

REPORT NO. 118-KAR-10-004

**SAFETY COMPLIANCE TESTING
FOR FMVSS 118**

**Power-Operated Window, Partition,
And Roof Panel Systems**

**2010 HONDA ODYSSEY LX
5-DOOR MPV**

NHTSA NO. CA5305

**PREPARED BY:
KARCO ENGINEERING, LLC.
9270 HOLLY ROAD
ADELANTO, CALIFORNIA 92301**



July 6, 2010

Final Report

**PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
MAIL CODE: NVS-221
1200 NEW JERSEY AVE SE, ROOM W43-498
WASHINGTON, D.C. 20590**

This final test report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract DTNH22-06-C-00034.

This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration in the interest of information exchange. The opinions, findings and conclusions expressed in this publication are those of the author(s) and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned, it is only because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

Prepared By: Matthew S. Hubbard
Mr. Matthew S. Hubbard, Test Engineer
KARCO Engineering, LLC.

Reviewed By: Angie Valenzuela
Ms. Angie Valenzuela, Quality Assurance Manager
KARCO Engineering, LLC.

Michael L. Dunlap
Mr. Michael L. Dunlap, Director of Operations
KARCO Engineering, LLC.

Approved By: Frank D. Richardson
Mr. Frank D. Richardson, Program Manager
KARCO Engineering, LLC.

Approval Date: 08/02/10

FINAL REPORT ACCEPTED BY OSVC:

FINAL REPORT ACCEPTED BY OSVC:
W. J. [Signature]
Accepted By:

8/5/10
Acceptance Date:

Technical Report Documentation Page

1. <i>Report No.</i> 118-KAR-10-004	2. <i>Government Accession No.</i>	3. <i>Recipient's Catalog No.</i>	
4. <i>Title and Subtitle</i> Final Report of FMVSS 118 Compliance Testing of 2010 Honda Odyssey LX 5-Door MPV NHTSA NO. CA5305		5. <i>Report Date</i> 07-06-10	
		6. <i>Performing Organization Code</i> KAR	
7. <i>Author(s)</i> Mr. Matthew S. Hubbard, Test Engineer, KARCO Mr. Michael L. Dunlap, Director of Operations, KARCO		8. <i>Performing Organization Report No.</i> TR-P30006-04-NC	
9. <i>Performing Organization Name and Address</i> KARCO Engineering 9270 Holly Road Adelanto, California 92301		10. <i>Work unit No.</i>	
		11. <i>Contract or Grant No.</i> DTNH22-06-C-00034	
12. <i>Sponsoring Agency Name and Address</i> U.S. Department of Transportation National Highway Traffic Safety Administration Enforcement Office of Vehicle Safety Compliance Mail Code: NVS-221 1200 New Jersey Ave SE, Room W43-410 Washington, D.C. 20590		13. <i>Type of report and Period Covered</i> Final Report- May 26, 2010	
		14. <i>Sponsoring Agency Code</i> NVS-221	
15. <i>Supplementary Notes</i>			
16. <i>Abstract</i> Compliance tests were conducted on the subject 2010 Honda Odyssey LX 5-Door MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-118-06 for the determination of FMVSS 118 compliance. Test failures identified were as follows: None			
17. <i>Key Words</i> Compliance Testing Safety Engineering FMVSS 118		18. <i>Distribution Statement</i> Copies of this report are available from: National Highway Traffic Safety Admin. Technical Information Services (TIS) Mail Code: NVS-221 1200 New Jersey Ave SE, Room W43-410 Washington, D.C. 20590	
19. <i>Security Classification (of this report)</i> UNCLASSIFIED	20. <i>Security Classification (of this page)</i> UNCLASSIFIED	21. <i>No. of Pages</i> 54	22. <i>Price</i>

Form DOT F1700.7 (8-72)

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1	Purpose of Compliance Test	1
2	Test Procedure and Data Summary	2
3	Test Data	5
4	Photographs	15
5	Data Plots	37
6	Copy of Owner's Manual Instructions for Use of Power Windows	47

SECTION 1

PURPOSE OF COMPLIANCE TEST

Tests were conducted on a 2010 Honda Odyssey LX 5-Door MPV, manufactured by Honda MFG. of Alabama, LLC to determine compliance with FMVSS 118 "Power-Operated Window, Partition, and Roof Panel Systems". FMVSS 118 specifies requirements for power operated window, partition and roof panel systems to minimize the likelihood of death or injury from their accidental operation.

All tests were conducted based on the current National Highway Traffic Safety Administration (NHTSA), Office of Vehicle Safety Compliance (OVSC) Laboratory Procedures, TP-118-06, dated April 12, 2006, and corresponding KARCO Engineering test procedure KTP-118, dated March 23, 2009. Detailed procedures for receiving, inspecting, testing and reporting of test results are described in the test procedures and are not repeated in this report.

SECTION 2

TEST PROCEDURE AND DATA SUMMARY

A 2010 Honda Odyssey LX 5-Door MPV was subjected to FMVSS 118 compliance testing. The tests were conducted at KARCO Engineering in Adelanto, California on July 6th, 2010. FMVSS 118 Compliance testing was performed in the following sequence:

- Vehicle Receiving Photographs
- Test Vehicle Check-in
- Power Window, Partitions and Roof Panel Identification/Documentation
- Interior, Exterior and Remote Control Switch Identification/Documentation
- Pre-Test Operation of all Power Windows, Partitions and Roof Panels
- Photograph Vehicle Ignition Switch and Master and Individual Power Window, Partition and Roof Panel Switches
- Perform Ignition Switch off Test
- Perform Ignition Key Removed Test
- Perform Exterior Key Locking System Test
- Perform Remote Control System Test
- Perform Reversal System Test
- Perform Sphere Test

DATA SUMMARY

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

SWITCH ACTUATION

WINDOWS, PARTITIONS, ROOF PANEL SWITCHES (WPRP)	INTERIOR KEY LOCKING SYSTEM*			EXTERIOR LOCKING SYSTEM (PASS / FAIL)
	IGNITION KEY OFF (PASS/FAIL)	IGNITION KEY REMOVED (PASS/FAIL)	IGNITION KEY REMOVED DOOR OPENED (PASS/FAIL)	
MASTER SWITCH PANEL				
Left Front (LF)	PASS	PASS	PASS	N/A
Right Front (RF)	PASS	PASS	PASS	N/A
Left Rear (LR)	PASS	PASS	PASS	N/A
Right Rear (RR)	PASS	PASS	PASS	N/A
Tail Gate (TG)	N/A	N/A	N/A	N/A
Partition	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A
INDIVIDUAL SWITCHES				
Left Front (LF)	PASS	PASS	PASS	N/A
Right Front (RF)	PASS	PASS	PASS	N/A
Left Rear (LR)	PASS	PASS	PASS	N/A
Right Rear (RR)	PASS	PASS	PASS	N/A
Tail Gate (TG)	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A

REMARKS: The master switch control panel is located on the driver's side door panel and includes the individual left front window switch. Vehicle passed as soon as ignition key "off" test was performed.

***PASS =** After ignition key cycled from ON,ACC, or START to OFF position, or removed WPRP does not close, or closes until either front door is opened

DATA SUMMARY...(CONTINUED)

REMOTE ACTUATION DEVICE

VEHICLE ORIENTATION REMOTE ACTUATION DEVICE	NON-LINE OF SIGHT REMOTE (METERS)	LINE OF SIGHT REMOTE (METERS)
FRONT	N/A	N/A
DRIVER SIDE	N/A	N/A
PASSENGER SIDE	N/A	N/A
REAR	N/A	N/A

WPRP OBSTRUCTION FORCE REVERSAL

WINDOW, PARTITION, ROOF PANEL	FORCE TO REVERSE (NEWTONS)	DISTANCE WINDOW, PARTITION, OR ROOF PANEL OPENED ON REVERSAL (mm)
LEFT FRONT (LF)	See Data Sheet 8	See Data Sheet 8
RIGHT FRONT (RF)	N/A	N/A
LEFT REAR (LR)	N/A	N/A
RIGHT REAR (RR)	N/A	N/A
PARTITION (P)	N/A	N/A
ROOF PANEL (RP)	N/A	N/A
TAIL GATE (TG)	N/A	N/A

SPHERE TEST

WINDOW, PARTITION, ROOF PANEL	MASTER SWITCH	INDIVIDUAL SWITCH	PASS / FAIL
LEFT FRONT (LF)	See Data Sheet 9	See Data Sheet 9	PASS
RIGHT FRONT (RF)	See Data Sheet 9	See Data Sheet 9	PASS
LEFT REAR (LR)	See Data Sheet 9	See Data Sheet 9	PASS
RIGHT REAR (RR)	See Data Sheet 9	See Data Sheet 9	PASS
PARTITION (P)	N/A	N/A	N/A
ROOF PANEL (RP)	N/A	N/A	N/A
TAIL GATE (TG)	N/A	N/A	N/A

REMARKS: None.

The subject 2010 Honda Odyssey LX 5-Door MPV appeared to meet the requirements of FMVSS 118.

SECTION 3
TEST DATA

**DATA SHEET NO. 1
VEHICLE IDENTIFICATION**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

Identify Vehicle equipped WPRP and WPRP controls

	LEFT FRONT	LEFT REAR	RIGHT FRONT	RIGHT REAR	TAIL GATE	PARTITION	ROOF PANEL
Power Windows	X	X	X	X	N/A	N/A	N/A
Interior Switches	X	X	X	X	N/A	N/A	N/A
Master Control Panel	X	X	X	X	N/A	N/A	N/A
Exterior Switches	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Remote Controller	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Auto-Reverse	X	N/A	N/A	N/A	N/A	N/A	N/A

Master Control Panel Location: **Driver Side Door Panel**

Remote Control: **None**

Window Switch Design: **Master Control Switches – Flush Mounted Rocker Switch push down to open, pull up to close.**
Individual Window Switches – Flush Mounted Rocker Switch push down to open, pull up to close.

