of the Mercedes during this vehicle inspection. The photographs were copied to a compact disc and are stored with the original investigation.

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
MULTIDISCIPLINARY ACCIDENT INVESTIGATION TEAM NARRATIVE/DIAGRAM
CHP 558D (REV. 3-99) OPI 061 (*MAIT use only*)

DATE OF COLLISION (*MONTH-DAY-YEAR*)	TIME (*2400*)	NCIC	OFFICER ID	NUMBER	PAGE
12-15-2008	1550	9565	18871	2008120189	1

SL-15-09
California Highway Patrol
West Los Angeles Area

SUPPLEMENTAL

The following investigation was conducted by the California Highway Patrol, Southern Division Multidisciplinary Accident Investigation Team (MAIT).

MAIT personnel involved:

J. Grindey, ID 12583, Officer
J. Paz, ID A12829, Motor Carrier Specialist – 1

Inquiries regarding subpoenas for MAIT personnel should be referred to:

California Highway Patrol
Southern Division MAIT
437 North Vermont Avenue
Los Angeles, CA 90004

Attention: Sergeant D. Karol

DATE OF COLLISION (*MONTH-DAY-YEAR*)	TIME (*2400*)	NCIC	OFFICER ID	NUMBER	PAGE
12-15-2008	1550	9565	18871	2008120189	2

TABLE OF CONTENTS

INTRODUCTION

Notification

On Monday, December 15, 2008, at approximately 1550 hours, a fatal traffic collision occurred on westbound Interstate 10 to the Overland Avenue off-ramp within the city of Los Angeles. [redacted] was driving a 2004 Lexus RX330 (Vehicle #1) westbound on Interstate 10 approaching the Overland Avenue off-ramp. As [redacted] exited Interstate 10, she collided into the rear of a 2007 Mercedes Benz S550 (Vehicle #2) being driven by [redacted] After the collision, Vehicle #1 overturned on the Overland Avenue on-ramp to westbound Interstate 10. As a result of the collision, [redacted], the left rear passenger in Vehicle #1, sustained fatal injuries.

Officers from the California Highway Patrol (CHP) West Los Angeles Area responded to the collision scene and completed the traffic collision investigation (#2008120189). On Tuesday, May 5, 2009, Officer Jakubowski, ID 18170, from the West Los Angeles Area CHP, contacted the CHP Southern Division Multidisciplinary Accident Investigation Team (MAIT) and requested assistance with a search warrant and removal of the Airbag Control Module (ACM) within Vehicle #1, as well as a mechanical examination of Vehicle #1.

On Wednesday, May 13, 2009, Officer Jakubowski obtained a signed search warrant, number 10175, to obtain the ACM from within Vehicle #1. On Tuesday, May 19, 2009, Investigator Grindey responded to U.S. Tow to retrieve the ACM from Vehicle #1.

On Thursday, June 4, 2009, Investigators Paz and Grindey responded to U.S. Tow to conduct a mechanical examination of Vehicle #1. Investigator Paz returned to U.S. Tow on Wednesday, June 10, 2009, to obtain additional photographs of Vehicle #1.

Issues

Southern Division MAIT will conduct a limited investigation to include the following:

1. Removal of the Airbag Control Module (ACM)
2. Mechanical Examination of Vehicle #1

AIRBAG CONTROL MODULE

Airbag Control Module Removal

Vehicle #1 (Lexus RX330) was equipped with an Airbag Control Module (ACM). The ACM is responsible for analyzing real-time driving conditions and other related variables to perform necessary safety measures in protecting occupants of the vehicle. These safety measures include decisions on whether or not to activate the vehicle's supplemental inflatable restraints (ie: the front driver's and/or passenger airbags). In addition, the ACM communicates with, and records data from, internal and external sensors that provide data related to the collision that may include: engine RPM; throttle position; brake switch status; and vehicle speed. The information is accessed and downloaded through proprietary hardware and software.

On Wednesday, May 13, 2009, Officer Jakubowski obtained a search warrant for the retrieval of data from the ACM contained within Vehicle #1. On Tuesday, May 19, 2009, Investigator Grindey retrieved the ACM from Vehicle #1 at U.S. Tow, 12710 Cerise Avenue, Hawthorne. The ACM was located in the center stack of Vehicle #1. Once removed, the ACM was booked into evidence at the West Los Angeles Area CHP office. Pursuant to the search warrant, the ACM was shipped for data retrieval and analysis to:

Alicia McAndrews, Corporate Counsel
Toyota Motor Sales, USA, Inc.
19001 South Western Avenue, HQ11
Torrance, California, 90501

Figures 1 and 2 (page 5) depict the location of the ACM along with the interior of Vehicle #1:

Airbag Control Module (continued)

Airbag Control Module Removal (continued)

