

REPORT NUMBER 110-STF-09-007

SAFETY COMPLIANCE TESTING FOR FMVSS 110 TIRE SELECTION AND RIMS

KIA MOTORS CORPORATION
2009 RONDO LX
FOUR-DOOR PASSENGER CAR
NHTSA NO. C90505

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



APRIL 2, 2009

FINAL REPORT

PREPARED FOR

**U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
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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	16
5 Photographs	17

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 Contour for Full Width of Cross Section
- 5.11 Rim Showing Size and Other Rim Markings
- 5.12 Rim Showing Other Rim Markings, Letter Designation for Source of Published Dimensions, and DOT Symbol
- 5.13 Rim Showing Manufacturer's Symbol and Other Rim Markings
- 5.14 Rim Showing Date of Manufacture
- 5.15 Rim Showing Other Rim Markings
- 5.16 Vehicle Front Seat Ballasted for Normal and Maximum Loads
- 5.17 Vehicle Mid Seat Ballasted for Normal Load
- 5.18 Vehicle Mid Seat Ballasted for Maximum Load
- 5.19 Vehicle Rear Seat Ballasted for Maximum Load
- 5.20 Vehicle Cargo Area Ballasted for Maximum Load
- 5.21 Vehicle on Weight Scales

SECTION 1

INTRODUCTION

1.1 PURPOSE OF COMPLIANCE TEST

A 2009 Kia Rondo LX 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 2009 Kia Rondo LX four-door passenger car. Nomenclatures applicable to the test vehicle are:

A. Vehicle Identification Number: KNAFG528X97227753

B. NHTSA Number: C90505

C. Manufacturer: Kia Motors Corporation

D. Manufacture Date: 06/2008

1.3 TEST DATE

The test vehicle was tested March 23 through March 26, 2009.

SECTION 2

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 were 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, and Maximum Vehicle Load weight. At each step of the ballasting procedure, data was recorded. Ballast was photographically documented for the Normal and Maximum Vehicle Load weights. 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 Kia Rondo LX test vehicle appears to be in compliance with all FMVSS 110 requirements tested.

SECTION 3
TEST DATA

DATA SUMMARY SHEET

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Kia Rondo LX four-door passenger car

VEHICLE NHTSA NUMBER: C90505 VIN: KNAFG528X97227753

VEHICLE TYPE: passenger car DATE OF MANUFACTURE: 06/2008

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, S4.2.1.1)

PASS

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 and located correctly, and display the information and format required. (S110, S4.3)

PASS

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

PASS

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))

See
Remarks

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

REMARKS: The rim retention test required by FMVSS No.110, paragraph S4.4.1(b) was not executed on the subject Kia Rondo.

DATA SHEET 1
TEST VEHICLE INFORMATION/RECEIVING INSPECTION

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Kia Rondo LX four-door passenger car

VEHICLE NHTSA NUMBER: C90505 TEST DATE: March 23, 2009

VIN: KNAFG528X97227753 MANUFACTURE DATE: 06/2008

GVWR: 2,200 kg (4,850 lb) GAWR(front): 1,140 kg (2,513 lb)

GAWR(rear): 1,180 kg (2,601 lb)

SEATING POSITIONS: FRONT 2 MID 3 REAR 2

ODOMETER READING AT START OF TEST: 101 km (63 mi)

ENGINE DATA: 4 Cylinders 2.4 Liters Cubic Inches

TRANSMISSION DATA: X Automatic Manual 4 No. of Speeds

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

INSTALLED VEHICLE EQUIPMENT:

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

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: March 23, 2009

APPROVED BY: Kenneth H. Yates

**DATA SHEET 2
VEHICLE TIRE IDENTIFICATION**

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Kia Rondo LX four-door passenger car

VEHICLE NHTSA NUMBER: C90505 VIN: KNAFG528X97227753

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 24, 2009

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>Michelin Energy MXV4 S8</u>	<u></u>	<u>Maxxis</u>
Tire Size Designation	<u>P205/60R16</u>	<u></u>	<u>T125/80D16</u>
Load Index/Speed Symbol	<u>91H</u>	<u></u>	<u>97M</u>
Maximum Inflation Pressure	<u>300 kPa (44 psi)</u>	<u></u>	<u>420 kPa (60 psi)</u>
Maximum Load Rating	<u>615 kg (1,356 lb)</u>	<u></u>	<u>730 kg (1,609 lb)</u>
Tread/Traction/Temperature	<u>440/A/A</u>	<u></u>	<u>N/A</u>
Tires Have "DOT" Markings	<u>Yes</u>	<u></u>	<u>Yes</u>