Exterior Control Switch: **N/A**

Sunroof: **N/A**

REMARKS: Master control panel switch is located in the driver side door panel. Individual switches are located on the door panel for each door. On this vehicle the reversal feature is not required because the windows appear to meet the operational requirements of FMVSS 118 paragraph S.4.

RECORDED BY: **MATTHEW S. HUBBARD** DATE: **07/06/10**
APPROVED BY: **MICHAEL L. DUNLAP** DATE: **08/02/10**

**DATA SHEET NO. 2
IGNITION KEY OFF TEST**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

Pre-Test Check: Window, Partition, Roof Panel Systems operate with Ignition Switch in "ON" Position		YES	X	NO	N/A		
Pre-Test Check: Window, Partition, Roof Panel Systems operate with Ignition Switch in "ACCESSORY" Position		YES	N/A	NO	X		
WINDOW SWITCHES	DOORS CLOSED		LEFT DOOR OPEN		RIGHT DOOR OPEN		PASS/FAIL
	INOP.	OPER.	INOP.	OPER.	INOP.	OPER.	
MASTER							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
INDIVIDUAL							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
REMARKS: The master left front switch is the same as the individual left front switch. Test was performed with key in the "Lock" position. For the pre-test check in the "Accessory" position the key was moved from the "Lock" position to the "Accessory" position without cycling through the "On" position or starting the engine. Vehicle passed as soon as ignition "off" test was performed.							

RECORDED BY: **MATTHEW S. HUBBARD** DATE: **07/06/10**
 APPROVED BY: **MICHAEL L. DUNLAP** DATE: **08/02/10**

**DATA SHEET NO. 3
IGNITION KEY REMOVED TEST**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

WINDOW SWITCHES	DOORS CLOSED		LEFT DOOR OPEN		RIGHT DOOR OPEN		PASS/ FAIL
	INOP.	OPER.	INOP.	OPER.	INOP.	OPER.	
MASTER							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
INDIVIDUAL							
Left Front (LF)	N/A	X	X	N/A	X	N/A	PASS
Right Front (RF)	N/A	X	X	N/A	X	N/A	PASS
Left Rear (LR)	N/A	X	X	N/A	X	N/A	PASS
Right Rear (RR)	N/A	X	X	N/A	X	N/A	PASS
Tail Gate (TG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Partition (P)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roof Panel (RP)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

REMARKS: The master left front switch is the same as the individual left front switch. Vehicle passed as soon as ignition key "off" test was performed.

RECORDED BY: MATTHEW S. HUBBARD DATE: 07/06/10
 APPROVED BY: MICHAEL L. DUNLAP DATE: 08/02/10

**DATA SHEET NO. 4
EXTERIOR KEY LOCKING SYSTEM**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

EXTERIOR LOCKING CONTROL SWITCH TEST				
Can Any WPRP Be Operated by Directly Using A Key in an Exterior Locking Control Switch?	Yes	N/A	No	X
If Yes: Is Continuous Activation of the Switch Required	Yes	N/A	No	X

IDENTIFY WINDOW, PARTITION AND ROOF PANEL POSITIONS WHICH ARE OPERABLE WITH EXTERIOR KEY.

LOCATION	OPERABLE W/KEY		CONTINUOUS ACTION		PASS / FAIL
	YES	NO	YES	NO	
LEFT FRONT (LF)	N/A	X	N/A	N/A	N/A
RIGHT FRONT (RF)	N/A	X	N/A	N/A	N/A
LEFT REAR (LR)	N/A	X	N/A	N/A	N/A
RIGHT REAR (RR)	N/A	X	N/A	N/A	N/A
PARTITION (P)	N/A	N/A	N/A	N/A	N/A
ROOF PANEL (RP)	N/A	N/A	N/A	N/A	N/A
TAIL GATE (TG)	N/A	N/A	N/A	N/A	N/A

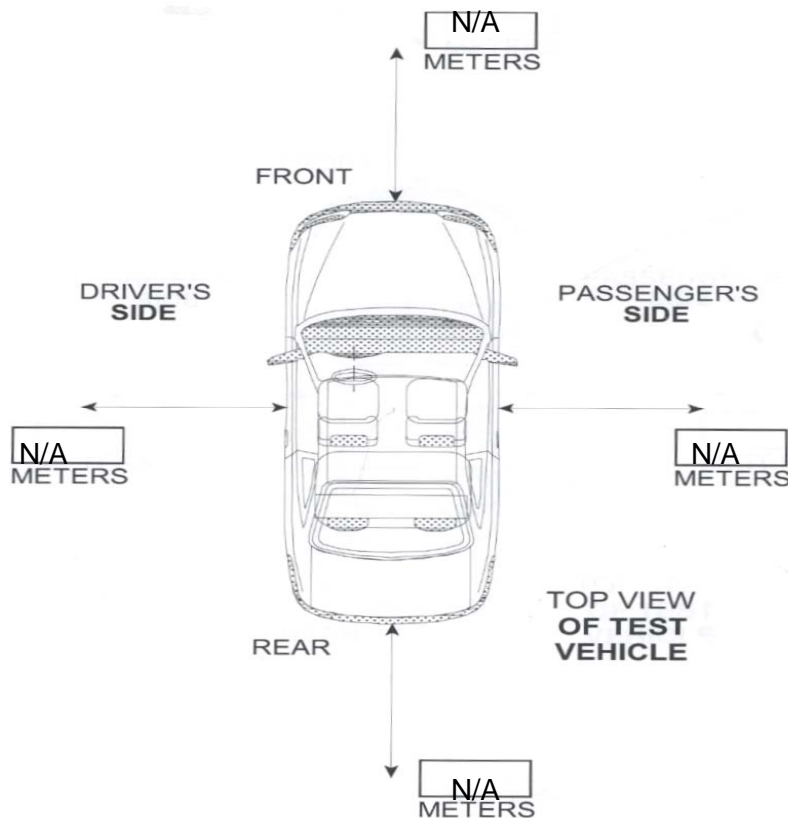
REMARKS:

RECORDED BY: MATTHEW S. HUBBARD DATE: 07/06/10
 APPROVED BY: MICHAEL L. DUNLAP DATE: 08/02/10

**DATA SHEET NO. 5
 MAXIMUM OPERATING RANGE FOR LINE-OF-SIGHT REMOTE**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

If range of operation exceeds 11 meters in any of the below measured directions, the window, partition, and roof panel must meet the reversing requirements of FMVSS 118. Continuous activation of remote device is required to close windows, partition and roof panel YES () NO (X).



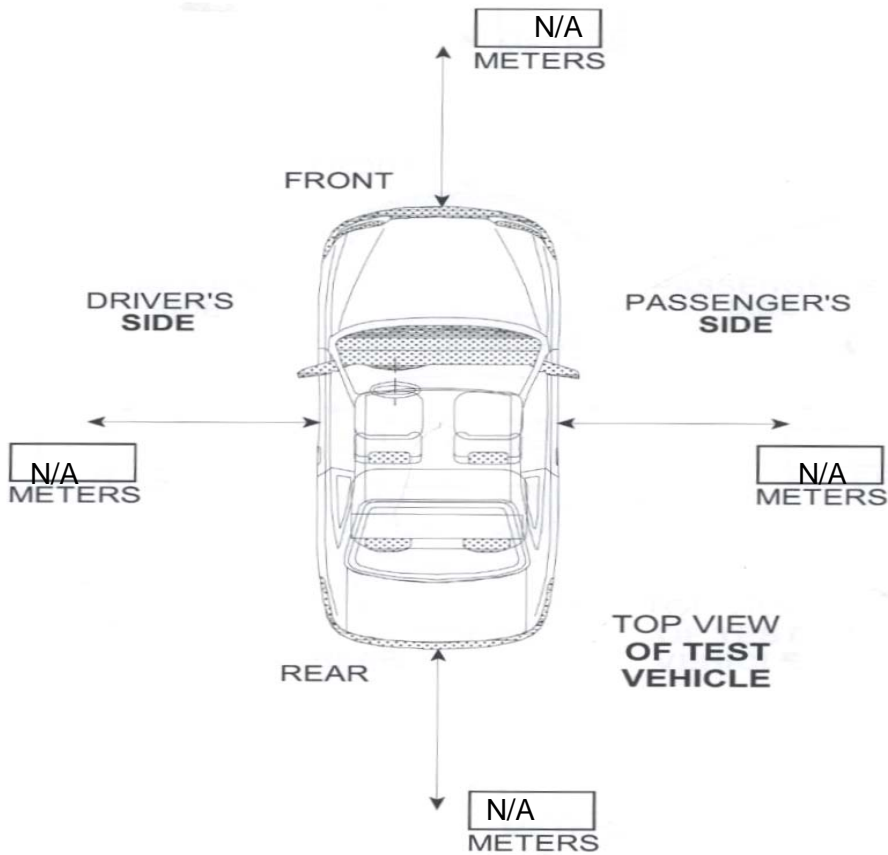
REMARKS: The vehicle is not equipped with a remote actuation device that allows the windows to be opened.

RECORDED BY: MATTHEW S. HUBBARD DATE: 07/06/10
 APPROVED BY: MICHAEL L. DUNLAP DATE: 08/02/10

**DATA SHEET NO. 6
MAXIMUM OPERATING RANGE FOR NON-LINE-OF-SIGHT REMOTE**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

If range of operation exceeds 6 meters in any of the below measured directions, the window, partition, and roof panel must meet the reversing requirements of FMVSS 118. Continuous activation of remote device is required to close windows, partition and roof panel YES () NO (X).



