HS#638101

REPORT NUMBER 225-GTL-05-009

SAFETY COMPLIANCE TESTING FOR FMVSS NO. 225 CHILD RESTRAINT ANCHORAGE SYSTEMS LOWER AND TETHER ANCHORAGES

GM DAEWOO AUTO & TECHNOLOGY COMPANY
2005 SUZUKI FORENZA, PASSENGER CAR
NHTSA NO. C50505

GENERAL TESTING LABORATORIES, INC.
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COLONIAL BEACH, VIRGINIA 22443

NOVEMBER 2, 2005

FINAL REPORT

PREPARED FOR

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NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
SAFETY ENFORCEMENT
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15. Supplementary Notes		

16. Abstract

Compliance tests were conducted on the subject, 2005 Suzuki Forenza Passenger Car in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP-225-01 for the determination of FMVSS 225 compliance.

Test failures identified were as follows:
S9.2.2(a) Not more than 70 mm behind point Z of the CRF. The lower child restraint anchor bars for the 2nd row seating positions are more than 70 mm behind point Z when measured with the CRF.

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SECTION 1

PURPOSE OF COMPLIANCE TEST

1.0 PURPOSE OF COMPLIANCE TEST

A 2005 Suzuki Forenza Passenger Car was subjected to Federal Motor Vehicle Safety Standard (FMVSS) No. 225 testing to determine if the vehicle was in compliance with the requirements of the standard. The purpose of this standard is to establish requirements for child restraint anchorage systems to ensure their proper location and strength for the effective securing of child restraints, to reduce the likelihood of the anchorage systems' failure and to increase the likelihood that child restraints are properly secured and thus more fully achieve their potential effectiveness in motor vehicles.

1.1 The test vehicle was a 2005 Suzuki Forenza Passenger Car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: KL5JD56Z15K080227

B. NHTSA No.: C50505

C. Manufacturer: DAEWOO AUTO & TECHNOLOGY COMPANY

D. Manufacture Date: 08/04

1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing during the time period August 8, 2005 - October 12, 2005.

SECTION 2

COMPLIANCE TEST RESULTS

2.0 TEST RESULTS

All tests were conducted in accordance with NHTSA, Office of Vehicle Safety Compliance (OVSC) Laboratory Procedures, TP-225-01 dated 11 April 2005.

Based on the test performed, the 2005 SUZUKI FORENZA Passenger Car does not appear to meet the requirements of FMVSS 225 testing.

SECTION 3

COMPLIANCE TEST DATA

3.0 TEST DATA

The following data sheets document the results of testing on the 2005 Suzuki Forenza Passenger Car.

DATA SHEET 1
SUMMARY OF RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8 - OCTOBER 12, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

A. VISUAL INSPECTION OF TEST VEHICLE

Upon receipt for completeness, function, and discrepancies or damage which might influence the testing.

RESULTS: OK FOR TEST

B. REQUIREMENTS FOR CHILD RESTRAINT SYSTEMS AND TETHER ANCHORAGES

	PASS	FAIL
DSP a	X	
DSP b	X	
DSP c	X	

C. LOCATION OF TETHER ANCHORAGES

	PASS	FAIL
DSP a	X	
DSP b	X	
DSP c	X	

D. LOWER ANCHORAGE DIMENSIONS

	PASS	FAIL
DSP a		X
DSP b	N/A	N/A
DSP c		X

DATA SHEET 1 CONTINUED
SUMMARY OF RESULTS

E. CONSPICUITY AND MARKING OF LOWER ANCHORAGES

	PASS	FAIL
DSP a	X	
DSP b	N/A	N/A
DSP c	X	

F. STRENGTH OF TETHER ANCHORAGES

	PASS	FAIL
DSP a	X	
DSP b	X	
DSP c	N/A	N/A

G. STRENGTH OF LOWER ANCHORAGES (Forward Force)

	PASS	FAIL
DSP a	N/A	N/A
DSP b	N/A	N/A
DSP c	X	

H. STRENGTH OF LOWER ANCHORAGE (Lateral Force)

	PASS	FAIL
DSP a	N/A	N/A
DSP b	N/A	N/A
DSP c	N/A	N/A

I. OWNER'S MANUAL PASS: X FAIL:

REMARKS: DSP a = Left Rear Outboard, DSP b = Center, DSP c = Right Rear Outboard

RECORDED BY:_____ DATE: 10/12/05

APPROVED BY:_____

DATA SHEET 2
REQUIREMENTS FOR CHILD RESTRAINT ANCHORAGE SYSTEMS
AND TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

Number of rows of seats: 2
Number of rear, forward-facing designated seating positions: 3
Number of required CRAS (lower anchorages only, for convertibles/school buses): 2
Number of required tether anchorages (can be additional CRAS): 1
Is the vehicle a convertible? NO
Is the vehicle a school bus? NO

Does the vehicle have a CRAS (lower anchorage only, for convertibles/school buses) installed at a front passenger seating position? NO

If NO, skip to next question.
If YES, does the vehicle have rear designated seating positions? _____
If NO, does the vehicle have an air bag on-off switch or a special exemption for no passenger air bag?
If NO = FAIL If YES = PASS
If Yes, does the vehicle meet the requirements of S4.5.4.1 (b) of S208 and have and air bag on-off switch or a special exemption for no passenger air bag?____
Record the distance between the front and rear seat back:_____
If Distance <720 mm and vehicle has an air bag on-off switch or special exemption = PASS
If Distance ≥ 720 mm or no air bag on-off switch or no special exemption = FAIL

Does the vehicle have rear designated seating position(s) where the lower bars of a CRAS are prevented from being located because of transmission and/or suspension component interference?
NO
If NO, skip to next question.
If YES, does the vehicle have a tether anchorage at a front passenger seating position?
YES = PASS NO = FAIL (S5(e))

Number of provided CRAS (lower anchorage only, for convertibles/school buses), indicate if a built-in child restraint is counted as a CRAS: 2

Is the number of provided CRAS (lower anchorages only, for convertible/school buses) greater than or equal to the number of required CRAS (lower anchorages only, for convertibles/school buses)?
YES
YES = PASS NO = FAIL (S4.4(a) or (b) or (c))

DATA SHEET 2 CONTINUED

If the vehicle has 3 or more rows of seats is a CRAS (lower anchorage only for convertibles/school buses) provided in the second row: N/A
YES = PASS NO = FAIL (S4.4(a)(1))

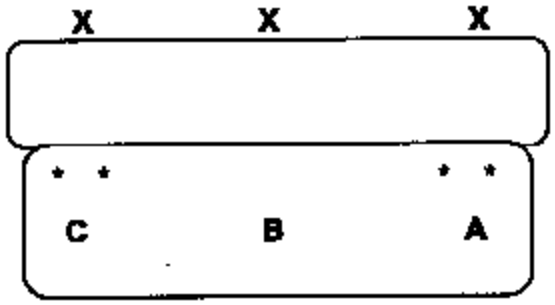
Number of provided tether anchorages (can be additional CRAS) indicate if a built-in child restraint is counted as tether anchorage (NOTE: a built-in child restraint can only be counted toward either the required number of CRAS or tether anchorages, not both): 3

Is the number of provided tether anchorages greater than or equal to the number of required tether anchorages? YES
YES = PASS NO = FAIL (S4.4 (a) or (b) or (c))

If the vehicle has 3 or more rear dsps and a non-outboard dsp, is a tether anchorage or CRAS provided at a non-outboard dsp? YES
YES = PASS NO = FAIL (S4.4 (a)(2))

Are all tether and lower anchorages available for use at all times when the seat is configured for passenger use? YES
YES = PASS NO = FAIL (S4.6 (b))

Provide a diagram showing the location of lower anchorages and/or tether anchorages.



X = Top Tether
* = Lower Anchors

RECORDED BY:_____ DATE: 08/08/05

APPROVED BY:_____

DATA SHEET 3
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

Detailed description of the location of the tether anchorage:
Located on rear shelf behind seat.

Based on visual inspection, is the tether anchorage within the shaded zone? YES
If YES = PASS, skip to next section
If NO, After constructing the shaded zone, is the tether anchorage within the shaded zone?

_____
If YES = PASS, skip to next section
If NO, Is it possible to locate a tether anchorage within the shaded zone without removing a seating component?
If YES = FAIL (S6.2.1)
If NO, Is a tether routing device provided?
If YES = PASS
IF NO = FAIL (S6.2.1.2)

Is the tether anchorage recessed? NO
If NO, skip to next question
If YES, is it outside of the tether strap wraparound area? _____
YES = PASS NO = FAIL (S6.2.1)

Does the tether anchorage permit attachment of a tether hook? YES
YES = PASS NO = FAIL (S6.1(a))

Is the tether anchorage accessible without the need for any tools other than a screwdriver or coin?
YES
YES = PASS NO = FAIL (S6.1(b))

After the tether anchorage is accessed, Is it ready for use without the need for tools? YES
YES = PASS NO = FAIL (S6.1(c)

Is the tether anchorage sealed to prevent the entry of exhaust fumes into the passenger compartment? YES
YES = PASS NO = FAIL (S6.1(d))

If the DSP has a tether routing device, is it flexible or rigid? N/A

DATA SHEET 3 CONTINUED

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

If the DSP has a flexible tether routing device, after installing SFAD2 record the tether strap tension:
N/A (Must be 60 N ± 5 N)

If the DSP has a flexible tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
Greater than or equal to 65mm = PASS Less than 65mm = FAIL

If the DSP has a rigid tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
Greater than or equal to 100mm = PASS Less than 100mm = FAIL

COMMENTS:

RECORDED BY: _____ DATE: 08/08/05

APPROVED BY: _____

DATA SHEET 3A
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 CENTER POSITION (DSP B)

Detailed description of the location of the tether anchorage:
Located on rear shelf behind seat.

Based on visual inspection, is the tether anchorage within the shaded zone? YES
If YES = PASS, skip to next section
If NO, After constructing the shaded zone, is the tether anchorage within the shaded zone?

If YES = PASS, skip to next section
If NO, is it possible to locate a tether anchorage within the shaded zone without removing a seating component?
If YES = FAIL (S6.2.1)
If NO, is a tether routing device provided?
If YES = PASS
IF NO = FAIL (S6.2.1.2)

Is the tether anchorage recessed? NO
If NO, skip to next question
If YES, Is it outside of the tether strap wraparound area? _____
YES = PASS NO = FAIL (S6.2.1)

Does the tether anchorage permit attachment of a tether hook? YES
YES = PASS NO = FAIL (S6.1(a))

Is the tether anchorage accessible without the need for any tools other than a screwdriver or coin?
YES
YES = PASS NO = FAIL (S6.1(b))

After the tether anchorage is accessed, is it ready for use without the need for tools? YES
YES = PASS NO = FAIL (S6.1(c)

Is the tether anchorage sealed to prevent the entry of exhaust fumes into the passenger compartment? YES
YES = PASS NO = FAIL (S6.1(d))

If the DSP has a tether routing device, is it flexible or rigid? N/A

DATA SHEET 3A CONTINUED

DESIGNATED SEATING POSITION: ROW 2 CENTER POSITION (DSP B)

If the DSP has a flexible tether routing device, after installing SFAD2 record the tether strap tension:
N/A (Must be 60 N ± 5 N)

If the DSP has a flexible tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
Greater than or equal to 65mm = PASS Less than 65mm = FAIL

If the DSP has a rigid tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
Greater than or equal to 100mm = PASS Less than 100mm = FAIL

COMMENTS:

RECORDED BY:_____ DATE: 08/08/05

APPROVED BY:_____

DATA SHEET 3B
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Detailed description of the location of the tether anchorage:
Located on rear shelf behind seat.

Based on visual inspection, is the tether anchorage within the shaded zone? YES
If YES = PASS, skip to next section
If NO, After constructing the shaded zone, is the tether anchorage within the shaded zone?

If YES = PASS, skip to next section
If NO, Is it possible to locate a tether anchorage within the shaded zone without removing a seating component?
If YES = FAIL (S6.2.1)
If NO, Is a tether routing device provided?
If YES = PASS
IF NO = FAIL (S6.2.1.2)

Is the tether anchorage recessed? NO
If NO, skip to next question
If YES, is it outside of the tether strap wraparound area? _____
YES = PASS NO = FAIL (S6.2.1)

Does the tether anchorage permit attachment of a tether hook? YES
YES = PASS NO = FAIL (S6.1(a))

Is the tether anchorage accessible without the need for any tools other than a screwdriver or coin?
YES
YES = PASS NO = FAIL (S6.1(b))

After the tether anchorage is accessed, is it ready for use without the need for tools? YES
YES = PASS NO = FAIL (S6.1(c)

Is the tether anchorage sealed to prevent the entry of exhaust fumes into the passenger compartment? YES
YES = PASS NO = FAIL (S6.1(d))

If the DSP has a tether routing device, is it flexible or rigid? N/A

DATA SHEET 3B CONTINUED

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

If the DSP has a flexible tether routing device, after installing SFAD2 record the tether strap tension:
N/A (Must be 60 N ± 5 N)

If the DSP has a flexible tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
Greater than or equal to 65mm = PASS Less than 65mm = FAIL

If the DSP has a rigid tether routing device, record the horizontal distance between the torso reference plane and the routing device: N/A
Greater than or equal to 100mm = PASS Less than 100mm = FAIL

COMMENTS:

RECORDED BY:_____ DATE: 08/08/05

APPROVED BY:_____

DATA SHEET 4
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

Outboard Lower Anchorage bar diameter: 5.93 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 5.93 mm
6mm ± 0.1mm = PASS Other size = FAIL (S9.1.1(a))

Are the bars straight, horizontal and transverse? YES
YES = PASS NO = FAIL

Length of the straight portion of the bar (outboard lower anchorage): 30 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 30 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 40 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 40 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 13.7°
Angle = 15°±10° = PASS Angle≠15°±10° = FAIL (S9.2.1)

CRF Roll angle: 0.0
Angle = 0°±5° = PASS Angle≠0°±5° = FAIL (S9.2.1)

CRF Yaw angle: 0.0
Angle = 0°±10° = PASS Angle≠0°±10° = FAIL (S9.2.1)

Distance between point Z on the CRF and the front surface of outboard anchor bar: 74 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 75 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

DATA SHEET 4 CONTINUED

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

Distance between SgRP and the front surface of outboard anchor bar: 193 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 193 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Based on visual observation, would a 100 N load cause the anchor bar to deform more than 5 mm?
NO

If NO = PASS
If YES = FAIL (S9.1.1(g)), Provide further description of the attachment of the anchor bar:

COMMENTS:

RECORDED BY: _____ DATE: 08/08/05

APPROVED BY: _____

DATA SHEET 4A
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Outboard Lower Anchorage bar diameter: 5.93 mm
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 5.93 mm
6mm ± 0.1mm = PASS Other size = FAIL (S9.1.1(a))

Are the bars straight, horizontal and transverse? YES
YES = PASS NO = FAIL

Length of the straight portion of the bar (outboard lower anchorage): 30 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 30 mm
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 40 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 40 mm
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 13.7°
Angle = 15°±10° = PASS Angle≠15°±10° = FAIL (S9.2.1)

CRF Roll angle: 0.0
Angle = 0°±5° = PASS Angle≠0°±5° = FAIL (S9.2.1)

CRF Yaw angle: 0.0
Angle = 0°±10° = PASS Angle≠0°±10° = FAIL (S9.2.1)

Distance between point Z on the CRF and the front surface of outboard anchor bar: 75 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 75 mm
Distance ≤70mm = PASS Distance > 70mm = FAIL

DATA SHEET 4A CONTINUED

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Distance between SgRP and the front surface of outboard anchor bar: 195 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Distance between SgRP and the front surface of Inboard anchor bar: 195 mm
Distance ≥ 120mm = PASS Distance < 120mm = FAIL

Based on visual observation, would a 100 N load cause the anchor bar to deform more than 5 mm?
NO

If NO = PASS
If YES = FAIL (S9.1.1(g)), Provide further description of the attachment of the anchor bar:

COMMENTS:

RECORDED BY:_____ DATE: 08/08/05

APPROVED BY:_____

DATA SHEET 5
CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

MARKING (Circles)

Diameter of the circle: 16 mm
Diameter ≥13mm = PASS Diameter <13mm = FAIL (S9.5(a)(1))

Does the circle have words, symbols or pictograms? YES
NO skip to next question
YES, are the meaning of the words, symbols or pictograms explained in the owner's manual?
YES
YES = PASS NO = FAIL (S9.5(a)(2))

Where is the circle located? Seat back or seat Cushion: Seat Back

For circles on seat backs, vertical distance from the center of the circle to the center of the anchor bar: 57 mm
Distance between 50&100mm = PASS Other Distance=FAIL (S9.5(a)(3))

For circles on seat cushions, horizontal distance from the center of the circle to the center of the bar:
N/A
Distance between 75&125mm= PASS Other Distance=FAIL (S9.5(a)(3))

Lateral distance from the center of the circle to the center of the anchor bar: 0.0
Distance≤25mm = PASS Distance >25mm = FAIL (S9.5(a)(3))

CONSPICUITY (No Circles)

Is the anchor bar or guide visible when viewed from a point 30° above the horizontal in a vertical longitudinal plane bisecting the anchor bar or guide? N/A
YES = PASS NO = FAIL (S9.5(b))

If there is a guide, is it permanently attached? N/A
YES = PASS NO = FAIL (S9.5(b))

DATA SHEET 5 CONTINUED

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

Is there a cap or cover over the anchor bar? N/A

If YES, Is the cap or cover marked with words, symbols or pictograms?_____

If NO = FAIL (S9.5(b))

If YES, is the meaning of the words, symbols or pictograms explained in the owner's manual?

YES = PASS NO = FAIL (S9.5(b))

If NO, there are no requirements for having a cover._____

RECORDED BY:_____ DATE: 08/08/05

APPROVED BY:_____

DATA SHEET 5A
CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 8, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

MARKING (Circles)

Diameter of the circle: 17 mm
Diameter ≥13mm = PASS Diameter <13mm = FAIL (S9.5(a)(1))

Does the circle have words, symbols or pictograms? YES
NO skip to next question
YES, are the meaning of the words, symbols or pictograms explained in the owner's manual?
YES
YES = PASS NO = FAIL (S9.5(a)(2))

Where is the circle located? Seat back or seat Cushion: Seat Back

For circles on seat backs, vertical distance from the center of the circle to the center of the anchor bar: 40 mm
Distance between 50&100mm = PASS Other Distance=FAIL (S9.5(a)(3))

For circles on seat cushions, horizontal distance from the center of the circle to the center of the bar:
N/A
Distance between 75&125mm= PASS Other Distance=FAIL (S9.5(a)(3))

Lateral distance from the center of the circle to the center of the anchor bar: 0.0
Distance≤25mm = PASS Distance >25mm = FAIL (S9.5(a)(3))

CONSPICUITY (No Circles)

Is the anchor bar or guide visible when viewed from a point 30° above the horizontal in a vertical longitudinal plane bisecting the anchor bar or guide? N/A
YES = PASS NO = FAIL (S9.5(b))

If there is a guide, is it permanently attached? N/A
YES = PASS NO = FAIL (S9.5(b))

DATA SHEET 5A CONTINUED

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Is there a cap or cover over the anchor bar? N/A

If YES, Is the cap or cover marked with words, symbols or pictograms?_____

If NO = FAIL (S9.5(b))

If YES, is the meaning of the words, symbols or pictograms explained in the owner's manual?

YES = PASS NO = FAIL (S9.5(b))

If NO, there are no requirements for having a cover._____

RECORDED BY:_____ DATE: 08/08/05

APPROVED BY:_____

DATA SHEET 6
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: OCTOBER 12, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 5337

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A)

SFAD: 2

Seat Back Angle: 28°

Location of seat back angle measurement: 2D Template

Head Restraint Position: UP

D-ring Position: N/A

Force at Point X (lower front crossmember for SFAD2) while securing belts and tether: 135 N

Lap belt tension: N/A (SFAD 1 only)

Tether strap tension: 60 N

Angle (measured above the horizontal at 500 N): 10°

Separation of tether anchorage at 500 N: NO
NO = PASS YES = FAIL (S6.3.1)

Force application rate: 575 N/S

Time to reach maximum force (24-30 s): 26

Maximum force (14,950 N ± 50 N): 14,972 N

Tested simultaneously with another DSP? NO

COMMENTS: Displacement at maximum load 33 mm.

RECORDED BY: _____ DATE: 10/12/05

APPROVED BY: _____

DATA SHEET 6A
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: OCTOBER 12, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 5339

DESIGNATED SEATING POSITION: ROW 2 CENTER (DSP B)

SFAD: 1

Seat Back Angle: 23°

Location of seat back angle measurement: 2D Template

Head Restraint Position: UP

D-ring Position: N/A

Force at Point X (lower front crossmember for SFAD2) while securing belts and tether: 135 N

Lap belt tension: 60 N (SFAD 1 only)

Tether strap tension: 60 N

Angle (measured above the horizontal at 500 N): 10°

Separation of tether anchorage at 500 N: NO
NO = PASS YES = FAIL (S6.3.1)

Force application rate: 575 N/S

Time to reach maximum force (24-30 s): 26

Maximum force (14,950 N ± 50 N): 14,954 N

Tested simultaneously with another DSP? NO

COMMENTS: Displacement at maximum load 76 mm.

RECORDED BY: _____ DATE: 10/12/05

APPROVED BY: _____

DATA SHEET 7
STRENGTH OF LOWER ANCHORAGES (Forward Force)

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: OCTOBER 12, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE
TEST NO: 5338

DESIGNATED SEATING POSITION: ROW 2 RIGHT SIDE (DSP C)

Seat Back Angle: 28°

Location of seat back angle measurement: 2D Template

Head Restraint Position: UP

Force at lower front crossmember for SFAD2 while tightening rearward extensions: 135 N

Angle (measured above the horizontal at 500 N): 10°

Force application rate: 423 N/S

Time to reach maximum force (24-30 s): 26

Maximum force (10,950 N ± 50 N): 10,978 N

Displacement, H1 (at 500 N): 0.0

Displacement, H2 (at maximum load): 47 mm

Displacement of Point X: 47 mm (H2-H1)
Displacement > 175 mm = FAIL (S9.4.1(a))

Tested simultaneously with another DSP? NO

Distance between adjacent DSP's: 340

COMMENTS:

RECORDED BY: _____ DATE: 10/12/05

APPROVED BY: _____

DATA SHEET 8
OWNER'S MANUAL

VEH. MOD YR/MAKE/MODEL/BODY: 2005 SUZUKI FORENZA PASSENGER CAR
VEH. NHTSA NO: C50505; VIN: KL5JD56Z15K080227
VEH. BUILD DATE: 08/04 ; TEST DATE: AUGUST 10, 2005
TEST LABORATORY: GENERAL TESTING LABORATORIES
OBSERVERS: GRANT FARRAND, JIMMY LATANE

Description of which DSP's are equipped with tether anchorages and child restraint anchorage systems: YES

PASS X FAIL

Step-by-step instructions for properly attaching a child restraint system's tether strap to the tether anchorage. Diagrams are required. YES

PASS X FAIL

Description of how to properly use the tether anchorage and lower anchor bars: YES

PASS X FAIL

If the lower anchor bars are marked with a circle, an explanation of what the circle indicates as well as any words or pictograms: YES

PASS X FAIL

COMMENTS:

RECORDED BY: DATE: 08/10/05

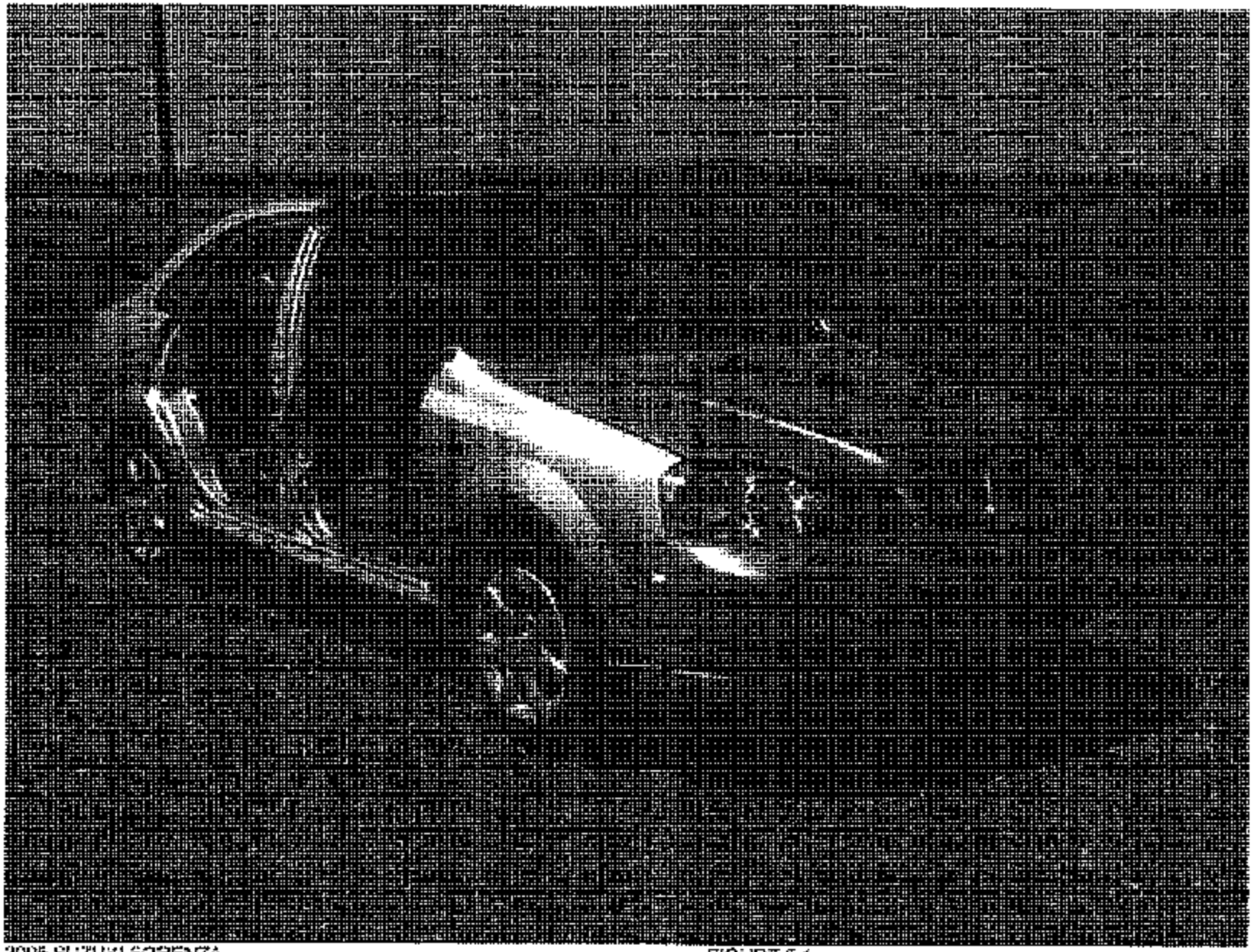
APPROVED BY:

SECTION 4
INSTRUMENTATION AND EQUIPMENT LIST

TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

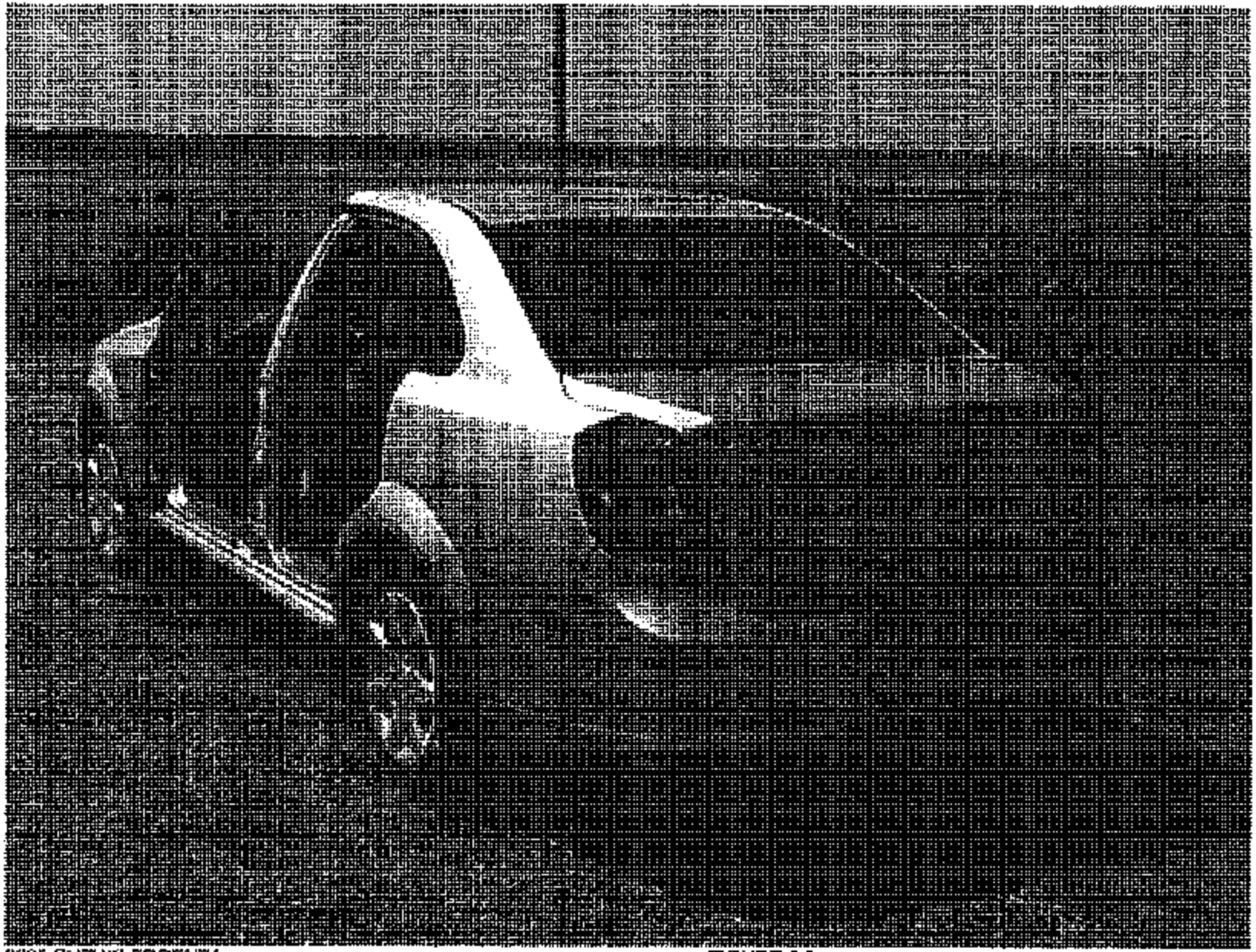
EQUIPMENT	DESCRIPTION	MODEL/ SERIAL NO.	CAL. DATE	NEXT CAL. DATE
COMPUTER	AT&T	486DX266	BEFORE USE	BEFORE USE
LOAD CELL	INTERFACE	496	01/05	01/06
LINEAR TRANSDUCER	SERVO SYSTEMS	20	BEFORE USE	BEFORE USE
SEAT BELT LOAD CELL	TRANSDUCER	135	BEFORE USE	BEFORE USE
SEAT BELT LOAD CELL	TRANSDUCER	137	BEFORE USE	BEFORE USE
LEVEL	STANLEY	42-449	02/05	02/06
FORCE GAUGE	CHATILLON	8761	BEFORE USE	BEFORE USE
CALIPER	N/A	Q9322365	BEFORE USE	BEFORE USE
CRF	MEASUREMENT FIXTURE	GTL CRF	BEFORE USE	BEFORE USE
SFAD 1	FORCE APPLICATION DEVICE	GTL SFAD 1	BEFORE USE	BEFORE USE
SFAD 2	FORCE APPLICATION DEVICE	GTL SFAD 2	BEFORE USE	BEFORE USE

SECTION 5
PHOTOGRAPHS



2005 SUZUKI FORENZA
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.1
¾ FRONTAL RIGHT SIDE VIEW OF VEHICLE



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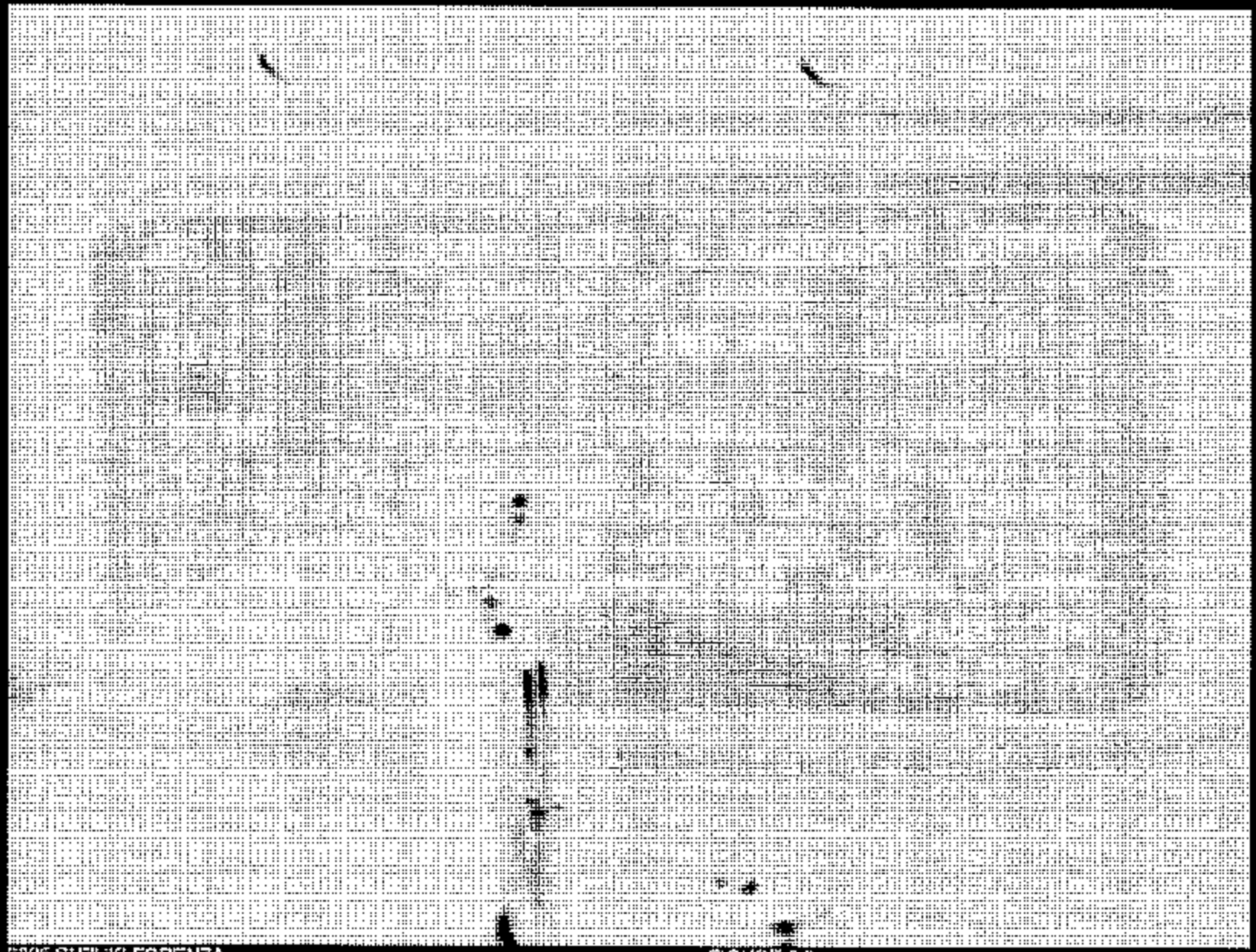
NHTSA NO. C50605
FMVSS NO. 225

FIGURE 5.2
¾ REARWARD LEFT SIDE VIEW OF VEHICLE



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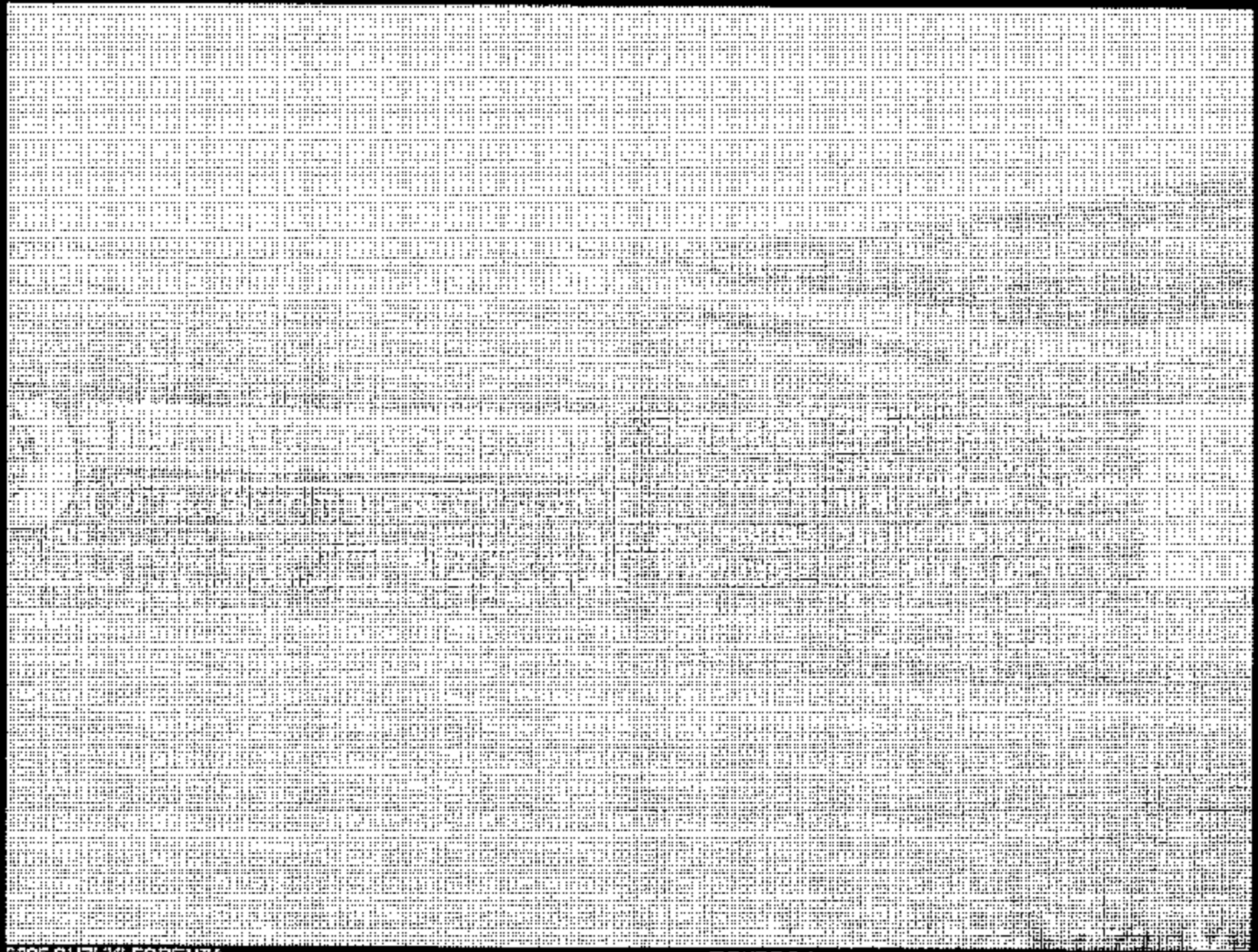
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.3
CLOSE-UP VIEW OF VEHICLE CERTIFICATION LABEL



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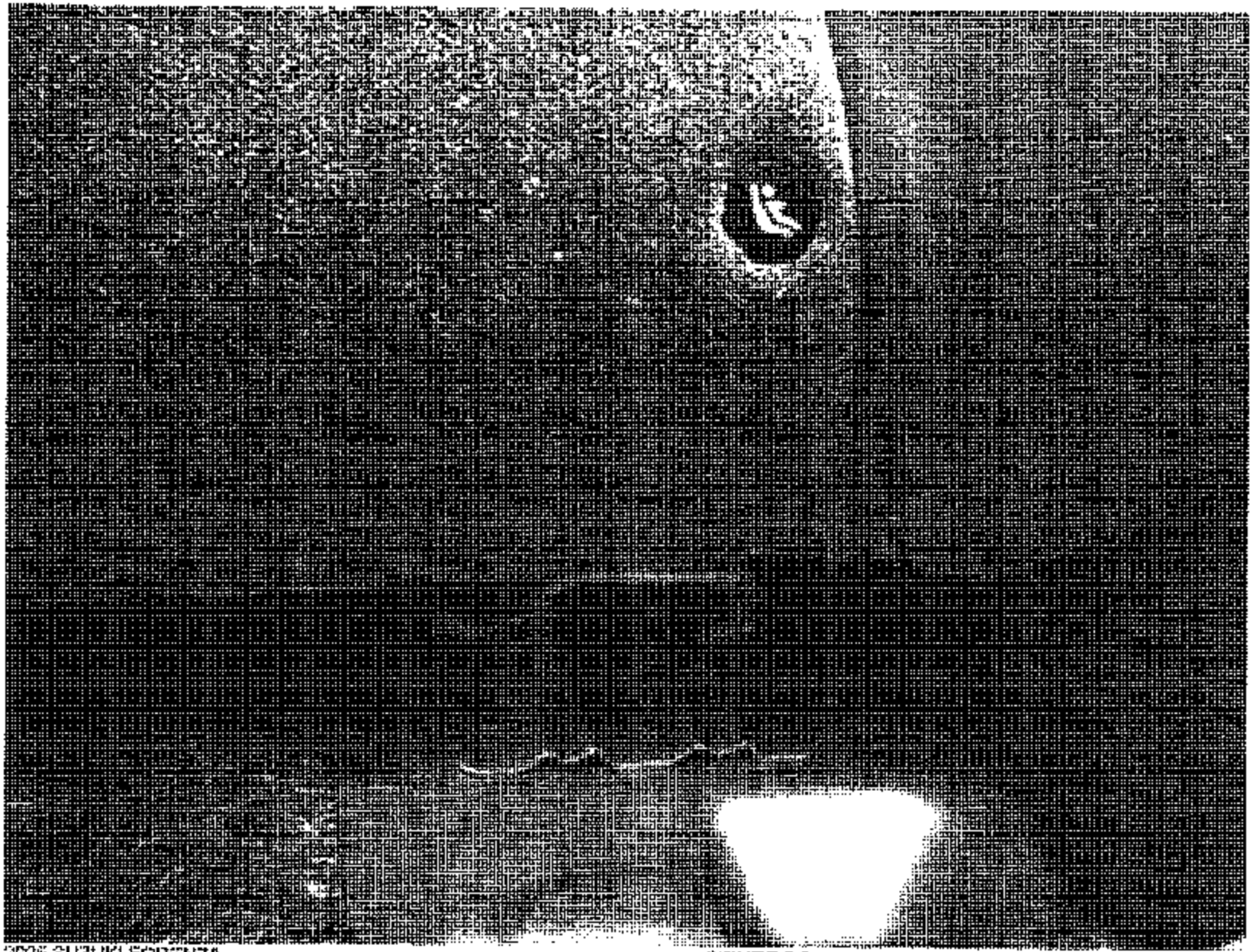
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.4
CLOSE-UP VIEW OF VEHICLE TIRE INFORMATION LABEL



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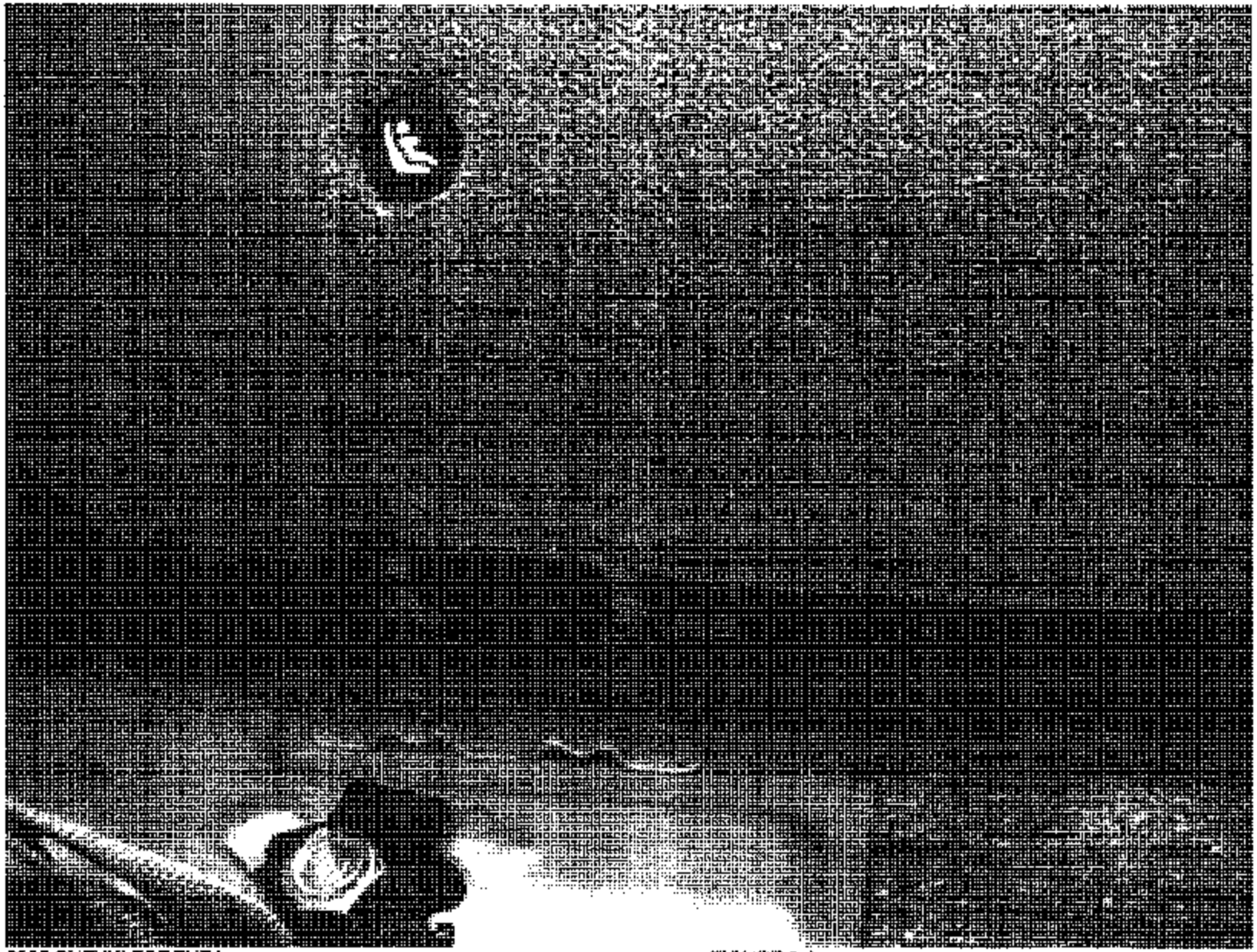
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.5
ROW 2, LEFT SIDE, OUTBOARD LOWER ANCHOR, PRE-TEST



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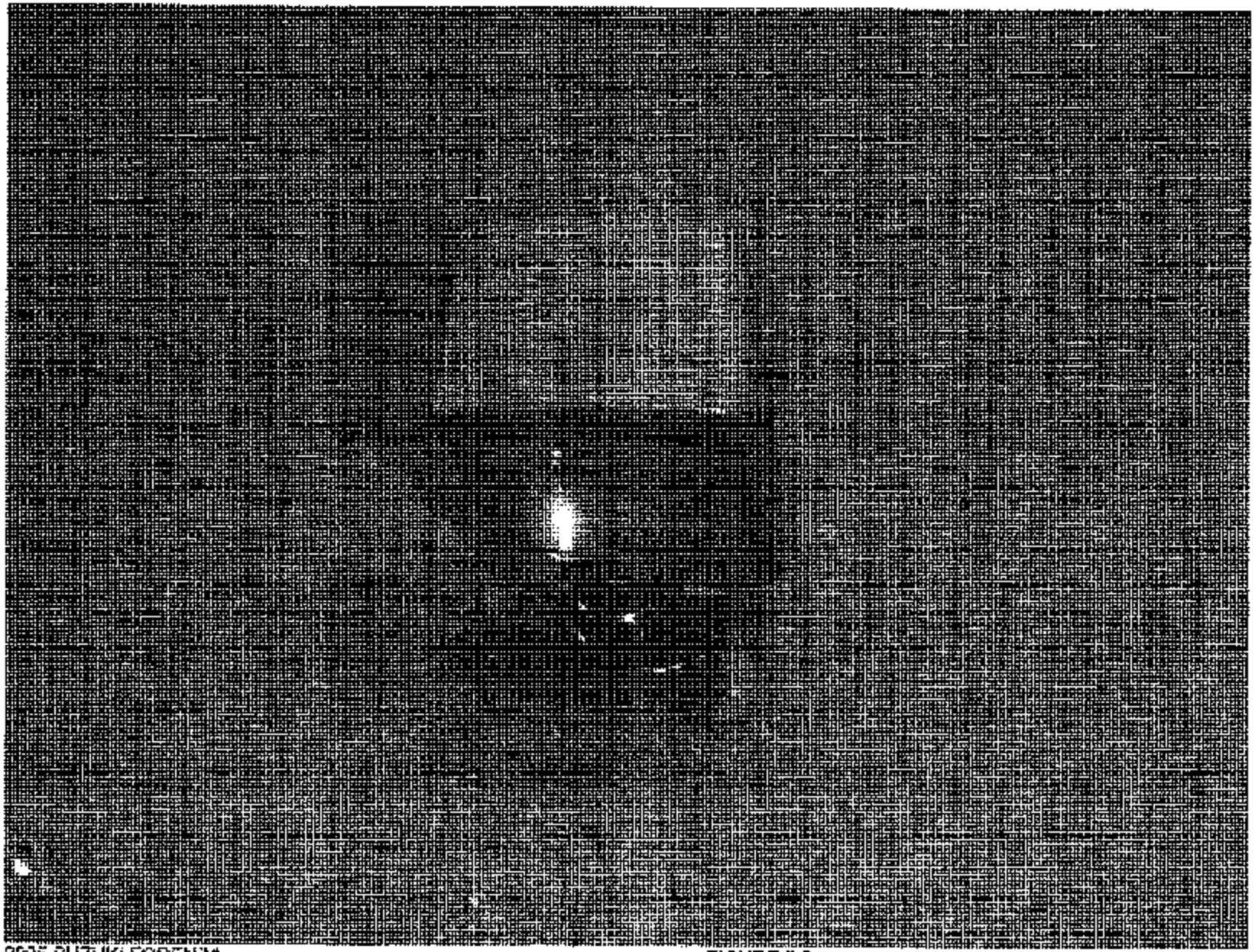
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.6
ROW 2, LEFT SIDE, INBOARD LOWER ANCHOR,
PRE-TEST