Serial Number: Right Front ED7RPHMX3307 Left Front ED7RPHMX3307

Right Rear ED7RPHMX3107 Left Rear ED7RPHMX3307

Spare 7FLHABC1808

DATA INDICATES COMPLIANCE: PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Todd P. Groghan

DATE: March 24, 2009

APPROVED BY: Kenneth H. Yates

**DATA SHEET 3
VEHICLE RIM IDENTIFICATION**

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Kia Rondo LX four-door passenger car

VEHICLE NHTSA NUMBER: C90505 VIN: KNAFG528X97227753

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 26, 2009

Rim Markings (if available):

Right Front

**Left Rear
(if different)**

Manufacturer's Name, Symbol or Trademark  _____

Rim Size 6½ Jx16 _____

Date of Manufacture  _____  _____

Does Rim contain "DOT" symbol? (YES/NO) Yes _____

Other Rim Markings See Figures 5.11-15 _____

Rim Inspection Comments: None _____

Tire Inspection Comments: None _____

Rim Size:	Tire Size	Measured Rim Width	Measured Rim Diameter
Right Front Wheel	<u>P205/60R16</u>	<u>6½ in (16.5 cm)</u>	<u>16 in (40.6 cm)</u>
Left Rear Wheel	<u>P205/60R16</u>	<u>6½ in (16.5 cm)</u>	<u>16 in (40.6 cm)</u>

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: 2008 Tire & Rim Association Inc. Yearbook

DATA INDICATES COMPLIANCE: _____ PASS/FAIL: PASS

REMARKS: None _____

RECORDED BY: Jack R. Stewart DATE: March 26, 2009

APPROVED BY: Kenneth H. Yates

DATA SHEET 4 (1 of 2) VEHICLE PLACARD

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Kia Rondo LX four-door passenger car

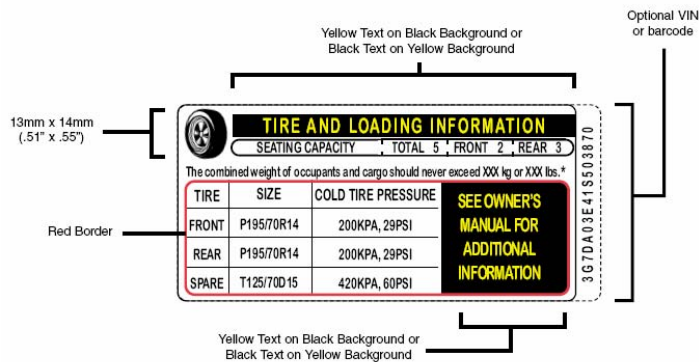
VEHICLE NHTSA NUMBER: C90505 VIN: KNAFG528X97227753

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 24, 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>No</u>	<u></u>	<u></u>

Vehicle Placard



**FIGURE 1
(70 FR 14425)**

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

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

Vehicle Placard Information:

Combined weight of occupants and cargo 525 kg (1,157 lb)

Seating Capacity: Total 7 FRONT 2 REAR 5

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

DATA SHEET 4 (2 of 2)
VEHICLE PLACARD

Vehicle Placard Tire Information:

Tire size: Front P205/60R16 Rear P205/60R16

Tire Inflation Pressure: Front 220 kPa (32 psi) Rear 220 kPa (32 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

DATA INDICATES COMPLIANCE: PASS/FAIL: PASS

REMARKS: Vehicle placard is bilingual. English is primary and French is secondary.