REMARKS: The vehicle is not equipped with a remote actuation device that allows the windows to be opened.

RECORDED BY: MATTHEW S. HUBBARD DATE: 07/06/10
 APPROVED BY: MICHAEL L. DUNLAP DATE: 08/02/10

**DATA SHEET NO. 7
AUTO REVERSAL**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

IDENTIFY WINDOW, PARTITION AND ROOF PANEL POSITIONS WHICH ARE EQUIPPED WITH AUTO REVERSAL.

Is vehicle equipped with Auto Reversal	YES	X	NO	N/A
--	-----	----------	----	-----

SWITCHES EQUIPPED WITH AUTO REVERSAL	MASTER	INDIVIDUAL
LEFT FRONT (LF)	X	X
RIGHT FRONT (RF)	N/A	N/A
LEFT REAR (LR)	N/A	N/A
RIGHT REAR (RR)	N/A	N/A
PARTITION (P)	N/A	N/A
ROOF PANEL (RP)	N/A	N/A
TAIL GATE (TG)	N/A	N/A

REMARKS: The master switch is the same as the individual switch for the left front window. The vehicle passed as soon as ignition key "off" was performed. The left front window is equipped with one touch auto express feature. The reversal feature is not required because the window appears to meet the operational requirements of FMVSS 118 paragraph S.4.

RECORDED BY: **MATTHEW S. HUBBARD** DATE: **07/06/10**
 APPROVED BY: **MICHAEL L. DUNLAP** DATE: **08/02/10**

**DATA SHEET NO. 8
AUTO REVERSAL**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

Distance window is open from top seam to start position.

415

WPRP OBSTRUCTION FORCE REVERSAL

LEADING EDGE LEFT FRONT WINDOW	FORCE TO REVERSE (NEWTONS)	DISTANCE WINDOW, PARTITION, OR ROOF PANEL OPENED ON REVERSAL (mm)
5mm semi rigid rod	60.0	190.9
25mm semi rigid rod	122.7	167.8
50mm semi rigid rod	92.3	138.1
100mm semi rigid rod	134.3	79.7
200mm semi rigid rod	169.6	76.9

Distance window is open from top seam to start position.

415

WPRP OBSTRUCTION FORCE REVERSAL

REAR EDGE LEFT FRONT WINDOW	FORCE TO REVERSE (NEWTONS)	DISTANCE WINDOW, PARTITION, OR ROOF PANEL OPENED ON REVERSAL (mm)
5mm semi rigid rod	53.7	197.2
25mm semi rigid rod	112.6	173.4
50mm semi rigid rod	92.0	150.9
100mm semi rigid rod	157.9	120.7
200mm semi rigid rod	153.3	80.7

REMARKS: The master switch is the same as the individual switch for the left front window. The vehicle passed as soon as ignition key "off" was performed. The reversal feature is not required because the window appears to meet the operational requirements of FMVSS 118 paragraph S.4.

Note: Vehicle complies with operating requirements of S4 thus not required to meet S5.

RECORDED BY: **MATTHEW S. HUBBARD**

DATE: **07/06/10**

APPROVED BY: **MICHAEL L. DUNLAP**

DATE: **08/02/10**

**DATA SHEET NO. 9
SPHERE TEST**

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

SPHERE TEST CONDUCTED ON MASTER SWITCH CONTROL PANEL

WINDOW	FORCE APPLIED TO ACTIVATE SWITCH (NEWTONS)	SWITCH ACTIVATED (YES / NO)	PASS / FAIL
LEFT FRONT (LF)	143.2	NO	PASS
RIGHT FRONT (RF)	162.1	NO	PASS
LEFT REAR (LR)	155.3	NO	PASS
RIGHT REAR (RR)	161.0	NO	PASS
PARTITION (P)	N/A	N/A	N/A
ROOF PANEL (RP)	N/A	N/A	N/A
TAIL GATE (TG)	N/A	N/A	N/A

SPHERE TEST CONDUCTED ON INDIVIDUAL SWITCH

WINDOW	FORCE APPLIED TO ACTIVATE SWITCH (NEWTONS)	SWITCH ACTIVATED (YES / NO)	PASS / FAIL
LEFT FRONT (LF)	143.2	NO	PASS
RIGHT FRONT (RF)	162.5	NO	PASS
LEFT REAR (LR)	142.6	NO	PASS
RIGHT REAR (RR)	154.4	NO	PASS
PARTITION (P)	N/A	N/A	N/A
ROOF PANEL (RP)	N/A	N/A	N/A
TAIL GATE (TG)	N/A	N/A	N/A

REMARKS: The master switch is the same as the individual switch for the left front window.

RECORDED BY: **MATTHEW S. HUBBARD**

DATE: **07/06/10**

APPROVED BY: **MICHAEL L. DUNLAP**

DATE: **08/02/10**

SECTION 4
PHOTOGRAPHS

Figure		Page
1	Frontal $\frac{3}{4}$ View from Right Side of Vehicle	16
2	Rear $\frac{3}{4}$ View from Left Side of Vehicle	17
3	Vehicle Certification Label	18
4	Tire Information Placard	19
5	Ignition Switch	20
6	Left Front Master Power Window Switch	21
7	Right Front Power Window Switch	22
8	Left Rear Power Window Switch	23
9	Right Rear Power Window Switch	24
10	Exterior Locking System (Driver Door)	25
11	Exterior Locking System (Key)	26
12	Overall Test Set-Up	27
13	Instrumentation	28
14	Left Front Window	29
15	Left Front Window Test Set-Up Leading Edge	30
16	Left Front Window Test Set-Up Rear Edge	31
17	Sphere Test Master Control Panel	32
18	Sphere Test Right Front Window Switch	33
19	Sphere Test Left Rear Window Switch	34
20	Sphere Test Right Rear Window Switch	35



Figure 1: Frontal ¾ View From Right Side of Vehicle

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118

Figure 2: Rear ¾ View From Left Side of Vehicle

MFD. BY HONDA MFG. OF ALABAMA, LLC 12' 09
GVWR 2695KG(5941LBS) TIRE SIZE RIM SIZE
GAWR F 1320KG(2910LBS) 235/65R16 103T 16X7J
GAWR R 1450KG(3197LBS) 235/65H16 103T 16X7J

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.: 5FNRL3H21AB039382 TYPE: MPV



SHJ A AB5 -NH700M -B -B

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118

Figure 3: Vehicle Certification Label



TIRE AND LOADING INFORMATION

SEATING CAPACITY: TOTAL 7 : FRONT 2 : SECOND 2 : THIRD 3

The combined weight of occupants and cargo should never exceed 612kg or 1349lbs.

TIRE	SIZE	COLD TIRE PRESSURE	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
FRONT	235/65R16 103T	230KPA, 33PSI	
REAR		240KPA, 35PSI	
SPARE	T135/80D17 103M	420KPA, 60PSI	

2010 Honda Odyssey LX
 NHTSA NO. CA5305
 FMVSS NO. 118

Figure 4: Tire Information Placard



Figure 5: Ignition Switch

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 6: Left Front Master Power Window Switch

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118

Figure 7: Right Front Power Window Switch



Figure 8: Left Rear Power Window Switch

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 9: Right Rear Power Window Switch

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 10: Exterior Locking System (Driver Door)

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 11: Exterior Locking System (Key)

