REPORT NO. 118-KAR-09-001

SAFETY COMPLIANCE TESTING FOR FMVSS 118

Power-Operated Window, Partition, And Roof Panel Systems

2009 FORD EDGE
5-DOOR MPV

NHTSA NO. C90203

PREPARED BY:
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June 08, 2009

Final Report

PREPARED FOR:
U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
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16. *Abstract* Compliance tests were conducted on the subject 2009 Ford Edge 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			
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1. PURPOSE OF COMPLIANCE TEST

Tests were conducted on a 2009 Ford Edge 5-Door MPV, manufactured by Ford Motor Company 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.

2. TEST PROCEDURE AND DATA SUMMARY

A 2009 Ford Edge 5-Door MPV was subjected to FMVSS 118 compliance testing. The tests were conducted at KARCO Engineering in Adelanto, California on June 08, 2009. 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

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

SWITCH ACTUATION

WINDOWS, PARTITIONS, ROOF PANEL SWITCHES	**INTERIOR KEY LOCKING SYSTEM**			EXTERIOR LOCKING SYSTEM (PASS / FAIL)
	IGNITION KEY OFF (PASS/FAIL)	IGNITION KEY REMOVED (PASS/FAIL)	IGNITION KEY REMOVED DOOR OPEN (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.

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 2009 Ford Edge 5-Door MPV appeared to meet the requirements of FMVSS 118.

3. TEST DATA

DATA SHEET NO. 1
VEHICLE IDENTIFICATION

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

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: **None**

Sunroof: **None**

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: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

DATA SHEET NO. 2
IGNITION KEY OFF TEST

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

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	X	NO	N/A

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: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

DATA SHEET NO. 3
IGNITION KEY REMOVED TEST

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

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: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

DATA SHEET NO. 4
EXTERIOR KEY LOCKING SYSTEM

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

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	N/A	N/A	N/A	N/A
RIGHT FRONT (RF)	N/A	N/A	N/A	N/A	N/A
LEFT REAR (LR)	N/A	N/A	N/A	N/A	N/A
RIGHT REAR (RR)	N/A	N/A	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: Vehicle is not equipped with an exterior key locking system capable of opening windows.

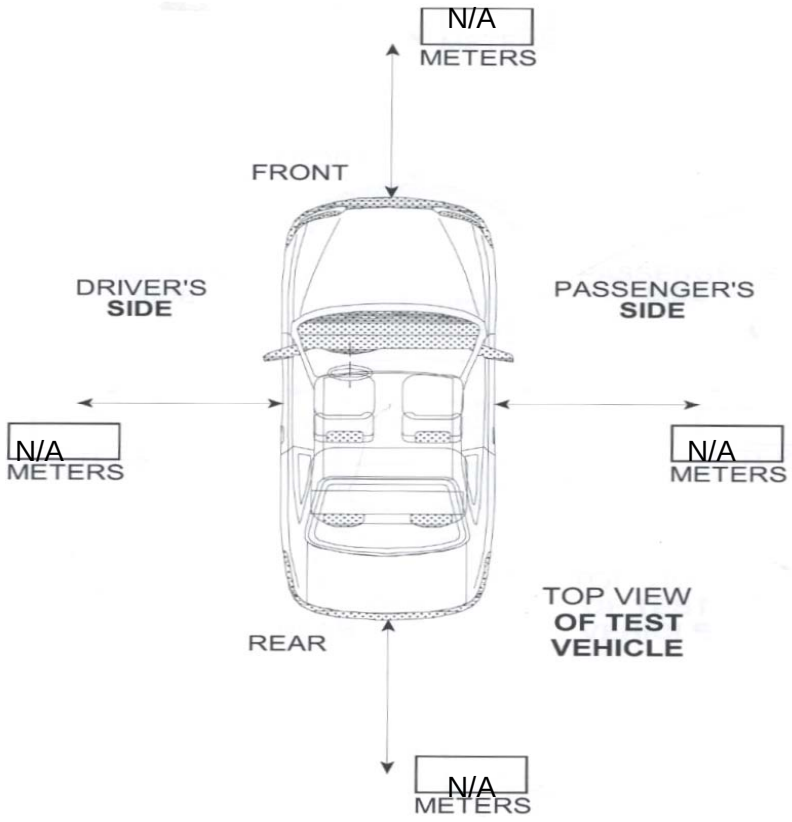
RECORDED BY: **MATTHEW S. HUBBARD** DATE: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

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

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

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 ( ).



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

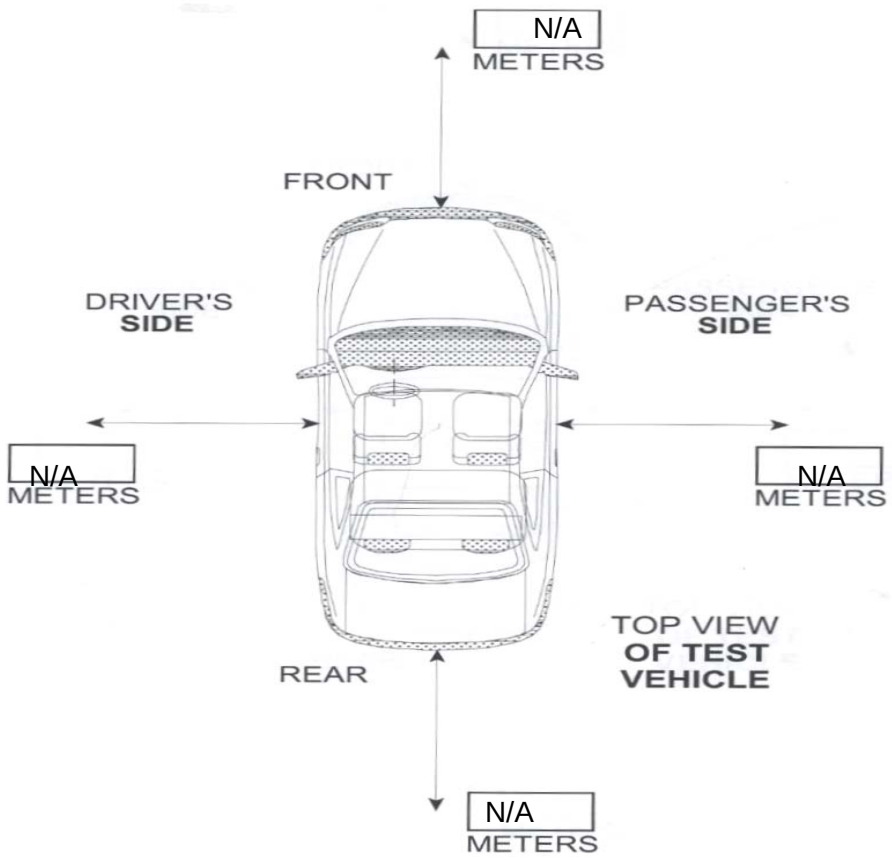
RECORDED BY: **MATTHEW S. HUBBARD** DATE: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

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

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

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 ( ).



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

RECORDED BY: **MATTHEW S. HUBBARD** DATE: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

DATA SHEET NO. 7
AUTO REVERSAL

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

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)	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

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.

RECORDED BY: **MATTHEW S. HUBBARD** DATE: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

DATA SHEET NO. 8
AUTO REVERSAL

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

Distance window is open from top seam to start position. 344

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	69.0	206.6
25mm semi rigid rod	95.5	183.1
50mm semi rigid rod	59.2	154.5
100mm semi rigid rod	60.3	124.5
200mm semi rigid rod	82.5	49.7

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	66.8	209.2
25mm semi rigid rod	50.1	186.4
50mm semi rigid rod	50.4	147.5
100mm semi rigid rod	74.5	136.7
200mm semi rigid rod	49.7	55.6

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.

