REPORT NUMBER 110-STF-11-003

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

GENERAL MOTORS LLC 2011 CHEVROLET CRUZE FOUR-DOOR PASSENGER CAR NHTSA NO. CB0100

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



September 19, 2011

FINAL REPORT

PREPARED FOR

U. S. DEPARTMENT OF TRANSPORTATION NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION ENFORCEMENT OFFICE OF VEHICLE SAFETY COMPLIANCE 1200 NEW JERSEY AVENUE, S.E. WEST BUILDING, FOURTH FLOOR, NVS-220 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.

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#### INTRODUCTION

#### 1.1 PURPOSE OF COMPLIANCE TEST

A 2011 Chevrolet Cruze passenger car was tested to determine if the vehicle was in compliance with the requirements of FMVSS No. 110. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Test Procedure TP-110P-03, dated August 31, 2007.

#### 1.2 TEST VEHICLE

The test vehicle was a 2011 Chevrolet Cruze four-door passenger car. Nomenclatures applicable to the test vehicle are:

- A. Vehicle Identification Number: 1G1PC5SH7B7171899
- B. NHTSA Number: CB0100
- C. Manufacturer: General Motors LLC
- D. Manufacture Date: 01/2011
- 1.3 <u>TEST DATE</u>

The test vehicle was tested March 12 and March 24, 2011.

#### TEST PROCEDURE AND SUMMARY OF RESULTS

#### 2.1 TEST PROCEDURE

Prior to test, 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. The right front and left rear wheels were removed from the vehicle. Pertinent information on the tires and rims furnished with the vehicle was recorded and tires and rims were photographed.

The vehicle tire placard was photographed and checked for compliance to location, format, and information requirements. Subsequent events included weighing the vehicle to establish delivered curb weight and the distribution of weight on the front and rear axles and each wheel position. Vehicle was ballasted to Normal Load weight, Full Occupant Load weight, and Maximum Vehicle Load weight. At each step of the ballasting procedure, data was recorded. Ballast was photographically documented for the Normal, Full, and Maximum Vehicle Load weights. The tires and rims labeled and installed on the vehicle were verified to be appropriate for the loading and load ratings of the vehicle. The owner's manual was checked for all required information on placard, tire loading, and general tire and loading parameters.

#### 2.2 SUMMARY OF RESULTS

The data indicate compliance of the Chevrolet Cruze with all requirements tested.

TEST DATA

#### DATA SUMMARY SHEET

VEHICLE MAKE/MODEL/BODY STYLE: 2011 Chevrolet Cruze for	our-door passenger car
VEHICLE NHTSA NUMBER: CB0100 VIN: 1G	1PC5SH7B7171899
VEHICLE TYPE:passenger car DATE OF MANUFA	CTURE: 01/2011
LABORATORY: US DOT San Angelo Test Facility	
PASSENGER CAR REQUIREMENTS	PASS/FAIL
General (Data Sheet 2)	
The vehicle is equipped with tires that meet the requirements of S139. (S110, S4.1)	PASS
Tire Load Limits (Data Sheet 5)	
The vehicle maximum load on the tire shall not be greater than the maximum load rating as marked on the sidewall of the tire. (S110, S4	<b>PASS</b> 4.2.1.1)
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, S4.2.1.2)	PASS
Placard and Tire Inflation Pressure Label (Data Sheets 4 and 5)	
The placard and tire inflation pressure label (if provided) are affixed a located correctly, and display the information and format required. (S110, S4.3)	and PASS
No inflation pressure other than the maximum permissible inflation pressure may be shown on the placard and, if any, tire inflation press label unless as required. (S110, S4.3.4)	PASSsure
Rim (Data Sheet 3)	
Each rim is constructed to the dimensions of a rim specified for the application. (S110, S4.4.1(a))	PASS
Vehicle rims retain deflated tires during a controlled brake application (S110, S4.4.1(b))	n. <u>Remarks</u>
Owner's Manual (Data Sheet 6)	
Owner's manual or other document has discussion of Vehicle Placar Loading and Tires. (575.6 (a)(4))	rd <u>PASS</u>
Owner's manual includes exact statement relating to "Steps for Determining Correct Load Limits." (575.6(a)(5))	PASS
REMARKS: The rim retention test required by FMVSS No.110, part	ragraph S4.4.1(b) was
not executed on the subject Chevrolet Cruze	

not executed on the subject Chevrolet Cruze.

