HS#: 637 605

#### FINAL REPORT NUMBER 401-NVS-05-006

## SAFETY COMPLIANCE TESTING FOR FMVSS 401 Interior Trunk Release

2005 Lincoln LS NHTSA No.C50206

# Prepared by: NHTSA OFFICE OF VEHICLE SAFETY COMPLIANCE

400 7<sup>th</sup> Street, SW Weshington, D.C. 20580



1/27/2005

## FINAL REPORT

PREPARED FOR:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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16. Abstract						
A compliance test was conduct the U. S. Department of Transp Procedure TP-401-01. The test engineers on 1/27/200:  Test Location:	ortation, National Highway	Traffic Safety Administration's L	aboratory Test			
Lincoln Dealer in Rockville, MD Test failures were as follows: N		•				
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#### 1.0 PURPOSE OF COMPLIANCE TEST

The purpose of this compliance test was to determine whether the subject vehicle, a 2005 Lincoln LS, 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 by NHTSA Office of Vehicle Safety Compliance test engineers on 1/27/2005

Test Location: Lincoln Dealer in Rockville, MD

#### 2.0 TEST PROCEDURE AND DISCUSSION OF RESULTS

Based on the test performed, the Vehicle: 2005 Lincoln LS, NHTSA No. C50206 appeared to meet the requirements of FMVSS 401.

The vehicle was tested by entering the trunk and closing the lid. The release slide lever was easily observed in the darkened, enclosed trunk. A force gauge was attached to the release handle 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 39.2 newtons (8.8lbs.) or less.

### 3.0 COMPLIANCE TEST DATA

#### DATA SHEET 1 FMVSS 401 - VEHICLE DESCRIPTION

VEHICLE MY/MAKE/M	ODEL/BODY 8	TYLE: 2005 Lincoln LS
VEH. NHTSA NO.: <u>C5</u>	0206	; VIN: 1LNHM86S85Y607282
DATE OF TEST: 1/27/2	005	TEST LAB: BY OVSC @ DEALER
GVWR: <u>2195</u> KG		MANUFACTURED DATE: 08/04
TRUNK LOCATION: 4		RONT If Front, Front Opening? POSITIONS: 1
		ANUAL & AUTOMATIC C BOTH
POWER OPERATED O OWNER'S MANUAL D	LOSURE: <u>No</u> ESCRIPTION O	OF TRUNK RELEASE: # YES C NO
REMOVABLE EQUIPM SPARE TIRE:		
TIRE JACK:	•	1400010
LUG WRENCH:		
PARTITIONS:		······································
OTHER:		
REMARKS:		<del></del>
RECORDED BY: Edua	rdo Maximo Av	viles DATE: <u>1/27/2005</u>
APPROVED BY: Edua	rdo Maximo A	viles

#### DATA SHEETS....Continued 3.0

DATA SHEET 2 (1 of 2)
FMVSS 401 - All trunks except for front trunk compartments with front opening hoods
MANUAL TRUNK RELEASE OPERATION

VEHICLE MYSIAVE MODEL (DODY CTV) E. COOF ( leader ) O
VEHICLE MY/MAKE/MODEL/BODY STYLE: 2005 Lincoln LS
VEH. NHTSA NO.: <u>C50206</u> ; VIN: <u>1LNHM86885Y607282</u> DATE OF TEST: <u>1/27/2005</u>
Method used to actuate Interior trunk release: Grab Handle Other:
Can test personnel enter trunk and be closed within: ♠ Yes ♠ No If Yes, size of occupant: <u>At least 50<sup>th</sup> percentile male</u>
is there access to the trunk compartment by folding down rear seat or partition: ♠ Yes ○ No
Does Release Mechanism require electric power:
Can release mechanism be easily seen inside the closed trunk: @ Yes _ C No
Describe method used by vehicle manufacturer to ensure that release mechanism is visible in a closed trunk compartment: <a href="Phosphoresnece">Phosphoresnece</a> (Phosphorescence, auxiliary lighting, etc.)

Describe laboratory test method used to determine visibility of release mechanism:

Trunk entry	<u>    (Trunk entry, darkened room, e</u>	(tc.)	
Vehicle Stationary (0 km/h)	Force Required to Release Trunk Lid (Newtons) (no requirement)	Trunk Released from <u>All</u> latching positions	Pass/Fall
IO KEY IN IGNITION			
	39.2	of Yes CNo	@ Pass
Attempt 1			C Fall
	39.2	# Yes C No	@ Pass
Attempt 2			C Fall
	39.1	€ Yes C No	€ Pess
Attempt 3			C Fall
Average -	39.2		