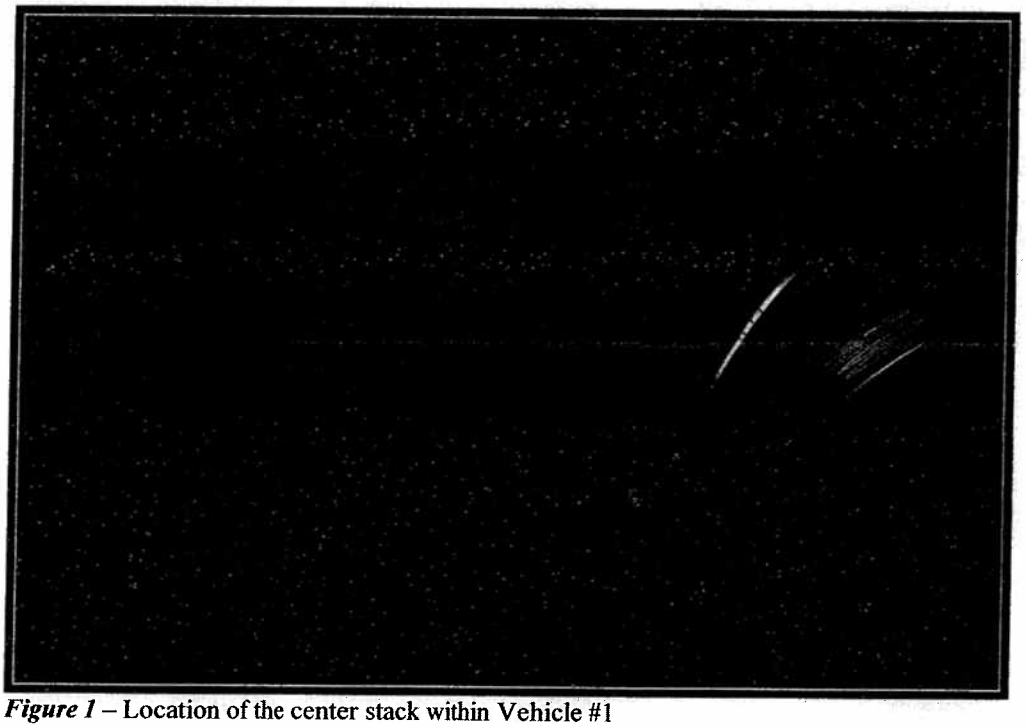


Figure 1 – Location of the center stack within Vehicle #1

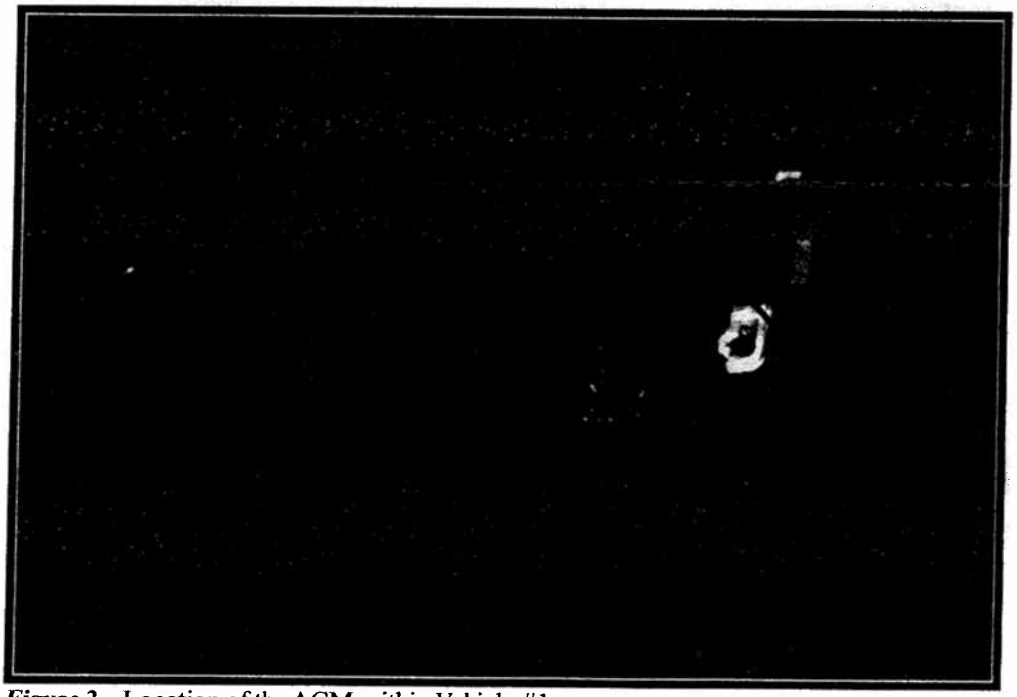


Figure 2 – Location of the ACM within Vehicle #1

STATE OF CALIFORNIA
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
MULTIDISCIPLINARY ACCIDENT INVESTIGATION TEAM NARRATIVE/DIAGRAM
CHP 558D (REV. 3-99) OPI 061 (*MAIT use only*)

DATE OF COLLISION (*MONTH-DAY-YEAR*)	TIME (*2400*)	NCIC	OFFICER ID	NUMBER	PAGE
12-15-2008	1550	9565	18871	2008120189	6

MECHANICAL EXAMINATION

Date of Inspection	June 4, 2009
Inspection Location	U. S. Tow 12710 Cerise Avenue Hawthorne, California 90250 310-970-7100
Vehicle Number	1
Manufacturer	Toyota Motor Corporation
Model	Lexus RX 330
License Plate Number	[redacted] California
Vehicle Identification Number	JTJGA31U440[redacted]
Year	2004
Mileage	81,649
Color	Silver
Type of Vehicle	Sport Utility Vehicle
Registered Owner	[redacted] Torrance, California [redacted]

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Introduction

The mechanical components of the involved vehicle were separated into individual critical item segments for a detailed analysis of their functional abilities or abnormalities. The critical item segments on this vehicle consisted of the following: Service Brakes; Suspension; Tires and Wheels; Steering System; Engine and Powertrain; and Throttle Operation. A search for safety recalls and a vehicle history were also conducted. All directional references in the following narrative are oriented from the driver's seat of the vehicle looking forward through the windshield.

Fluid Levels

An examination of the various fluid levels and their related components disclosed the following:

Radiator Coolant Level

The radiator and coolant overflow tank were damaged by the collision. The pressure cap was properly installed on the radiator filler neck. The radiator and coolant overflow tank were empty.

Engine Oil Level

The engine oil dipstick was mounted on the front of the engine and was in place. Inspection of the engine oil dipstick revealed the crankcase was filled with engine oil up to the minimum indicator mark.

Power Steering System Fluid Level

The power steering fluid reservoir was located on the right side of the engine compartment. The power steering fluid reservoir was filled with power steering fluid approximately up to the maximum cold indicator mark. The collision caused the power steering fluid reservoir to come off the mounting bracket, but was held by the power steering hoses.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Fluid Levels (continued)

Brake System Hydraulic Fluid Level

The brake system utilized two brake fluid reservoirs connected to each other using rubber hoses. One reservoir was attached to the top of the master cylinder and the second reservoir was attached to the left side of the engine compartment. The master cylinder was located on the firewall within the engine compartment. The reservoirs contained an adequate amount of brake fluid.

Service Battery

The service battery was located at the left front area of the engine compartment, behind the left front headlamp assembly. The service battery was damaged by the collision causing the battery to lose a large amount of battery acid.

Automatic Transaxle Fluid Level

The automatic transmission case was complete and was securely coupled to the engine assembly. The transmission was filled with transmission fluid, but the proper level was unable to be determined due to the collision damage, which prevented the vehicle from being started.

