

REPORT NUMBER 110-GTL-05-002

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

**VOLKSWAGEN AG GERMANY  
2005 VOLKSWAGEN PASSAT, 4-DOOR PASSENGER CAR  
NHTSA NO. C55800**

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JULY 5, 2005

FINAL REPORT

PREPARED FOR

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

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## SECTION 1

### INTRODUCTION

#### 1.0 PURPOSE OF COMPLIANCE TEST

A 2005 Volkswagen Passat 4-door passenger car was subjected to FMVSS No. 110 testing to determine if the vehicle was in compliance with the requirements of the standard. All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure, TP-110-02 dated 14 December 1989 and General Testing Laboratories, Inc (GTL) Test Procedure, TP-110-02 dated 22 May 2002.

#### 1.1 TEST VEHICLE

The test vehicle was a 2005 Volkswagen Passat 4-door passenger car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: WVVME63B15P023983

B. NHTSA No.: C55800

C. Manufacturer: VOLKSWAGEN AG GERMANY

D. Manufacture Date: 09/04

#### 1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 110 testing during the time period May 24 through May 31, 2005.

## SECTION 2

### TEST PROCEDURE AND SUMMARY OF RESULTS

#### 2.0 GENERAL

The 2005 Volkswagen Passat 4-door passenger car, NHTSA No. C55800, was subjected to FMVSS No. 110 testing during the time period May 24 through May 31, 2005.

#### 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 as required by the DOT/NHTSA and GTL test procedures. 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. The vehicle normal load as well as the maximum load on each wheel were measured. Data from each tire furnished with the vehicle were recorded. The vehicle tire placard was surveyed and photographed. Required dimensional data and other identifying data for the left front and right rear rims were obtained. The contour of the aforementioned rims was documented photographically.

In preparation for the deflated tire retention test, test instrumentation was installed in the vehicle. With the driver aboard, the vehicle was ballasted to equal the "vehicle maximum load on the tire" on the front and rear axle, as previously established. The tire pressure of all tires was adjusted to placard specifications for cold tire inflation at maximum loaded vehicle weight. The deflated tire retention test was then conducted on the left front tire followed by the right rear tire. The tests were conducted with the vehicle traveling in a straight line at 96.6 kph (60 mph). The respective tire was blown by an explosive charge on the tire's sidewall. Test data collected during the test included vehicle speed, deceleration, stopping distance, distance of uncontrolled deviation from a straight line and tire pressure. After the vehicle was stopped, any tire bead separation from the rim flange was documented photographically.

#### 2.2 SUMMARY OF RESULTS

The test vehicle appears to be in compliance with the requirements of FMVSS No. 110.

**SECTION 3****TEST DATA**

# DATA SHEET 1 SUMMARY

VEHICLE MAKE/MODEL/BODY STYLE: 2005 VOLKSWAGEN PASSAT PASSENGER CAR  
 VEHICLE NHTSA NO.: C55800; VIN: WVWME63B15P  
 LABORATORY: GENERAL TESTING LABORATORIES  
 TEST DATE: 05/24/05

<u>REQUIREMENT</u>	<u>PASS/FAIL</u>
<b>TIRE LOAD LIMITS AND PLACARD</b>	
The vehicle is equipped with tires that meet the requirements of FMVSS 109. (FMVSS 110, S4.1)	<u>PASS</u>
The vehicle maximum load on the tire shall not be greater than the applicable maximum load rating as marked on the sidewall of the tire. (FMVSS 110, S4.2.1)	<u>PASS</u>
The vehicle normal load on the tire shall not be greater than the high speed performance test load specified in FMVSS 109 paragraph S5.5. (FMVSS 110, S4.2.2)	<u>PASS</u>
The placard must be permanently affixed to the glove compartment door or equally accessible location; and display the required information. (FMVSS 110, S4.3)	<u>PASS</u>
No inflation pressure other than the maximum permissible inflation pressure is specified unless as required. (FMVSS 110, S4.3.1)	<u>PASS</u>
<b>RIM DIMENSIONS</b>	
Each rim shall be constructed to the dimensions of a rim or alternate specified for the tire size. (FMVSS No. 110, S4.4.1 (a))	<u>PASS</u>
<b>DEFLATED TIRE RETENTION</b>	
Each rim shall retain the deflated tire until the vehicle can be stopped. (FMVSS 110, S4.4.1(b))	<u>PASS</u>

Statement of indication of compliance or noncompliance to FMVSS 110 and data reference:  
THE VOLKSWAGEN PASSAT APPEARS TO COMPLY WITH THE REQUIREMENTS OF  
FMVSS 110.

REMARKS:

RECORDED BY:   
 APPROVED BY: 

DATE: 05/24/05

# DATA SHEET 2 TEST VEHICLE INFORMATION/RECEIVING INSPECTION

LABORATORY: GENERAL TESTING LABORATORIES DATE: 05/24/05

VEHICLE MODEL YEAR/MAKE/MODEL/BODY STYLE: 2005 VOLKSWAGEN PASSAT

MANUFACTURE DATE: 09/04 NHTSA NO.: C55800 BODY COLOR: RED

VIN: WVWME83B15P VEHICLE TYPE: PASSENGER CAR

GVWR 2070 kg (4564 lbs) GAWR(Fr) 1110 kg (2448 lbs) GAWR(Rr) 990 kg (2183 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 6 No. of Speeds

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

INSTALLED TIRE DATA: Size - P195/35R15 Mfr. - CONTINENTAL

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

X	Air Conditioning		Traction Control	X	Clock
X	Tinted Glass		All Wheel Drive		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	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 -

REMARKS:

RECORDED BY: [Signature]

DATE: 05/24/05

APPROVED BY: [Signature]

**DATA SHEET 3**  
**CURB WEIGHT WITH OPTIONS, NORMAL LOAD, VEHICLE MAXIMUM LOAD**

VEHICLE MAKE/MODEL/BODY STYLE: 2005 VOLKSWAGEN PASSAT PASSENGER CAR  
 VEHICLE NHTSA NO.: C55800 ; VIN: WVWME63B15P  
 LABORATORY: GENERAL TESTING LABORATORIES  
 TEST DATE: 05/24/05

**Full Fluid Levels:**

Fuel Full ; Coolant Full ; Other Fluids Full

Tire Pressure: LF 250 KPA (36 psi) LR 300 KPA (44 psi)  
 RF 250 KPA (36 psi) RR 300 KPA (44 psi)

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

LF <u>473</u> KG (1042 LB)	LR <u>301</u> KG (664 LB)
RF <u>488</u> KG (1075 LB)	RR <u>289</u> KG (638 LB)
Front Axle <u>960</u> KG (2117 LB)	Rear Axle <u>591</u> KG (1302 LB)
Total Vehicle <u>1551</u> KG (3419 LB)	

**B. VEHICLE NORMAL LOAD ON THE TIRE**

- (1) Seating Capacity (from Tire Information Placard) = 5  
 (2) Normal Load # of Occupants from FMVSS 110, Table I 3

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 Axles

LF <u>521</u> KG (1148 LB)	LR <u>354</u> KG (780 LB)
RF <u>538</u> KG (1185 LB)	RR <u>343</u> KG (756 LB)
Frt Axle <u>1058</u> KG (2333 LB)	Rr Axle <u>697</u> KG (1536 LB)
Total Vehicle <u>1755</u> KG (3869 LB)	

## DATA SHEET 3 - CONTINUED

- (5) Calculated Vehicle Normal Load on the Tire  
 Front Tires (measured front axle normal load/2) = 529 KG (1167 LB)  
 Rear Tires (measured rear axle normal load/2) = 348 KG (768 LB)

- (6) High Speed Test Load from FMVSS 109 (S5.5)

	Front	Rear
Installed Tire Size	<u>P195/65R15</u>	<u>P195/65R15</u>
Max. Load Rating on Sidewall	<u>615 KG(1356 LBS)</u>	<u>615 KG(1356 LBS)</u>
High Speed Test Load (88% of sidewall max. load rating)	<u>541 KG(1193 LBS)</u>	<u>541 KG(1193 LBS)</u>
Optional Tire Size(s)	<u>NONE</u>	<u>NONE</u>
Max. Load Rating on Sidewall (Obtain from approved reference manual)	<u>N/A</u>	<u>N/A</u>
High Speed Test Load (88% of sidewall max. load rating)	<u>N/A</u>	<u>N/A</u>

Vehicle Normal Load on the Tire is not greater than the High Speed Test Load

Installed Tires; [(5) < (6)]	Front Tires Rear Tires	PASS/FAIL <u>PASS</u> <u>PASS</u>
Optional Tires; [(5) < (6)]	Front Tires Rear Tires	<u>N/A</u> <u>N/A</u>

## C. MEASURED VEHICLE WITH FULL OCCUPANT LOAD

LF	<u>549 KG (1211 LB)</u>	LR	<u>412 KG (908 LB)</u>
RF	<u>550 KG (1212 LB)</u>	RR	<u>380 KG (838 LB)</u>
Front Axle	<u>1099 KG (2423 LB)</u>	Rear Axle	<u>792 KG (1746 LB)</u>
Total Vehicle	<u>1891 KG (4169 LB)</u>		

## DATA SHEET 3 – CONTINUED

## D. VEHICLE MAXIMUM LOAD ON THE TIRE

(1) Vehicle Capacity Weight (from Placard) 484 KG (1068 LB)

(2) Seating Capacity (from Placard) 5

(3) Total Occupant Load (seating capacity x 68 KG) 340 KG (750 LB)

(4) Luggage/Cargo Load (Subtract (3) from (1)) 144 KG (318 LB)

(5) Measured Maximum Load on Axles

LF <u>530 KG (1168 LB)</u>	LR <u>481 KG (1060 LB)</u>
RF <u>554 KG (1221 LB)</u>	RR <u>471 KG (1038 LB)</u>
Frt Axle <u>1084 KG (2389 LB)</u>	Rr Axle <u>952 KG (2098 LB)</u>
Total Vehicle <u>2035 KG (4487 LB)</u>	

- (6) Calculated Vehicle Maximum Load on the Tire
- Front Tires (measured front axle max. load/2) = 542 KG (1195 LB)
- Rear Tires (measured rear axle max. load/2) = 474 KG (1045 LB)
- (7) Maximum Load Rating on Tire Sidewall (obtain data from B.(6))

	Front	Rear
Installed Tire Size	<u>P195/65R15</u>	<u>P195/65R15</u>
Max. Load Rating on Sidewall	<u>615 KG (1356 LBS)</u>	<u>615 KG (1356 LBS)</u>
Optional Tire Size(s)	<u>N/A</u>	<u>N/A</u>
Max Load Rating on Sidewall (obtain from approved reference manual)	<u>N/A</u>	<u>N/A</u>

Vehicle Maximum Load on the Tire is not greater than the Maximum Load Rating Marked on the Tire Sidewall

		PASS/FAIL
Installed Tires;	Front Tires	<u>PASS</u>
[(6) < (7)]	Rear Tires	<u>PASS</u>
Optional Tires;	Front Tires	<u>N/A</u>
[(6) < (7)]	Rear Tires	<u>N/A</u>

## DATA SHEET 3 – CONTINUED

## E. VEHICLE LOAD ON THE TIRE FOR OTHER DISPLAYED LOAD AND TIRE INFLATION PRESSURE CONDITIONS

- (1) Condition Description (Load, Tire Size, Inflation Pressure)  
Vehicle at maximum load of 2035 kg (4487 lbs) with P195/65R15 tire at  
250 kPa (36 psi) front and 300 kPa (44 psi) rear on tire label.
- (2) Condition Load on Tire/Axle – Maximum Load
- |                                 |     |              |                          |     |              |
|---------------------------------|-----|--------------|--------------------------|-----|--------------|
| LF                              | 530 | KG (1168 LB) | LR                       | 481 | KG (1060 LB) |
| RF                              | 554 | KG (1221 LB) | RR                       | 471 | KG (1038 LB) |
| Frt Axle 1084 KG (2389 LB)      |     |              | Rr Axle 952 KG (2098 LB) |     |              |
| Total Vehicle 2035 KG (4487 LB) |     |              |                          |     |              |

- (3) Load Rating of Tire at Recommended Inflation Pressure

	Front	Rear
Displayed Tire Size	<u>P195/65R15</u>	<u>P195/65R15</u>
Recommended Inflation Pressure	<u>250 kPa (36 psi)</u>	<u>300 kPa (44 psi)</u>
Tire Load Rating (obtained from 2005 Tire and Rim Association Yearbook)	<u>587 KG (1294 LBS)</u>	<u>615 KG (1356 LBS)</u>

Vehicle Load on the Tire is not greater than the Tire Load Rating at the Tire Recommended Inflation Pressure

	PASS/FAIL
Front Tires [(2) < (3)]	<u>PASS</u>
Rear Tires [(2) < (3)]	<u>PASS</u>

NOTE: Section E should be repeated for every different load/tire inflation pressure condition displayed.

## REMARKS:

RECORDED BY:

DATE: 05/24/05

APPROVED BY:

**DATA SHEET 4**  
**TIRE INFORMATION LABEL OR PLACARD**

VEHICLE MAKE/MODEL/BODY STYLE: 2005 VOLKSWAGEN PASSAT PASSENGER CAR  
 VEHICLE NHTSA NO.: C55800 ; VIN: WVWME63B15P  
 LABORATORY: GENERAL TESTING LABORATORIES  
 TEST DATE: 05/24/05

		<b>PASS/FAIL</b>
A.	Description of Placard: <u>Self Adhesive decal – Red, Black Yellow and White</u>	<u>Pass</u>
B.	Description of Placard Location: <u>Driver's "B" pillar</u>	<u>Pass</u>
	Permanently Affixed (X) YES ( ) NO	
C.	Enter Information from Placard:	
	Vehicle Capacity Weight - <u>484 KG (1068 LBS)</u>	
	Designated Seating Capacity (DSC) - <u>5</u>	<u>Pass</u>
	Expressed In—	
	(1) Total No. of Occupants (X) Yes ( ) No	
	(2) Terms of Occupants for Each Seat Location (X) YES ( ) NO	<u>Pass</u>
	Manufacturer's Recommended Cold Tire Inflation Pressure for Maximum Load Vehicle Weight:	
	FRONT - <u>250 kPa (36 psi)</u>	REAR - <u>300 kPa (44 psi)</u>
	All Other Recommended Inflation Pressures: <u>None</u>	
	All Other Recommended Loading Conditions: <u>None</u>	
	Manufacturer's Recommended Size Designation: <u>P195/65R15</u>	
	All Other Manufacturer's Recommended Size Designation: <u>NONE</u>	
	DATA CORRECTLY DISPLAYED	<u>Pass</u>

## DATA SHEET 4 continued

PASS/FAIL

D. For Every Inflation Pressure Listed Above Indicate:

(1)	Less than Maximum?	(YES/NO)	<u>Yes</u>	<u>Pass</u>
(2)	Loading Condition Stated?	(YES/NO)	<u>Yes</u>	<u>Pass</u>

DATA INDICATES COMPLIANCE (X) YES ( ) NO

REMARKS:

RECORDED BY: DATE: 05/24/05APPROVED BY: 

# DATA SHEET 5 VEHICLE TIRE DATA

VEHICLE MAKE/MODEL/BODY STYLE: 2005 VOLKSWAGEN PASSAT PASSENGER CAR  
 VEHICLE NHTSA NO.: C55800 ; VIN: WVWME63B15P  
 LABORATORY: GENERAL TESTING LABORATORIES  
 TEST DATE: 05/24/05

