

REPORT NUMBER 110-STF-09-004

SAFETY COMPLIANCE TESTING FOR FMVSS NO. 110 TIRE SELECTION AND RIMS

FORD MOTOR COMPANY
2009 FORD EDGE SE
FOUR-DOOR MPV
NHTSA NO. C90203

U.S. DOT SAN ANGELO TEST FACILITY
131 COMANCHE TRAIL, BUILDING 3527
GOODFELLOW AFB, TEXAS 76908



March 5, 2009

FINAL REPORT

PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
NVS-220
OFFICE OF VEHICLE SAFETY COMPLIANCE
1200 NEW JERSEY AVENUE, SE
WASHINGTON, D.C. 20590

This publication is distributed by the National Highway Traffic Safety Administration in the interest of information exchange. 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.

Prepared By: Doris Beebe

Approved By: Ken H. Yates

Accepted By: John Linneman

Acceptance Date: 3/5/09

1. Report No. 110-STF-09-004	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Final Report of FMVSS 110 Compliance Testing of 2009 Ford Edge SE Four-door MPV, NHTSA No. C90203		5. Report Date March 5, 2009	
		6. Performing Organization Code STF	
7. Author(s) Jack R. Stewart, Junior Systems Analyst Todd P. Groghan, Safety Compliance Engineer Kenneth H. Yates, Safety Compliance Engineer		8. Performing Organization Rep# STF-DOT-09-110-004	
9. Performing Organization Name and Address U.S. DOT San Angelo Test Facility 131 Comanche Trail, Building 3527 Goodfellow AFB, Texas 76908		10. Work Unit No. (TRAVIS)	
		11. Contract or Grant No.	
12. Sponsoring Agency Name and Address United States Department of Transportation National Highway Traffic Safety Administration Office of Vehicle Safety Compliance 1200 New Jersey Avenue, SE Washington, DC 20590		13. Type of Report and Period Covered Final Test Report February 18 through February 25, 2009	
		14. Sponsoring Agency Code NVS-220	
15. Supplementary Notes			
16. Abstract Compliance tests were conducted on the subject 2009 Ford Edge SE four-door MPV in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-110T-02 for the determination of FMVSS 110 compliance. Test failures identified were as follows: None.			
17. Key Words Compliance Testing Safety Engineering FMVSS 110		18. Distribution Statement Copies of this report are available from: National Highway Traffic Safety Administration Technical Information Services Division NPO-411, Room E12-100 1200 New Jersey Avenue, S.E. Washington, DC 20590 Email: tis@dot.gov FAX: 202-493-2833	
19. Security Classification (of this report) UNCLASSIFIED	21. No. of Pages 43	22. Price	
20. Security Classification (of this page) UNCLASSIFIED			

TABLE OF CONTENTS

SECTION	PAGE
1 Introduction	1
2 Test Procedure and Summary of Results	2
3 Test Data	3
4 Test Equipment List and Calibration Information	19
5 Photographs	20
Figure	
5.1 ¾ Front View from Left Side of Vehicle	
5.2 ¾ Rear View from Right Side of Vehicle	
5.3 Vehicle Certification Label	
5.4 Vehicle Placard	
5.5 Tire Showing Brand	
5.6 Tire Showing Model	
5.7 Tire Showing Size, Load Index and Speed Symbol	
5.8 Tire Showing Max Load Rating and Max Inflation Pressure	
5.9 Tire Showing Serial Number	
5.10 Rim Showing Manufacturer Name	
5.11 Rim Showing Manufacture Date	
5.12 Rim Showing Size	
5.13 Other Rim Markings	
5.14 Rim Contour for Full Width of Cross Section	
5.15 Vehicle Rear Seat Ballasted for Normal Load	
5.16 Vehicle Front Seat Ballasted for Normal and Maximum Load	
5.17 Vehicle Rear Seat Ballasted for Maximum Load	
5.18 Rear of Vehicle Shown Ballasted for Maximum Load	
5.19 Vehicle on Weight Scales	

SECTION 1
INTRODUCTION

1.1 PURPOSE OF COMPLIANCE TEST

A 2009 Ford Edge SE four-door MPV was tested to determine if the vehicle was in compliance with the requirements of FMVSS 110. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure, TP-110T-02, dated August 31, 2007.

This standard establishes requirements to ensure that applicable vehicles are equipped with tires of adequate size and load rating and rims of appropriate size and type designation. This standard also establishes location, content, and format requirements for the Vehicle Placard and optional Tire Inflation Pressure Label.

1.2 TEST VEHICLE

The test vehicle was a 2009 Ford Edge SE four-door MPV. Nomenclatures applicable to the test vehicle are:

- A. Vehicle Identification Number: 2FMDK36C89BA34371
- B. NHTSA Number: C90203
- C. Manufacturer: Ford Motor Company
- D. Manufacture Date: 10/2008

1.3 TEST DATE

The test vehicle was tested February 18 through February 25, 2009.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.1 TEST PROCEDURE

The test vehicle was inspected for completeness, systems operability, and appropriate fuel and liquid levels, i.e. oil and coolant. The vehicle was then photographically documented as required by the NHTSA/OVSC Test Procedure. Tire sidewall information was recorded. The owner's manual was reviewed. Pertinent information from the tire and rim was photographed.