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118

Figure 12: Overall Test Set-Up

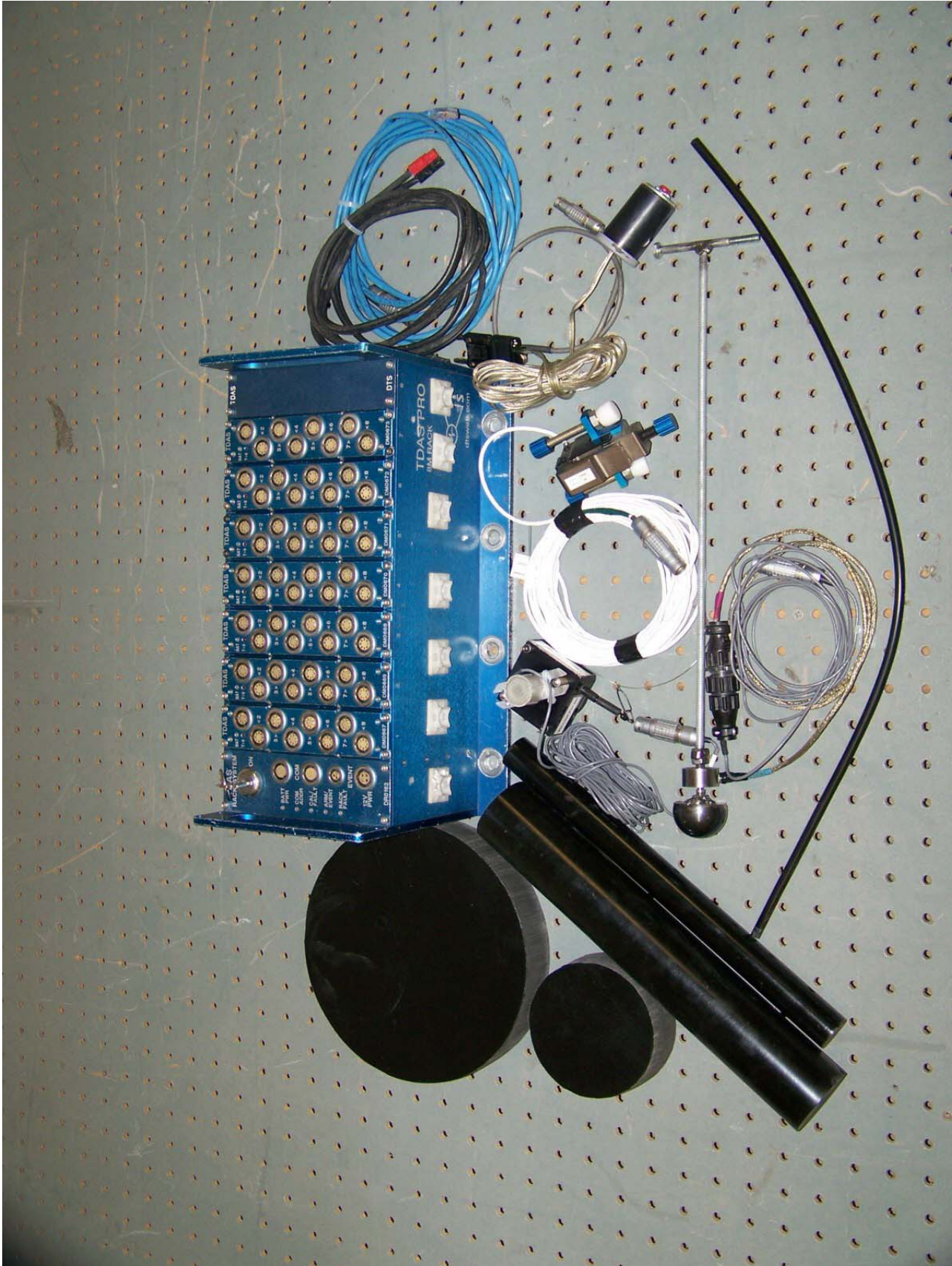


Figure 13: Instrumentation

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 14: Left Front Window

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 15: Left Front Window Test Set-Up Leading Edge

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 16: Left Front Window Test Set-Up Rear Edge

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 17: Sphere Test Master Control Panel

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 18: Sphere Test Right Front Window Switch

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 19: Sphere Test Left Rear Window Switch

2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118



Figure 20: Sphere Test Right Rear Window Switch

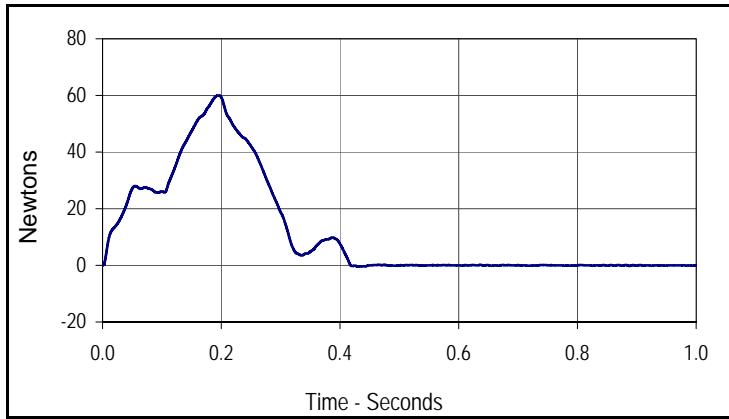
2010 Honda Odyssey LX
NHTSA NO. CA5305
FMVSS NO. 118

SECTION 5
DATA PLOTS

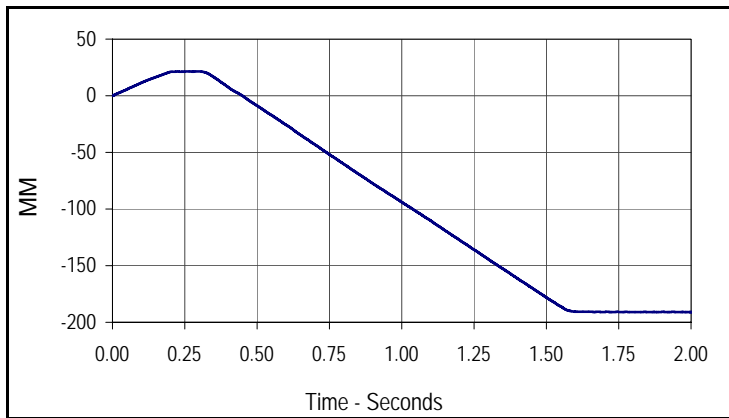
Plot		Page
1	Left Front Window: Window Force 5mm Leading Edge	37
2	Left Front Window: Window Travel 5mm Leading Edge	37
3	Left Front Window: Window Force 25mm Leading Edge	37
4	Left Front Window: Window Travel 25mm Leading Edge	37
5	Left Front Window: Window Force 50mm Leading Edge	38
6	Left Front Window: Window Travel 50mm Leading Edge	38
7	Left Front Window: Window Force 100mm Leading Edge	38
8	Left Front Window: Window Travel 100mm Leading Edge	38
9	Left Front Window: Window Force 200mm Leading Edge	39
10	Left Front Window: Window Travel 200mm Leading Edge	39
11	Left Front Window: Window Force 5mm Rear Edge	40
12	Left Front Window: Window Travel 5mm Rear Edge	40
13	Left Front Window: Window Force 25mm Rear Edge	40
14	Left Front Window: Window Travel 25mm Rear Edge	40
15	Left Front Window: Window Force 50mm Rear Edge	41
16	Left Front Window: Window Travel 50mm Rear Edge	41
17	Left Front Window: Window Force 100mm Rear Edge	41
18	Left Front Window: Window Travel 100mm Rear Edge	41
19	Left Front Window: Window Force 200mm Rear Edge	42
20	Left Front Window: Window Travel 200mm Rear Edge	42
21	Master Switch Test: Master Switch Left Front Window	43
22	Master Switch Test: Master Switch Right Front Window	43
23	Master Switch Test: Master Switch Left Rear Window	43
24	Master Switch Test: Master Switch Right Rear Window	43
25	Individual Switch Test: Individual Switch Right Front Window	44
26	Individual Switch Test: Individual Switch Left Rear Window	44
27	Individual Switch Test: Individual Switch Right Rear Window	44
	Test Equipment List and Calibration Information	45

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

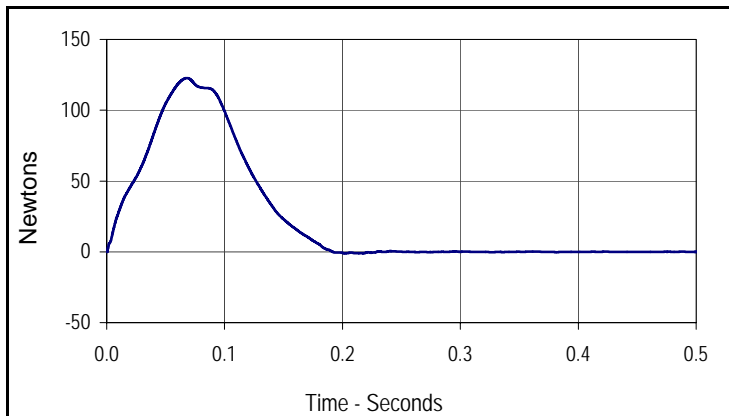
Test Date: 7/6/10
 NHTSA No.: CA5305



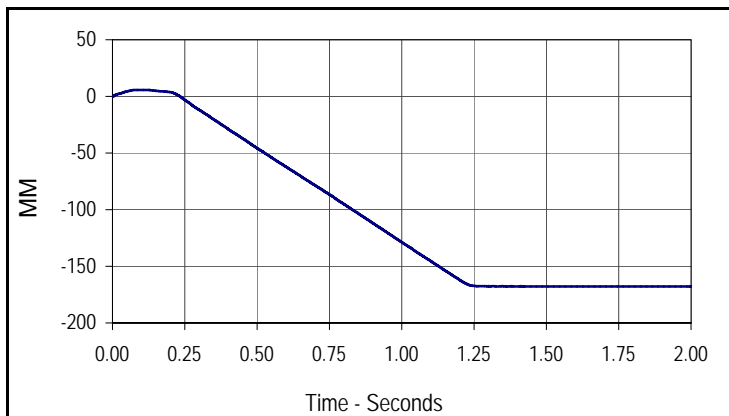
Curve Description			
Left Front Window			
Window Force 5MM Leading Edge			
CURNO	Type	SAE Class	Units
001	FIL	60	Newtons
Max	Time	Min	Time
60.0	0.2	-0.5	0.4



Curve Description			
Left Front Window			
Window Travel 5MM Leading Edge			
CURNO	Type	SAE Class	Units
002	FIL	60	MM
Max	Time	Min	Time
21.4	0.3	-190.9	2.4



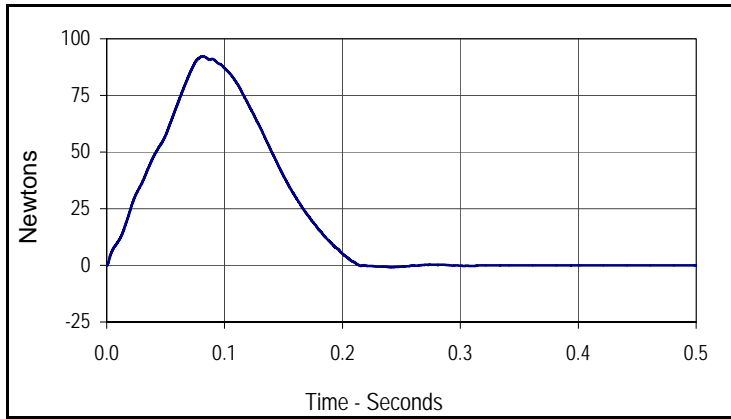
Curve Description			
Left Front Window			
Window Force 25MM Leading Edge			
CURNO	Type	SAE Class	Units
003	FIL	180	Newtons
Max	Time	Min	Time
122.7	0.1	-1.1	0.2



