

REPORT NUMBER 110(IND)-GTL-03-026

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

**FORD MOTOR CO. IN U.S.A.
2003 FORD FOCUS PASSENGER CAR
NHTSA NO. C30212**

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



SEPTEMBER 22, 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:

Debbie Messel

Approved By:

M. A. G. B.

Approval Date:

9/22/03

FINAL REPORT ACCEPTANCE BY OVSC:

Accepted By:

John Turner

Acceptance Date:

9/30/03

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16. Abstract This test was conducted on the subject, 2003 Ford Focus passenger car 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 Ford Focus passenger car 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 Ford Focus. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 1FAFP34P63W219003

B. NHTSA No.: C30212

C. Manufacturer: FORD MOTOR CO. IN U.S.A.

D. Manufacture Date: 02/03

1.2 TEST DATE

The test vehicle was subjected to testing on June 03, 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

Test results are provided in Section 3.

SECTION 3
TEST DATA

DATA SHEET 1
SUMMARYVEHICLE MAKE/MODEL/BODY STYLE: 2003 FORD FOCUS PASSENGER CARVEHICLE NHTSA NO.: C30212 ; VIN: 1FAFP34P63W219003LABORATORY: GENERAL TESTING LABORATORIESTEST DATE: 06/03/03

<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>YES</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>N/A</u>

REMARKS:

RECORDED BY: M. A. [Signature]DATE: 06/03/03APPROVED BY: D. [Signature]

DATA SHEET 2 TEST VEHICLE INFORMATION/RECEIVING INSPECTION

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

VEHICLE MODEL YEAR/MAKE/MODEL/BODY STYLE: 2003 FORD FOCUS SE

MANUFACTURE DATE: 02/03 NHTSA NO.: C30212 BODY COLOR: SANGRIA RED

VIN: 1FAFP34P63W219003 VEHICLE TYPE: PASSENGER CAR

GVWR 1641 kg (3620 lbs) GAWR(Fr) 891 kg (1965 lbs) GAWR(Rr) 791 kg (1745 lbs)

BELTED SEATING POSITIONS: FRONT 2 MID N/A REAR 3 OTHER N/A

ENGINE DATA: 4 Cylinders 2.0 Liters Cubic Inches

TRANSMISSION DATA: X Automatic Manual 5 No. of Speeds

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

INSTALLED TIRE DATA: Size - P195/60R15 Mfr. - GOODYEAR EAGLE

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

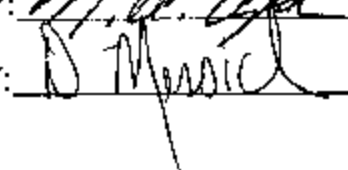
☒	Air Conditioning		Traction Control	☒	Clock
☒	Tinted Glass		All Wheel Drive		Roof Rack
☒	Power Steering		Cruise Control	☒	Console
☒	Power Windows	☒	Rear Window Defroster	☒	Driver Air Bag
☒	Power Door Locks		Sun Roof or T-Top	☒	Passenger Air Bag
	Power Seat(s)		Tachometer	☒	Front Disc Brakes
☒	Power 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: 

DATE: 06/03/03

APPROVED BY: 

DATA SHEET 3
CURB WEIGHT WITH OPTIONS AND NORMAL LOAD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 FORD FOCUS PASSENGER CAR
 VEHICLE NHTSA NO.: C30212 ; VIN: 1FAFP34P63W219003
 LABORATORY: GENERAL TESTING LABORATORIES
 TEST DATE: 06/03/03

Full Fluid Levels:

Fuel Full ; Coolant Full ; Other Fluids Full

Tire Pressure: LF 220 KPA (32 psi) LR 220 KPA (32 psi)
 RF 220 KPA (32 psi) RR 220 KPA (32 psi)

A. MEASURED CURB WEIGHT WITH INSTALLED OPTIONS AND ACCESSORIES

LF 373 KG (822 LB) LR 224 KG (493 LB)
 RF 373 KG (822 LB) RR 251 KG (553 LB)
 Front Axle 746 KG (1644 LB) Rear Axle 474 KG (1046 LB)
 Total Vehicle 1220 KG (2690 LB)

B. MEASURED VEHICLE WEIGHT IN NORMAL LOAD CONDITION

(1) Seating Capacity (from Tire Information Placard) = 5
 Seating Capacity (# of belted seating positions) = 5

(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 420 KG (925 LB) LR 277 KG (610 LB)
 RF 422 KG (930 LB) RR 306 KG (675 LB)
 Frt Axle 841 KG (1855 LB) Rr Axle 583 KG (1285 LB)
 Total Vehicle 1424 KG (3140 LB)