Subsequent events included weighing the vehicle to establish delivered Unloaded Vehicle Weight and the distribution of weight on the front and rear axles and each wheel position. The vehicle was ballasted to its Normal Load, Full Occupant Load, and Maximum Vehicle Load weight. At each step of the ballasting procedure, data was recorded. Ballast was photographically documented for Normal and Maximum Vehicle Load weight. The vehicle maximum load on each wheel was measured. Data from each tire furnished with the vehicle were recorded. Tire size information was taken from vehicle certification label and vehicle placard. The right front wheel was removed from the vehicle and the tire was dismounted from the rim. The rim was measured from flange to flange, and rim markings were photographically documented. The owner's manual was checked for all required information on tire loading, and on general tire and loading parameters.

2.2 SUMMARY OF RESULTS

The Ford Edge SE test vehicle appears to be in compliance with all FMVSS 110 requirements.

SECTION 3

TEST DATA

DATA SUMMARY SHEET (1 of 2)

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Ford Edge SE four-door MPV

VEHICLE NHTSA NUMBER: C90203 VIN: 2FMDK36C89BA34371

VEHICLE TYPE: MPV DATE OF MANUFACTURE: 10/2008

LABORATORY: US DOT San Angelo Test Facility

LIGHT TRUCK TYPE REQUIREMENTS

PASS/FAIL

General (Data Sheet 2)

The vehicle must be equipped with tires that meet the requirements of S139. (S110, S4.1) PASS

Tire Load Limits (Data Sheet 2)

The sum of the maximum load ratings of the tires fitted to an axle is not less than the gross axle weight rating (GAWR) of the axle system as specified on the certification label. When passenger car tires are installed, each tire's load rating is reduced by dividing it by 1.10 before determining the sum of the maximum load ratings of the tires fitted to an axle. (S110, S4.2.2.1, S4.2.2.2) PASS

When passenger car tires are installed, the vehicle normal load on the tire is not greater than the value of 94 percent of the de-rated load rating at the vehicle manufacturer's recommended cold inflation pressure for that tire. When LT tires are installed, the vehicle normal load on the tire is not greater than the value of 94 percent of the load rating at the vehicle manufacturer's recommended cold inflation pressure for that tire. (S110, S4.2.2.3(a), (b)) PASS

Rim (Data Sheet 3)

Each rim is constructed to the dimensions of a rim referred to in FMVSS 139 that is listed by the manufacturer of the tires as suitable for use with those tires. (S110, S4.4.1(a)) PASS

Each rim is properly marked. (S110, S4.4.2) PASS

DATA SUMMARY SHEET (2 of 2)

Certification, Placard, and Tire Inflation Pressure Labels (Data Sheet 4)

The placard and tire inflation pressure label (if provided) are affixed and located correctly, and display the information and format required. (S110, S4.3)

PASS

The Part 567 certification label shows the size designation of the tires and rims appropriate for the vehicle including the tire size(s) listed on the vehicle placard and, if provided, tire inflation pressure label. (S110, S4.3.3)

PASS

No inflation pressure other than the maximum permissible inflation pressure is shown on the placard and, if any, tire inflation pressure label unless as required. (S110, S4.3.4)

PASS

Vehicle Weight Distribution (Data Sheet 5)

The Gross Vehicle Weight Rating (GVWR) is not less than the sum of the unloaded vehicle weight, rated cargo load, and 68 kg times the vehicle's designated seating capacity. However, for school buses, the minimum occupant weight allowance is 54 kg. (49 CFR 567, *Certification*)

PASS

Owner's Manual (Data Sheet 6)

Owner's manual or other document has discussion of Vehicle Placard, Loading and Tires. (575.6(a)(4))

PASS

Owner's manual includes exact statement relating to "Steps for Determining Correct Load Limits". (575.6(a)(5))

PASS

RECORDED BY: Todd P. Groghan

DATE: February 25, 2009

APPROVED BY: Kenneth H. Yates

DATA SHEET 1
TEST VEHICLE INFORMATION / RECEIVING INSPECTION

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Ford Edge SE four-door MPV

VEHICLE NHTSA NUMBER: C90203 TEST DATE: February 20, 2009

VIN: 2FMDK36C89BA34371 MANUFACTURE DATE: 10/2008

GVWR: 2,422 kg (5,340 lbs) GAWR (front): 1,288 kg (2,840 lbs)

GAWR (rear): 1,148 kg (2,530 lbs)

SEATING POSITIONS: FRONT 2 MID N/A REAR 3

ODOMETER READING AT START OF TEST: 268.1 km (166.6 mi)

ENGINE DATA: 6 Cylinders 3.5 Liters Cubic Inches

TRANSMISSION DATA: X Automatic Manual 6 No. of Speeds

FINAL DRIVE DATA: Rear Drive X Front Drive 4 Wheel Drive

CHECK APPROPRIATE BOXES FOR INSTALLED VEHICLE EQUIPMENT:

<input checked="" type="checkbox"/>	Air Conditioning	<input checked="" type="checkbox"/>	Traction Control	<input checked="" type="checkbox"/>	Clock
<input checked="" type="checkbox"/>	Tinted Glass	<input checked="" type="checkbox"/>	Tachometer	<input checked="" type="checkbox"/>	Roof Rack
<input checked="" type="checkbox"/>	Power Steering	<input checked="" type="checkbox"/>	Cruise Control	<input checked="" type="checkbox"/>	Console
<input checked="" type="checkbox"/>	Power Windows	<input checked="" type="checkbox"/>	Rear Window Defroster	<input checked="" type="checkbox"/>	Driver Air Bag
<input checked="" type="checkbox"/>	Power Door Locks	<input type="checkbox"/>	Sun Roof or T-Top	<input checked="" type="checkbox"/>	Passenger Air Bag
<input type="checkbox"/>	Power Seat(s)	<input checked="" type="checkbox"/>	Tilt Steering Wheel	<input checked="" type="checkbox"/>	Side Curtain Air Bag(s)
<input checked="" type="checkbox"/>	Power Brakes	<input checked="" type="checkbox"/>	Stereo	<input checked="" type="checkbox"/>	Front Disc Brakes
<input checked="" type="checkbox"/>	Antilock Brake System	<input type="checkbox"/>	Telephone	<input checked="" type="checkbox"/>	Rear Disc Brakes
<input type="checkbox"/>	Navigation System	<input type="checkbox"/>	Trailer Hitch	<input type="checkbox"/>	Other -

REMARKS: None

RECORDED BY: Todd P. Groghan DATE: February 20, 2009

APPROVED BY: Kenneth H. Yates

DATA SHEET 2 (1 of 2)
VEHICLE RIM IDENTIFICATION AND LOAD LIMITS

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Ford Edge SE four-door MPV

VEHICLE NHTSA NUMBER: C90203 VIN: 2FMDK36C89BA34371

LABORATORY: US DOT San Angelo Test Facility TEST DATE: February 20, 2009

All tires on the vehicle (excluding the spare) are the same make and model: (X) YES () NO

All tires on the vehicle (excluding the spare) are the same size: (X) YES () NO

Spare tire is the same size as all other tires: () YES (X) NO

Tire Sidewall	Right Front	Left Rear (If different)	Spare Tire (If different)
Manufacturer and Model	<u>Hankook DynaPro AS</u>	<u></u>	<u>Maxxis Spare Tire</u>
Tire Size Designation	<u>P235/65R17</u>	<u></u>	<u>T165/80D17</u>
Load Index/Speed Symbol	<u>103T</u>	<u></u>	<u>115M</u>
Maximum Inflation Pressure	<u>300 kPa (44 psi)</u>	<u></u>	<u>420 kPa (60 psi)</u>
Maximum Load Rating	<u>875 kg (1,929 lbs)</u>	<u></u>	<u>1,215 kg (2,679 lbs)</u>
Tread/Traction/Temperature	<u>440/B/A</u>	<u></u>	<u>N/A</u>
Tires Have "DOT" Markings	<u>Yes</u>	<u></u>	<u>Yes</u>

Serial Number: Right Front 5M7CPJNH1008 Left Front 5M7CPJNH1008

Right Rear 5M7CPJNH1008 Left Rear 5M7CPJNH1008

Spare UYJMABC3108

DATA SHEET 2 (2 of 2)
VEHICLE TIRE IDENTIFICATION AND LOAD LIMITS

MOUNTED TIRE VS. AXLE RATING COMPARISON (at sidewall maximum inflation pressure)		
	FRONT AXLE	REAR AXLE
A. GAWR from certification label	1,288 kg (2,840 lbs)	1,148 kg (2,530 lbs)
B. Tire Maximum Load Rating from above	875 kg (1,929 lbs)	875 kg (1,929 lbs)
C. Reduced tire load rating if applicable*	795 kg (1,754 lbs)	795 kg (1,754 lbs)
D. (No. of tires) x (Tire load rating de-rated if appropriate)	1,590 kg (3,508 lbs)	1,590 kg (3,508 lbs)
Is "D" equal to or greater than "A"? (Yes/No)	Yes	Yes

* If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: February 20, 2009

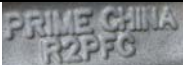

APPROVED BY: Kenneth H. Yates

**DATA SHEET 3
VEHICLE RIM IDENTIFICATION**

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Ford Edge SE four-door MPV

VEHICLE NHTSA NUMBER: C90203 VIN: 2FMDK36C89BA34371

LABORATORY: US DOT San Angelo Test Facility TEST DATE: February 25, 2009

Rim Markings	RIGHT FRONT	LEFT REAR (if different)
A. Source of published dimensions (letter designation)	T	
B. Rim Size Designation	17X7.5J	
C. Does rim contain DOT symbol? (Yes/No)	Yes	
D. Manufacturer's name, symbol or trademark (copy format)		
E. Date of manufacture or symbol (copy format)		
F. Letter height (not less than 3 mm)	Yes	
G. Lettering (impressed or embossed)	Embossed	
H. Are all rim markings legible? (Yes/No)	Yes	
Do items A-C appear on weather side of rim (Yes/No)	Yes	
Do all markings comply with requirements (Yes/No)	Yes	

Rim Measurements	RIGHT FRONT	LEFT REAR (If different)
Rim width	19.1 cm (7.5 in)	
Rim diameter	43.2 cm (17.0 in)	
Rim measurements same as rim markings?	Yes	

Rims are suitable for tires on vehicle? (X)YES () NO

Reference source used for tire/rim match verification:

2008 Tire and Rim Association Yearbook

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: None.