RECORDED BY: Todd P. Groghan

DATE: March 24, 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 Kia Rondo LX four-door passenger car

VEHICLE NHTSA NUMBER: C90505 VIN: KNAFG528X97227753

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 26, 2009

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

* Brake fluid, transmission fluid, windshield washer fluid, power steering fluid, & engine oil

Tire Pressures: LF 220 kPa (32 psi) LR 220 kPa (32 psi)
(cold, prior to loading vehicle) RF 220 kPa (32 psi) RR 220 kPa (32 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

LF 468 kg (1,031 lb) LR 335 kg (739 lb)
RF 449 kg (989 lb) RR 337 kg (743 lb)
Front Axle 917 kg (2,020 lb) Rear Axle 672 kg (1,482 lb)
Total Vehicle 1,589 kg (3,502 lb)

B. MEASURED VEHICLE NORMAL LOAD WEIGHT

(1) Seating Capacity from Vehicle Placard = 7

(2) Normal Load Number of Occupants (Table in Section 10) = 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 515 kg (1,135 lb) LR 392 kg (864 lb)
RF 492 kg (1,084 lb) RR 394 kg (869 lb)
Front Axle 1,007 kg (2,219 lb) Rear Axle 786 kg (1,733 lb)
Total Vehicle 1,793 kg (3,952 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] = 504 kg (1,110 lb)

Rear Tires [measured rear axle normal load/2] = 393 kg (867 lb)

(6) Calculated 94% of tire load rating at recommended cold inflation pressure:

Load rating at recommend cold inflation pressure= 590 kg (1,301 lb)

94% of load rating = 555 kg (1,223 lb)

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

		PASS/FAIL
[B.(5)<B.(6)]	Front Tires	<u>PASS</u>
	Rear Tires	<u>PASS</u>

C. MEASURED VEHICLE WEIGHT WITH FULL OCCUPANT LOAD

(1) Seating Capacity from Placard:

Total 7 FRONT 2 REAR 5

(2) Full Occupant Load: 476 kg (1,050 lb)
 [# of total occupants from C.(1) x 68 KG per occupant]

(3) Measured Vehicle Weight with Full Occupant Load:

LF 524 kg (1,155 lb) LR 521 kg (1,149 lb)

RF 502 kg (1,106 lb) RR 518 kg (1,142 lb)

Front Axle 1,026 kg (2,261 lb) Rear Axle 1,039 kg (2,291 lb)

Total Vehicle 2,065 kg (4,552 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): 525 kg (1,157 lb)

(2) Full Occupant Load (from C.(2)): 476 kg (1,050 lb)

(3) Luggage/Cargo Load (subtract (2) from (1)): 49 kg (107 lb)

(4) Measured Vehicle Maximum Load on Axles:

LF 518 kg (1,142 lb) LR 552 kg (1,216 lb)

RF 497 kg (1,095 lb) RR 547 kg (1,206 lb)

Front Axle 1,015 kg (2,237 lb) Rear Axle 1,099 kg (2,422 lb)

Total Vehicle 2,114 kg (4,659 lb)

(5) Calculated Vehicle Maximum Load on the Tire:

Front Tires [measured front axle maximum load/2]= 508 kg (1,119 lb)

Rear Tires [measured rear axle maximum load/2] = 550 kg (1,211 lb)

(6) Tire Sidewall Maximum Load Ratings:

	Front	Rear
Installed Tire Size	<u>P205/60R16</u>	<u>P205/60R16</u>

Max Load Rating on Sidewall	<u>615 kg (1,356 lb)</u>	<u>615 kg (1,356 lb)</u>
-----------------------------	--------------------------	--------------------------

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)] Front Tires	<u>PASS</u>
Rear Tires	<u>PASS</u>

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	P205/60R16	P205/60R16
Labeled Cold Inflation Pressure	220 kPa (32 psi)	220 kPa (32 psi)
Load Rating at This Pressure*	590 kg (1,301 lb)	590 kg (1,301lb)

*Reference used to obtain Load Rating: 2008 Tire & Rim 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)]	Front Tires	<u>PASS</u>
	Rear Tires	<u>PASS</u>

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)]	Front Tires	<u>PASS</u>
	Rear Tires	<u>PASS</u>