Opinion

- Examination of the various fluid levels did not disclose any pre-existing damage or impairment that might compromise the vehicle's normal operating characteristics.
- The loss of radiator coolant appeared to have been caused by the collision damage to the radiator and cooling system components.
- The battery damage and loss of acid appeared to have been caused by the collision.
- The proper transmission level was not determined because collision damage prevented the vehicle from being started.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Service Brakes

This vehicle was fitted with a hydraulically operated, power assisted, brake system with a front and rear disc brake configuration. The service brake system used a dual piston master cylinder and a power brake booster, utilizing engine manifold vacuum to provide assistance to the hydraulic system. The master cylinder and power brake booster unit were undamaged and properly mounted on the firewall in the engine compartment. The hydraulic system was a split system with separated circuits, designed to maintain braking capability in the event of a fluid leak or failure in one of the hydraulic circuits. In order to access the individual brake assemblies, the front and rear wheel assemblies were removed from the vehicle. Vehicle #1 was also equipped with a 4-sensor/4-channel anti-lock braking system designed to maintain vehicle directional stability and optimum deceleration under severe braking conditions by controlling the brake line pressure to each wheel.

No evidence of hydraulic fluid leakage was noted in the vicinity of the master cylinder or power booster assembly. No hydraulic fluid leakage was observed at the hydraulic lines or from the master cylinder and brake booster junction. The front hood, the wiper arm assembly and miscellaneous air intake components were removed to access the master cylinder and brake booster assembly. The brake pedal assembly was properly mounted and undamaged. Vehicle #1's driver side was equipped with three floor mats; the first was the manufacturer's floor mat, which was not properly secured to the carpet anchors clips (# 1). The second (#2) and third (#3) were plastic type floor mats which were not properly secured to the vehicle (Figure 3).

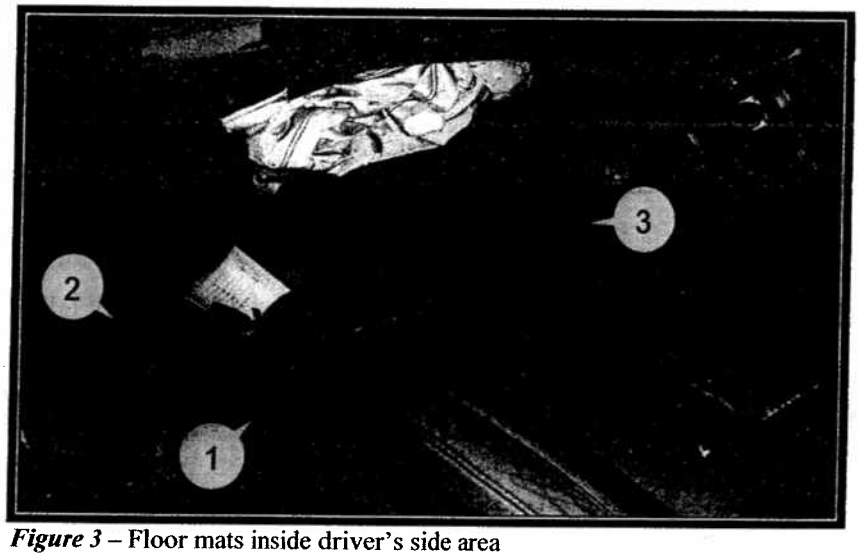


Figure 3 – Floor mats inside driver's side area

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Service Brakes (continued)

Axle #1

The steering axle was equipped with a single piston, floating caliper, self-adjusting disc type brake system. The brake rotors were a ventilated type design and displayed a relatively smooth and polished appearance upon their frictional surfaces. The brake rotors and the associated calipers were properly mounted. The brake caliper assemblies appeared functional and moved freely upon the associated anchor pins. The anti-lock braking system components included wheel speed sensors, wire connections and harnesses, which were complete and properly mounted.

Hydraulic fluid was delivered to the brake units via flexible hydraulic hoses and steel piping. The hydraulic hoses and steel piping were complete and did not display any indication of fluid leakage. The support brackets for each of the flexible brake hoses for the front brake units were properly mounted. No hydraulic fluid leaks were found on either caliper piston assemblies.

In order to access the individual brake assemblies, the wheel assemblies were removed from the vehicle. Examination of the brake assemblies revealed that the vehicle was equipped with Raybestos brake pads which were of a bonded design. The brake pads were properly attached to their respective backing plates and had friction material of adequate thicknesses (Figures 4 through 7, page 11).

FRONT BRAKE SPECIFICATIONS		
ITEM	FIELD MEASUREMENT	MANUFACTURER'S MINIMUM SPECIFICATIONS
Left outer brake friction material	11/32 inch	2/32 inch
Left inner brake friction material	11/32 inch	2/32 inch
Right outer brake friction material	11/32 inch	2/32 inch
Right inner brake friction material	11/32 inch	2/32 inch
Left front rotor thickness	1.066 inch	1.024 inch
Right front rotor thickness	1.043 inch	1.024 inch

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Service Brakes (continued)

Axle #1 (continued)

Figure 4 – Left front brake pads.

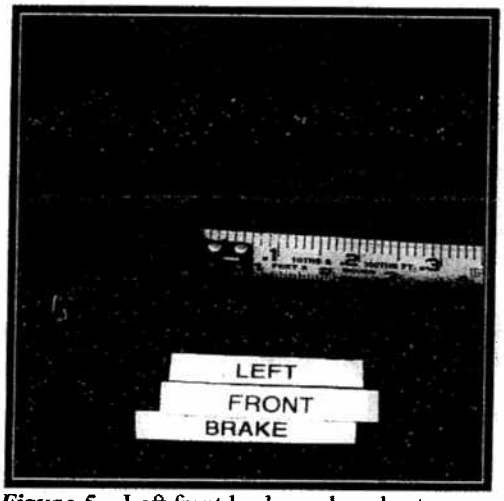


Figure 5 – Left front brake pads and rotor.

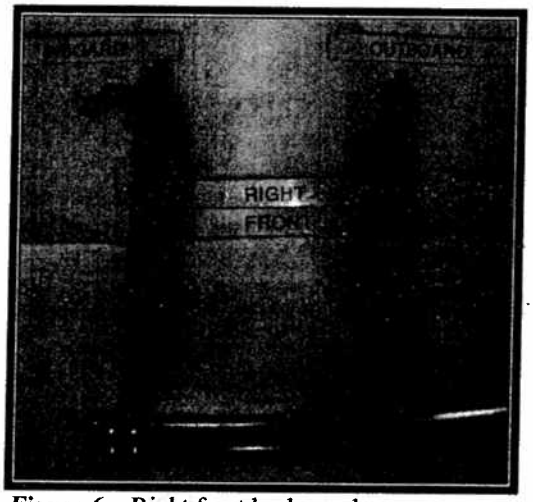


Figure 6 – Right front brake pads.