DATA SHEET 3 - CONTINUED

- (5) Calculated Vehicle Normal Load on the Tire
 Front Tires (measured front axle normal load/2) = 420 KG (927 LB)
 Rear Tires (measured front axle normal load/2) = 291 KG (642 LB)
- (6) High Speed Test Load from (X) FMVSS 109 (S5.5), or () FMVSS 119 (S7.4)

	Front	Rear
(a) Installed Tire Size	<u>P195/60R15</u>	<u>P195/60R15</u>
Max. Load Rating on Sidewall	<u>540 KG(1190 LBS)</u>	<u>540 KG(1190 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>475 KG(1047 LBS)</u>	<u>475 KG(1047 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. [Signature]

DATE: 06/03/03

APPROVED BY: D. Messick

DATA SHEET 4
TIRE INFORMATION LABEL OR PLACARD

VEHICLE MAKE/MODEL/BODY STYLE: 2003 FORD FOCUS PASSENGER CAR

VEHICLE NHTSA NO.: C30212 ; VIN: 1FAPP34P63W219003

LABORATORY: GENERAL TESTING LABORATORIES

TEST DATE: 06/03/03

A. Vehicle Type from Certification Label: Passenger Car

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

Description of Label: Vinyl

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 - "MAXIMUM LOAD" 375 KG (827 LBS)

Designated Seating Capacity (DSC) - 5

Expressed In—

(1) Total No. of Occupants ☒ Yes ☐ No

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

Manufacturer's Recommended Tire Size and Cold Tire Inflation Pressure For Maximum Load Vehicle Weight:

P195/60R15

FRONT - 220 kPa (32 psi)

REAR - 220 kPa (32 psi)

Manufacturer's Recommended Tire Size and Cold Tire Inflation Pressure For Other Load Conditions: NONE

REMARKS:

RECORDED BY: [Signature]

DATE: 06/03/03

APPROVED BY: [Signature]

DATA SHEET 5
VEHICLE TIRE DATAVEHICLE MAKE/MODEL/BODY STYLE: 2003 FORD FOCUS PASSENGER CARVEHICLE NHTSA NO.: C30212 ; VIN: 1FAFP34P63W219003LABORATORY: GENERAL TESTING LABORATORIESTEST DATE: 06/03/03All tires on the vehicle are the same size: (Yes/No) Yes

INFORMATION FROM TIRE SIDEWALL:

Left Front Tire

Tire Size Designation P195/60R15Tire Load Index/Speed Symbol 87TMaximum Inflation Pressure 300 kPa (44 psi)Maximum Load Rating 540 KG (1190 LBS.)Mfr. Name or Brand & Code GOODYEAR EAGLETube or Tubeless TUBELESSTreadwear/Traction/Temp.
Grades 260/A/BSidewall (Plies & Composition) 1 PLY POLYESTERTread (Plies & Composition) 1 PLY POLYESTER
2 PLY STEELSerial Number: Right Front - DOT W6V9 LNER 0303

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

REMARKS:

RECORDED BY: [Signature]DATE: 06/03/03APPROVED 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	06/20/03
	#2 199744RF	199744RF	06/02	06/20/03
	#3 199744LR	199744LR	06/02	06/20/03
	#4 199744RR	19974RR	06/02	06/20/03
PRESSURE GAGE	WESKLER	0-100	05/03	05/04
SURFACE LEVEL	GTL	N/A	BEFORE USE	BEFORE USE

