DANA WORLD HEADQUARTERS • LAW DEPARTMENT

08E-003
(7 pages)

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DEFECTS INVESTIGATION
RECALL MGMT DIV.

January 3, 2008

Daniel C. Smith
Associate Administrator for Enforcement,
National Highway Traffic Safety Administration
Attn: Recall Management Division (NVS-215)
1200 New Jersey Avenue S.E.
Washington, DC 20590

Dear Mr. Smith

Part 573 Defect Report

The following information is being submitted pursuant to the requirements of 49 CFR 573.6 as it applies to a decision by Dana Corporation that a defect which relates to motor vehicle safety exists in certain pinion gears that were manufactured on December 4, 2007.

Dana is filing this Defect Information Report in compliance with 49 CFR 573.6(c).

573.6(c)(1) The Manufacturer's name:

Dana Corporation

Your Initial Contact for inquiries relating to this report is:
Don Commons, Dana Legal
Dana Corporation
Phone: 419-535-4664
Fax: 419-535-4790

573.6(c)(2) Identification of equipment containing the defect:

On December 7, 2007, the Dana axle assembly plant noted breakage in (1) one pinion gear being assembled into axles. Dana immediately tried to contain the product and determine the cause of the breakage. This is a low volume part, which Dana had not manufactured for a significant period of time, prior to December 4, 2007. Dana reviewed the inspection records for the pinion manufacturing operation and determined that the

wrong induction hardness process was used resulting in excessive hardness. The excessive hardness can potentially result in the threaded end of the pinion breaking off. Dana was able to contain all the parts made using the incorrect induction hardness process, except certain axles with pinions that had been manufactured on December 4, 2007.

573.6(c)(2)(iii) Identify the Items of Equipment in this recall:

Generic name of the item: Pinion Gear, part number 129737, Function: transfer driveshaft power to drive axles.
Other information which distinguishes the items of equipment to be recall: Manufacturing date of this part number limited to: 04 Dec. 2007. The pinion gear was assembled into the Dana axle assembly of tandem-rear or single rear drive axles. The serial numbers and OEM chassis numbers with these pinions are included in the table below:

Generic name of the item: Pinion Gear, part number 127420, Function: transfer driveshaft power to drive axles.
Other information which distinguishes the items of equipment to be recall: Manufacturing date of this part number limited to: 04 Dec. 2007. The pinion gear was assembled into the Dana axle assembly of tandem-rear or single rear drive axles. The serial numbers and OEM chassis numbers with these pinions are included in the table below.

The Recall Population

Gear Set part number	customer	cust chassis	cust part	model	cust seq	serial
132150	INTERNATIONAL	9140	3561210C91	17060S	1-9140	HN02944172
132150	PACCAR	769001	C2-1C63BB20A1D2A300	RSP41	Y0628F0	HN02942391
132150	PACCAR	769002	C2-1C63BB20A1D2A300	RSP41	Y0648F0	HN02942393
132150	PACCAR	763329	C05-140601H7A00308	RSP40	Y0622F0	HN02942683
132150	PACCAR	763319	C05-140601H7A00308	RSP40	Y0640F0	HN02942709
132150	PACCAR	763318	C05-140601H7A00308	RSP40	Y0639F0	HN02942707
132150	PACCAR	763320	C05-140601H7A00308	RSP40	Y0642F0	HN02942713