RECORDED BY: Todd P. Groghan

DATE: February 25, 2009

APPROVED BY: Kenneth H. Yates

DATA SHEET 4 (1 of 3)
VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Ford Edge SE four-door MPV

VEHICLE NHTSA NUMBER: C90203 VIN: 2FMDK36C89BA34371

LABORATORY: US DOT San Angelo Test Facility TEST DATE: February 20, 2009

Identification of Vehicle Labeling

	(Yes/No)	Location	PASS/FAIL
1. Certification Label*	<u>Yes</u>	<u>Driver's side B pillar</u>	<u>PASS</u>
2. Vehicle Placard*	<u>Yes</u>	<u>Driver's side B pillar</u>	<u>PASS</u>
3. Tire Inflation Pressure Label*	<u>N/A</u>		

* Labels must be located as specified in section 12.4 of test procedure.

Vehicle Placard

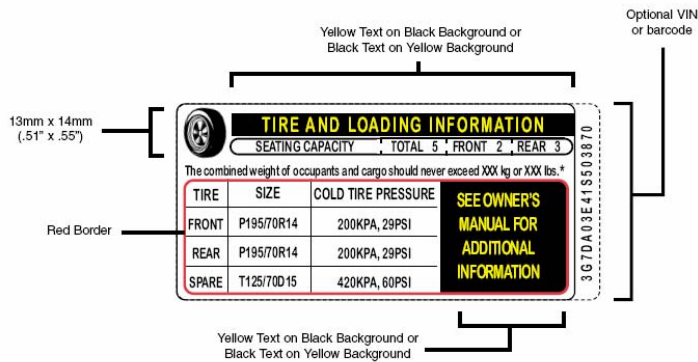


FIGURE 1
(70 FR 14425)

Vehicle Placard has the exact color and format as specified in the above Figure 1 and text is in English language. (X) YES () NO

Vehicle Placard and, if provided, **Tire Inflation Pressure Label** are permanently affixed. (X) YES () NO

DATA SHEET 4 (2 of 3)
VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

Vehicle Placard Information:

Combined weight of occupants and cargo 412 kg (909 lbs)

Seating Capacity: Total 5 ; Front 2 ; Rear 3

Is the number of belted seating positions the same as the labeled seating capacity? (X) YES () NO

Is the tire size and pressure provided? (X) YES () NO

Tire Information:

Tire Size: Front P235/65R17 ; Rear P235/65R17

Tire Inflation Pressure: Front 240 kPa (35 psi) ; Rear 240 kPa (35 psi)

Are the sizes of the installed tires the same as the sizes of the labeled tires? (X) YES () NO

Is the labeled cold tire inflation pressure equal to or less than the sidewall labeled maximum cold tire inflation pressure?

Front axle: (X) YES () NO Rear axle: (X) YES () NO

Vehicle Certification Label information:

	Tire Size	Rim Size Designation	Rim Suitable for Tire?*
Front Axle	<u>P235/65R17</u>	<u>17x7.5J</u>	<u>Yes</u>
Rear Axle	<u>P235/65R17</u>	<u>17x7.5J</u>	<u>Yes</u>

*Referenced source used for tire/rim match verification:

2008 Tire and Rim Association Yearbook

DATA SHEET 4 (3 of 3)
VEHICLE PLACARD AND TIRE INFLATION PRESSURE LABEL

Is (Are) tire size(s) listed on the vehicle placard and/or tire inflation pressure label also listed on the certification label with suitable rim size? (X) YES () NO

LABELED TIRE CAPACITY AT SPECIFIED PRESSURE		
GVWR <u>2,422 kg (5,340 lbs)</u>	FRONT AXLE	REAR AXLE
A. GAWR from certification label	1,288 kg (2,840 lbs)	1,148 kg (2,530 lbs)
B. Tire load rating of labeled tire size at labeled inflation pressure*	875 kg (1,929 lbs)	875 kg (1,929 lbs)
C. Reduced tire load rating if applicable**	795 kg (1,754 lbs)	795 kg (1,754 lbs)
D. (No. of tires) x (Tire load rating de-rated if appropriate)	1,590 kg (3,508 lbs)	1,590 kg (3,508 lbs)
Is "D" equal to or greater than "A"?	Yes	Yes

*Reference source used for determining load rating:

2008 Tire and Rim Association Yearbook

** If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: February 20, 2009

APPROVED BY: Kenneth H. Yates

DATA SHEET 5 (1 of 4)
CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Ford Edge SE four-door MPV

VEHICLE NHTSA NUMBER: C90203 VIN: 2FMDK36C89BA34371

LABORATORY: US DOT San Angelo Test Facility TEST DATE: February 19, 2009

Full Fluid Levels: Fuel Full Coolant Full Other Fluids* Full

* Transmission, windshield washer, brake fluid, engine oil, etc.