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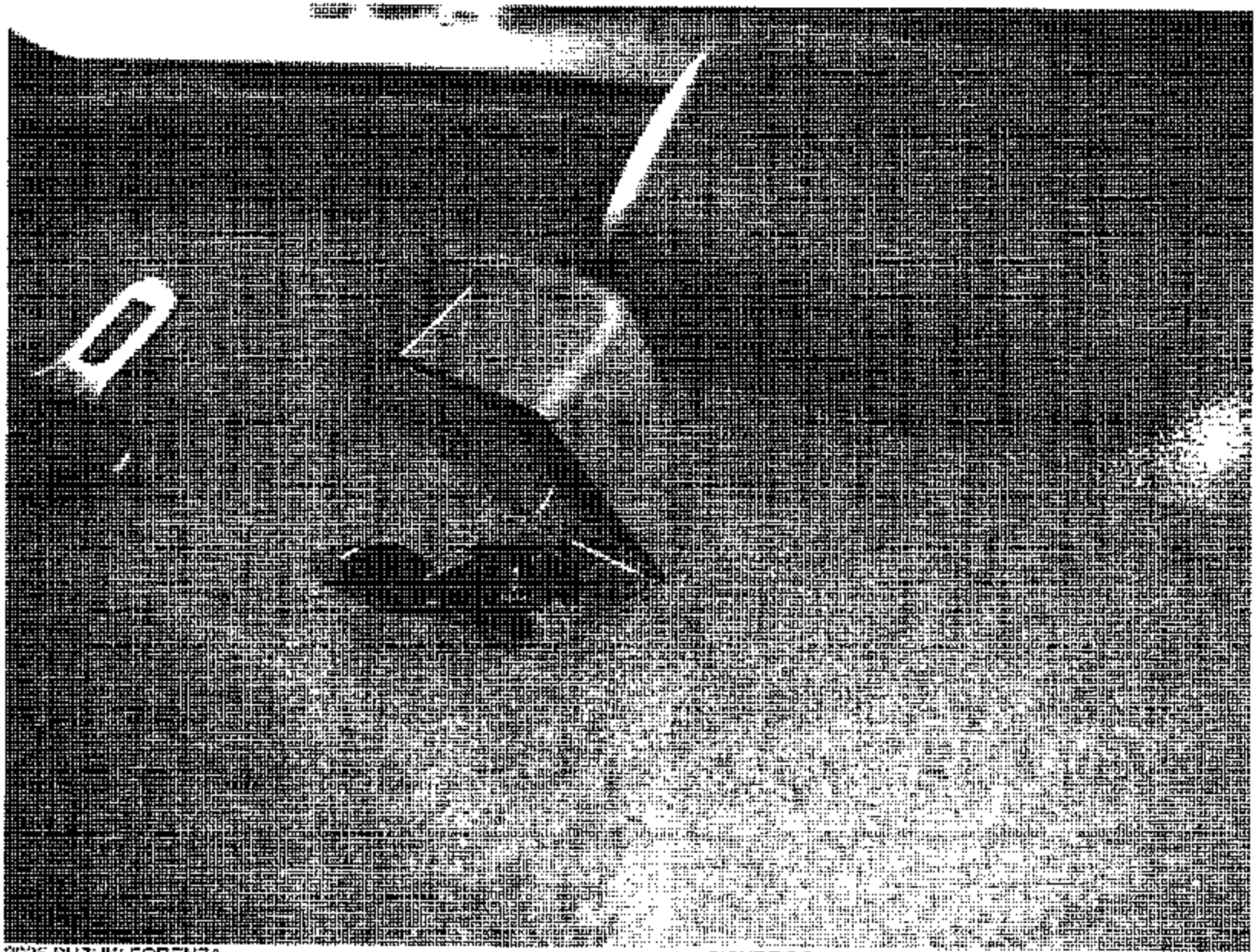
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.7
ROW 2, LEFT SIDE, TOP TETHER ANCHOR,
PRE-TEST



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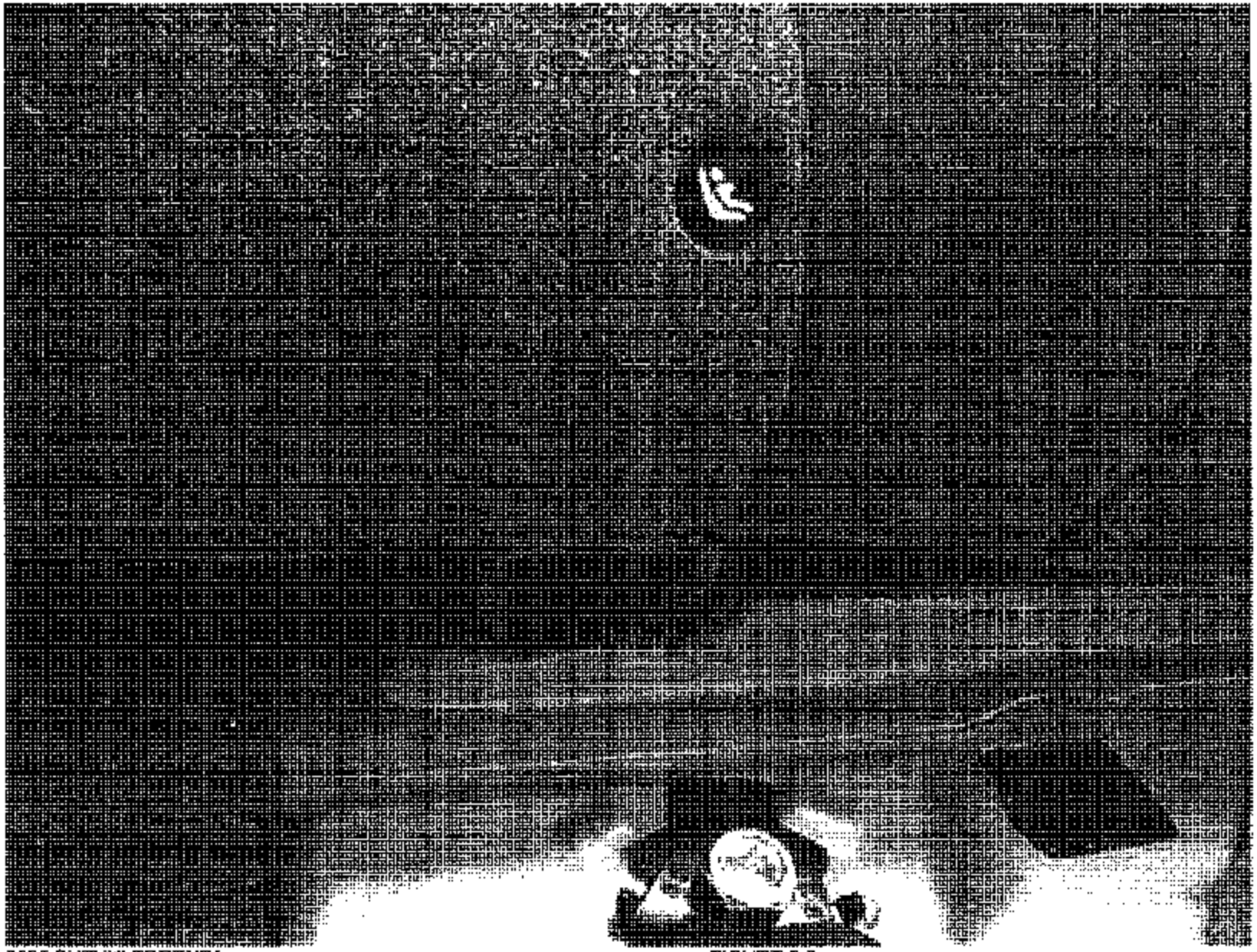
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.8
ROW 2, CENTER, TOP TETHER ANCHOR,
PRE-TEST



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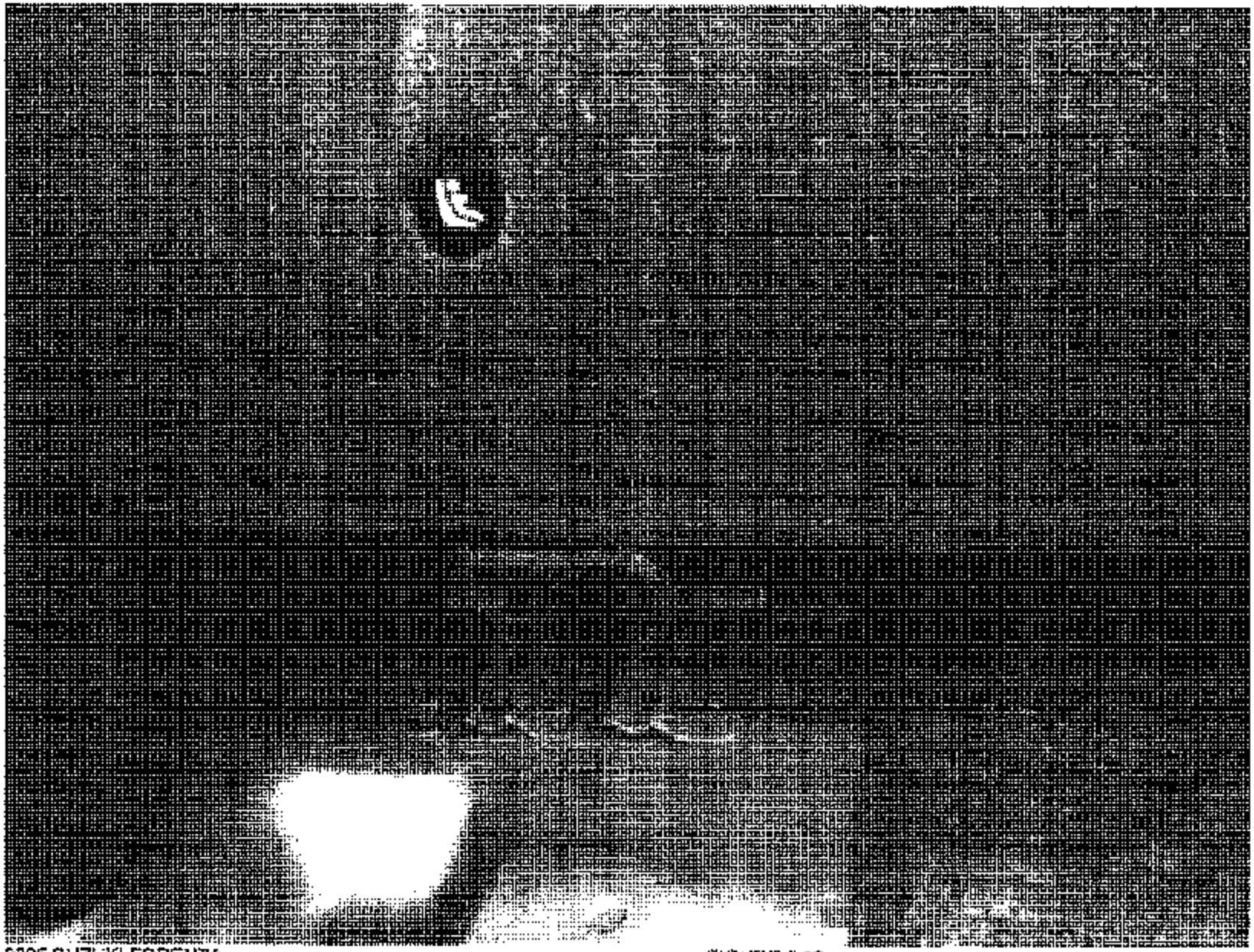
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.9
ROW 2, RIGHT SIDE, INBOARD LOWER ANCHOR,
PRE-TEST



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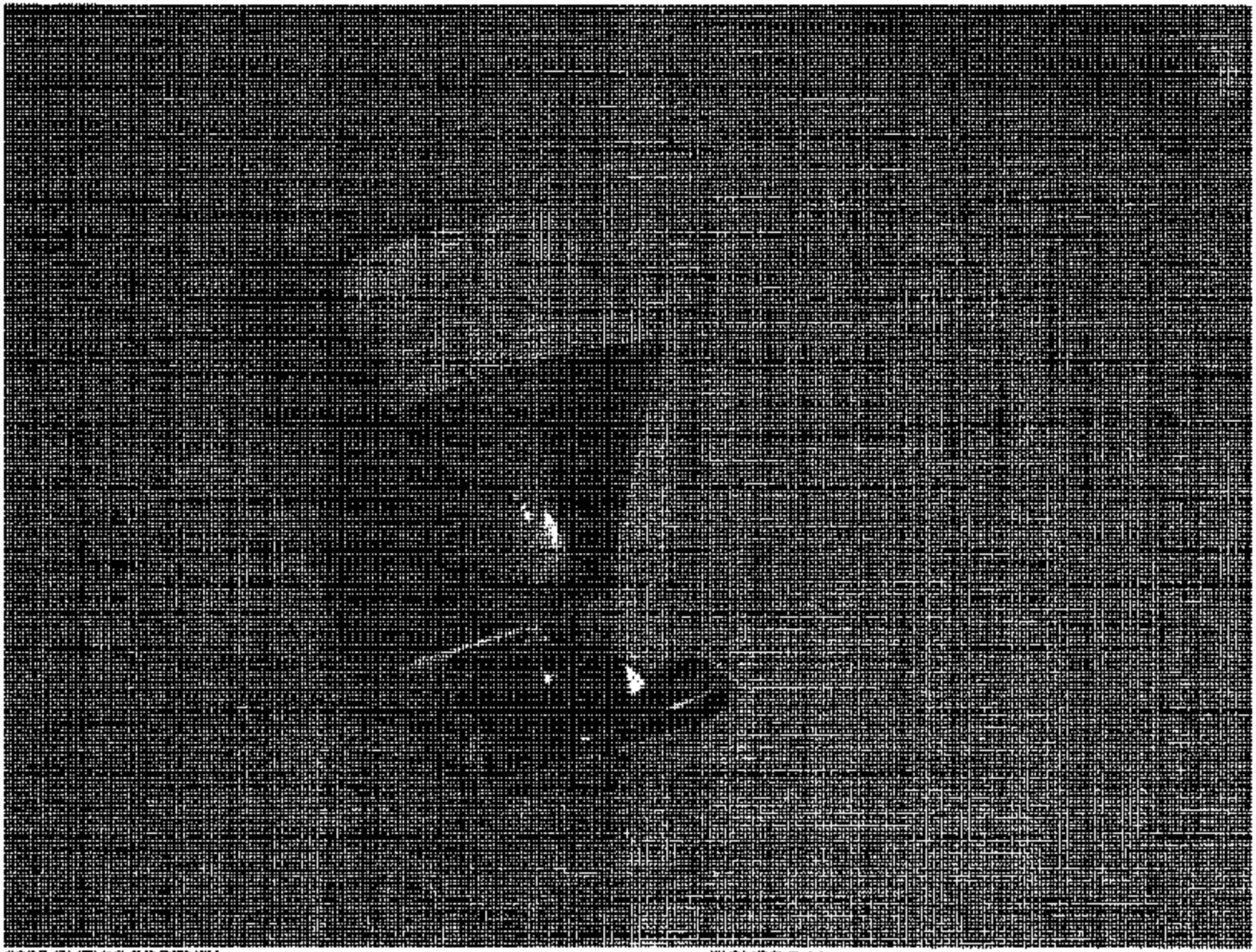
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 6.10
ROW 2, RIGHT SIDE, OUTBOARD LOWER ANCHOR,
PRE-TEST



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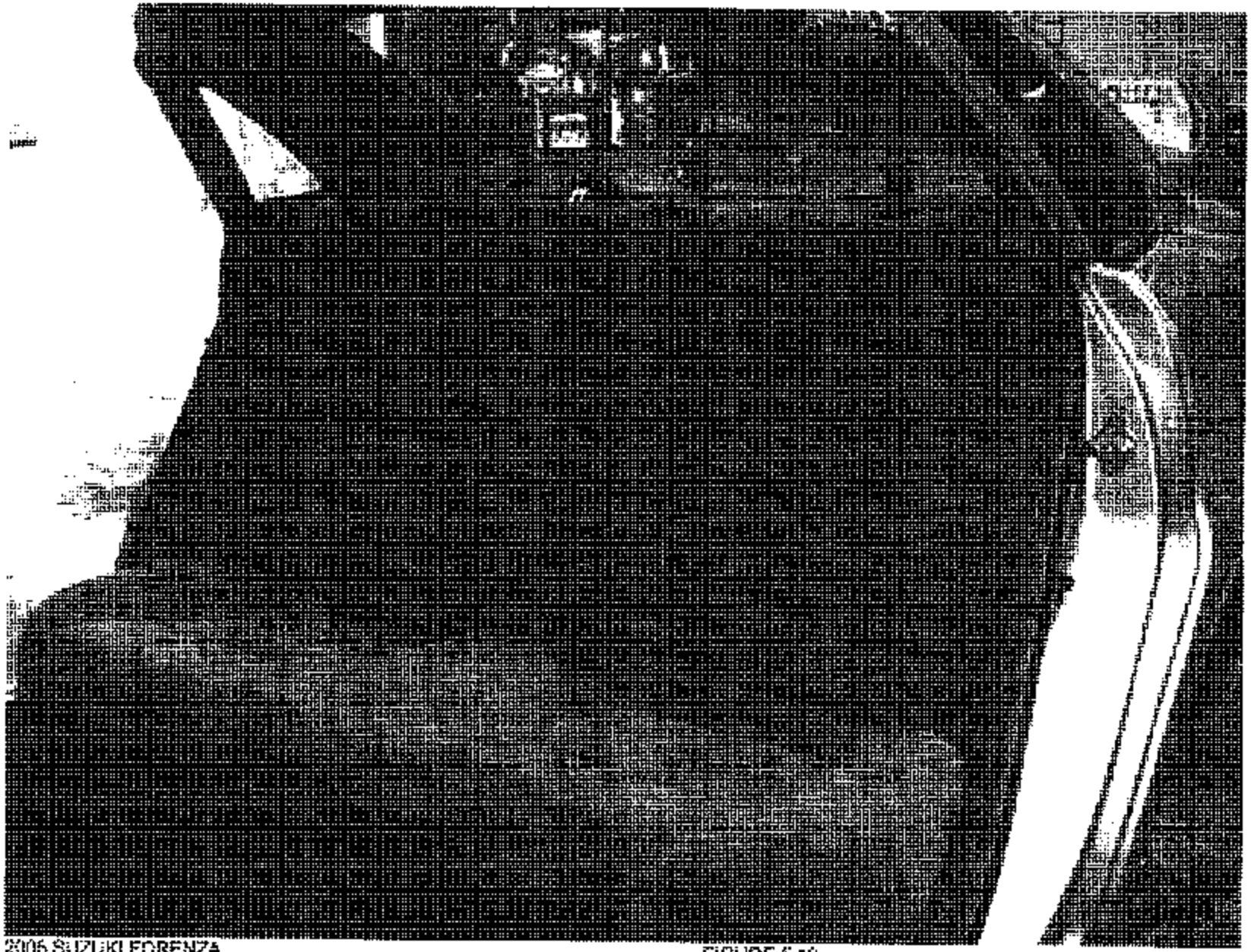
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5-11
ROW 2, RIGHT SIDE, TOP TETHER ANCHOR,
PRE-TEST



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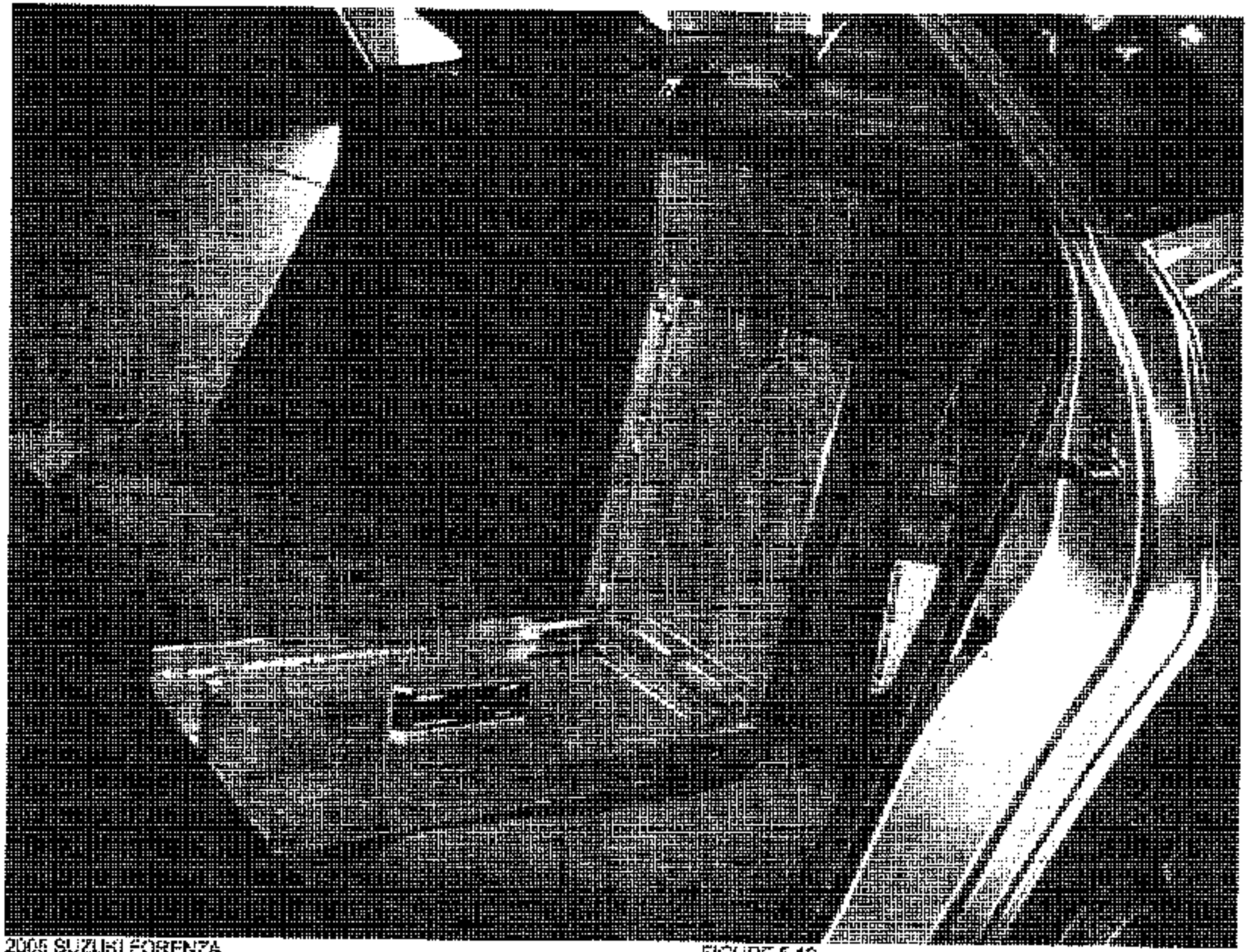
NHTSA NO. C50505
FMVSS NO. 226

