

SAFETY COMPLIANCE TESTING FOR FMVSS NO. 114 THEFT PROTECTION

HONDA MFG. OF ALABAMA, LLC
2011 HONDA ODYSSEY, MPV
NHTSA NO. CB5300

GENERAL TESTING LABORATORIES, INC.
1623 LEEDSTOWN ROAD
COLONIAL BEACH, VIRGINIA 22443



February 3, 2011

FINAL REPORT

PREPARED FOR

**U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVE., SE
WASHINGTON, D.C. 20590**

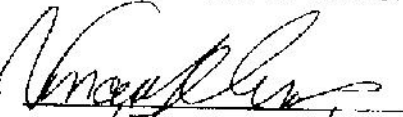
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15. Supplementary Notes		
16. Abstract Compliance tests were conducted on the subject 2011 Honda Odyssey 5-door LX MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-114-04 for the determination of FMVSS 114 compliance. Test failures identified were as follows: None		
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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF TEST

A model year 2011 Honda Odyssey 5-door LX MPV was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 114 testing to determine if the vehicle was in compliance with the requirements of the standard. FMVSS 114 specifies requirements to decrease the likelihood that a vehicle is stolen, or accidentally set in motion.

1.1 The test vehicle was a 2011 Honda Odyssey 5-door LX MPV. The vehicle was identified as follows:

A. Vehicle Identification Number: 5FNRL5H20BB011182

B. NHTSA No.: CB5300

C. Manufacturer: HONDA MFG. OF ALABAMA, LLC

D. Manufacture Date: 10/10

E. Color: Alabaster Silver

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 114 testing on January 25-26, 2011.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 TEST PROCEDURE

All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure TP-114-04 and General Testing Laboratories, Inc. (GTL) Test Procedure, TP-114-04, "Theft Protection and Rollaway Prevention".

2.1 SUMMARY OF RESULTS

Test data indicate the FMVSS 114 requirements appear to have been satisfied. All test data resulting from the tests were recorded on test data sheets in Section 3.

SECTION 3

TEST DATA

3.0 TEST RESULTS

The following data sheets document the results of FMVSS 114 testing on the 2011 Honda Odyssey.

FMVSS 114, THEFT PROTECTION
DATA SHEET 1 – VEHICLE IDENTIFICATION

TEST DATE: 01/25/11 LAB.: General Testing Laboratories
 CONTRACT: DTNH22-06-C-00032 VEH. NHTSA NO.: CB5300
 VIN: 5FNRL5H20BB011182 BUILD DATE: 10/10

MY/MAKE/MODEL/BODY STYLE: 2011 Honda Odyssey

TRANSMISSION TYPE:

Automatic X; Manual ; Other (describe: 5 speed)

DRIVE TRAIN TYPE:

Front Wheel X; Rear Wheel ; 4-Wheel

FUEL TANK LEVEL: 100 (% OF max.) MILEAGE: 57

VEHICLE STARTING SYSTEM:

Location of the starting system:

Located on Right Side of Steering Column

Selectable settings:

Off/Lock, Accessory, On/Run, Start

Explain how the system is activated:

The system is activated when the key is inserted into receptacle and turned clockwise.

KEY

Description of the key:

Mechanical Type Metal Key with embedded code.

STARTING SYSTEM ACTIVATION

Describe how the key is inserted into the starting system:

The key is inserted into the starting system by physical means.

Describe how the key is used to activate the starting system:

The System is activated by turning the key clockwise.

Describe how the key is removed from the starting system:

With the transmission in the "park" position, turn key to the off/lock position and pull key out of receptacle.

FMVSS 114, THEFT PROTECTION
DATA SHEET 1 continued

GEAR SELECTION CONTROL

Describe the gear selection control:

Shift Lever located on Center Dash just to the right of the steering column.

Describe how the gear selection control is activated:

Press firmly on Brake Pedal and press release button on front of the shift lever then move lever to the desired position.

Describe all of the selectable settings:

Park, Reverse, Neutral, Drive, Low

IMMOBILIZER

Is the vehicle equipped with an immobilizer YES X NO

Describe the immobilizer device and how it prevents vehicle theft (if equipped):

Vehicle must see a properly coded key or the engines fuel system is disabled. The immobilizer is activated when the key is removed. To deactivate, insert the key and turn it from "ACC" to "ON". The engine control module prevents fuel and spark when the immobilizer is activated.