RECORDED BY: **MATTHEW S. HUBBARD** DATE: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

DATA SHEET NO. 9
SPHERE TEST

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

SPHERE TEST CONDUCTED ON MASTER SWITCH CONTROL PANEL

WINDOW	FORCE APPLIED TO ACTIVATE SWITCH (NEWTONS)	SWITCH ACTIVATED (YES / NO)	PASS / FAIL
LEFT FRONT (LF)	142.9	NO	PASS
RIGHT FRONT (RF)	142.3	NO	PASS
LEFT REAR (LR)	146.4	NO	PASS
RIGHT REAR (RR)	144.0	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)	142.9	NO	PASS
RIGHT FRONT (RF)	141.0	NO	PASS
LEFT REAR (LR)	137.6	NO	PASS
RIGHT REAR (RR)	150.6	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: **06/08/09**

APPROVED BY: **MICHAEL L. DUNLAP** DATE: **06/08/09**

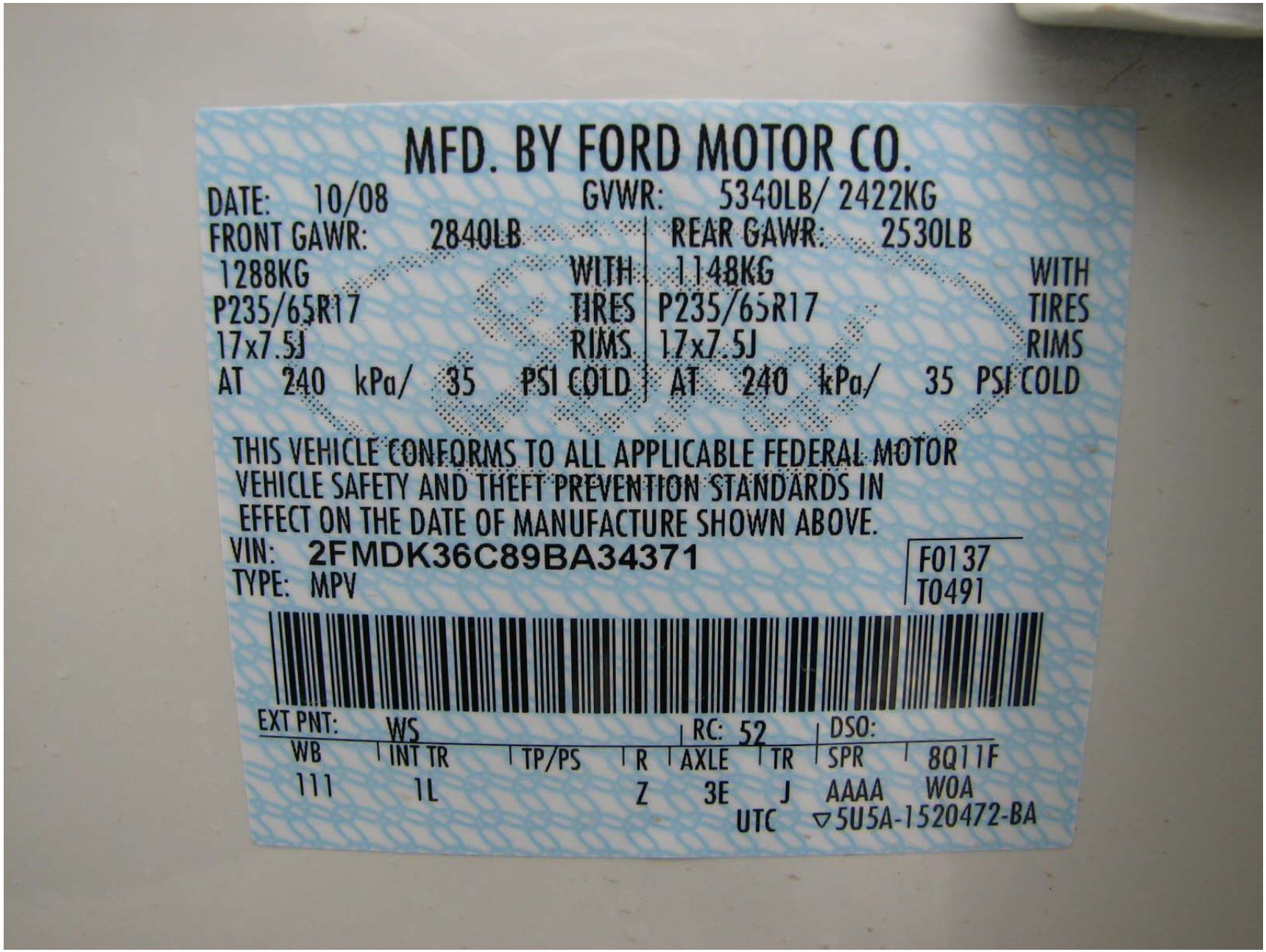
4. PHOTOGRAPHS

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 1: Frontal ¾ View From Right Side of Vehicle

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 2: Rear ¾ View From Left Side of Vehicle



2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 3: Vehicle Certification Label

Figure 4: Tire Information Placard

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 5: Ignition Switch

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 6: Left Front Master Power Window Switch

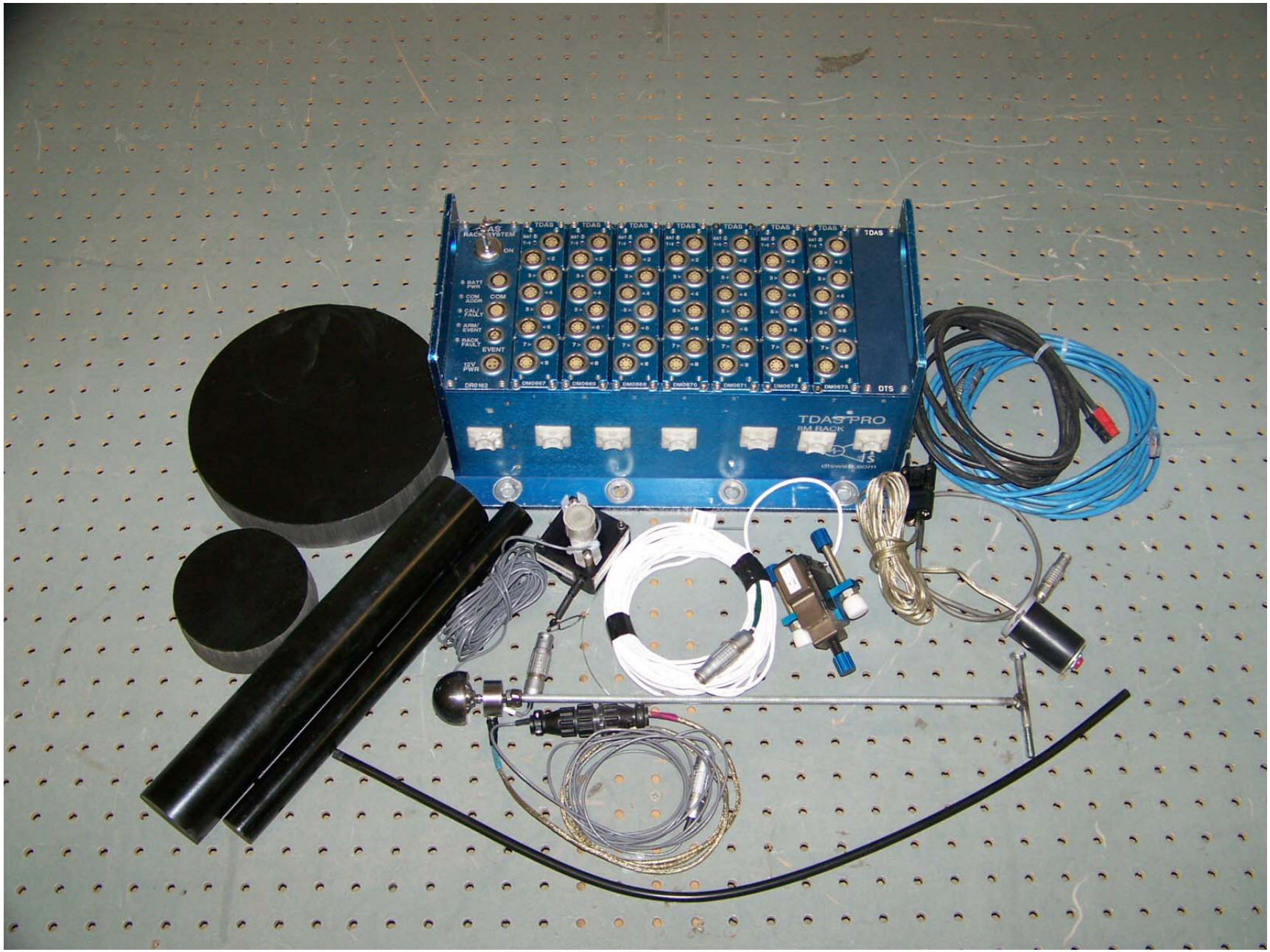
Figure 7: Right Front Power Window Switch