DATA INDICATES COMPLIANCE: PASS/FAIL: PASS

REMARKS: None

RECORDED BY: Jack R. Stewart

DATE: March 26, 2009

APPROVED BY: Kenneth H. Yates

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

VEHICLE MAKE/MODEL/BODY STYLE: 2009 Kia Rondo LX four-door passenger car

VEHICLE NHTSA NUMBER: C90505 VIN: KNAFG528X97227753

LABORATORY: US DOT San Angelo Test Facility TEST DATE: March 23, 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	7-41 through 7-44
(4)(ii)	(A) Description and explanation of recommended cold tire inflation pressure.	Yes	7-35
	(B) Description and explanation of FMVSS 110 Vehicle Placard and Tire Inflation Pressure Label and their location(s).	Yes	7-35
	(C) Description and explanation of adverse safety consequences of under-inflation including tire failure.	Yes	7-35, 36
	(D) Description and explanation for measuring and adjusting air pressure to achieve proper inflation.	Yes	7-36, 7-37
(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	7-44 through 7-46
(4)(iv)	Tire care, including maintenance and safety practices.	Yes	7-40
(4)(v)	(A) Description and explanation of locating and understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity.	Yes	5-45 through 5-48
	(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	5-46 through 5-48
	(C) Description and explanation for determining compatibility of tire and vehicle load capabilities.	Yes	5-45, 5-46
	(D) Description and explanation of adverse safety consequences of overloading on handling and stopping and on tires.	Yes	5-48, 5-49

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 23, 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 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

FIGURE 5.1
¾ FRONT VIEW FROM LEFT SIDE OF VEHICLE



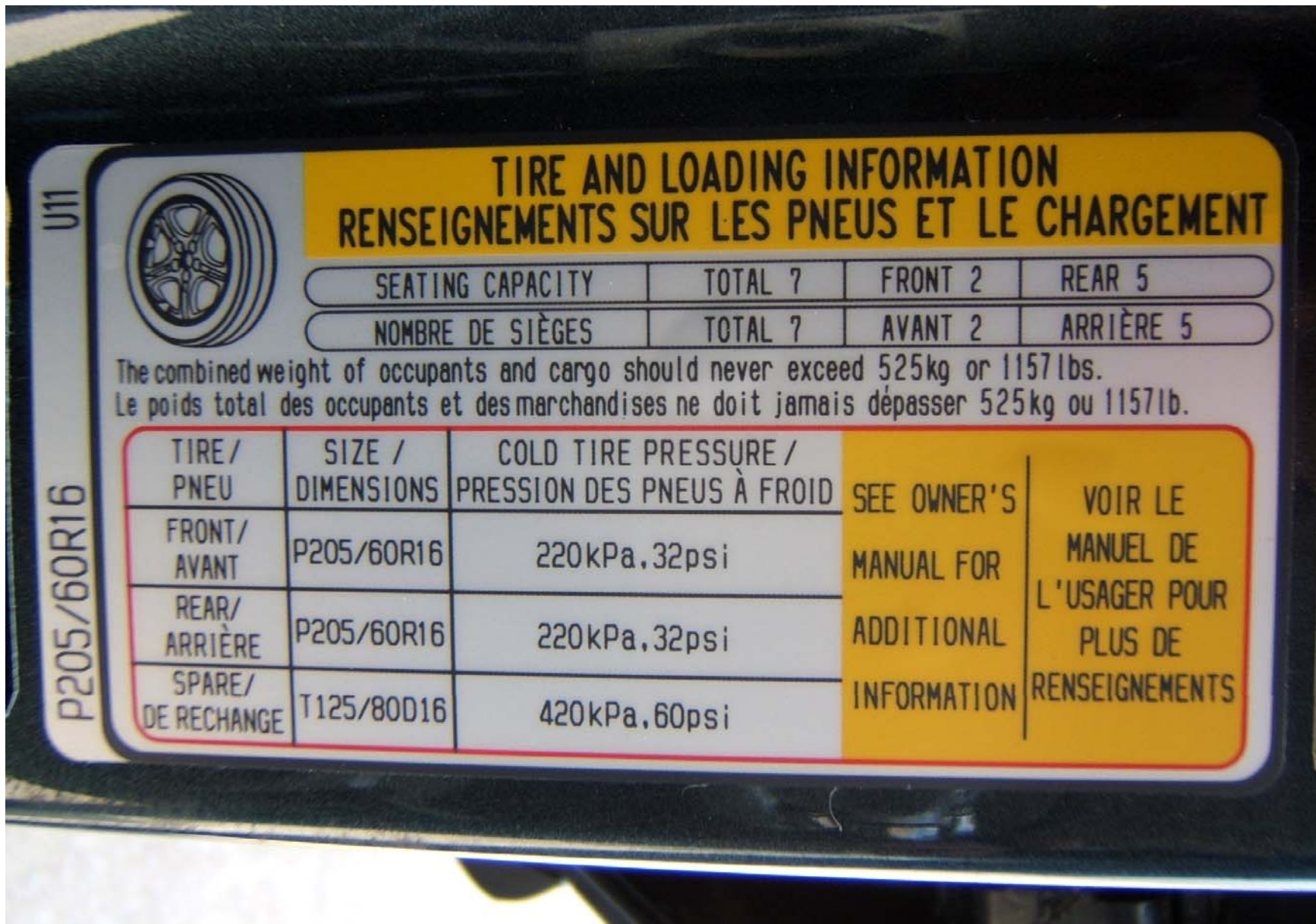
2009 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

