

REPORT NUMBER 110(IND)-GTL-03-018

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

**CAMI-AUTOMOTIVE, INC.
2003 CHEVROLET TRACKER, MPV
NHTSA NO. C30115**

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



SEPTEMBER 15, 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: Delfra Merid
Approved By: M. P. Oja
Approval Date: 09/15/03

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16. Abstract This test was conducted on the subject 2003 Chevrolet Tracker MPV 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 Chevrolet Tracker MPV 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 Chevrolet Tracker MPV. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 2CNBE18C736901162

B. NHTSA No.: C30115

C. Manufacturer: CAMI-AUTOMOTIVE INC.

D. Manufacture Date: 07/02

1.2 TEST DATE

The test vehicle was subjected to testing on May 22, 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 Chevrolet Tracker is a multipurpose passenger vehicle (MPV) 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 CHEVROLET TRACKER MPV
 VEHICLE NHTSA NO.: C30115 VIN: 2CNBE18C736901162
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 05/22/03

<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:

DATE: 05/21/03

APPROVED BY:

DATA SHEET 2

TEST VEHICLE INFORMATION/RECEIVING INSPECTION

LABORATORY: GENERAL TESTING LABORATORIES DATE: 05/22/03

VEHICLE MODEL YEAR/MAKE/MODEL/BODY STYLE: 2003 CHEVROLET TRACKER MPV

MANUFACTURE DATE: 07/02 NHTSA NO.: C30115 BODY COLOR: WILDFIRE RED

VIN: 2CNBE18C736901162 VEHICLE TYPE: MPV

GVWR 1580 kg (3483 lbs) GAWR(Fr) 720 kg (1587 lbs) GAWR(Rr) 930 kg (2050 lbs)

BELTED SEATING POSITIONS: FRONT 2 MID N/A REAR 2 OTHER N/A

ENGINE DATA: 4 Cylinders 2.0 Liters Cubic Inches

TRANSMISSION DATA: X Automatic Manual 4 No. of Speeds

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

INSTALLED TIRE DATA: Size - P195/75R15 Mfr. - GOODYEAR

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

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

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

REMARKS:

RECORDED BY: M. A. [Signature]

DATE: 05/22/03

APPROVED BY: A. Messia [Signature]

DATA SHEET 3
CURB WEIGHT WITH OPTIONS AND NORMAL LOAD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 CHEVROLET TRACKER MPV
 VEHICLE NHTSA NO.: C30115 ; VIN: 2CNBE18C736901162
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 05/22/03

Full Fluid Levels:

Fuel Full ; Coolant Full ; Other Fluids Full

Tire Pressure: LF 180 KPA (26 psi) LR 180 KPA (26 psi)
 RF 180 KPA (26 psi) RR 180 KPA (26 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

LF	<u>316 KG (697 LB)</u>	LR	<u>294 KG (648 LB)</u>
RF	<u>310 KG (684 LB)</u>	RR	<u>304 KG (671 LB)</u>
Front Axle <u>626 KG (1381 LB)</u>		Rear Axle <u>598 KG (1319 LB)</u>	
Total Vehicle <u>1225 KG (2700 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) = 4
- (2) Normal Load # of Occupants from Appendix
 Occupant Distribution: Front Seat- 2 Second Seat- N/A
 Third Seat - N/A Fourth Seat- N/A
- (3) Total Normal Occupant Load 136 KG (300 LB)
 (# of occupants x 68 KG per occupant)
- (4) Measured Normal Load on each Wheel and Axles (Sum)

LF	<u>347 KG (765 LB)</u>	LR	<u>331 KG (730 LB)</u>
RF	<u>342 KG (755 LB)</u>	RR	<u>341 KG (751 LB)</u>
Frt Axle <u>689 KG (1520 LB)</u>		Rr Axle <u>672 KG (1481 LB)</u>	
Total Vehicle <u>1361 KG (3001 LB)</u>			

DATA SHEET 3 – CONTINUED

- (5) Calculated Vehicle Normal Load on the Tire
 Front Tires (measured front axle normal load/2) = 345 KG (760 LB)
 Rear Tires (measured front axle normal load/2) = 336 KG (741 LB)

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

	Front	Rear
(a) Installed Tire Size	<u>P195/75R15</u>	<u>P195/75R15</u>
Max. Load Rating on Sidewall	<u>670 KG(1477 LBS)</u>	<u>670 KG(1477 LBS)</u>
Reduced Sidewall Load Rating (if applicable)*	<u>609 KG(1343 LBS)</u>	<u>609 KG(1343 LBS)</u>
High Speed Test Load (88% of sidewall max. load rating)	<u>536 KG(1182 LBS)</u>	<u>536 KG(1182 LBS)</u>
(b) Optional Tire Size(s)	<u>NONE</u>	<u>NONE</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. R. B. Jr.