Figure 7 – Right front brake pads and rotor.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Service Brakes (continued)

Axle #2

The trailing axle was equipped with a single piston, floating caliper, self-adjusting disc/drum type brake system, incorporating rear brakes and parking brake assemblies. The brake rotors were a solid type design and displayed a relatively smooth and polished appearance upon their frictional surfaces. The brake rotors and the associated calipers were properly mounted to the brackets. The brake caliper assemblies appeared functional and moved freely upon the associated anchor pins. The anti-lock braking system components included wheel speed sensors, wire connections and harnesses, which were complete and properly mounted.

Hydraulic fluid was delivered to the brake units via flexible hydraulic hoses and steel piping. The hydraulic hoses and steel piping were complete and did not display any indication of fluid leakage. The support brackets for each of the flexible brake hoses for the brake units were properly mounted. No hydraulic fluid leaks were found on either caliper piston assemblies.

In order to access the individual brake assemblies, the wheel assemblies were removed from the vehicle. Examination of the brake assemblies revealed that the individual brake pads were a bonded design. The brake pads were properly attached to their respective backing plates and had friction material of adequate thicknesses (Figures 8 through 11, page 13).

REAR BRAKE SPECIFICATIONS		
ITEM	FIELD MEASUREMENT	MANUFACTURER'S MINIMUM SPECIFICATIONS
Left outer brake friction material	11/32 inch	2/32 inch
Left inner brake friction material	10/32 inch	2/32 inch
Right outer brake friction material	11/32 inch	2/32 inch
Right inner brake friction material	11/32 inch	2/32 inch
Left rear rotor thickness	0.394 inch	0.335 inch
Right rear rotor thickness	0.396 inch	0.335 inch

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Service Brakes (continued)

Axle #2 (continued)

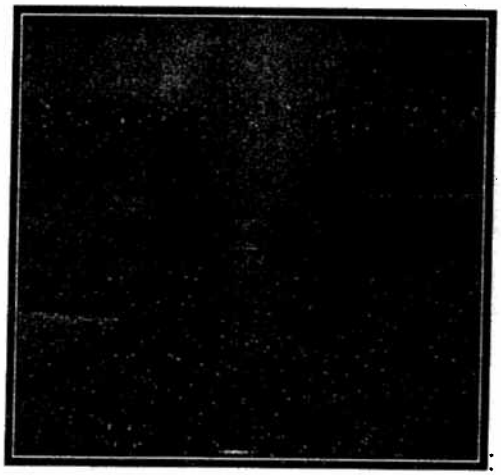


Figure 8 – Left rear brake pads.

Figure 9 – Left rear brake pads and rotor.

Figure 10 – Right rear brake pads.

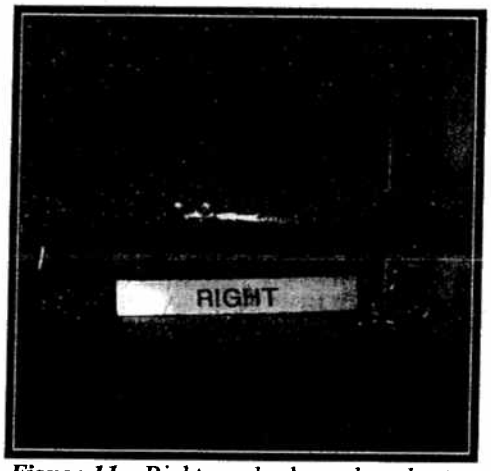


Figure 11 – Right rear brake pads and rotor.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Service Brakes (continued)

Parking Brake System

Vehicle #1 incorporated rear brakes and parking brake assemblies. Vehicle #1 was equipped with a cable operated, foot actuated parking brake assembly. The parking brake system allowed the rear brakes shoes to be mechanically applied by pushing downward on the parking brake pedal. This system mechanically expanded the rear parking brake shoes inside of the brake drums. The parking brake was activated via a pedal assembly mounted adjacent to the left kick panel inside the driver's compartment. The parking brake was found in an unapplied condition (Figures 12 through 15).

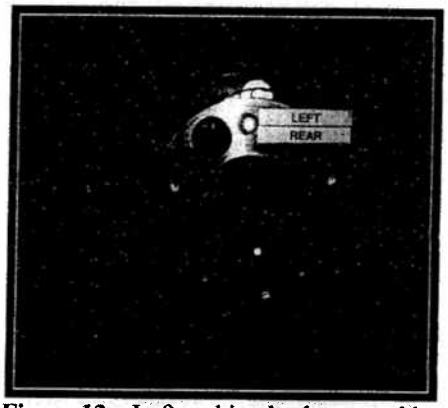


Figure 12 – Left parking brake assembly.

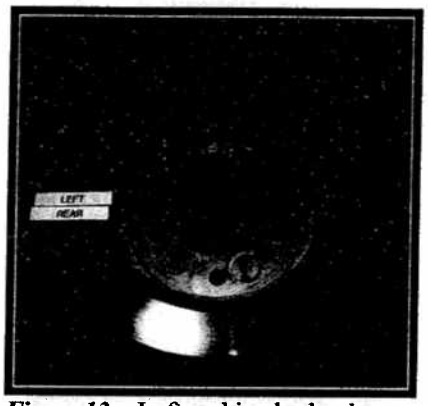


Figure 13 – Left parking brake drum.

Figure 14 – Right parking brake.

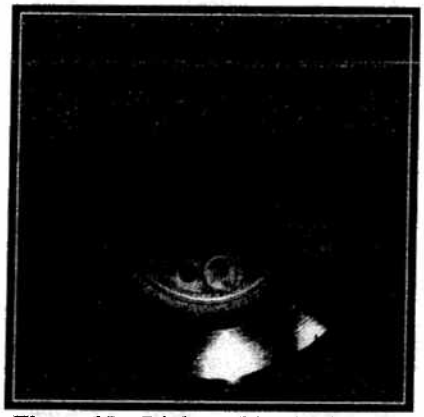


Figure 15 – Right parking brake drum.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Service Brakes (continued)

Opinion

- Examination of the front and rear service brake system and parking brake system did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics.
- The vehicle's service brake system brake rotors and brake pads were within manufacturer's specifications.
- The parking brake system components were within manufacturer's specifications.
- All related anti-lock braking system components were complete and properly mounted.
- Vehicle #1 was equipped with three sets of floor mats which were not properly secured to the vehicle.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Suspension System

Front

The steering axle was equipped with a fully independent McPherson strut suspension design. Each suspension assembly was outfitted with coil type springs for ride control and gas-pressurized shock absorbers for spring damping control. The coil spring and shock absorber were incorporated into the McPherson strut assembly. The vehicle was also equipped with a stabilizer bar mounted across the vehicle, connecting one wheel to another, and designed to help restrict body lean.