SECTION 5
PHOTOGRAPHS

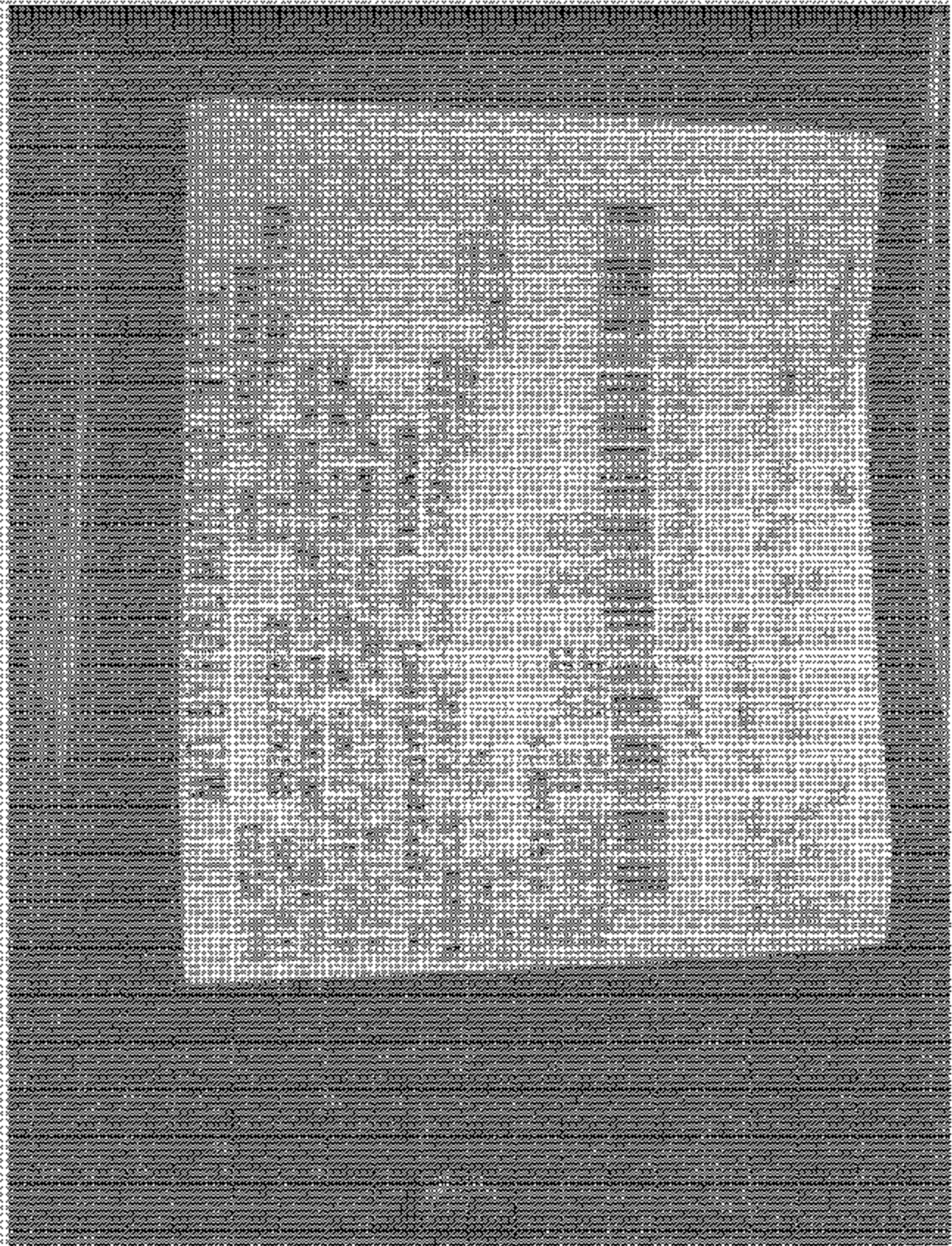
