

REPORT NUMBER 110(IND)-GTL-03-038

**SAFETY COMPLIANCE TESTING FOR
FMVSS NO. 110(INDICANT)
TIRE SELECTION AND RIMS**

**DAIMLERCHRYSLER CORPORATION
2003 DODGE RAM 1500 PICKUP TRUCK
NHTSA NO. C30312**

**GENERAL TESTING LABORATORIES, INC.
1623 LEEDSTOWN ROAD
COLONIAL BEACH, VIRGINIA 22443**



SEPTEMBER 26, 2003

FINAL REPORT

PREPARED FOR

**U. S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SAFETY ENFORCEMENT
OFFICE OF VEHICLE SAFETY COMPLIANCE
400 SEVENTH STREET, SW
ROOM 6111 (NVS-220)
WASHINGTON, D.C. 20590**

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Prepared By: Julius Messick
Approved By: M. L. [Signature]
Approval Date: 09/25/03

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Accepted By: John [Signature]
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15. Supplementary Notes		
16. Abstract This test was conducted on the subject 2003 Dodge Ram 1500 Pickup Truck in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-110-02 (partial), to gather data relating to the normal load requirements specified in FMVSS 110. NHTSA's Office of Safety Performance Standards requested this data to support the agency's TREAD tire rulemaking efforts.		
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SECTION 1

INTRODUCTION

1.0 PURPOSE OF INDICANT TEST

A 2003 Dodge Ram 1500 Pickup Truck was subjected to a FMVSS No. 110 (Indicant) test intended to gather data relating to the normal load requirements specified in FMVSS 110. NHTSA's Office of Safety Performance Standards requested this data to support the agency's TREAD tire rulemaking efforts.

1.1 TEST VEHICLE

The test vehicle was a 2003 Dodge Ram 1500 Pickup Truck. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 1D7HU18N23S207307

B. NHTSA No.: C30312

C. Manufacturer: DAIMLERCHRYSLER CORPORATION

D. Manufacture Date: 12/02

1.2 TEST DATE

The test vehicle was subjected to testing on June 02, 2003.

SECTION 2

TEST PROCEDURE AND SUMMARY OF RESULTS

2.0 TEST PROCEDURE

The vehicle was inspected, photographed and filled with fuel. It was then weighed to establish total curb weight and the weights of all wheels were measured and recorded. The vehicle was then ballasted to its normal load condition (refer to appendix) and the weights of all wheels were measured and recorded. Tire information labeling data and tire sidewall data were recorded.

This indicant test did not include any other requirements in FMVSS 110.

2.1 SUMMARY OF RESULTS

Currently FMVSS 110 applies only to passenger cars. The subject Dodge Ram 1500 Pickup is a truck and therefore it is not required to meet FMVSS 110 requirements. It was subjected to the normal load testing as executed for FMVSS 110 compliance verification for information only.

SECTION 3 TEST DATA

DATA SHEET 1 SUMMARY

VEHICLE MAKE/MODEL/BODY STYLE: 2003 DODGE RAM 1500 PICKUP TRUCK

VEHICLE NHTSA NO.: C30312; VIN: 1D7HU18N23S207307

LABORATORY: GENERAL TESTING LABORATORIES

TEST DATE: 06/02/03

<u>REQUIREMENT</u>	<u>YES/NO</u>
The vehicle is equipped with tires that meet the requirements of FMVSS 109 or FMVSS 119.	<u>YES</u>
The vehicle normal load on the tire is not greater than the high speed performance test load specified in FMVSS 109 paragraph S5.5 or FMVSS 119 paragraph S7.4.	<u>YES</u>
For passenger cars, the tire information placard is permanently affixed to the glove compartment door or equally accessible location; and displays the required information (FMVSS 110, S4.3).	<u>N/A</u>
For vehicles other than passenger cars, a combined certification/ tire information label or separate tire information label is permanently affixed to either the hinge pillar, door-latch post or to the inward-facing surface of the door next to the driver's seating position (FMVSS 120, S5.3).	<u>YES</u>

REMARKS:

RECORDED BY: *M. A. [Signature]*

DATE: 06/02/03

APPROVED BY: *D. [Signature]*

DATA SHEET 2

TEST VEHICLE INFORMATION/RECEIVING INSPECTION

LABORATORY: GENERAL TESTING LABORATORIES DATE: 06/02/03

VEHICLE MODEL YEAR/MAKE/MODEL/BODY STYLE: 2003 DODGE RAM 1500 PICKUP TRUCK

MANUFACTURE DATE: 12/02 NHTSA NO.: C30312 BODY COLOR: RED

VIN: 1D7HU18N23S207307 VEHICLE TYPE: TRUCK

GVWR 3017 kg (6650 lbs) GAWR(Fr) 1770 kg (3900 lbs) GAWR(Rr) 1770 kg (3900 lbs)