Figure 8: Left Rear Power Window Switch

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 9: Right Rear Power Window Switch

Figure 10: Overall Test Set-Up



2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 11: Instrumentation

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 12: Left Front Window

Figure 13: Test Set-Up Left Front Window

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 14: Test Set-Up Left Front Window

Figure 15: Sphere Test Master Control Panel

2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 16: Sphere Test Right Front Window

Figure 17: Sphere Test Left Rear Window

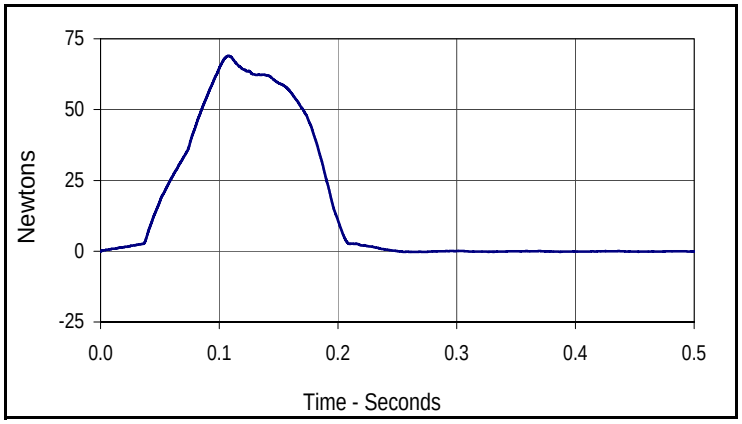
2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

Figure 18: Sphere Test Right Rear Window

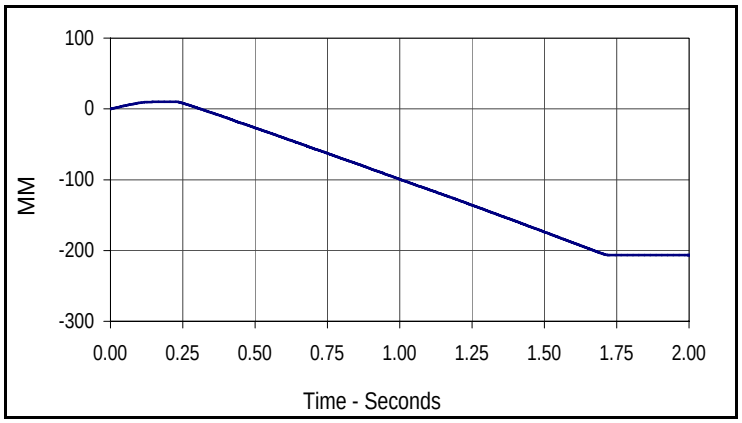
2009 FORD EDGE
NHTSA NO. C90203
FMVSS NO. 118

5. DATA PLOTS

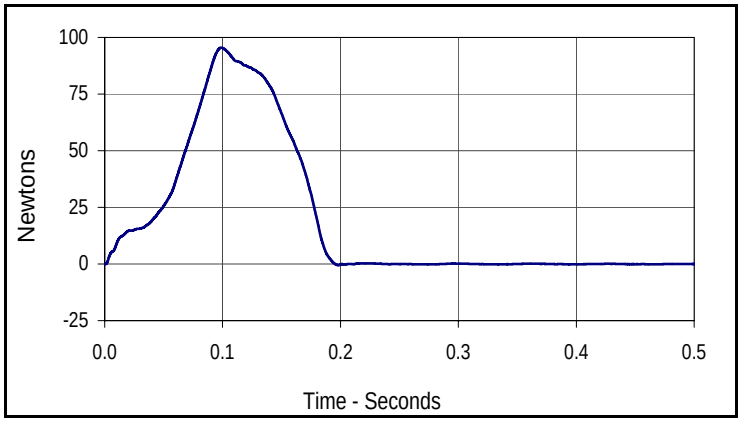
Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Left Front Window)	NHTSA No.:	C90203



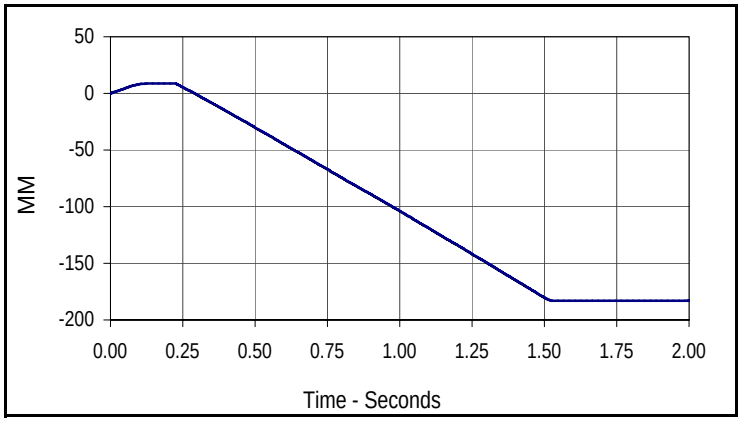
Curve Description			
Window Force 5MM Leading Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
69.0	0.1	-0.7	1.2



Curve Description			
Window Travel 5MM Leading Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
10.1	0.2	-206.6	2.1

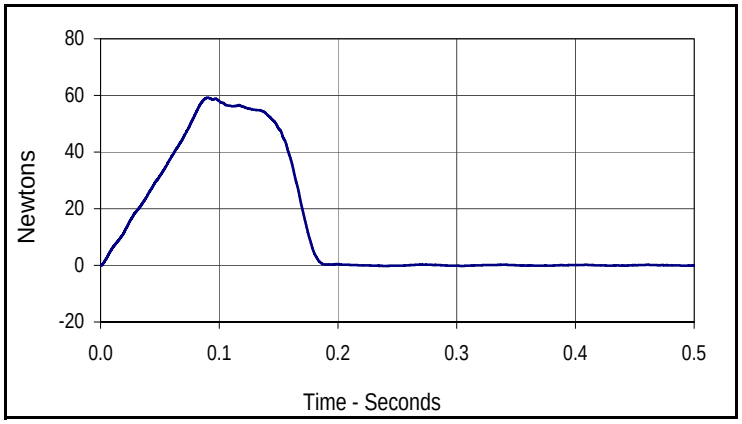


Curve Description			
Window Force 25MM Leading Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
95.5	0.1	-0.5	0.2

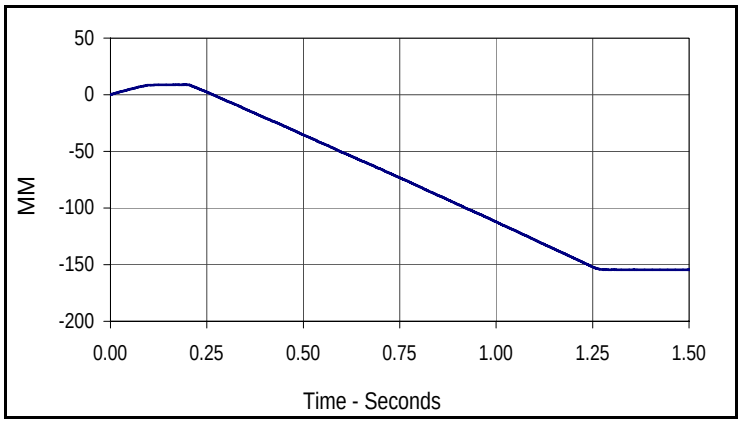


Curve Description			
Window Travel 25MM Leading Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
8.9	0.2	-183.1	2.8