FIGURE 6.12
OVERALL VIEW OF ROW 2 SEATING POSITIONS,
PRE-TEST



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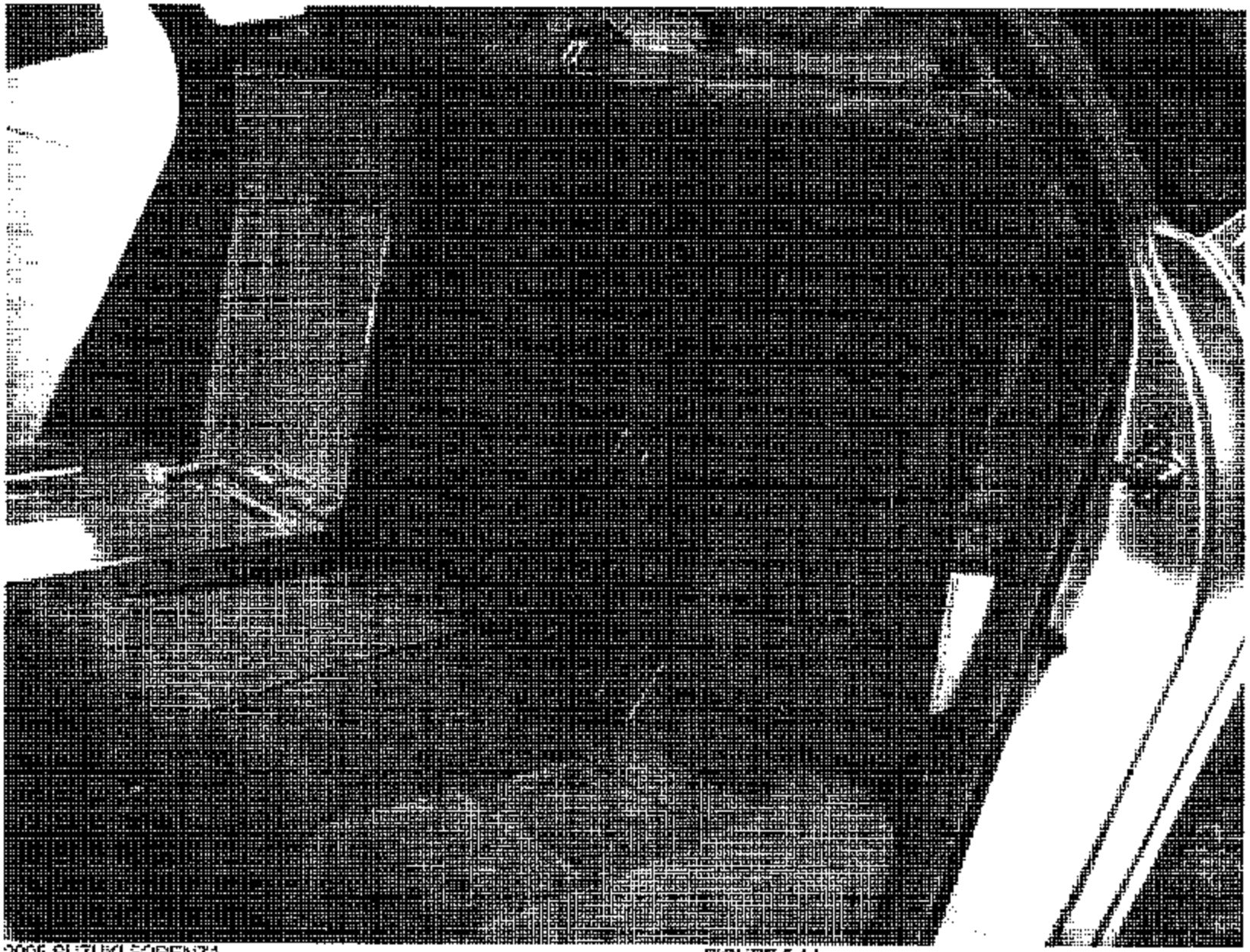
NHTSA NO. C60505
FMVSS NO. 225

FIGURE 5.13
ROW 2, LEFT SIDE WITH CRF



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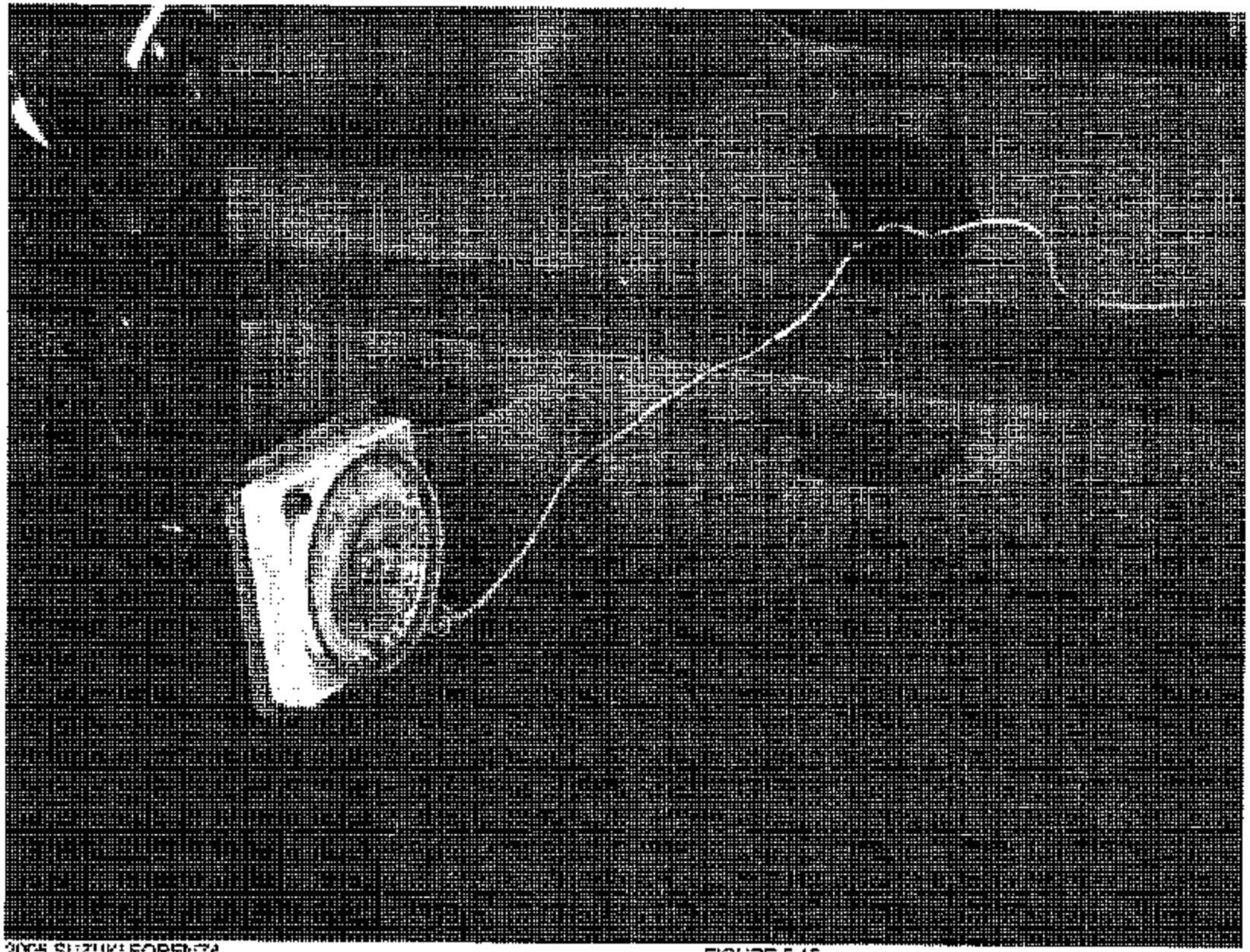
FMVSS NO. 225

FIGURE 5.14
ROW 2, LEFT SIDE WITH 2-D TEMPLATE



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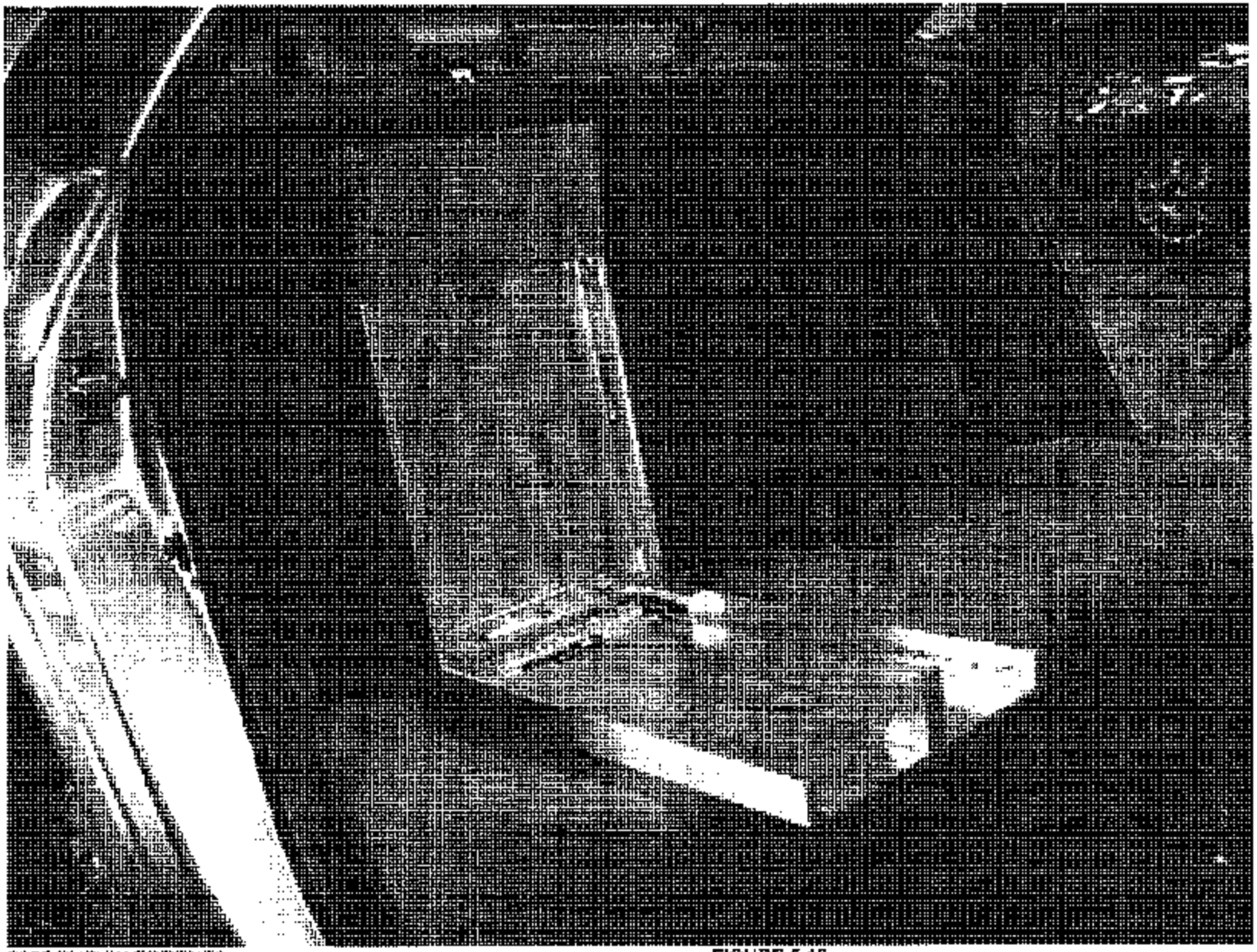
NHTSA NO. CS0505
FMVSS NO. 225

FIGURE 5.15
ROW 2, LEFT SIDE TOP TETHER ROUTING



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FMVSS NO. 225

FIGURE 5.15
ROW 2, RIGHT SIDE WITH CRF

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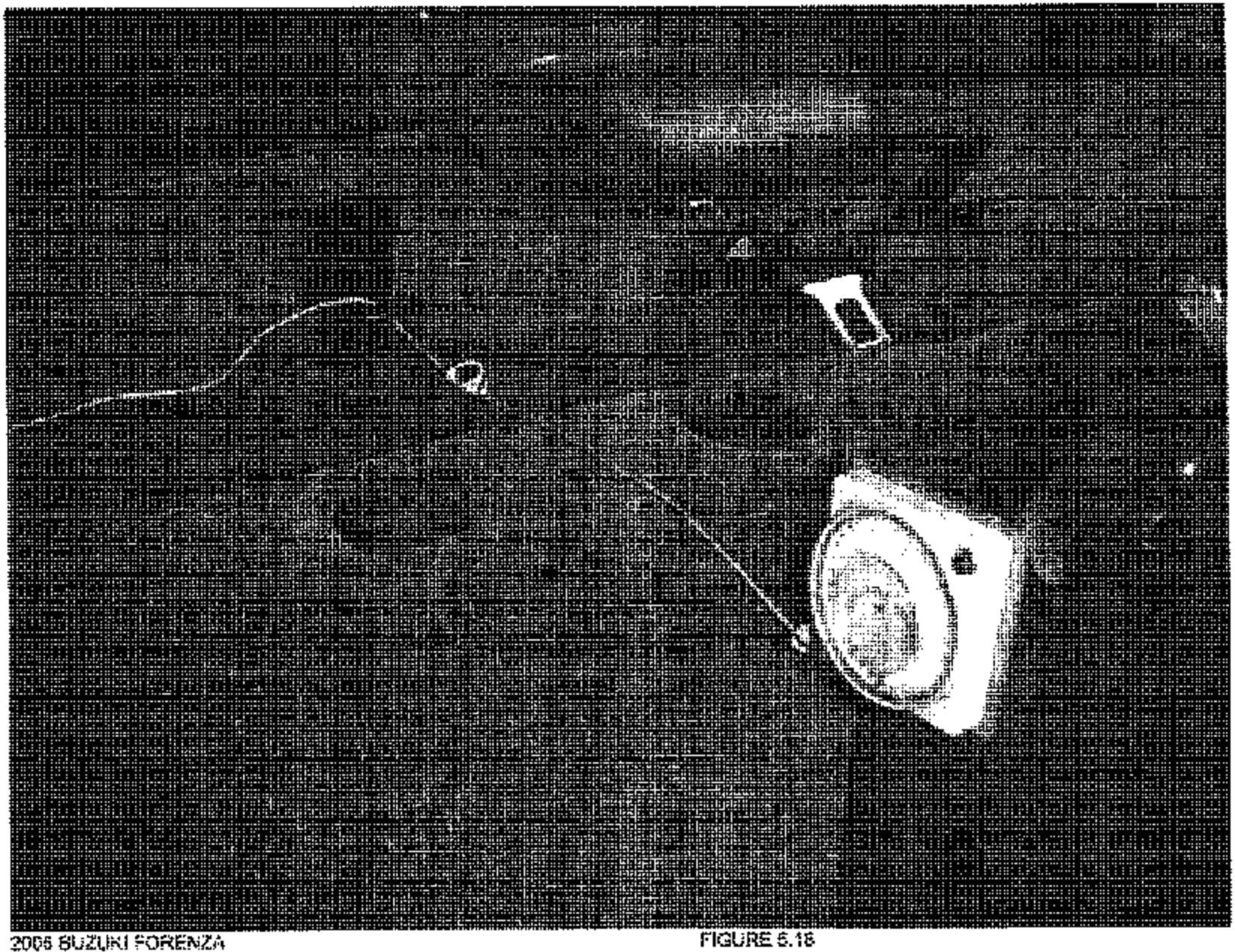
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.17
ROW 2, RIGHT SIDE WITH 3-D TEMPLATE



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FMVSS NO. 225

FIGURE 5.18
ROW 2, RIGHT SIDE TOP TETHER ROUTING

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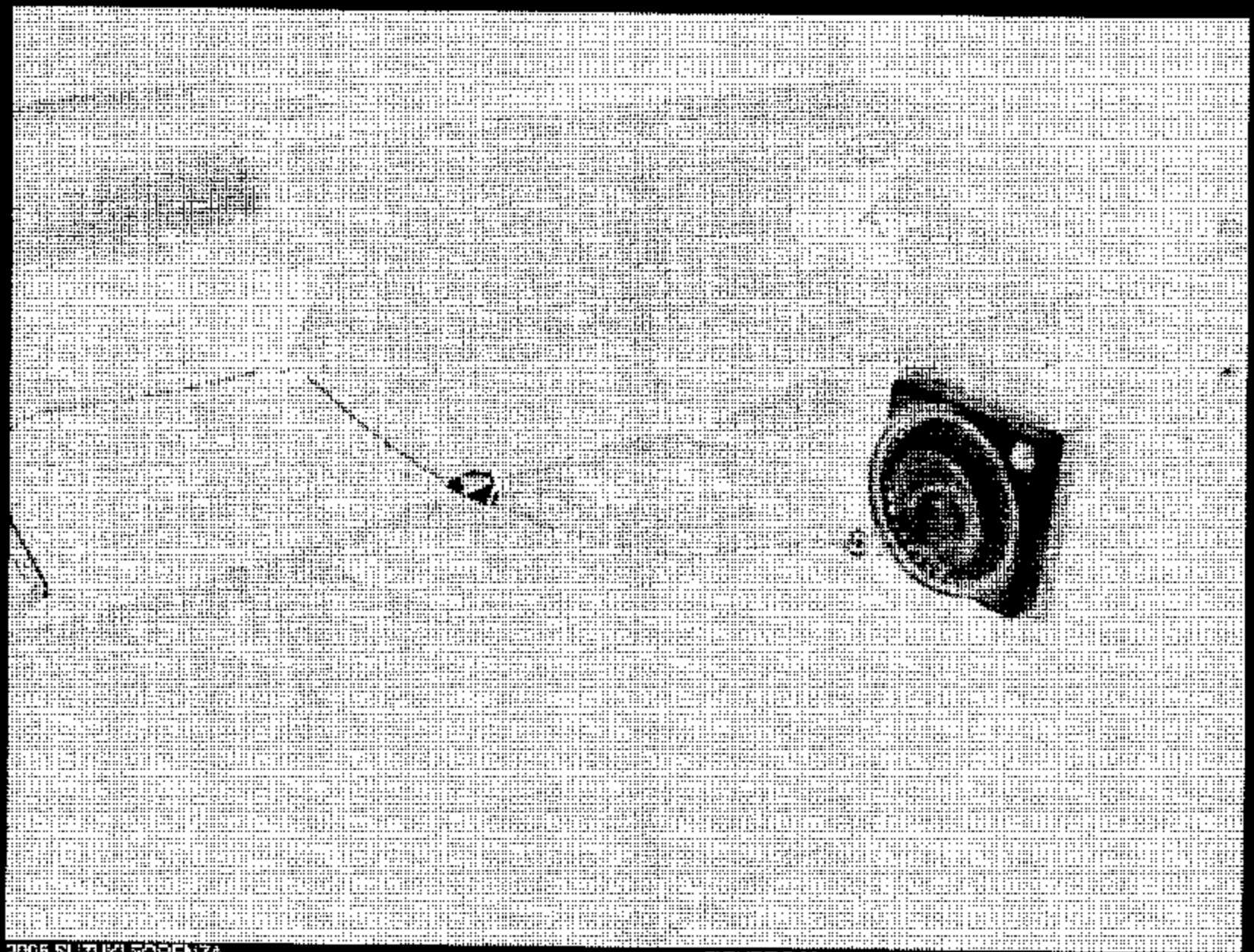
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5-19
ROW 2, CENTER WITH 2-D TEMPLATE



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NHTSA NO. CS0505
FMVSS NO. 225

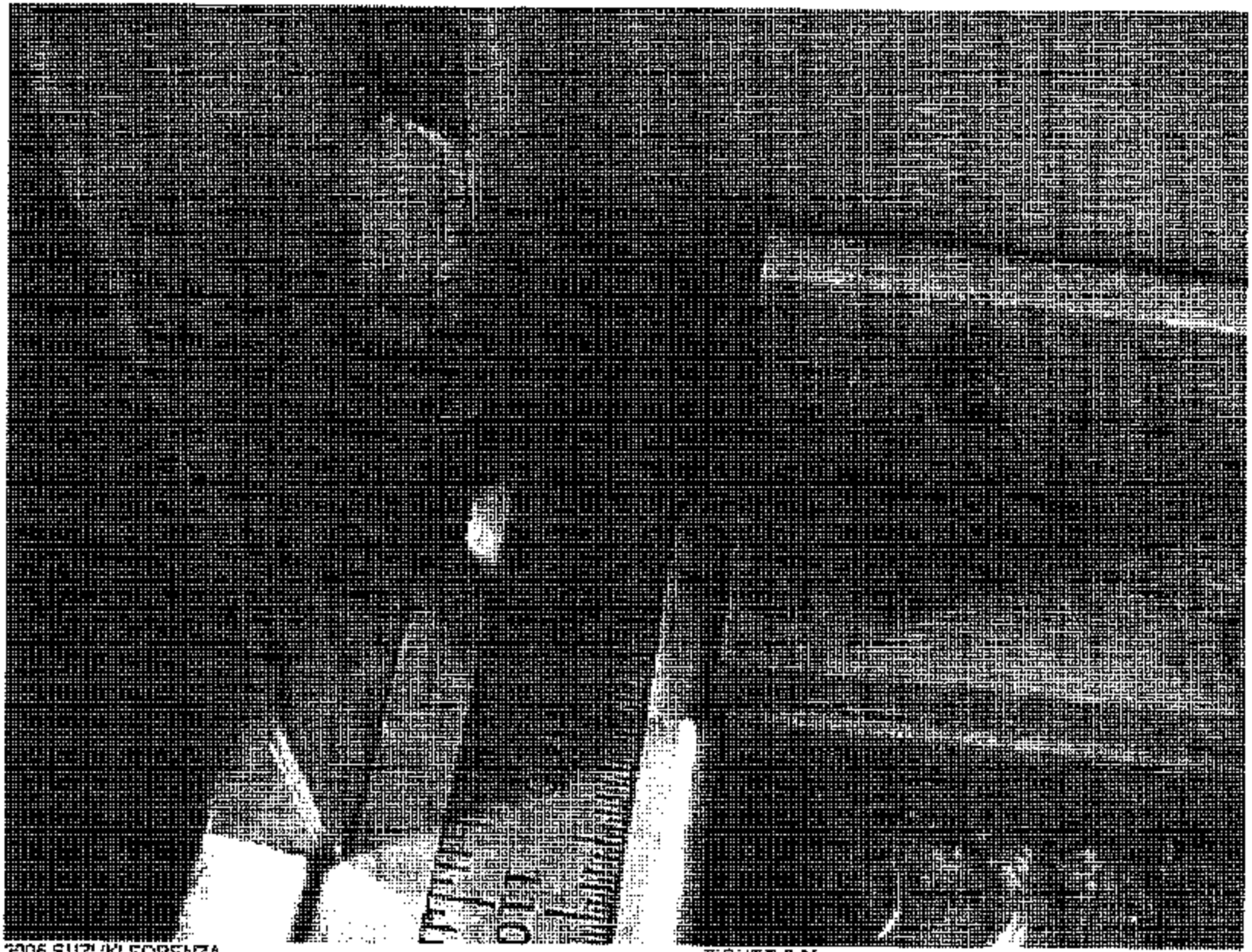
FIGURE 5.20
ROW 2, CENTER TOP TETHER ROUTING

2005 SUZUKI FORENZA
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.21
ROW 2, RIGHT SIDE INBOARD CRF MEASUREMENT

2005 SUZUKI FORENZA
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.22
ROW 2, RIGHT SIDE OUTBOARD CRF MEASUREMENT



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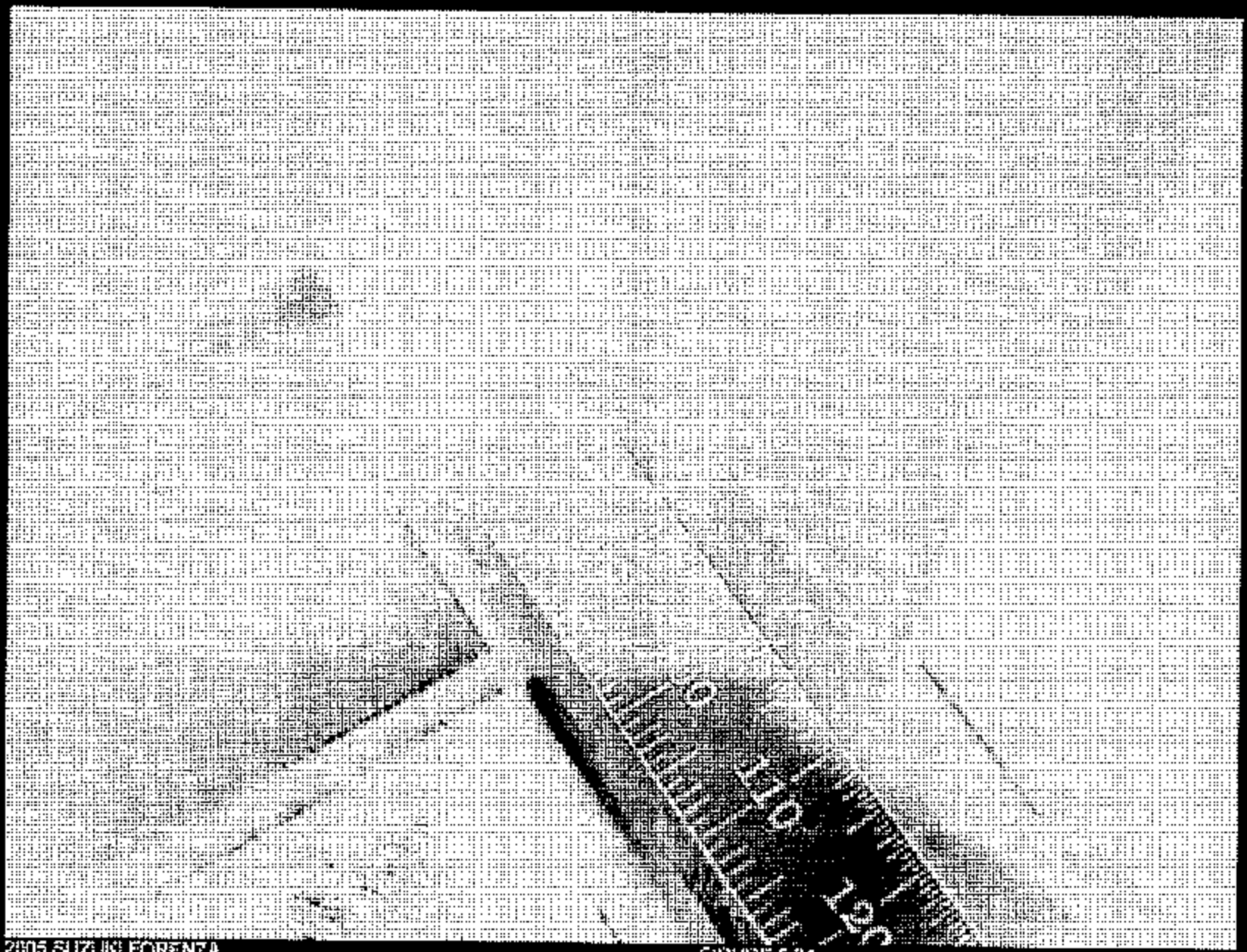
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.23
ROW 2, LEFT SIDE, INBOARD CRF MEASUREMENT