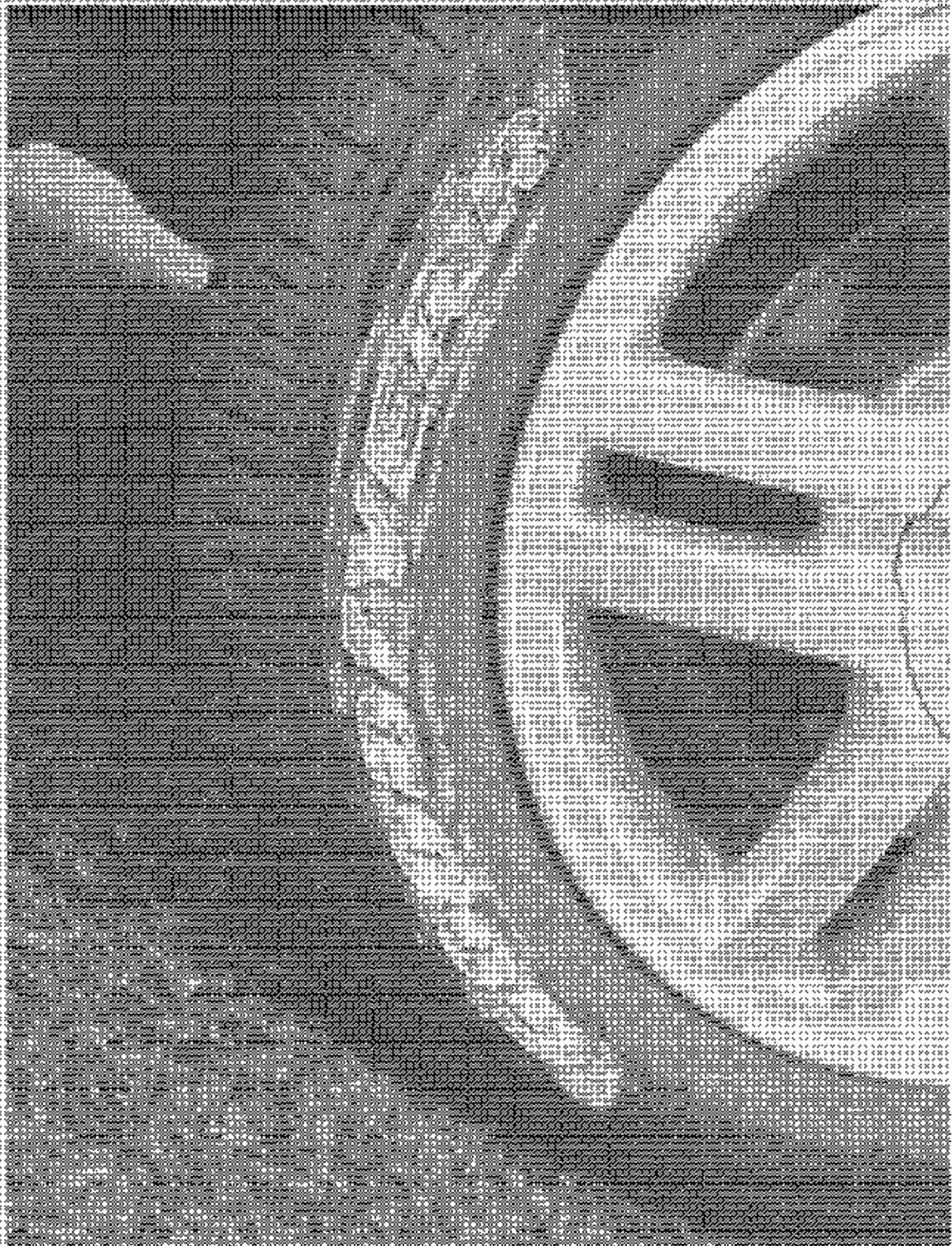
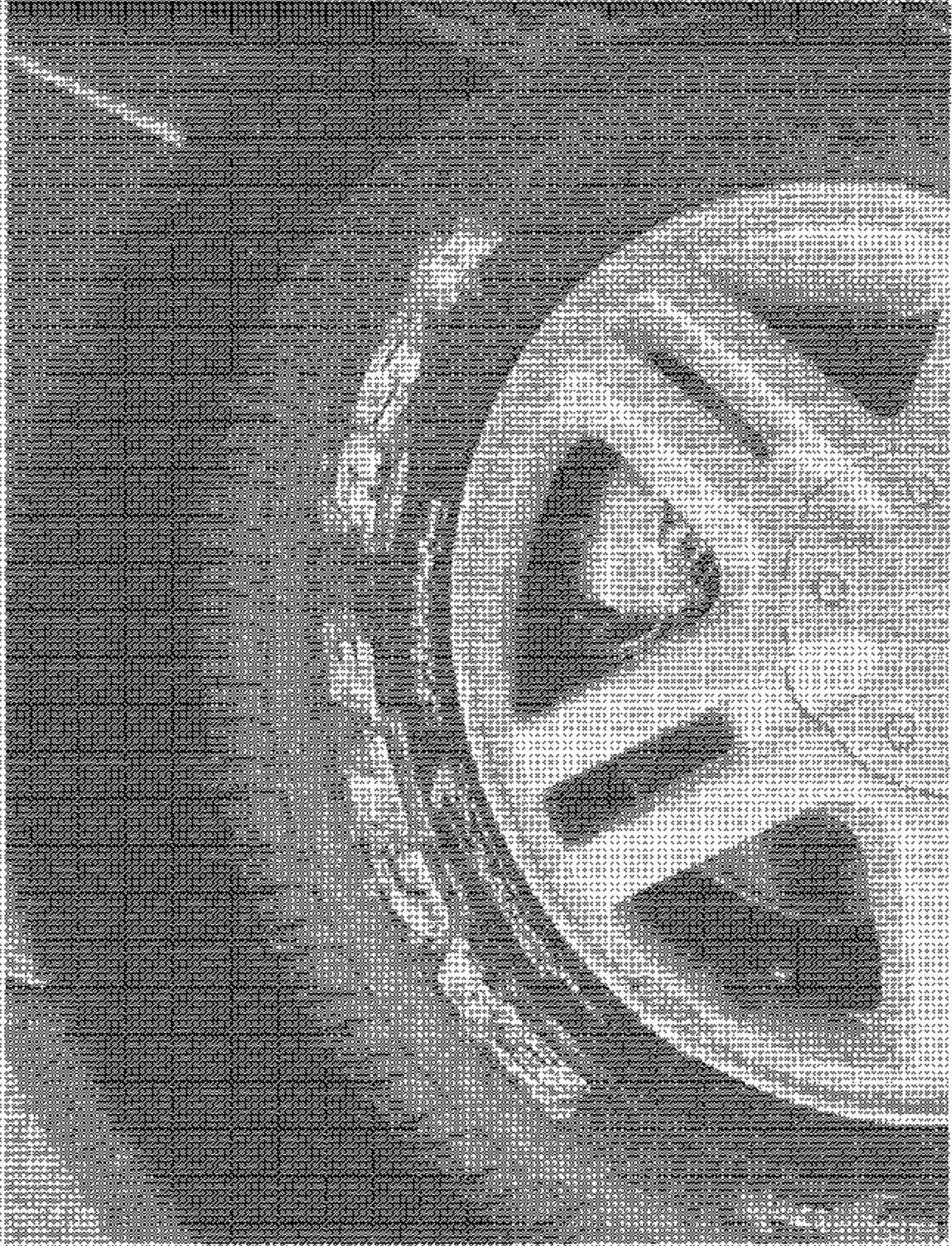