OPTIONAL RELEASE DEVICES

Describe if the vehicle is equipped with optional release devices:

Yes

OPTIONAL RELEASE DEVICES:

Key Removal Gear Selection Control X None Other

VEHICLE FLUIDS

Check all vehicle fluids and adjust to the proper levels for operation: Full

VEHICLE TIRE PLACARD INFORMATION

Vehicle Mfg. Recommended Tire Inflation Pressure

(kPa): Front 230 Rear 230

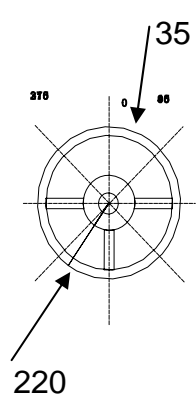
TIRE INFLATION PRESSURES:

Measured (kPa): LF 230 LR 230 RF 230 RR 230

WEIGHT

Vehicle Curb Weight(kg): 1963 Weight of Driver (kg): 91 (target = 91kg)

FMVSS 114, THEFT PROTECTION
DATA SHEET 2

REQUIREMENT S5.1.1	PASS	FAIL
Engine cannot be started without using the key ____Yes <u>X</u> No	X	
<p>With key removed, steering wheel locks: Yes: <u>X</u> No: _____</p> <p>Identify steering wheel locking position(s) on wheel using arrow(s)</p> <p>Clockwise: <u>35</u> (degrees) Counterclockwise: <u>220</u> (degrees)</p> <div style="text-align: right; margin-top: 20px;">  </div> <p>Service brake must be depressed in order to start engine Yes _____ No <u>X</u></p> <p>Key removal prevents forward self-mobility: Yes: <u>X</u> No: _____</p> <p>If yes describe: Engine will not start without key in ignition.</p>		
When key is removed from the starting system, starting of the engine or motor and either steering or self mobility is prevented. Yes: <u>X</u> No: _____	X	

REMARKS:

FMVSS 114, THEFT PROTECTION
DATA SHEET 2 continued

REQUIREMENT S5.1.3	PASS	FAIL
<p>An audible warning is activated whenever the key is in any starting system position with the exception of "on" and "start" and the door closest to the driver's designated seating position is opened.</p> <p align="right">Yes <u> X </u> No <u> </u></p> <p>Identify ALL key/starting system position setting: <u> OFF/LOCK, ACCESSORY, ON/RUN, START </u></p>	X	

REQUIREMENT S5.1.4	PASS	FAIL
<p>With the vehicle engine or motor shut down and the transmission gear selection control in any position other than "park";</p> <p>The steering wheel can rotate without locking? Yes <u> X </u> No <u> </u></p>	X	
<p>The vehicle is free to roll forward? Yes <u> X </u> No <u> </u></p>	X	

REMARKS:

RECORDED BY: G. Farrand
APPROVED BY: D. Messick

DATE: 01/25/11

FMVSS 114, ROLLAWAY PREVENTION
DATA SHEET 3
(for vehicles equipped with transmission with a "park" position)

VEH. NHTSA NO.: CB5300

TEST DATE: 01/25/11

REQUIREMENT S5.2.1	PASS	FAIL
<p>The starting system prevents key removal in ALL gear selection control positions except "park". Yes <u>X</u> No <u> </u></p> <p>Can the gear selection control be placed between each gear selection position and will it remain there without assistance? Yes <u> </u> No <u>X</u></p> <p>If yes, can the key be removed from the starting system? Yes <u> </u> No <u> </u></p> <p>If the key can be removed from the vehicle starting system when the gear selection control is not locked in "park", a mechanism shall exist which, upon key removal, the vehicle transmission or gear selection control shall become locked in "park" as the direct result of removing the key. If such a mechanism exists, describe the mechanism and its function:</p>	X	

REQUIREMENT S5.2.2	PASS	FAIL
<p>The gear selection control is locked in the "park" position when the key is removed from the starting system. Yes <u>X</u> No <u> </u></p>	X	

REMARKS:

DATA SHEET 3 continued

REQUIREMENT S5.2.3	PASS	FAIL
<p><u>KEY REMOVAL OVERRIDE OPTION:</u></p> <p>The vehicle is equipped with an override device that allows the user to Remove the key from the “starting system without the transmission or gear selection control in the “park” position. Yes_____ No___X</p> <p>If <u>yes</u>, describe the override device design and mode of activation:</p> <p>Fill in the section below that describes the condition for which the user is allowed to remove the key from the starting system without the transmission or gear selection control in the “park” position:</p>	X	
<p><u>ELECTRICAL FAILURE</u></p> <p>In the event of an electrical failure, including battery discharge, key removal from the starting system without the transmission or gear selection control locked in “park” is permitted”. Yes_X No_____</p>	X	
<p><u>OVERRIDE DEVICE WITH NO COVER:</u></p> <p>The following condition is prevented: Steering_____ Self-Mobility_____</p> <p>The device requires both the use of a tool to activate and simultaneous activation of the override device and removal of the key from the starting system Yes_____ No_____</p>	N/A	
<p><u>OVERRIDE DEVICE WITH AN OPAQUE COVER</u></p> <p>The following condition is prevented: Steering_____ Self-Mobility_____</p> <p>The device is covered by an opaque surface which prevents sight of and use of the device. Yes_____ No_____</p> <p>The opaque surface can only be removed by using a screwdriver or other tool: Yes_____ No_____</p>	N/A	

DATA SHEET 3 continued

REQUIREMENT S5.2.4	PASS	FAIL
<p><u>GEAR SELECTION CONTROL OVERRIDE DEVICE</u></p> <p>The vehicle is equipped with an override device that allows the user to move the gear selection control from “park” after the key has been removed from the starting system. Yes <u>X</u> No _____</p> <p>If yes, select the type of override device used: Key _____ Opaque Cover <u>X</u> No Cover _____</p> <p>Describe the override device design and mode of activation (if equipped): Small cover on right side of shifter which when removed allows a key to be inserted to release shifter.</p> <p>FILL IN THE SECTION BELOW THAT APPLIES:</p> <p><u>OVERRIDE OPERATED WITH KEY:</u></p> <p>The key is required to operate the override device that allows the user to move the gear selection control from “park” after the key has been removed from the starting system. Yes _____ No _____</p> <p><u>OVERRIDE DEVICE WITH NO COVER</u></p> <p>As a direct result of removing the key from the starting system, the following is prevented: Steering _____ Self-Mobility _____</p> <p>The override device requires the use of a tool to operate. Yes _____ No _____</p> <p>Simultaneous activation of the override device and movement of the gear selection control from “park” is required Yes _____ No _____</p> <p><u>OVERRIDE DEVICE WITH AN OPAQUE COVER</u></p> <p>As a direct result of removing the key from the starting system, the following is prevented: Steering <u>X</u> Self-Mobility _____</p> <p>The opaque surface cover prevents sight of and use of the device: Yes <u>X</u> No _____</p> <p>The opaque surface cover can only be removed by using a screwdriver or other tool: Yes <u>X</u> No _____</p>	<p>X</p> <p>N/A</p> <p>N/A</p> <p>X</p>	

DATA SHEET 3 continued

REQUIREMENTS S5.2.5	PASS	FAIL
<p><u>VEHICLE FACING UPHILL ON 10% GRADE</u></p> <p>With the gear selection control in “park” measure movement of the vehicle down the slope upon releasing the service brake.</p> <p>Test grade: <u>15</u> % (9% to 15%) Measured movement: <u>20</u> mm (150mm maximum)</p> <p>NOTE: Repeat procedure if vehicle fails on grade in excess of 10%.</p> <p>Test grade: _____ % (9% to 10%) Measured movement: _____ mm (150 mm maximum)</p> <p><u>VEHICLE FACING DOWNHILL ON 10% GRADE</u></p> <p>With the gear selection control in “park” measure movement of the vehicle down the slope upon releasing the service brake.</p> <p>Test grade: <u>15</u> % (9% to 15%) Measured movement: <u>54</u> mm (150mm maximum)</p> <p>NOTE: Repeat procedure if vehicle fails on grade in excess of 10%.</p> <p>Test grade: _____ % (9% to 10%) Measured movement: _____ mm (150 mm maximum)</p>	<p>X</p> <p>X</p>	<p><u>see note</u></p>

REMARKS:

DATA SHEET 3 continued

REQUIREMENTS S5.3		PASS	FAIL
With the key in the "OFF" position, the transmission will shift out of "PARK" without the service brake being applied. Yes_____ No <u>X</u>		<u>X</u>	
With the key in the "ACC" position, the transmission will shift out of "PARK" without the service brake being applied. Yes_____ No <u>X</u>		<u>X</u>	
With the key in the "ON" position (engine off), the transmission will shift out of "PARK" without the service brake being applied. Yes_____ No <u>X</u>		<u>X</u>	
With the key in the "START" position, the transmission will shift out of "PARK" without the service brake being applied. Yes_____ No <u>X</u>		<u>X</u>	
With the key in the "OTHER" position (please specify), the transmission will shift out of "PARK" without the service brake being applied. Yes_____ No_____		<u>N/A</u>	
Does the key stay between starting system positions without being held by operator? Yes_____ No <u>X</u> If so, please describe.		<u>X</u>	
With the vehicle battery disconnected, the gear selection control is locked in the "PARK" position. Yes <u>X</u> No_____		<u>X</u>	
Brake force readings (force required to allow the transmission to shift out of "park"):			
The vehicle is equipped with adjustable pedals: Yes_____ No <u>X</u>			
Fore Position:	Aft Position (if applicable)		
Reading 1 <u>20.9 N</u>	Reading 1 <u>N/A</u>		
Reading 2 <u>19.6 N</u>	Reading 2 <u>N/A</u>		
Reading 3 <u>20.0 N</u>	Reading 3 <u>N/A</u>		
Reading 4 <u>20.5 N</u>	Reading 4 <u>N/A</u>		
Reading 5 <u>20.0 N</u>	Reading 5 <u>N/A</u>		
Avg. <u>20.2 N</u>	Avg. <u>N/A</u>	<u>X</u>	
*For vehicles equipped with adjustable pedals, record readings for both the Fore and Aft positions. For non-adjustable pedal vehicles, use the Fore position column to record values.			

REMARKS:

RECORDED BY: G. Farrand
APPROVED BY: D. Messick

DATE: 01/26/11

SECTION 4
TEST EQUIPMENT LIST

ITEM	MFR	MODEL	S/N	CAL. PERIOD	DATE OF NEXT CALIB.	REMARKS
SLR DIGITAL CAMERA	NIKON	D50	N/A	N/A	N/A	
TIRE PRESSURE GAUGE	WESKLER	45-0/100	107	12 MO.	04/11	
INCLINOMETER	MITUTOYO	PRO 360	950-315	N/A	BEFORE USE	
STEEL TAPE	STANLEY	FAT MAX	33-890	12 MO.	01/12	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/11	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/11	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/11	
WHEEL SCALES	INTERCOMP	SERIES 94	199744	12 MO.	03/11	
SPRING SCALE	CHATILLON	DPP-10	4729	12 MO.	BEFORE USE	

SECTION 5
PHOTOGRAPHS



2011 HONDA ODYSSEY
NHTSA NO. CB5300
FMVSS NO. 114

FIGURE 5.1
 $\frac{3}{4}$ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE

CB5300

MFD. BY HONDA MFG. OF ALABAMA, LLC 10/' 10

GVWR 2730KG(6019LBS) TIRE SIZE RIM SIZE

GAWR F 1320KG(2910LBS) P235/65R17 103T 17X7J

GAWR R 1450KG(3197LBS) P235/65R17 103T 17X7J

**THIS VEHICLE CONFORMS TO ALL APPLICABLE
FEDERAL MOTOR VEHICLE SAFETY
AND THEFT PREVENTION STANDARDS IN EFFECT
ON THE DATE OF MANUFACTURE SHOWN ABOVE.**

V.I.N.: 5FNRL5H20BB011182 TYPE: MPV



TK8 B AA5 -NH700M -C -B



2011 HONDA ODYSSEY
 NHTSA NO. CB5300
 FMVSS NO. 114

FIGURE 5.3
 VEHICLE TIRE INFORMATION LABEL



2011 HONDA ODYSSEY
NHTSA NO. CB5300
FMVSS NO. 114

FIGURE 5.4
CLOSE-UP VIEW OF IGNITION KEY



2011 HONDA ODYSSEY
NHTSA NO. CB5300
FMVSS NO. 114

FIGURE 5.5
IGNITION SWITCH



2011 HONDA ODYSSEY
NHTSA NO. CB5300
FMVSS NO. 114

FIGURE 5.6
TRANSMISSION GEAR SELECTION CONTROL



2011 HONDA ODYSSEY
NHTSA NO. CB5300
FMVSS NO. 114

FIGURE 5.7
GEAR SELECTION CONTROL OVERRIDE DEVICE