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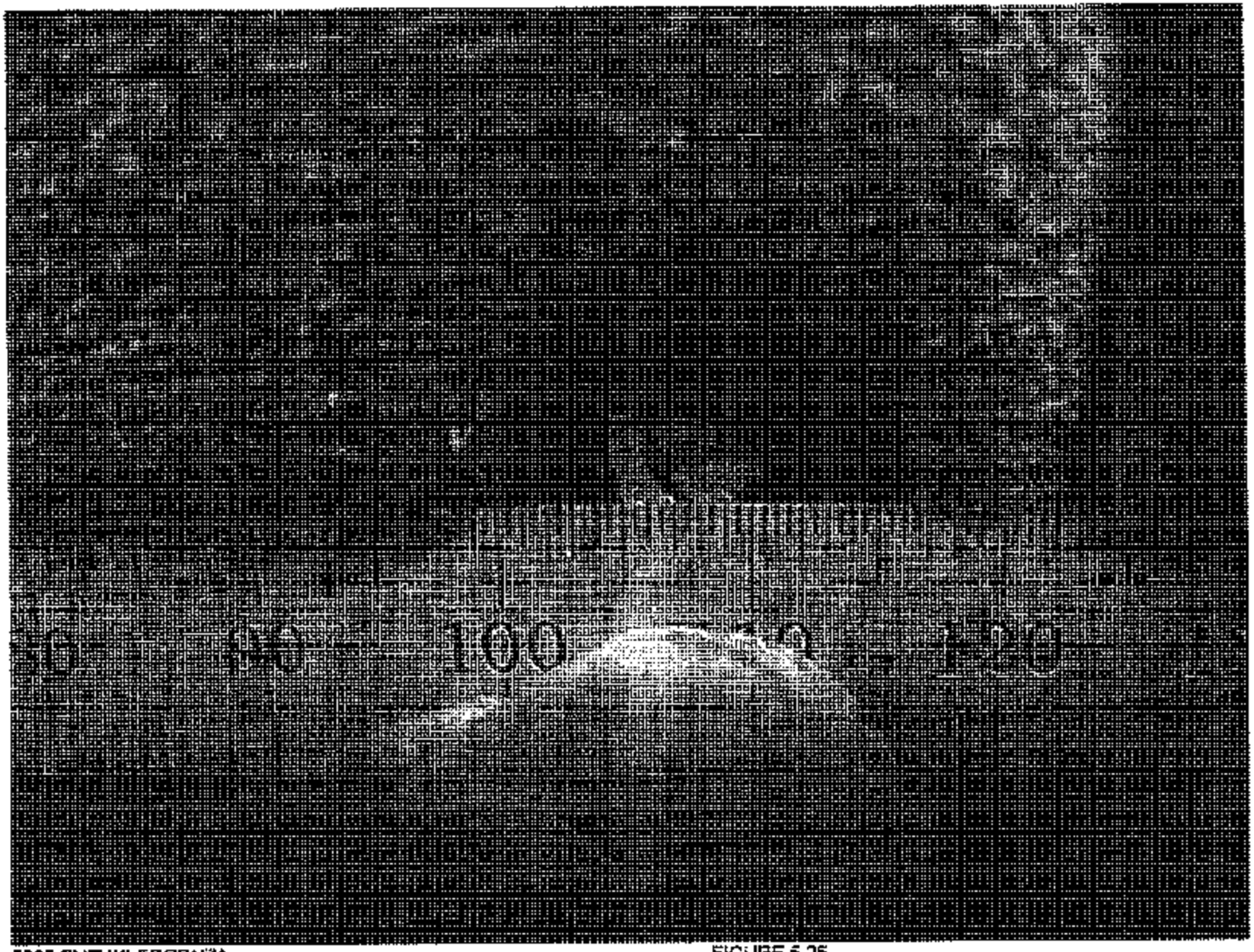
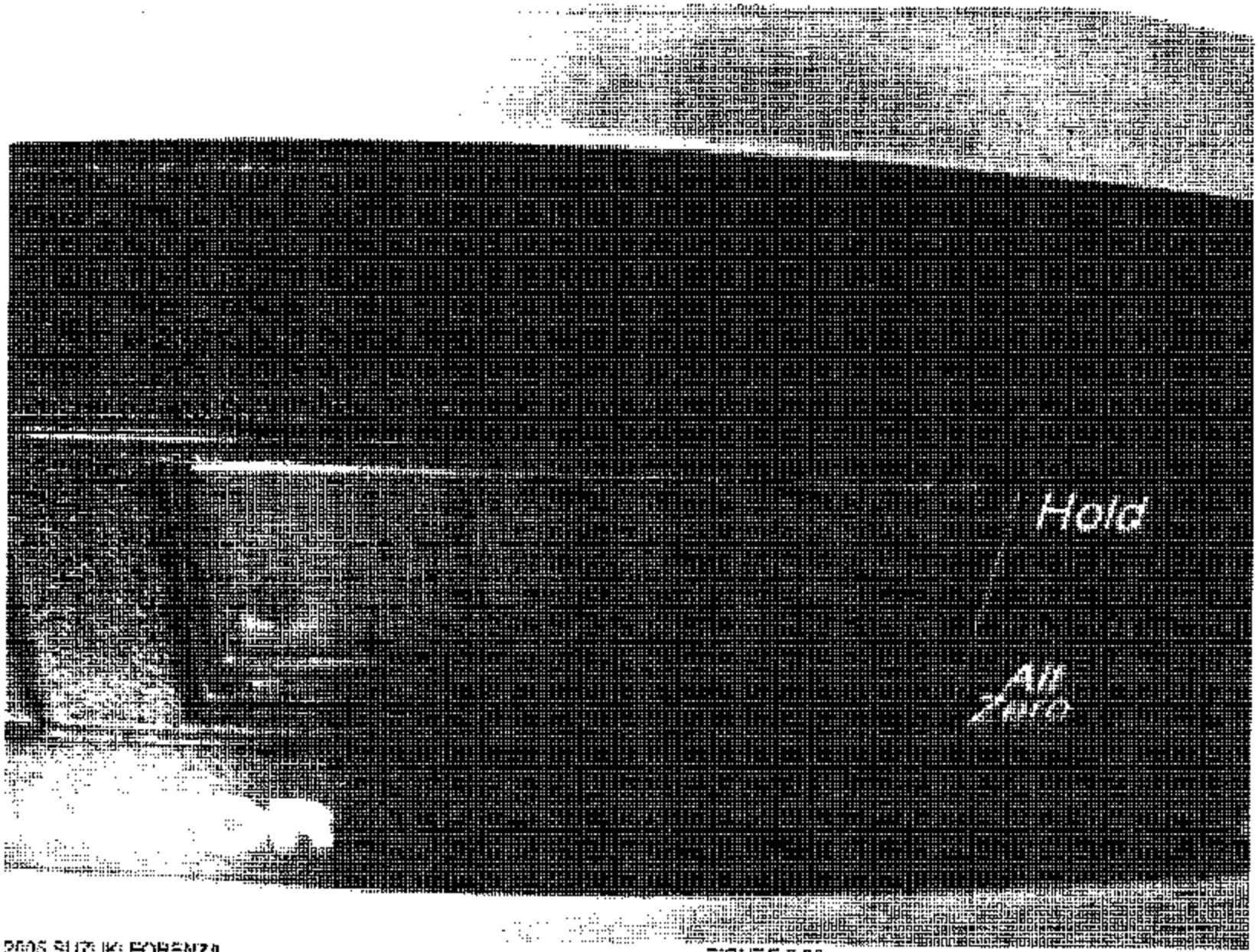
NHTSA NO. CS0505
FMVSS NO. 225

FIGURE 5.24
ROW 2, LEFT SIDE, OUTBOARD CRF MEASUREMENT



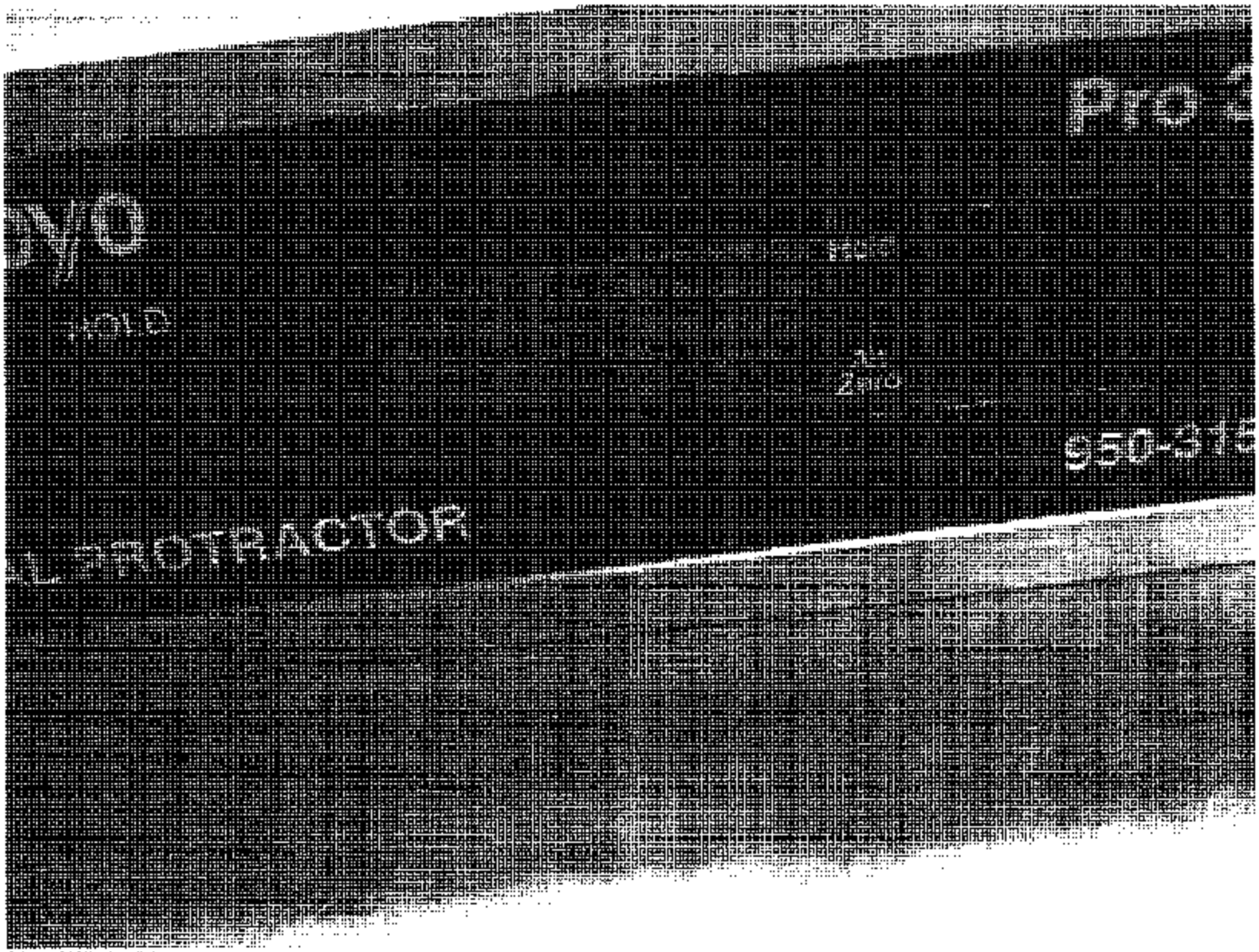
2005 SUZUKI FORENZA
NHTSA NO. C50605
FMVSS NO. 225

FIGURE 5.25
SYMBOL MEASUREMENT



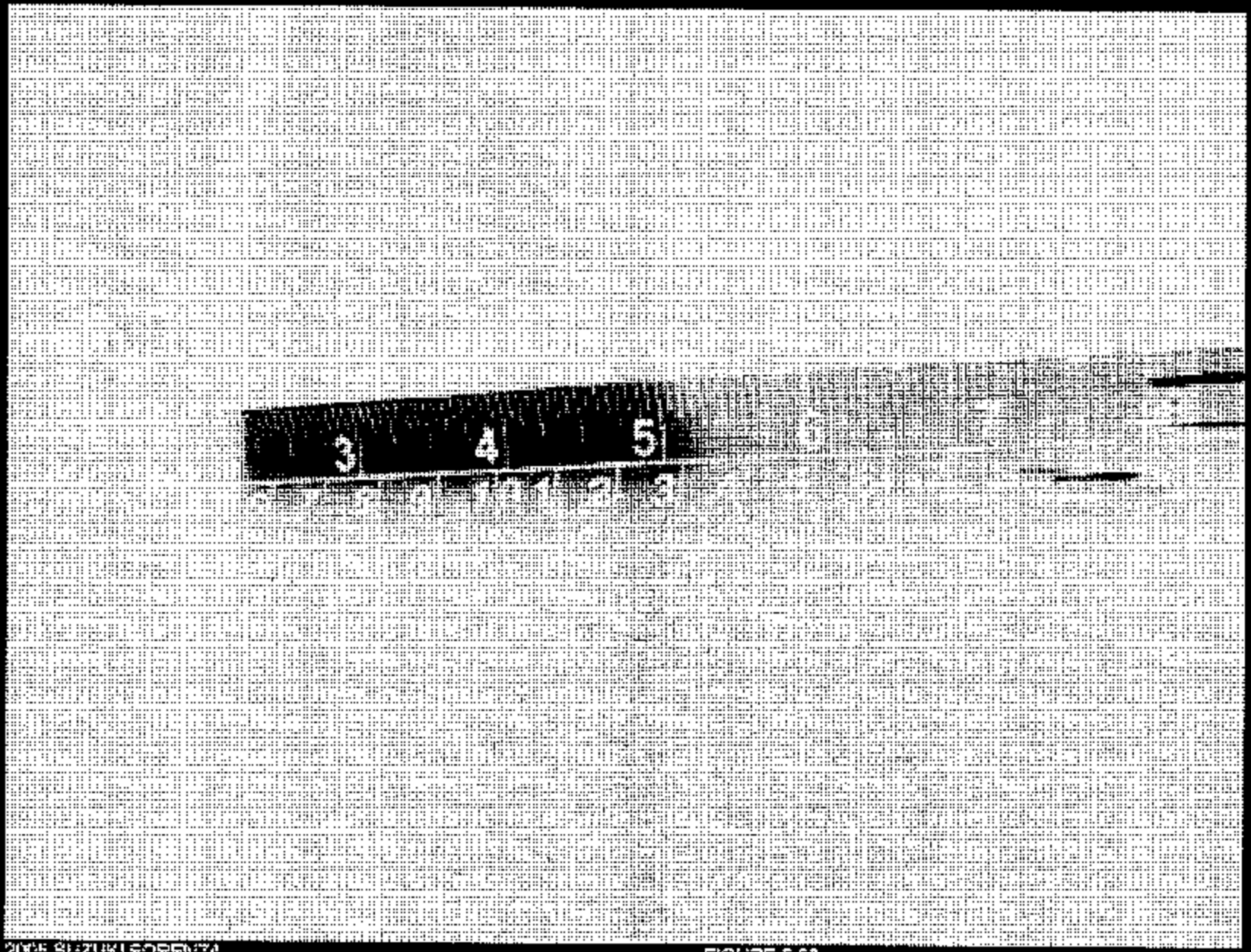
2005 SUZUKI FORENZA
NHTSA NO. C50506
FMVSS NO. 225

FIGURE 5.26
ROW 2, LEFT SIDE CRF PITCH MEASUREMENT



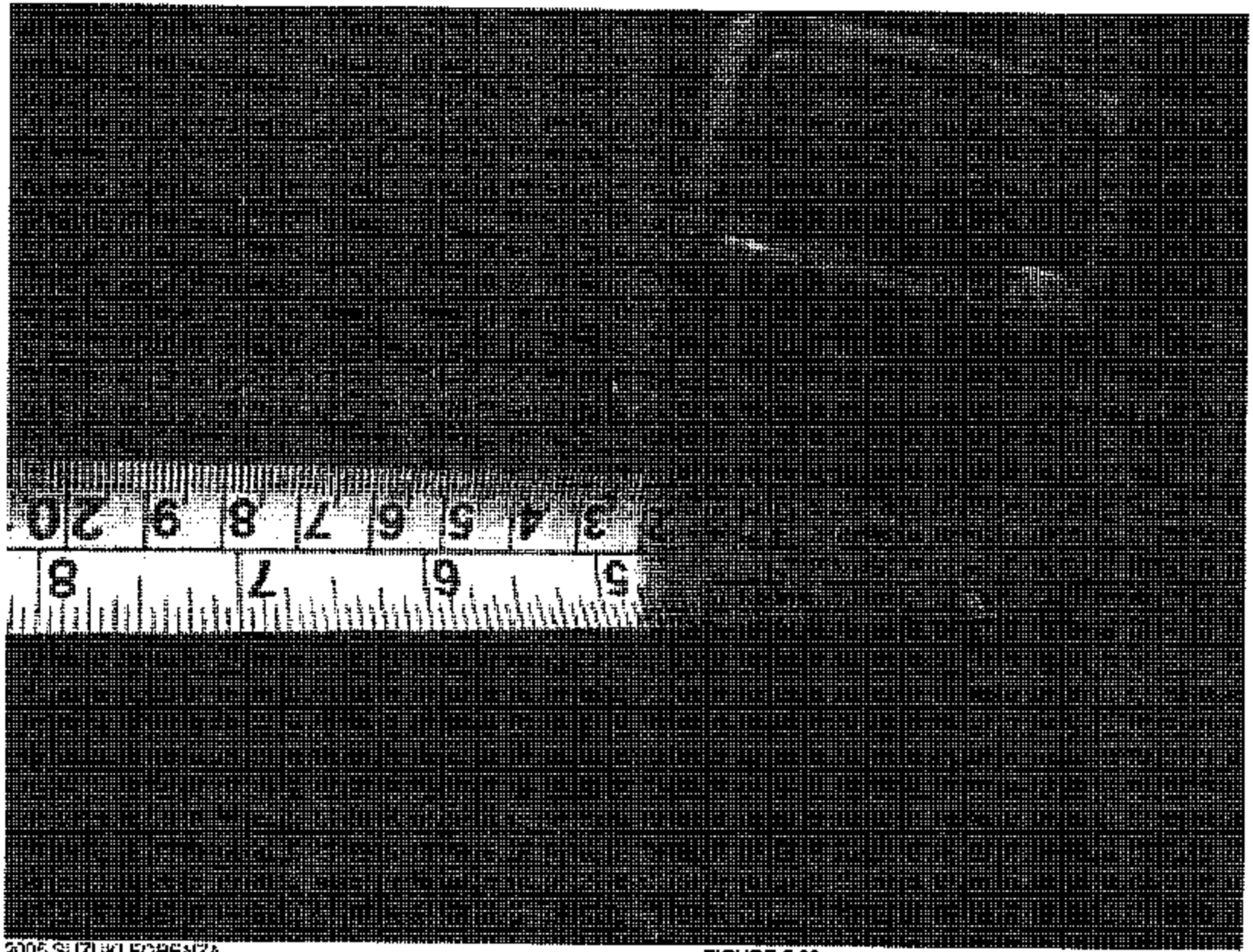
2005 SUZUKI FORENZA
NHTSA NO. CS0505
FMVSS NO. 225

FIGURE 5.27
ROW 2, RIGHT SIDE CRF PITCH MEASUREMENT



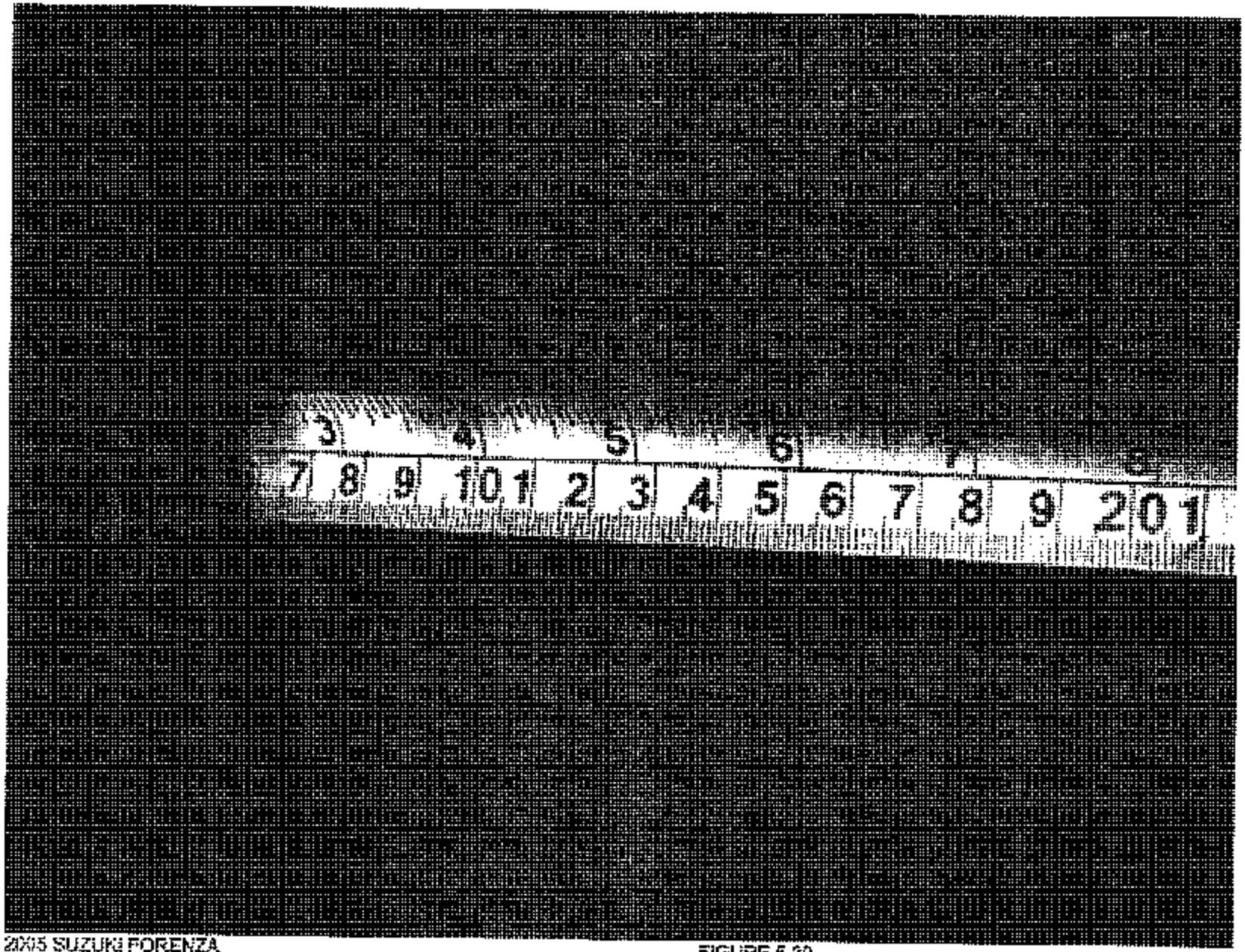
2005 SUZUKI FORENZA
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.2B
ROW 2, LEFT SIDE OUTBOARD SRP MEASUREMENT



