

INFORMATION Redacted PURSUANT TO THE FREEDOM OF

INFORMATION ACT (FOIA), 5 U.S.C. 552(B)(6)

To: NHTSA Office of Defects Investigation

NOV 22 2013

CL-10478661-5511

Date: 11/12/13

Subject: Death Wobble / Severe Vibration in Ford F53 Chassis on a Forest River Coachmen Mirada RV Class a Motor Home (length: 30 ft)

Reference: NHSTA Complaint #10478661 and telephone call #58039 of 11-12-13 w/NHTSA

VIN: 1F6LF53Y990 [REDACTED]

Current Mileage: 10,050 miles

Greetings,

This transmittal is sent per the direction provided to me in the referenced telephone call of today. The NHTSA is requested to look into this matter at the earliest opportunity.

I have experienced what appears on a web search to be known as the "DEATH WOBBLE". I have experienced this event a total of 7 times in the last 14 months since I bought my 2011 Coachman Mirada RV motor home, which has an F53 Ford truck chassis assembled in 2009. I have also had 3 other near-wobbles which I was able to terminate by quickly applying brakes. My RV is relatively new, purchased in August 2012 with 2419 dealer miles on it. The RV is currently early in its 3 year warranty period. It had about 2700 miles on it when the wobble was first experienced. It is also noteworthy that I check and maintain tire pressure at the recommended 100 psi.

Normally the RV drives smoothly, although it shudders some when going over rough surfaces. Once having that first near-death experience, however, I find myself constantly steering around possible road bumps, but not all can be safely avoided. The wobble occurs intermittently; I am sure avoiding road bumps helps. When it does happen, the wobbles' characteristic is an extremely violent shaking of the vehicle's front end and steering wheel (sideways and up-down). The wobble is set off when traveling at normal highway speeds (55-65 mph) over a relatively minor bump like a bridge expansion joint or surface discontinuity like repair patches on a highway. The wobble amplifies to full force within 1-2 seconds after it initiates. Its severity doesn't stop until brakes are applied and speed reduces to < 5 mph. Without steering control, the driver can only hold on tight to the steering wheel, drive straight, apply brakes, and pray. This is EXTREMELY DANGEROUS to the vehicle and its occupants, as well as other vehicles on the road.

After the first occurrence in September 2012, I contacted the RV dealer (Longview RV in Windsor Locks, CT) who then had the RV serviced under warranty at Interstate Ford in Hartford, CT. Interstate Ford inspected the RV and replaced the front shocks and front tires, which had a "cupping" wear pattern. Their service work order is attached. Alignment was not checked.

For a while, I was hoping the problem was solved, although the RV still shuttered while traveling over rough patches. Unfortunately, the Death Wobble returned in October 2013 after about 6000 miles of additional travel since the first warranty service. This time the wobble started early into an RV trip, so I immediately returned home. As it turned out, 6 wobbles occurred in that short round trip of 100 miles.

NAM
11/22/13
SMD

Again, I contacted Longview who in turn contacted Interstate Ford who recommended inspection by a local GCR Tire Center. GCR found cupping wear on the recently "new" front tires and found the front end alignment to be significantly out of spec, identically on both left and right sides (+5/16" front toe vs 1/32" spec). GCR stated their belief that the symmetrical nature of the non-alignment is indicative of being out of alignment ever since manufacturing. In an attempt to at least temporarily address the problem, GCR found the rear tires to have worn evenly, and so they rotated two of the rear tires to the front, re-balanced and re-aligned. The GCR work orders are also attached along with the post alignment figures.

After a satisfactory test drive, I resumed and completed my RV trip of 1800 miles. The tire rotation and re-alignment appeared to help, the RV drove well most of the way, but partial wobbling still reoccurred 3 times during the trip. In those instances I was fortunately able to terminate the wobbling early on (within 1 second) by quickly applying brakes. It seems that the front tires, which had an even wear pattern, the re-alignment and my quick braking in combination may have helped to temper the early wobble enough until the braking action shifted weight to the front end, serving to attenuate the onslaught of the violent wobble. But, overall, the vehicle was and still remains on the edge when driving over bumps.

Upon my return home, I again informed Longview of the continuing wobble susceptibility. They found a different Ford truck service shop to look at the RV (Sarat Ford, Agawam, MA). A shop visit is being scheduled as soon as a lift is available. I have also directly contacted Ford Motor Company, and was connected with their Motor Home Customer Relationship Center. Their technical representative will be contacting Sarat Ford to advice on the upcoming inspection.