DATE: 05/22/03

APPROVED BY:

D. M. M. Jr.

DATA SHEET 4
TIRE INFORMATION LABEL OR PLACARD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 CHEVROLET TRACKER MPV
 VEHICLE NHTSA NO.: C30115 ; VIN: 2CNBE18C736901162
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 05/22/03

A. Vehicle Type from Certification Label: MPV

B. Identify Vehicle Labeling:

Vehicle has a combined Certification Tire Information Label ☐ Yes ☒ No
 Is Label Permanently Affixed: ☐ Yes ☐ No
 Label Location: _____
 Description of Label: _____

Vehicle has a separate Tire Information Label or Placard ☒ Yes ☐ No
 Is Label Permanently Affixed: ☒ Yes ☐ No
 Label Location: Driver's Side "B" Pillar
 Description of Label: White/Black Sticker

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

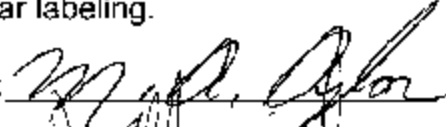
(2) Terms of Occupants for Each Seat Location ☐ Yes ☐ No

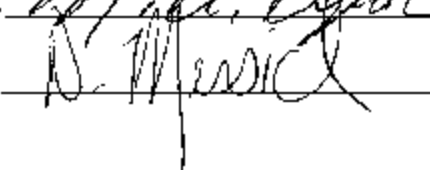
Manufacturer's Recommended Tire Size(s) and Cold Tire Inflation Pressure(s) for
 Maximum Load Vehicle Weight:

P195/75R15 FRONT - 180 kPa (26 psi)
 REAR - 180 kPa (26 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 an MPV do not include
 Vehicle Capacity Weight (VCW) or Designated Seating Capacity (DSP) as required by FMVSS
 110 passenger car labeling.

RECORDED BY:  DATE: 05/22/03

APPROVED BY: 

DATA SHEET 5
VEHICLE TIRE DATA

VEHICLE MAKE/MODEL/BODY STYLE: 2003 CHEVROLET TRACKER MPV

VEHICLE NHTSA NO.: C30115; VIN: 2CNBE18C736901162

LABORATORY: GENERAL TESTING LABORATORIES

TEST DATE: 05/22/03

All tires on the vehicle are the same size: (Yes/No) Yes

INFORMATION FROM TIRE SIDEWALL:

Right Front Tire

Tire Size Designation P195/75R15

Tire Load Index/Speed Symbol 94S

Maximum Inflation Pressure 300 kPa (44 psi)

Maximum Load Rating 670 KG (1477 LBS)

Mfr. Name or Brand & Code GOODYEAR WRANGLER

Tube or Tubeless TUBELESS

Treadwear/Traction/Temp. Grades 340/B/B

Sidewall (Plies & Composition) 1 PLY POLYESTER

Tread (Plies & Composition) 1 PLY POLYESTER
2 PLY STEEL

Serial Number: Right Front - DOT MARKINGS VISIBLE ON INSIDE OF TIRE BUT COULD NOT TAKE PHOTO

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

REMARKS:

RECORDED BY: M. A. [Signature]

DATE: 05/22/03

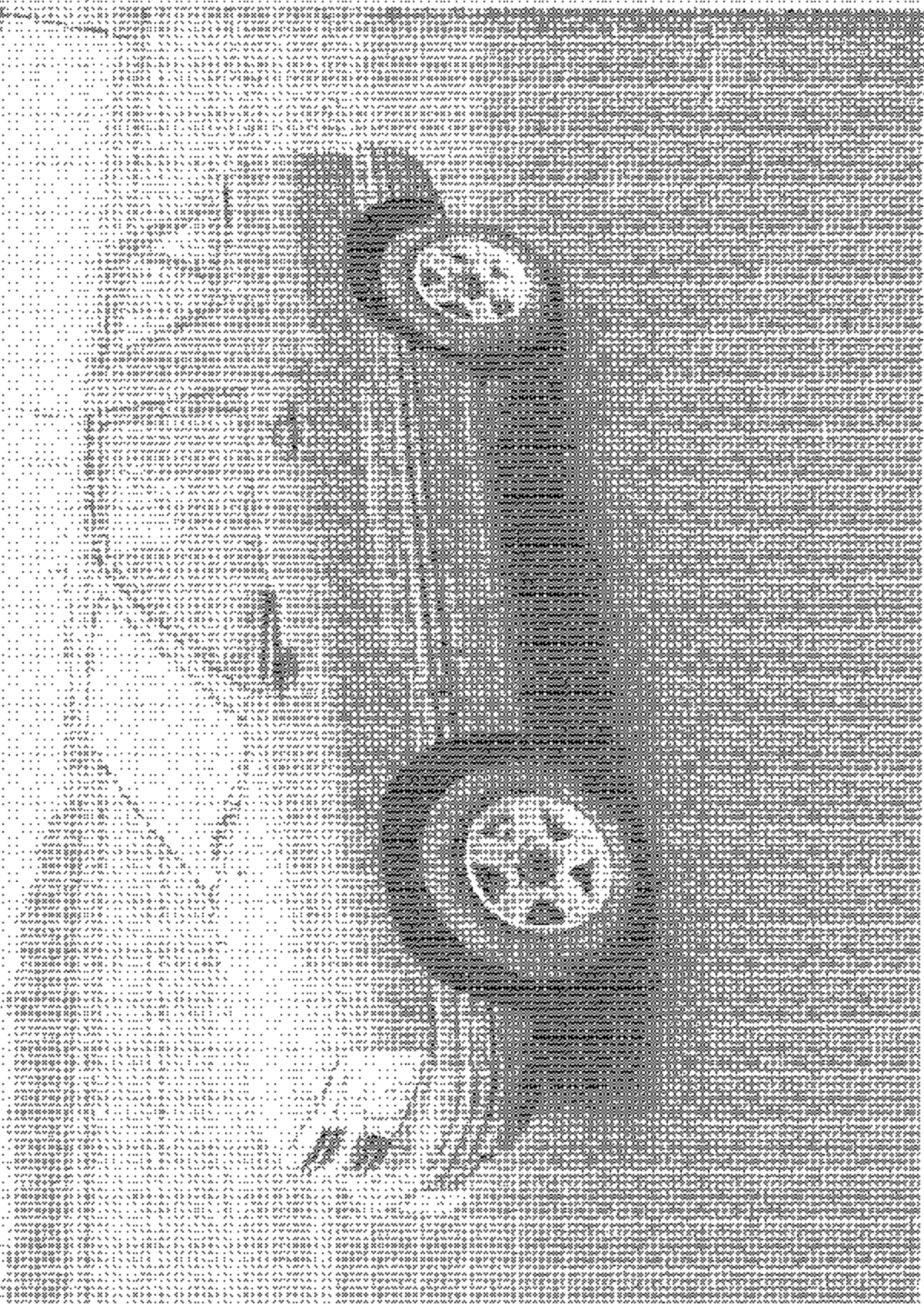
APPROVED BY: [Signature]