#### DATA SHEET 1 TEST VEHICLE INFORMATION/RECEIVING INSPECTION

VEHICLE MAKE/MODEL/BOD	Y ST	YLE: 2011 Chevrole	et Cruz	ze four-door passenger car			
VEHICLE NHTSA NUMBER: CB0100 TEST DATE: March 12, 2011							
VIN: 1G1PC5SH7B7171899				RE DATE: 01/2011			
GVWR: <u>1,847 kg (4,072</u>	lb)	GAWR(front):	96	52 kg (2,120 lb)			
	10)						
		GAWR(lear).	00	35 kg (1,952 lb)			
SEATING POSITIONS: FRONT <u>2</u> MID <u>N/A</u> REAR <u>3</u>							
ODOMETER READING AT START OF TEST: 201 km (125 mi)							
ENGINE DATA:       4       Cylinders       1.8       Liters       Cubic Inches							
TRANSMISSION DATA: X	Au	tomatic Manu	ıal	6 No. of Speeds			
FINAL DRIVE DATA:	Re	ar Drive <u>X</u> Front	Drive	4 Wheel Drive			
INSTALLED VEHICLE EQUIPM	ЛЕN	T:					
X Air Conditioning		Traction Control	Х	Clock			
	х	Tachometer		Roof Rack			
X Power Steering		Cruise Control		Console			
X Power Windows	х	Rear Window Defroster	Х	Driver Air Bag			
X Power Door Locks		Sun Roof or T-Top	х	Passenger Air Bag			
Power Seat(s)	х	Tilt Steering Wheel	х	Side Air Bag(s)			

 Power Seat(s)
 X
 Tilt Steering Wheel
 X
 Side Air Bag(s)

 X
 Power Brakes
 X
 Stereo
 X
 Front Disc Brakes

 X
 Antilock Brake System
 Telephone
 Rear Disc Brakes

 Navigation System
 Trailer Hitch
 Other 

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: March 12, 2011

APPROVED BY: Kenneth H. Yates

#### DATA SHEET 2 VEHICLE TIRE IDENTIFICATION

 VEHICLE MAKE/MODEL/BODY STYLE:
 2011 Chevrolet Cruze four-door passenger car

 VEHICLE NHTSA NUMBER:
 CB0100
 VIN:
 1G1PC5SH7B7171899

 LABORATORY:
 US DOT San Angelo Test Facility
 TEST DATE:
 March 12, 2011

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 Firestone FR710				Maxxis			
Tire Size Designation P215/60R16				T115/70R16			
Load Index/Speed Sy	/mbol	94S				92M	
Maximum Inflation Pr	essure	300 kF	Pa (44 psi)			420 kPa (60 psi)	
Maximum Load Ratin	g	670 kg	g (1,477 lb)			630 kg (1,389 lb)	
Tread/Traction/Temperature		560/B/B				N/A	
Tires Have "DOT" Markings		Yes				Yes	
Serial Number:	Right Right	-	8XX8CKD50 8XX8CKD50 UYPYABC42	10	Left Front _ Left Rear _	8XX8CKD5010 8XX8CKD5010	
DATA INDICATES	S COM	PLIAN	CE:			PASS/FAIL: PASS	
REMARKS: Non	IE						

RECORDED BY:Todd P. GroghanAPPROVED BY:Kenneth H. Yates

DATE: <u>March12, 2011</u>

#### DATA SHEET 3 VEHICLE RIM IDENTIFICATION

VEHICLE MAKE/MODEL/BODY STYL	2011 Chevrolet Cruze four-door passenger car			
VEHICLE NHTSA NUMBER: _ CB010	00VIN:1G1PC5SH7B7171899			
LABORATORY: US DOT San Angelo	o Test Facility TEST DATE: March 12, 2011			