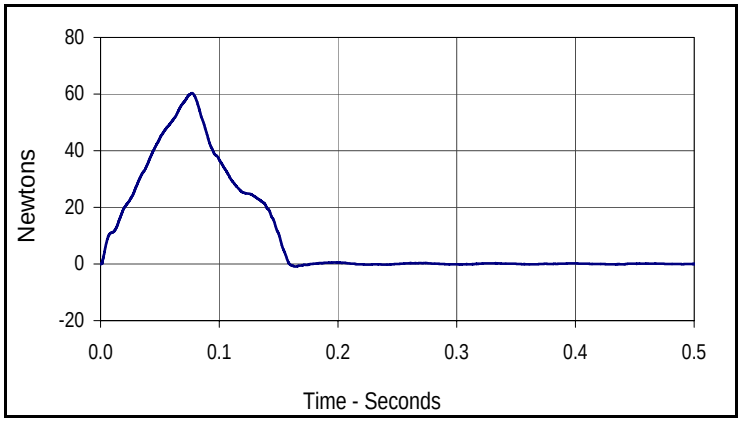
Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Left Front Window)	NHTSA No.:	C90203



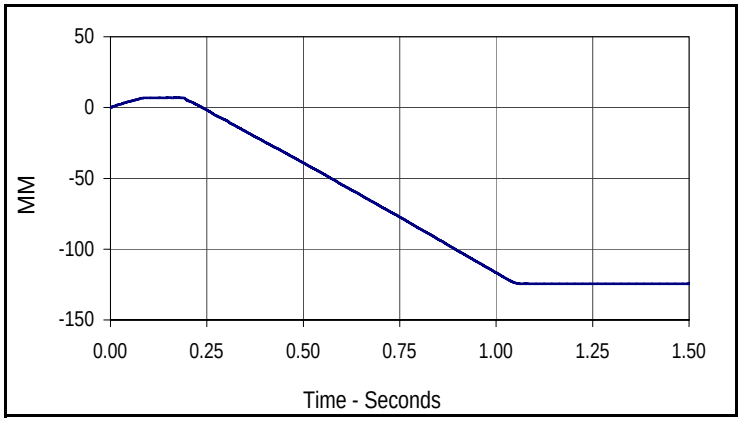
Curve Description			
Window Force 50MM Leading Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
59.2	0.1	-0.2	0.2



Curve Description			
Window Travel 50MM Leading Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
9.0	0.2	-154.5	2.5

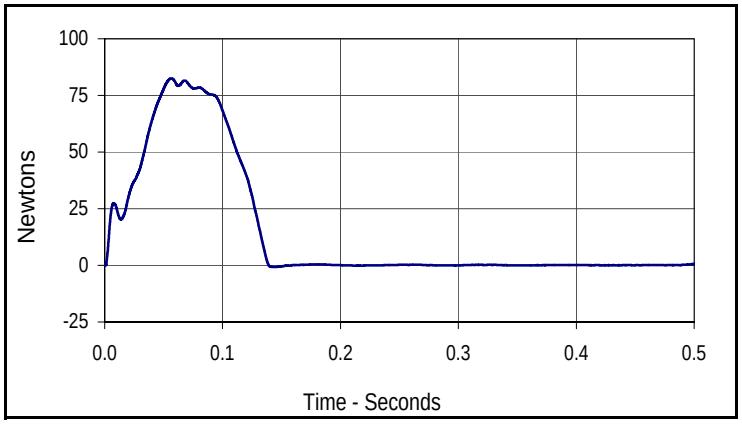


Curve Description			
Window Force 100MM Leading Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
60.3	0.1	-0.9	0.2

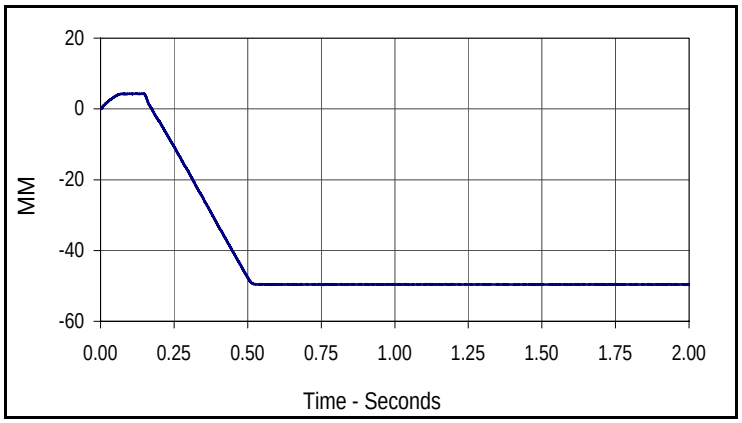


Curve Description			
Window Travel 100MM Leading Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
7.0	0.1	-124.5	1.9

Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Left Front Window)	NHTSA No.:	C90203

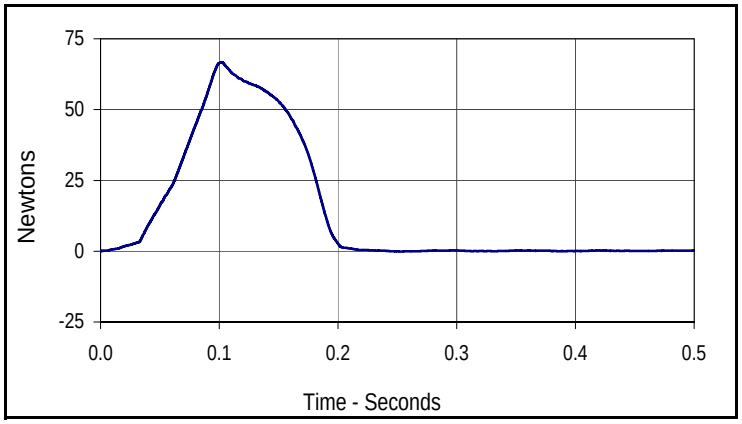


Curve Description			
Window Force 200MM Leading Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
82.5	0.1	-0.7	0.1

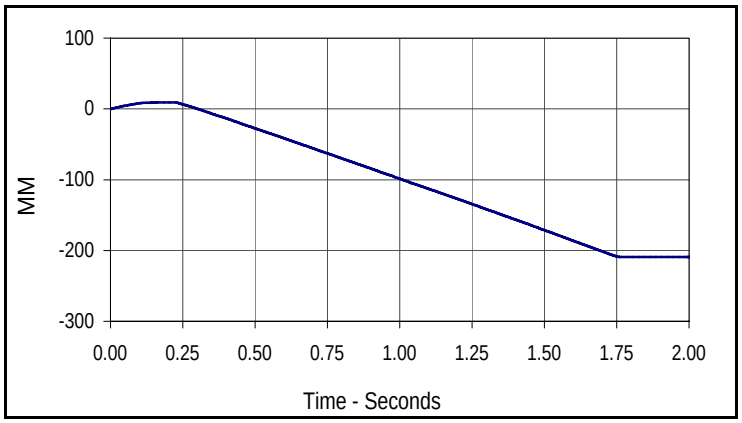


Curve Description			
Window Travel 200MM Leading Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
4.3	0.1	-49.7	1.0

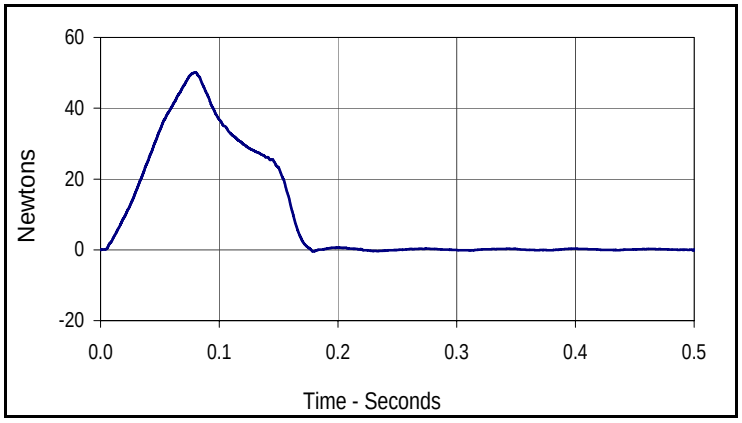
Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Left Front Window)	NHTSA No.:	C90203