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	07/02	05/04
SURFACE LEVEL	GTL	N/A	BEFORE USE	BEFORE USE

SECTION 5 PHOTOGRAPHS



2003 CHEVROLET TRACKER
NHTSA NO. C30115
FMVSS NO. 110 (INDICANT)

FIGURE 57
FRONTAL VIEW OF VEHICLE

2003 CHEVROLET TRACKER
DATE OF SALE 01/01/03
VIN 1G1JG51E032001641
ENGINE 2.2L I4
TRANSMISSION 4-SPD AUTOMATIC
COLOR BLACK
MILEAGE 100000
SALES TAX \$1000.00
REGISTRATION \$100.00
SALES PRICE \$10000.00
TOTAL \$11100.00
SALES TAX \$1000.00
REGISTRATION \$100.00
SALES PRICE \$10000.00
TOTAL \$11100.00

2003 CHEVROLET TRACKER
VIN 1G1JG51E032001641
SALES TAX \$1000.00
REGISTRATION \$100.00
SALES PRICE \$10000.00
TOTAL \$11100.00

FIGURE 52
VEHICLE'S CERTIFICATION LABEL

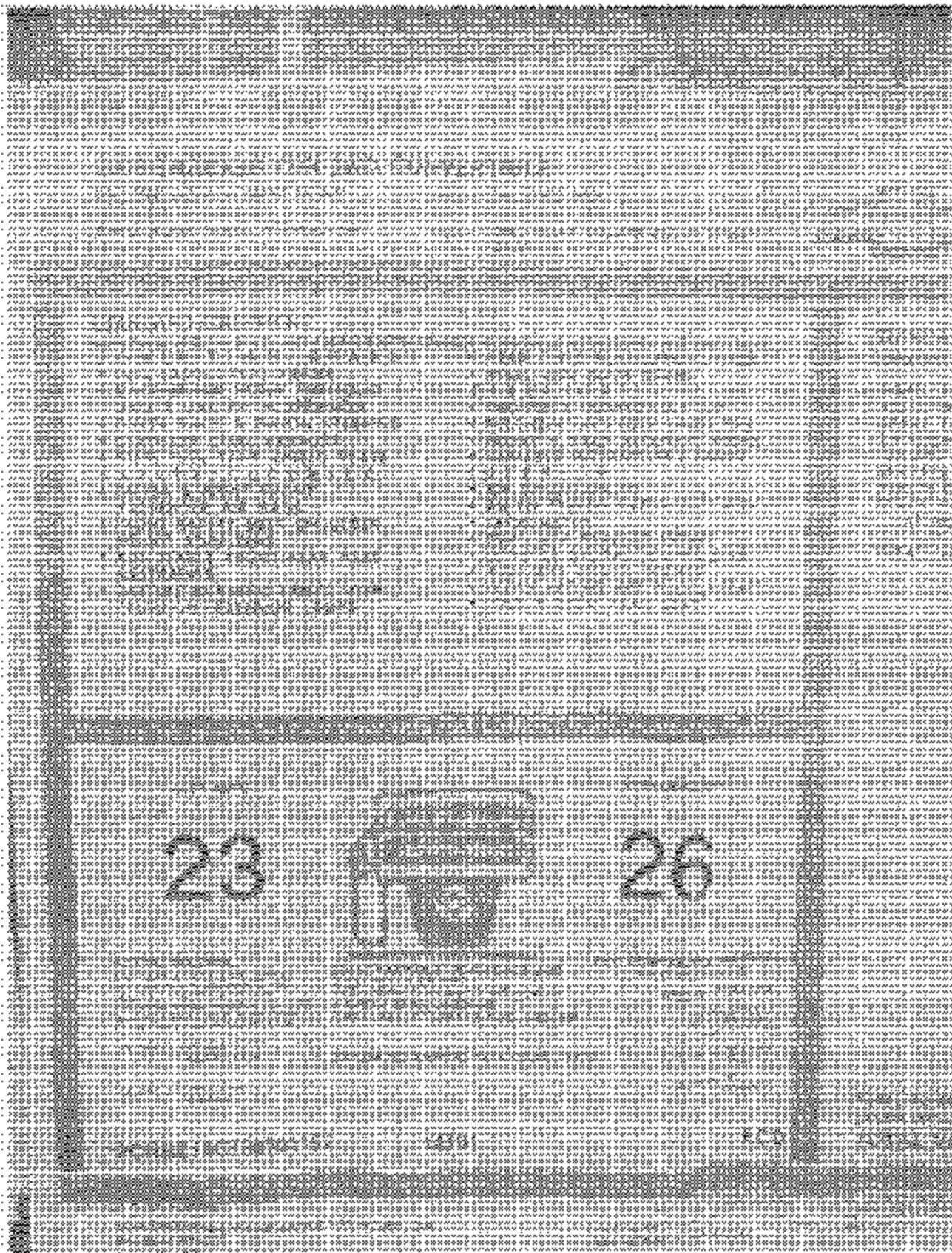


FIGURE 54
VEHICLES MONITORING LABEL (PART 1)

2003 CHEVROLET TRACKER
NHISA NO. 030115
FMVSS NO. 110 (INDICANT)

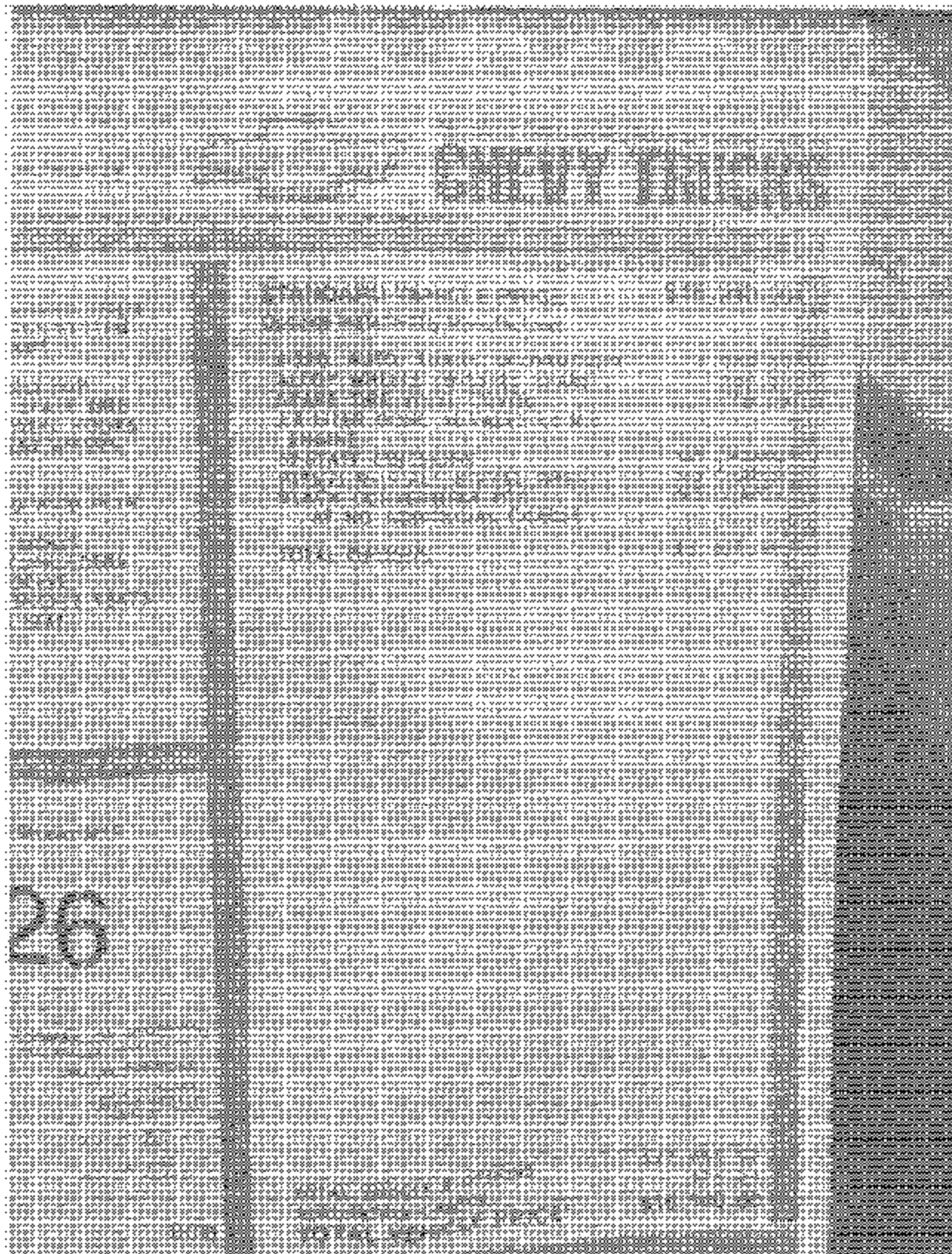


FIGURE 15
VEHICLE'S MONEY LABEL (PART 2)