2005 SUZUKI FORENZA
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.28
ROW 2, LEFT SIDE INBOARD SRP MEASUREMENT



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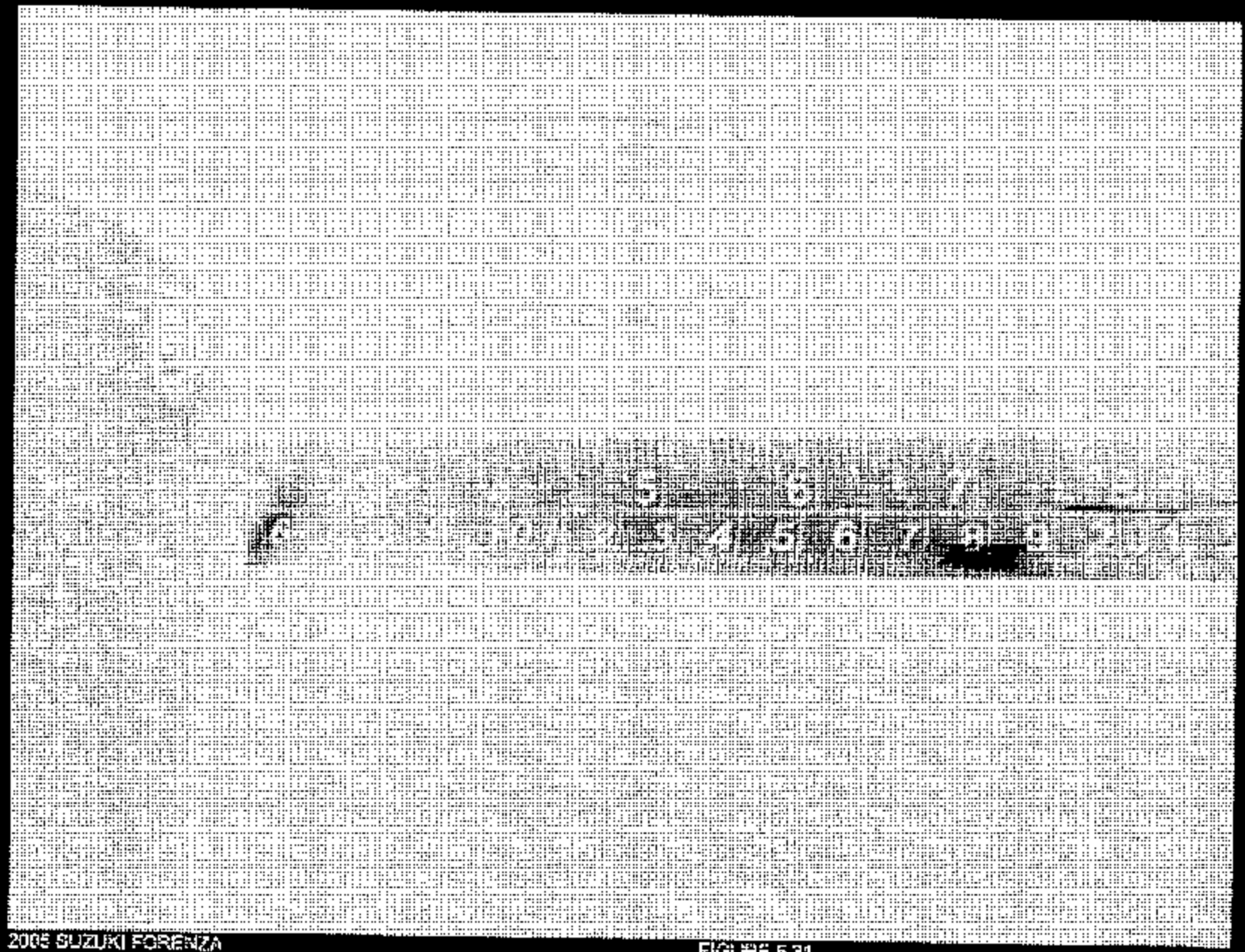
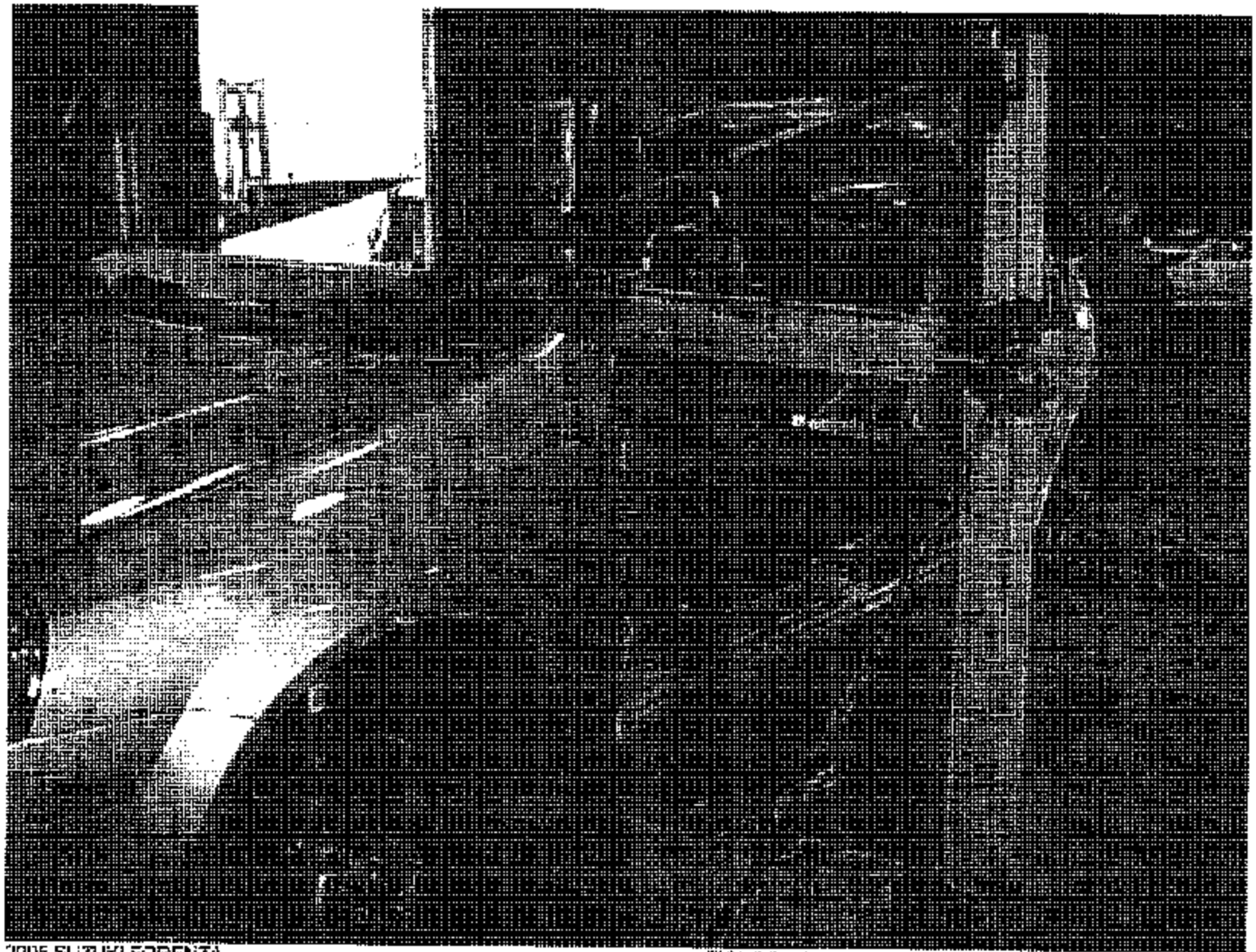
NHTSA NO. C50505
FMVSS NO. 226

FIGURE 5.39
ROW 2, RIGHT SIDE OUTBOARD SRP MEASUREMENT



2005 SUZUKI FORENZA
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.31
ROW 2, RIGHT SIDE INBOARD SRP MEASUREMENT



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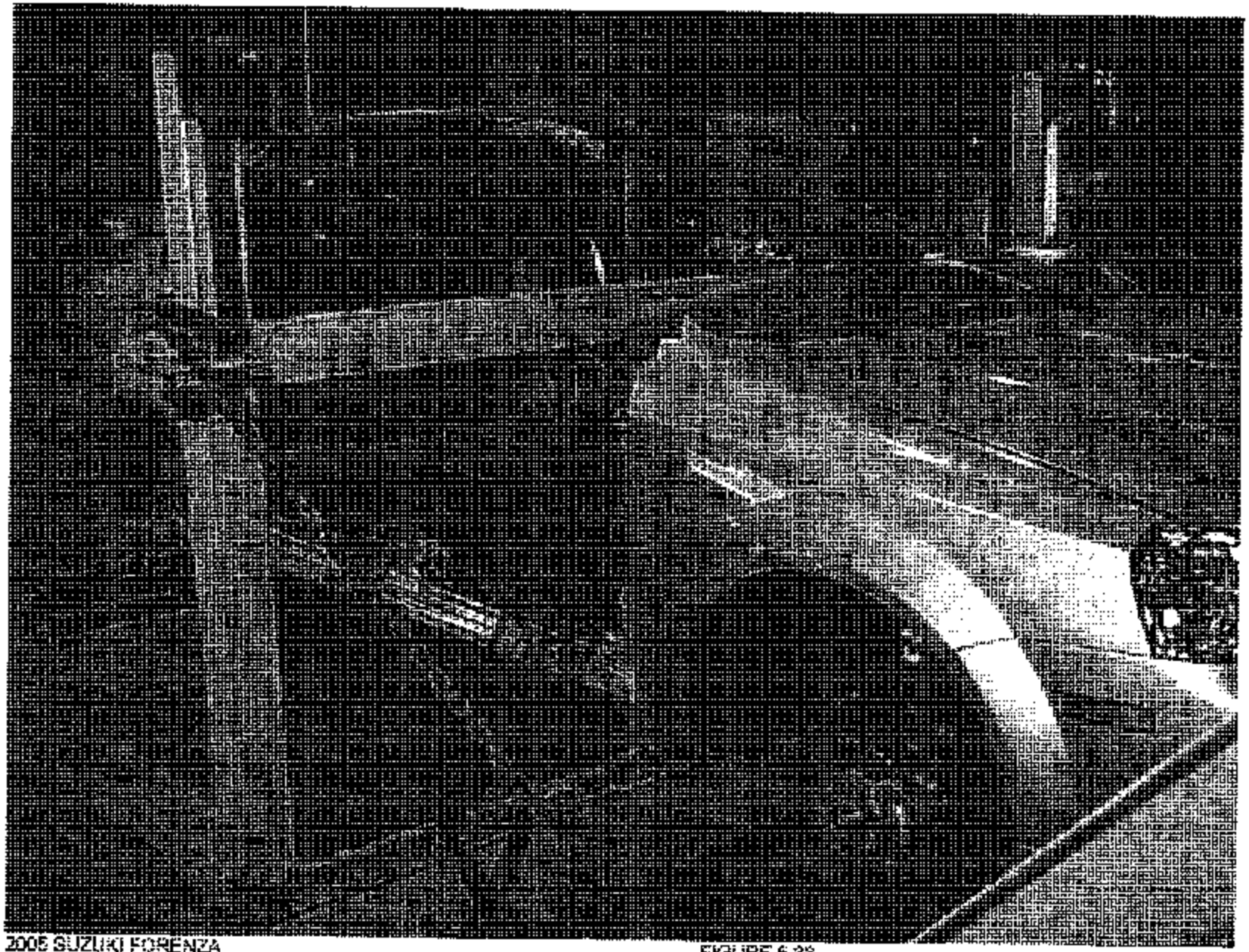
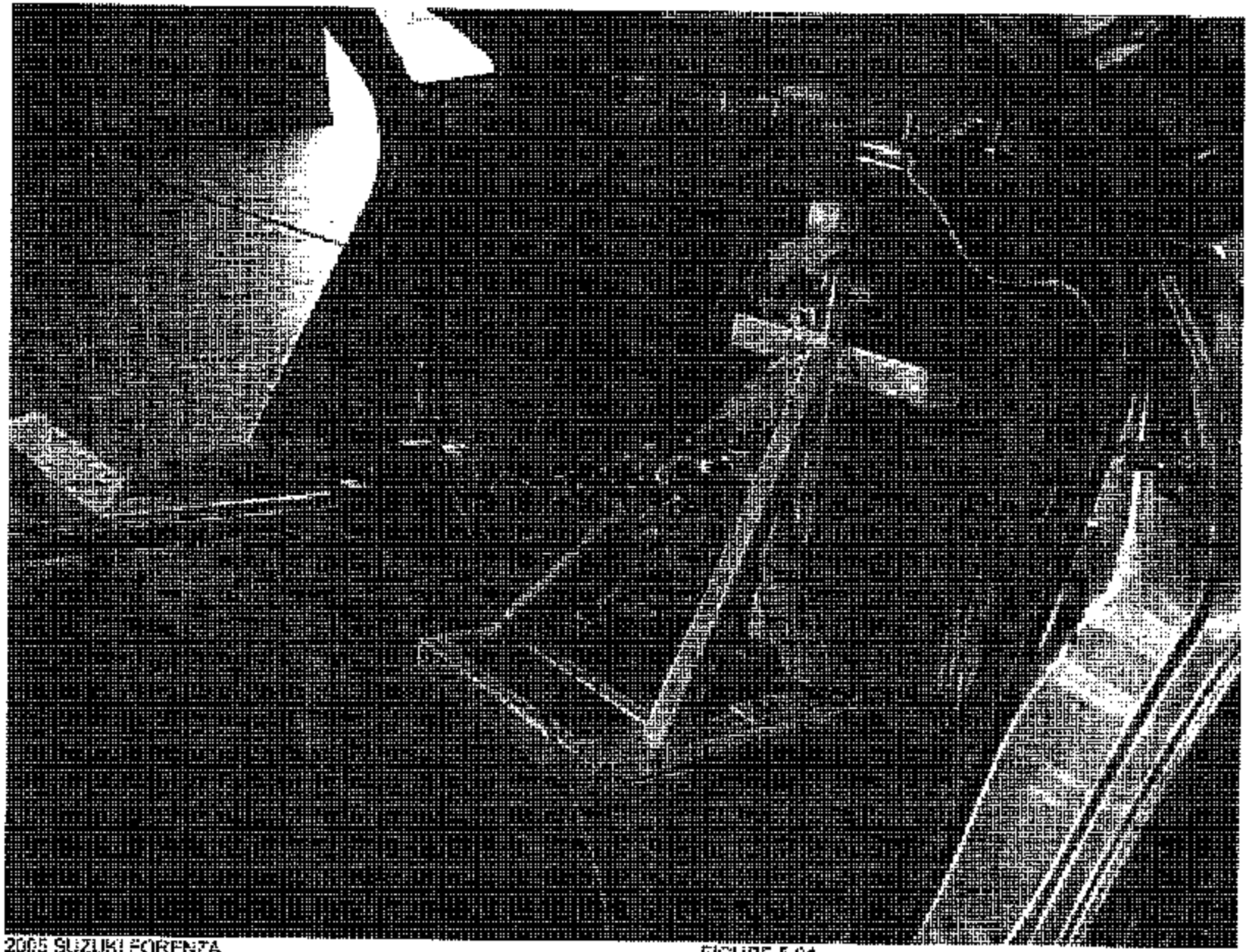
NHTSA NO. C50505
FMVSS NO. 226

FIGURE 5.32
¾ LEFT FRONT VIEW OF VEHICLE IN TEST RIG



2005 SUZUKI FORENZA
NHTSA NO. C50605
FMVSS NO. 225

FIGURE 6.38
¾ RIGHT FRONT VIEW OF VEHICLE IN TEST RIG

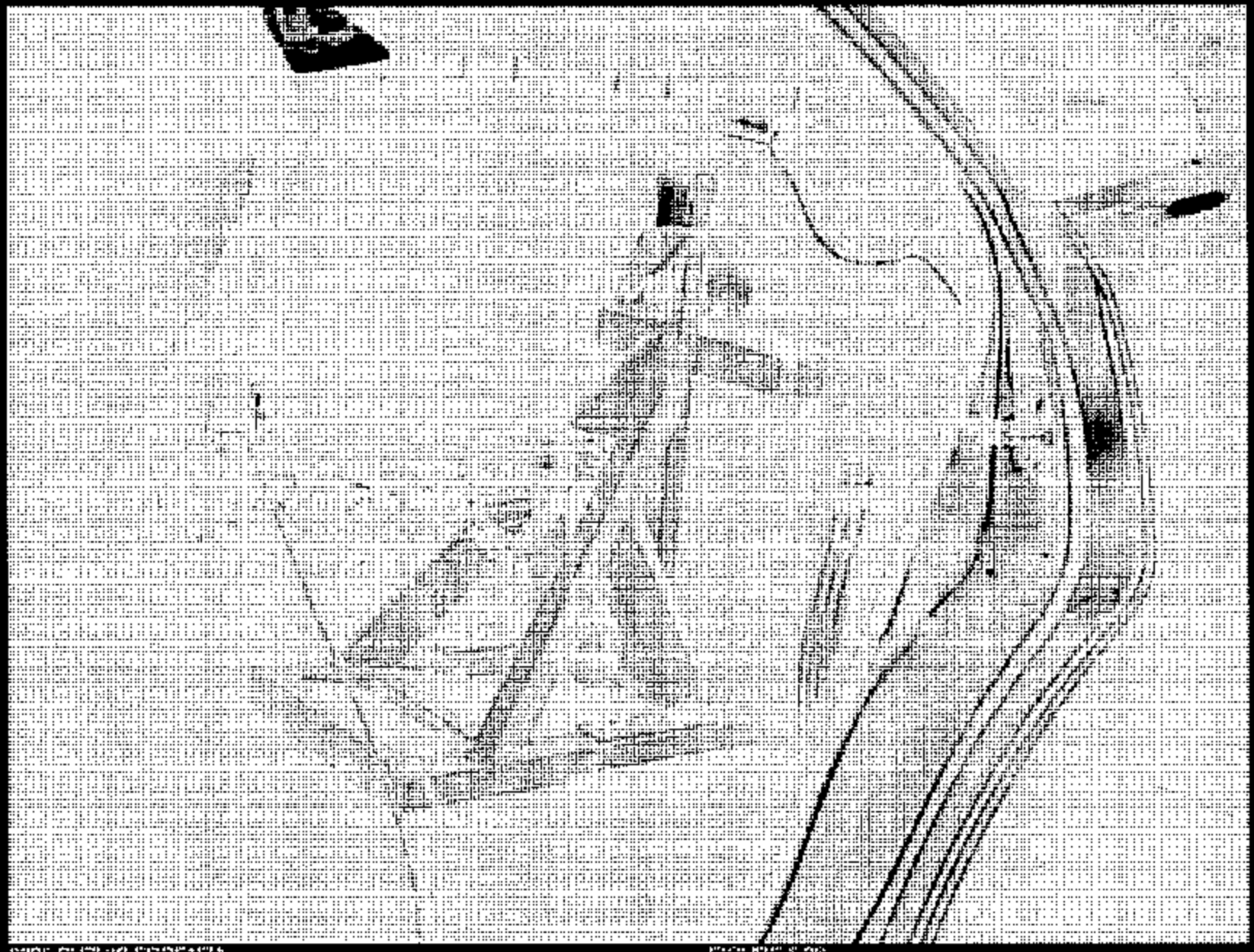


2005 SUZUKI FORENZA
NHTSA NO. C60606
FMVSS NO. 225

FIGURE 5.S4
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2

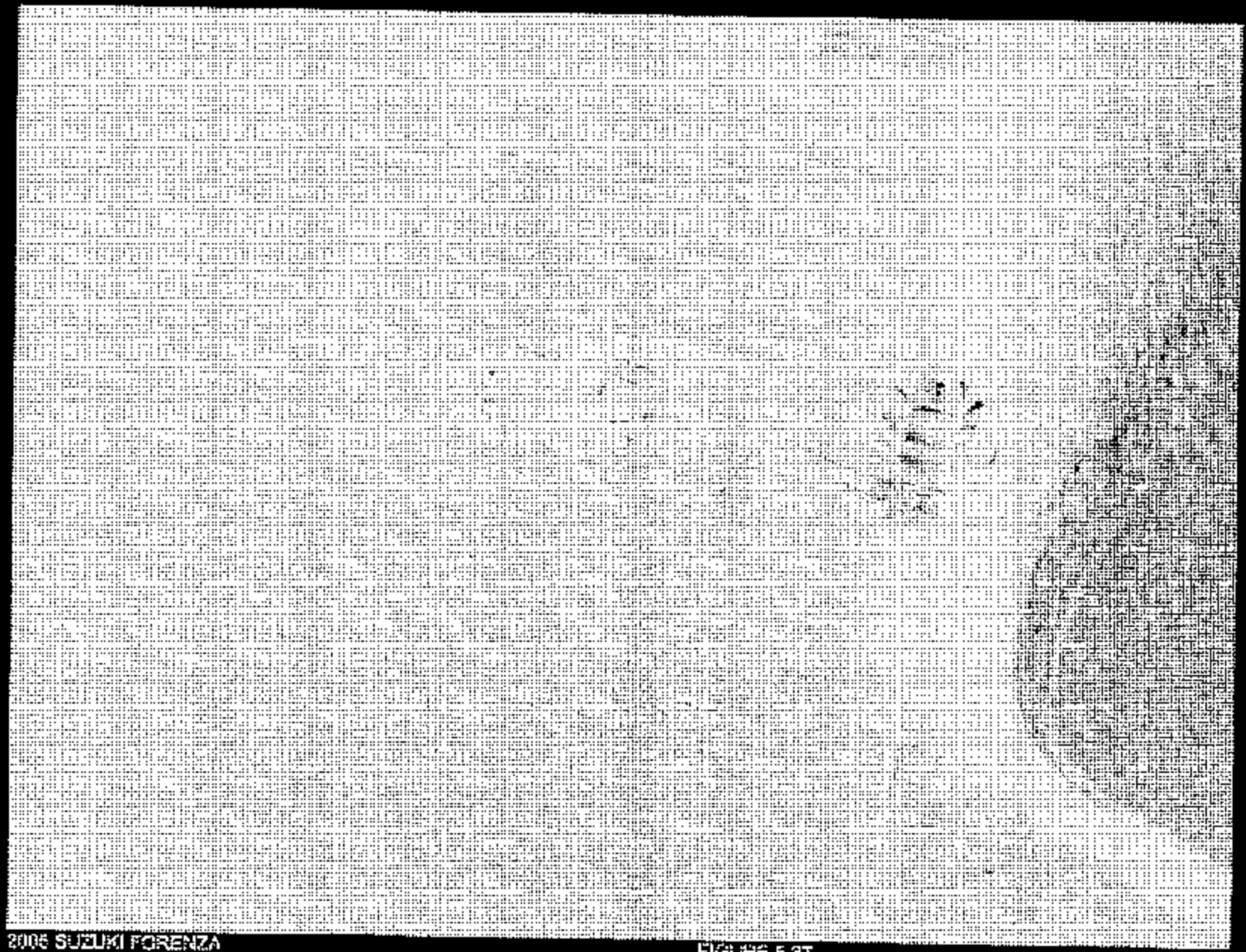
2006 SUZUKI FORENZA
NHTSA NO. C60605
FMVSS NO. 225