BELTED SEATING POSITIONS: FRONT 3 MID N/A REAR 3 OTHER N/A

ENGINE DATA: 8 Cylinders 4.7 Liters Cubic Inches

TRANSMISSION DATA: X Automatic Manual 5 No. of Speeds

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

INSTALLED TIRE DATA: Size - LT275/70R17 Mfr. - GOODYEAR

CHECK APPROPRIATE BOXES FOR VEHICLE EQUIPMENT/MAKE SURE ALL OPTIONS ON WINDOW STICKER ARE LISTED:

X	Air Conditioning	X	Traction Control	X	Clock
X	Tinted Glass		All Wheel Drive		Roof Rack
X	Power Steering	X	Cruise Control		Console
X	Power Windows		Rear Window Defroster	X	Driver Air Bag
X	Power Door Locks		Sun Roof or T-Top	X	Passenger Air Bag
X	Power Driver Seat	X	Tachometer	X	Front Disc Brakes
X	Power Brakes	X	Tilt Steering Wheel	X	Rear Disc Brakes
X	Antilock Brake System	X	AM/FM/CD		Other -

ARE ALL OPTIONS LISTED ON "WINDOW STICKER" PRESENT ON THE TEST VEHICLE:
(YES/NO) Yes

REMARKS:

RECORDED BY: *M. P. [Signature]*

DATE: 06/02/03

APPROVED BY: *D. [Signature]*

DATA SHEET 3
CURB WEIGHT WITH OPTIONS AND NORMAL LOAD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 DODGE RAM 1500 PICKUP TRUCK
 VEHICLE NHTSA NO.: C30312 ; VIN: 1D7HU18N23S207307
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 06/02/03

Full Fluid Levels:

Fuel Full ; Coolant Full ; Other Fluids Full

Tire Pressure: LF 241 KPA (35 psi) LR 241 KPA (35 psi)
 RF 241 KPA (35 psi) RR 241 KPA (35 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

LF	<u>714 KG (1575 LB)</u>	LR	<u>517 KG (1140 LB)</u>
RF	<u>705 KG (1555 LB)</u>	RR	<u>513 KG (1130 LB)</u>
Front Axle <u>1420 KG (3130 LB)</u>		Rear Axle <u>1030 KG (2270 LB)</u>	
Total Vehicle <u>2449 KG (5400 LB)</u>			

B. MEASURED VEHICLE WEIGHT IN NORMAL LOAD CONDITION

(1) Seating Capacity (from Tire Information Placard) = N/A
 Seating Capacity (# of belted seating positions) = 6

(2) Normal Load # of Occupants from Appendix
 Occupant Distribution: Front Seat- 2 Second Seat- 1
 Third Seat - N/A Fourth Seat- N/A

(3) Total Normal Occupant Load 204 KG (450 LB)
 (# of occupants x 68 KG per occupant)

(4) Measured Normal Load on each Wheel and Axles (Sum)

LF	<u>769 KG (1696 LB)</u>	LR	<u>560 KG (1234 LB)</u>
RF	<u>766 KG (1688 LB)</u>	RR	<u>558 KG (1231 LB)</u>
Frt Axle <u>1535 KG (3384 LB)</u>		Rr Axle <u>1118 KG (2465 LB)</u>	
Total Vehicle <u>2653 KG (5849 LB)</u>			

DATA SHEET 3 – CONTINUED

- (5) Calculated Vehicle Normal Load on the Tire
 Front Tires (measured front axle normal load/2) = 767 KG (1692 LB)
 Rear Tires (measured front axle normal load/2) = 559 KG (1233 LB)

- (6) High Speed Test Load from () FMVSS 109 (S5.5), or (X) FMVSS 119 (S7.4)

	Front	Rear
(a) Installed Tire Size	<u>LT275/70R17</u>	<u>LT275/70R17</u>
Max. Load Rating on Sidewall	<u>1180KG(2600 LBS)</u>	<u>1180KG(2600 LBS)</u>
Reduced Sidewall Load Rating (if applicable)*	<u>N/A</u>	<u>N/A</u>
High Speed Test Load (88% of sidewall max. load rating)	<u>1038 KG(2288 LBS)</u>	<u>1038KG(2288 LBS)</u>
(b) Optional Tire Size(s)	<u>P245/70R17</u>	<u>P245/70R17</u>
Max. Load Rating on Sidewall (From 2003 Tire & Rim Association Yearbook)	<u>1180KG(2600 LBS)</u>	<u>1180KG(2600 LBS)</u>
Reduced Sidewall Load Rating (if applicable)*	<u>N/A</u>	<u>N/A</u>
High Speed Test Load (88% of sidewall max. load rating)	<u>1038 KG(2288 LBS)</u>	<u>1038KG(2288 LBS)</u>

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

REMARKS: The Vehicle Normal Load on the Tire is not greater than the High Speed Test Load.