In closing, the Death Wobble is a design defect or mechanical failure which is a SEVERE SAFETY ISSUE and EXTREMELY DANGEROUS. It is something which must be corrected, not only for my own RV, but also in RVs owned by others and future RV chassis designs. I would not have purchased this vehicle had I known of this defect. The vehicle is not road-worthy in its present condition.

The NHTSA is requested to look into this matter at the earliest opportunity. Please contact me with any questions and inform me of the outcome of the investigation. My contact info is below.

Thank you,

[REDACTED]
South Windsor, CT [REDACTED]

Home phone: [REDACTED]

Email: [REDACTED]

Attachments:

Work Order, GCR Tire Center (2nd inspection, 10/15/13)

Front End Alignment Results (10/15/13)

Work Order, GCR Tire Center (tire balance & rotation, 10/15/13)

Work Order, Interstate Ford (1st inspection, 10/04/12)

GCR

CENTERS

GCR SOUTH WINDSOR C325TTC
260 CHAPEL ROAD
SOUTH WINDSOR, CT 06074
(860) 528-9070

2ND INSPECTION
Re: DEATH WOBBLE
TIRE OCT 2013

REMIT TO:

PO Box 910530 • Denver, CO 80291-0530

INVOICE DATE	CUST. NO.	ORDER NO.	PAGE	INVOICE NO.
10/15/13	325	30695	1	Time in 2:36 PM
Mileage: 8,843				
Tax Id: SOUTH WINDSOR CT 06074-4103 US				

D
O

SHIP
TO

SOUTH WINDSOR, CT

PURCHASE ORDER NO.		SALES PERSON	PHONE	SHIP VIA	Work Order		
		2019		PICKUP			
ITEM NO.	DESCRIPTION	QTY. ORDERED	QTY. SHIPPED	F.E.T.	PRICE	NET EXTENSION	
IGN	ALIGNMENT (attached) *CHECK FRONT END AND TIRES, SHAKES *AFTER HITTING BUMP AT HIWAY SPEEDS. ***** *NOTHING LOOSE IN FRONT END. *FRONT TIRES ARE VERY CHOPPY. *RECOMMEND ROTATE AND BALANCE. *ALIGNMENT REQUIRED SIGNIFICANT *ADJUSTMENTS. *RECOMMEND NEW TIRES FOR BEST *RIDE QUALITY.	1	1		139.00	139.00	
CHK'D BY: _____				DELV'D BY: _____			
Total Units: 1							
				SubTot Parts:		0.00	
				SubTot Labor:		139.00	
				Sales Tax:		8.83	
Inv Total :						147.83	

3SH

mer authorizes company to perform the above written services to their vehicle.
NFORMATION STATEMENT OF REVERSE SIDE REGARDING CONSUMER CREDIT CONTRACT AND SECURITY AGREEMENT

PRINT NAME / AUTHORIZED SIGNATURE _____

E: In order to save all FINANCE CHARGES, the customer must pay, in full, the entire unpaid balance by the 10th of the following month. FINANCE CHARGES are computed on amounts 30 days or more past due at the PERIODIC RATE of 1.5% PER MONTH (MINIMUM CHARGE OF \$1.00) which is an ANNUAL PERCENTAGE RATE OF 18%. The above credit terms have been set out in accord with the Truth-In-Lending requirements of the Federal Government and are for the customer's benefit and protection.

PAY FROM THIS INVOICE

te Delivered: _____
et Authorization # _____
edit Release # _____
one: _____
stomer/Fleet Acct # _____
stomer/Fleet Loc # _____

Disposition of Take Off Tires:
____ Ret'd w/Driver ____ Ret'd w/ Dealer
____ Ret'd to Customer ____ Ret'd for Warranty

Tire Replacement Reason _____

For ERS Information Only:
ERS Work Order # _____
DOT On Tires _____
DOT Off Tires _____
Driver Roll Time _____
Serial/VIN# _____

Hubometer _____
Odometer _____
Color _____
Lic#/State _____
Chassis # _____

ake _____
odel _____
hicle # _____
ailer # _____
re/Wheel Pos: _____
ontainer # _____

☐ Your wheel components have been inspected and it has been determined your wheel components require immediate attention.