FIGURE 5.36
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2



2005 SUZUKI FORENZA
NHTSA NO. C60606
FMVSS NO. 225

FIGURE 6.36
POST TEST ROW 2, LEFT SIDE WITH SFAD 2



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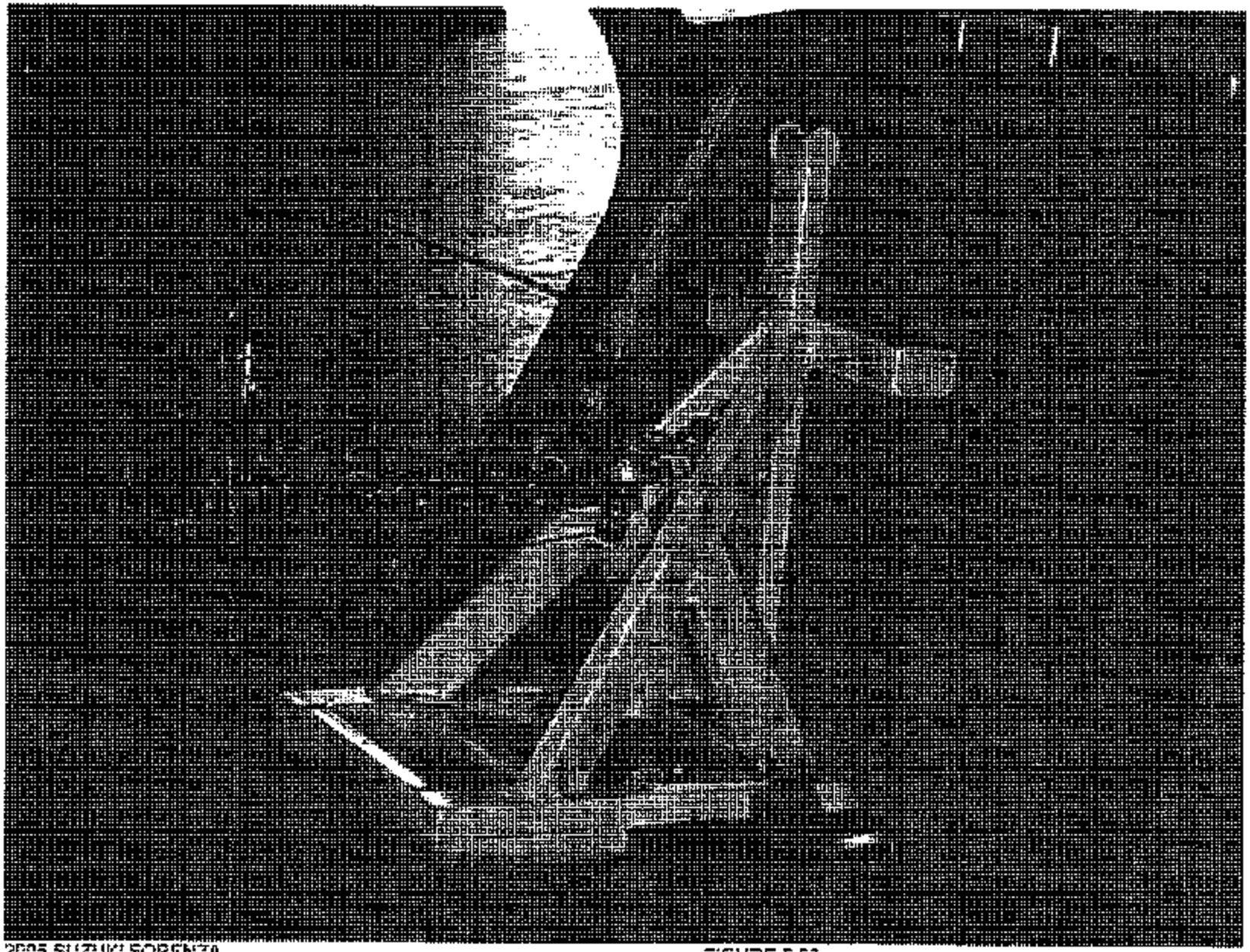
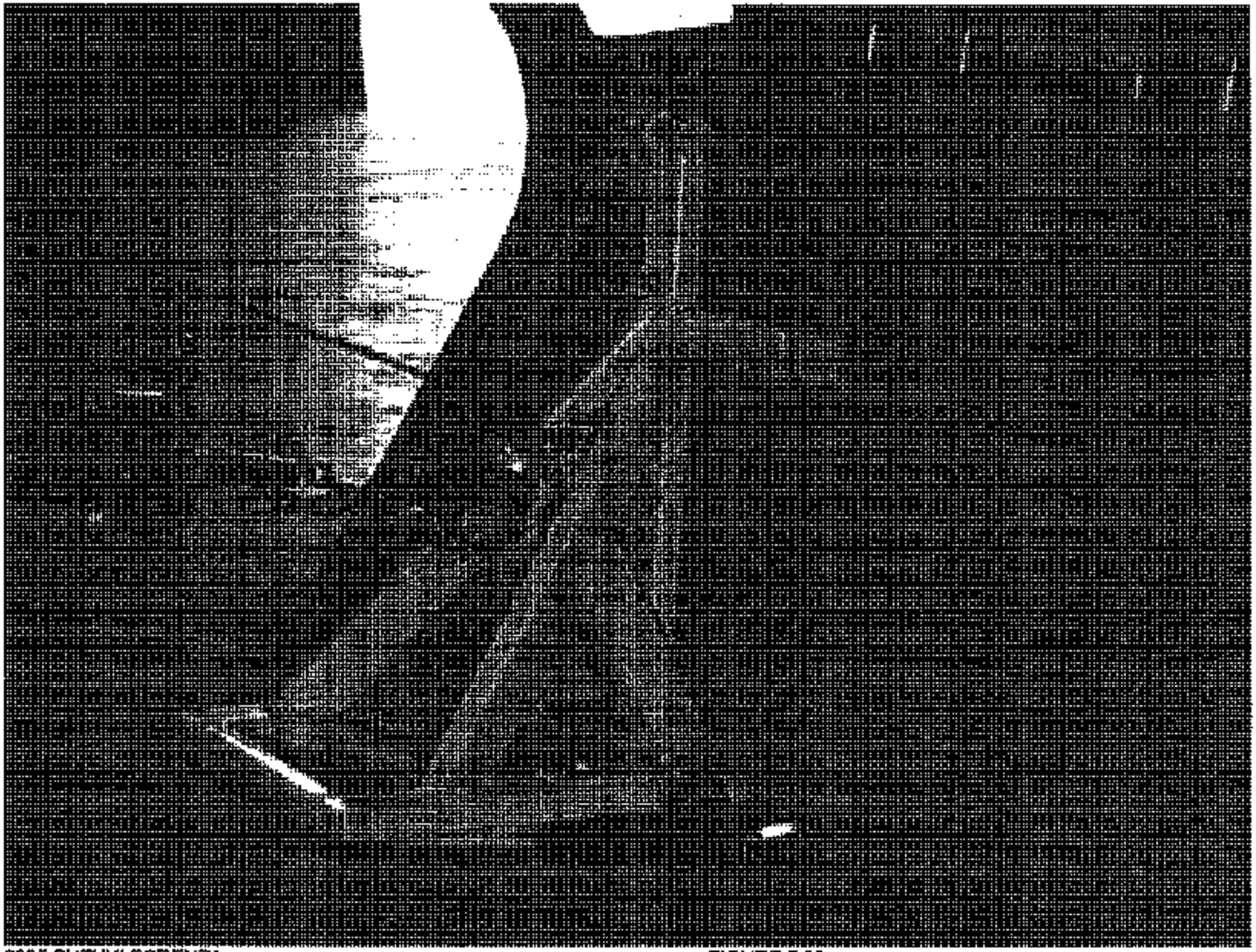
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.37
POST TEST ROW 2, LEFT SIDE WITH SFAD 2



2005 SUZUKI FORENZA
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.38
PRE-TEST ROW 2, RIGHT SIDE WITH SFAD 2



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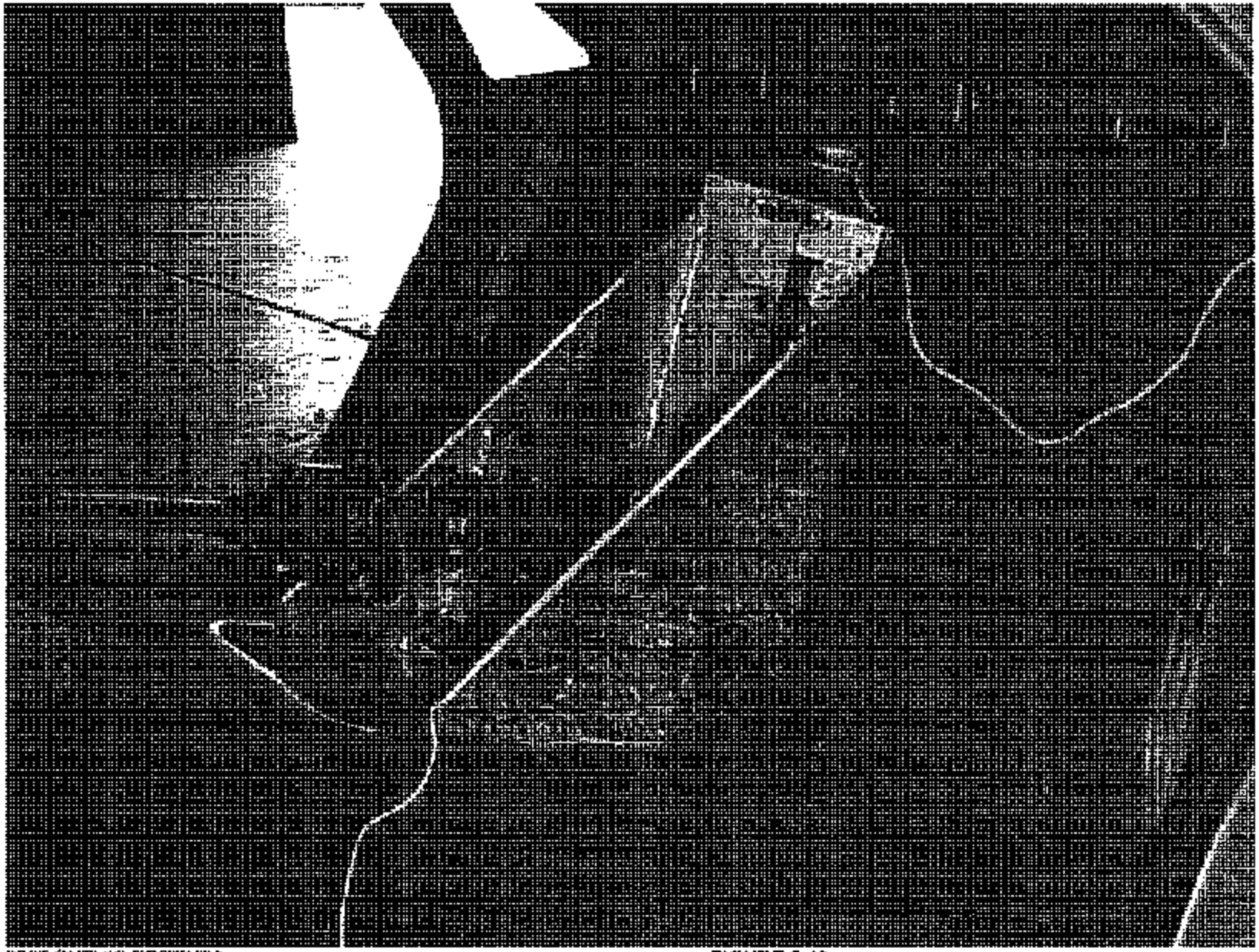
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.39
POST TEST ROW 2, RIGHT SIDE WITH SFAD 1



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NHTSA NO. CS0505
FMVSS NO. 225

FIGURE 5.40
PRE-TEST ROW 2, CENTER POSITION WITH SFAD 1

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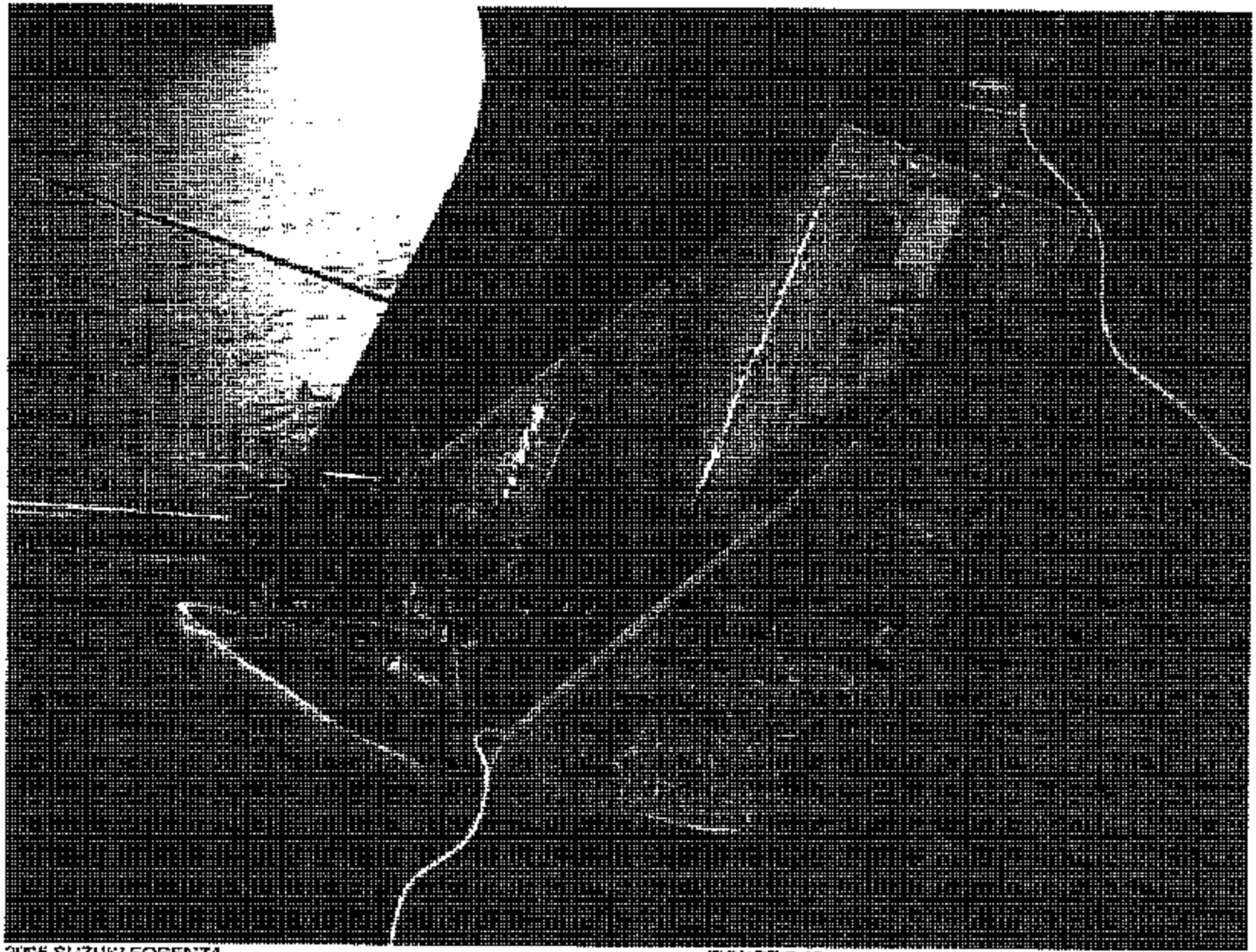
NHTSA NO. C50505
FMVSS NO. 225

FIGURE 5.41
PRE-TEST ROW 2, CENTER POSITION WITH SFAD 1



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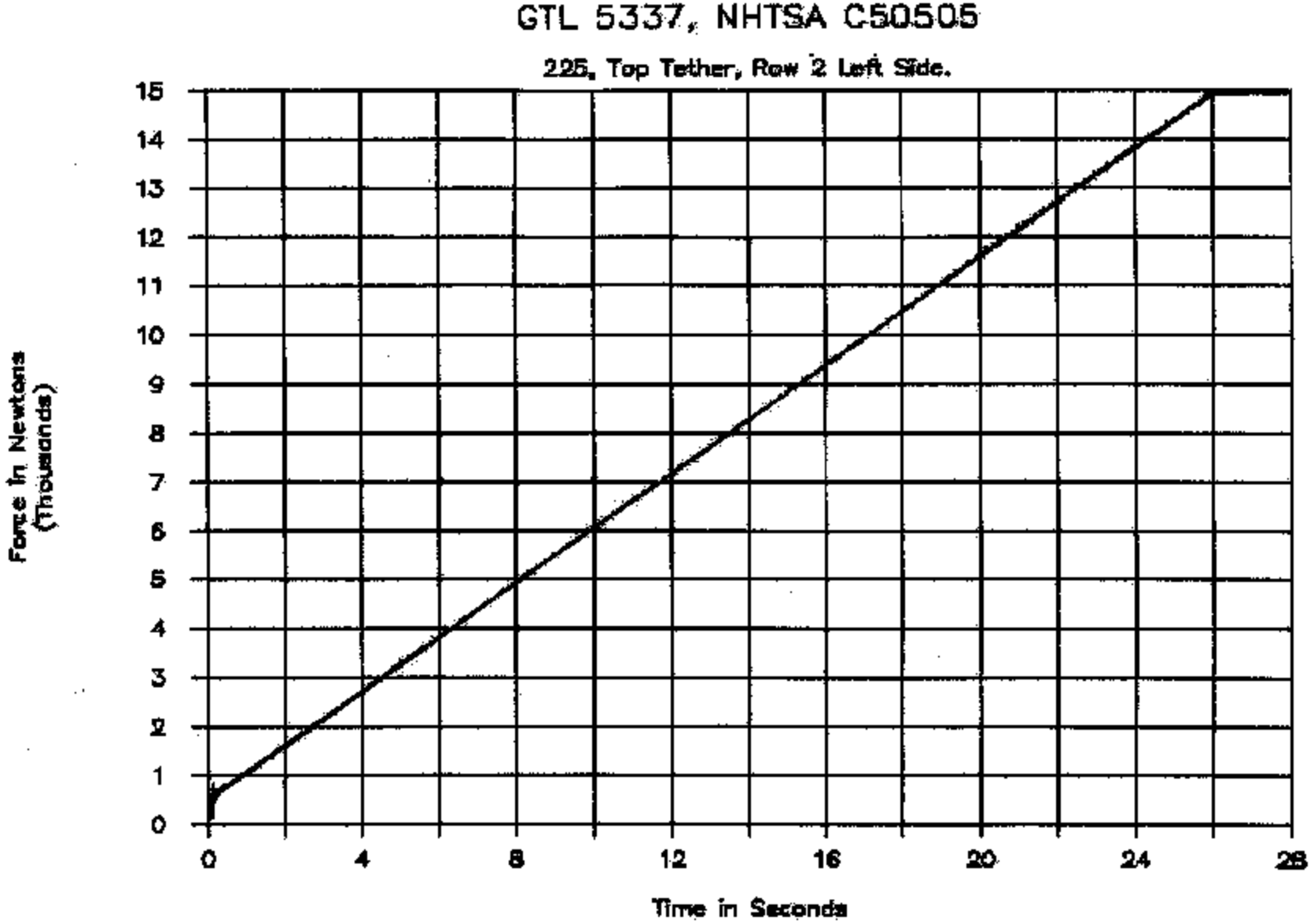
FMVSS NO. 225

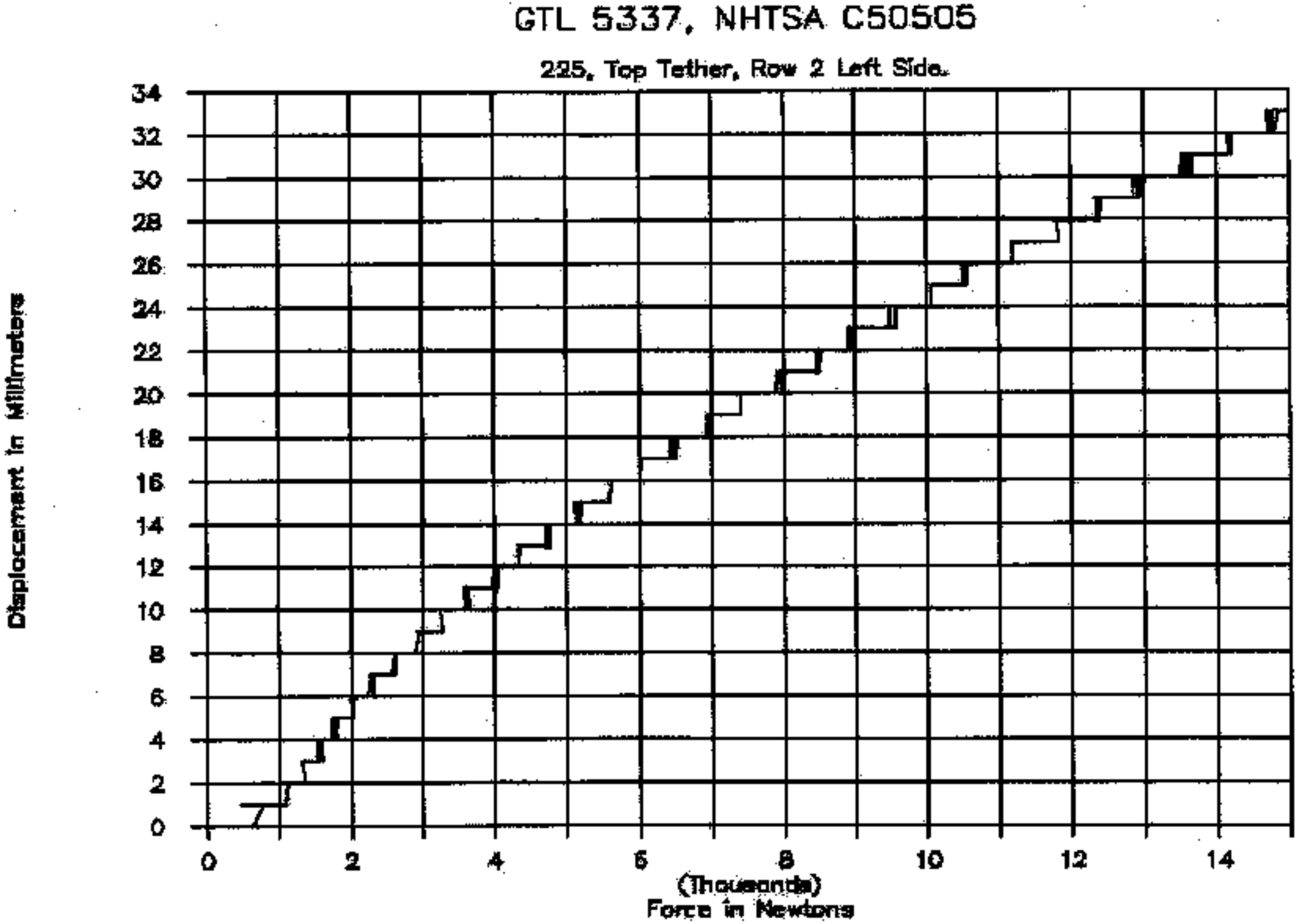
FIGURE 5.42
POST TEST ROW 2, CENTER POSITION WITH SFAD 1

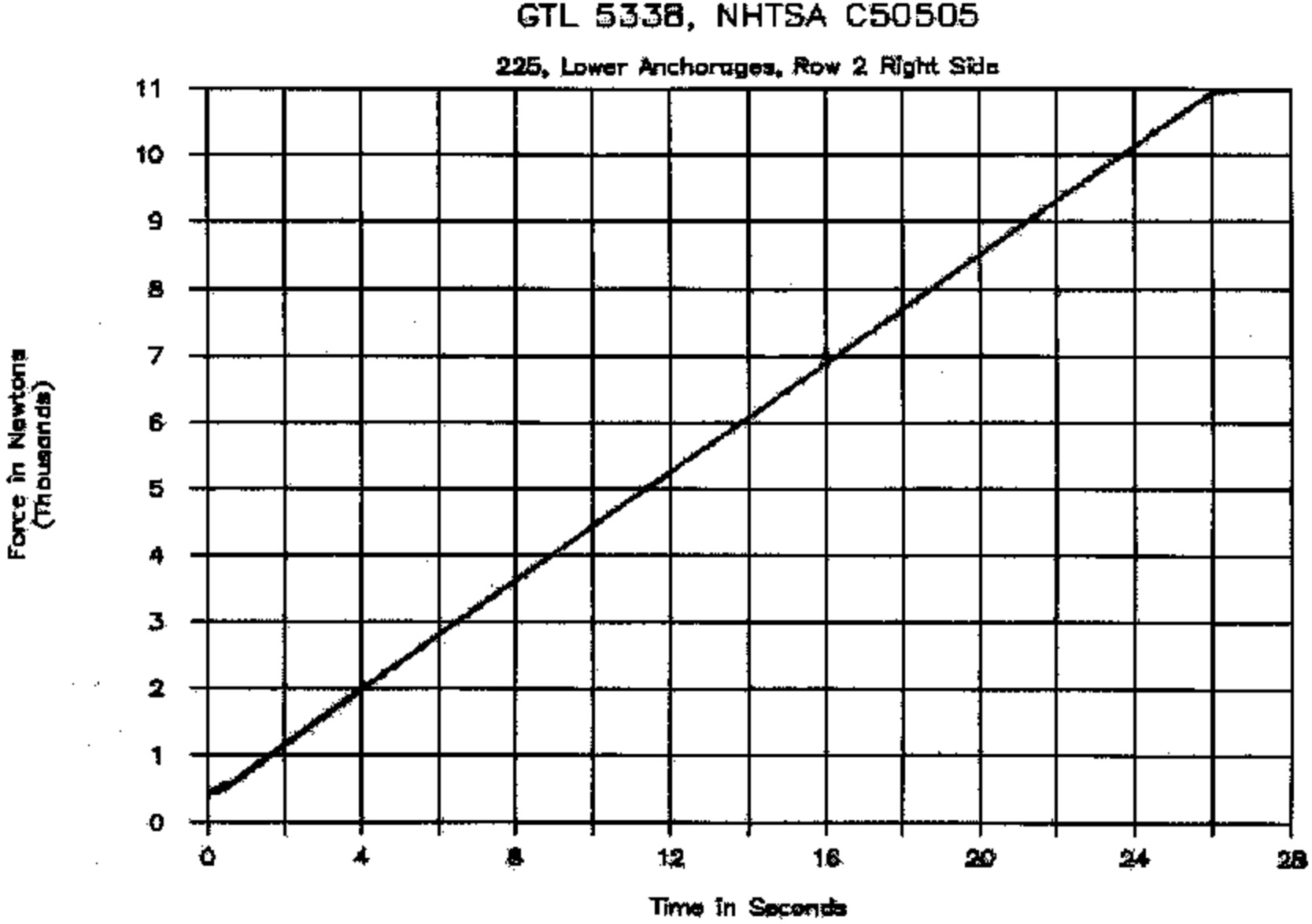
2005 SUZUKI FORENZA
NHTSA NO. C50506
FMVSS NO. 225