FIGURE 5.2
¾ REAR FROM RIGHT SIDE OF VEHICLE



2009 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

FIGURE 5.3
VEHICLE CERTIFICATION LABEL



TIRE AND LOADING INFORMATION
RENSEIGNEMENTS SUR LES PNEUS ET LE CHARGEMENT



U11

SEATING CAPACITY	TOTAL 7	FRONT 2	REAR 5
NOMBRE DE SIÈGES	TOTAL 7	AVANT 2	ARRIÈRE 5

The combined weight of occupants and cargo should never exceed 525kg or 1157lbs.
 Le poids total des occupants et des marchandises ne doit jamais dépasser 525kg ou 1157lb.

P205/60R16

TIRE / PNEU	SIZE / DIMENSIONS	COLD TIRE PRESSURE / PRESSION DES PNEUS À FROID	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION	VOIR LE MANUEL DE L'USAGER POUR PLUS DE RENSEIGNEMENTS
FRONT / AVANT	P205/60R16	220kPa, 32psi		
REAR / ARRIÈRE	P205/60R16	220kPa, 32psi		
SPARE / DE RECHANGE	T125/80D16	420kPa, 60psi		

2009 KIA RONDO LX
 NHTSA NO. C90505
 FMVSS 110

FIGURE 5.4
 VEHICLE PLACARD



2009 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

FIGURE 5.5
TIRE SHOWING BRAND



2009 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

FIGURE 5.6
TIRE SHOWING MODEL



2009 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

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



2009 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

FIGURE 5.8
TIRE SHOWING MAX LOAD RATING
AND MAX INFLATION PRESSURE



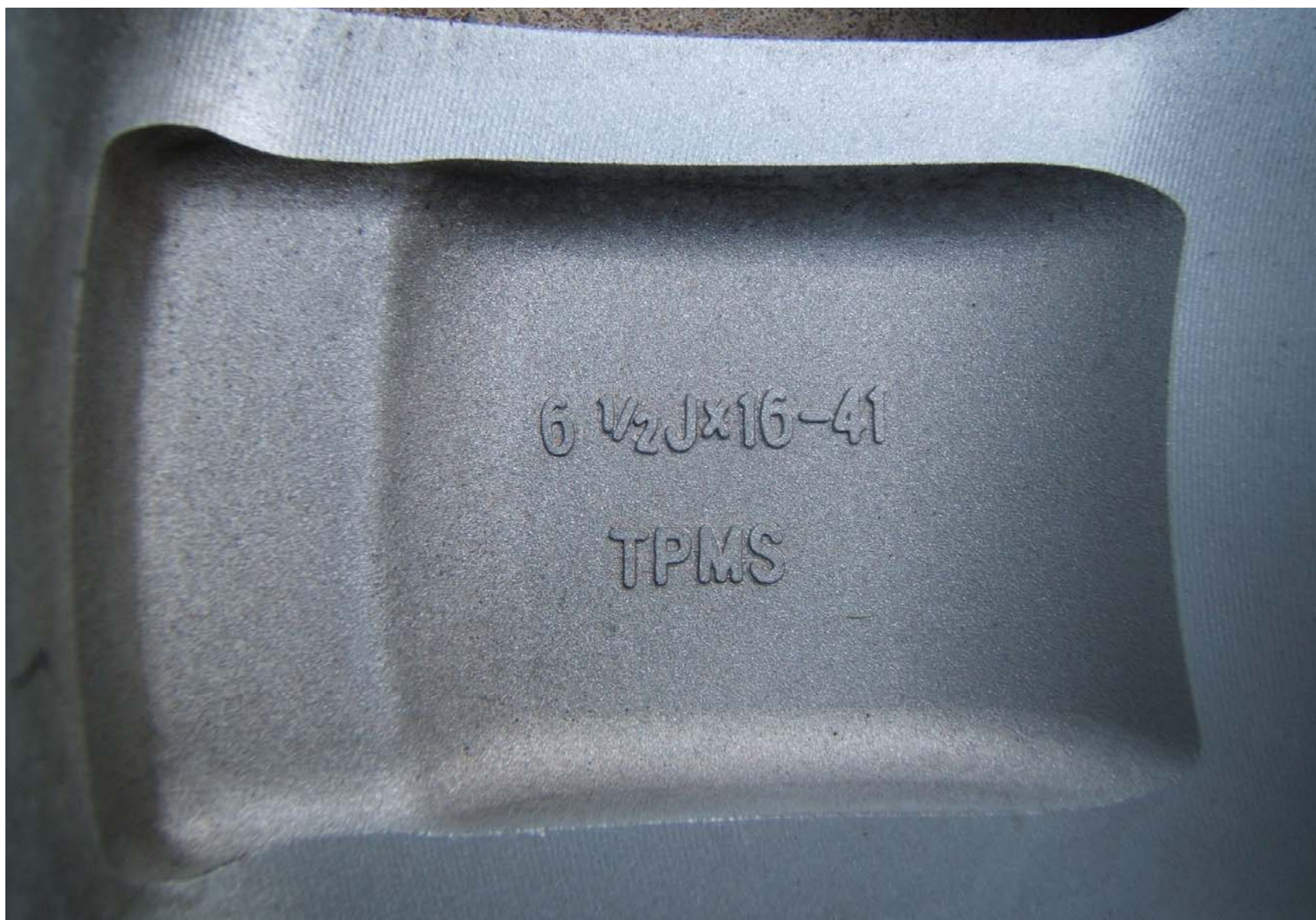
2009 KIA RONDO LX
NHTSA NO. C90505
FMVSS 110