Rim Markings (if available):		Right Front	Left Rear	
Manufacturer's Name, Symbol or Trademark		K4 – Hayes Lemmerz	K4 – Hayes Lemmerz	
Rim Size		16x6.5J	16x6.5J	
Date of Manufacture		01 05 11	01 05 11	
Does Rim contain "DOT" symbol? (YES/NO)		Yes	Yes	
Other Rim Markings		See pages 31 and 32		
Rim Inspection Comments:		None		
Rim Size:				
	Tire Size	Measured Rim Width	Measured Rim Diameter	
Right Front Wheel	P215/60R16	16.5 cm (6.5 in)	40.6 cm (16.0 in)	
Left Rear Wheel	P215/60R16	16.5 cm (6.5 in)	40.6 cm (16.0 in)	

Does stamped rim size (if available) agree with the measured rim size? Right front rim: (X) YES () NO Left rear rim: (X) YES () NO

Installed rims are suitable for installed tires? (X) YES () NO Reference document: <u>2010 Tire & Rim Association Yearbook</u>

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: March 12, 2011

APPROVED BY: Kenneth H. Yates

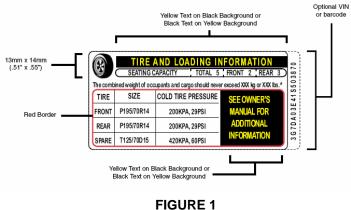
#### DATA SHEET 4 (1 of 2) VEHICLE PLACARD, AND TIRE INFLATION PRESSURE LABEL

VEHICLE MAKE/MODEL/BODY STYLE:			2011 Chevrolet Cruze four-door passenger car			
VEHICLE NHTSA	NUMBER:	CB0100	VIN:	1G1PC	5SH7B7171899	
LABORATORY:	US DOT Sar	n Angelo Tes	st Facility	TEST DATE:	March 12, 2011	

#### Identification of Vehicle Labeling

	Yes/No	Location	PASS/FAIL
1. Certification Label	Yes	Driver's side B-pillar	PASS
2. Vehicle Placard	Yes	Driver's side B-pillar	PASS
3. Tire Inflation Pressure Label	No		

#### Vehicle Placard



(70 FR 14425)

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

Vehicle Placard is permanently affixed. (X)YES ()NO

#### Vehicle Placard Information:

Combined weight of occupan	ts and cargo	408 kg (89	99 lb)	_
Seating Capacity: Total <u>5</u>	Front _	2	Rear _	3
Is the number of belted seatin capacity?	ng positions the	e same as th (X)YES		•

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

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

#### **Vehicle Placard Tire Information:**

Tire size:	Front	P215/60R16	Rear	P215/6	60R16
Tire Inflation Pressur	e: Front	240 kPa (35 psi)	Rear _	240 kPa	(35 psi)
Are the sizes of the ir	nstalled tires		es of the S ()N		ires?
Is the labeled cold tire maximum cold tire in			ss than tl	he sidewa	all labeled
Front axle: (X	)YES ( )N	O Rear axl	e: (X)	YES (	)NO
DATA INDICATES COMPLIANC	CE:		PAS	S/FAIL:	PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: <u>March 12, 2011</u>

APPROVED BY: Kenneth H. Yates

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

 VEHICLE MAKE/MODEL/BODY STYLE:
 2011 Chevrolet Cruze four-door passenger car

 VEHICLE NHTSA NUMBER:
 CB0100
 VIN:
 1G1PC5SH7B7171899

 LABORATORY:
 US DOT San Angelo Test Facility
 TEST DATE:
 March 24, 2011

Full Fluid Levels: Fuel <u>Full</u> Coolant <u>Full</u> Other Fluids\* <u>Full</u> \* Transmission, windshield washer, brake, and engine oil.

