

U.S. Department of Transportation

National Highway Traffic Salety Administration

Memorandum

Vohicle Research and Test Certier

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FINAL MEMORANDUM REPORT -- VRTC-DCD3059 "Alleged

Subject: Failure of the Ignition-Park Interlock System on 1993-1999

DaimlerChrysler LH, JA, and JX Vehicles With Console Shift

Automatic Transmission (EA03-011)"

From: Ulllow-

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Director, Vehicle Research & Test Center

Ťo:

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Director, Office of Defects Investigation

Reply to

Date:

NVS-310

NVS-210

Attached are four (4) copies of the subject report. This completes the requirements for this program.

Attachments: Final Report (4)

MANS-SID NANS-SID



VRTC-DCD3059 (EA03-011)

Alleged Failure of the Ignition-Park Interlock System on 1993 - 1999 DaimlerChrysler LH,
JA, and JX Vehicles With Console Shift Automatic Transmission

1.9 Introduction

This program was performed at the Vehicle Research and Test Center (VRTC) in response to a request by the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA). The purpose of this project was to assess complaints that alleged that the ignition key could be removed while the shifter was in a non-Park position, or that the shifter could be moved from the Park position with the ignition turned off. Both of these actions are prohibited by Federal Motor Vehicle Safety Standard (FMVSS) 114, "Theft Protection."

2.0 Background

For model years (MY) 1995 - 1998, DaimlerChrysler's LH, JA and JX vehicles were the subjects of Recall 98V-183. Vehicle models included Eagle Vision, Dodge Intrepid, Chrysler Concorde, Chrysler LHS, Chrysler 300M, Plymouth Breeze, Dodge Stratus, Chrysler Cirrus, and Chrysler Sebring Convertible. The recall addressed a misadjusted interlock cable that could result in an inoperative ignition-park interlock system. The current project was prompted by complaints of similar problems in MY 1999 vehicles.

3.0 Procedure

VRTC was asked to generate and mail a questionnaire to 1,000 owners of 1995 - 2000 DaimlerChrysler vehicles that were likely to be equipped with the floor-shift automatic transmission. These six model years were chosen for the survey for the following reasons:

 Since 1995 – 1998 subject vehicles were already subject to a recall, data were sought to determine current ignition-park interlock failure rates.

- Since 1999 subject vehicles were the subjects of this investigation, data were sought that would allow comparison of the failure rate of these vehicles to those of earlier subject vehicles.
- 3. Beginning with MY 2000 production, these vehicles incorporated a redesigned shifter that DaimlerChrysler claimed would reduce the ignition-park interlock failure rate. Consequently, data were sought that compared the failure rate of these "peer" vehicles to those of earlier subject vehicles.

The questionnaire, sent to owners in the central Ohio area, requested each owner to report the results of a brief screening procedure that was provided on the questionnaire to allow the owner to determine whether or not the Ignition-Park Interlock system on their vehicle was operating correctly. Available responses on the questionnaire were "No Longer Own," "Shifter Okay," "Shifter Not Okay," and "Manual/Column." The last category was required because 1) some peer vehicles could be equipped with column-mounted shift levers, and 2) some subject vehicles could be equipped with manual transmissions. The type of shifter could not be determined from the Vehicle Identification Number (VIN) prior to mailing the questionnaires. A pre-addressed, postage-paid return envelope was included with the questionnaire for the owner to return the completed form. A copy of the questionnaire is attached at the end of this report.

4.0 Results

The questionnaire had a response rate of 34%. A summary of the responses is tabulated in Table 1.

Table 1
Response Summary

	Numbers	Percentage			
Total Questionnaires Sent:	1000				
Undeliverable:	25	3%			
Total Responses:	336	34%			
Shifter Okay:	236	70%			
Shifter not okay:	13	4%			
No longer own:	42	12%			
Column/Manuel shifter:	44	13%			
Returned without comments	3	1%			

The data were then analyzed by model year as shown in Table 2. This analysis showed that the failure rate among owners who responded to this survey was higher in 1995 - 1999 subject vehicles (combined failure rate of 7.2%) than in the 2000 "peer" vehicles.