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

## INFORMATION FROM TIRE SIDEWALL:

	Front Axle (R.F. Tire)	Rear Axle (L.R. Tire)	Spare
Tire Size Designation	<u>P195/85R15</u>	<u>P195/85R15</u>	<u>P195/85R15</u>
Tire Load Index/Speed Symbol	<u>91H</u>	<u>91H</u>	<u>91H</u>
Maximum Inflation Pressure	<u>300 kPa (44 psi)</u>	<u>300 kPa (44 psi)</u>	<u>300 kPa(44psi)</u>
Maximum Load Rating	<u>615 KG (1356 LBS)</u>	<u>615 KG(1356 LBS)</u>	<u>615KG(1356 LB)</u>
Mfr. Name or Brand & Code	<u>CONTINENTAL</u>	<u>CONTINENTAL</u>	<u>CONTINENTAL</u>
Tube or Tubeless	<u>Tubeless</u>	<u>Tubeless</u>	<u>Tubeless</u>
Treadwear/Traction/Temp. Grades	<u>360-A-A</u>	<u>360-A-A</u>	<u>360-A-A</u>
Sidewall (Plies & Composition)	<u>1 polyester</u>	<u>1 polyester</u>	<u>1 polyester</u>
Tread (Plies & Composition)	<u>2 steel</u> <u>1 polyester</u> <u>1 nylon</u>	<u>2 steel</u> <u>1 polyester</u> <u>1 nylon</u>	<u>2 steel</u> <u>1 polyester</u> <u>1 nylon</u>

Serial Number: Left Front - DOT CNPC PXBU 2004  
 Right Front - DOT CNPC PXBU 2004  
 Left Rear - DOT CNPC PXBU 2004  
 Right Rear - DOT CNPC PXBU 2004  
 Spare - DOT CNPC PXBU 2004

Tires have "DOT" markings: (X) YES ( ) NO

## REMARKS:

RECORDED BY: [Signature] DATE: 05/24/05

APPROVED BY: [Signature]

# DATA SHEET 8 RIM DIMENSIONS

VEHICLE MAKE/MODEL/BODY STYLE: 2005 VOLKSWAGEN PASSAT PASSENGER CAR  
 VEHICLE NHTSA NO.: C55800 ; VIN: WVWME63B15F  
 LABORATORY: GENERAL TESTING LABORATORIES  
 TEST DATE: 05/24/05

## A. Rim Size & Flange

	Tire Size	Specfd. Rims	Measured Width of Rims	Measured Height of Rims	PASS/ FAIL
Right Front:	<u>P195/85R15</u>	<u>5.5 to 7.0J</u>	<u>6.0"</u>	<u>15"</u>	<u>Pass</u>
Left Rear:	<u>P195/65R15</u>	<u>5.5 to 7.0J</u>	<u>6.0"</u>	<u>15"</u>	<u>Pass</u>

REFERENCE USED: 2005 Tire and Rim Association Yearbook

## B. Trade Stamps, Marks, Symbols: VW, DE, 05/04, 3BO.601, 027D

Rim Manufacturer's Name or Label: VW

Other Rim/Wheel Marking: 6J x 15H2, ET37

Rim Inspection Comments: None

Tire Inspection Comments: None

Wheel/Rim Construction (i.e., welded, one piece, cast, deep dish, etc.)  
Two piece welded steel, painted black

DATA INDICATES COMPLIANCE: (X) YES ( ) NO

REMARKS:

RECORDED BY: [Signature]

DATE: 05/24/05

APPROVED BY: D. Messer

# DATA SHEET 7 DEFLATED TIRE RETENTION

VEHICLE MAKE/MODEL/BODY STYLE: 2005 VOLKSWAGEN PASSAT PASSENGER CAR  
 VEHICLE NHTSA NO.: C55800; VIN: WVWME63B15P XXXXXXXXXX  
 LABORATORY: GENERAL TESTING LABORATORIES  
 TEST DATE: 05/26/05

Tire Pressures: LF 250 kPa (36 psi) LR 300 kPa (44 psi)  
 (cold) RF 250 kPa (36 psi) RR 300 kPa (44 psi)

Test Weight (should be the same weight and distribution recorded on Data Sheet 3 Section D.5.)

LF 532 kg (1173 lb) LR 482 kg (1062 lb)  
 RF 554 kg (1221 lb) RR 488 kg (1028 lb)  
 Front Axle 1086 kg (2394 lb) Rear Axle 948 kg (2090 lb)

TOTAL VEHICLE 2034 kg (4484 lb)

Description of Weight Distribution: Salt bags in front passenger seat, rear seat and trunk.

## A. Retention Test Left Front:

Odometer (START): 214 km (133 miles) Fuel Level: Full

Tire Pressure: 250 kPa (36 psi)

Ambient Temperature: 25.6 degrees C (78 F)

Wind Speed: 8.0 kmph (5.0 mph)

Size of Deflation Opening: 2.5 cm (1.0 in.) in diameter

Speed: 95.8 kmph (59.5 mph)

Deceleration Rate: 1.82 – 2.43 mpsps avg. ( 6-8 fpsps)

Distance Traveled After Initial Release of Air: 246 m (808 ft)

Distance of Deviation: < .3 m (<1 ft)

Description of Bead Separation, Outboard: None

Description of Bead Separation, Inboard: None

# DATA SHEET 7 continued DEFLATED TIRE RETENTION

## B. Retention Test Right Rear:

Odometer (START): 219 km (136 miles) Fuel Level: Full

Tire Pressure: 300 kPa (44 psi)

Ambient Temperature: 25.6 degrees C (78 F)

Wind Speed: 8.0 kmph (5 mph)

Size of Deflation Opening: 2.5 cm (1.0 in.) in diameter

Speed: 90.8 kmph (60.2 mph)

Deceleration Rate: 2.13 - 2.43 mpaps avg. ( 7-8 fpaps)

Distance Traveled After Initial Release of Air: 242 m (794 ft)

Distance of Deviation: <.3 m (<1 ft)

Description of Bead Separation, Outboard: None

Description of Bead Separation, Inboard: None

NOTE: No rotation of tire on rim

## C. REMARKS: (Stability, Control, Suspension, etc.)

Good control, normal stopping

PASS/FAIL

Left Front  
Right Rear

Pass  
Pass

DATA INDICATES COMPLIANCE: (X) YES ( ) NO

REMARKS:

RECORDED BY: [Signature]

DATE: 05/31/05

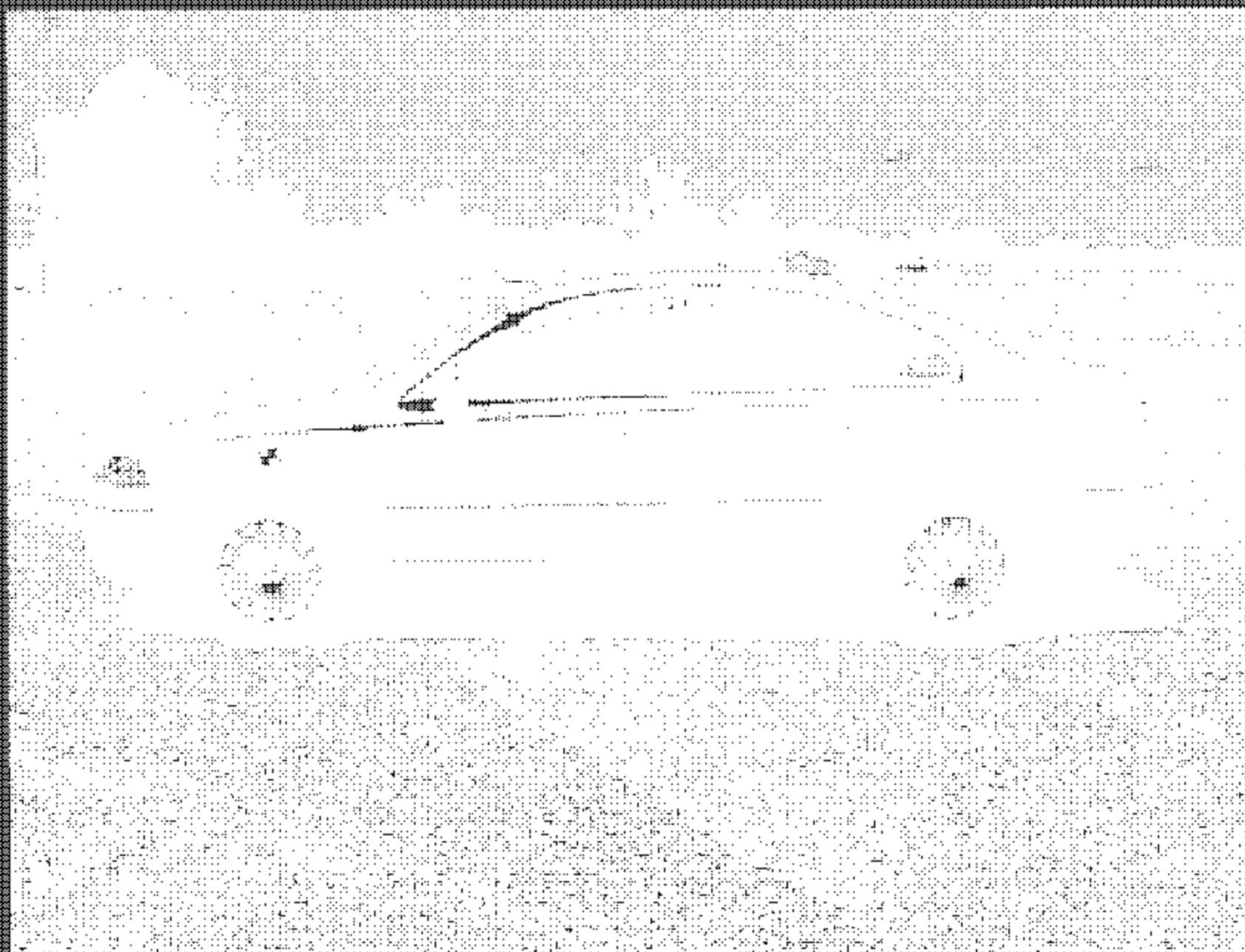
APPROVED BY: [Signature]

# 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	07/04	07/05
	#2 199744RF	199744RF	07/04	07/05
	#3 199744LR	199744LR	07/04	07/05
	#4 199744RR	199744RR	07/04	07/05
PRESSURE TRANSDUCER	BLH	D-HF #65409	BEFORE USE	BEFORE USE
SURFACE LEVEL	STANLEY	641186	05/05	05/06
DATA ACQUISITION COMPUTER	GEO1	N/A	BEFORE USE	BEFORE USE
ANEMOMETER	HASTINGS	RM-1	05/05	05/06
SLIP RING ASSEMBLY	GTL	N/A	BEFORE USE	BEFORE USE
DECCELEROMETER	GTL	N/A	BEFORE USE	BEFORE USE
INCLINOMETER	STARRETT	002	05/05	05/06
VBOX	RACELOGIC	VB2 #004337	BEFORE USE	BEFORE USE

SECTION 5  
PHOTOGRAPHS



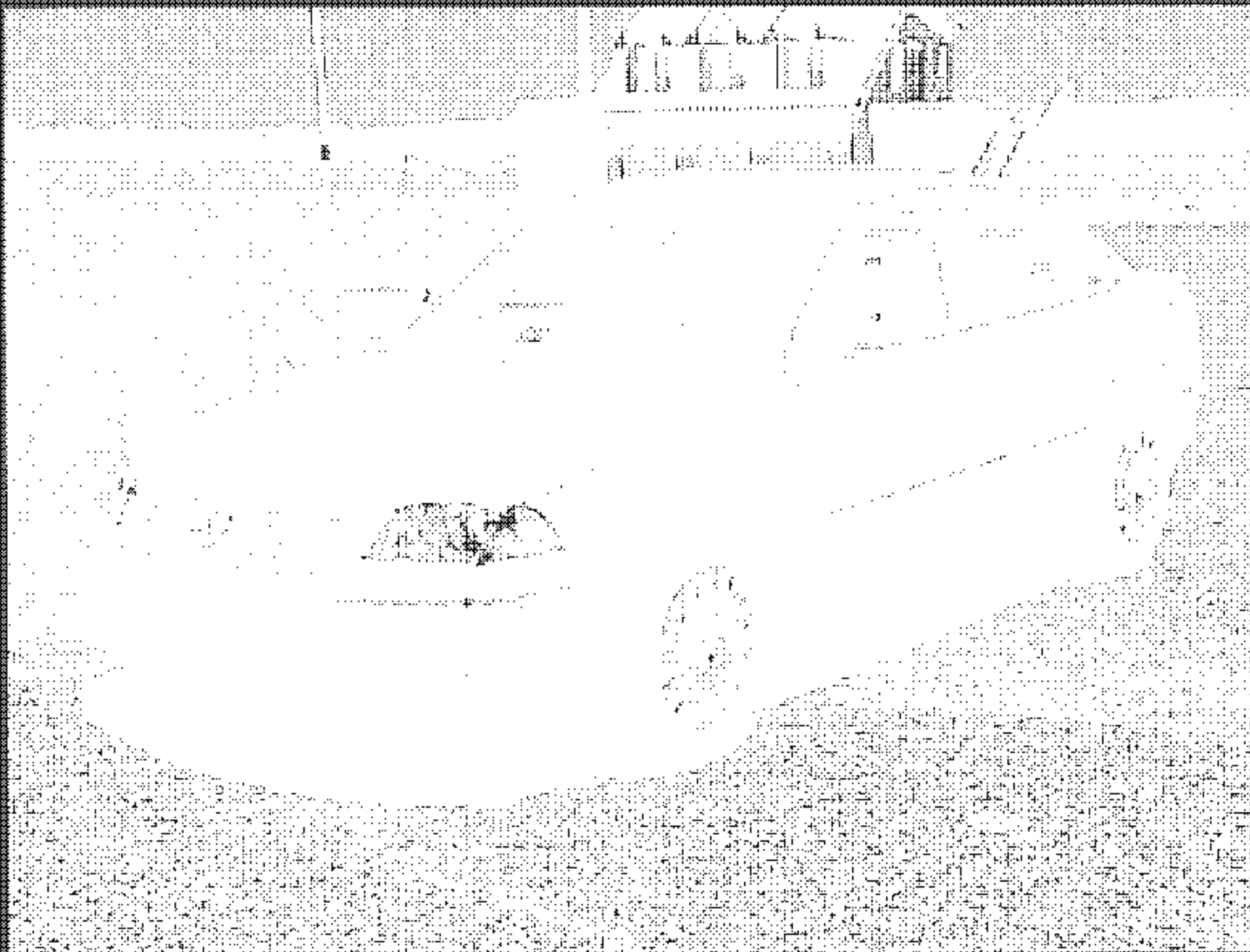
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C56800  
FMVSS NO. 110