Tire Pressures: LF 240 kPa (35 psi) LR 240 kPa (35 psi)
(cold, prior to loading vehicle) RF 240 kPa (35 psi) RR 240 kPa (35 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

Measured Unloaded Vehicle Weight

LF 562 kg (1,238 lb) LR 375 kg (826 lb)
RF 542 kg (1,195 lb) RR 373 kg (823 lb)
Front Axle 1,104 kg (2,433 lb) Rear Axle 748 kg (1,649 lb)
Total Vehicle Weight 1,852 kg (4,082 lb)

B. MEASURED VEHICLE NORMAL LOAD WEIGHT

(1) Seating Capacity from Vehicle Placard = 5

(2) Normal Load Number of Occupants 3

Occupant Distribution: Front Seat 2 Second Seat 1

(3) Total Normal Occupant Load 204 kg (450 lb)
[# of occupants x 68 KG per occupant]

(4) Measured Normal Load on Axles

LF 606 kg (1,337 lb) LR 432 kg (952 lb)
RF 587 kg (1,294 lb) RR 430 kg (949 lb)
Front Axle 1,193 kg (2,631 lb) Rear Axle 862 kg (1,901 lb)
Total Vehicle Weight 2,055 kg (4,532 lb)

DATA SHEET 5 (2 of 4)
CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

(5) Calculated Vehicle Normal Load on the Tire

Front Tires [measured front axle normal load/2] = 597 kg (1,316 lbs)

Rear Tires [measured rear axle normal load/2] = 431 kg (951lbs)

(6) Measured Normal Load on Tire vs. Value of 94% of Load Rating for that Tire at Specified Pressure

MEASURED NORMAL LOAD ON TIRE VS. VALUE OF 94% OF LOAD RATING FOR THAT TIRE AT SPECIFIED PRESSURE		
	FRONT AXLE	REAR AXLE
A. Calculated Vehicle Normal Load on the Tire from (5)	597 kg (1,316 lbs)	431 kg (951 lbs)
B. Tire load rating of installed tire size at recommended inflation pressure*	875 kg (1,929 lbs)	875 kg (1,929 lbs)
C. Reduced tire load rating if applicable**	795 kg (1,754 lbs)	795 kg (1,754 lbs)
D. 94% of tire load rating, de-rated if appropriate)	748 kg (1,649 lbs)	748 kg (1,649 lbs)
Is "D" equal to or greater than "A"?	Yes	Yes

*Reference source used for tire/rim match verification:

2008 Tire and Rim Association Yearbook

** If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10.

Vehicle Normal Load on the tire is not greater than 94% of the Recommended Cold Inflation Load Rating.

	PASS/FAIL
Front Tires	<u>PASS</u>
Rear Tires	<u>PASS</u>

DATA SHEET 5 (3 of 4)
CURB WEIGHT, NORMAL LOAD WEIGHT & MAXIMUM VEHICLE WEIGHT

C. MEASURED VEHICLE WEIGHT WITH FULL OCCUPANT LOAD

Seating Capacity: Total 5 ; Front 2 ; Rear 3

Full Occupant Load 340 kg (750 lbs)

[# of occupants x 68 KG per adult occupant and 54 KG per student occupant]

LF	<u>621 kg (1,368 lb)</u>	LR	<u>487 kg (1,073 lb)</u>
RF	<u>599 kg (1,321 lb)</u>	RR	<u>485 kg (1,070 lb)</u>
Front Axle	<u>1,220 kg (2,689 lb)</u>	Rear Axle	<u>972 kg (2,143 lb)</u>
Total Vehicle Weight <u>2,192 kg (4,832 lb)</u>			

D. MEASURED MAXIMUM VEHICLE LOAD WEIGHT

(1) Vehicle Capacity Weight (from placard) 412 kg (909 lbs)

(2) Full Occupant Load (from above) 340 kg (750 lbs)

(3) Luggage/Cargo Load (subtract (2) from (1)) 72 kg (159 lbs)

(4) Measured Vehicle Maximum Load on Axles

LF	<u>616 kg (1,359 lb)</u>	LR	<u>526 kg (1,160 lb)</u>
RF	<u>596 kg (1,314 lb)</u>	RR	<u>525 kg (1,158 lb)</u>
Front Axle	<u>1,212 kg (2,673 lb)</u>	Rear Axle	<u>1,051 kg (2,318 lb)</u>
Total Vehicle Weight <u>2,263 kg (4,991 lb)</u>			