FIGURE 10
VIRAL REPLICATION OF
HUMAN HERPESVIRUS
H1N1

FIGURE 11
HUMAN HERPESVIRUS
H1N1



THE NEW YORK PUBLIC LIBRARY
ASTOR LENOX TILDEN FOUNDATION
1009 5TH AVENUE
NEW YORK, N.Y. 10028

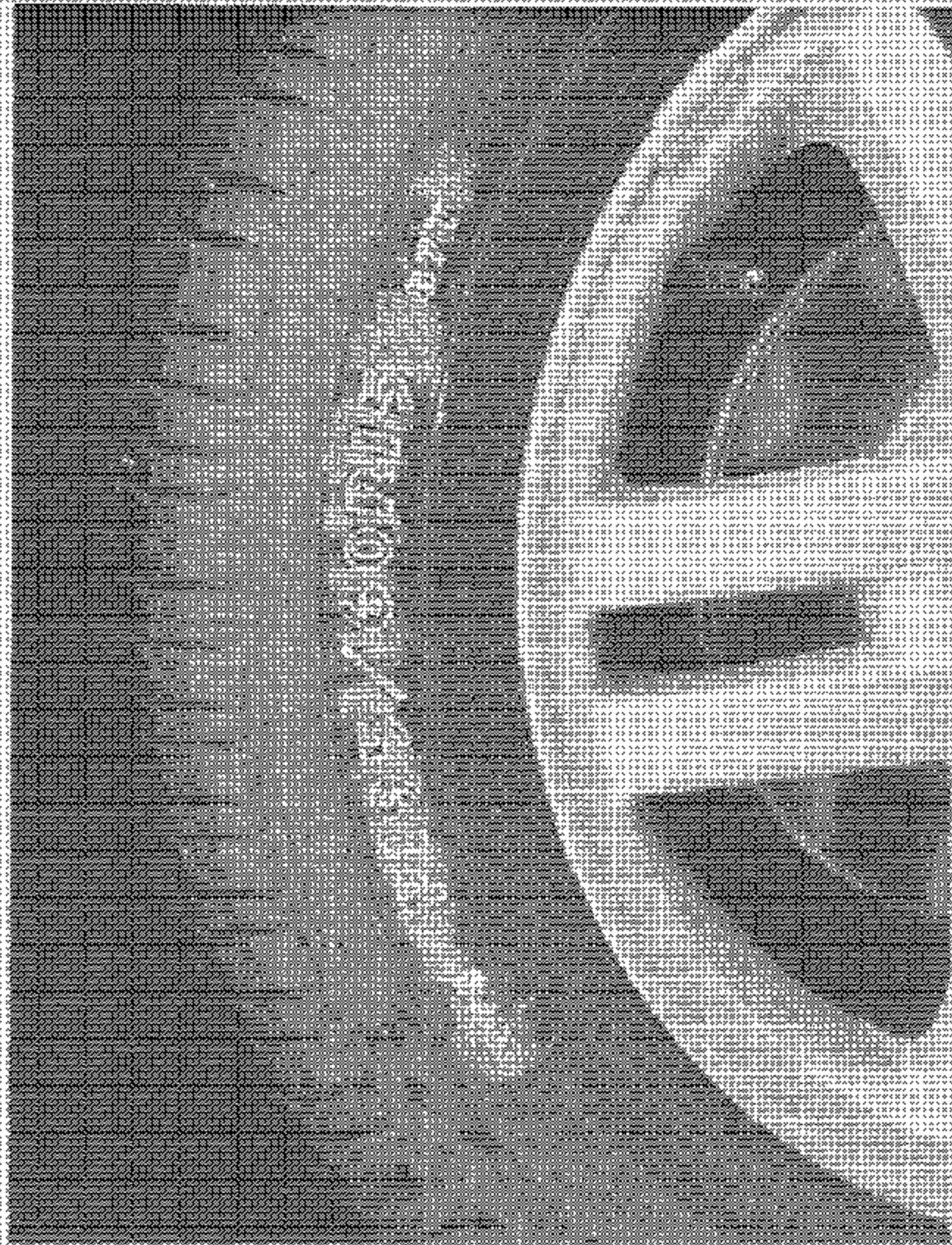


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2013 FORD F150 LARIAT

ALISA K. GAG 2

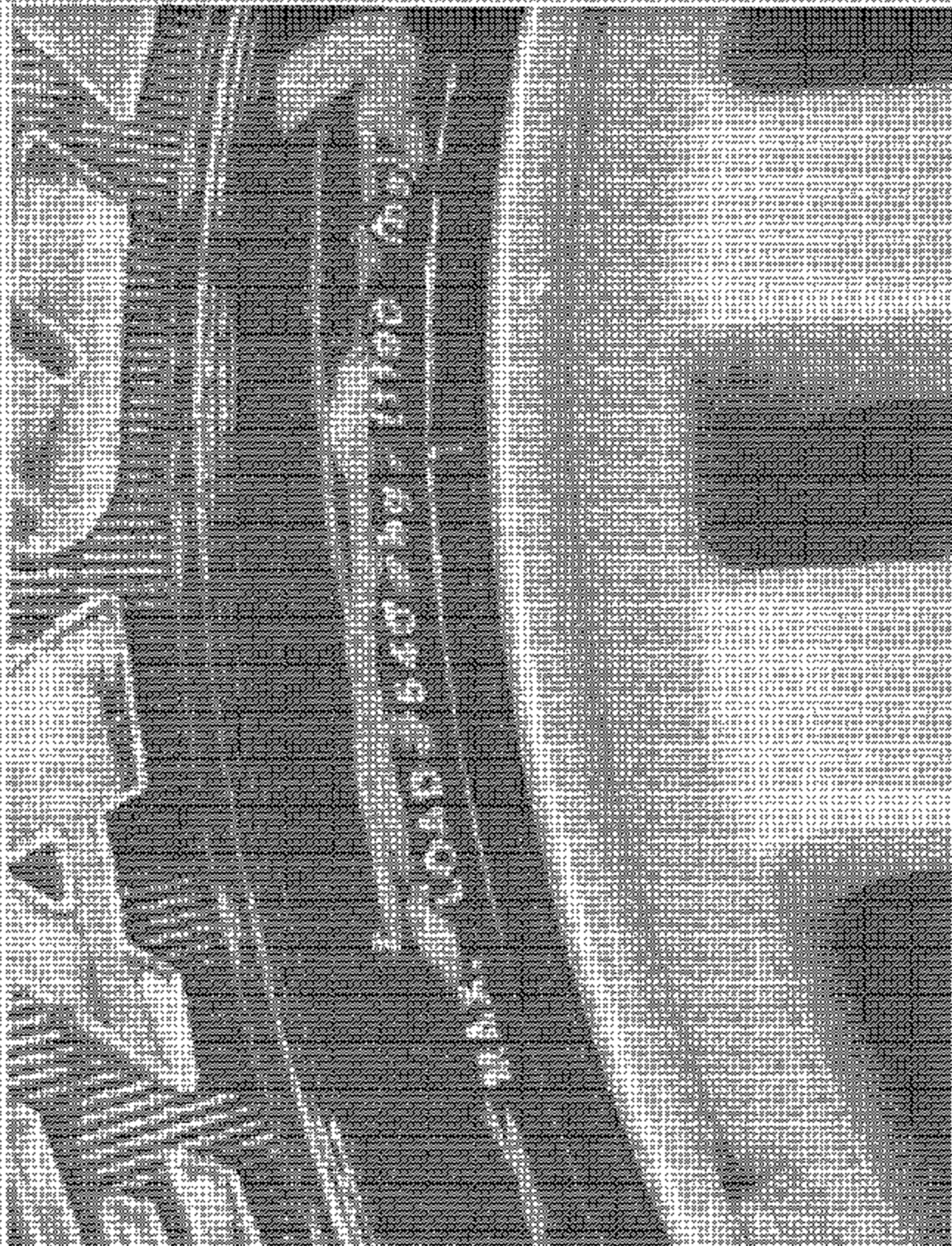