132150	PACCAR	767607	C05-140601H7A00308	RSP40	X0591F0	HN02916686
132150	VOLVO	265799	21159954	RS404	5291	HN02939269
132150	VOLVO	266622	21159954	RS404	5418	HN02940471
211444	INTERNATIONAL	6861	3549525C91	RS404	A-6861	HN02935506
211444	INTERNATIONAL	6902	3549525C91	RS404	A-6902	HN02937006
211444	INTERNATIONAL	6901	3549525C91	RS404	A-6901	HN02937004
211444	INTERNATIONAL	6882	3549525C91	RS404	A-6882	HN02936990
211444	INTERNATIONAL	6873	3549525C91	RS404	A-6873	HN02936982
211444	INTERNATIONAL	6872	3549525C91	RS404	A-6872	HN02936980
211444	INTERNATIONAL	6908	3549525C91	RS404	A-6908	HN02937014
211444	INTERNATIONAL	6911	3549525C91	RS404	A-6911	HN02937018
211444	INTERNATIONAL	6912	3549525C91	RS404	A-6912	HN02937020
211444	INTERNATIONAL	6893	3549525C91	RS404	A-6893	HN02937000
211444	INTERNATIONAL	6880	3549525C91	RS404	A-6880	HN02936988
211444	INTERNATIONAL	6879	3549525C91	RS404	A-6879	HN02936986
211444	INTERNATIONAL	6907	3549525C91	RS404	A-6907	HN02937012
211444	INTERNATIONAL	6894	3549525C91	RS404	A-6894	HN02937002
211444	INTERNATIONAL	6903	3549525C91	RS404	A-6903	HN02937008
211444	INTERNATIONAL	6876	3549525C91	RS404	A-6876	HN02936984
211444	INTERNATIONAL	6868	3549525C91	RS404	A-6868	HN02936978
211444	INTERNATIONAL	6905	3549525C91	RS404	A-6905	HN02937010
211444	INTERNATIONAL	6889	3549525C91	RS404	A-6889	HN02936996
211444	INTERNATIONAL	6892	3549525C91	RS404	A-6892	HN02936998
211444	INTERNATIONAL	6886	3549525C91	RS404	A-6886	HN02936992
211444	INTERNATIONAL	6888	3549525C91	RS404	A-6888	HN02936994
211444	INTERNATIONAL	6946	3549525C91	RS404	A-6946	HN02937811
211444	INTERNATIONAL	6938	3549525C91	RS404	A-6938	HN02937799
211444	INTERNATIONAL	6921	3549525C91	RS404	A-6921	HN02937789
211444	INTERNATIONAL	6950	3549525C91	RS404	A-6950	HN02937815
211444	INTERNATIONAL	7010	3549525C91	RS404	A-7010	HN02939337
211444	INTERNATIONAL	6991	3678717C91	RS405	A-6991	HN02939309
211444	INTERNATIONAL	7017	3615599C91	RD405	A-7017	HN02939347
211444	INTERNATIONAL	7012	3615599C91	RD405	A-7012	HN02939339
211444	INTERNATIONAL	5583A	3549525C91	RD405	A-5583A	HN02939273
211444	INTERNATIONAL	6992	3549525C91	RD405	A-6992	HN02939311
211444	INTERNATIONAL	6989	3549525C91	RD405	A-6989	HN02939307
211444	INTERNATIONAL	7013	3549525C91	RD405	A-7013	HN02939341
211444	INTERNATIONAL	7009	3549525C91	RD405	A-7009	HN02939335
211444	INTERNATIONAL	6673A	3678717C91	RD405	A-6673A	HN02939275
211444	INTERNATIONAL	7021	3615599C91	RD405	A-7021	HN02939350
211444	INTERNATIONAL	6985	3549525C91	RD405	A-6985	HN02939299

211444	INTERNATIONAL	6994	3549525C91	RD405	A-6994	HN02939315
211444	INTERNATIONAL	7004	3549525C91	RD405	A-7004	HN02939329
211444	INTERNATIONAL	5581A	3549525C91	RD405	A-5581A	HN02939271
211444	INTERNATIONAL	7007	3678717C91	RD405	A-7007	HN02939331
211444	INTERNATIONAL	7014	3615599C91	RD405	A-7014	HN02939343
211444	INTERNATIONAL	6988	3549525C91	RD405	A-6988	HN02939305
211444	INTERNATIONAL	6693A	3678717C91	RD405	A-6693A	HN02939279
211444	INTERNATIONAL	6983	3678717C91	RD405	A-6983	HN02939297
211444	INTERNATIONAL	6998	3615599C91	RD405	A-6998	HN02939321
211444	INTERNATIONAL	6685A	3678717C91	RD405	A-6685A	HN02939277
211444	INTERNATIONAL	6973	3549525C91	RD405	A-6973	HN02939281
211444	INTERNATIONAL	6996	3549525C91	RD405	A-6996	HN02939317
211444	INTERNATIONAL	7028	3615599C91	RD405	A-7028	HN02940483
211444	INTERNATIONAL	5582A	3549525C91	RD405	A-5582A	HN02940473
211444	INTERNATIONAL	7032	3549525C91	RD405	A-7032	HN02940489
211444	INTERNATIONAL	7033	3615599C91	RD405	A-7033	HN02940491
211444	INTERNATIONAL	7026	3615599C91	RD405	A-7026	HN02940479
211444	INTERNATIONAL	7034	3549525C91	RD405	A-7034	HN02940493
211444	INTERNATIONAL	7037	3615599C91	RD405	A-7037	HN02940499
211444	INTERNATIONAL	7025	3549525C91	RD405	A-7025	HN02940477

573.6(c)(2)(v) Identification of Manufacturers that purchased the axles with defective pinion gears:

Peterbilt Motors, (a Division of Paccar, Inc.), 3200 Airport Road Denton, TX 76205 (940)-566-7213

Navistar International Corp., 508 Richmond St. Chatham, Ont. N7M 5M4 519-436-4007