FIGURE 5.1  
LEFT SIDE VIEW OF VEHICLE



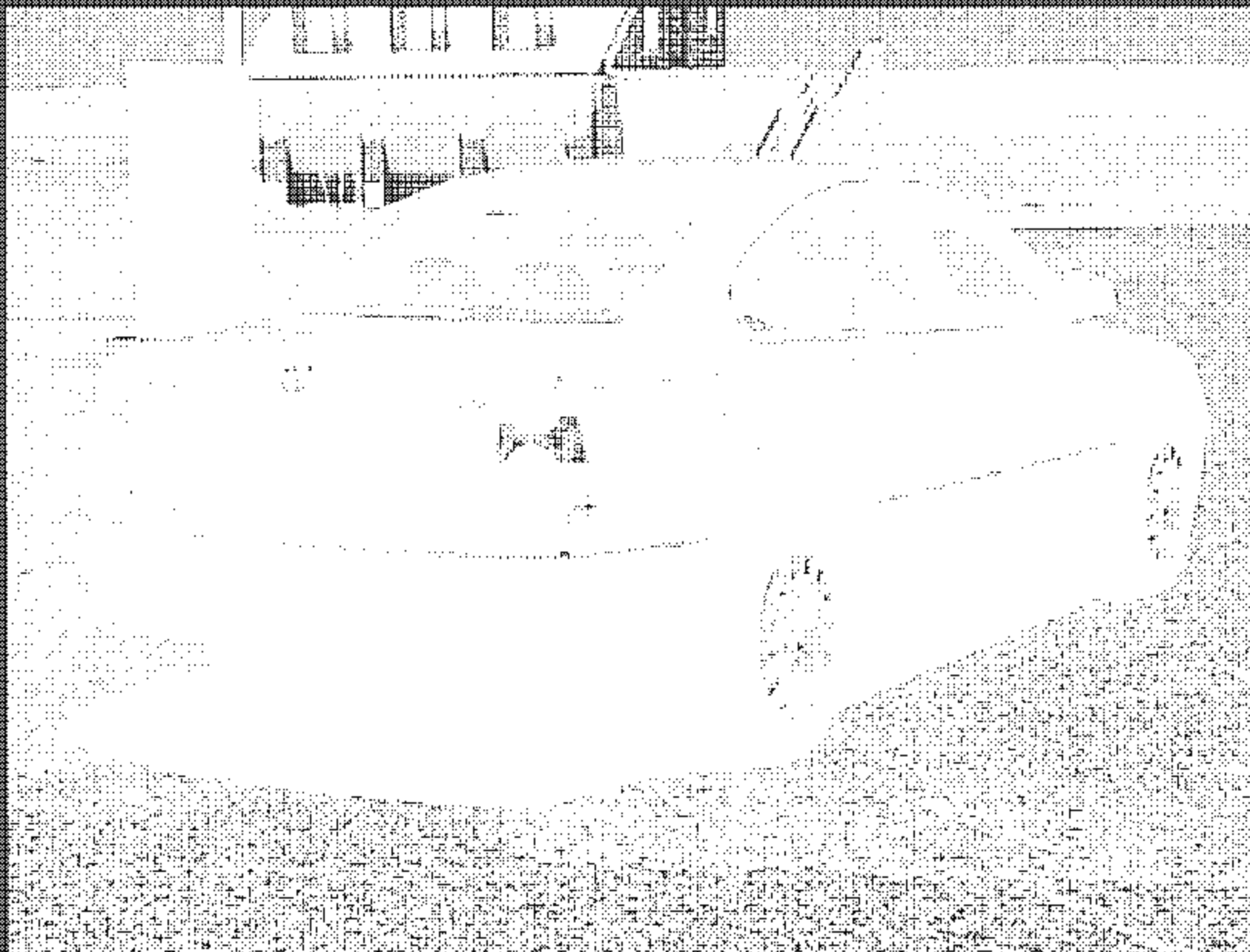
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.2  
RIGHT SIDE VIEW OF VEHICLE



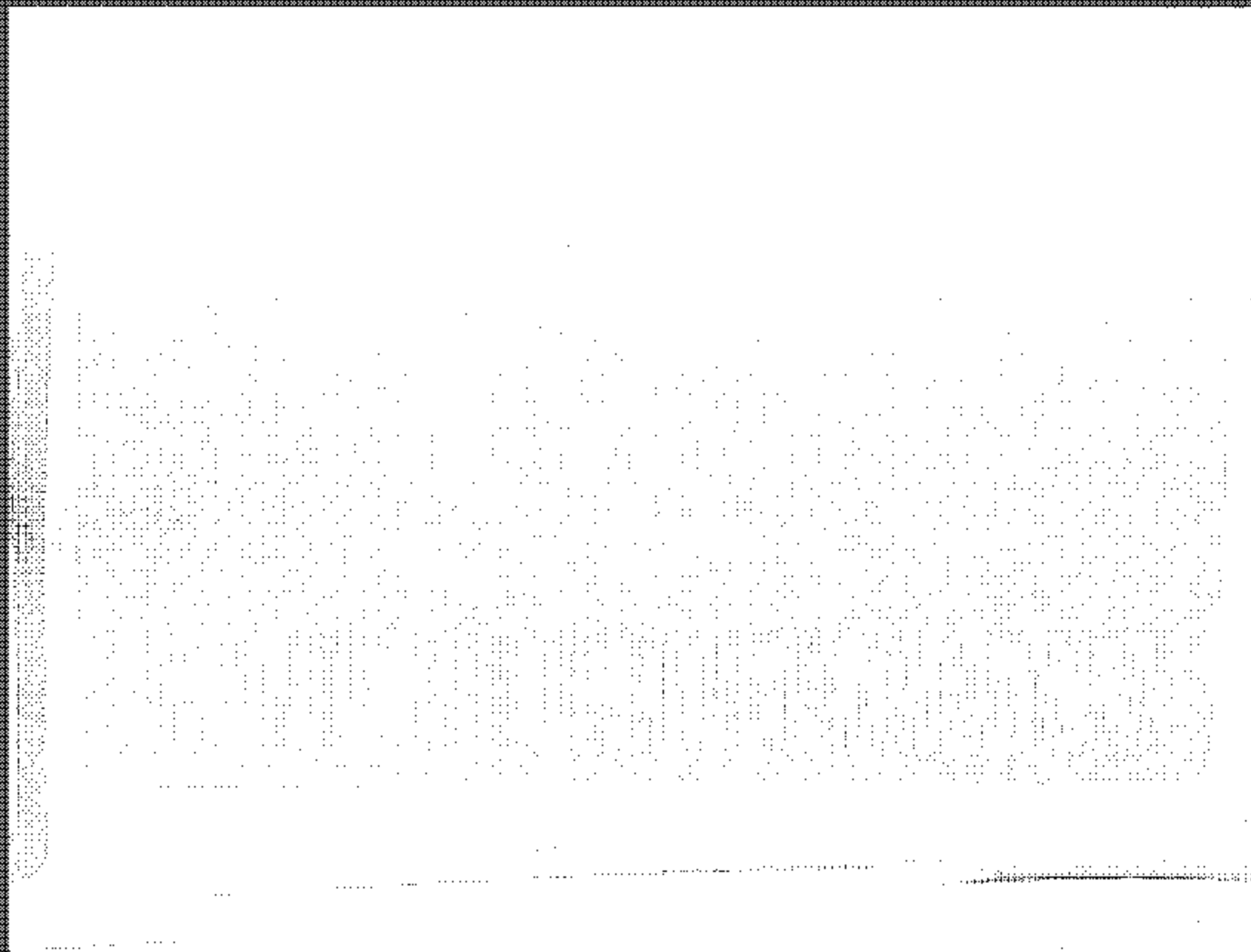
2006 VOLKSWAGEN PASSAT  
NHTSA NO. C55600  
FMVSS NO. 110

FIGURE 5.3  
X FRONTAL VIEW FROM LEFT SIDE OF VEHICLE



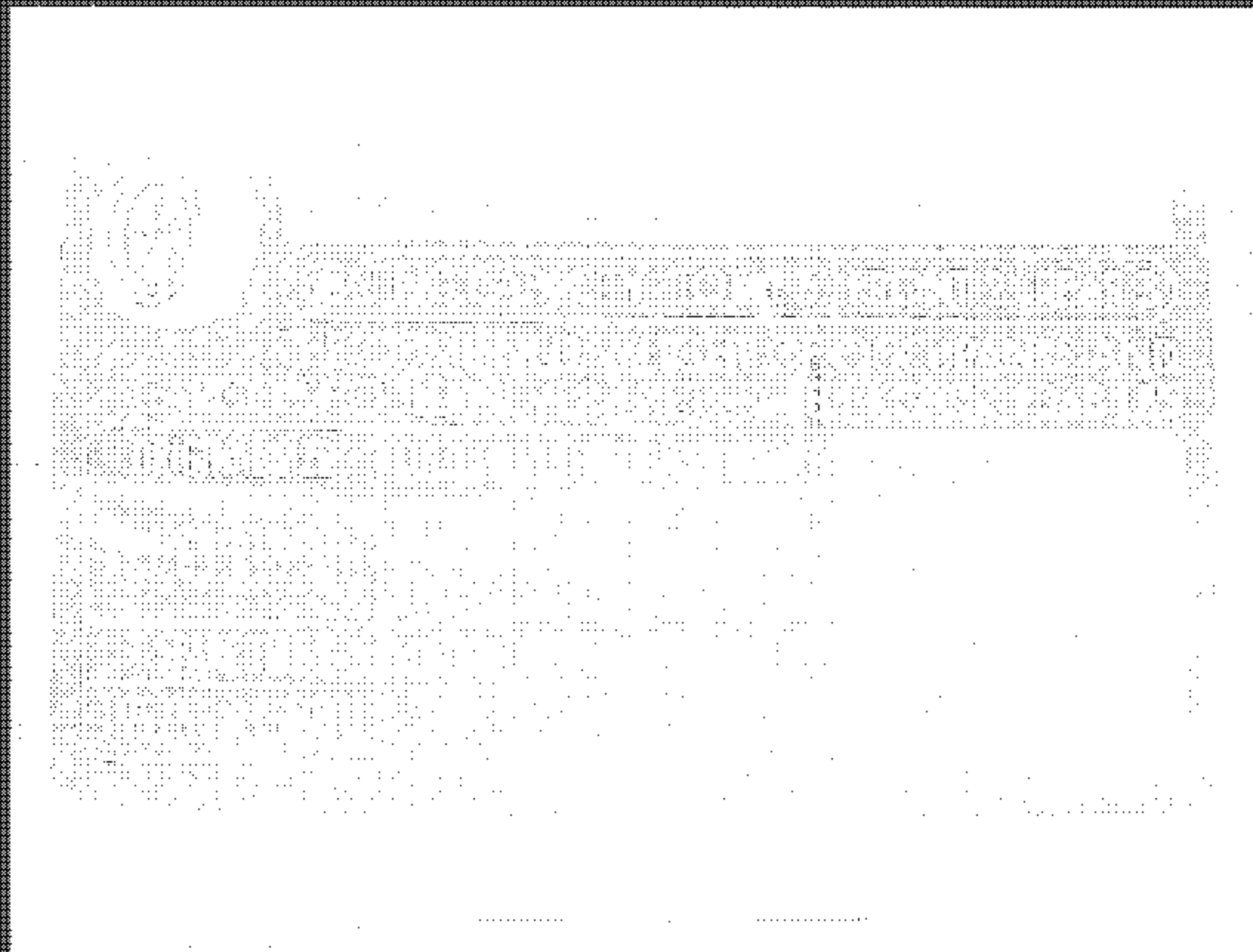
2005 VOLKSWAGEN PASSAT  
NHTSA NO. 055800  
FMVSS NO. 110

FIGURE 5.4  
¾ REAR VIEW FROM RIGHT SIDE OF VEHICLE



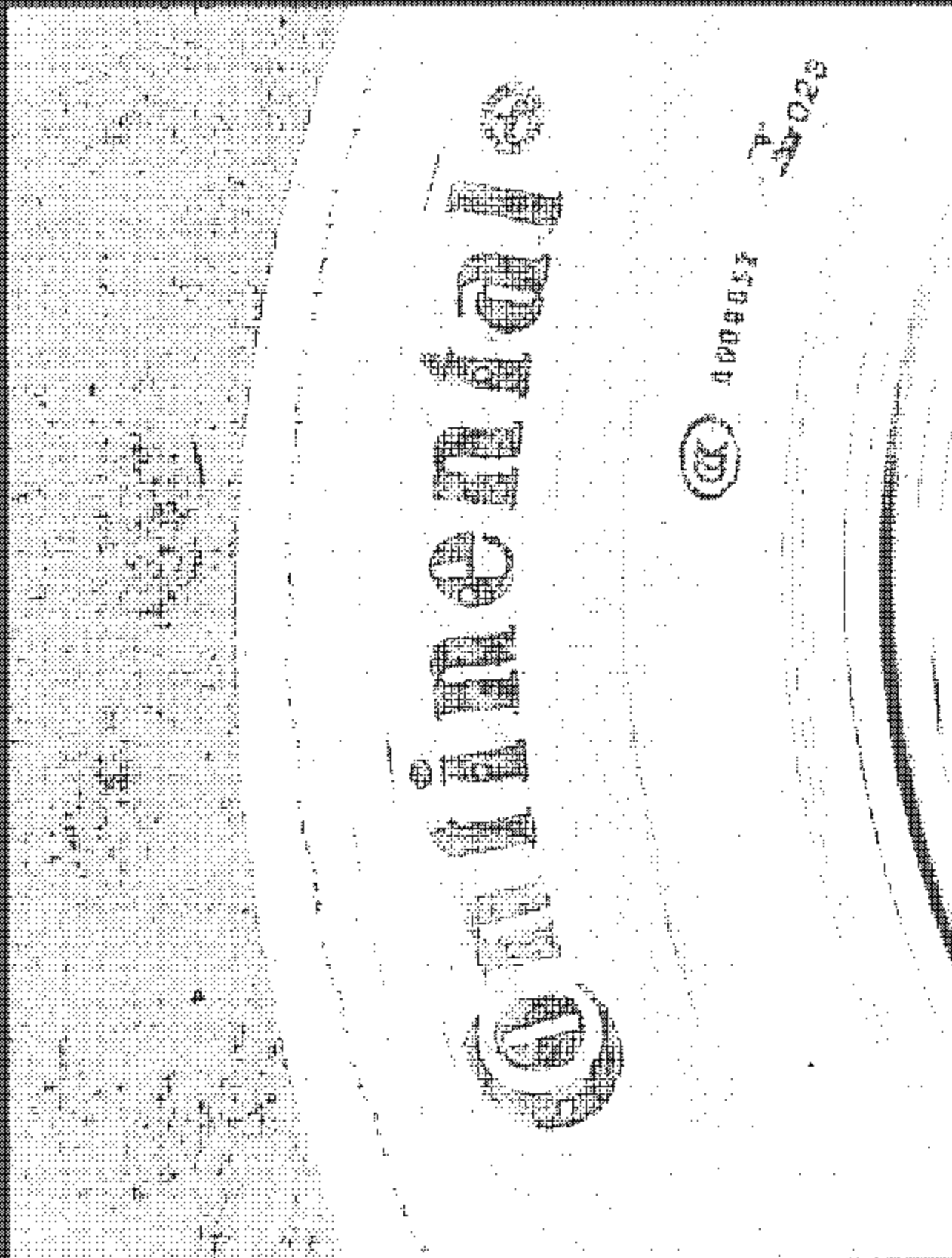
2005 VOLKSWAGEN PASSAT  
NHTSA NO. 055800  
FMVSS NO. 110