DATA SHEET 5 (4 of 4)
VEHICLE WEIGHT DISTRIBUTION

ITEM	Tire or Vehicle Rating*	Unloaded Vehicle Weight		Vehicle Weight with Normal Occupant Load		Vehicle Weight with Full Occupant Load		Vehicle Maximum Weight with Occupants and Cargo	
		Measured	Over-load	Measured	Over-load	Measured	Over-load	Measured	Over-load
Left Front Tire	795 kg (1,754 lbs)	562 kg (1,238 lbs)	no	606 kg (1,337 lbs)	no	621 kg (1,368 lbs)	no	616 kg (1,359 lbs)	no
Right Front Tire	795 kg (1,754 lbs)	542 kg (1,195 lbs)	no	587 kg (1,294 lbs)	no	599 kg (1,321 lbs)	no	596 kg (1,314 lbs)	no
Front Axle (GAWR)	1,288 kg (2,840 lbs)	1,104 kg (2,433 lbs)	no	1,193 kg (2,631 lbs)	no	1,220 kg (2,689 lbs)	no	1,212 kg (2,673 lbs)	no
Left Rear Tire	795 kg (1,754 lbs)	375 kg (826 lbs)	no	432 kg (952 lbs)	no	487 kg (1,073 lbs)	no	526 kg (1,160 lbs)	no
Right Rear Tire	795 kg (1,754 lbs)	373 kg (823 lbs)	no	430 kg (949 lbs)	no	485 kg (1,070 lbs)	no	525 kg (1,158 lbs)	no
Rear Axle (GAWR)	1,148 kg (2,530 lbs)	748 kg (1,649 lbs)	no	862 kg (1,901 lbs)	no	972 kg (2,143 lbs)	no	1,051 kg (2,318 lbs)	no
Total Vehicle (GVWR)	2,422 kg (5,340 lbs)	1,852 kg (4,082 lbs)	no	2,055 kg (4,532 lbs)	no	2,192 kg (4,832 lbs)	no	2,263 kg (4,991 lbs)	no

*Vehicle and axle weight ratings (GVWR & GAWR) are located on the vehicle certification label. Vehicle tire load ratings are based upon the inflation pressure specified on the Vehicle Placard or Tire Inflation Pressure Label for each respective axle, as determined from the appropriate Tire and Rim reference manual. If a passenger car tire is installed on a multipurpose passenger vehicle (MPV), truck or bus, the tire's load rating is reduced by dividing by 1.10

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: February 19, 2009

APPROVED BY: Kenneth H. Yates

DATA SHEET 6 (1 of 2)
OWNER'S MANUAL REQUIREMENTS

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Ford Edge SE four-door MPV

VEHICLE NHTSA NO. C90203 VIN: 2FMDK36C89BA34371

LABORATORY: US DOT San Angelo Test Facility TEST DATE: February 20, 2009

Owner's Manual Discusses:

Part 575.6(a) Paragraph	Required Discussion Topic	Discussed in Manual? (YES/NO)	Page Numbers
(4)(i)	Tire labeling, including a description and explanation of each marking on the tires provided with the vehicle, and information about the location of the Tire Identification Number (TIN).	YES	181, 182, 187, 191-195
(4)(ii)	(A) Description and explanation of recommended cold tire inflation pressure.	YES	183 - 185
	(B) Description and explanation of FMVSS 110 Vehicle Placard and Tire Inflation Pressure Label and their location(s).	YES	184, 187 193, 195, 203, 204
	(C) Description and explanation of adverse safety consequences of under-inflation including tire failure.	YES	184
	(D) Description and explanation for measuring and adjusting air pressure to achieve proper inflation.	YES	183-185, 199
(4)(iii)	Glossary of tire terminology, including "cold tire pressure," "maximum inflation pressure," and "recommended inflation pressure," and all non-technical terms defined in S3 of FMVSS 110 & 139.	YES	182-185, 201-204
(4)(iv)	Tire care, including maintenance and safety practices.	YES	185-189
(4)(v)	(A) Description and explanation of locating and understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity.	YES	201-208
	(B) Description and explanation for calculating total and cargo load capacities with varying seating configurations including quantitative examples showing/illustrating how the vehicle's cargo and luggage capacity decreases as the combined number and size of occupants increases.	YES	206, 207
	(C) Description and explanation for determining compatibility of tire and vehicle load capabilities.	YES	205
	(D) Description and explanation of adverse safety consequences of overloading on handling and stopping and on tires.	YES	205

DATA SHEET 6 (2 of 2)
OWNER'S MANUAL REQUIREMENTS

The following statement, in the English language, is provided verbatim in the Owner's Manual. Reference Part 575.6(a)(5) YES (X) NO ()

Steps for Determining Correct Load Limit

- (1) Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs." on your vehicle's placard.
- (2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.
- (3) Subtract the combined weight of the driver and passengers from XXX kg or XXX lbs.
- (4) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400-750 (5x150) = 650 lbs.)
- (5) Determine the combined weight of the luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
- (6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: Part 575.6(a)(4)(v)(D) was located in the Fuel Requirements section of the owner's manual under 'Starting and Driving'.