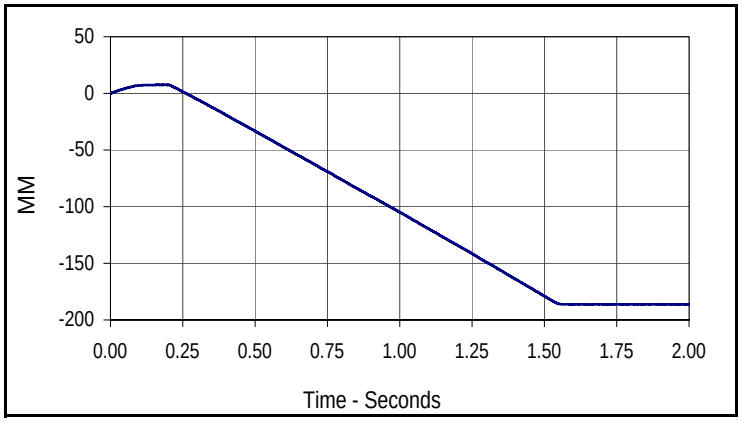
Curve Description			
Window Force 5MM Rear Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
66.8	0.1	-0.2	0.3



Curve Description			
Window Travel 5MM Rear Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
9.2	0.2	-209.2	1.9

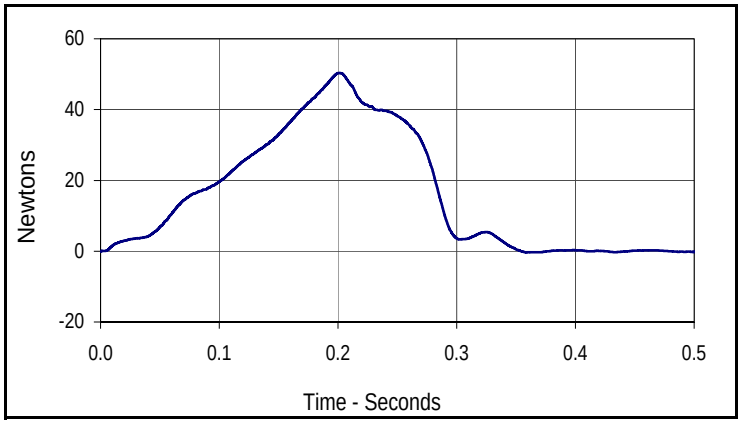


Curve Description			
Window Force 25MM Rear Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
50.1	0.1	-0.5	0.2

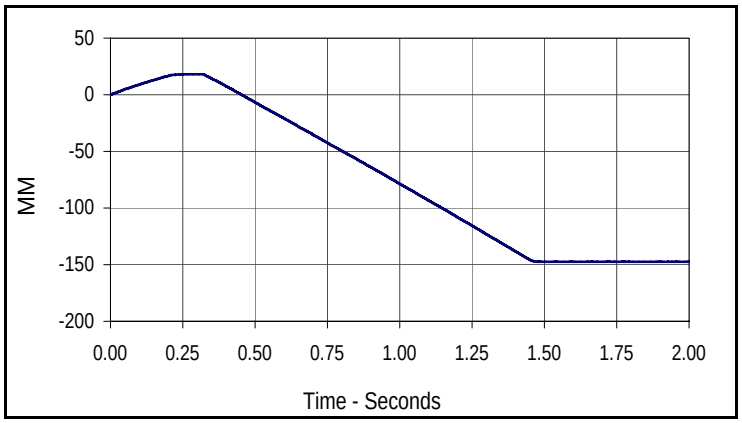


Curve Description			
Window Travel 25MM Rear Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
7.5	0.2	-186.4	1.7

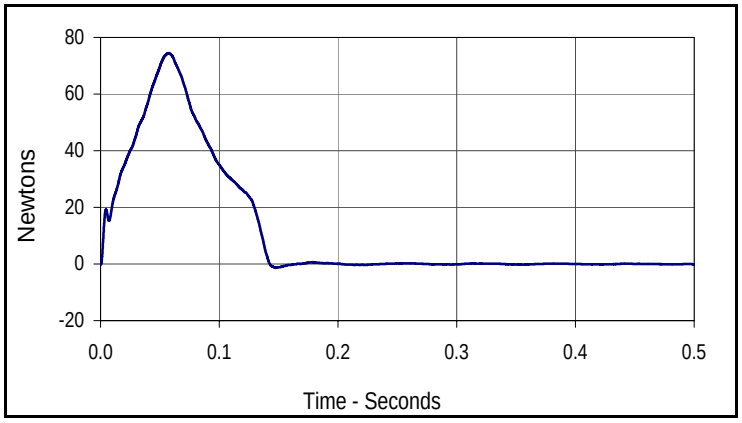
Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Left Front Window)	NHTSA No.:	C90203



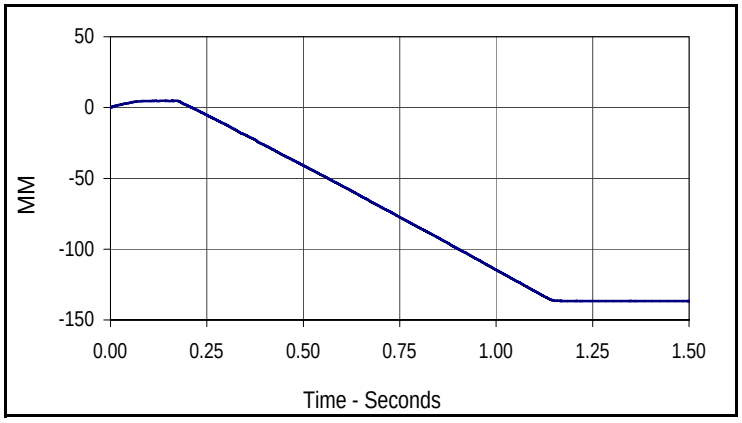
Curve Description			
Window Force 50MM Rear Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
50.4	0.2	-0.3	0.4



Curve Description			
Window Travel 50MM Rear Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
18.2	0.3	-147.5	2.2

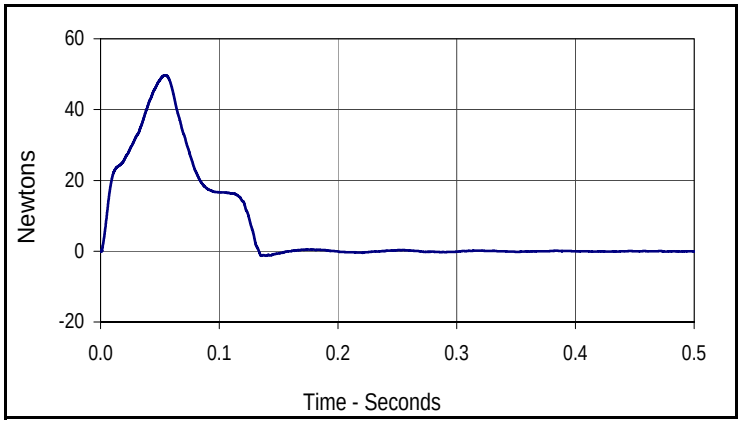


Curve Description			
Window Force 100MM Rear Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
74.5	0.1	-1.3	0.1