FIGURE 5.5  
VEHICLE CERTIFICATION LABEL



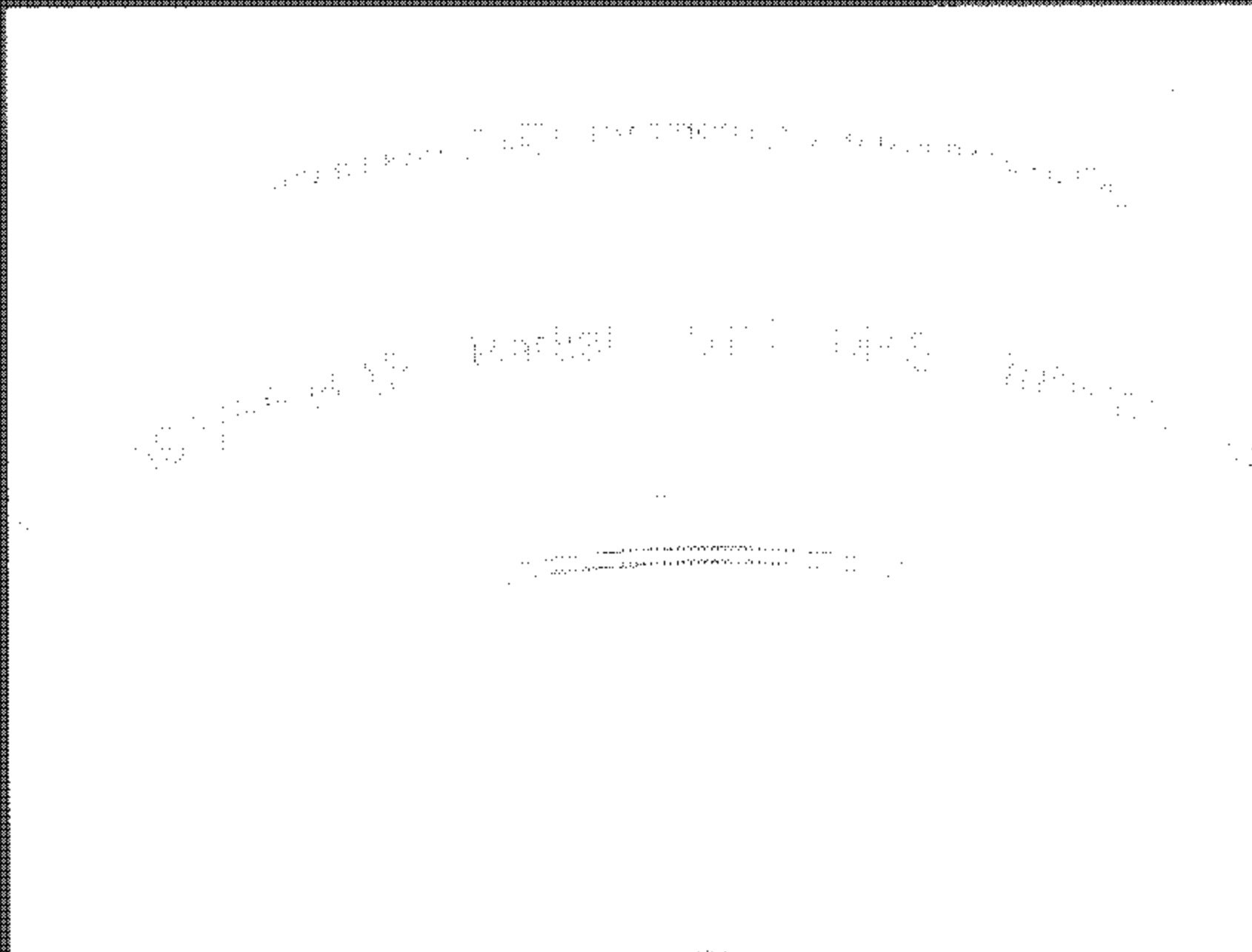
2005 VOLKSWAGEN PASSAT  
NHTSA NO. 055800  
FMVSS NO. 110

FIGURE 5.6  
VEHICLE TIRE INFORMATION LABEL



2005 VOLKSWAGEN PASSAT  
NHTSA NO. C66800  
FMVSS NO. 110

FIGURE 5.7  
TIRE SHOWING MANUFACTURER



2005 VOLKSWAGEN PASSAT  
NHTSA NO. 055800  
FMVSS NO. 110

FIGURE 5.8  
TIRE SHOWING SIZE, LOAD INDEX, SPEED RATING,  
TREADWARE, TRACTION AND TEMPERATURE

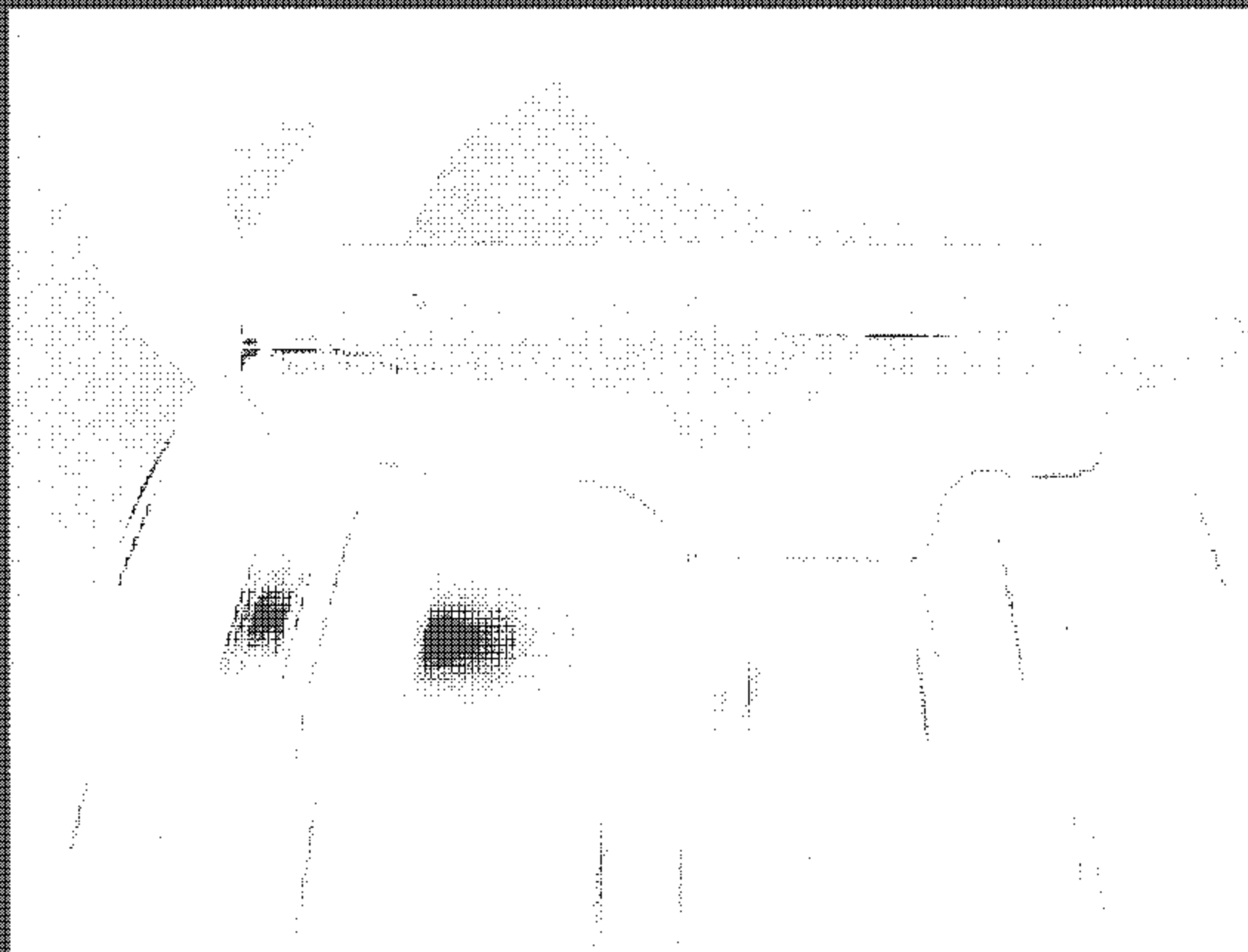
MAX 1. 15. EXTREME  
31-11-11 15.00

MAX. INFLATION PRESSURE  
30 PSI (2.1 BAR) 300 C.M.H. (100 C.M.H.)  
REAR (1.1 BAR)  
195/65 R15 88V  
REAR (1.1 BAR) 255/65 R17 91V  
REAR (1.1 BAR) 255/65 R17 91V

DOT CAPC P XBU  
1434 006787 000470

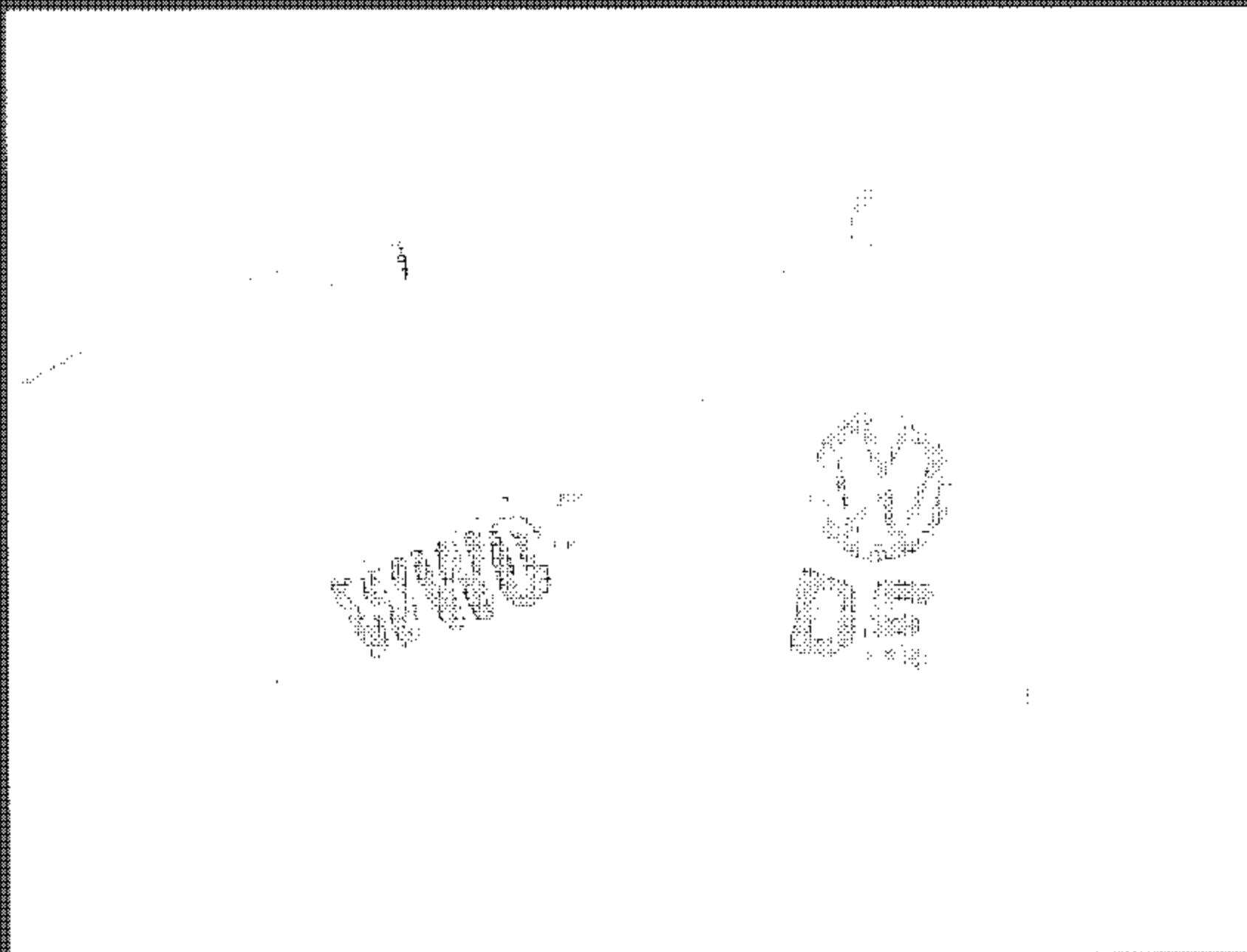
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C35800  
FMVSS NO. 110

FIGURE 5.11  
TIRE SHOWING SERIAL NUMBER



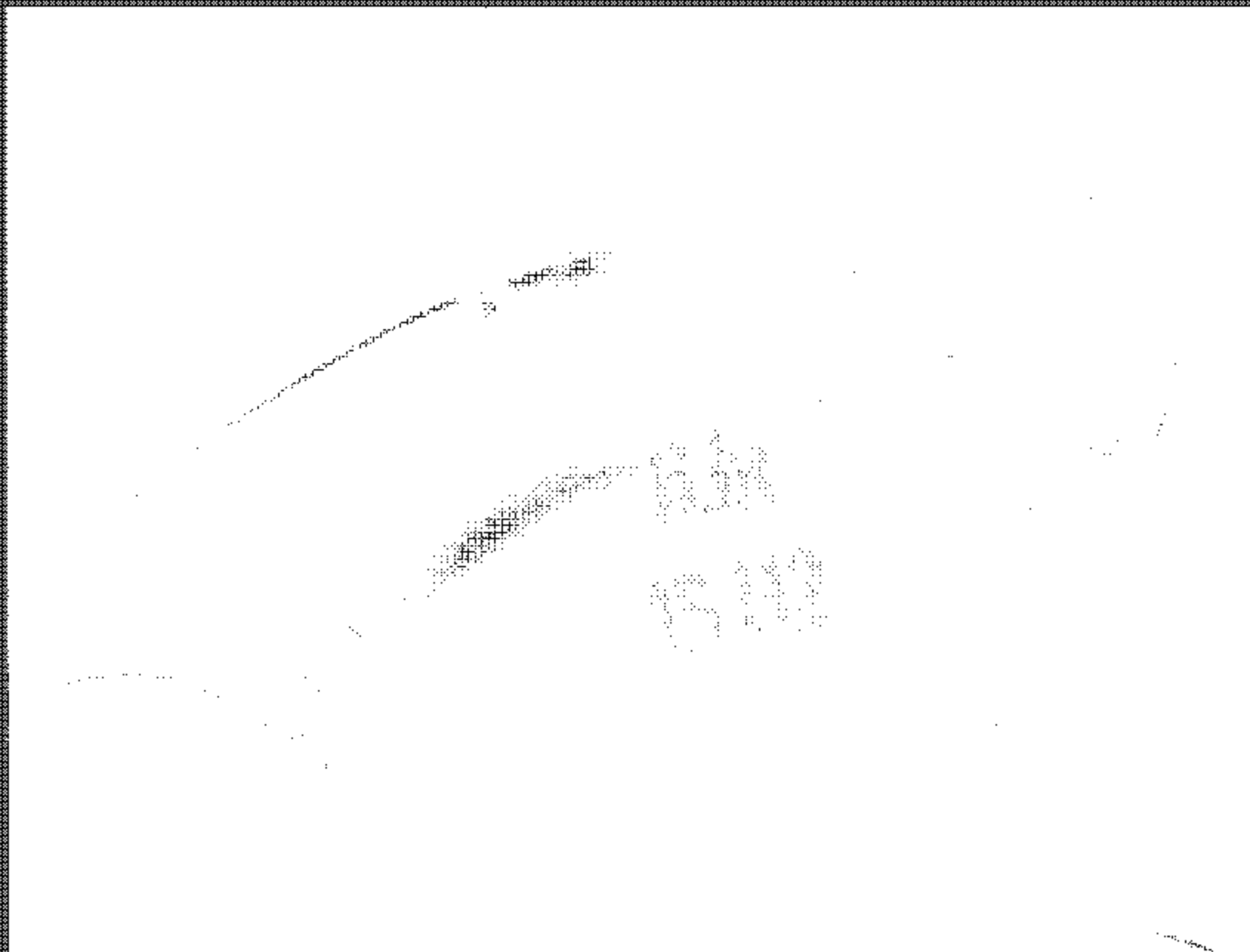
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C65800  
FMVSS NO. 110