Table 2
Year-By-Year Data Analysis

			Total Day 1001 Date Filling yes							
95	96	97	98	99	00					
24	35	49	30	13	94	236				
2	2	2	3	_2	2	13				
28	37	42	33	15	96	249				
7.7%	5.4%	4.B%	9.1%	13.3%	2.1%					
	24 2 28	24 35 2 2 28 37	24 35 40 2 2 2 28 37 42	24 35 40 30 2 2 2 3 28 37 42 33	24 35 40 30 13 2 2 2 3 2 28 37 42 33 15	24 35 40 30 13 94 2 2 2 3 2 2				

At the conclusion of the response period, DaimlerChrysler agreed to a recall of the subject vehicles and work on the project at VRTC was discontinued.

«Owner_Name» «Owner_Address» «City», «St» «Zip»

Dear «Owner Name»

You are being asked by the United States Department of Transportation to take part in an informal survey regarding the performance of the ignition-park interlock system on the automatic transmission in your «Model_Year» «Make», «VIN». This survey will only take you about 10 minutes to complete. Your help is very much appreciated. If you no longer own this vehicle, please check the box to the right and return this form in the enclosed envelope.

NO LONGER OWN:

The survey requires a specific action to be performed while sitting in your vehicle. That action is described in the "SURVEY INSTRUCTIONS" portion of this letter. For your safety, we recommend that these actions be attempted with the parking brake engaged and your foot firmly on the brake pedal. Please use only the forces you would ordinarily use when attempting these actions.

To conduct and complete the survey:

First, review the "SURVEY INSTRUCTIONS" printed on the back of this form.

Second, conduct the actions requested in the instructions.

- Third, complete the "SURVEY RESPONSE" section of this form.
- Fourth, mail your completed survey to us. No postage is necessary to return the survey response form.

Please be advised that we may need to contact you concerning your survey response and or provide a copy of it (possibly including your name and contact information) on request to your vehicle's manufacturer. If you do not wish to be contacted by us, or do not want your response provided on request to your vehicle's manufacturer, please so indicate on the survey form.

Thank you for your assistance with this survey.

Sincerely,

Robert C. Esser

Below the

Project Engineer

SURVEY INSTRUCTIONS

Vehicles equipped with floor shift automatic transmission:

IMPORTANT: Use normal effort when attempting to depress the shifter button and move the shift lever. Excessive effort may cause damage to the shifter assembly.

With the ignition key removed, the parking brake set and your foot firmly on the brake podal, attempt to depress the shifter button and move the shift lever out of the "PARK" position.

- If the shift lever <u>CANNOT</u> be moved out of the "PARK" position with the ignition key removed, the ignition-park interlock on your vehicle is likely functioning at this time.
 When completing the survey, check the "<u>SHIFTER OKAY</u>" box.
- If the shift lever <u>CAN</u> be moved out of the "PARK" position with the ignition key removed, the ignition-park interlock on your vehicle is inoperative, broken or, otherwise not functional. When completing the survey, check the "<u>SHIFTER NOT</u> <u>OKAY</u>" box.

CAUTION: Please note that a vehicle with an imperative ignition-park interlock system increases the risk that a vehicle may roll-away if parked improperly, or if tampered with while parked. In order to prevent vehicle rollaway, please be certain to place the shifter in the "PARK" position and engage the parking brake whenever you park your vehicle. Please also be careful not to allow children to play or otherwise remain unattended in your vehicle. You should also contact a qualified service facility for repairs to your vehicle's ignition-park interlock system.

Manual transmission or column shift equipped vehicles:

This survey is only for vehicles equipped with floor shift automatic transmissions. If your vehicle is equipped with a manual transmission, or has a steering column gearshift, please check the "MANUAL/COLUMN" box.

SURVEY RESPONSE

Current Mileage:	· .	Contact Name:	
SHIFTER OKAY		Daytime Phone:	_ _
SHIFTER NOT OKAY		Do Not Contact	
MANUAL/COLUMN		Do Not Share with Manufa	cturer 🗀