2003 CHEVROLET TRACKER
MITSUBISHI
SALES NO. C20116
FINANCIAL NO. 440 (INDICANT)

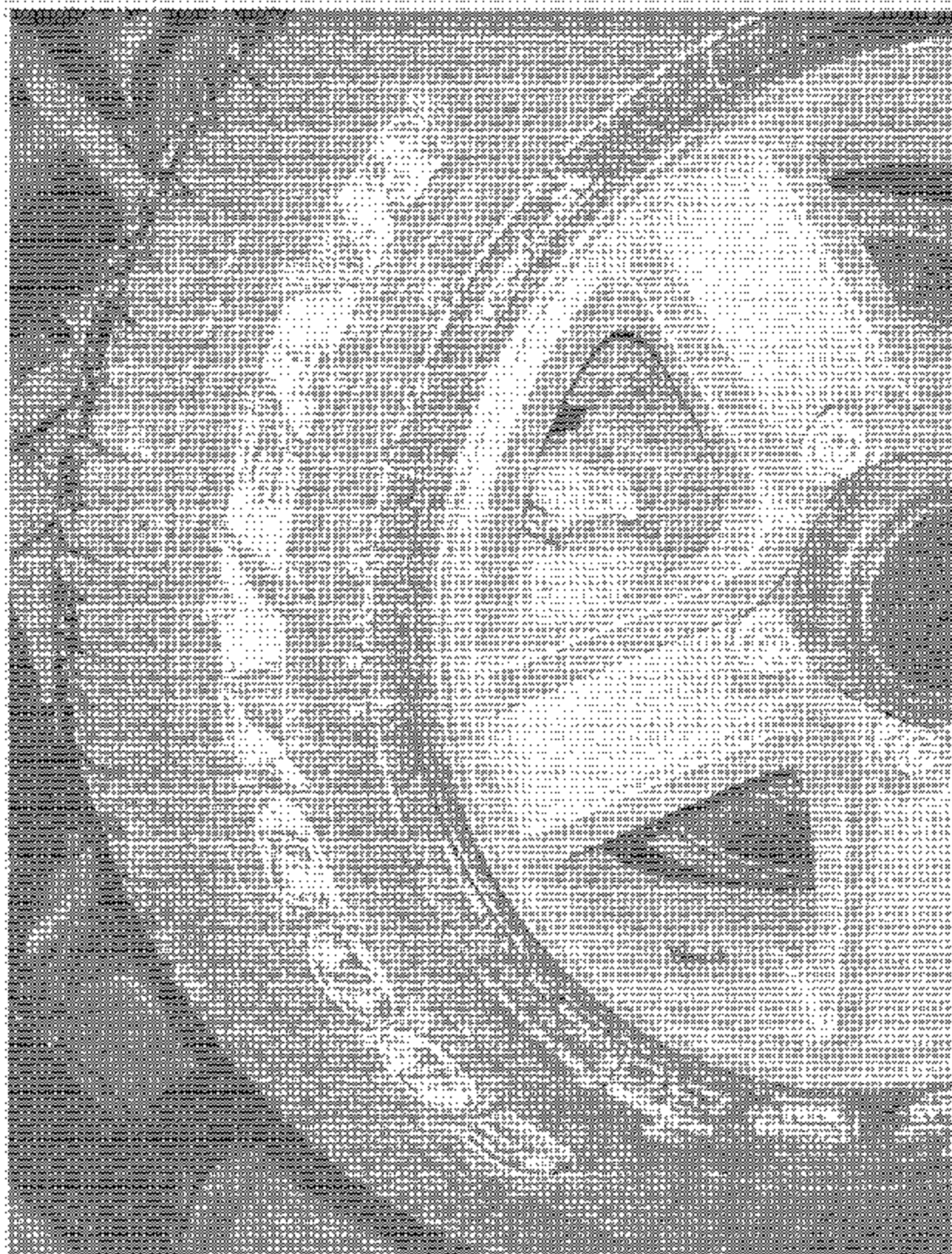
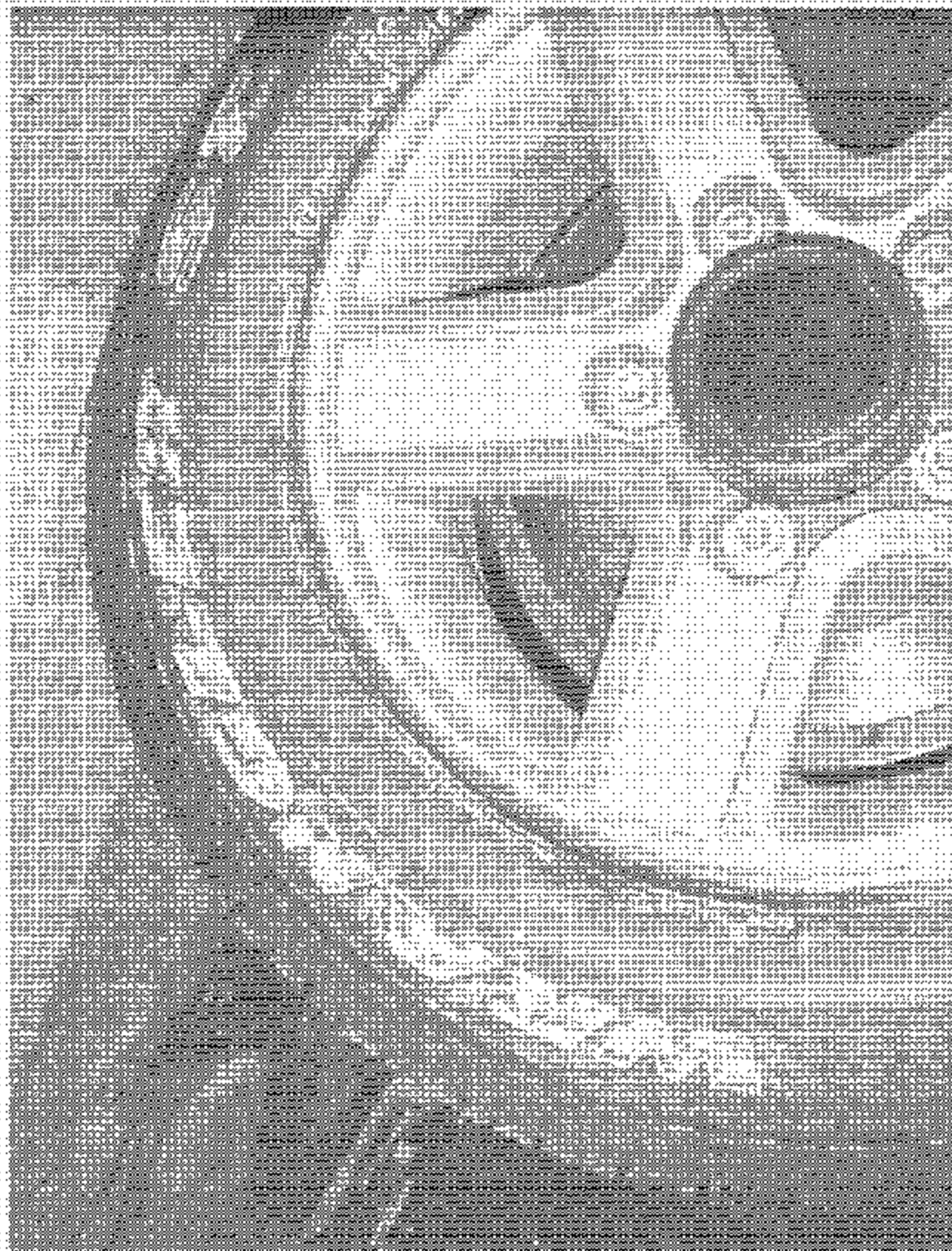