FIGURE 5.12  
RIM CONTOUR FOR FULL WIDTH OF RIM CROSS  
SECTION



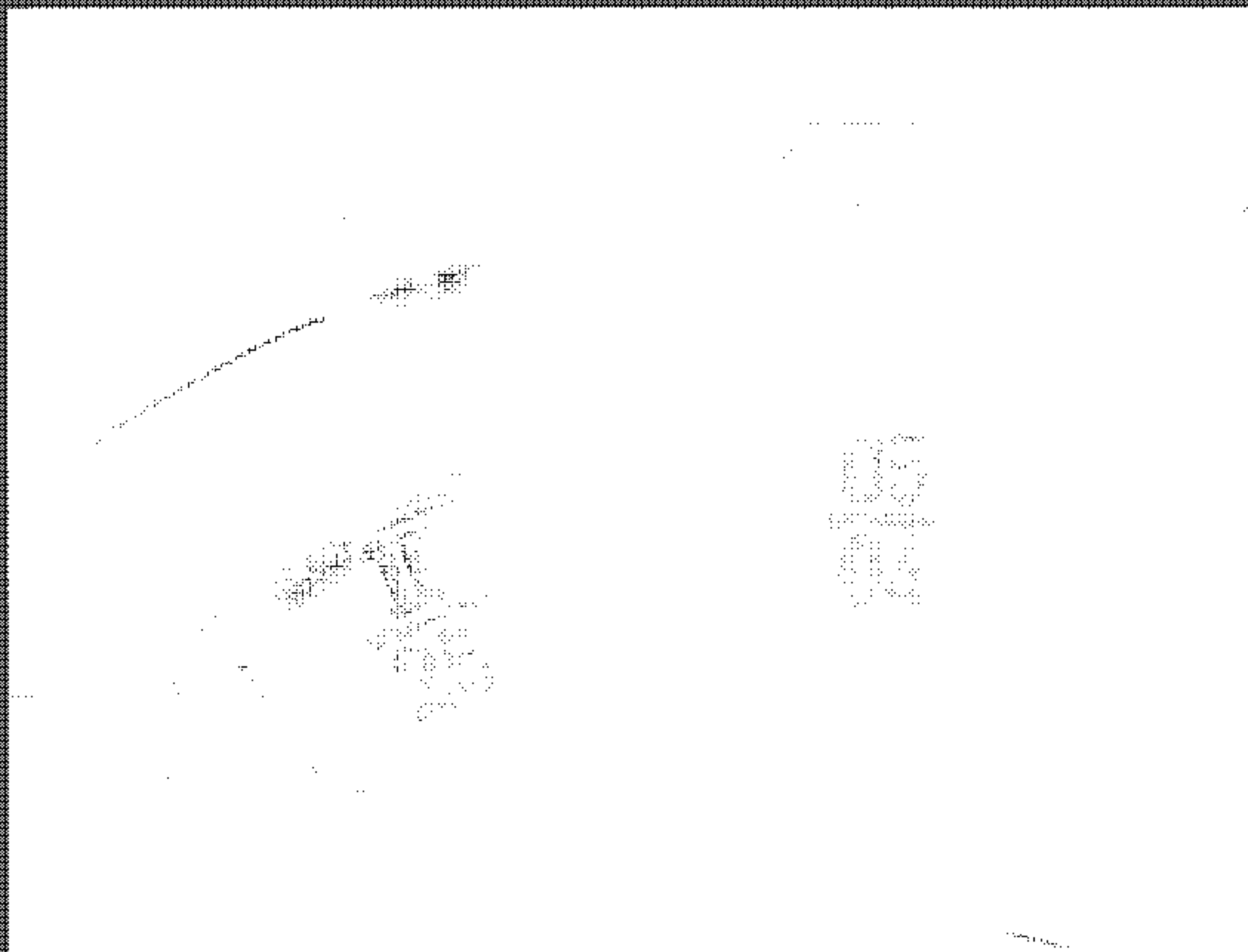
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.13  
RIM MARKINGS AND MANUFACTURER



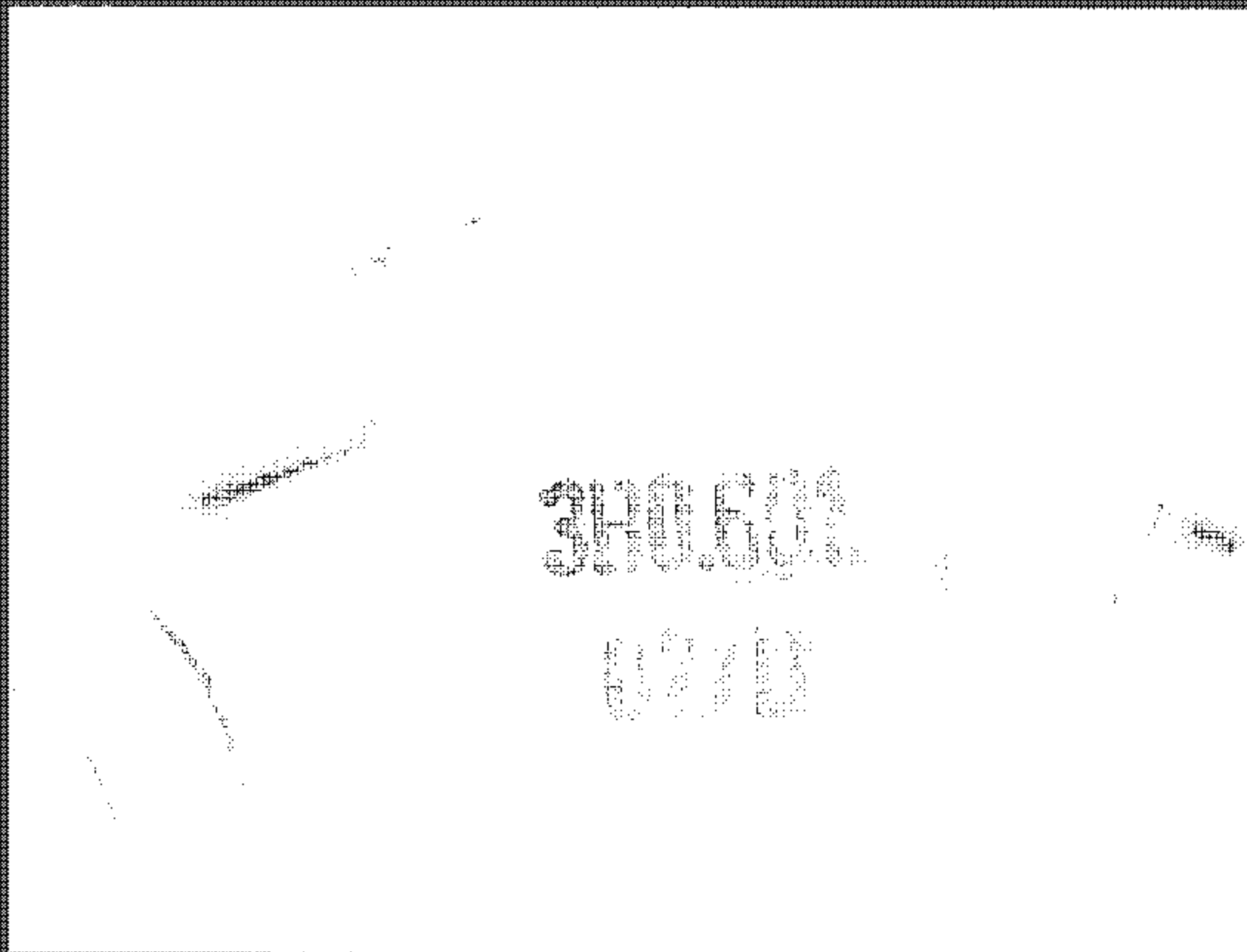
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.14  
RIM SHOWING SIZE



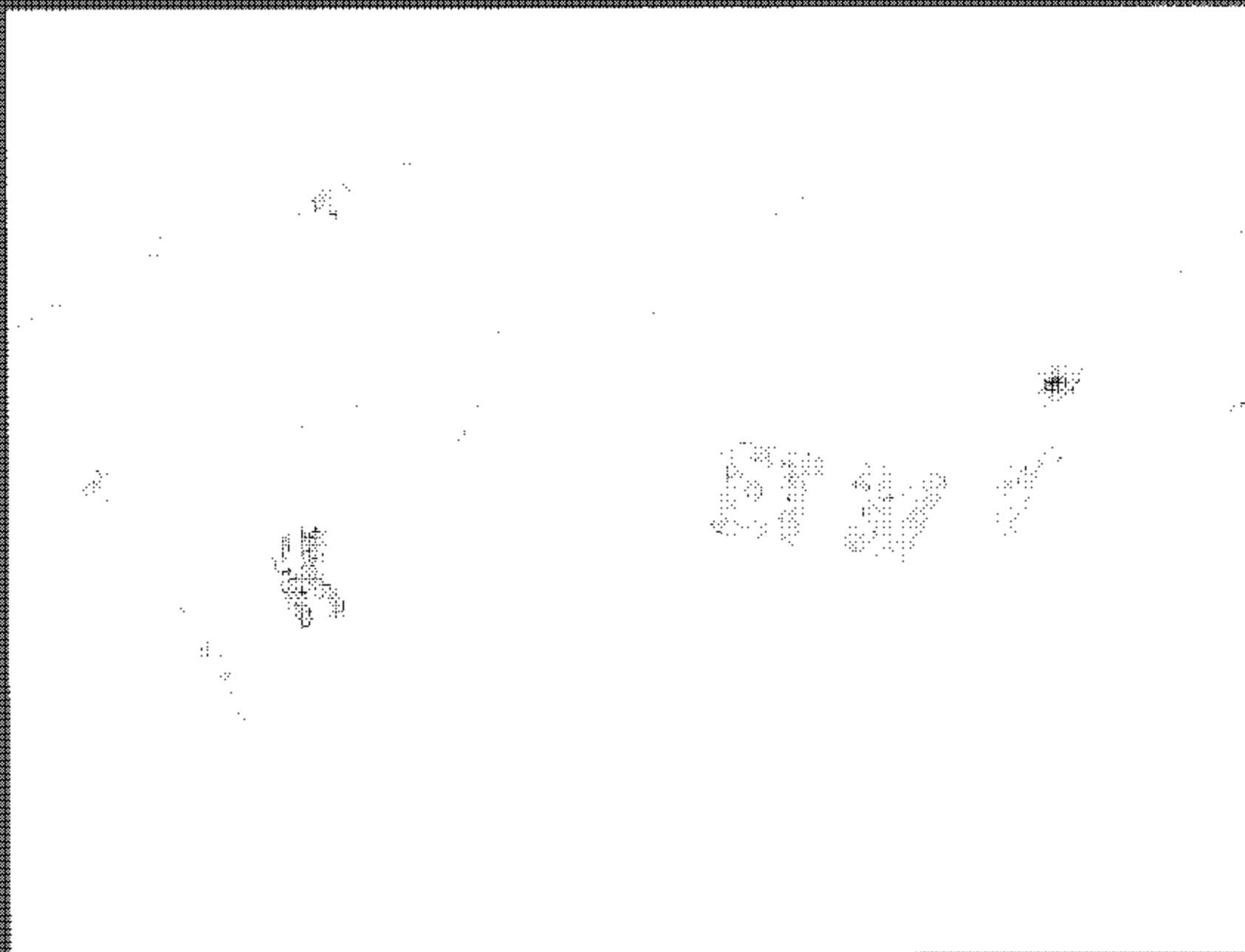
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.15  
RIM SHOWING DATE CODE



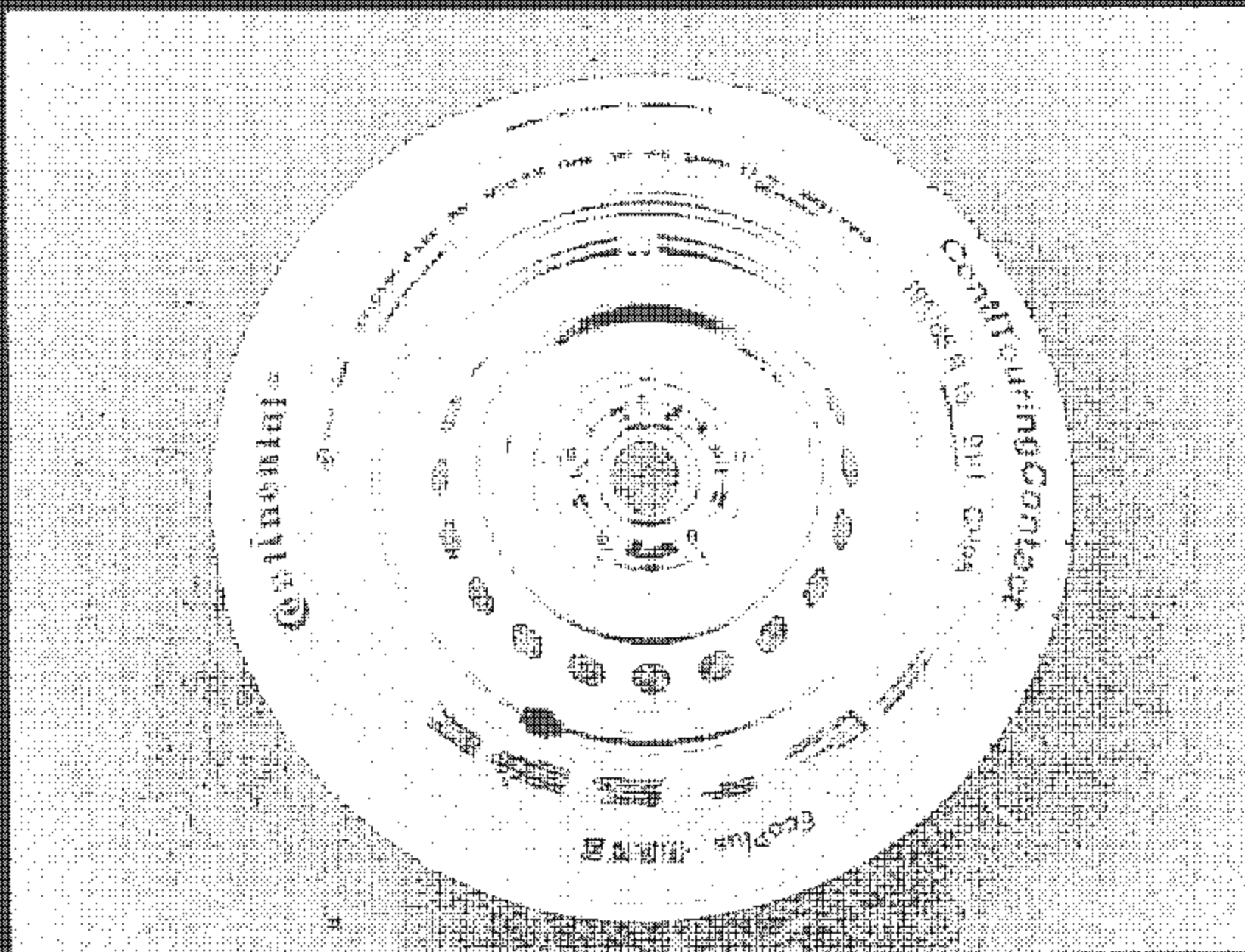
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C658800  
FMVSS NO. 110