1540001008800

FIGURE 5-5

THE SHOWING OF LOAD INDEX AND SPEED

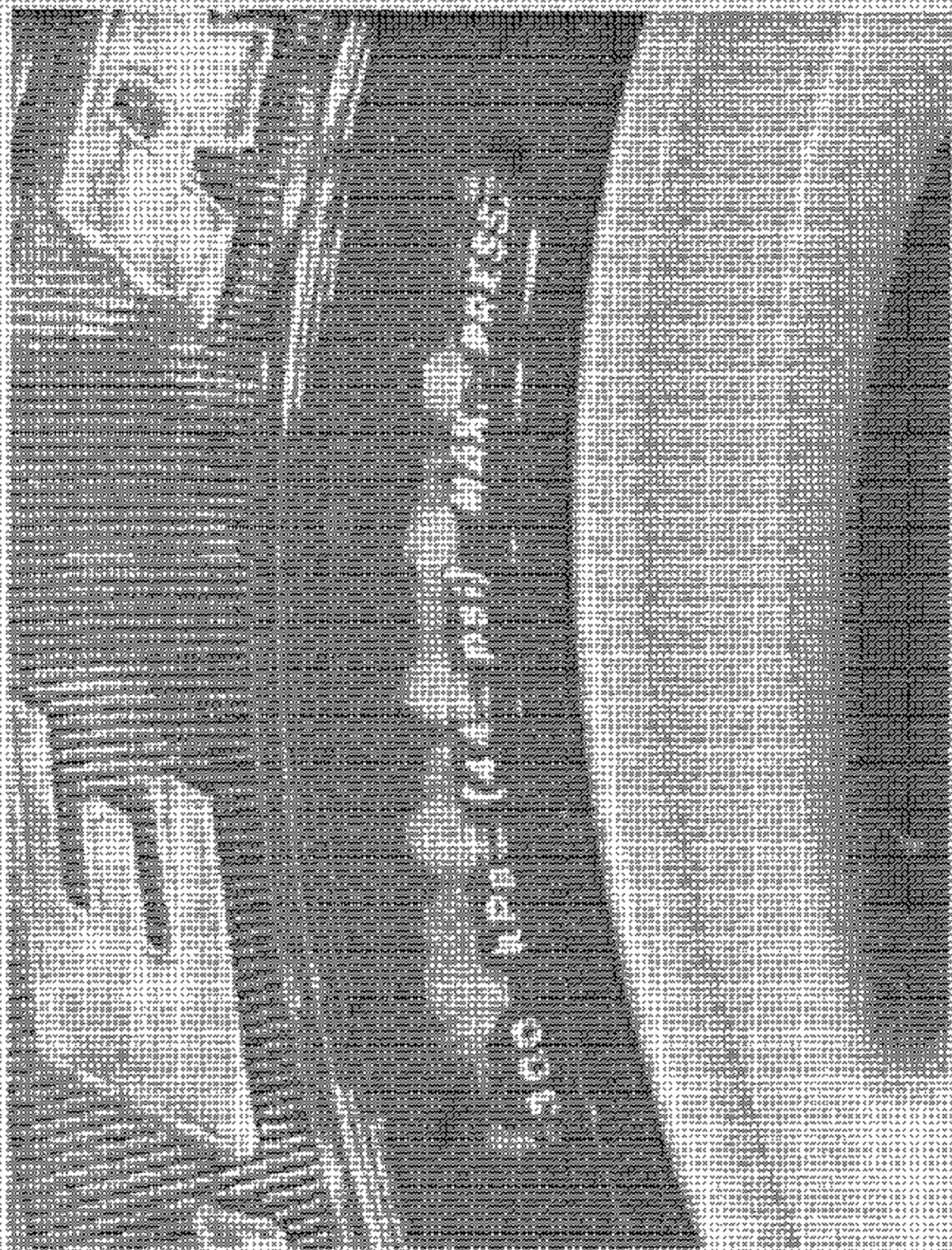
EX-30000

100000



MAXIMUM LOAD (LBS)
 6000 LBS (2000 LBS)
 MAXIMUM WEIGHT (LBS)