The collision damaged caused the front left lower control arm ball joint to come apart from the lower control arm (Figure 16). All other suspension components including strut support towers and steering knuckles appeared undamaged and properly mounted.

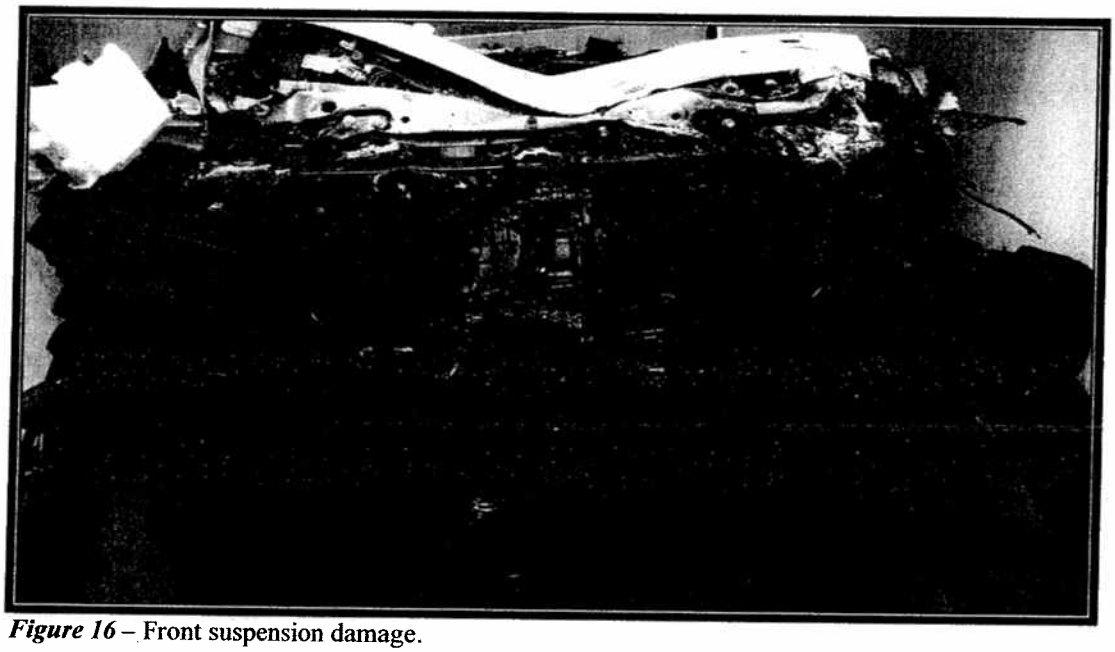


Figure 16 – Front suspension damage.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Suspension System (continued)

Rear

The rear suspension was equipped with a fully independent strut suspension. Each suspension assembly was outfitted with coil type springs for ride control and gas-pressurized shock absorbers for spring damping control. The coil spring and shock absorber were incorporated into the strut assembly. In addition, each suspension assembly was outfitted with suspension arms and a longitudinal mounted strut rod. The rear suspension components appeared undamaged by the collision. All mounting components including strut support towers, suspension arms and strut rods, appeared undamaged and properly mounted (Figure 17).

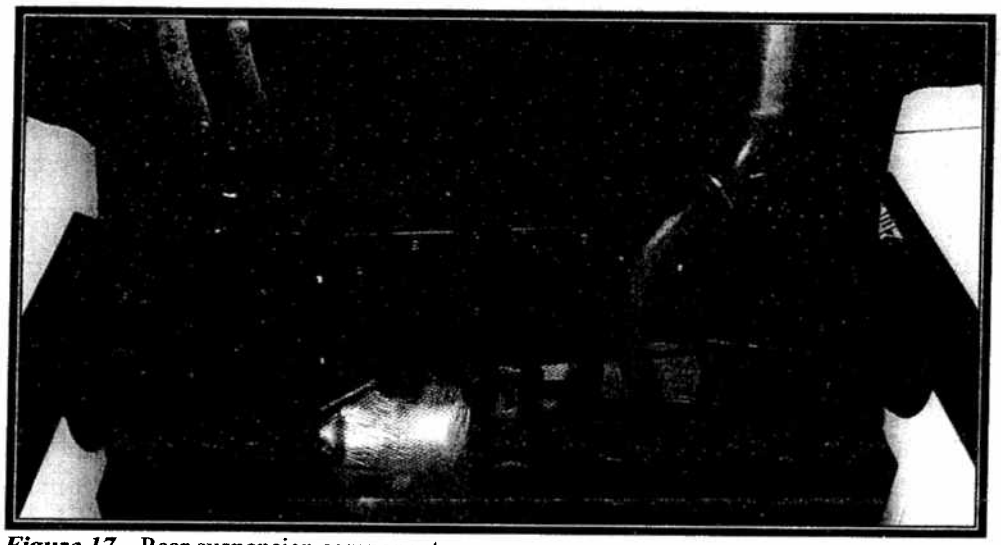


Figure 17 – Rear suspension components.

Opinion

- Examination of the suspension components did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics.

- The damaged caused to the left front lower control arm ball joint appeared to have been caused by the collision.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Tires and Wheels

Damage to the wheel assemblies was indexed to the valve stem being located at the 12 o'clock position. Damage to the tires was indexed to the Department of Transportation number being located at the 12 o'clock position. Tread depth measurements originated in the outer tread groove and traversed the tread width terminating at the inner tread groove.

The following Department of Transportation Serial Numbers were noted on the tires of Vehicle #1:

DEPARTMENT OF TRANSPORTATION NUMBERS			
Left Front Tire	C0B9YP6V1907	Right Front Tire	C0B9YP6V1907
Left Rear Tire	C0B9YP6V1907	Right Rear Tire	C0B9YP6V1907

The tires on Vehicle #1 were manufactured by the following company during the 19th week of 2007:

Goodyear Lastikleri Tas
Fabrika Posta Kutusu 27
Adopozari, Turkey

The sidewalls of the front and rear tires were embossed with the following specifications:

FRONT AND REAR TIRE INFORMATION	
Manufacturer	KUMHO
Tire Name	Solus KR21
Size	P235/65R17
Maximum Load	1929 pounds
Maximum Inflation Pressure	44 pounds per square inch
Tread Construction	Steel 2 + Polyester 2 + Nylon 1
Sidewall Construction	Polyester 2 plies
Treadwear	680
Traction	A
Temperature	B

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Tires and Wheels (continued)

Figures 18 through 21 depict the tire tread for each tire. The left front tire was flat with the bead seated on the rim flange.