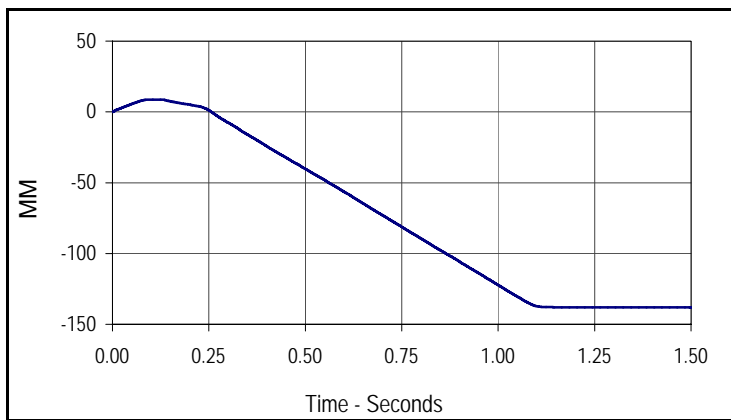
Curve Description			
Left Front Window			
Window Travel 25MM Leading Edge			
CURNO	Type	SAE Class	Units
004	FIL	60	MM
Max	Time	Min	Time
5.7	0.1	-167.8	3.0

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

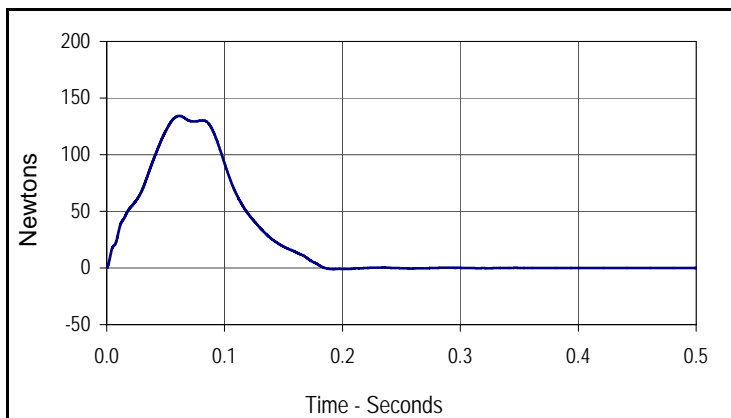
Test Date: 7/6/10
 NHTSA No.: CA5305



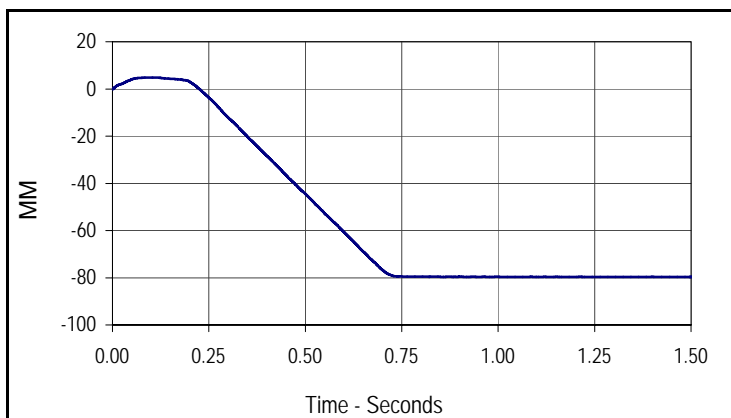
Curve Description			
Left Front Window			
Window Force 50MM Leading Edge			
CURNO	Type	SAE Class	Units
005	FIL	180	Newtons
Max	Time	Min	Time
92.3	0.1	-0.8	0.2



Curve Description			
Left Front Window			
Window Travel 50MM Leading Edge			
CURNO	Type	SAE Class	Units
006	FIL	60	MM
Max	Time	Min	Time
8.7	0.1	-138.1	2.3



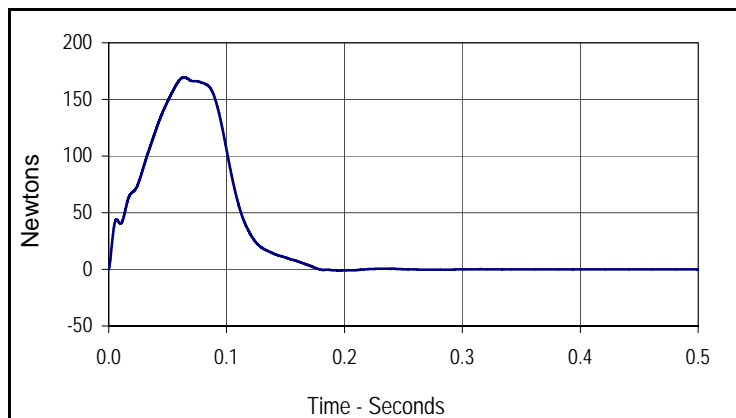
Curve Description			
Left Front Window			
Window Force 100MM Leading Edge			
CURNO	Type	SAE Class	Units
007	FIL	60	Newtons
Max	Time	Min	Time
134.3	0.1	-1.0	0.2



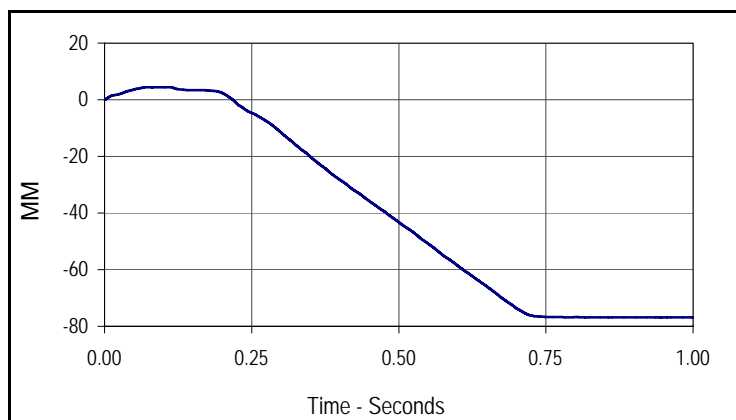
Curve Description			
Left Front Window			
Window Travel 100MM Leading Edge			
CURNO	Type	SAE Class	Units
008	FIL	180	MM
Max	Time	Min	Time
4.8	0.1	-79.7	2.7

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

Test Date: 7/6/10
 NHTSA No.: CA5305



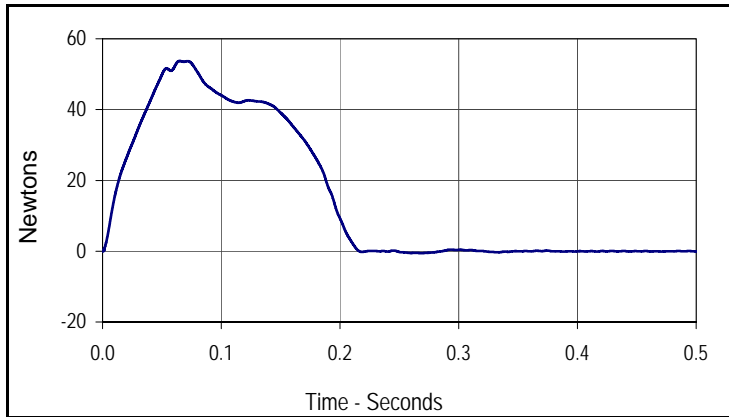
Curve Description			
Left Front Window			
Window Force 200MM Leading Edge			
CURNO	Type	SAE Class	Units
009	FIL	60	Newtons
Max	Time	Min	Time
169.6	0.1	-1.0	0.2



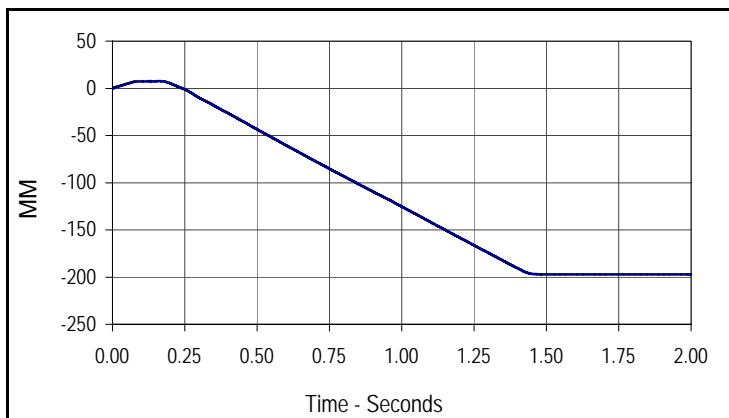
Curve Description			
Left Front Window			
Window Travel 200MM Leading Edge			
CURNO	Type	SAE Class	Units
010	FIL	60	MM
Max	Time	Min	Time
4.5	0.1	-76.9	1.9