RECORDED BY: M.A. [Signature]

DATE: 06/02/03

APPROVED BY: D. [Signature]

DATA SHEET 4
TIRE INFORMATION LABEL OR PLACARD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 DODGE RAM 1500 PICKUP TRUCK
 VEHICLE NHTSA NO.: C30312 ; VIN: 1D7HU18N23S207307
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 06/02/03

A. Vehicle Type from Certification Label: TRUCK

B. Identify Vehicle Labeling:

Vehicle has a combined Certification Tire Information Label ☒ Yes ☐ No
 Is Label Permanently Affixed: ☒ Yes ☐ No
 Label Location: Driver's Door Jam
 Description of Label: Black/White Sticker

Vehicle has a separate Tire Information Label or Placard ☐ Yes ☒ No
 Is Label Permanently Affixed: ☐ Yes ☐ No
 Label Location: _____
 Description of Label: _____

C. Enter Information from Combined or Separate Tire Information Label/Placard

Vehicle Capacity Weight - N/A(see remarks)

Designated Seating Capacity (DSC) - N/A(see remarks)

Expressed In—

(1) Total No. of Occupants ☐ Yes ☐ No

(2) Terms of Occupants for Each Seat Location ☐ Yes ☐ No

Manufacturer's Recommended Tire Size(s) and Cold Tire Inflation Pressure(s) for Maximum Load Vehicle Weight:

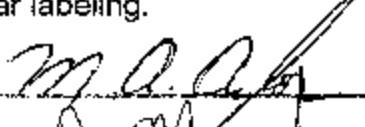
P245/70R17

FRONT - 241 kPa (35 psi)

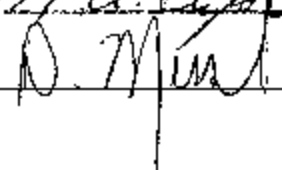
REAR - 241 kPa (35 psi)

Manufacturer's Recommended Tire Size(s) and Cold Tire Inflation Pressure(s) for Other Load Conditions: NONE

REMARKS: The vehicle labeling requirements of FMVSS 120 for a truck do not include Vehicle Capacity Weight (VCW) or Designated Seating Capacity (DSP) as required by FMVSS 110 passenger car labeling.

RECORDED BY: 

DATE: 06/02/03

APPROVED BY: 

DATA SHEET 5
VEHICLE TIRE DATAVEHICLE MAKE/MODEL/BODY STYLE: 2003 DODGE RAM 1500 PICKUP TRUCKVEHICLE NHTSA NO.: C30312 ; VIN: 1D7HU18N23S207307LABORATORY: GENERAL TESTING LABORATORIESTEST DATE: 06/02/03All tires on the vehicle are the same size: (Yes/No) Yes

INFORMATION FROM TIRE SIDEWALL:

Right Front Tire

Tire Size Designation LT275/70R17Tire Load Index/Speed Symbol 114/110RMaximum Inflation Pressure 350 kPa (50 psi)Maximum Load Rating 1180 KG (2600 LBS)Mfr. Name or Brand & Code GOODYEAR WRANGLERTube or Tubeless TUBELESSTreadwear/Traction/Temp.
Grades _____Sidewall (Plies & Composition) 3 PLY POLYESTERTread (Plies & Composition) 3 PLY POLYESTER
2 PLY STEELSerial Number: Right Front - DOT MKXC LREV 4602

Tire has "DOT" markings: (X) YES () NO () UNDETERMINED

REMARKS:

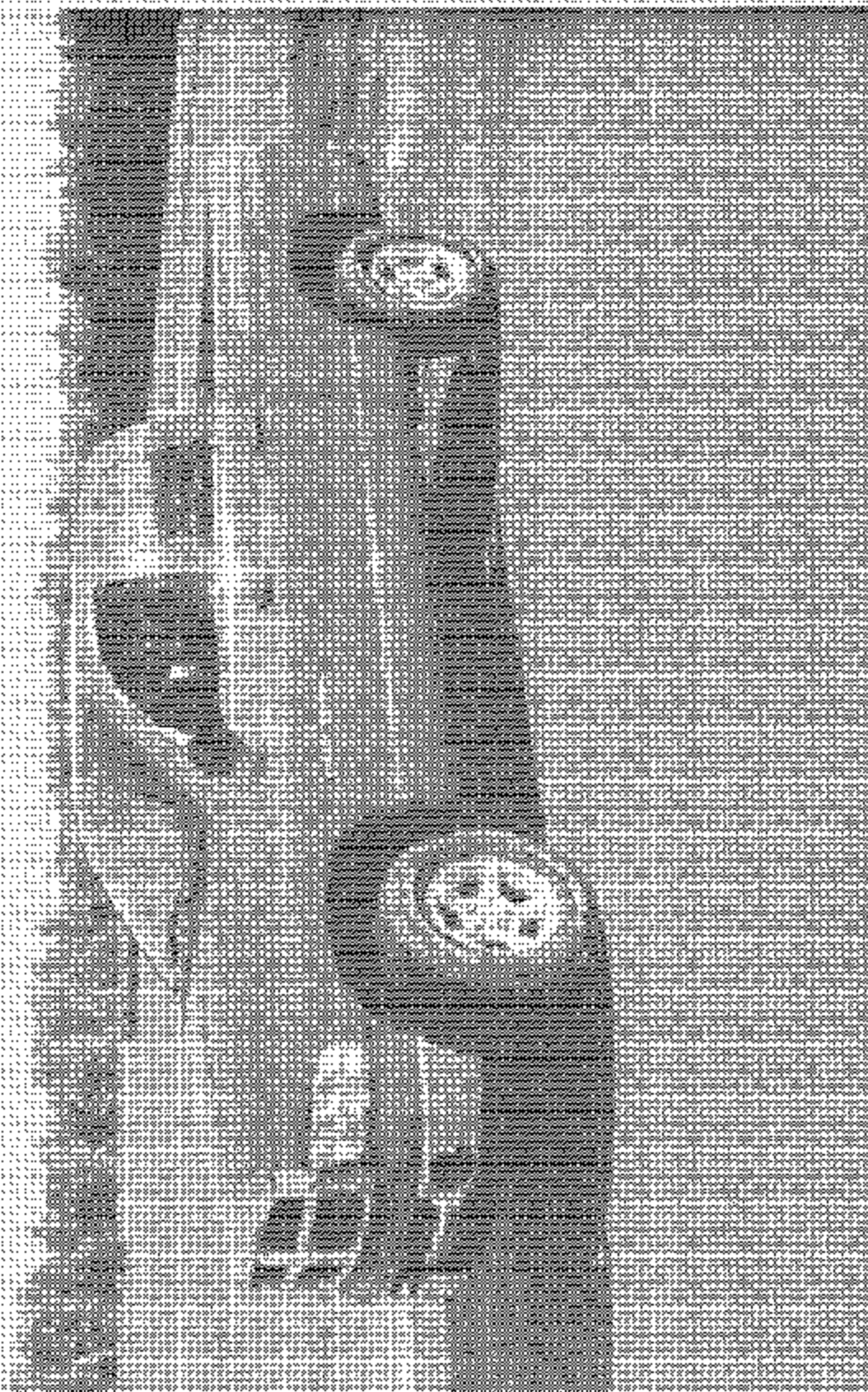
RECORDED BY: M. A. G.DATE: 06/02/03APPROVED BY: D. M. M.

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

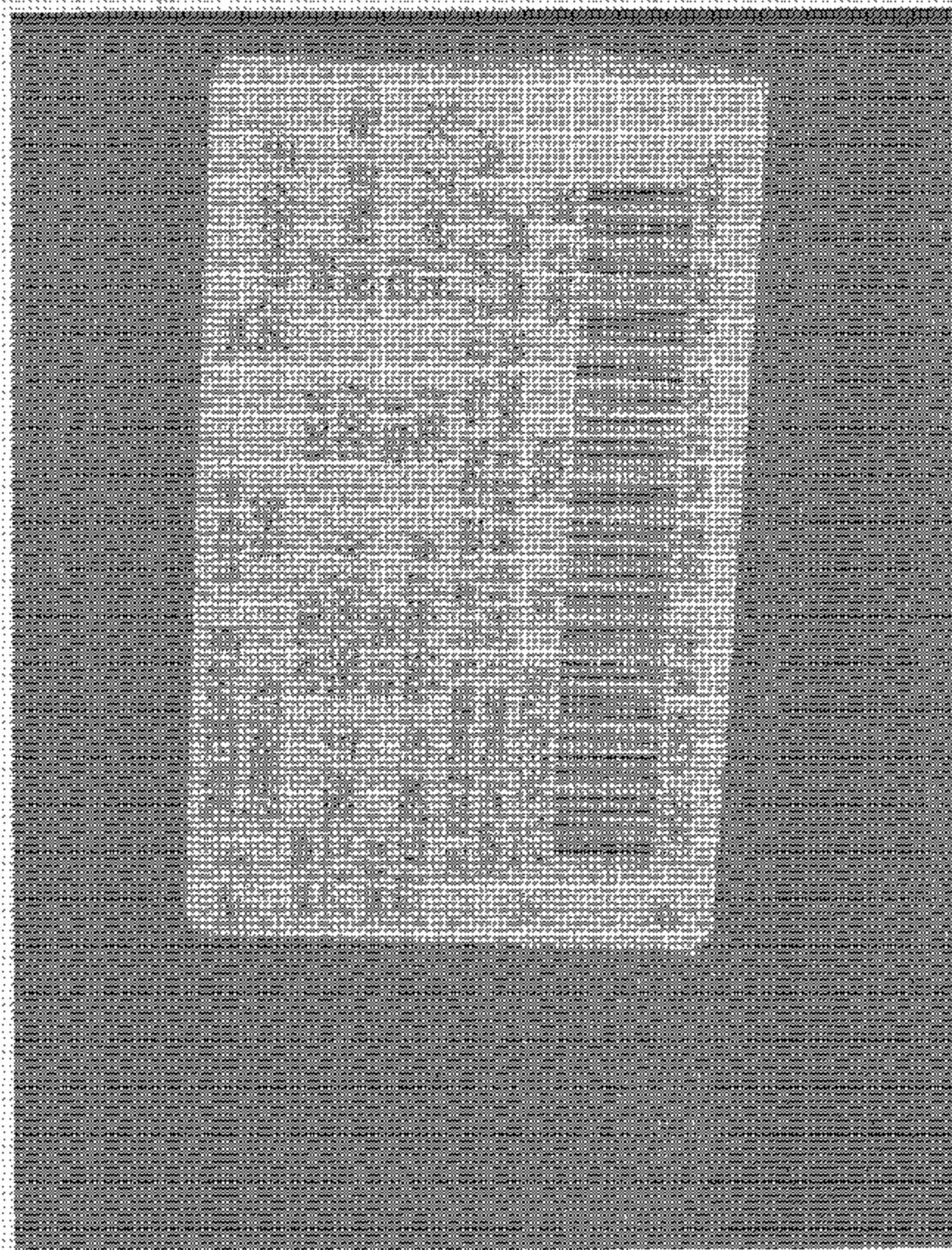
EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO.	CAL. DATE	NEXT CAL. DATE
PAD SCALES	#1 199744LF	199744LF	06/02	06/03
	#2 199744RF	199744RF	06/02	06/03
	#3 199744LR	199744LR	06/02	06/03
	#4 199744RR	19974RR	06/02	06/03
PRESSURE GAGE	WESKLER	0-100	12/02	05/04
SURFACE LEVEL	GTL	N/A	BEFORE USE	BEFORE USE