INFLATION AND TIRE TREAD DEPTHS		
ITEM	INFLATION PRESSURE	TREAD DEPTH*
Left Front Tire	0 pounds per square inch	7/32, 8/32, 8/32, 7/32
Left Rear Tire	28 pounds per square inch	10/32, 11/32, 11/32, 11/32
Right Front Tire	28 pounds per square inch	7/32, 8/32, 8/32, 7/32
Right Rear Tire	30 pounds per square inch	9/32, 10/32, 10/32, 9/32

*outboard tread groove to inboard tread groove

Figure 18 – Left front tire.

Figure 19 – Right front tire.

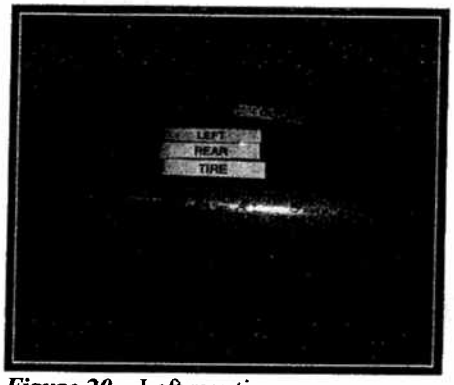


Figure 20 – Left rear tire.

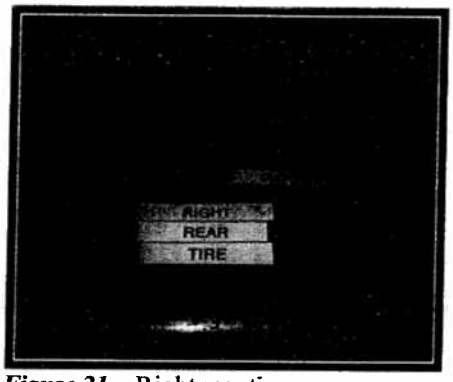


Figure 21 – Right rear tire.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Tires and Wheels (continued)

Steering Axle

The left front tire appeared to have sustained collision related damage on the outboard side including superficial radial cuts on the sidewall at the 7, 8, 9, and 12 o'clock positions and a small tire cut at the 10 o'clock position (Figure 22, arrows marked in red). The right front tire did not appear to have sustained collision related damage, scratches, or scuff marks.

The left front wheel appeared to have sustained abrasions all around the flange and scratches all around the outboard side of the wheel. Abrasions and scratches were also found all around the inboard side of the wheel (Figure 23). The right front wheel sustained small abrasions around the outboard flange between the 4 and 6 o'clock positions.

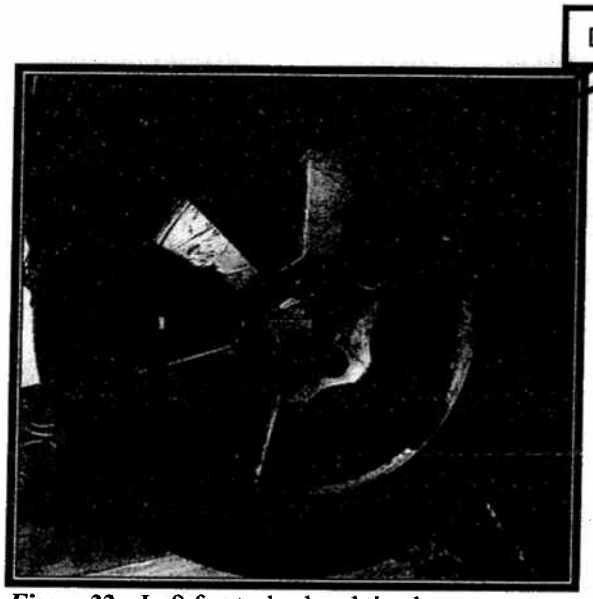


Figure 22 – Left front wheel and tire damage.

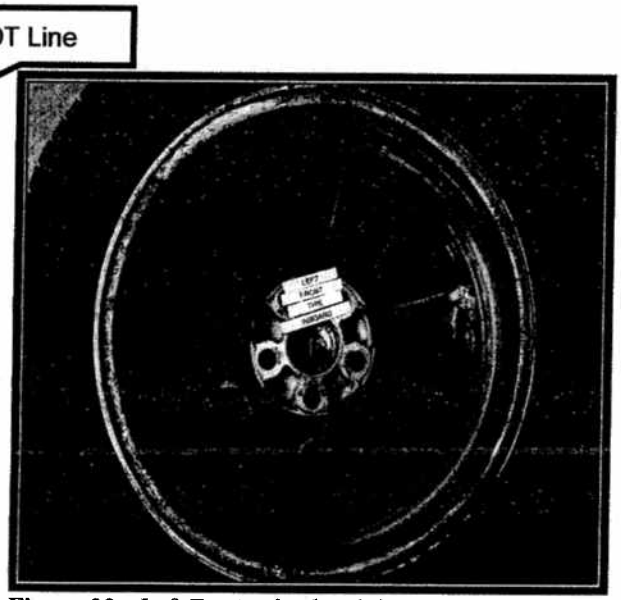


Figure 23 – Left Front wheel and tire.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Tires and Wheels (continued)

Trailing Axle

Examination of the rear tires and wheel assemblies did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics. The body molding in front of the right rear tire was damaged by the collision, causing the tire to rub against the body molding.

Opinion

- Examination of the tire and wheel assemblies did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics.
- Damage to the left front tire and wheel and right front wheel appeared to have been caused by the collision.
- The body molding rubbing against the right rear tire appeared to have been caused by the collision damage.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Steering System

This vehicle was equipped with a power assisted rack-and-pinion type steering system. The factory-equipped steering wheel remained round in configuration and was securely attached to the steering shaft. The supplemental inflatable restraint (airbag) was deployed from the center hub during the collision. The steering unit was securely attached toward the rear of the engine sub frame. The power steering system employed an engine driven power steering pump that was connected by hoses to the steering system. The power steering pump was securely attached. The collision caused the power steering fluid reservoir to come off the mounting bracket, but was held by the power steering hoses. The reservoir cap was securely mounted to the reservoir. Inspection revealed that the reservoir was filled approximately up to the maximum cold indicator mark. The power steering system drive belt was securely mounted to the power steering pump driven pulley. The belt appeared to be in good condition.