Tire Pressures:	LF	240 kPa	(35 psi)	LR	240 kPa	(35 psi)
	RF	240 kPa	(35 psi)	RR	240 kPa	(35 psi)

#### A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

LF _	446 kg (984 lb)	LR	284 kg (626 lb)
RF _	420 kg (925 lb)	RR _	278 kg (612 lb)
Front Axle	866 kg (1,909 lb)	Rear Axle	562 kg (1,238 lb)
	Total Vehicle 1,42	8 kg (3,147 lb)	)

#### **B. MEASURED VEHICLE NORMAL LOAD WEIGHT**

- (1) Seating Capacity from Vehicle Placard = 5
- (2) Normal Load Number of Occupants (Table in Section 10) = 3

Occupant Distribution: Front Seat 2 Second Seat 1

- (3) Total Normal Occupant Load: <u>204 kg (450 lb)</u> [# of occupants x 68 KG per occupant]
- (4) Measured Normal Load on Axles:

LF	487 kg (1,073 lb)	LR _	345 kg (760 lb)
RF	462 kg (1,018 lb)	RR _	338 kg (746 lb)
Front Axle	949 kg (2,091 lb)	Rear Axle	683 kg (1,506 lb)
	Total Vehicle <u>1,632 kg</u>	(3,597 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] =	475 kg (1,046 lb)
Rear Tires [measured rear axle normal load/2] =	342 kg (753 lb)

(6) Calculated 94% of tire load rating at recommended cold inflation pressure:
 Load rating at recommend cold inflation pressure= 670 kg (1,477 lb)
 94% of load rating = 630 kg (1,388 lb)

Vehicle Normal Load on the Tire must not be greater than 94% of Load Rating Value.

		PASS/FAIL
[B.(5) <b.(6)]< td=""><td>Front Tires</td><td>PASS</td></b.(6)]<>	Front Tires	PASS
	Rear Tires	PASS

#### C. MEASURED VEHICLE WEIGHT WITH FULL OCCUPANT LOAD

(1)	Seating Capacity from Placard:			
		Total <u>5</u>	Front 2	Rear <u>3</u>
(2) Full Occupant Load: <u>340 kg (750 lb)</u> [# of total occupants from C.(1) x 68 KG per occupant]				
(3)	Meas	sured Vehicle Weight w	vith Full Occupant Loa	ad:
	LF _	498 kg (1,099 lb)	LR	401 kg (883 lb)
	RF _	474 kg (1,045 lb)	RR	395 kg (870 lb)
Front	Axle _	972 kg (2,144 lb)	Rear Axle	796 kg (1,753 lb)
		Total Vehicle	1,768 kg (3,897 lb)	_

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

#### D. MEASURED MAXIMUM VEHICLE LOAD WEIGHT

(1)	Vehicle Capacity Weight (from placard):	408 kg (899 lb)
(2)	Full Occupant Load (from C.(2)):	340 kg (750 lb)
(3)	Luggage/Cargo Load (subtract (2) from (1)):	68 kg (149 lb)

(4) Measured Vehicle Maximum Load on Axles:

LF _	494 kg (1,090 lb)	LR _	438 kg (965 lb)
RF	470 kg (1,037 lb)	RR _	433 kg (954 lb)
Front Axle	964 kg (2,127 lb)	Rear Axle	871 kg (1,919 lb)
	Total Vehicle	1,835 kg (4,046	lb)

(5) Calculated Vehicle Maximum Load on the Tire:

Front Tires [measured front axle maximum load/2]=	482 kg (1,064 lb)
Rear Tires [measured rear axle maximum load/2] =	435 kg (960 lb)

(6) Tire Sidewall Maximum Load Ratings:

	Front	Rear
Installed Tire Size	P215/60R16	P215/60R16
Max. Load Rating on Sidewall	670 kg (1,477 lb)	670 kg (1,477 lb)

Vehicle Maximum Load on the tire must not be greater than the Maximum Load Rating Marked on the Tire Sidewall.

		PASS/FAIL
[D.(5) <d.(6)]< td=""><td>Front Tires</td><td>PASS</td></d.(6)]<>	Front Tires	PASS
	Rear Tires	PASS

**Rear Tires** 

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

(7) Tire Load Ratings at Vehicle Placard or Tire Inflation Pressure Label Recommended Cold Tire Inflation Pressure.