FIGURE 5.16  
OTHER RIM MARKINGS



2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.17  
OTHER RIM MARKINGS



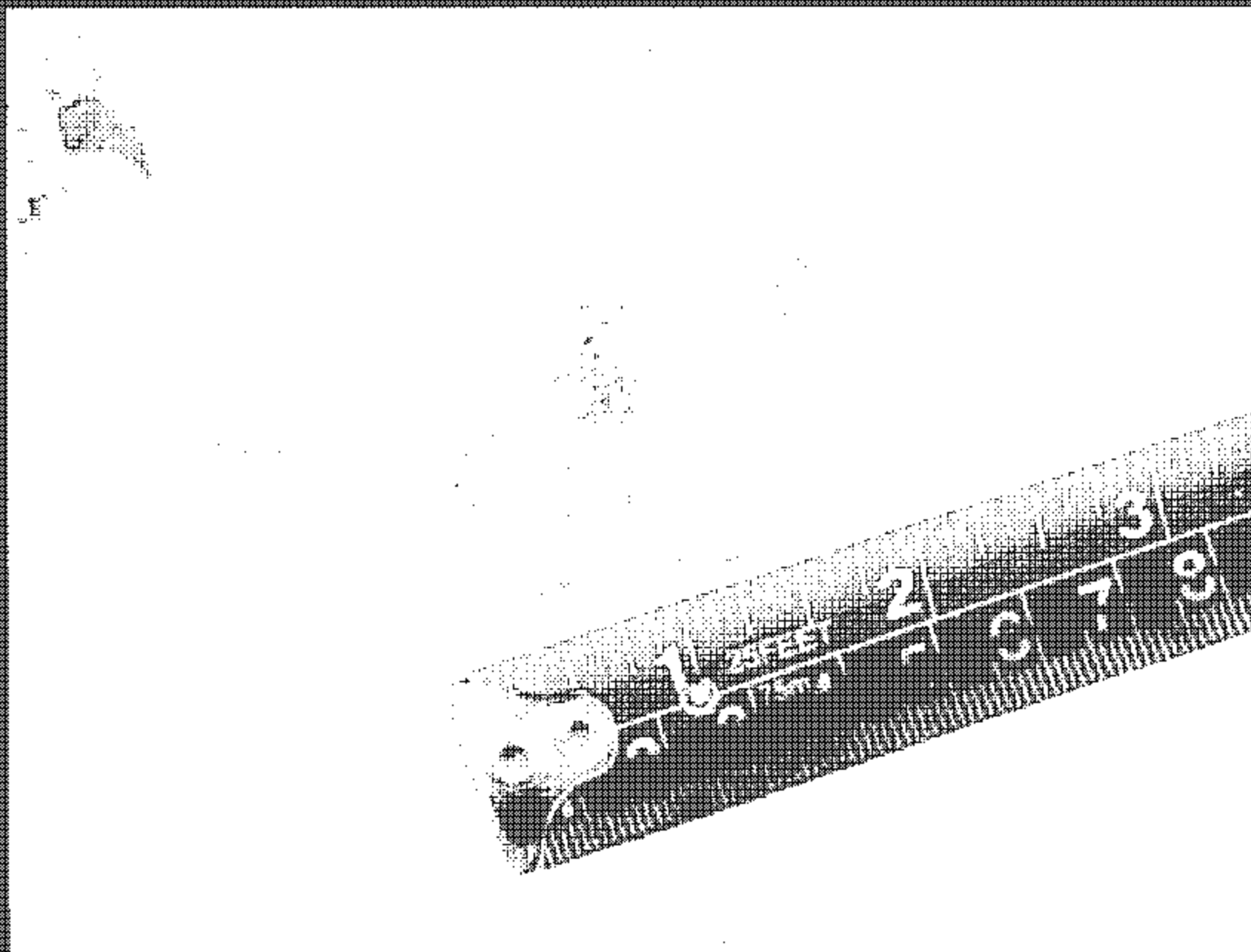
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.18  
SPARE TIRE AND RIM ASSEMBLY



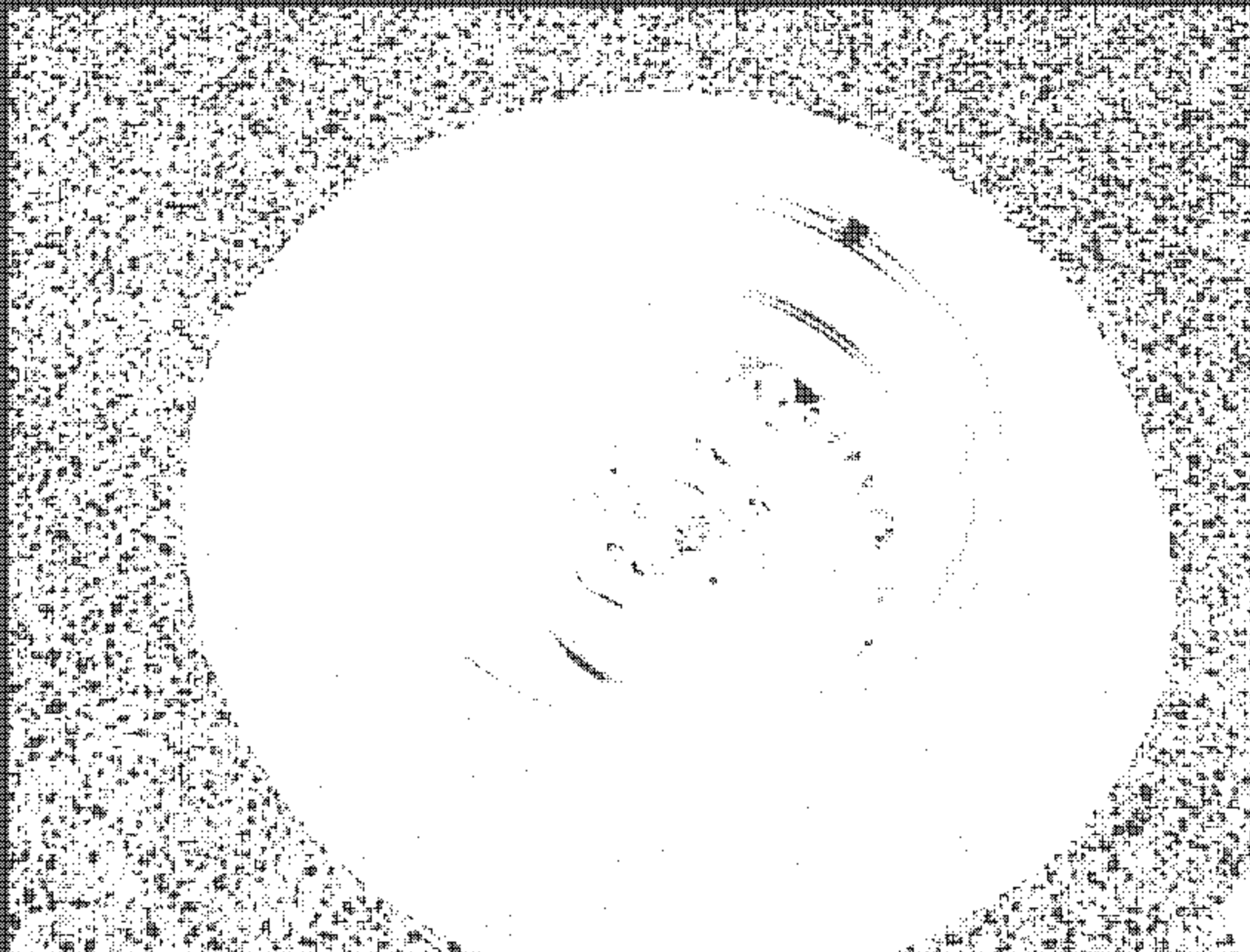
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C56800  
FMVSS NO. 110

FIGURE 5.19  
OUTSIDE VIEW OF LEFT FRONT TIRE AFTER  
BLOW-OUT



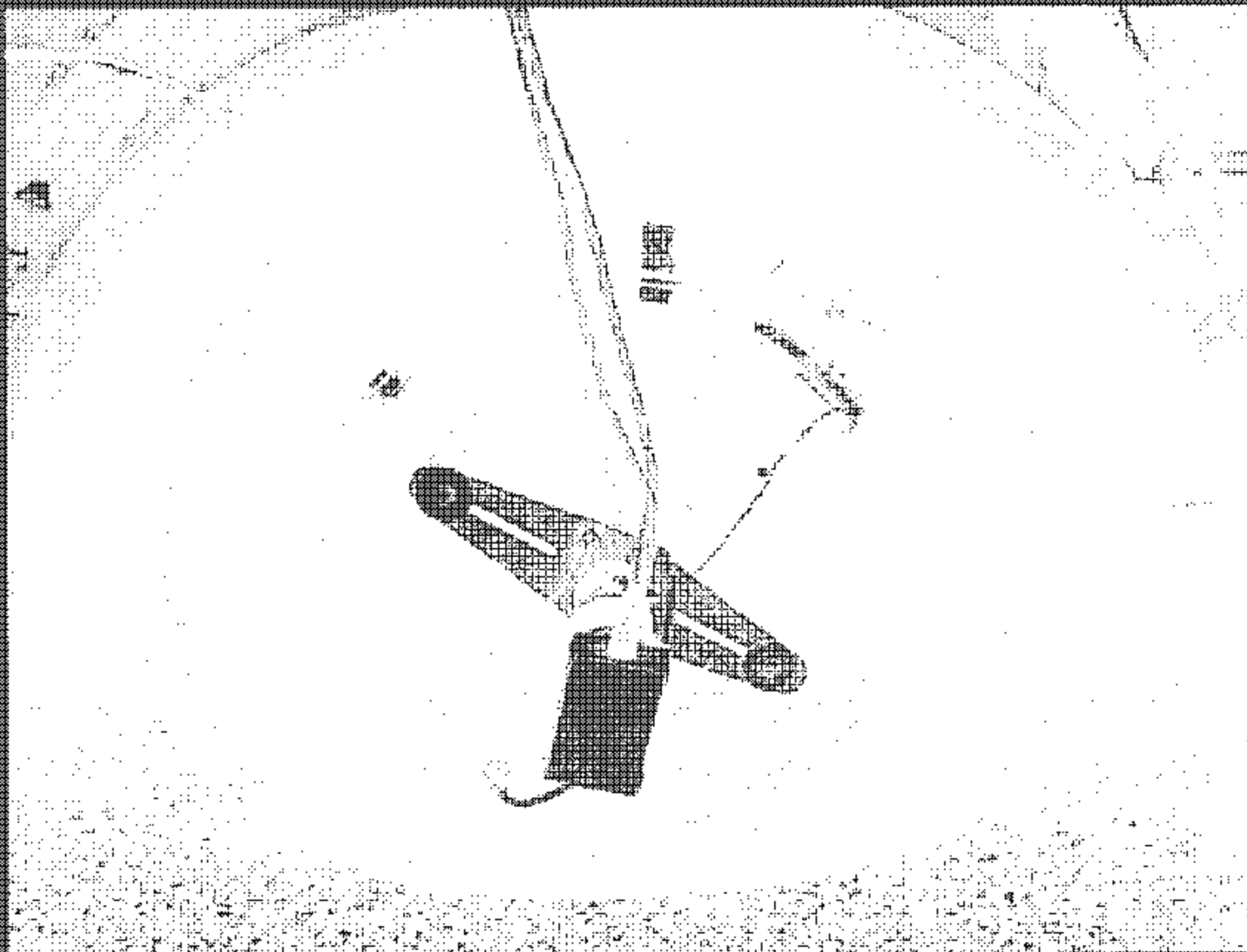
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.20  
CLOSE-UP OF BLOWN-OUT TIRE WITH RULER  
NEXT TO HOLE



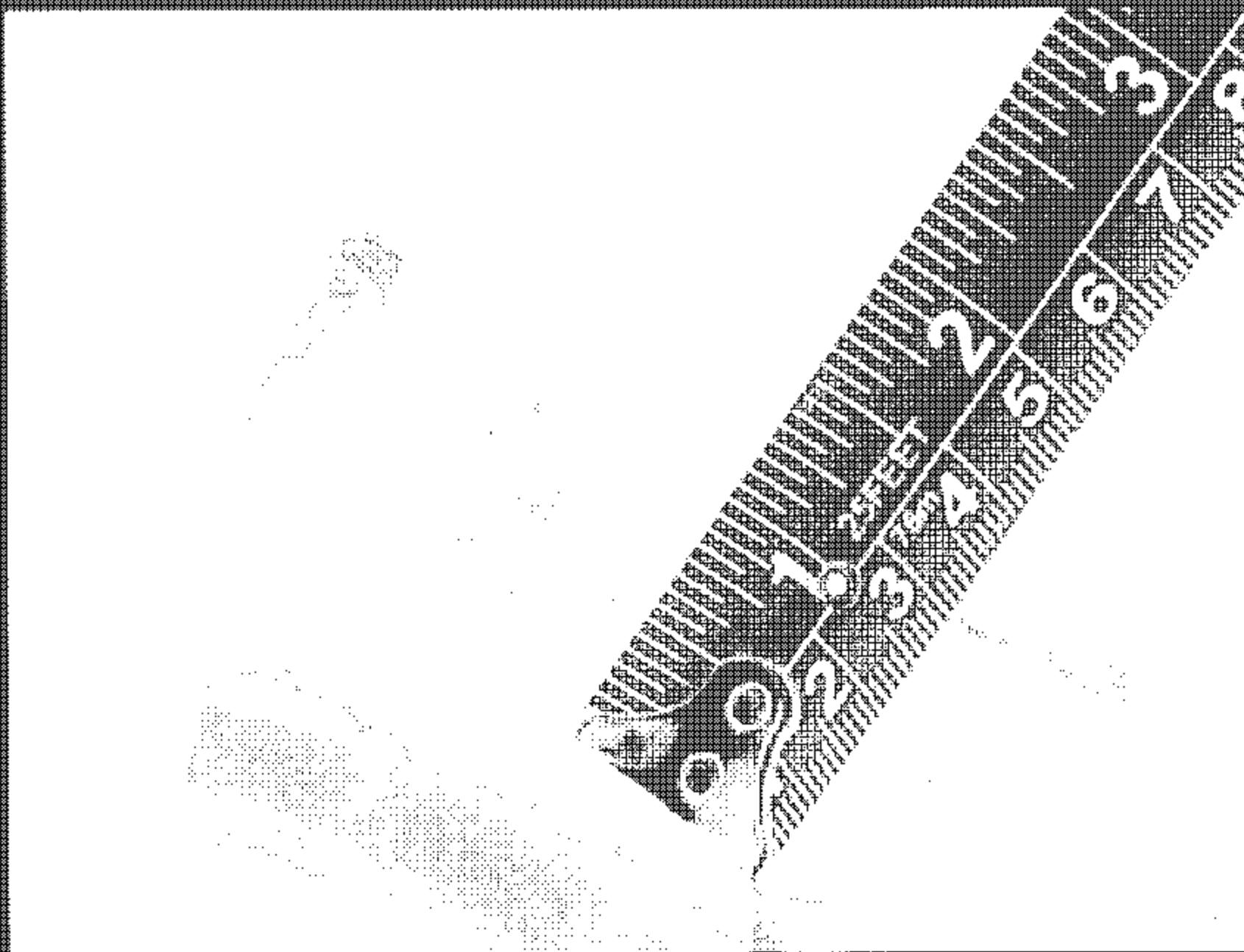
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C65800  
FMVSS NO. 110