FIGURE 3.6
TIRE SHOWING BRAND

2003 CHEVROLET TRACKER
MUTSA NO. C10111
FNVSS NO. 1-0 (INDICANT)



2003 CHEVROLET TRACKER
NHTSA NO. 220715
FAVSS NO. 110 (INVERT)

FIGURE 5.7
TRAIL SHOWING MODEL

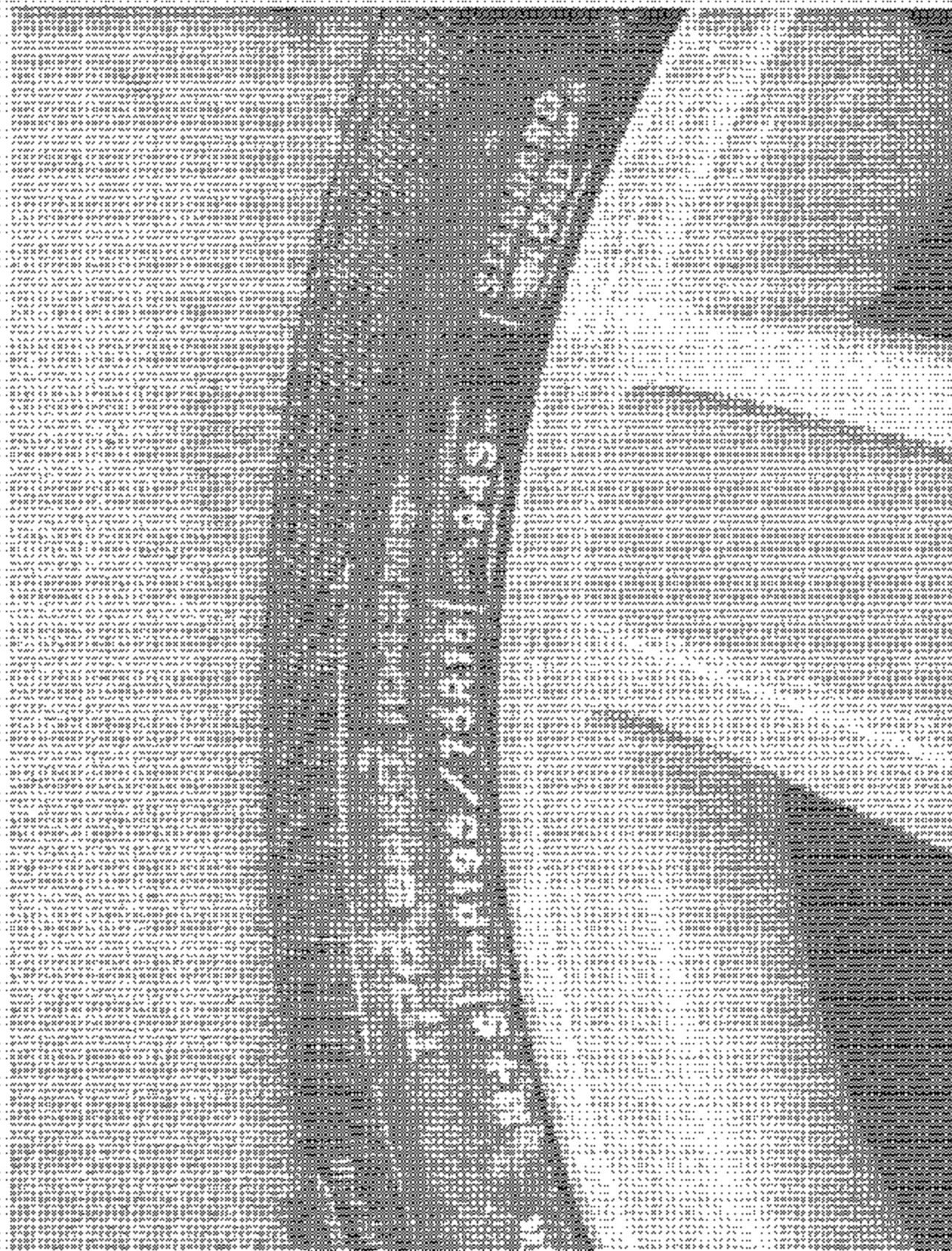
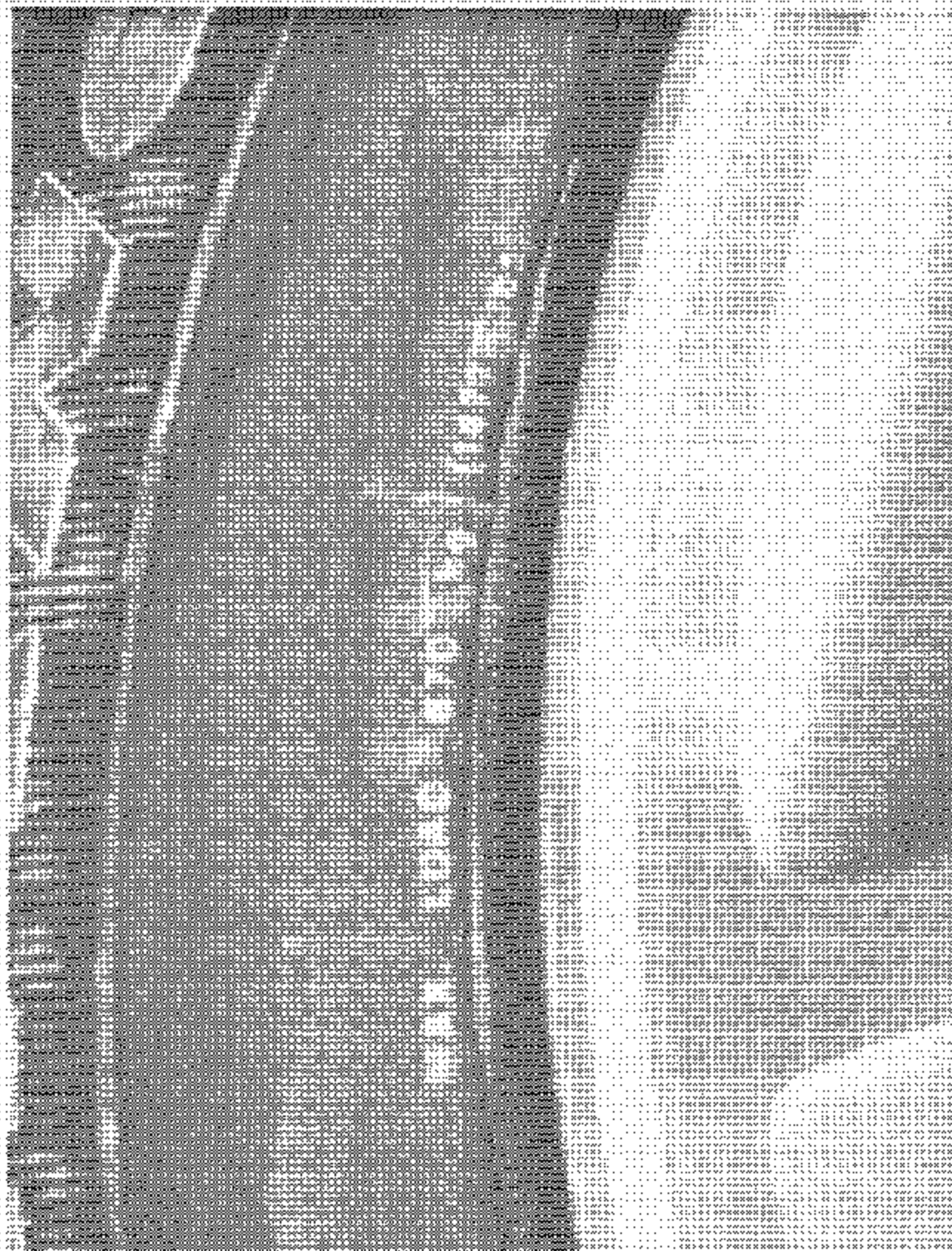