	Front Axle	Rear Axle
Labeled Tire Size	P215/60R16	P215/60R16
Labeled Cold Inflation Pressure	240 kPa (35 psi)	240 kPa (35 psi)
Load Rating at This Pressure	670 kg (1,477 lb)	670 kg (1,477 lb)
Reference used to obtain Load	Rating: 2010 Tire & Rin	n Association Yearbook

Vehicle Normal Load on the Tire must not be greater than the Tire Load Rating at the Labeled Cold Tire Inflation Pressure.

		PASS/FAIL
[B.(5) <d.(7)]< td=""><td>Front Tires</td><td>PASS</td></d.(7)]<>	Front Tires	PASS
	Rear Tires	PASS

Vehicle Maximum Load on the tire must not be greater than the Tire Load Rating at the Labeled Cold Tire Inflation Pressure.

		PASS/FAIL
[D.(5) <d.(7)]< td=""><td>Front Tires</td><td>PASS</td></d.(7)]<>	Front Tires	PASS
	Rear Tires	PASS

DATA INDICATES COMPLIANCE:

PASS/FAIL: PASS

DATE: March 24, 2011

REMARKS: Front GAWR was exceeded on full and maximum loading weighings.

RECORDED BY: Todd P. Groghan

APPROVED BY: Kenneth H. Yates

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

VEHICLE MAKE/	MODEL/BOD	Y STYLE:	2011 Chev	rolet Cru	uze four-d	loor passenger	car
VEHICLE NHTSA	NUMBER:	CB0100	VIN	N:	1G1PC5	SH7B7171899	
LABORATORY:	US DOT Sai	n Angelo Te	st Facility	TEST D	ATE:	March 24, 201	1

#### Discussed in Part 575.6(a) **Required Discussion Topic** Page Numbers Manual? Paragraph (YES/NO) (4)(i) Tire labeling, including a description and explanation of each Yes 10-44 - 10-46marking on the tires provided with the vehicle, and information about the location of the Tire Identification Number (TIN). (A) Description and explanation of recommended cold tire (4)(ii) Yes 10-48 inflation pressure. (B) Description and explanation of FMVSS NO. 110 Vehicle Yes 9-12, 9-16, 10-50 Placard and Tire Inflation Pressure Label and their location(s). (C) Description and explanation of adverse safety Yes 10-50, 10-51 consequences of under-inflation including tire failure. (D) Description and explanation for measuring and adjusting Yes 10-51 air pressure to achieve proper inflation. (4)(iii) Glossary of tire terminology, including "cold tire pressure," 10-47 - 10-50 Yes maximum inflation pressure," and "recommended inflation pressure," and all non-technical terms defined in S3 of FMVSS NO. 110 & 139. (4)(iv) Tire care, including maintenance and safety practices. Yes 10-56 - 10-58 (4)(v) (A) Description and explanation of locating and Yes 9-12 understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity. (B) Description and explanation for calculating total and cargo Yes 9-13 - 9-15 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. (C) Description and explanation for determining compatibility Yes 9-13 of tire and vehicle load capabilities. (D) Description and explanation of adverse safety Yes 9-12 consequences of overloading on handling and stopping and on tires.

#### **Owner's Manual Discusses:**

#### 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: None

RECORDED BY: Todd P. Groghan

DATE: March 12, 2011

APPROVED BY: Kenneth H. Yates

#### TEST EQUIPMENT LIST AND CALIBRATION INFORMATION

		MODEL/	_	NEXT
EQUIPMENT	DESCRIPTION	SERIAL NO	CAL. DATE	CAL. DATE
FLOOR SCALES	INTERCOMP SW	PART #100156	7/21/2010	7/21/2011
(VEHICLE &	DELUXE SCALES	SERIAL #27032382		
BALLAST)				
AIR PRESSURE	ASHCROFT	MODEL #D1005PS	12/17/2010	12/17/2011
GAUGE	GENERAL PURPOSE	02L 100 PSI		
	DIGITAL GAUGE	SERIAL #20017398-		
		01		