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

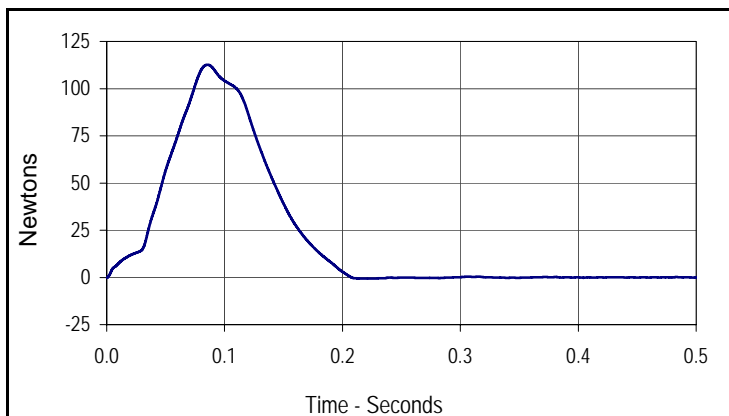
Test Date: 7/6/10
 NHTSA No.: CA5305



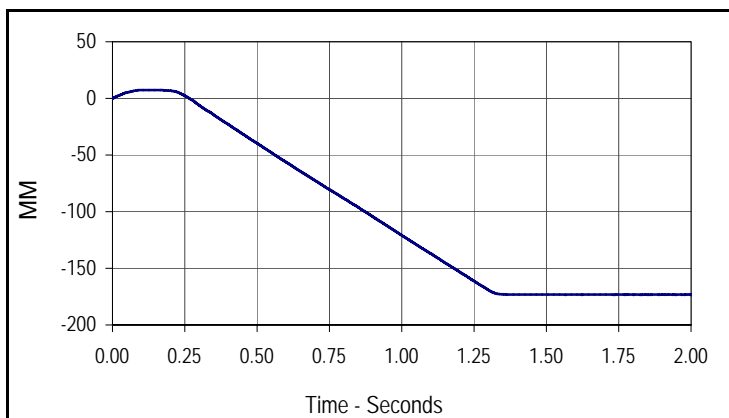
Curve Description			
Left Front Window			
Window Force 5MM Rear Edge			
CURNO	Type	SAE Class	Units
011	FIL	60	Newtons
Max	Time	Min	Time
53.7	0.1	-0.6	0.3



Curve Description			
Left Front Window			
Window Travel 5MM Rear Edge			
CURNO	Type	SAE Class	Units
012	FIL	60	MM
Max	Time	Min	Time
7.5	0.2	-197.2	3.0



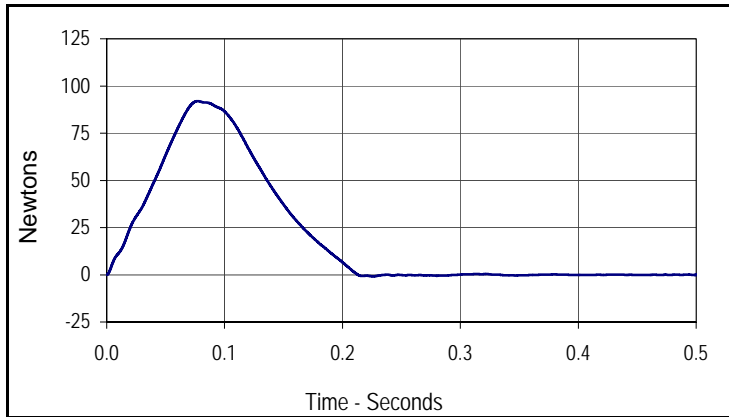
Curve Description			
Left Front Window			
Window Force 25MM Rear Edge			
CURNO	Type	SAE Class	Units
013	FIL	60	Newtons
Max	Time	Min	Time
112.6	0.1	-0.6	0.2



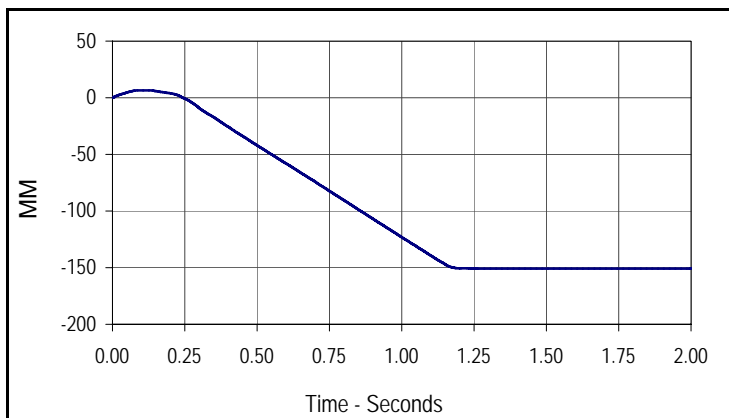
Curve Description			
Left Front Window			
Window Travel 25MM Rear Edge			
CURNO	Type	SAE Class	Units
014	FIL	60	MM
Max	Time	Min	Time
7.4	0.1	-173.4	2.6

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

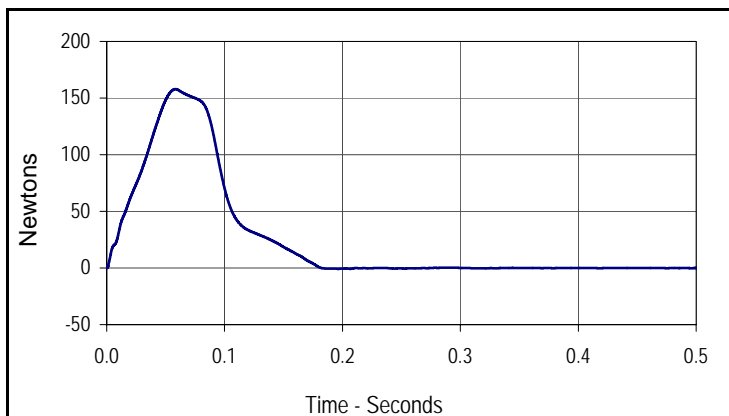
Test Date: 7/6/10
 NHTSA No.: CA5305



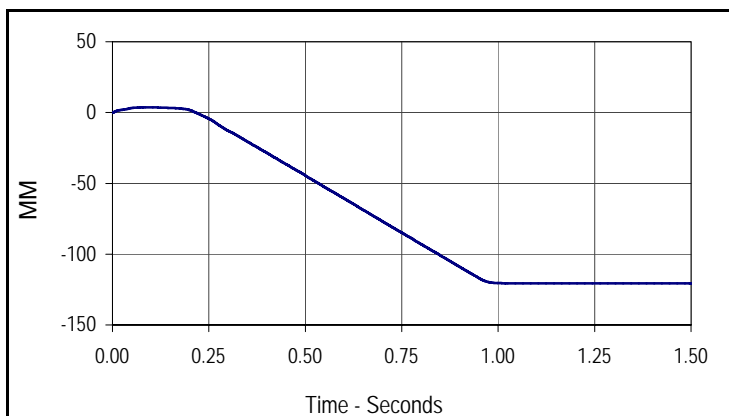
Curve Description			
Left Front Window			
Window Force 50MM Rear Edge			
CURNO	Type	SAE Class	Units
015	FIL	60	Newtons
Max	Time	Min	Time
92.0	0.1	-0.9	0.2



Curve Description			
Left Front Window			
Window Travel 50MM Rear Edge			
CURNO	Type	SAE Class	Units
016	FIL	60	MM
Max	Time	Min	Time
6.6	0.1	-150.9	3.0



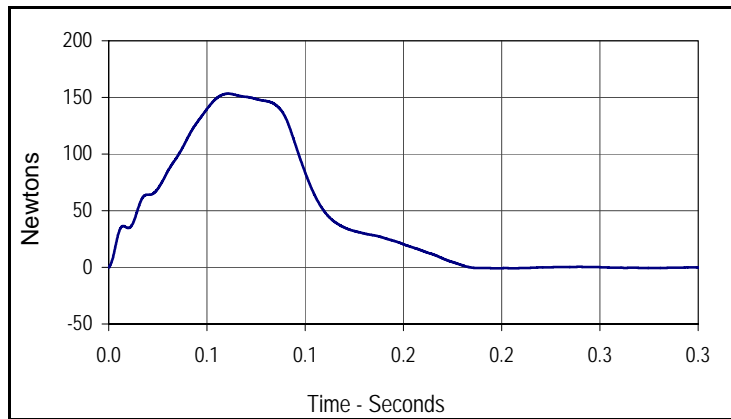
Curve Description			
Left Front Window			
Window Force 100MM Rear Edge			
CURNO	Type	SAE Class	Units
017	FIL	60	Newtons
Max	Time	Min	Time
157.9	0.1	-0.7	0.2



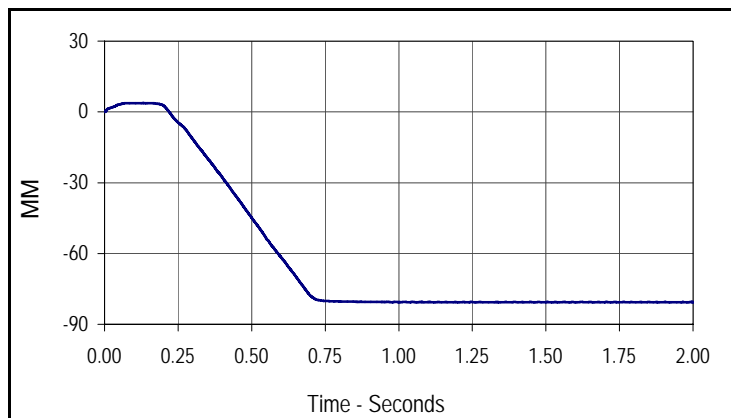
Curve Description			
Left Front Window			
Window Travel 100MM Rear Edge			
CURNO	Type	SAE Class	Units
018	FIL	60	MM
Max	Time	Min	Time
3.6	0.1	-120.7	2.6

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

Test Date: 7/6/10
 NHTSA No.: CA5305



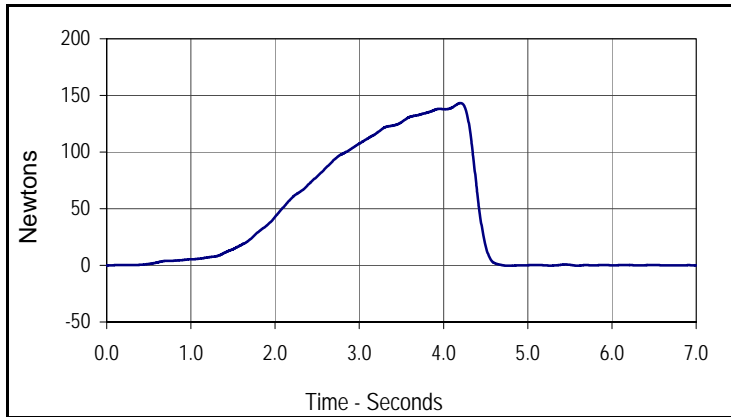
Curve Description			
Left Front Window			
Window Force 200MM Rear Edge			
CURNO	Type	SAE Class	Units
019	FIL	60	Newtons
Max	Time	Min	Time
153.3	0.1	-0.9	0.2