FIGURE 5-21  
INSIDE VIEW OF LEFT FRONT TIRE AFTER  
BLOW-OUT



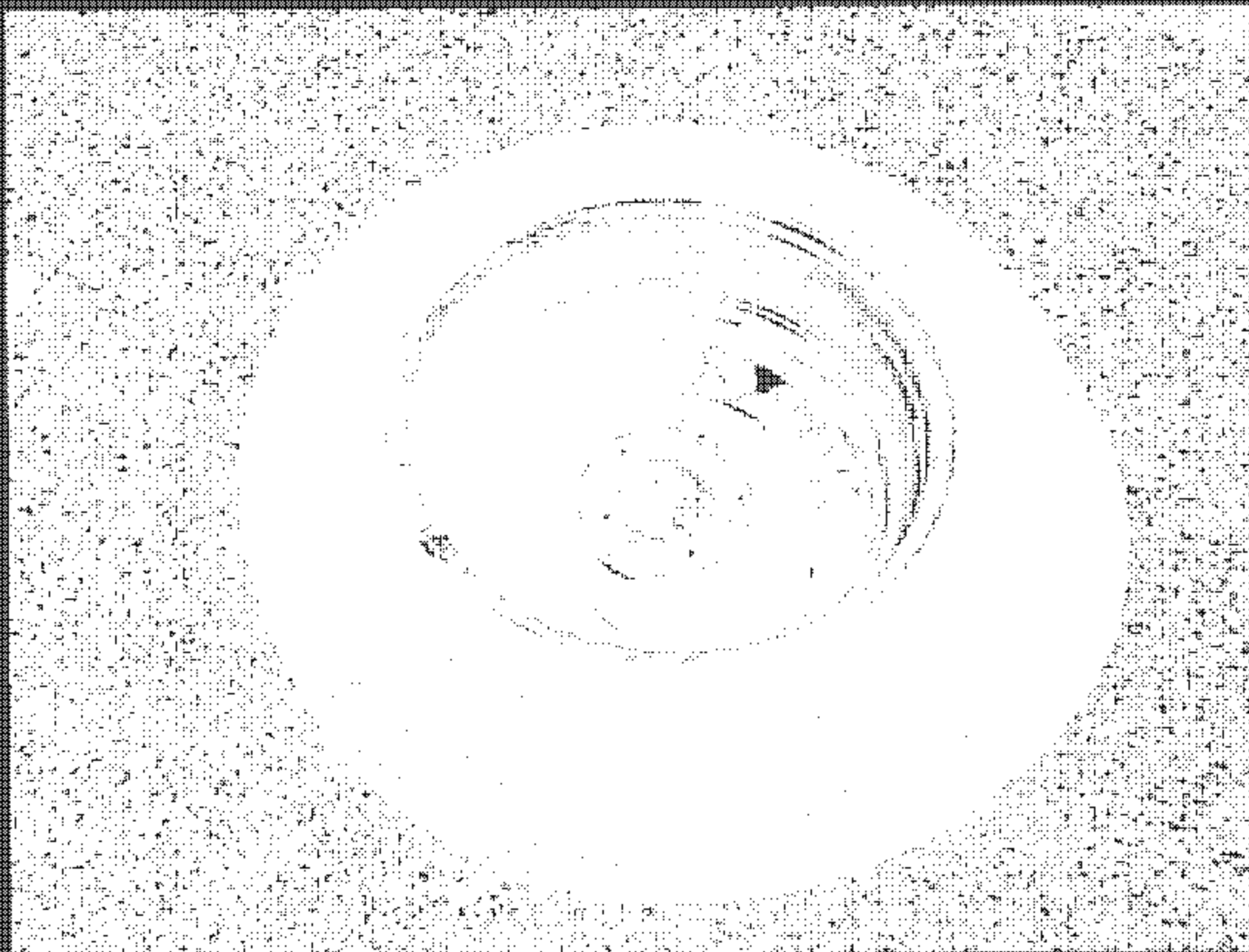
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C65800  
FMVSS NO. 110

FIGURE 5-22  
OUTSIDE VIEW OF RIGHT REAR TIRE AFTER  
BLOW-OUT



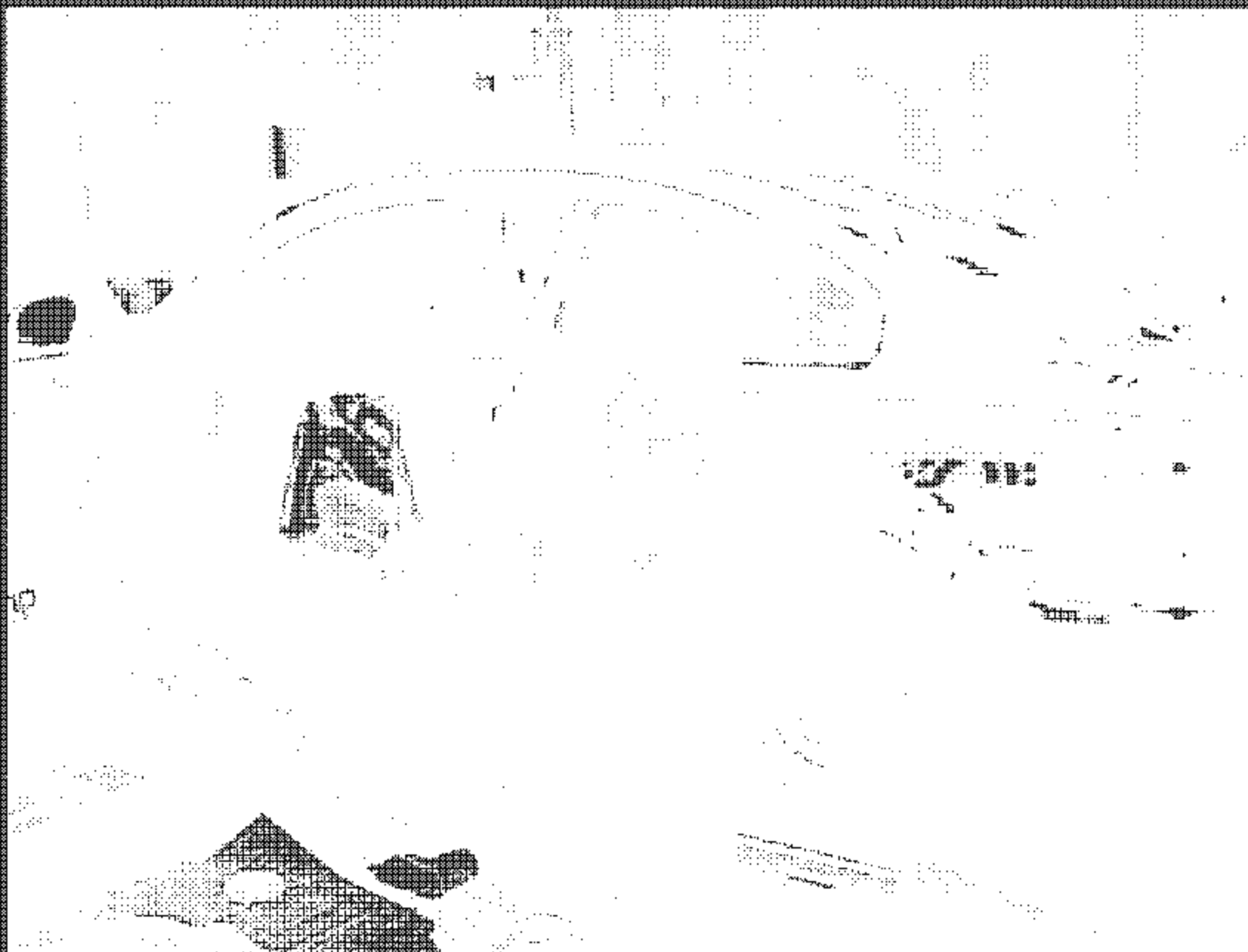
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 6.23  
CLOSE-UP OF BLOWN-OUT TIRE WITH RULER  
NEXT TO HOLE



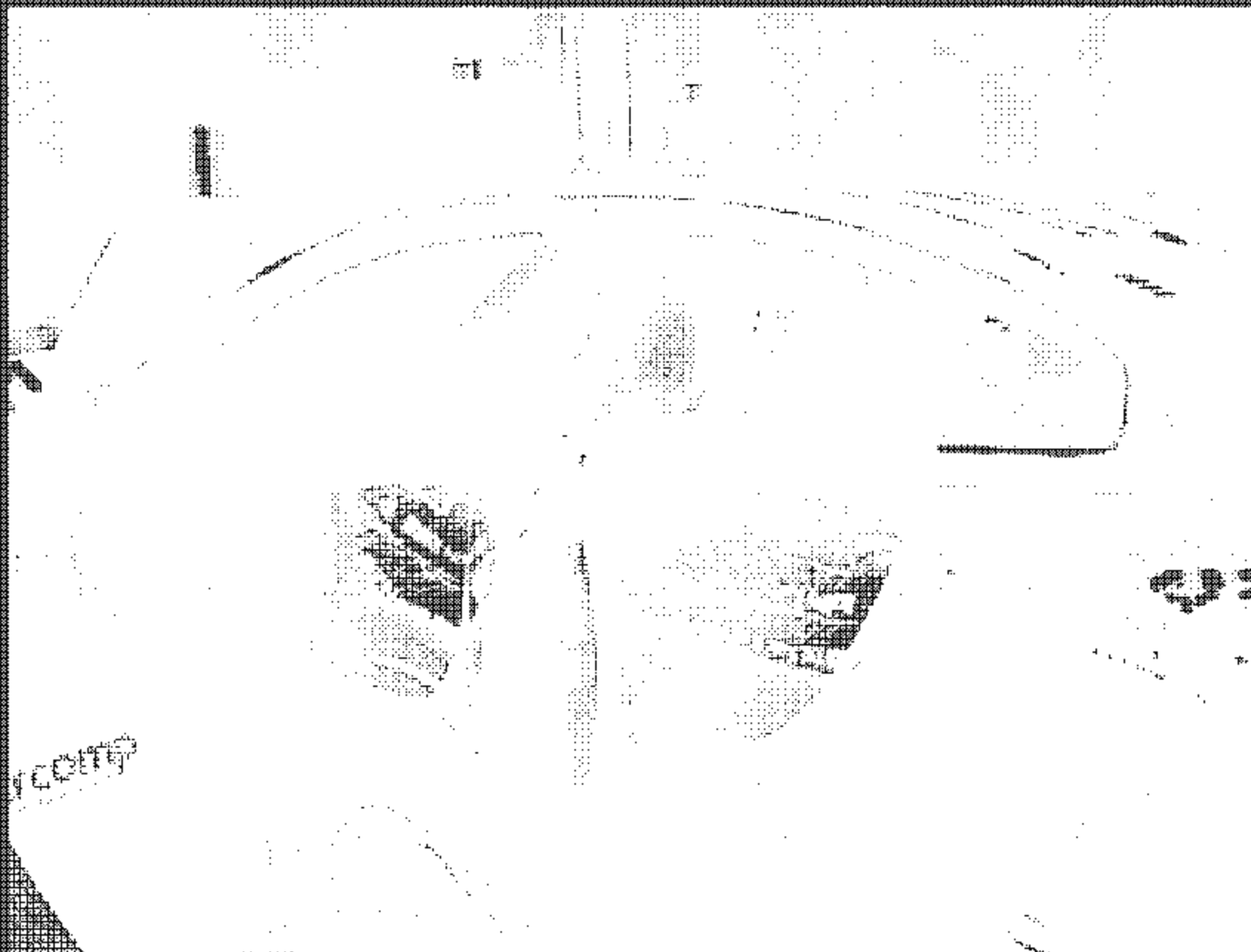
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.24  
INSIDE VIEW OF RIGHT REAR TIRE AFTER  
BLOW-OUT



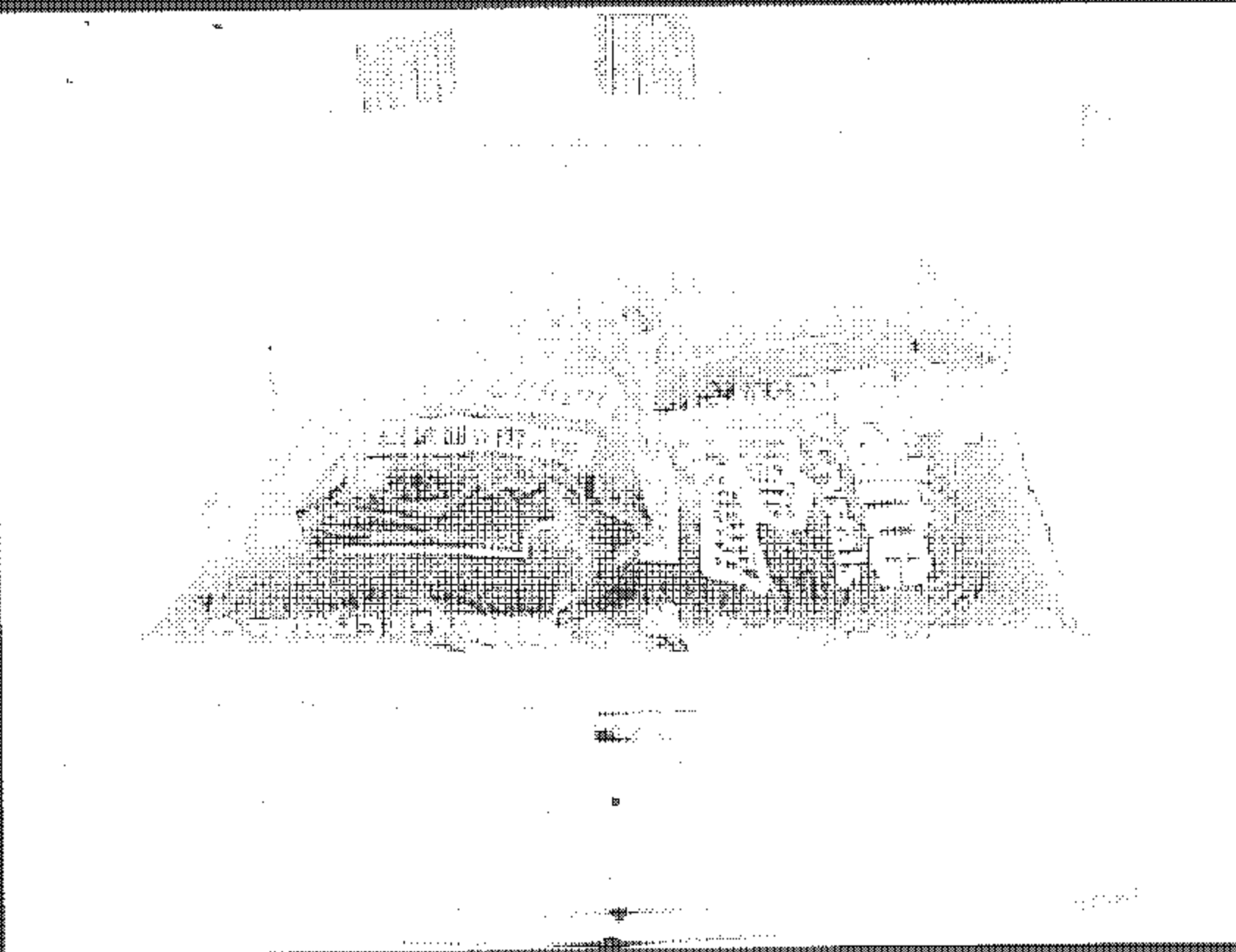
2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