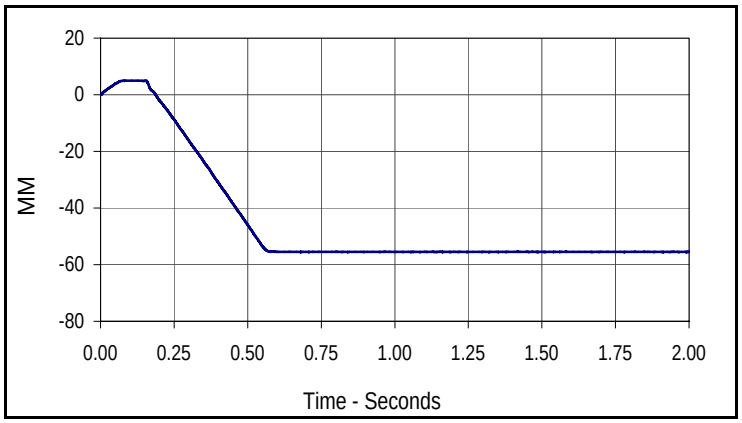


Curve Description			
Window Travel 100MM Rear Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
4.8	0.2	-136.7	1.3

Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Left Front Window)	NHTSA No.:	C90203

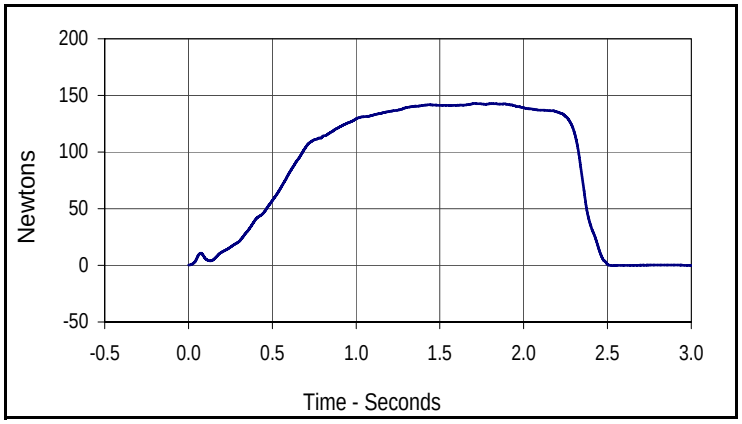


Curve Description			
Window Force 200MM Rear Edge			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
49.7	0.1	-1.3	0.1

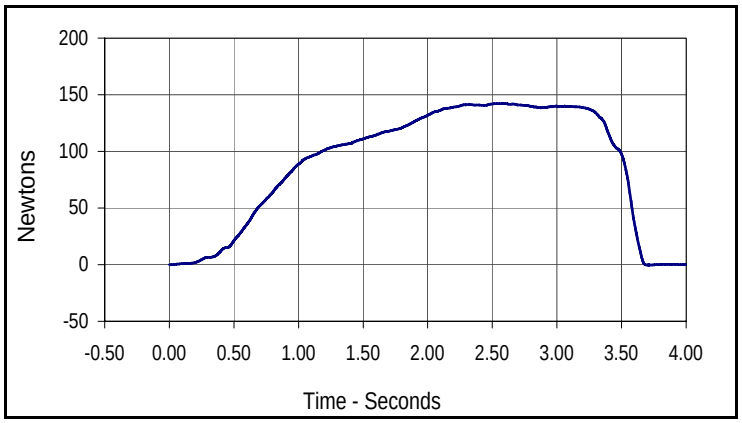


Curve Description			
Window Travel 200MM Rear Edge			
CURNO	Type	SAE Class	Units
002	FIL	180	MM
Max	Time	Min	Time
5.0	0.1	-55.6	1.0

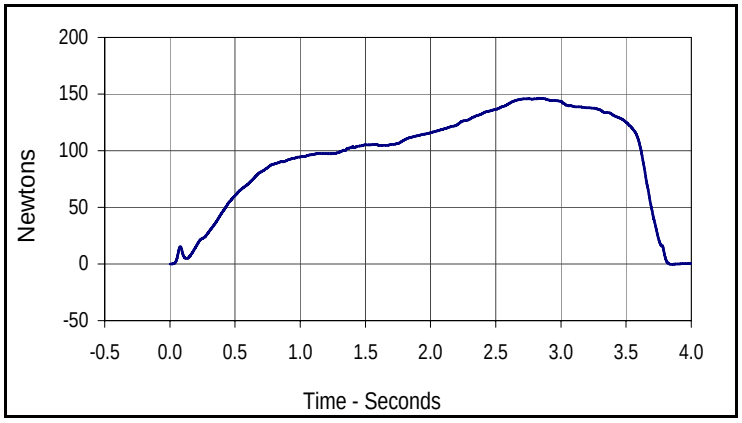
Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Master Switch Test)	NHTSA No.:	C90203



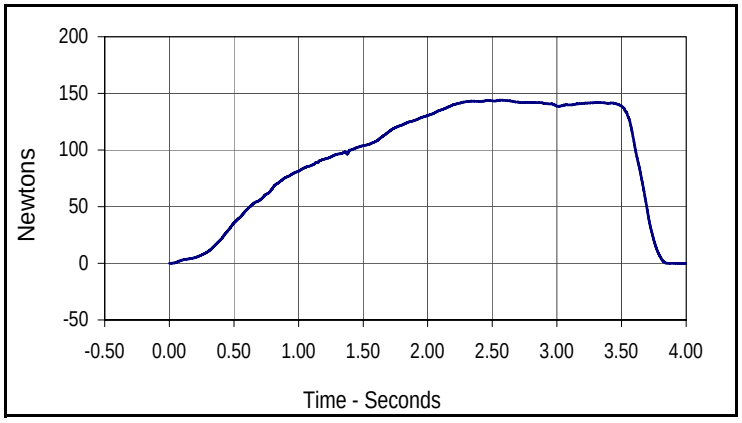
Curve Description			
Master Left Front Window Switch			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
142.9	1.7	-0.2	2.5



Curve Description			
Master Right Front Window Switch			
CURNO	Type	SAE Class	Units
002	FIL	180	Newtons
Max	Time	Min	Time
142.3	2.6	-0.7	3.7

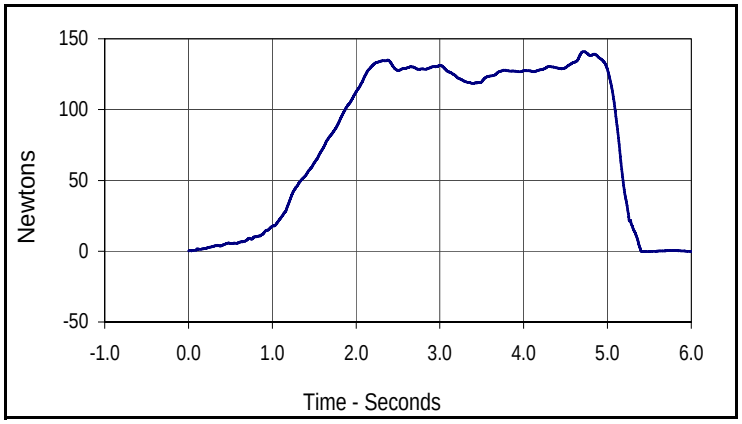


Curve Description			
Master Left Rear Window Switch			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
146.4	2.8	-0.3	3.8

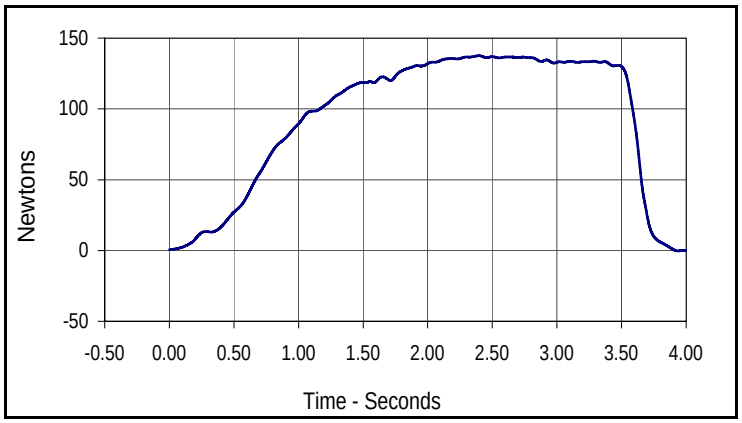


Curve Description			
Master Right Rear Window Switch			
CURNO	Type	SAE Class	Units
002	FIL	180	Newtons
Max	Time	Min	Time
144.0	2.6	-0.2	4.0