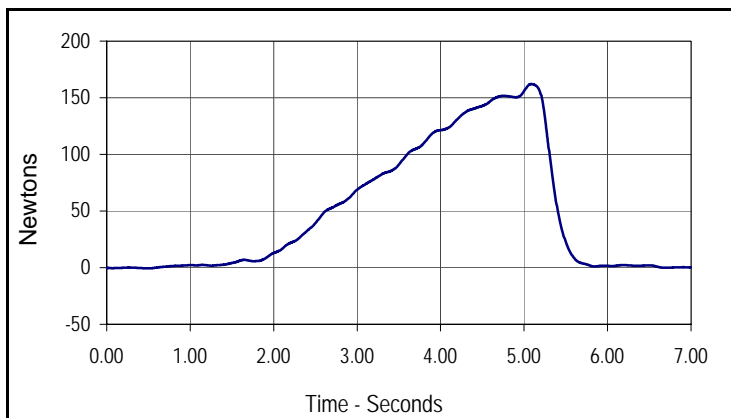
Curve Description			
Left Front Window			
Window Travel 200MM Rear Edge			
CURNO	Type	SAE Class	Units
020	FIL	60	MM
Max	Time	Min	Time
3.8	0.1	-80.7	1.9

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

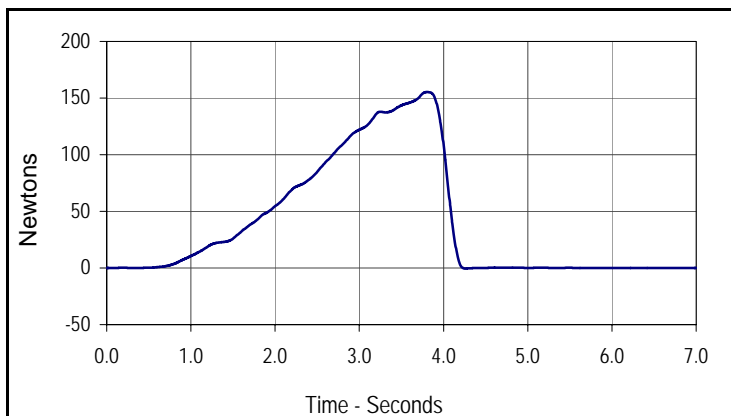
Test Date: 7/6/10
 NHTSA No.: CA5305



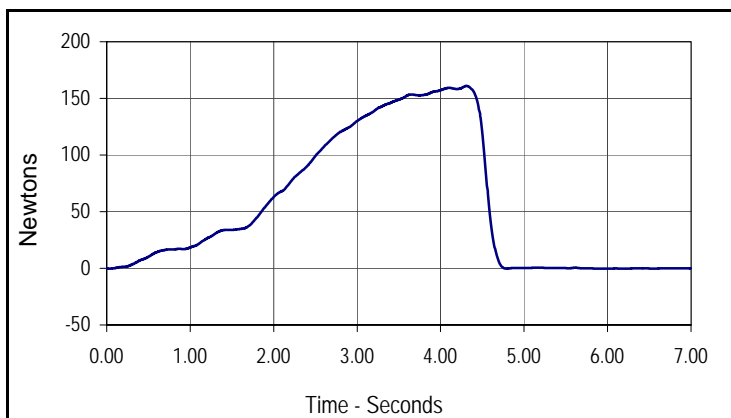
Curve Description			
Master Switch Test			
Master Switch Left Front Window			
CURNO	Type	SAE Class	Units
021	FIL	60	Newtons
Max	Time	Min	Time
143.2	4.2	-0.4	5.6



Curve Description			
Master Switch Test			
Master Switch Right Front Window			
CURNO	Type	SAE Class	Units
022	FIL	60	Newtons
Max	Time	Min	Time
162.1	5.1	-0.6	0.5



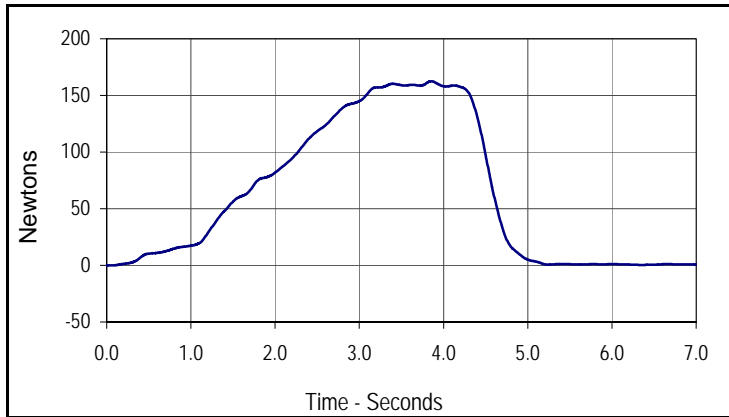
Curve Description			
Master Switch Test			
Master Switch Left Rear Window			
CURNO	Type	SAE Class	Units
023	FIL	60	Newtons
Max	Time	Min	Time
155.3	3.8	-0.5	4.3



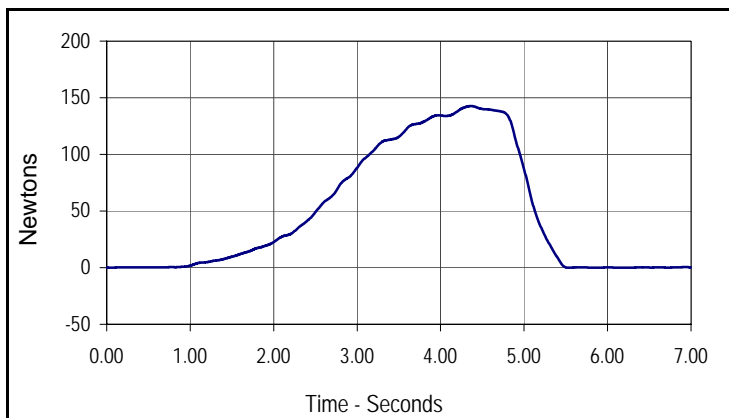
Curve Description			
Master Switch Test			
Master Switch Right Rear Window			
CURNO	Type	SAE Class	Units
024	FIL	60	Newtons
Max	Time	Min	Time
161.0	4.3	-0.4	5.9

Test Vehicle: 2010 Honda Odyssey LX 5-Dr MPV
 Test Program: FMVSS 118

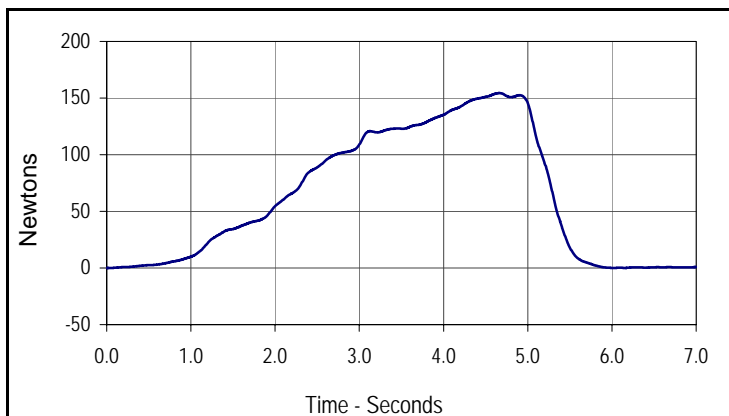
Test Date: 7/6/10
 NHTSA No.: CA5305



Curve Description			
Individual Switch Test			
Individual Switch Right Front Window			
CURNO	Type	SAE Class	Units
025	FIL	60	Newtons
Max	Time	Min	Time
162.5	3.9	0.0	0.1



Curve Description			
Individual Switch Test			
Individual Switch Left Rear Window			
CURNO	Type	SAE Class	Units
026	FIL	60	Newtons
Max	Time	Min	Time
142.6	4.4	-0.1	5.5



Curve Description			
Individual Switch Test			
Individual Switch Right Rear Window			
CURNO	Type	SAE Class	Units
027	FIL	60	Newtons
Max	Time	Min	Time
154.4	4.7	0.1	6.0