FIGURE 5.25  
VEHICLE ON SCALES AND BALLASTED FOR  
NORMAL LOAD



2006 VOLKSWAGEN PASSAT  
NHTSA NO. C56800  
FMVSS NO. 110

FIGURE 5.26  
VEHICLE BALLASTED FOR MAXIMUM LOAD



2005 VOLKSWAGEN PASSAT  
NHTSA NO. C55800  
FMVSS NO. 110

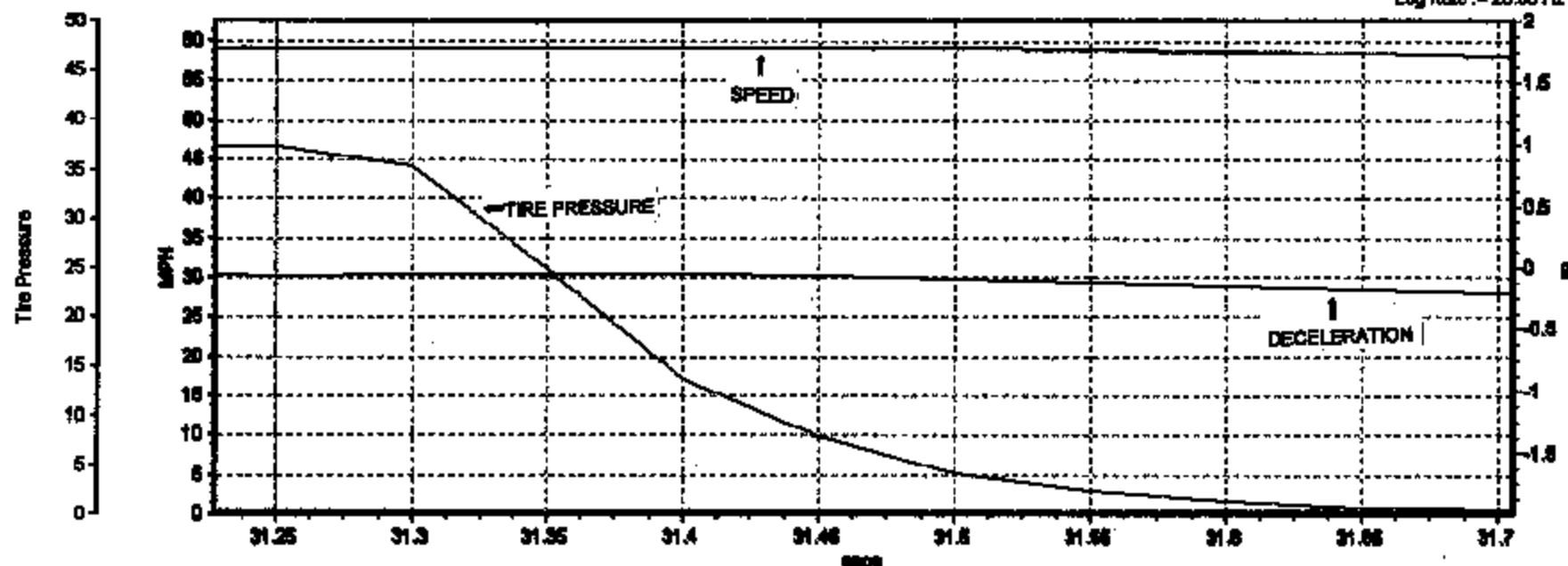
FIGURE 6.27  
VEHICLE BALLASTED FOR CARGO

**SECTION 6**  
**TEST PLOTS**

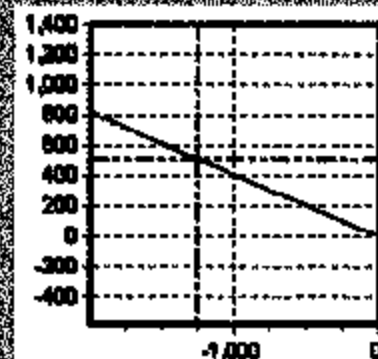


VW Passat, C55800, Left Front, 110 BLOW-OUT

Log Rate := 20.00 Hz

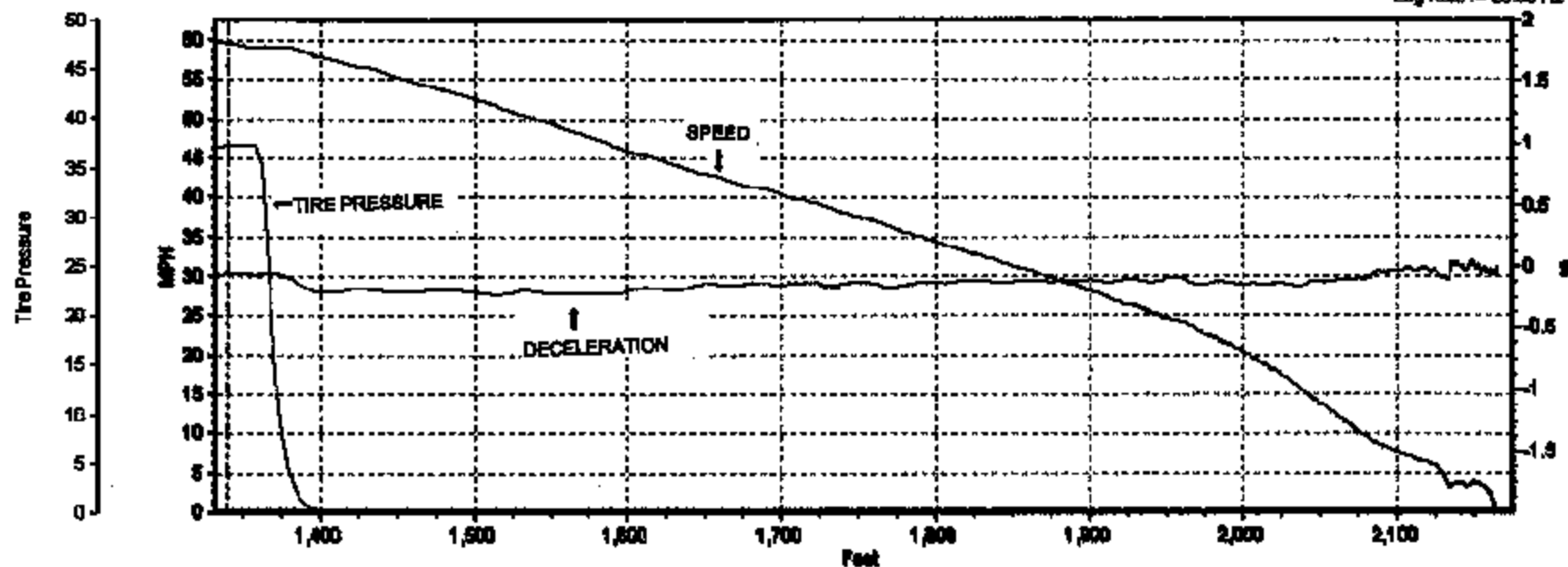


Run Time	1 minute 0.45 sec			
Cursor (sec)	31.24			
Speed (MPH)	58.68			
(°)	80.473			
(PSI)	37.386			
Longitudinal Acceleration (g)	-0.062			
Height (Feet)	-89.993			
Vertical Velocity (MPH)	0.000			
Satellites (Number of)	10			

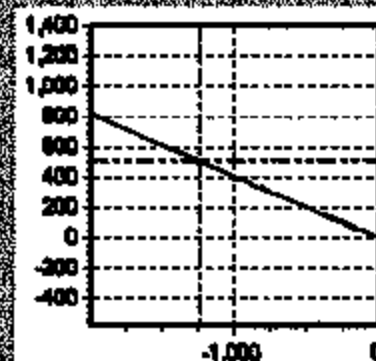


## VW Passat, C55800, Left Front, 110 BLOW-OUT

Log Rate := 20.00 Hz

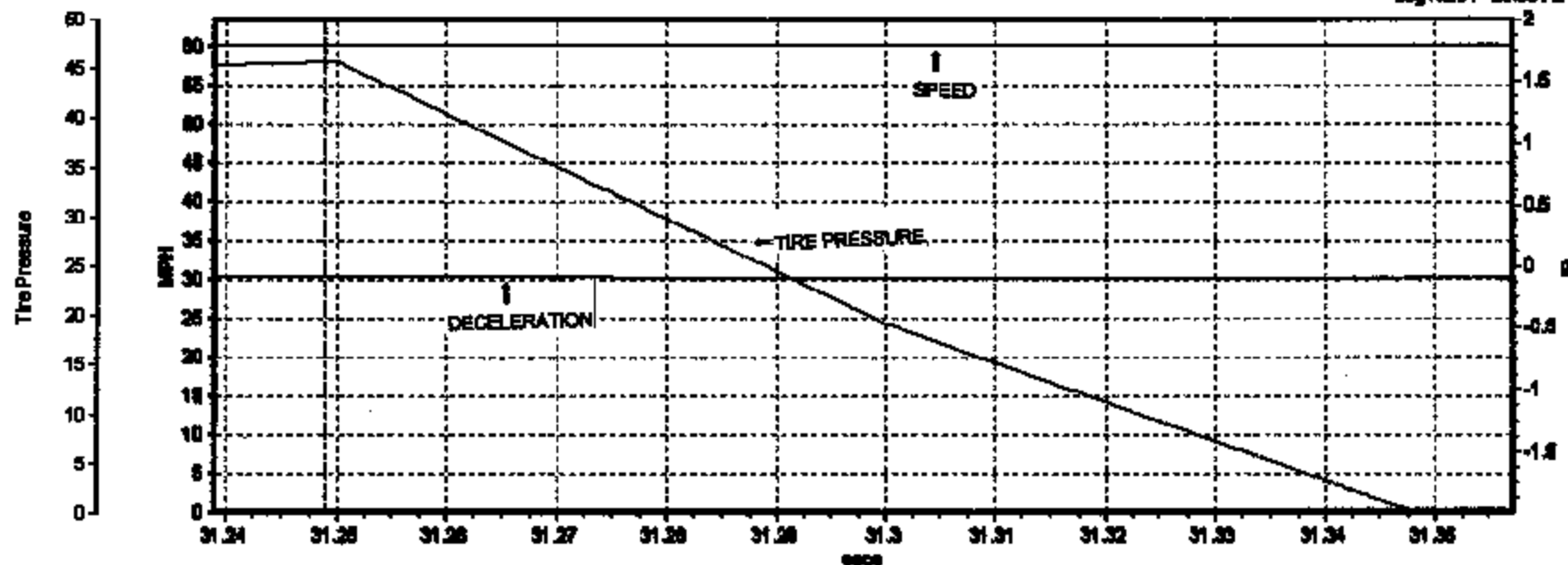


Run Time	1 minute 0.48 secs			
Cursor (Feet)	1340.07			
Speed (MPH)	59.42			
(°F)	80.683			
(PSI)	37.253			
Longitudinal Acceleration (g)	-0.058			
Height (Feet)	-90.025			
Vertical Velocity (MPH)	0.000			
Satellites (Number of)	10			

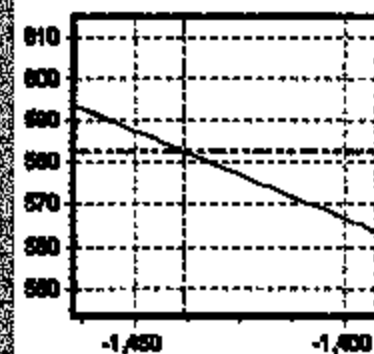


## VW Passat, 056800, Right Rear, 110 BLOW-OUT

Log Rate := 20.00 Hz

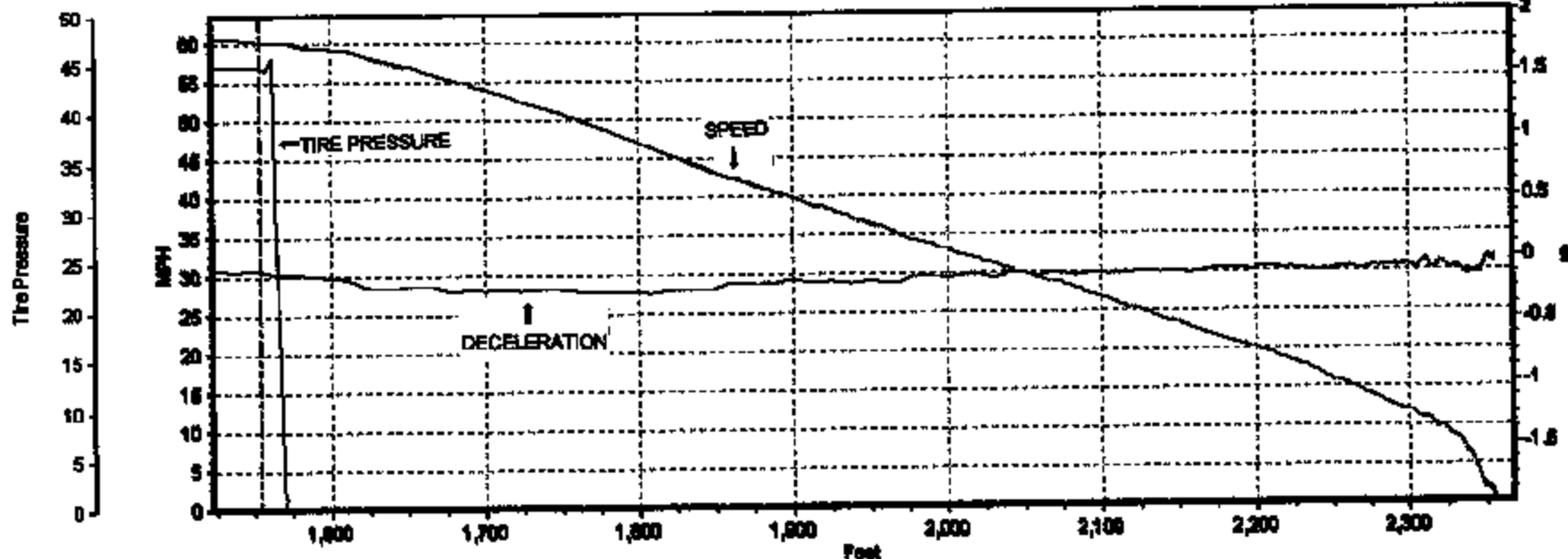


Run Time	0 minute 55.18 secs			
Cursor (secs)	31.24			
Speed (MPH)	60.13			
(°F)	77.414			
(PSI)	45.694			
Longitudinal Acceleration (g)	-0.081			
Height (Feet)	-94.948			
Vertical Velocity (MPH)	0.000			
Satellites (Number of)	10			



VW Passat, C55800, Right Rear, 110 BLOW-OUT

Log Rate := 20.00 Hz



Run Time	0 minute 58.15 secs			
Cursor (Feet)	1853.93			
Speed (MPH)	60.18			
(°F)	77.414			
(PSI)	44.692			
Longitudinal Acceleration (g)	-0.061			
Height (Feet)	-95.002			
Vertical Velocity (MPH)	0.000			
Satellites (Number of)	10			