FIGURE 1
 TAIL SHOWING MAXIMUM LOAD



1000 H.P. (441 PSI) MAX. PRESS.
1000 H.P. (441 PSI) MAX. PRESS.
1000 H.P. (441 PSI) MAX. PRESS.

1000 H.P. (441 PSI) MAX. PRESS.
1000 H.P. (441 PSI) MAX. PRESS.
1000 H.P. (441 PSI) MAX. PRESS.

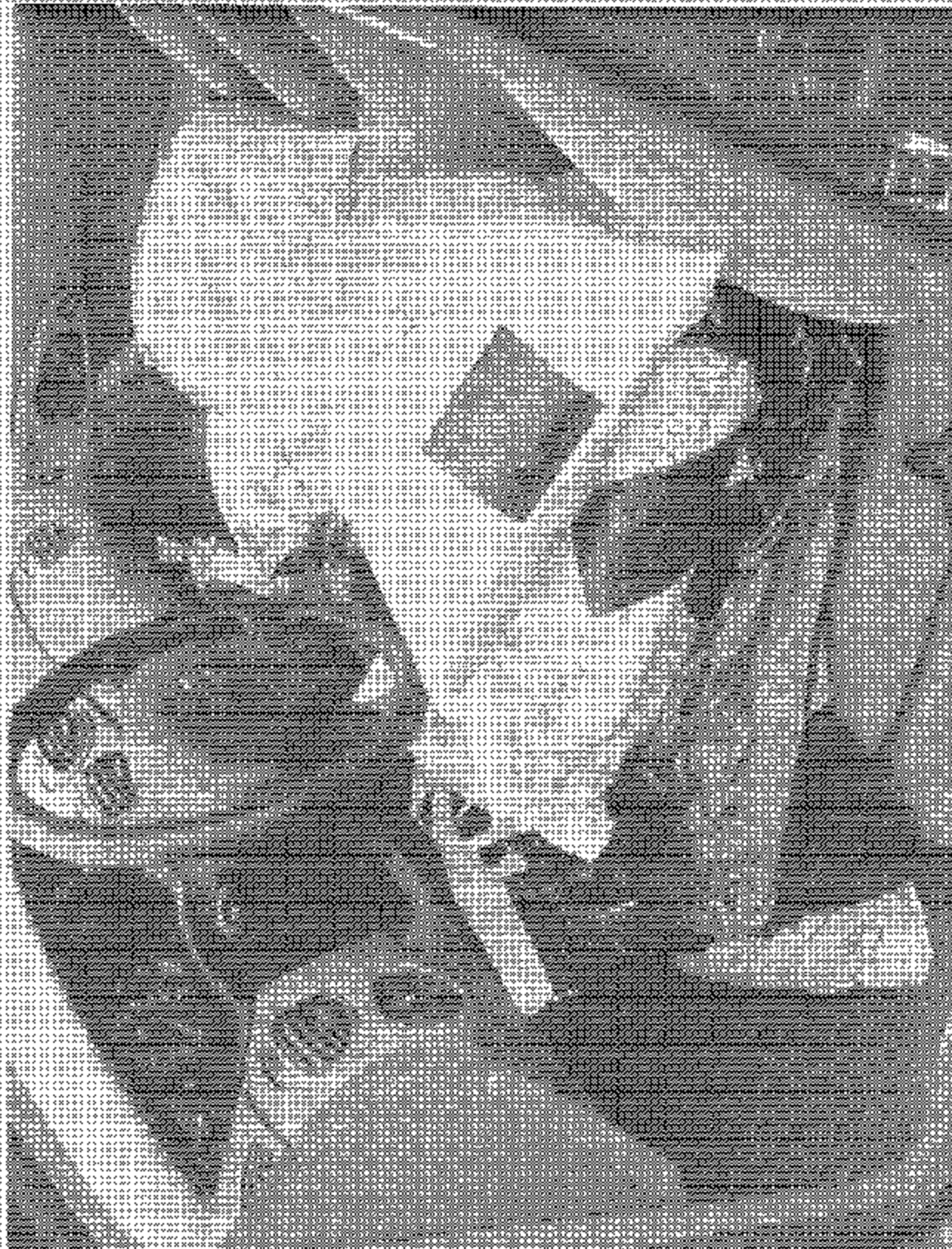


FIGURE 10-15
VEHICLE CHASSIS
TESTING ON A
DYNAMOMETER

FIGURE 10-16
VEHICLE CHASSIS
TESTING ON A
DYNAMOMETER

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.