H5#: 639231

### FINAL REPORT NUMBER NVS-08-001

# SAFETY COMPLIANCE TESTING FOR FMVSS 401 Interior Trunk Release

2008 Lexus LS460L NHTSA No. C85110

# Prepared by: NHTSA OFFICE OF VEHICLE SAFETY COMPLIANCE

400 7<sup>th</sup> Street, SW Washington, D.C. 20590



2/6/2008

### **FINAL REPORT**

PREPARED FOR:

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NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
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#### 1.0 PURPOSE OF COMPLIANCE TEST

The purpose of this compliance test was to determine whether the subject vehicle 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 by NHTSA Office of Vehicle Safety Compliance test engineers on 2/6/2008

**Test Location:** 

### 2.0 TEST PROCEDURE AND DISCUSSION OF RESULTS

Based on the test performed, the subject vehicle 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 newtons (lbs.) or less.

### 3.0 COMPLIANCE TEST DATA

## DATA SHEET 1 FMVSS 401 - VEHICLE DESCRIPTION

VEHICLE MY/MAKE/MODEL/BODY STY	
VEH. NHTSA NO.: <u>C85110</u>	; VIN: <u>JTHGL46F985025386</u>
DATE OF TEST: <u>2/6/2008</u>	TEST LAB: BY OVSC @ DEALER
GVWR: <u>5480 lbs</u> LBS (KG)	MANUFACTURED DATE: 12/07
TRUNK LOCATION: © REAR OF FROM IF NUMBER OF TRUNK LID LATCHING PO	Front, Front Opening?
INTERIOR TRUNK RELEASE: © MAN	UAL CAUTOMATIC CBOTH
POWER OPERATED CLOSURE: OWNER'S MANUAL DESCRIPTION OF	TRUNK RELEASE: © YES C NO
REMOVABLE EQUIPMENT DELIVERED	
SPARE TIRE: ☑ (SIZE) TIRE JACK: ☑	<del></del>
LUG WRENCH: ▼	
TOOL BOX: (SIZE) PARTITIONS:	
OTHER:	
REMARKS:	
RECORDED BY: Andre Jones	DATE: <u>2/6/2008</u>
APPROVED BY: Harry Thompson	

### 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

EHICLE MY/MAKE/MODEL/BODY STYLE: 2008 Lexus LS460L
EH. NHTSA NO.: C85110 ; VIN: JTHGL46F985025386
ATE OF TEST: <u>2/6/2008</u>
ethod used to actuate interior trunk release: <u>Grab Handle</u> ther:
an 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>
there access to the trunk compartment by folding down rear seat or partition:   No
oes Release Mechanism require electric power:
an release mechanism be easily seen inside the closed trunk:   Yes  No
escribe method used by vehicle manufacturer to ensure that release mechanism is visible a closed trunk compartment: <a href="Phosphorescence">Phosphorescence</a> (Phosphorescence, auxiliary phting, etc)
escribe laboratory test method used to determine visibility of release mechanism:
runk Entry (Trunk entry, darkened room, etc.)

Vehicle Stationary (0 km/h)	Force Required to Release Trunk Lid (Newtons) [no requirement]	Trunk Released from <u>All</u> latching positions	Pass/Fail
IO KEY IN IGNITION			•
	10 Newtons		Pass
Attempt 1			C Fail
	11 Newtons	● Yes ○ No	Pass
Attempt 2	ļ		C Fail
	10 Newtons	Yes C No	Pass
Attempt 3			C Fail
Average -	10.3 Newtons		