FMVSS 118
Test Equipment List and Calibration Information
07/06/10

2010 Honda Odyssey LX 5-Dr MPV

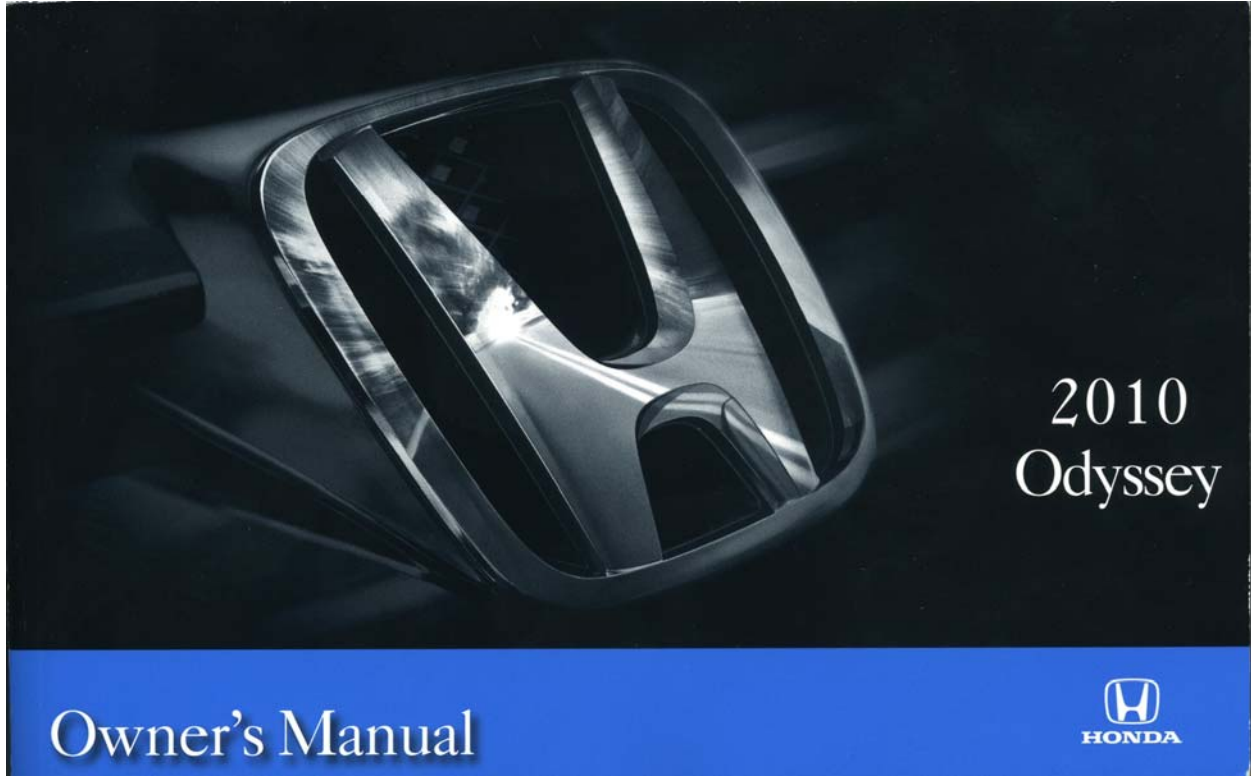
Description	Manufacturer	Model No.	Serial No.	Limit	Accuracy	Cal. Date	Due Cal.
DAS	DTS	TDAS Pro	DM0429	N/A	SAE J211	03/08/10	03/08/11
Laptop Computer	Toshiba	Satellite	LAP02	N/A	N/A	N/A	N/A
Load Cell	Denton	2409	85	445 Newtons	± 1.0%	03/22/10	03/22/11
Displacement Xdcr.	Celesco	PTX101-0030	J0654653	76 CM	± 1.0%	Each Use	
Load Cell	Lebow	261134	K118	300 Newtons	± 1.0%	05/25/10	05/25/11



SECTION 6
COPY OF OWNER'S MANUAL INSTRUCTION FOR USE OF POWER WINDOWS

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

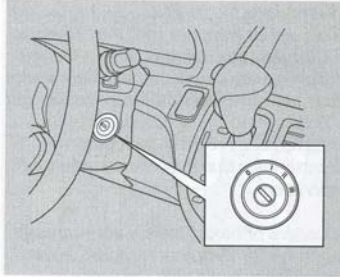
TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		



COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

Ignition Switch



The ignition switch has four positions: LOCK (0), ACCESSORY (I), ON (II), and START (III).

LOCK (0) – You can insert or remove the key only in this position. To turn the key to the LOCK (0) position, the shift lever must be in Park, and you must push the key in slightly.

If the front wheels are turned, the anti-theft lock may make it difficult to turn the key. Firmly turn the steering wheel to the left or right as you turn the key.

ACCESSORY (I) – You can operate the audio system and the accessory power sockets in this position.

ON (II) – This is the normal key position when driving. Several of the indicators on the instrument panel come on as a test when you turn the ignition switch from the ACCESSORY (I) to the ON (II) position.

START (III) – Use this position only to start the engine. The switch returns to the ON (II) position when you let go of the key.

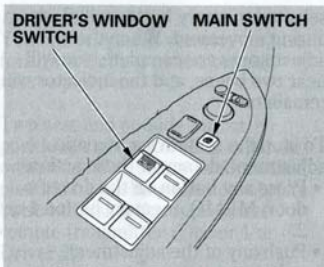
You will hear a reminder beeper if you leave the key in the ignition switch in the LOCK (0) or the ACCESSORY (I) position and open the driver's door. Remove the key to turn off the beeper.

On Touring models
You will also see a "REMOVE KEY" message on the multi-information display (see page 89).

The shift lever must be in Park before you can remove the key from the ignition switch.

144

Power Windows



Turn the ignition switch to the ON (II) position to raise or lower any window. To open the window, push the switch down to the first detent and hold it. Release the switch when you want the window to stop. Pull back on the switch and hold it to close the window.

The windows will operate for up to 10 minutes after you turn off the ignition switch. Opening either front door cancels this function.

WARNING

Closing a power window on someone's hands or fingers can cause serious injury.

Make sure your passengers are away from the windows before closing them.

AUTO – To open/close the driver's window, push the window switch firmly down or up to the second detent, and release it. The window will automatically go up or down all the way. To stop the window, pull/push on the window switch briefly.

If the MAIN switch is OFF, the passenger windows cannot be raised or lowered. Keep the MAIN switch off when you have children in the vehicle so they do not injure themselves by operating the windows unintentionally.

AUTO REVERSE – If the driver's window senses any obstacle while it is closing automatically, it will reverse direction, and then stop. To close the window, remove the obstacle, then use the window switch again.

Auto reverse stops sensing when the window is almost closed. You should always check that all passengers and objects are away from the window before closing it.

NOTE: The driver's window auto reverse function is disabled when you continuously pull up the switch.

186

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

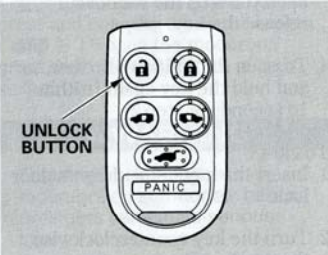
Power Windows

If your vehicle's battery is disconnected or goes dead, or the driver's window fuse is removed, the AUTO function may be disabled. If the AUTO function is disabled, the power window system will need to be reset after reconnecting the battery or installing the fuse.

1. Start the engine. Push down and hold the driver's window switch until the window is fully open.
2. Pull and hold the driver's window switch to close the window completely, then hold the switch for about 2 seconds.

If the power windows do not operate properly after resetting, have your vehicle checked by your dealer.

Opening the Windows with the Remote Transmitter



UNLOCK BUTTON

On EX, EX-L, Touring, and Canadian SE models
You can open all of the windows from the outside with the remote transmitter.

1. Press the UNLOCK button once to unlock the driver's door.

2. Press the UNLOCK button a second time, and hold it. The passenger's doors unlock, and all four windows start to open. To stop the windows, release the button.
3. To open the windows further, press the button again (within 10 seconds of step 1) and hold it. If the windows stop before the desired position, repeat steps 1 and 2.

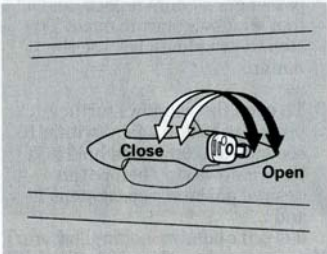
You cannot close the windows with the remote transmitter.

Instruments and Controls

187

Power Windows

Opening/Closing the Windows with the Key



On EX, EX-L, Touring, and Canadian SE models
You can open and close the windows with the key in the driver's door lock.

To open:

1. Insert the key in the driver's door lock.
2. Turn the key clockwise, then release it.

3. Turn the key clockwise again, and hold it. All four windows start to open. To stop the windows, release the key.
4. To open the windows further, turn and hold the key again (within 10 seconds of step 2).

To close:

1. Insert the key in the driver's door lock.
2. Turn the key counterclockwise, then release it.
3. Turn the key counterclockwise again, and hold it. All four windows start to close. To stop the windows, release the key.
4. To close the windows further, turn and hold the key again (within 10 seconds of step 2).

NOTE: If the windows stop before the desired position, repeat steps 2 and 3.

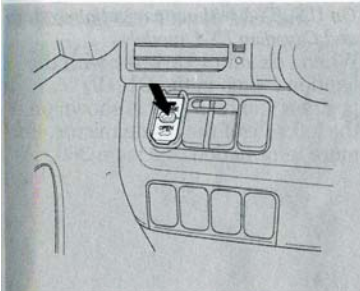
NOTE: The driver's window auto reverse function is disabled when you use the key to open or close the windows.

188

COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

TEST VEHICLE INFORMATION			
YEAR	2010	MAKE	HONDA
MODEL	Odyssey LX	BODY STYLE	5-Door MPV
NHTSA NO.	CA5305	VIN	5FNRL3H21AB039382
TEST DATE:	07/06/10		

Moonroof



On EX-L and Touring models
The moonroof can be tilted up in the back for ventilation, or it can be slid back into the roof. Use the switch under the left dashboard vent to operate the moonroof. You must turn the ignition switch to the ON (II) position for the moonroof to operate.

To tilt up the back of the moonroof, press and hold the center button (☰). To close the moonroof, press and hold the top of the switch (☶). To open the moonroof, press and hold the bottom of the switch (☷).

⚠ WARNING

Opening or closing the moonroof on someone's hands or fingers can cause serious injury.

Make sure all hands and fingers are clear of the moonroof before opening or closing it.

NOTICE

If you try to open the moonroof in below-freezing temperatures, or when it is covered with snow or ice, you can damage the moonroof panel or its motor.

The moonroof has a key-off delay. You can still open and close the moonroof for up to 10 minutes after you turn off the ignition. The key-off delay cancels as soon as you open either front door. You must then turn the ignition to the ON (II) position for the moonroof to operate.

189

Instruments and Controls