

FINAL REPORT NUMBER 401-NVS-04-008

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**SAFETY COMPLIANCE TESTING FOR  
FMVSS 401  
Interior Trunk Release**

**2004 Mercedes Benz E320  
NHTSA No. C40308**

**Prepared by:  
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April 20, 2004


**FINAL REPORT**

PREPARED FOR:

**U.S. DEPARTMENT OF TRANSPORTATION  
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION  
ENFORCEMENT  
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16. Abstract A compliance test was conducted on the subject 2004 Mercedes Benz E320 4-Door, NHTSA No. C40308, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-401-01 for the determination of FMVSS 401 compliance. The test was conducted at a Mercedes Benz Dealership in Northern Virginia, by NHTSA personnel on April 13, 2004. Test failures identified were as follows: NONE			
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**TABLE OF CONTENTS**

<b><u>SECTION NO.</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAGE</u></b>
1.0	PURPOSE OF COMPLIANCE TEST	5
2.0	TEST PROCEDURE AND DISCUSSION OF RESULTS	6
3.0	COMPLIANCE TEST DATA	7
4.0	TEST EQUIPMENT LIST AND CALIBRATION INFORMATION	11
5.0	PHOTOGRAPHS	12
	List of Photographs	
	A. Vehicle Front	
	B. Vehicle Rear	
	C. Trunk Open	
	D. Vehicle Certification Label	
	E. Trunk Release Button	
6.0	VEHICLE OWNER'S MANUAL (applicable pages)	13

## **1.0 PURPOSE OF COMPLIANCE TEST**

The purpose of this compliance test was to determine whether the subject vehicle, a 2004 Mercedes Benz E320 4-Door, meets the performance requirements of FMVSS 401, Interior Trunk Release.

The test was conducted in accordance with the U. S. Department of Transportation, National Highway Traffic Safety Administration's Laboratory Test Procedure TP-401-01.

The test was conducted at a Mercedes Benz Dealership in Northern Virginia on April 13, 2004 by NHTSA Office of Vehicle Safety Compliance test engineers.

## **2.0 TEST PROCEDURE AND DISCUSSION OF RESULTS**

Based on the test performed, the 2004 Mercedes Benz E320 4-Door, NHTSA No. C40308 appeared to meet the requirements of FMVSS 401.

The vehicle was tested by entering the trunk and closing the lid. The release button flashed and was easily observed in the darkened, enclosed trunk. A force gauge was not available to measure the force required to depress the button. However, 3 separate attempts were made to exit the trunk by pushing on the button. Slight finger pressure estimated to be under 4.5 Newtons (1 pound) easily released the trunk lid from the single latching position in each of the 3 attempts. It is noted that the release is dependant upon electric power for operation.

## 3.0 COMPLIANCE TEST DATA

## DATA SHEET 1

## FMVSS 401 - VEHICLE DESCRIPTION

VEHICLE MY/MAKE/MODEL 2004/MERCEDES BENZ/ E320BODY STYLE: 4-DOORVEH. NHTSA NO.: C40308 ; VIN: WDBUF65J74A522806DATE OF TEST: 04/13/04TEST LAB: BY OVSC @ DEALERGVWR: 2150 KGMANUFACTURED DATE: 02/04TRUNK LOCATION: REAR X FRONT \_\_\_\_\_If Front, Front Opening? naNUMBER OF TRUNK LID LATCHING POSITIONS: 1INTERIOR TRUNK RELEASE: MANUAL X; AUTOMATIC \_\_\_\_\_;

BOTH \_\_\_\_\_

POWER OPERATED CLOSURE: naOWNER'S MANUAL DESCRIPTION OF TRUNK RELEASE: YES X

NO \_\_\_\_\_

## REMOVABLE EQUIPMENT DELIVERED IN TRUNK:

SPARE TIRE: X (SIZE) \_\_\_\_\_TIRE JACK: XLUG WRENCH: X

TOOL BOX: \_\_\_\_\_ (SIZE) \_\_\_\_\_

PARTITIONS: \_\_\_\_\_

OTHER: \_\_\_\_\_

## REMARKS:

RECORDED BY: SSe DATE: 04/13/04APPROVED BY: S. Seigel

## 3.0 DATA SHEETS....Continued

## DATA SHEET 2 (1 of 2)

FMVSS 401 - All trunks except for front trunk compartments with front opening hoods

## MANUAL TRUNK RELEASE OPERATION

VEHICLE MY/MAKE/MODEL/BODY STYLE: 2004/MERCEDES BENZ E320/4-DOOR

VEH. NHTSA NO.: C40308 \_\_\_\_\_ ; VIN: WDBUF65J74A522806

DATE OF TEST: 4/13/04

Method used to actuate interior trunk release: PUSH BUTTON (Grab handle, Rotating lever, etc.)

Can test personnel enter trunk and be closed within: Yes X No \_\_\_\_\_

If Yes, size of occupant: At least 50<sup>th</sup> percentile male

Is there access to the trunk compartment by folding down rear seat or partition: Yes \_\_\_\_\_ No X

Does Release Mechanism require electric power: Yes X No \_\_\_\_\_

Can release mechanism be easily seen inside the closed trunk: Yes X No \_\_\_\_\_

Describe method used by vehicle manufacturer to ensure that release mechanism is visible in a closed trunk compartment: SELF LIT - flashing (Phosphorescence, auxiliary lighting, etc)

Describe laboratory test method used to determine visibility of release mechanism: Trunk Entry (Trunk entry, darkened room, etc.)