SECTION 5 PHOTOGRAPHS



2001 DODGE RAM 500 QUAD CAB SLT PICK-UP
NHTSA NO. C800312
FMVSS NO. 210 (INDICATED)

FIGURE 6-4
FRONTAL VIEW OF VEHICLE



2013 DOBUEKAM - CONQUEROR SLITRUX UP
NITELIN, CLOTH
KAYSSAM - HONORANT

FIGURE 52
VEHICLES IDENTIFICATION AND THE
INFORMATION UNIT

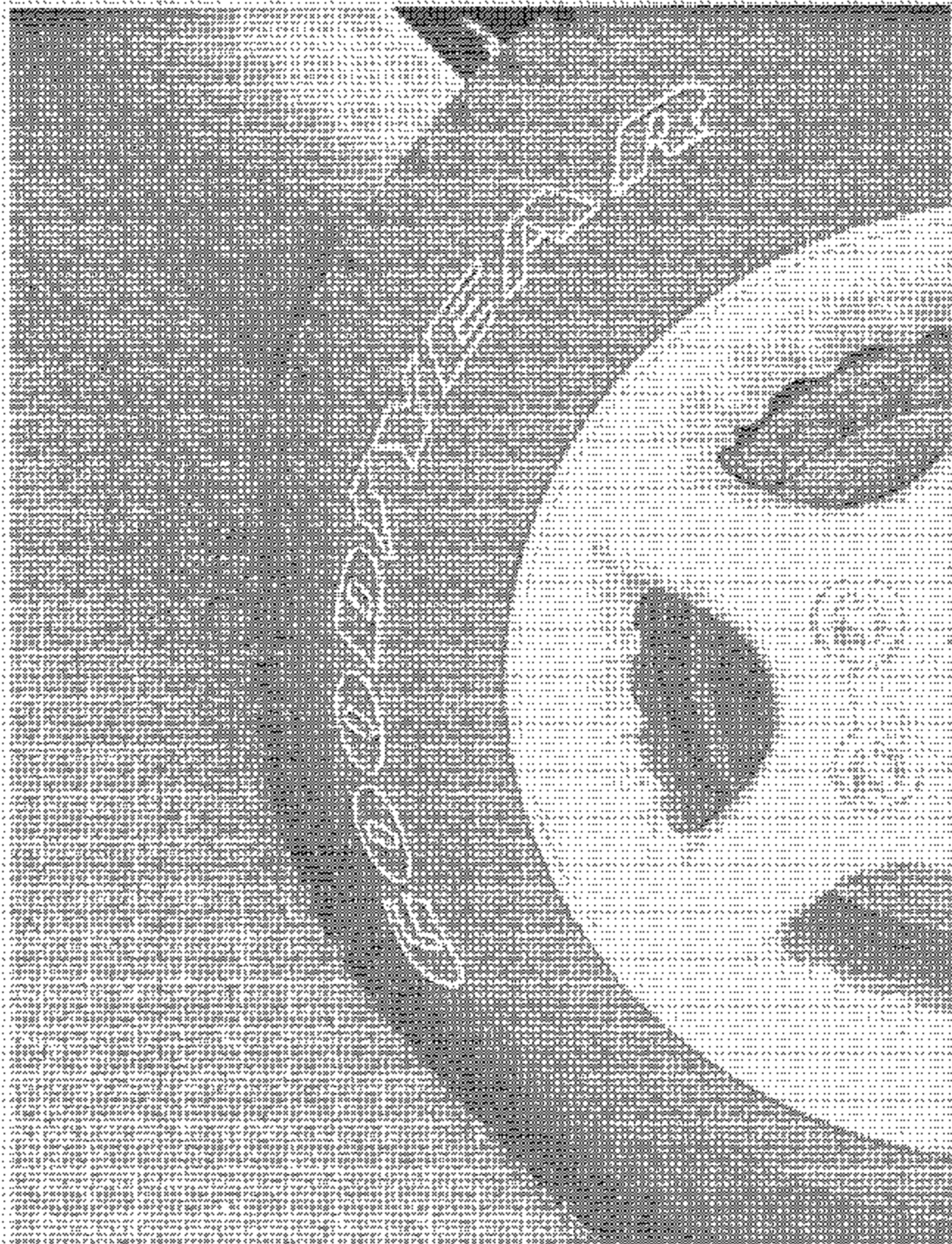
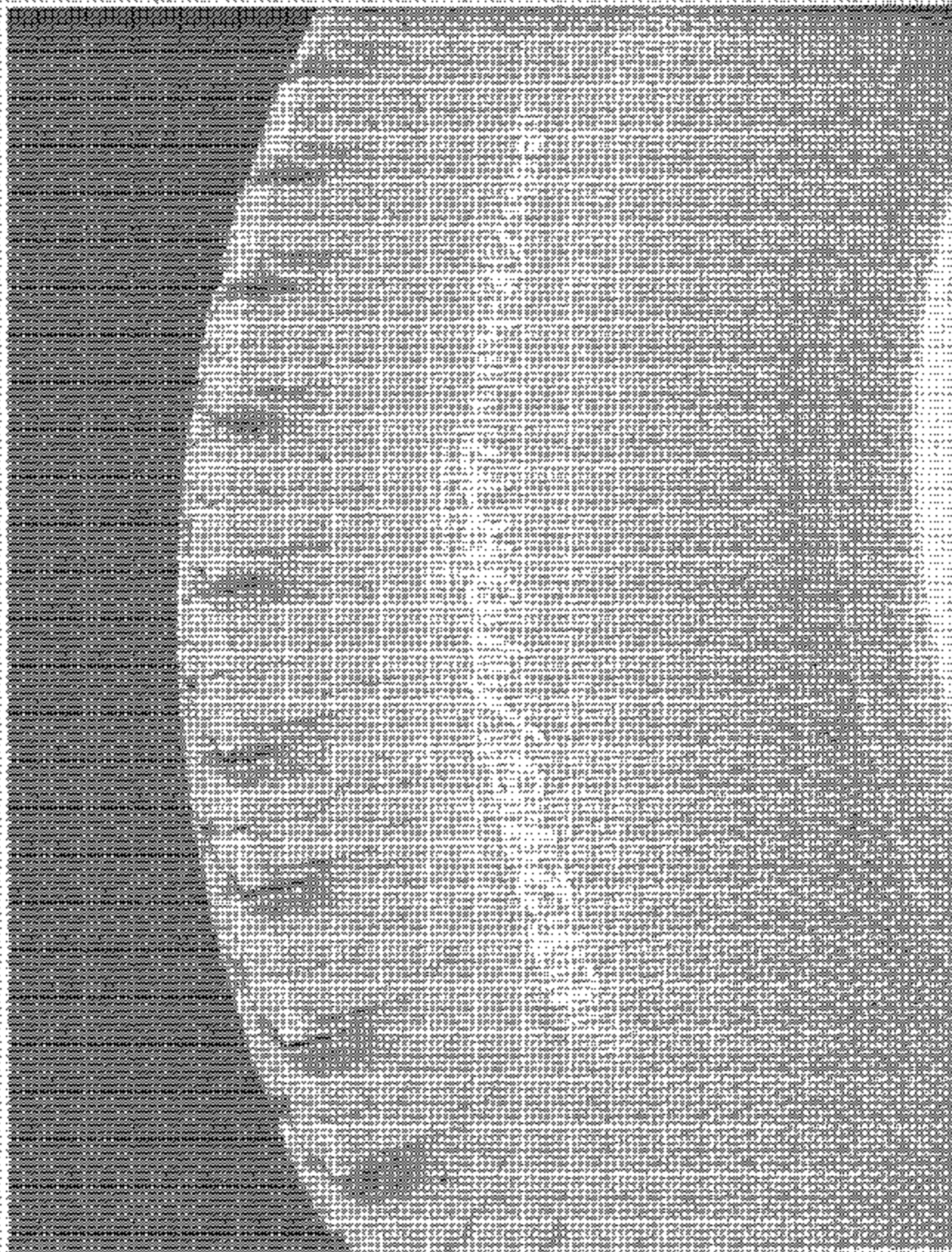