☐ A wheel assembly has been installed. Industry guidelines require that the torque level of the wheel nuts be rechecked between 50 and 100 miles of operation and retorqued as necessary. Failure to do so may result in loss of this assembly. I acknowledge receipt of wheel assembly info.

(Signature)

(Name Printed)

BEE LINE ALIGNMENT SYSTEM

GCR TIRE CENTERS

260 CHAPEL RD.

SOUTH WINDSOR, CT 06074

Ph# 860-528-9070

Fax# 860-282-2285

Vehicle Information

Configuration: SINGLE REAR AXLE PS.

Front End Alignment Results

Front Toe	Initial	Final	Specification Range	
Left	+5/16"	+1/32"	0"	+1/32"
Right	+5/16"	+1/32"	0"	+1/32"
Total	+5/8"	+1/16"	0"	+1/16"

Front Camber	Initial	Final	Specification Range	
Left	+1/2°	+1/4°	0°	+1/2°
Right	+5/8°	+3/8°	-3/8°	+1/8°

Caster	Initial	Final	Specification Range	
Left	+6°	+5 3/4°	+2°	+4°
Right	+6 1/8°	+6°	+2°	+4°

Kpi	Initial	Final	Specification Range	
Left	+5 3/4°	+4 3/4°	N/A	N/A
Right	+5 1/4°	+4 3/4°	N/A	N/A

TIRE ROTATION
OCT 2013

GCR TIRE CENTERS

GCR SOUTH WINDSOR C325TTC
260 CHAPEL ROAD
SOUTH WINDSOR, CT 06074
(860) 528-9070

REMIT TO:

PO Box 910530 • Denver, CO 80291-0530

INVOICE DATE	CUST. NO.	ORDER NO.	PAGE	INVOICE NO.
10/16/13	325	30734	1	Time in 1:23 PM

Mileage: 8,843

Tax Id: SOUTH WINDSOR CT 06074-4103 US

OLD
TO

SHIP
TO

SOUTH WINDSOR, CT

PURCHASE ORDER NO.	SALES PERSON	PHONE	SHIP VIA	Work Order
	2019		PICKUP	

ITEM NO.	DESCRIPTION	QTY. ORDERED	QTY. SHIPPED	F.E.T.	PRICE	NET EXTENSION
STK	SV WHEEL SWITCH MED TRUCK	4	4		12.00	48.00
BLT	SV WHEEL BALANCE LIGHT TRUCK	4	4		16.00	64.00
	*ROTATE & BAL FRTS TO LRI-0					
CHK'D BY: _____		DELV'D BY: _____				
		Total Units: 8				
				SubTot Parts:		0.00
				SubTot Labor:		112.00
				Sales Tax:		7.11

ASH
Customer authorizes company to perform the above written services to their vehicle.
INFORMATION STATEMENT OF REVERSE SIDE REGARDING CONSUMER CREDIT CONTRACT AND SECURITY AGREEMENT

PRINT NAME / AUTHORIZED SIGNATURE

NOTE: In order to save all FINANCE CHARGES, the customer must pay, in full, the entire unpaid balance by the 10th of the following month. FINANCE CHARGES are computed on amounts 30 days or more past due at the PERIODIC RATE of 1.5% PER MONTH (MINIMUM CHARGE OF \$1.00) which is an ANNUAL PERCENTAGE RATE OF 18%. The above credit terms have been set out in accord with the Truth-In-Lending requirements of the Federal Government and are for the customer's benefit and protection.

PAY FROM THIS INVOICE

Inv Total : 119.11

Job # _____
Date Delivered: _____
Job Authorization # _____
Edit Release # _____
Phone: _____
Customer/Fleet Acct # _____
Customer/Fleet Loc # _____

Disposition of Take Off Tires:
____ Ret'd w/Driver ____ Ret'd w/ Dealer
____ Ret'd to Customer ____ Ret'd for Warranty

Tire Replacement Reason _____

Vehicle Information:

Make _____ Hubometer _____
Model _____ Odometer _____
Vehicle # _____ Color _____
Trailer # _____ Lic#/State _____
Tire/Wheel Pos: _____ Chassis # _____
Container # _____

For ERS Information Only:

ERS Work Order # _____
DOT On Tires _____
DOT Off Tires _____
Driver Roll Time _____
Serial/VIN# _____

☐ Your wheel components have been inspected and it has been determined your wheel components require immediate attention.