Vehicle Stationary (0 km/h) <b>NO KEY IN IGNITION</b>	<i>Estimated</i> Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
Attempt 1	4.5 N - 1 pounds	Yes	pass
Attempt 2	4.5 N - 1 pounds	Yes	pass
Attempt 3	4.5 N - 1 pounds	Yes	pass
Average -	4.5N - 1 pounds		



## 3.0 DATA SHEETS....Continued

## DATA SHEET 2 (2 of 2)

## FMVSS 401 - MANUAL TRUNK RELEASE OPERATION (continued)

**NOTE: Interior Trunk Release operation and functioning is not dependant upon engine operation or vehicle speed. The release mechanism will function identical to that of the stationary vehicle with the no key in the ignition (as previously tested) and thus the following tests were not required to be conducted.**

Vehicle Stationary (0 km/h)	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
<b>ENGINE IDLING</b>			
Attempt 1			
Attempt 2			
Attempt 3			
Average -			

Vehicle Speed (km/h)	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
10			
20			
30			

Describe method used to propel vehicle: \_\_\_\_\_

PASS  FAIL \_\_\_\_\_

REMARKS:

RECORDED BY: SSe

DATE: 3/10/04

APPROVED BY: S. Seigel

## 3.0 DATA SHEETS...Continued

**DATA SHEET 3**  
**FMVSS 401 - TEST SUMMARY**

	PASS	FAIL	COMMENTS
Automatic or Manual release mechanism inside the trunk compartment. S4.1	X		Push Button
If manual release, lighting feature is included. S4.2(a)	X		Self Lighting - electric
If automatic release, unlatches trunk lid within 5 minutes. S4.2(b)	Na		
Except as provided by S4.3(b), actuation of release mechanism required by S4.1 completely releases trunk lid from all latching positions of the trunk lid latch. S 4.3(a)	X		Single Latch Position Only
For front trunk compartments, front opening hoods, when vehicle is stationary latch releases trunk lid from all locking positions. When moving forward at a speed less than 5km/h, must release the primary latch and may release all latches. At speeds greater than 5km/h must release the primary latch only. S4.3(b)	Na		

PASS   X   FAIL       

REMARKS: RECORDED BY:   SSe  

APPROVED BY:   S.Seigel  

DATE:   4/13/04

**4.0 - Test Equipment List and Calibration Information**

EQUIPMENT	DESCRIPTION	MODEL/SERIAL NO.	CALIBRATION DATE	NEXT CAL. DATE
Force Transducer	Viking Jr. Hanson Instrument	Model 890	Manufacturer	Manufacturer

Note: Transducer not utilized for this test.

## 5.0 - Photographs



2004 MERCURY SABLE E320

NHTSA # C40308

Vehicle Front

Alexander Sch  
Albuquerque



2004 RECEIPTS STATE #320

NM TSA # C40308

VEHICLE YEAR

2004 MEMBERS ONLY E170

WHTSA # C4P308

TRUNK OPEN

MFD BY DAIMLERCHRYSLER AG STUTTGART

KG LBS

PASSNGR CAR MADE IN GERMANY 02/04

GVWR 2150 4740

THIS VEHICLE CONFORMS TO ALL APPLICABLE

GAWR FRONT 975 2150

U.S. FEDERAL MOTOR VEHICLE SAFETY BUMPER

GAWR REAR 1175 2590

AND THE PREVENTION STANDARDS IN EFFECT

ON THE DATE OF MANUFACTURE SHOWN ABOVE

WDBUF65J74A522806

C753



2004 MERCEDES B230 E320

WDBUF65J74A522806

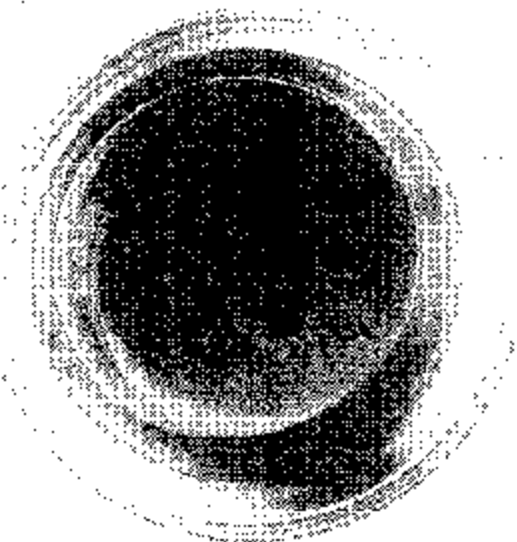
VEHICLE IDENTIFICATION LABEL



2004 MITSUBISHI GALANT 2.0L

PLATE # CH0308

TRUNK RELEASE BUTTON



**6.0 Vehicle Owner's Manual (applicable pages)**

2004 MILLER 603 BOLD E120

MMSA # CHOICE

OWNERS MANUAL