N**avistar-Escobedo** Plant, c/o Gonzalez Se Castilla, 11929 Sara Dr., El Porto Industrial Park, Laredo, TX 78045 Navistar Int'l Mexico SA De CV S/T (011 52-818-154-2520

Volvo Heavy-Truck, 4881 Cougar Trail Road, Dublín, Va 24084, (240-674-7320

573.6(c)(3) The total number of parts potentially affected by the recall: 68

573.6(c)(4) The percentage of the equipment that potentially has the defect: 100%

573.6(c)(5) Describe the Defect or Noncompliance

Dana Corporation has decided that a defect which relates to motor vehicle safety exists in two Drive pinion part numbers that were produced at Dana's gear facility in Glasgow, KY on 04 December 2007. The pinion gears were manufactured with the wrong induction hardness process settings. The incorrect process resulted in the excessive hardness. The excessive hardness can potentially result in the threaded end of the pinion breaking off. This failure could result in driveshaft disconnecting from the axle, which would cause a loss of vehicle power. It is also possible that the drive shaft may separate from the vehicle.

573.6(c)(6) Chronology of principle events:

For gear set part number 211444, the 127420 pinion gear problem defect was discovered on 07 Dec. 2007 at the Henderson, Kentucky assembly operation. A broken end of the pinion was found in the shipping area. A second pinion gear problem defect with a similar condition was discovered on 11 Dec, 2007 at a Dana customer located in Chatham, Ontario

For gear set part number 132150, the 129737 pinion gear problem defect was discovered on 12 Dec 2007 at the Henderson, Kentucky assembly operation. A broken end of the pinion was found in the rework area of the process.

After analysis of the failed parts, it was determined the failed parts potentially ran over the wrong operation and equipment and therefore the wrong induction hardness process was used resulting in excessive hardness. These findings were consistent with the shape of the hardness zone of the defective product. It was not yet determined if only these parts were defective (i.e. set-up parts) or if other parts with the defect existed.

Interim, both gear sets were checked for conformance using the appropriate processes both in Henderson and Glasgow operations and the breakpoint for correct product was established on 13 Dec. 07.

After review of internal Dana shipping receipts, material move transactions, and inspection records, it was determined the suspect pinion gears were contained to a 04 Dec 2007 manufacturing date. On Saturday 22 Dec 07, Glasgow was able to duplicate this defect condition, validating the cause, and validated the expectation that additional parts with the defect may exist.

On 22 Dec 07, Dana made a decision that all suspect product should be repaired or replaced. However, all Dana and customer locations were closed for the holidays until December 26. On the next business day, which was 26 Dec 07, affected customers were notified of the defect.

Paccar began inspections on December 27. Because of the holiday shut-down period, no personnel were available to inspect at the other OEM's facilities.

The outflow of suspect assembled axles with this hardness defect is listed above. It represents (58) – 211444 gear sets which shipped from Henderson operation between the dates of 4 Dec and 12 Dec, 2007 and (10) - 132150 gear sets which shipped between 4 Dec and 12 Dec, 2007.

02 January 2007, the other OEMs began inspection at their facilities for the suspect parts.

573.6(c)(8)(i) A description of the program to remedy:

Manufacturers remedy: Dana has quarantined all in-house stock. Dana has advised its three affected customers, Paccar, International and Volvo Truck, to quarantine and return to it all suspect axles. Dana has also advised its customers to locate and replace any suspect axles which may have already been incorporated into trucks and shipped to their respective dealers. For axles not yet assembled into vehicles, the vehicle manufacturer may replace the head unit on axles with a new drive pinion supplied by Dana.

Distinguishing characteristics of the remedy: The replacement axles or pinion gears have been manufactured using the appropriate induction hardness process.

How the recall condition was corrected in production: Set-up documentation for the unauthorized equipment has been modified to remove the subject part numbers. Additionally, there is independent validation on a daily basis that these parts are being run on the proper equipment.

573.6(c)(8)(ii) Estimated Recall dates:

Dana Corporation is currently prepared to repair or replace assembled heads or axles as required as they are identified by the vehicle manufacturer.

573.6(c)(10) Furnish Recall Communications

A copy of a representative communication sent by Dana to the vehicle manufacturers is included.

573.6(c)(11) Dana Recall Number

Dana intends to use the number assigned by NHTSA as its recall number.

Very truly yours,

Donald W. Commons
Senior Counsel

c. Kelly Schuler

As noted below, Dana has identified an incorrect induction hardening setting used on a lot of drive gear pinions that could potentially lead to premature failures by way of the pinion end cracking off. I have been in contact with Paul Trudell this morning and provided him with the attached spreadsheet of suspect axles that must located and repaired. Once we have the axle locations, Dana can then coordinate the replacement of the differential head assemblies from our end.

If you should have additional questions or concerns, please fell free to contact me.