RECORDED BY: Todd P. Groghan

DATE: February 20, 2009

APPROVED BY: Kenneth H. Yates

SECTION 4

TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO	CAL. DATE	NEXT CAL. DATE
PLATFORM SCALE (BALLAST)	HOWE RICHARDSON	MODEL #6401 SERIAL #0181- 5509-26	8/5/2008	8/5/2009
AIR PRESSURE GAUGE	ASHCROFT GENERAL PURPOSE DIGITAL GAUGE	MODEL #D1005PS 02L 100 PSI SERIAL #20017398- 01	11/20/2008	11/20/2009
FLOOR SCALES (VEHICLE)	INTERCOMP SW DELUXE SCALES	PART #100156 SERIAL #27032382	8/5/2008	8/5/2009

SECTION 5
PHOTOGRAPHS



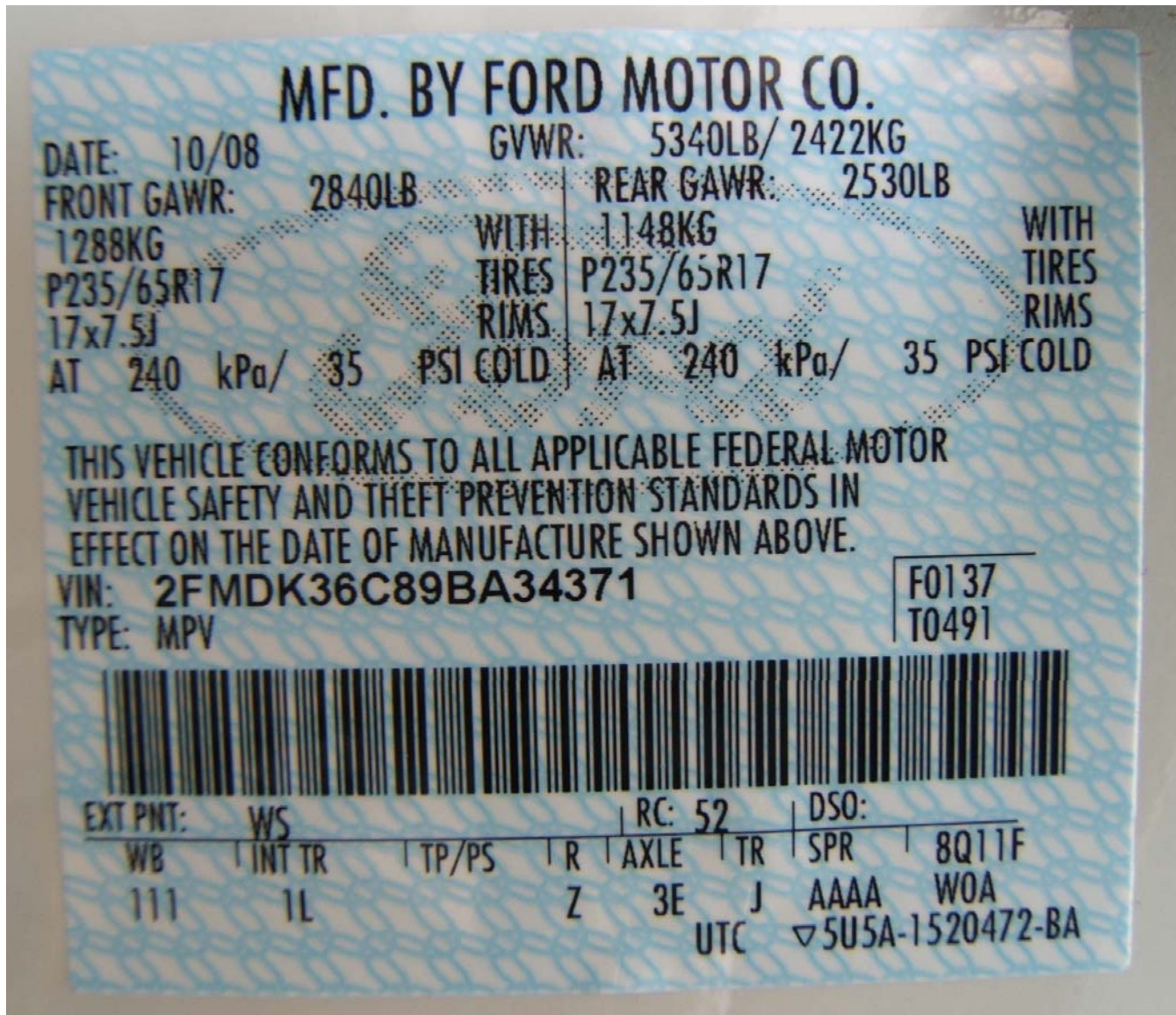
2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.1
¾ FRONT VIEW FROM LEFT SIDE OF VEHICLE




2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.2
 $\frac{3}{4}$ REAR VIEW FROM RIGHT SIDE OF VEHICLE



2009 FORD EDGE SE
 NHTSA NO. C90203
 FMVSS NO.110

FIGURE 5.3
 VEHICLE CERTIFICATION LABEL



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
 2FMMDK36C89BA34371

5U5A-1532-AA (TLU)