### 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 Re Trunk Lid (Newto [no requiremen	ons)		Released from	All	Pass/Fail
ENGINE IDLING 🗹 N	ot Applicable						
Attempt 1				C	Yes C No		C Pass C Fail
Attempt 2				C	Yes C No		C Pass C Fail
Attempt 3					Yes C No	:	C Pass C Fail
Average -		·					
Vehicle Speed (km/h)	Force Require	ed to Release Trunk L [no requirement]	id (Nev	vtons)	Trunk Release		Pass/Fail
10					C Yes		C Pass
20					C Yes	C No	C Pass C Fail
30					C Yes	C No	C Pass C Fail
Describe method us	ed to prope	l vehicle:			, .		
C Pass C F	ail						·
REMARKS:							
RECORDED BY: And	dre Jones		· · · · · · · · · · · · · · · · · · ·	DATE: 2	2/6/2008	_	

APPROVED BY: Harry Thompson

### 3.0 DATA SHEETS....Continued

### DATA SHEET 3 FMVSS 401 -TEST SUMMARY

1 101 2 3 401 - 1 2 3 1			SOMINALL	
	PASS	FAIL	COMMENTS	
Automatic or Manual release mechanism inside the trunk compartment. S4.1	•	c		
If manual release, lighting feature is included. S4.2(a)	.6	C		
If automatic release, unlatches trunk lid within 5 minutes. S4.2(b)	c	C	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)	•	C		
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)	C	<b>O</b> .	N/A	

RECORDED BY: Andre Jones	DATE:
<u>2/6/2008</u>	

• Pass C Fail

APPROVED BY: Harry Thompson

### 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



Vehicle Front



Vehicle Rear



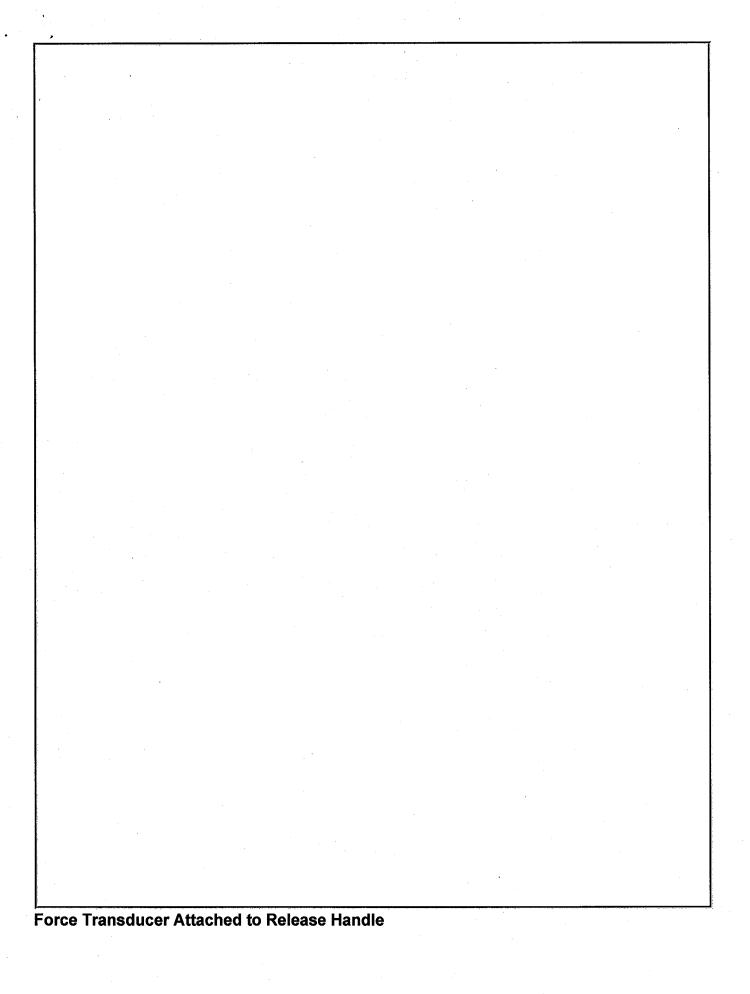
Trunk Open



**Certification Label** 



Trunk Release Handle/Lever



6.0 Vehicle Owner's Manual (applicable pages)

