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

**2004 BMW 525i 4-Door
NHTSA No. C40511**

**Prepared by:
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April 20, 2004

FINAL REPORT

PREPARED FOR:

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16. Abstract A compliance test was conducted on the subject 2004 BMW 525i 4-Door, NHTSA No. C40511, 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 BMW Dealership in Northern Virginia, by NHTSA personnel on April 13, 2004. Test failures identified were as follows: NONE					
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1.0 PURPOSE OF COMPLIANCE TEST

The purpose of this compliance test was to determine whether the subject vehicle, a 2004 BMW 525i 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 BMW 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 BMW 525i 4-Door, NHTSA No. C40511 appeared to meet the requirements of FMVSS 401.

The vehicle was tested by entering the trunk and closing the lid. The release handle was easily observed in the darkened, enclosed trunk. A force gauge was attached to the release lever and 3 separate attempts were made to exit the trunk by applying a load to the instrument. For each attempt, the trunk released from the single latching position at a force level of approximately 31.5 newtons (7 lbs.) or less.

3.0 COMPLIANCE TEST DATA**DATA SHEET 1****FMVSS 401 - VEHICLE DESCRIPTION**VEHICLE MY/MAKE/MODEL 2004/BMW 525i/4DOORBODY STYLE: 4-DOORVEH. NHTSA NO.: C40511 ; VIN: WBANA53554B173124DATE OF TEST: 04/13/04TEST LAB: BY QVSC @ DEALERGVWR: 2085 KGMANUFACTURED DATE: 09/03TRUNK 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: XTOOL BOX: - (SIZE) -PARTITIONS: -OTHER: -**REMARKS:**RECORDED BY: SSeDATE: 04/13/04APPROVED BY: S. Selgel

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/BMW 525i/4-DOOR

VEH. NHTSA NO.: C40511 _____; VIN: WBANA53554B173124

DATE OF TEST: 4/13/04

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

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

If Yes, size of occupant: At least 50th 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 _____ No X

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: Phosphorescence
(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) NO KEY IN IGNITION	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
Attempt 1	31.5 N - 7.0 pounds	Yes	pass
Attempt 2	27 N - 6.0 pounds	Yes	pass
Attempt 3	31.5 N - 7.0 pounds	Yes	pass
Average -	30 N - 6.7 pounds		

3.0 DATA SHEETS....Continued

DATA SHEET 2 (2 of 2)

FMVSS 401 - MANUAL TRUNK RELEASE OPERATION (continued)

NOTE: Interior Trunk Release is a totally mechanical system with its operation and functioning 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
ENGINE IDLING			
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 X FAIL _____

REMARKS:

RECORDED BY: SSe

DATE: 4/13/04

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		Manual Release Lever
If manual release, lighting feature is included. S4.2(a)	X		Self Lighting
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.Selgel 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

5.0 - Photographs

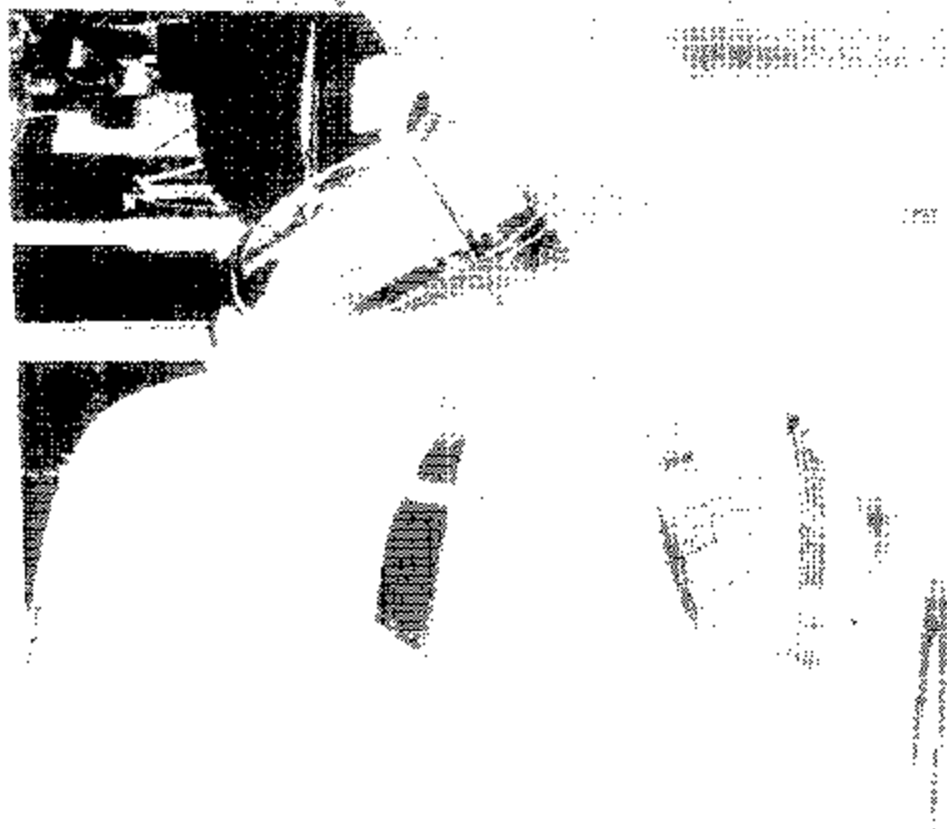
2004 BMW 525i
1525 M448 100
NHTSA # C40511