FIGURE 5.3
TIRE SHOWING BRAND

2003 ODDERMAN 1800 QUAD GAS SLT PICKUP
EAPSA NO. 920212
EAPSA NO. 110 (INDICANT)

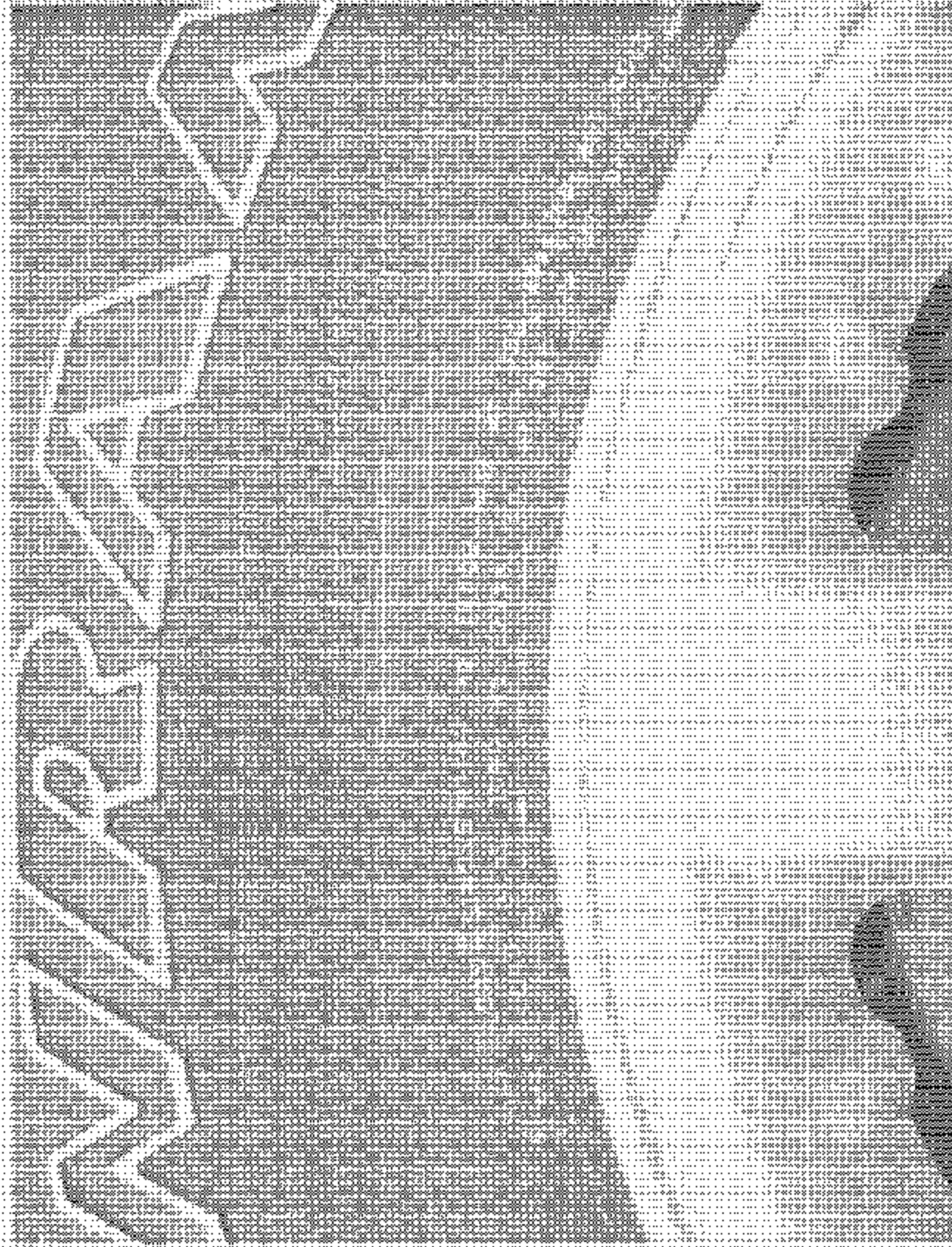


ELECTRA: THE NEW 1964 FORD
 FORD'S NEW 1964 FORD
 FORD'S NEW 1964 FORD



2003 DODGE RAM 1500 QUAD CAB SLT PICK-UP
NHTSA NO. 920252
TMSO N. 110 (MIDCANY)

FIGURE 6
TIRE SHOWING SIZE, LOAD INDEX AND
SPEED SYMBOL



2001 DODGE RAM 1500 2.4L 4-CYL CAB SLT PICK-UP
 NHTSA NO. 030312
 FMVSS NO. 110 (NO CONTACT)

FIGURE 3-6
 THE SHOWING MAX LEAD RAINFALL AND
 MAX INFLATION PRESSURE

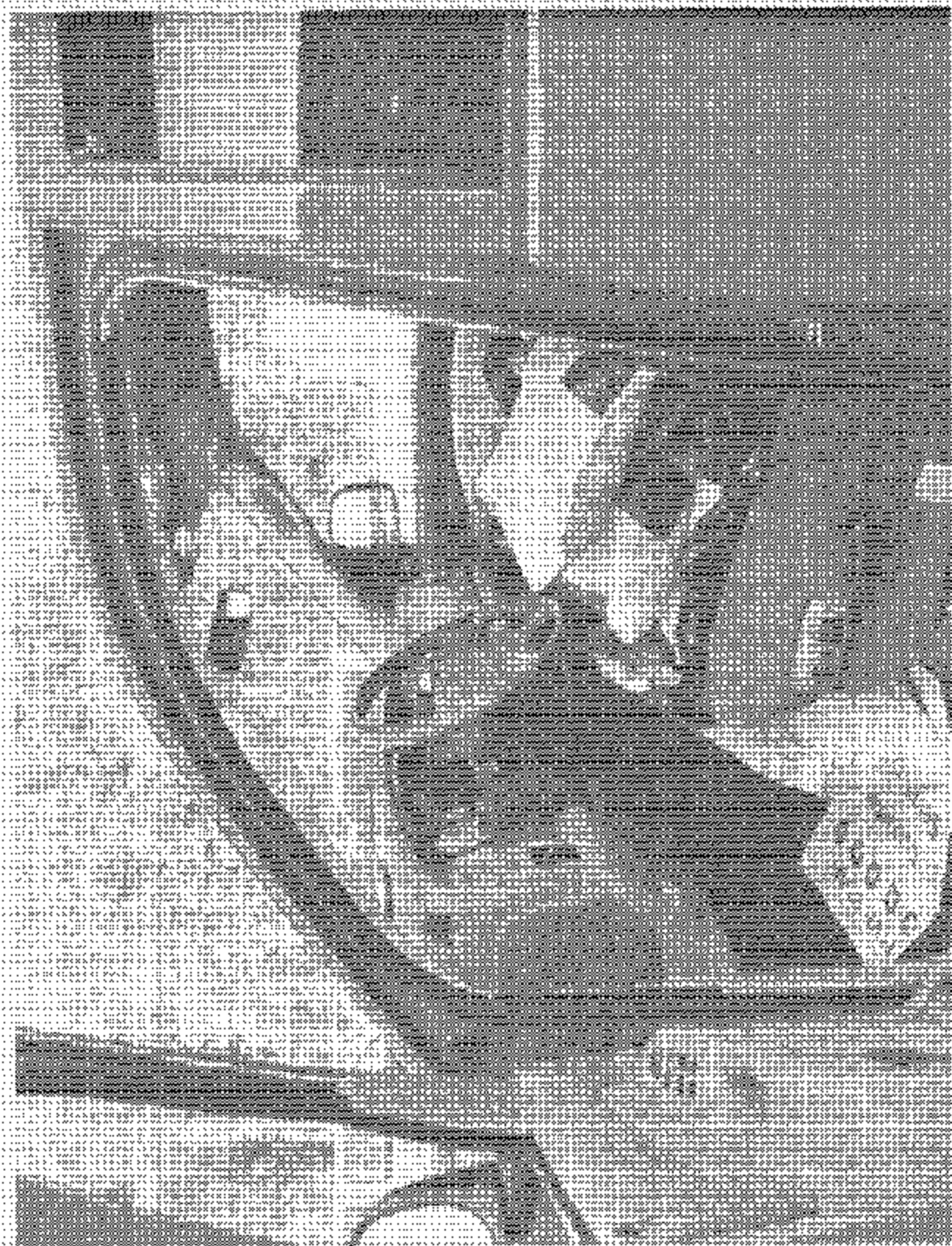


FIGURE 8-7
VEHICLE BALLASTED TO SIMULATE
NORMAL BALLAST CONDITION

2003 DODGE RAM 1500 QUAD CAB SET PICK-UP
NHTSA NO. 220512
FNUSS NO. 110400001

APPENDIX

Table 1 – Occupant Loading and Distribution for Vehicle Normal Load for
Various Designated Seating Capacities

Designated Seating Capacities, numbers of Occupants	Vehicle normal load, number of occupants	Occupant distribution in a normally loaded vehicle
2 through 4	2	2 in front
5 through 10	3	2 in front, 1 in second seat
11 through 15	5	2 in front, 1 in second seat, 1 in third seat, 1 in fourth seat
16 through 22	7	2 in front, 2 in second seat, 2 in third seat, 1 in fourth seat

NOTE: For the indicant test each seat was adjusted to its full down and mid forward to aft position with the seat back adjusted to a 25° reclined angle. Each designated seat position was ballasted with 54 KG (120 LBS) in the seat and 14 KG (30 LBS) on the floor directly in front of the respective seat position.