#### 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.

	Force Required to Release Trunk Lid (Newtons) [no requirement]	unk Released from <u>All</u> latching positions						Paas/Fail			
Not Applicable	1 ' ' '										
		,	ſ Ye	8	<u>ر</u>	No					
		,	r Ye	s	r	No	I				
•			r Ye	18	r	Nto	l				
											- : 
Force Require		wtons)	Ta						AII	Pe	sse/Fall
•											Pass Fail
				٢	Y	8	ר	No			Pass Fail
				C	Y	85	۲	No			Pass Fail
		Trunk Lid (Newtons) [no requirement]  Not Applicable	Trunk Lid (Newtons) Is [no requirement]  Not Applicable  Force Required to Release Trunk Lid (Newtons)	Trunk Lid (Newtons)   latchin   [no requirement]	Trunk Lid (Newtons)   latching property	Trunk Lid (Newtons)   latching position requirement)   Ino requirement   Ino require	Trunk Lid (Newtons)   latching positions   [no requirement]    Yes No Yes No Yes No No Yes No No Yes No No Yes No Yes No Yes No Yes Yes No Yes Yes No Yes Yes No Yes Yes Yes No Yes	Trunk Lid (Newtons)   latching positions   Yes	Trunk Lid (Newtons)   latching positions	Trunk Lid (Newtons)   latching positions	Trunk Lid (Newtons)   latching positions

RECORDED BY: Eduardo Maximo Aviles DATE: 1/27/2005

APPROVED BY: Eduardo Maximo Aviles

REMARKS:

#### 3.0 DATA SHEETS....Continued

DATA SHEET 3 FMVSS 401 -TEST SUMMARY

	1 111 1 0 0	401 -1E0	I SOMMINAL
	PA66	FAIL .	COMMENTS
Automatic or Manual release mechanism inside the trunk compartment. \$4.1	æ	۲	Manual Release
if manual release, lighting feature is included. S4.2(a)		۲	Self lighting (Phosphorescence)
if automatic release, unlatches trunk lid within 5 minutes, 84.2(b)	Ċ	ŗ	N/A
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)	Œ	۲	
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 tatch and may release all latches. At speeds greater than 5km/h must release the primary letch only.  S4.3(b)	د	٠	N/A

# Pass C Fall

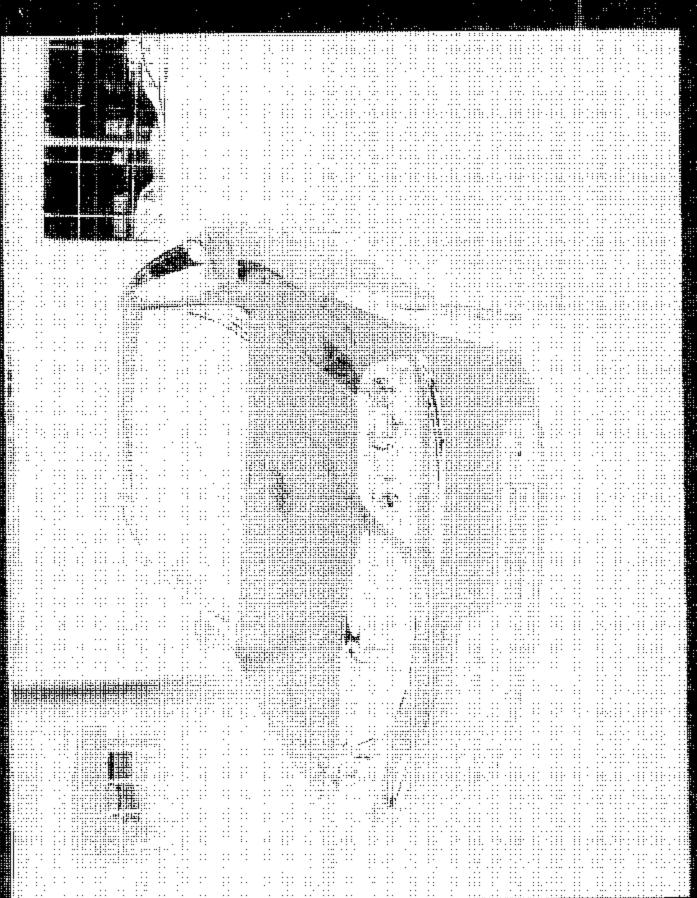
RECORDED BY: Eduardo Maximo Aviles DATE: 1/27/2005

APPROVED BY: Eduardo Maximo Aviles

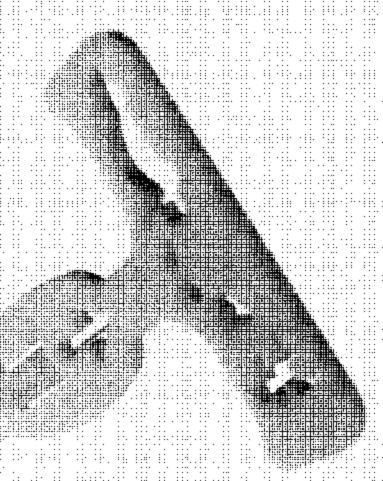
# 4.0 - Test Equipment List and Calibration Information

EQUIPMENT	DESCRIPTION	MODEL/SERIAL NO.		NEXT CAL. DATE
L .	Shimpo Force Gauge	Model MF-50 KG	12/09/03	Manufacturer

# 5.0 - Photographs







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