The steering system components between the rack-and-pinion assembly and all other steering related components including, steering knuckles and tie-rod ends, were complete and appeared undamaged. The steering gear coupling shaft and the associated flex joints were in good condition. The steering column was securely attached to its dashboard and floor mounts and appeared undamaged. The collision damaged caused the front left lower control arm ball joint to come apart from the lower control arm.

Opinion

- Examination of the steering system components did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics.
- The collision damaged caused the front left lower control arm ball joint to come apart from the lower control arm.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Engine and Powertrain

Vehicle #1 was fitted with a 6 cylinder, V-type engine. Vehicle #1 was equipped with a 3.3 liter, transversely mounted, gasoline powered engine, coupled to a five speed automatic, front wheel drive transmission. The under hood inspection revealed that the engine received extensive collision damage to the cooling system components, engine related components, air intake system, electrical and wiring components (Figure 24). Vehicle #1 could not be started because of the extensive damage.

The automatic transmission also received collision damage. The damage to the lower control arm ball joint caused the drive axle tripod joint to come apart from the CV joint housing (Figure 25). A functional test on Vehicle #1 was not performed because of the extensive collision damage to powertrain components.

Figure 24 – Engine compartment.

Figure 25 – Left front Drive axle.

Opinion

- Examination of the engine and powertrain components did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics.
- Vehicle #1 could not be started because of the collision damage to the engine components.
- The damage to the lower control arm ball joint caused the drive axle tripod joint to come apart from the CV joint housing.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Throttle Operation

Vehicle #1 was equipped with an electronically controlled throttle body assembly, using a computer operated throttle position sensor to control fuel intake. The throttle blade was manually manipulated throughout its range of motion at the throttle body. No binding, sticking or obstructions were noted in the throttle body assembly. The throttle blade opened freely and fully, and returned adequately to the closed position (Figure 26). The throttle position sensor and all related electrical connections and wiring appeared in good condition. Vehicle #1 sustained excessive collision damage and could not be driven or started.

Inspection revealed the accelerator pedal was intact and undamaged. Examination of driver side foot pedal area of Vehicle #1 revealed that there was a shoe stuck between the accelerator pedal and ventilation system vent (Figure 27). The shoe found in the vehicle did not appear to interfere with the accelerator pedal. Vehicle #1 was equipped with three sets of floor mats. The first floor mat was the manufacturer's floor mat which was not securely attached to its anchor pins. The other two floor mats were aftermarket floor mats and were not secured to the vehicle. The center console (driver side floor carpet cover) and retaining clips were properly secured and did not appear to interfere with the accelerator pedal, as per Recall 06V253000.

Figure 26 – Throttle assembly.

Figure 27 – Right shoe in driver's side accelerator pedal area.

DATE OF COLLISION (*MONTH-DAY-YEAR*)	TIME (*2400*)	NCIC	OFFICER ID	NUMBER	PAGE
12-15-2008	1550	9565	18871	2008120189	25

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Throttle Operation (continued)

Opinion

- Examination of the throttle system components did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics.
- All of the components of the throttle system appeared undamaged and operational.
- Inspection of the driver compartment revealed that there a shoe was stuck between the accelerator pedal and ventilation system vent. The shoe found in the vehicle did not appear to interfere with the accelerator pedal.
- Vehicle #1 was equipped with three sets of floor mats. The first floor mat was the manufacturer's floor mat but was not securely attached to its anchor pins. The other two floor mats were aftermarket floor mats and were not secured to the vehicle.
- The center console (driver side floor carpet cover) and retaining clips were properly secured and did not appear to interfere with the accelerator pedal as per Recall 06V253000.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

CARFAX® Vehicle History Report™

A vehicle history report was obtained through CARFAX®. Three records were found for Vehicle #1. It should be noted that the first record was on July 2, 2003, when vehicle was manufactured and shipped to the original dealer. The second record was reported on July 24, 2003, when the first owner was reported and the vehicle was registered at the Department of Motor Vehicles in the city of Torrance, California. The third record was created due this collision investigation. No history of major accidents, fire, flood damage, or "lemon" history was found on Vehicle #1. The last recorded mileage of Vehicle #1 was on July 24, 2003, with a mileage of five miles.

A vehicle maintenance history was also obtained from Longo Lexus Dealership in the city of El Monte, California. The vehicle service history did not disclose any pre-existing damage or impairment that might compromise their normal functional abilities or operating characteristics.

Safety Recalls

A search of Safety Recalls was conducted through the National Highway Traffic Safety Administration (NHTSA) and Alldata®.

A safety recall is defined as a recall by the manufacturer (or governmental agency) due to an immediate safety hazard with the involved vehicle. A recall is initiated when a motor vehicle or item of motor vehicle equipment (including tires) does not comply with a Federal Motor Vehicle Safety Standard (FMVSS), or when there is a safety-related defect in the vehicle or equipment.[1]

There were two National Highway Traffic Safety Administration (NHTSA) recalls found related to Vehicle#1:

GENERAL AND SAFETY RECALLS			
RECALL NUMBER	DATE	DESCRIPTION	STATUS
06V253000	07/11/2006	Vehicle Speed Control: Accelerator Pedal	Incomplete
04V558000	11/18/2004	Exterior Lighting: Brake Light Switch	Completed

Safety recall 06V253000 involved the center console (driver side floor carpet cover) retaining clips. Although incomplete, the retaining clips on the driver side center console were properly secured and did not appear to be problematic or in a condition as described in the recall campaign, nor appeared to interfere with accelerator pedal operation. Figure 28, page 27, shows the location of the retaining clips which were subjected to this recall notice.