SECTION 5 PHOTOGRAPHS



FIGURE 5.1 ¾ FRONT VIEW FROM LEFT SIDE OF VEHICLE

2011 CHEVROLET CRUZE NHTSA NO. CB0100 FMVSS NO. 110

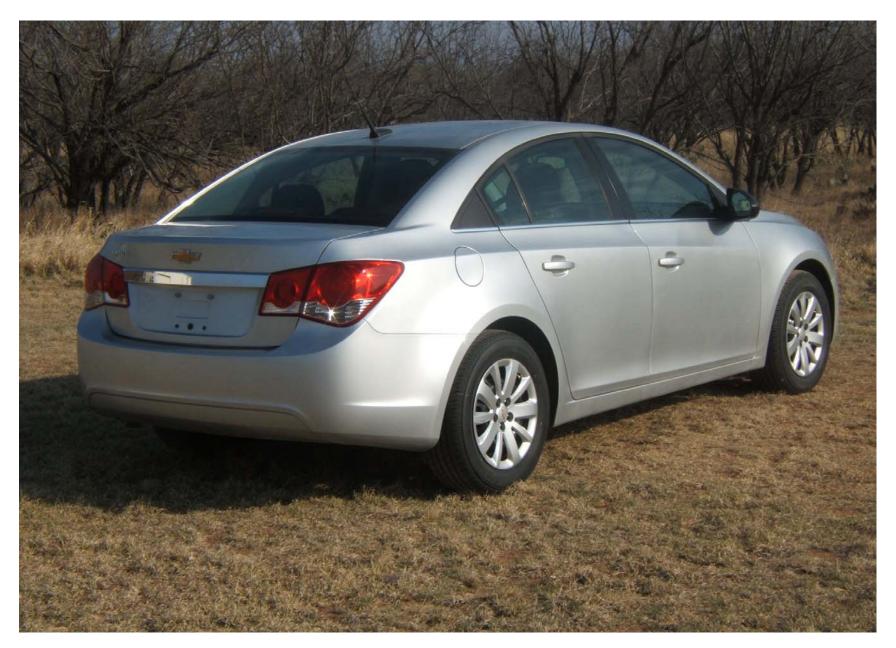


FIGURE 5.2 ¾ REAR VIEW FROM RIGHT SIDE OF VEHICLE

2011 CHEVROLET CRUZE NHTSA NO. CB0100 FMVSS NO. 110

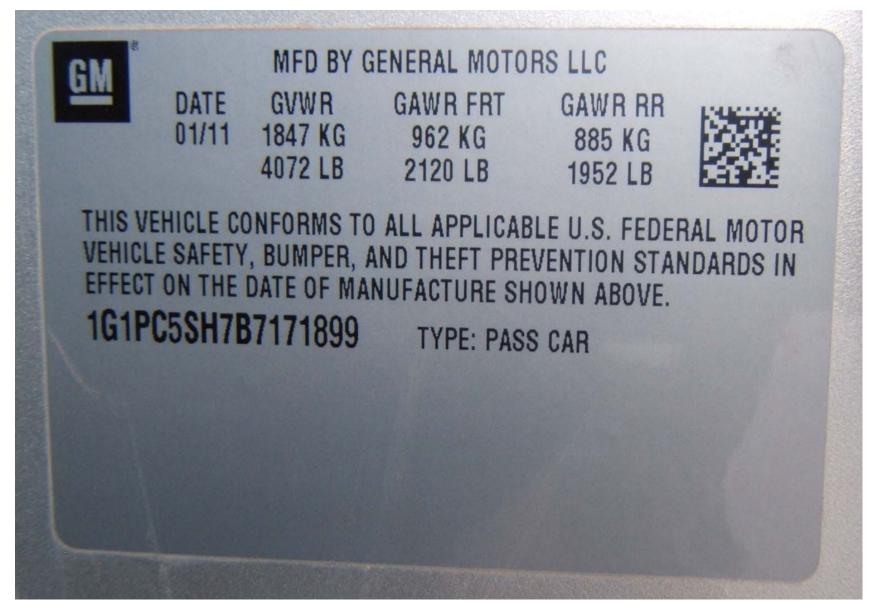


FIGURE 5.3 VEHICLE CERTIFICATION LABEL

	TIRE A	ND	LOADING INFORM	
	SEATING CAPACIT		TOTAL 5 FRONT 2	REAR 3
The combine	ed weight of occupants	s and c	argo should never exceed 408 kg	or 899 lbs.
TIRE	ORIGINAL SIZ	E	COLD TIRE PRESSURE	SEE OWNER'S
FRONT	P215/60R16	S	240 kPa, 35 PSI	MANUAL FOR
REAR	P215/60R16	S	240 kPa, 35 PSI	ADDITIONAL
SPARE	T115/70R16	M	420 kPa, 60 PSI	