FIGURE 5.9
TIRE SHOWING SERIAL NUMBER



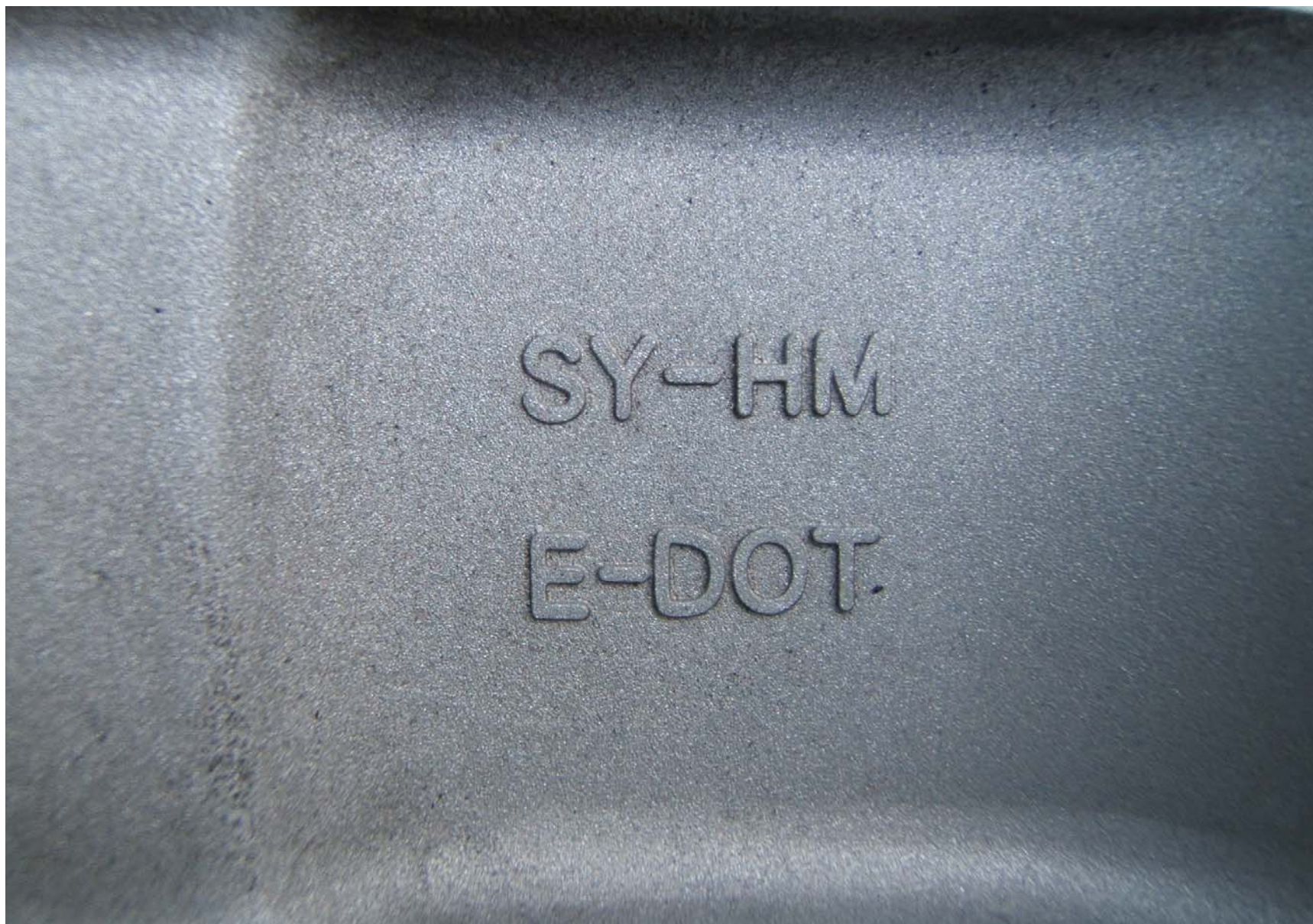
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FIGURE 5.10
RIM CONTOUR FOR FULL WIDTH OF CROSS SECTION