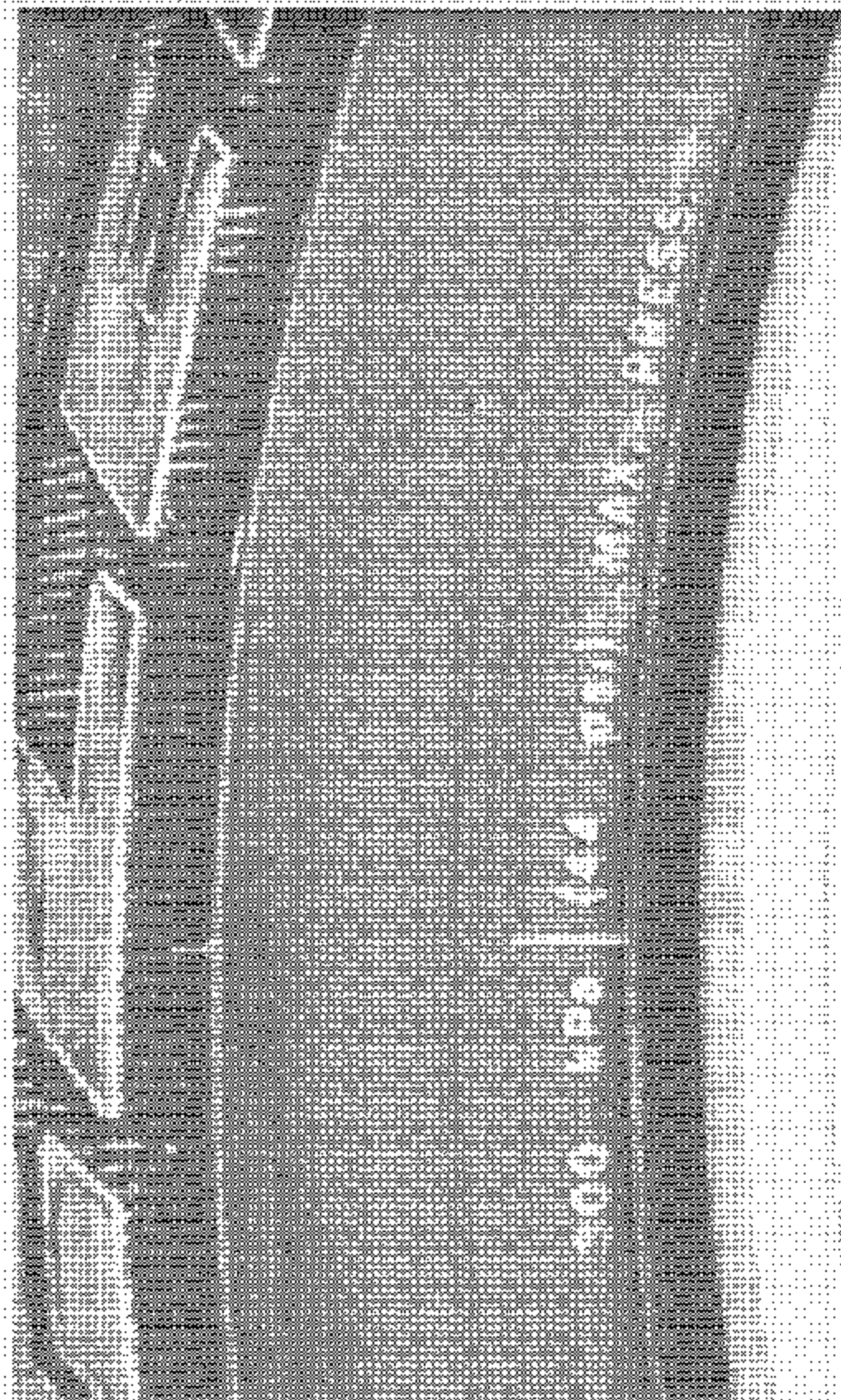
FIGURE 6.8
TIRE SHOWING SIZE, LOAD INDEX AND SPEED
SYMBOL

2001 CHEVROLET TRACKER
NHTSA NO. 020115
FAVSS NO. 110 (INCLINANT)



2003 CHEVROLET TRACKER
NHTSA NO. C30115
FMVSS NO. 110 (INDICANT)

FIGURE 8-9
FIRE SLICING MAX LOAD RATING



2003 CHEVROLET TRACKER
NHTSA NO. 030115
FMVSS NO. 110 (INDICATED)

FIGURE 5-10
TIRES SHOWING MAX INFLATION PRESSURE



2003 CHEVROLET TRACKER
NHTSA NC 630116
PAUSE NO. 110 (MILICANT)

FIGURE S11
VEHICLE INSTALLED TO SIMULATE
NORMAL LOAD CONDITION

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.