FIGURE 5.4 VEHICLE PLACARD



FIGURE 5.5 TIRE SHOWING BRAND AND MODEL



FIGURE 5.6 TIRE SHOWING SIZE, LOAD INDEX, AND SPEED SYMBOL

2011 CHEVROLET CRUZE NHTSA NO. CB0100 FMVSS NO. 110

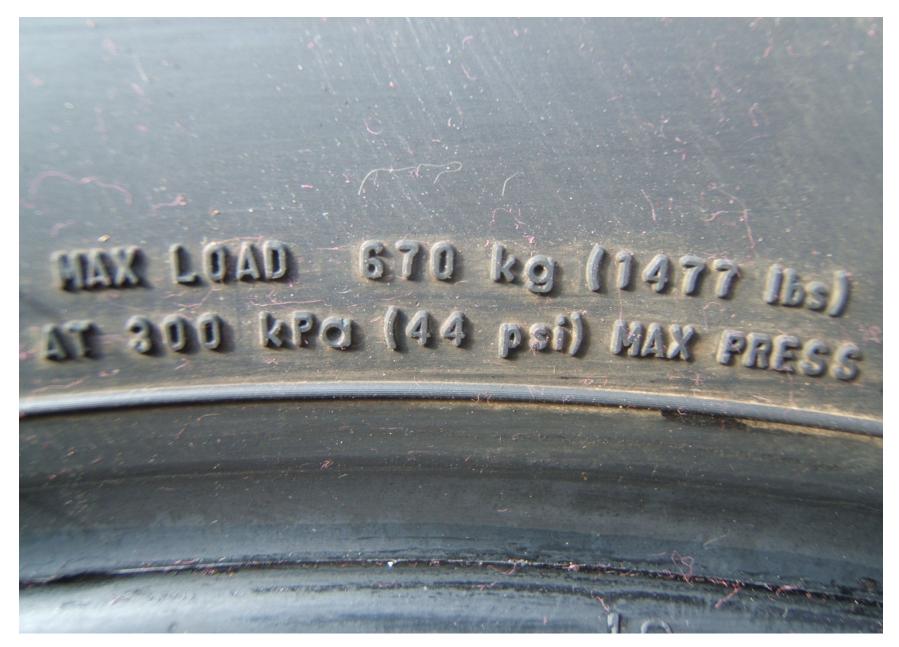


FIGURE 5.7 TIRE SHOWING MAX LOAD RATING AND MAX INFLATION PRESSURE



FIGURE 5.8 TIRE SHOWING SERIAL NUMBER





FIGURE 5.10 RIGHT FRONT RIM SHOWING DATE OF MANUFACTURE, OTHER RIM MARKINGS, SIZE, LETTER DESIGNATION FOR SOURCE OF PUBLISHED DIMENSIONS, DOT SYMBOL, AND OTHER RIM MARKINGS









#### FIGURE 5.11 RIGHT FRONT RIM SHOWING OTHER RIM MARKINGS



FIGURE 5.12 VEHICLE FRONT SEATS BALLASTED FOR NORMAL, FULL, AND MAXIMUM LOADS 29



FIGURE 5.13 VEHICLE REAR SEAT BALLASTED FOR NORMAL LOAD



FIGURE 5.14 VEHICLE REAR SEAT BALLASTED FOR FULL AND MAXIMUM LOADS 31



FIGURE 5.15 VEHICLE TRUNK BALLASTED FOR MAXIMUM LOAD



FIGURE 5.16 VEHICLE ON WEIGHT SCALES