Vehicle Front

2004 BMW 525i

NHTSA # C40511

VEHICLE REAR



2004 BMW 525i

NHTSA # C40511

TRUNK OPEN



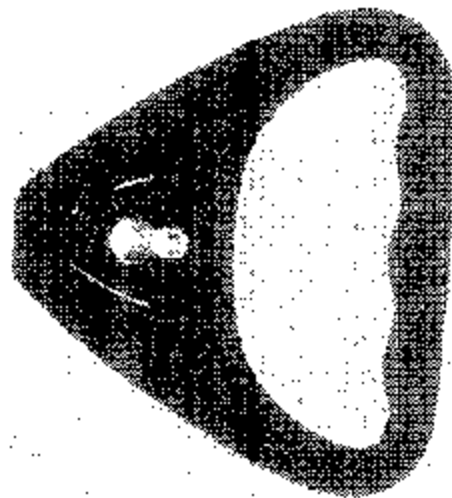
123 45 6



2004 BMW 525i

WMTSA # C40511

VEHICLE CERTIFICATION LABEL



2004 Gm 5251

WHS # C 40511

TRUNK RELEASE HANDLE



2004 BMW 0231
WHTSA # C40511
FORCE TRANSDUCER ATTACHED
TO RELEASE HANDLE

6.0 Vehicle Owner's Manual (applicable pages)

Alarm system

The concept

The vehicle alarm system responds to the opening of the hood, the compartment lid is opened, or the vehicle interior motion sensor is activated. In the event of an attempt to steal the vehicle's tilt if the vehicle is tilted.

To interruption of battery voltage. The system responds to unauthorized entry and attempted theft by signaling the alarm.

An acoustic alarm, which lasts for a period of approx. 30 seconds, is activated. The alarm flashes for approx. 30 seconds.

The alarm flashes, which flash on and off for approx. 30 seconds.

The alarm flashes on and off for approx. 30 seconds.

The alarm flashes on and off for approx. 30 seconds. The alarm flashes on and off for approx. 30 seconds.

The alarm flashes on and off for approx. 30 seconds. The alarm flashes on and off for approx. 30 seconds.

2004 BMW 525i

NHTSA # C40511

OWNERS MANUAL



Figure 1: Luggage compartment lid is open.

The alarm flashes on and off for approx. 30 seconds. The alarm flashes on and off for approx. 30 seconds.

The alarm flashes on and off for approx. 30 seconds. The alarm flashes on and off for approx. 30 seconds.

Operate the vehicle only when the luggage compartment lid is completely closed. Otherwise, exhaust fumes could penetrate the interior of the vehicle. If special circumstances occur...

Indicator lamp displays

The indicator lamp mirror flashes continuously if the indicator is armed. The indicator is armed if the indicator is armed. The indicator is armed if the indicator is armed.

The indicator lamp mirror flashes continuously if the indicator is armed. The indicator is armed if the indicator is armed. The indicator is armed if the indicator is armed.