2009 FORD EDGE SE
 NHTSA NO. C90203
 FMVSS NO.110

FIGURE 5.4
 VEHICLE PLACARD



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.5
TIRE SHOWING BRAND



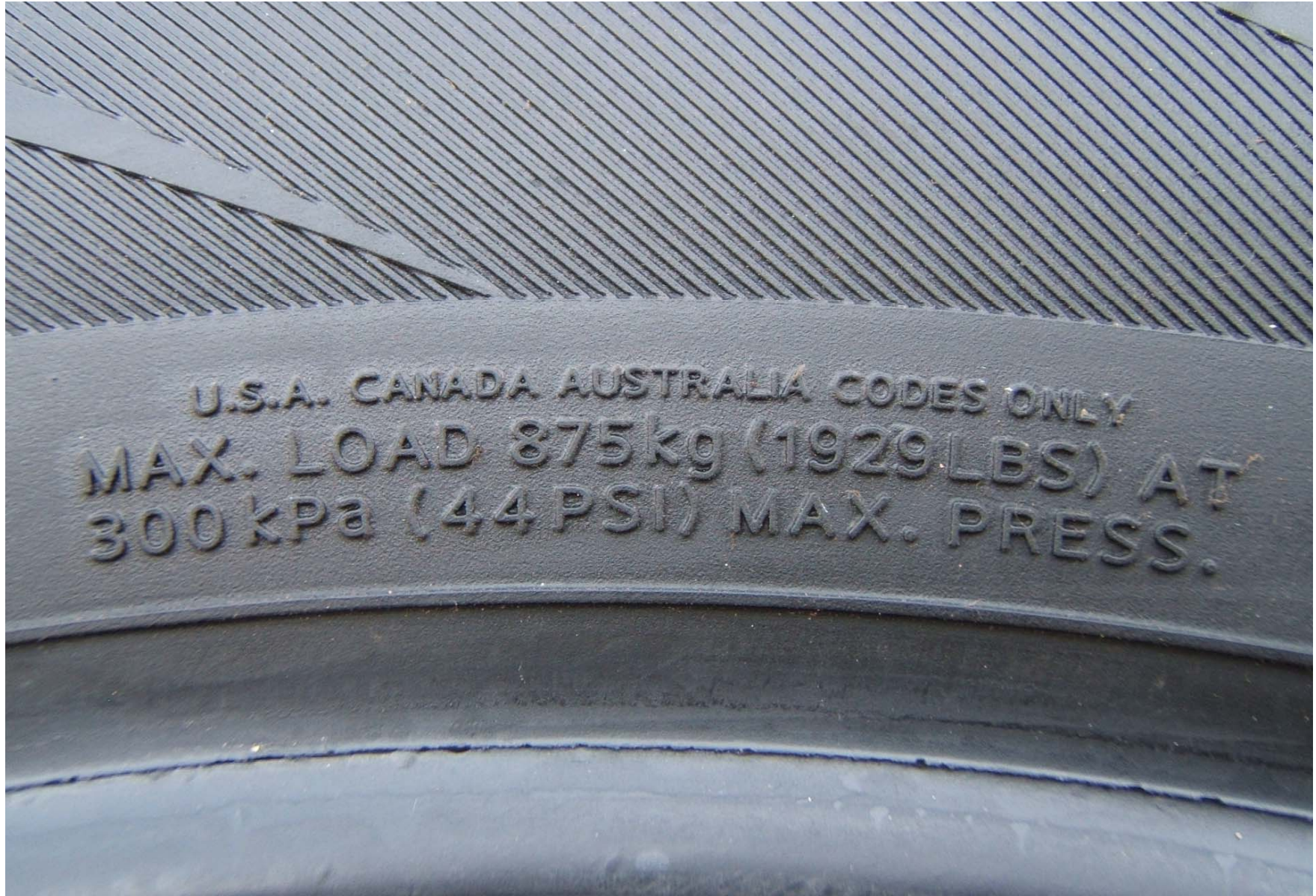
2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.6
TIRE SHOWING MODEL



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.7
TIRE SHOWING SIZE, LOAD INDEX, AND SPEED SYMBOL



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.8
TIRE SHOWING MAX LOAD RATING AND MAX INFLATION PRESSURE



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.9
TIRE SHOWING SERIAL NUMBER



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.10
RIM SHOWING MANUFACTURER NAME



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.11
RIM SHOWING MANUFACTURE DATE



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.12
RIM SHOWING SIZE

08/10/2007 19:51:50H

10/09/07 22:00:20

MOLD12DOT-1

M 10087501

C 7G

FONOCO

7T43-1007-BC

BA

F NID

SENSOR MAY
BE INSIDE

HT 1 0°

2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.13
OTHER RIM MARKINGS



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.14
RIM CONTOUR FOR FULL WIDTH OF CROSS SECTION



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.15
VEHICLE REAR SEAT BALLASTED
FOR NORMAL LOAD



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.16
VEHICLE FRONT SEAT BALLASTED
FOR NORMAL AND MAXIMUM LOAD



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.17
VEHICLE REAR SEAT BALLASTED
FOR MAXIMUM LOAD



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.18
REAR OF VEHICLE SHOWN BALLASTED FOR MAXIMUM LOAD



2009 FORD EDGE SE
NHTSA NO. C90203
FMVSS NO. 110

FIGURE 5.19
VEHICLE ON WEIGHT SCALES