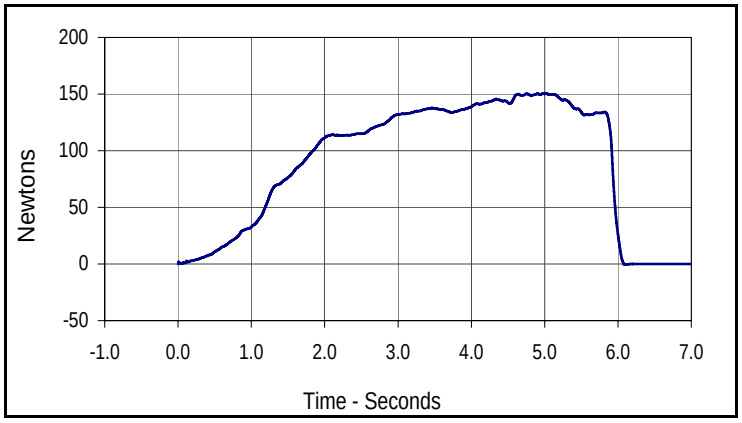
Test Vehicle:	2009 Ford Edge 5-Door MPV	Test Date:	6/8/09
Test Program:	FMVSS 118 (Switch Test)	NHTSA No.:	C90203



Curve Description			
Right Front Window Switch			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
141.0	4.7	-0.3	5.4



Curve Description			
Left Rear Window Switch			
CURNO	Type	SAE Class	Units
002	FIL	180	Newtons
Max	Time	Min	Time
137.6	2.4	-0.3	3.9



Curve Description			
Right Rear Window Switch			
CURNO	Type	SAE Class	Units
001	FIL	180	Newtons
Max	Time	Min	Time
150.6	5.0	-0.5	6.1

FMVSS 118

Test Equipment List and Calibration Information

06/08/09

2009 Ford Edge 5-Door MPV

Description	Manufacturer	Model No.	Serial No.	Limit	Accuracy	Cal. Date	Due Cal.
DAS	DTS	TDAS Pro	DM0429	N/A	SAE J211	03/02/09	03/02/10
Laptop Computer	Toshiba	Satellite	LAP02	N/A	N/A	N/A	N/A
Load Cell	Denton	2409	85	445 Newtons	± 1.0%	03/19/09	03/19/10
Displacement Xdcr.	Celesco	PTX101-0030	J0654653	76 CM	± 1.0%	Each Use	
Load Cell	Lebow	261134	K118	300 Newtons	± 1.0%	04/26/09	04/26/10

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

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

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

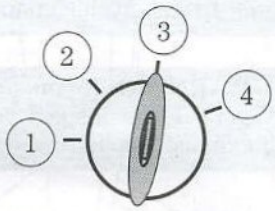
COPY OF OWNER'S MANUAL INSTRUCTIONS FOR USE OF POWER WINDOWS

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

STARTING

Positions of the ignition

1. Off— locks the automatic transmission gearshift lever and allows key removal. This position also shuts the engine and all electrical accessories off without locking the steering wheel. To lock the steering wheel, remove the key then turn the steering wheel.



2. Accessory— allows the electrical accessories such as the radio to operate while the engine is not running. This position also unlocks the steering wheel.

3. On— all electrical circuits operational. Warning lights illuminated. Key position when driving.

4. Start— cranks the engine. Release the key as soon as the engine starts.

Preparing to start your vehicle

Engine starting is controlled by the powertrain control system.

This system meets all Canadian Interference-Causing Equipment standard requirements regulating the impulse electrical field strength of radio noise.

When starting a fuel-injected engine, avoid pressing the accelerator before or during starting. Only use the accelerator when you have difficulty starting the engine. For more information on starting the vehicle, refer to *Starting the engine* in this chapter.

WARNING: Extended idling at high engine speeds can produce very high temperatures in the engine and exhaust system, creating the risk of fire or other damage.

WARNING: Do not park, idle, or drive your vehicle in dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, which can start a fire.

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

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

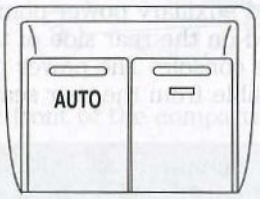
POWER WINDOWS

WARNING: Do not leave children unattended in the vehicle and do not let children play with the power windows. They may seriously injure themselves.

WARNING: When closing the power windows, you should verify they are free of obstructions and ensure that children and/or pets are not in the proximity of the window openings.

Press and pull the window switches to open and close windows.

- Push down (to the first detent) and hold the switch to open.
- Pull up (to the first detent) and hold the switch to close.



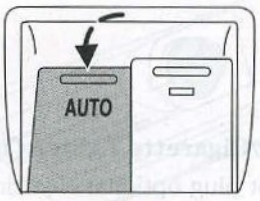
Rear Window Buffeting: When one or both of the rear windows are open, the vehicle may demonstrate a wind throb or buffeting noise. This noise can be alleviated by lowering a front window approximately 2–3 inches (5–8 cm).

One touch up or down (Driver's window only)

This feature allows the driver's window to open or close fully without holding the control down.

To operate ONE TOUCH DOWN:

- Press the switch completely down to the second detent and release quickly. The window will open fully. Momentarily press the switch to any position to stop the window operation.



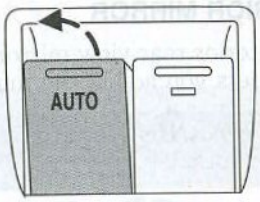
If the switch is pressed and held to the normal close or ONE TOUCH UP position during a ONE TOUCH DOWN event, the window will stop. If, after 1/2 second the switch is still held, the window will perform a normal close or ONE TOUCH UP.

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

VEHICLE			
YEAR	**2009**	MAKE	**Ford**
MODEL	**Edge**	BODY STYLE	**5-Door MPV**
NHTSA NO.	**C90203**	VIN	**2FMDK36C89BA34371**
TEST DATE:	**06/08/09**		

To operate ONE TOUCH UP:

- Pull the switch completely up to the second detent and release quickly. The window will close fully. Momentarily press the switch to any position to stop the window operation.



If the switch is pressed and held to the normal open or ONE TOUCH DOWN position during a ONE TOUCH UP event, the window will stop. If, after 1/2 second the switch is still held, the window will perform a normal open or ONE TOUCH DOWN.

Bounce-Back

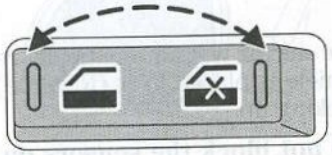
When the window is moving upward and an obstacle or a rough road condition interferes with the window's movement, the window will automatically reverse direction and move down. This is known as "bounce-back". If the ignition is turned off (without accessory delay being active) during bounce-back, the window will move down until the bounce-back position is reached.

Security Override

To override a bounce-back condition, within two seconds after the window reaches the bounce-back position, pull and hold the switch up and **the window will travel up with no bounce-back or pinch protection.** If the switch is released before the window is fully closed, the window will stop. For example, this can be used to overcome the resistance of ice on the window or seals.

Window lock

The window lock feature allows only the driver to operate the power windows.