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FIGURE 5.11
RIM SHOWING SIZE AND OTHER RIM MARKINGS



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FIGURE 5.12
RIM SHOWING OTHER RIM MARKINGS, LETTER DESIGNATION FOR
SOURCE OF PUBLISHED DIMENSIONS, AND DOT SYMBOL



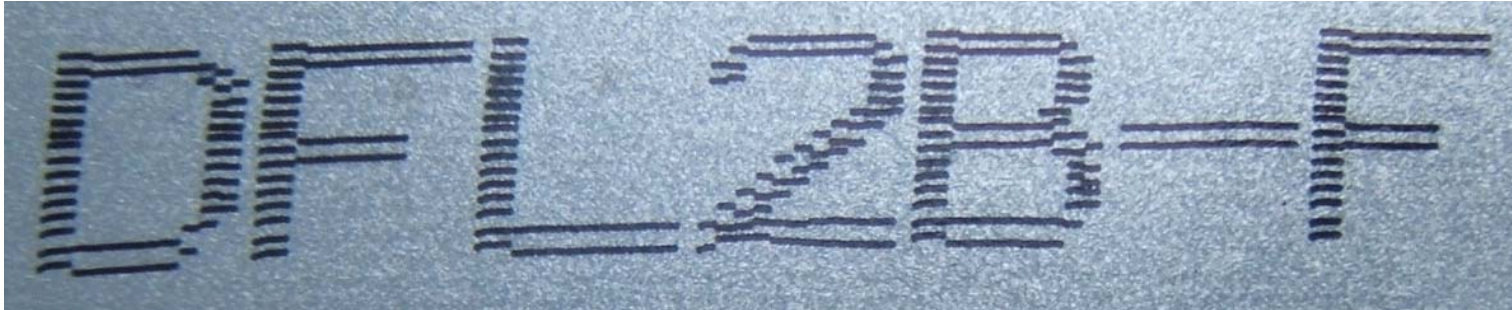
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FIGURE 5.13
RIM SHOWING MANUFACTURER'S SYMBOL
AND OTHER RIM MARKINGS



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FIGURE 5.14
RIM SHOWING DATE OF MANUFACTURER



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FIGURE 5.15
RIM SHOWING OTHER RIM MARKINGS



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FIGURE 5.16
VEHICLE FRONT SEAT BALLASTED FOR
NORMAL AND MAXIMUM LOADS



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FIGURE 5.17
VEHICLE MID SEAT BALLASTED
FOR NORMAL LOAD



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FIGURE 5.18
VEHICLE MID SEAT BALLASTED
FOR MAXIMUM LOAD



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FIGURE 5.19
VEHICLE REAR SEAT BALLASTED
FOR MAXIMUM LOAD



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FIGURE 5.20
VEHICLE CARGO AREA BALLASTED
FOR MAXIMUM LOAD



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FIGURE 5.21
VEHICLE ON WEIGHT SCALES