☐ A wheel assembly has been installed. Industry guidelines require that the torque level of the wheel nuts be rechecked between 50 and 100 miles of operation and retorqued as necessary. Failure to do so may result in loss of this assembly. I acknowledge receipt of wheel assembly info.

(Signature)

(Name Printed)

TECHNICIAN COPY

CUSTOMER #:

SOUTH WINDSOR, CT

HOME: BUS:

FIRST INSPECTION
Re: DEATH WOBBLE
OCT 2012
152545

WORKORDER
REPRINT
PAGE 1

INTERSTATE FORD TRUCK SALES, INC

45 BRAINARD RD. · HARTFORD, CT 06114
PARTS 860-706-0980 · 1-800-726-5592 · FAX 860-524-5504
SERVICE 860-706-0970 · 1-800-726-5593

CONNECTICUT'S ONLY FULL LINE FORD TRUCK DEALER.
WE SERVICE ALL MAKES OF TRUCKS.

TENCO

SOUTHERN NEW ENGLAND
PARTS & SERVICE
860-706-0970 EXT. 127
FAX 860-524-5504

SERVICE ADVISOR: 170 RIVERA, BRENDA LIE

COLOR	YEAR	MAKE/MODEL	VIN	LICENSE	MILEAGE IN/OUT	TAG
	09	FORD RV-CHASSIS	1F6LF53Y990		2839/	T485
DEL DATE	PROD. DATE	WARR. EXP.	PROMISED	PO NO.	RATE	PAYMENT
21AUG12 IS		21AUG2016	17:00 04OCT12		125.00	CASH
R.O. OPENED	READY	OPTIONS:				
04OCT2012 16:35						

LINE	OP CODE	TECH. TYPE	DESCRIPTIONS/INSTRUCTIONS
# A		WF09	CUSTOMER STATES WHEN HE DRIVERS OVER BUMPS THE STEERING WHEEL

Replace front shock absorbers.
Due to internal failure.
Replaced two front tires due
to cupping.

Thxs

EXCLUSION OF WARRANTIES

STOCK PARTS MUST BE RETURNED WITHIN 19 DAYS OR NO RETURNS WILL BE ACCEPTED. AFTER 24 HOURS 20% HANDLING CHARGE WILL BE APPLIED. PARTS ORDERED ON AN EMERGENCY BASIS ARE NOT RETURNABLE. RETURN OF ELECTRICAL PARTS, ACCESSORIES, SHEET METAL, NON-STOCK PARTS.

Any warranties on the products sold hereby are those made by the manufacturer. The seller, INTERSTATE FORD TRUCK SALES, INC., hereby expressly disclaims all warranties, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose, and the seller, INTERSTATE FORD TRUCK SALES, INC., neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of said products.

AUTHORIZATION FOR REPAIRS

I hereby authorize the repair work herein set forth to be done along with the necessary material and agree that you are not responsible for loss or damage to vehicle or articles left in vehicle in case of fire, theft or any other cause beyond your control or for any delays caused by unavailability of parts or delays in parts shipments by the supplier or transporter. I hereby grant you and/or your employees permission to operate the vehicle herein described on streets, highways or elsewhere for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on above vehicle to secure the amount of repairs thereto. The dealership is not responsible for damages from freezing due to lack of antifreeze.

PRELIMINARY ESTIMATE \$

AUTHORIZED BY X

REVISED ESTIMATE (1)	DATE	TIME	BY
REVISED ESTIMATE (2)			
REVISED ESTIMATE (3)			

I HEREBY ACKNOWLEDGE THAT I WAS NOTIFIED & GAVE ORAL APPROVAL OF THE ABOVE REVISED ESTIMATES:

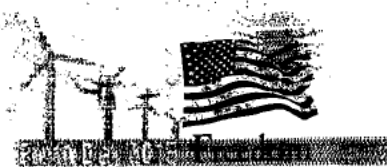
X

CUSTOMER SIGNATURE

South Windsor, CT

HARTFORD CT 061

13 NOV 2013 PM 8 L



FOREVER

U.S. Department of Transportation
National Highway Traffic Safety Admin.
Office of Defects Investigation (NVS210)
1200 New Jersey Avenue SE
West Building
Washington, DC 20590

20590