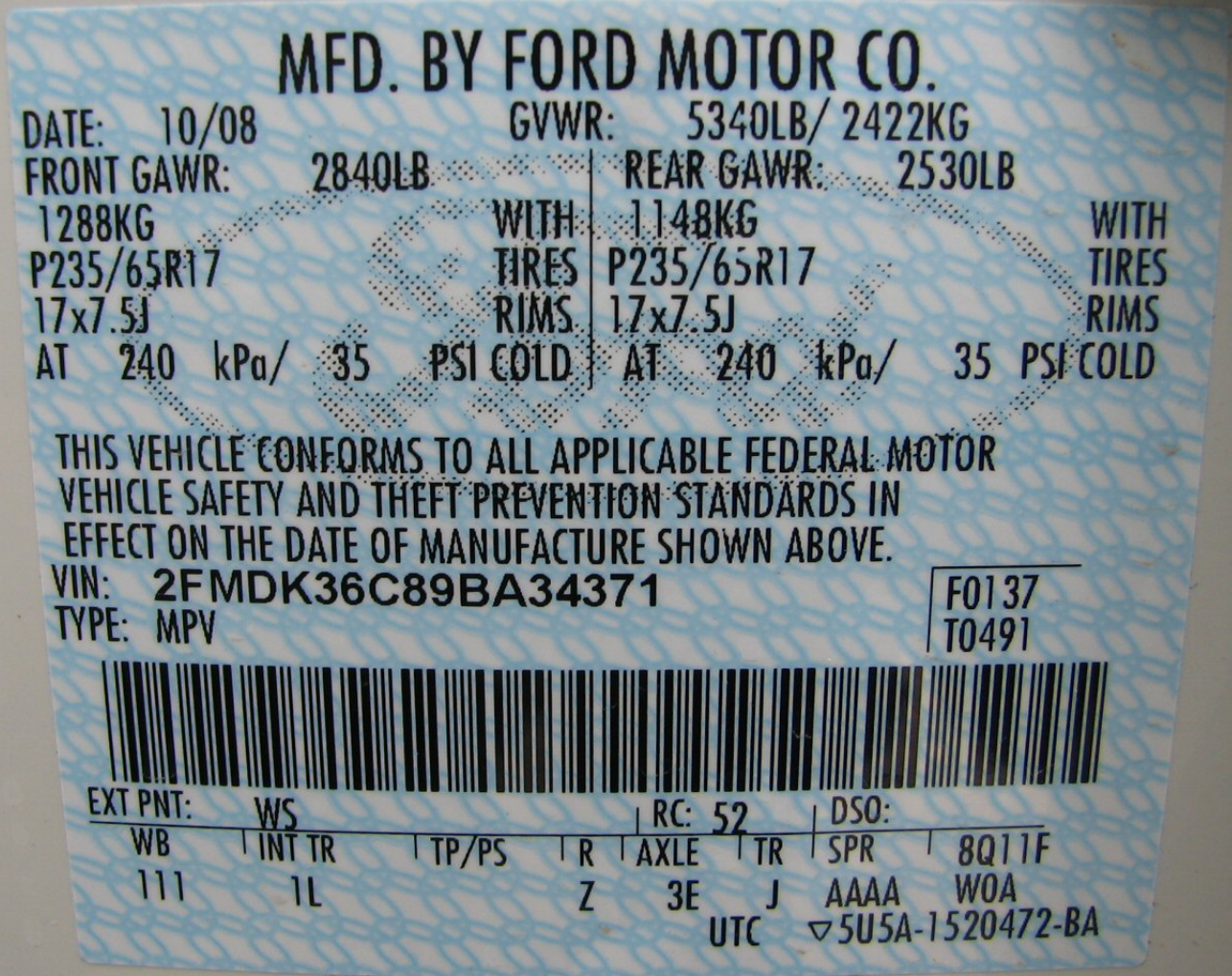
To lock out all the window controls (except for the driver's) press the right side of the control. Press the left side to restore the window controls.

Accessory delay

With accessory delay, the audio system, power windows and moon roof (if equipped) operate for up to 10 minutes after the ignition switch is turned from the on to the off position or until either front door is opened.


Ford


Ford
EDGE



MFD. BY FORD MOTOR CO.

DATE: 10/08 GVWR: 5340LB/ 2422KG

FRONT GAWR: 2840LB		REAR GAWR: 2530LB	
1288KG	WITH	1148KG	WITH
P235/65R17	TIRES	P235/65R17	TIRES
17x7.5J	RIMS	17x7.5J	RIMS
AT 240 kPa/ 35 PSI COLD		AT 240 kPa/ 35 PSI COLD	

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

VIN: 2FMDK36C89BA34371

TYPE: MPV

F0137
T0491

EXT PNT: WS RC: 52 DSO:

WB	INT TR	TP/PS	R	AXLE	TR	SPR	8Q11F
111	1L		Z	3E	J	AAAA	W0A

UTC ▽5U5A-1520472-BA

TIRE AND LOADING INFORMATION

SEATING CAPACITY	TOTAL : 5	FRONT: 2	REAR: 3

The combined weight of occupants and cargo should never exceed : 412 kg or 909 lbs.

TIRE	SIZE	COLD TIRE PRESSURE
FRONT	P235/65R17	240 KPA, 35 PSI
REAR	P235/65R17	240 KPA, 35 PSI
SPARE	T165/80D17	415 KPA, 60 PSI

SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION

▽5U5A-1532-AA (TLU)

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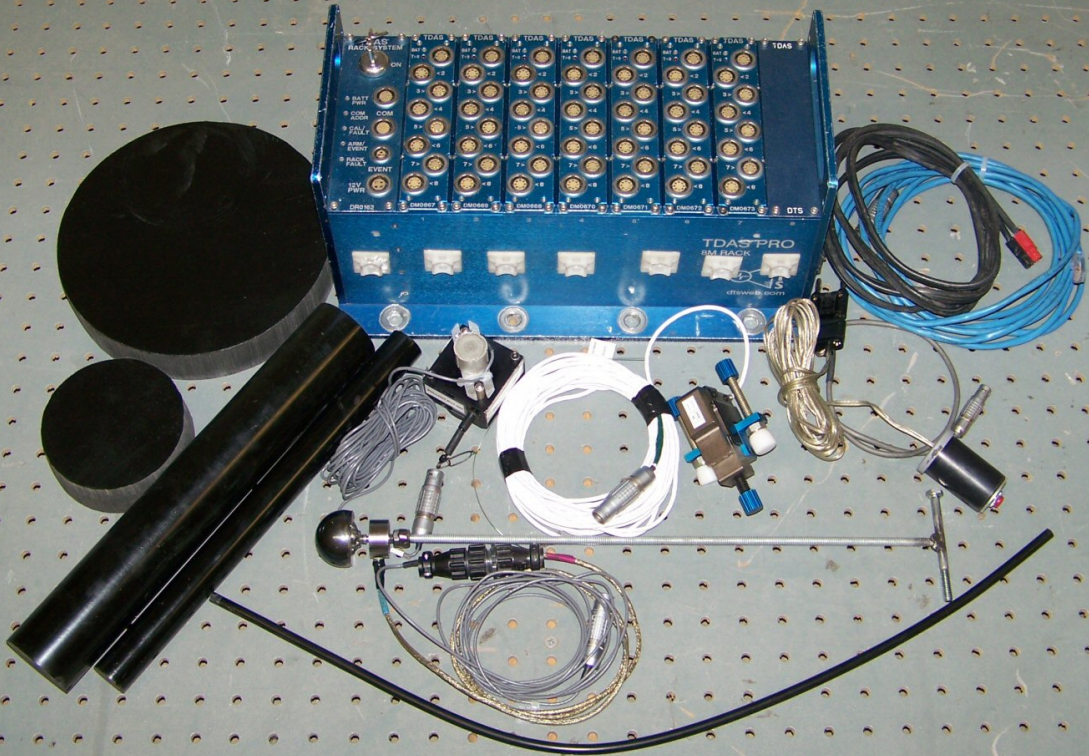
FMVSS 118
2009 FORD EDGE
C90203
TEST DATE 06/08/09
VEHICLE IGNITION SWITCH


FMVSS 118
2009 FORD EDGE
C90203
TEST DATE 06/08/09
POWER WINDOW MASTER SWITCH
AUTO


FMVSS 118
2009 FORD EDGE
C90203
TEST DATE 06/08/09
RIGHT FRONT POWER WINDOW
SWITCH


FMVSS 118
2009 FORD EDGE
C90203
TEST DATE 06/08/09
LEFT REAR POWER WINDOW
SWITCH


FMVSS 118
2009 FORD EDGE
C90203
TEST DATE 06/08/09
RIGHT REAR POWER WINDOW
SWITCH


TDAS PRO
8M RACK
dtsweb.com
DTS


FMVSS 118
2009 FORD EDGE
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TEST DATE 06/08/09
POWER WINDOW MASTER SWITCH


FMVSS 118
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FMVSS 118
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SWITCH