[1] "Motor Vehicle Defects and Recall Campaigns," National Highway Traffic Safety Administration online brochure.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Safety Recalls (continued)

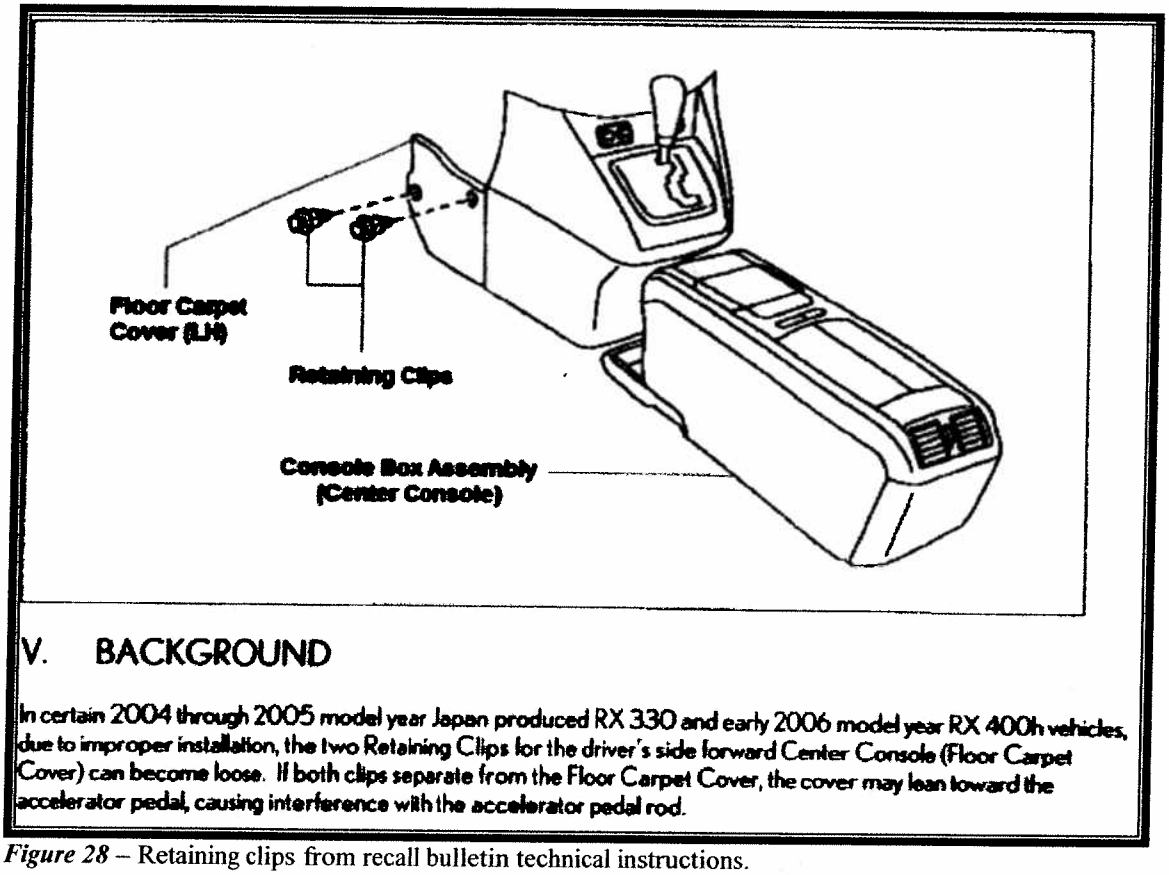


Figure 28 – Retaining clips from recall bulletin technical instructions.

Mechanical Examination (continued)

Vehicle #1 (2004 Lexus RX 330) (continued)

Conclusions

A comprehensive mechanical inspection of Vehicle #1 disclosed the following pre-existing conditions:

- Vehicle #1 was equipped with three sets of floor mats inside the driver compartment which were not properly secured to the vehicle's carpet.

A comprehensive mechanical inspection of Vehicle #1 disclosed the following conditions that appear to have been collision related:

- The radiator and coolant overflow tank were empty and were extensively damaged.
- The 12 volt battery received extensive damage.
- The proper transmission level was not determined because the collision damage prevented Vehicle #1 from being started.
- The left front lower control arm ball joint was damaged.
- The left front tire received cuts to the outboard sidewall.
- The left and right front wheel received outboard and inboard scratches and scuff marks.
- The body molding was damaged and rubbed against the right rear tire.
- Safety recall 06V253000 did not appear to be problematic or in a condition as described in the recall campaign, nor appeared to interfere with accelerator pedal operation.

Mechanical Examination (continued)

Reference Material

The following reference material was utilized to prepare this mechanical inspection:

www.carfaxonline.com

www.nhtsa.dot.gov

www.mech.uwa.edu.au

www.1010tires.com

Who Make It and Where Tire Directory
1101-6 South Rogers Circle
Boca Raton, Florida 33487
©2005

Toyota/Lexus (Highlander 2001-2006 / RX 300/330 1996-2006)
Chilton's Repair Manual
Haynes North America, Incorporated
861 Lawrence Drive
Newbury Park, California 91320
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DATE OF COLLISION (*MONTH-DAY-YEAR*)	TIME (*2400*)	NCIC	OFFICER ID	NUMBER	PAGE
12-15-2008	1550	9565	18871	2008120189	30

DIGITAL MEDIA LOG

During the course of this MAIT investigation, 556 digital photographs were taken of Vehicle #1 (2004 Lexus RX330) as well as the Airbag Control Module (ACM) from within Vehicle #1. The photographs were taken by the following personnel, with the corresponding digital file number, date, number of photographs, and subject matter.

PHOTOGRAPHER	FILE NUMBER	DATE	PHOTOS	DESCRIPTION
Grindey	DSC_0001.jpg – DSC_0042.jpg	5-18-09	42	ACM from Vehicle #1
Grindey	DSC_0001.jpg – DSC_0104.jpg	6-4-09	104	Interior of Vehicle #1
Paz	P6030037.jpg – P6030076.jpg	6-4-09	39	Mechanical of Vehicle #1
Paz	P6030078.jpg – P6030221.jpg	6-4-09	144	Mechanical of Vehicle #1
Paz	P6040222.jpg – P6040370.jpg	6-4-09	148	Mechanical of Vehicle #1
Paz	P6100371.jpg – P6100406.jpg	6-10-09	35	Mechanical of Vehicle #1
Paz	P6100408.jpg – P6100452.jpg	6-10-09	44	Mechanical of Vehicle #1

During the course of this MAIT investigation, two digital videos were taken of the interior of Vehicle #1. The videos were taken by the following personnel, with the corresponding digital file number, date, type of video, and subject matter.

VIDEOGRAPHER	FILE NUMBER	DATE	TYPE	DESCRIPTION
Paz	P6030077	6-4-09	Video clip	Interior of Vehicle #1
Paz	P6100407	6-10-09	Video clip	Interior of Vehicle #1