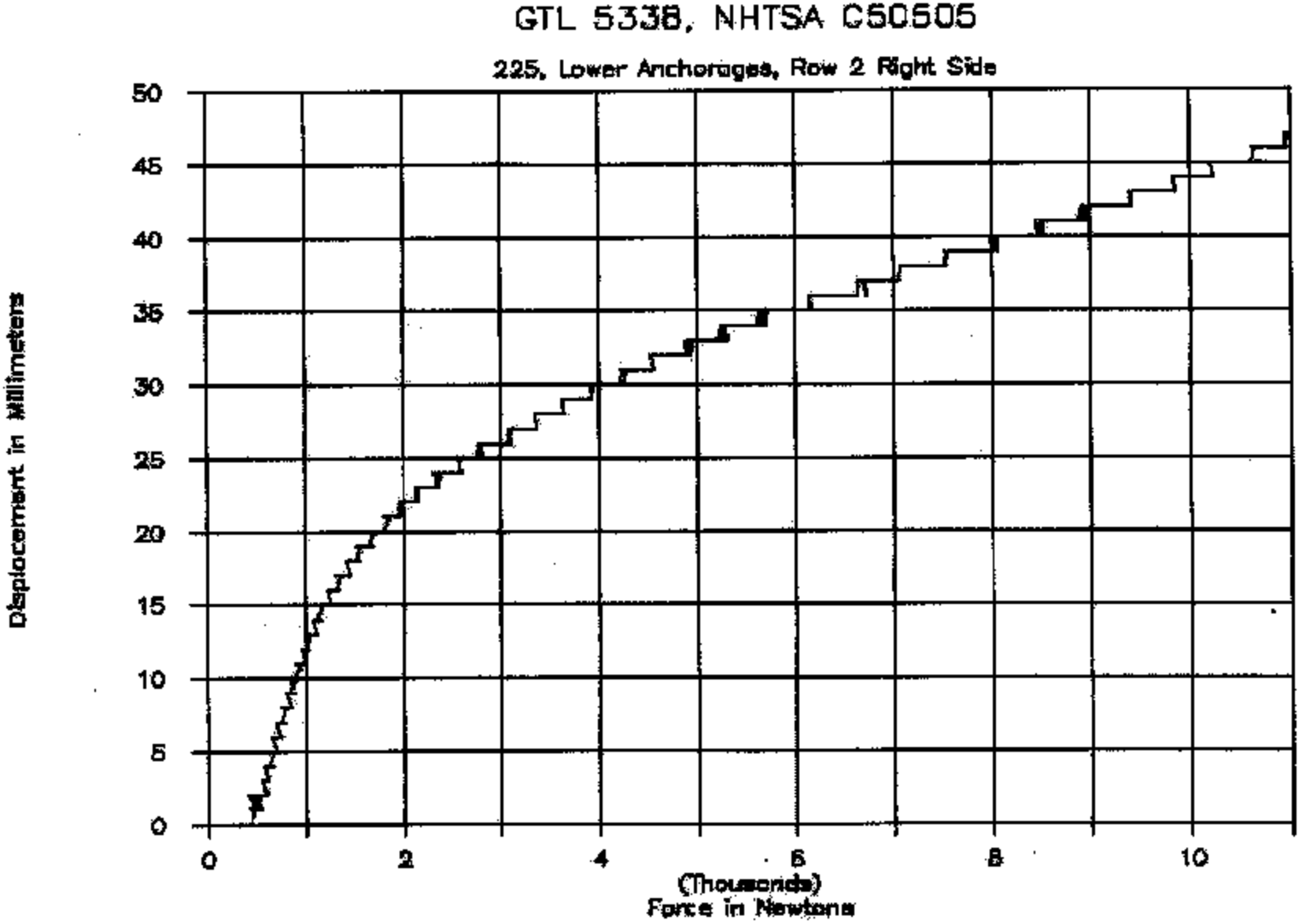
FIGURE 5.43
POST TEST ROW 2, CENTER POSITION WITH SFAD 1

SECTION 6
PLOTS


GTL 5337, NHTSA C50505
225, Top Tether, Row 2 Left Side.
Force in Newtons (Thousands)
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
0
4
8
12
16
20
24
28
Time in Seconds

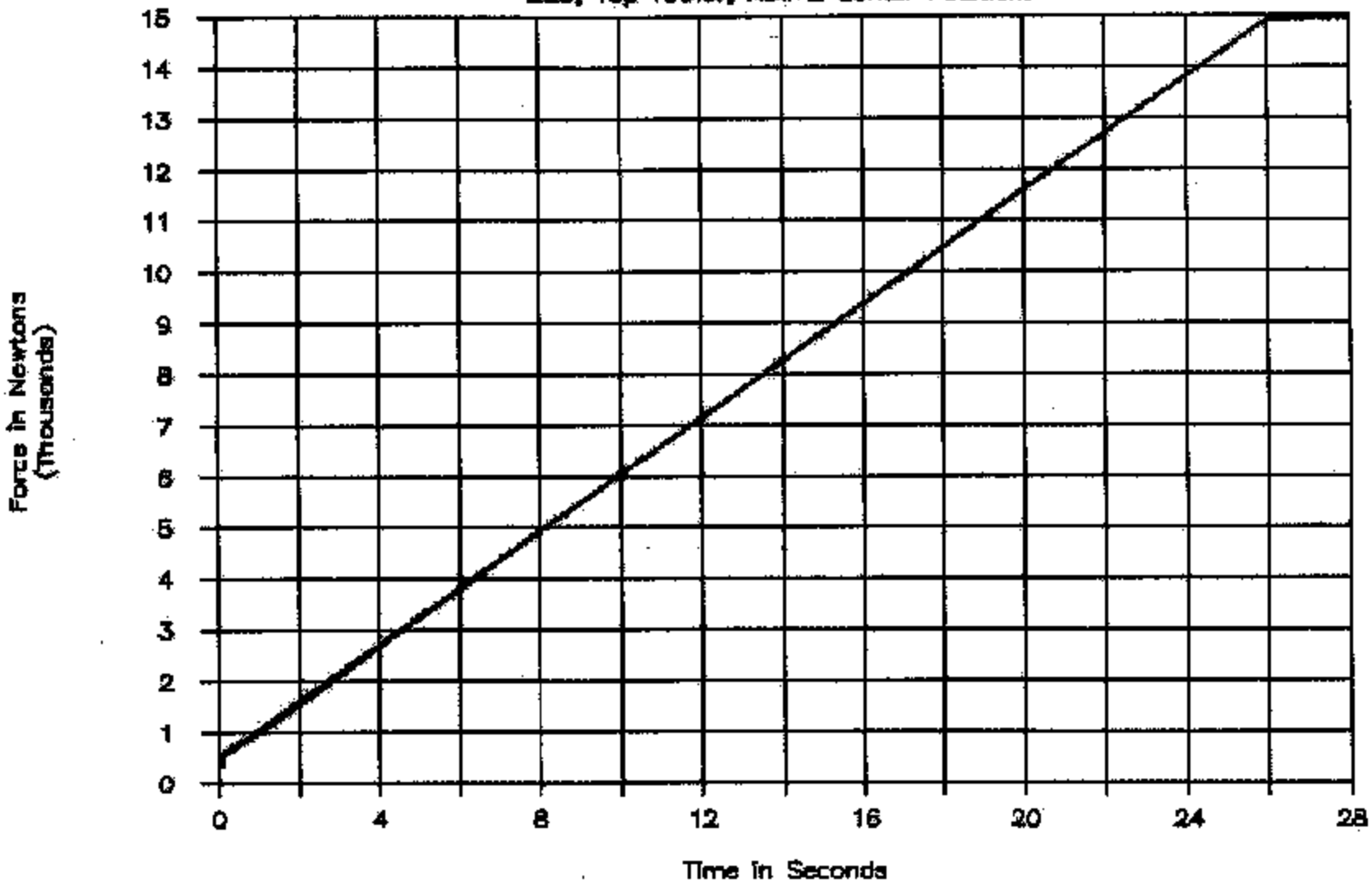

GTL 5337, NHTSA C50505
225, Top Tether, Row 2 Left Side.
Displacement in Millimeters
34
32
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
0
2
4
6
8
10
12
14
(Thousands)
Force in Newtons

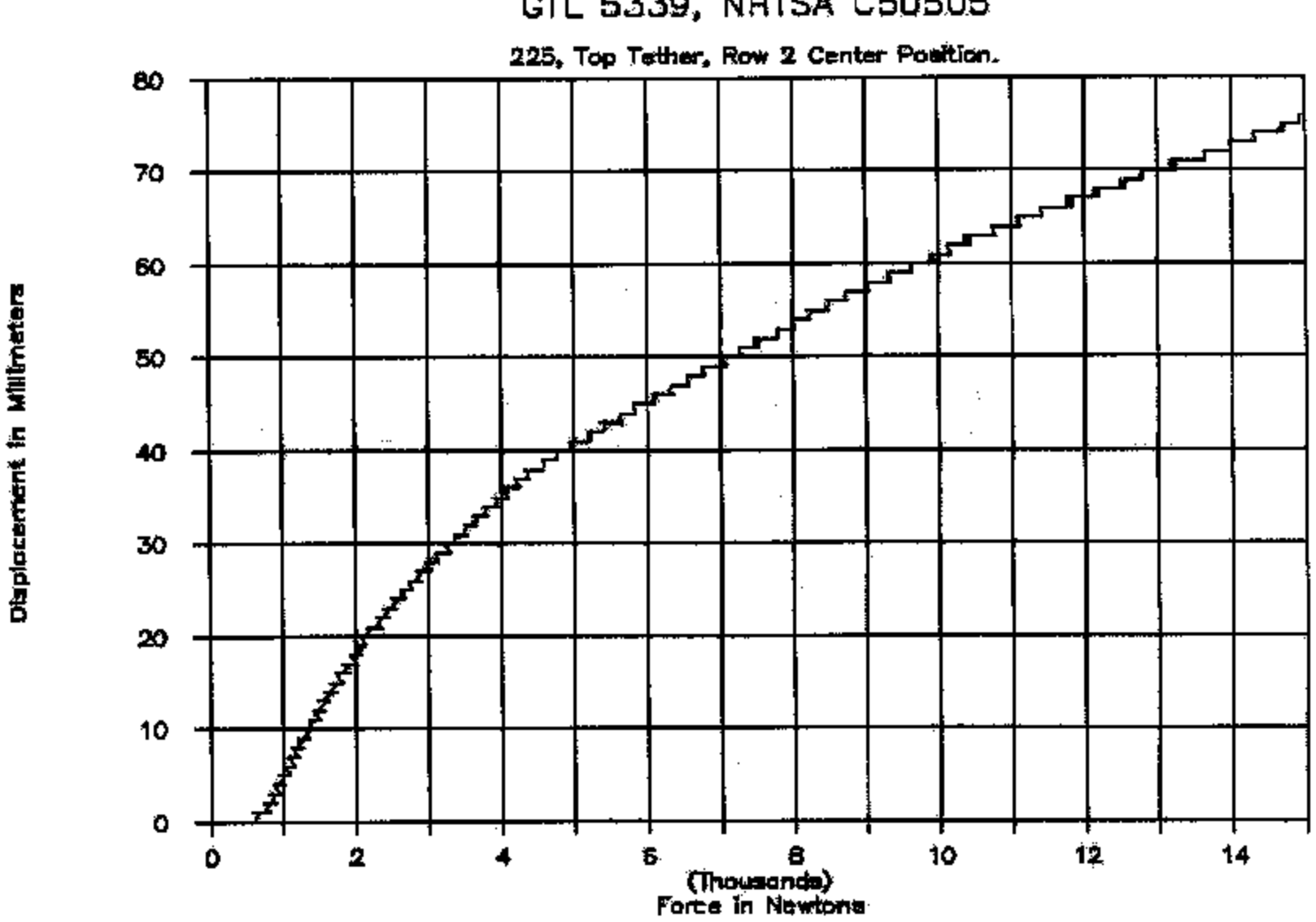

GTL 5338, NHTSA C50505
225, Lower Anchorages, Row 2 Right Side
Force in Newtons (Thousands)
11
10
9
8
7
6
5
4
3
2
1
0
0
4
8
12
16
20
24
28
Time in Seconds


GTL 5338, NHTSA C50505
225, Lower Anchorages, Row 2 Right Side
Displacement in Millimeters
50
45
40
35
30
25
20
15
10
5
0
0
2
4
6
8
10
(Thousands)
Force in Newtons

GTL 5339, NHTSA C50505

225, Top Tether, Row 2 Center Position.




GTL 5339, NHTSA C50505
225, Top Tether, Row 2 Center Position.
Displacement in Millimeters
80
70
60
50
40
30
20
10
0
0
2
4
6
8
10
12
14
(Thousands)
Force in Newtons

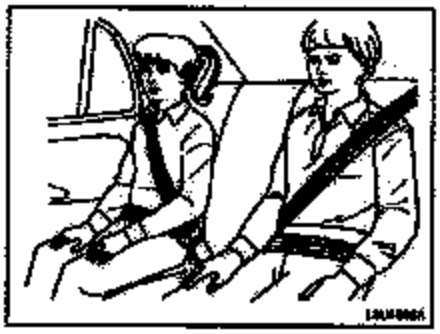
APPENDIX A
OWNER'S MANUAL CHILD RESTRAINT INFORMATION

Failure to follow these instructions may increase the risk of injury in a crash.

- Only use an extender for the person, vehicle and seating position it was provided for.
- A front safety belt extender must only be used in a front seating position, and a rear safety belt extender must only be used in a rear seating position.
- Safety belt extenders are not intended for use by pregnant women, and should only be used upon approval by their medical advisors.
- The extender has been designed for adults. Never use it for securing child seats.
- Do not use a safety belt extender if the open end of the extender's buckle is within 152 mm (6 inches) of the center of the occupant's body (See diagram).
- Remove and store the extender when it is not being used.

Child Restraints

Older Children



Older children who have outgrown booster seats should wear the vehicle's safety belts.

Q: What is the proper way to wear safety belts?

A: If possible, an older child should wear a lap-shoulder belt and get the additional restraint a shoulder belt can provide. The shoulder belt should not cross the face or neck. The lap belt should fit snugly below the hips, just touching the top of the thighs. It should never be worn over the abdomen, which could cause severe or even fatal internal injuries in a crash.

Accident statistics show that children are safer if they are restrained in the rear seat.

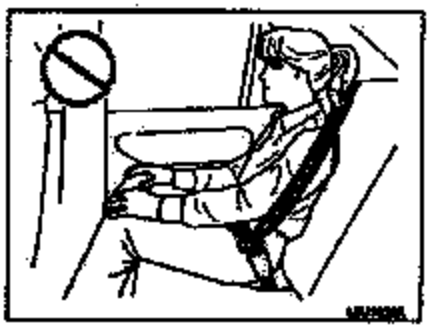
In a crash, children who are not buckled up can strike other people who are buckled up, or can be thrown out of the vehicle. Older children need to use safety belts properly.

Never do this.
Here two children are wearing the same belt. The belt can't properly spread the impact forces. In a crash, the two children can be crushed together and severely injured. A belt must be used by only one person at a time.

SEATS AND RESTRAINT SYSTEMS

Q: What if a child is wearing a lap-shoulder belt, but the child is so small that the shoulder belt is very close to the child's face or neck?

A: If the child is sitting in a seat next to a window, move the child toward the center of the vehicle. If the child is sitting in the center rear seat passenger position, move the child toward the safety belt buckle. In either case, be sure that the shoulder belt still is on the child's shoulder, so that in a crash the child's upper body would have the restraint that belts provide. If the child is so small that the shoulder belt is still very close to the child's face or neck, you might want to place the child in a seat that has a lap belt, if your vehicle has one.



Never do this.
Here a child is sitting in a seat that has a lap-shoulder belt, but the shoulder part is behind the child. If the child wears the belt in this way, in a crash the child might slide under the belt. The belt's force would then be applied right on the child's abdomen. This could cause serious or fatal injuries.

Wherever the child sits, the lap portion of the belt should be worn low and snug on the hips, just touching the child's thighs. This applies belt force to the child's pelvic bones in a crash.

Infants and Young Children

Everyone in a vehicle needs protection! This includes infants and all other children. Neither the distance traveled nor the age and size of the traveler changes the need to use safety restraints. In fact, the law in every state in the United States and in every Canadian province says children up to some age must be restrained while in a vehicle.

Every time infants and young children ride in vehicles, they should have the protection provided by appropriate restraints. Young children should not use the vehicle's adult safety belts alone, unless there is no other choice. Instead, they need to use a child restraint.

People should never hold a baby in their arms while riding in a vehicle. A baby doesn't weigh much – until a crash occurs. During a crash a baby will become so heavy it is not possible to hold it. For example, in a crash at only 25 mph (40 km/h), a 12-lb. (5.5 kg) baby will suddenly become a 240-lb. (110 kg) force on a person's arms. A baby should be secured in an appropriate restraint.

Children who are up against, or very close to, any air bag when it inflates can be severely injured or killed. Air bags plus lap-shoulder belts offer outstanding protection for adults and older children, but not for young children and infants. Neither the vehicle's safety belt system nor its air bag system is designed for them. Young children and infants need the protection that a child restraint system can provide.

Q: What are the different types of add-on child restraints?

A: Add-on child restraints, which are purchased by the vehicle's owner, are available in four basic types. Selection of a particular restraint should take into consideration not only the child's weight, height and age but also whether or not the restraint will be compatible with the motor vehicle in which it will be used.

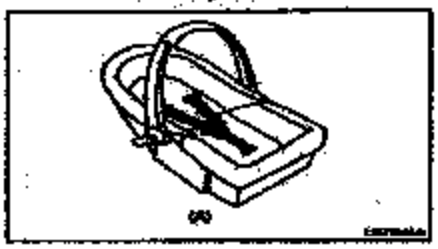
For most basic types of child restraints, there are many different models available. When purchasing a child restraint, be sure it is designed to be used in a motor vehicle. If it is, the restraint will have a label saying that it meets federal motor vehicle safety standards.

The restraint manufacturer's instructions that come with the restraint, state the weight and height limitations for a particular child restraint. In addition, there are many kinds of restraints available for children with special needs.

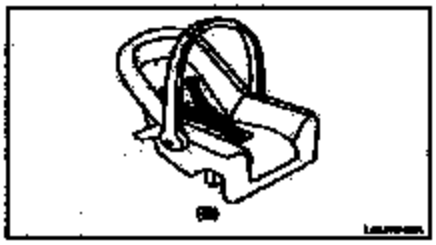
Newborn infants need complete support, including support for the head and neck. This is necessary because a newborn infant's neck is weak and its head weighs so much compared with the rest of its body. In a crash, an infant in a rear-facing seat settles into the restraint, so the crash forces can be distributed across the strongest part of an infant's body, the back and shoulders. Infants always should be secured in appropriate infant restraints.

The body structure of a young child is quite unlike that of an adult or older child, for whom the safety belts are designed. A young child's hip bones are still so small that the vehicle's regular safety belt may not remain low on the hip bones, as it should. Instead, it may settle up around the child's abdomen. In a crash, the belt would apply force on a body area that's unprotected by any bony structure. This alone could cause serious or fatal injuries. Young children always should be secured in appropriate child restraints.

Child Restraint Systems

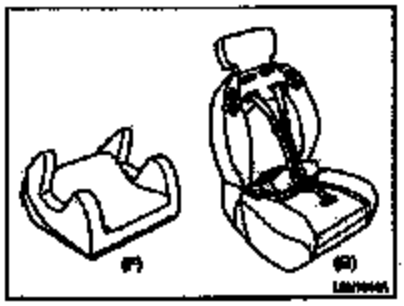


An infant car bed (A), a special bed made for use in a motor vehicle, is an infant restraint system designed to restrain or position a child on a continuous flat surface. Make sure that the infant's head rests toward the center of the vehicle.



A rear-facing infant seat (B) provides restraint with the seating surface against the back of the infant. The harness system holds the infant in place and, in a crash, aids to keep the infant positioned in the restraint.

A forward-facing child seat (C–E) provides restraint for the child's body with the harness and also sometimes with surfaces such as T-shaped or shelf-like shields.



A booster seat (F–G) is a child restraint designed to improve the fit of the vehicle's safety belt system. Some booster seats have a shoulder belt positioner, and some high-back booster seats have a five-point harness. A booster seat can also help a child to see out the window.

Q: How do child restraints work?

A: A child restraint system is any device designed for use in a motor vehicle to restrain, seat, or position children. A built-in child restraint system is a permanent part of the motor vehicle. An add-on child restraint system is a portable one, which is purchased by the vehicle's owner.

For many years, add-on child restraints have used the adult belt system in the vehicle. To help reduce the chance of injury, the child also has to be secured within the restraint. The vehicle's belt system secures the add-on child restraint in the vehicle, and the add-on child restraint's harness system holds the child in place within the restraint.

One system, the three-point harness, has straps that come down over each of the infant's shoulders and buckle together at the crotch. The five-point harness system has two shoulder straps, two hip straps and a crotch strap. A shield may take the place of hip straps. A T-shaped shield has shoulder straps that are attached to a flat pad which rests low against the child's body. A shelf- or pommel-type shield has straps that are attached to a wide, shelf-like shield that swings up or to the side.

When choosing a child restraint, be sure the child restraint is designed to be used in a vehicle. If it is, it will have a label saying that it meets federal motor vehicle safety standards.

Then follow the instructions for the restraint. You may find these instructions on the restraint itself or in a booklet, or both. These restraints use the belt system in your vehicle, but the child also has to be secured within the restraint to help reduce the chance of personal injury. When securing an add-on child restraint, refer to the instructions that come with the restraint which may be on the restraint itself or in a booklet, or both, and to this manual. The child restraint instructions are important, so if they are not available, obtain a replacement copy from the manufacturer.

Where to Put the Restraint

All child restraint systems are designed to be secured in vehicle seats by either safety belts (lap belts or the lap portion of lap-shoulder belts) or by special rigid lower anchor bars built into the seats. Wherever possible, SUZUKI recommends that child restraint systems be installed on the rear seat. According to accident statistics, children are safer when properly restrained in rear seating positions than in front seating positions. Never put a rear-facing child restraint in the front passenger seat. Here's why:

A child in a rear-facing child restraint can be severely injured or killed if the right front passenger's frontal air bag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating air bag.
(Continued)

(Continued)
Even though the passenger sensing system is designed to turn off the passenger's frontal air bag under certain conditions, no system is fail-safe, and no one can guarantee that an air bag will not deploy under some unusual circumstance, even though it is turned off. Always secure a rear-facing child restraint in the rear seat, even if the air bag is off.
If you need to secure a forward-facing child restraint in the right front seat, always move the front passenger seat as far back as it will go. It is better to secure the child restraint in a rear seat.

Wherever you install it, be sure to secure the child restraint properly.

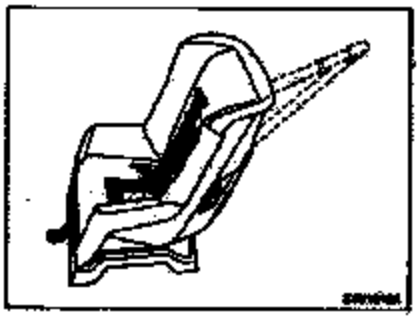
Keep in mind that an unsecured child restraint can move around in a collision or sudden stop and injure people in the vehicle. Be sure to properly secure any child restraint in your vehicle – even when no child is in it.

Children could be endangered in a crash if their child restraints are not properly secured in the vehicle. When installing a child restraint system, be sure to follow the instructions below. Be sure to secure the child in the restraint system according to the manufacturer's instructions.

Top Strap

Some child restraints have a top strap, or "top tether." It can help restrain the child restraint during a collision. For it to work, a top strap must be properly anchored to the vehicle. Some top strap-equipped child restraints are designed for use with or without the top strap being anchored. Others require the top strap always to be anchored. Be sure to read and follow the instructions for your child restraint. If yours requires that the top strap be anchored, don't use the restraint unless it is anchored properly.

If the child restraint does not have a top strap, one can be obtained, in kit form, for many child restraints. Ask the child restraint manufacturer whether or not a kit is available.



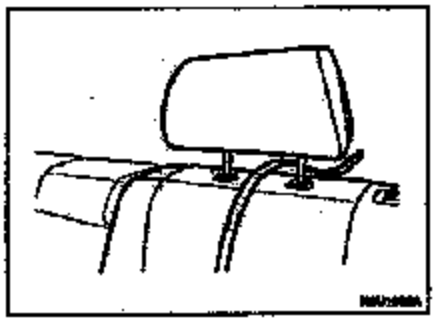
In Canada, the law requires that forward-facing child restraints have a top strap, and that the strap be anchored. In the United States, some child restraints also have a top strap. If your child restraint has a top strap, it should be anchored.

Anchor the top strap to an anchor point specified in "Top Strap Anchor Location" in this section. Be sure to use an anchor point located on the same side of the vehicle as the seating position where the child restraint will be placed.

located at both sides of the luggage compartment floor.

4) Hook the top strap to the anchor bracket and tighten the top strap according to the instructions provided by the child restraint system manufacturer. Be sure to attach the top strap to the corresponding anchor located directly behind the child restraint.

Each top tether bracket is designed to anchor only one child restraint. Attaching more than one child restraint to a single bracket could cause the anchor to come loose or even break during a crash. A child or others could be injured if this happens. To help prevent injury to people and damage to your vehicle, attach only one child restraint per bracket.

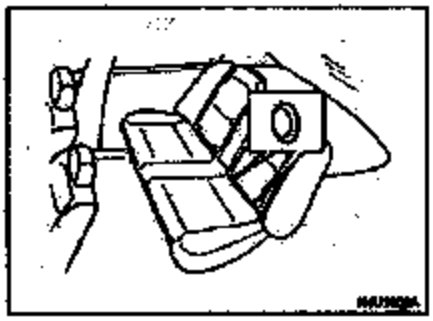


5) When routing the top strap, be sure to pass it between the head restraint and the rear seatback as shown. (Refer to "Head Restraints" in this section for details on how to raise or lower the head restraint.)
6) Make sure that cargo does not interfere with routing of the top strap.

Lower Anchorages and Top Tethers for Children (LATCH System)

Your vehicle has a LATCH system. You'll find anchors (A) in the rear outside seat positions.

To assist you in locating the lower anchors, each seating position with the LATCH system has a circular disk on the seatback at each lower anchor position.



The disks are located near the base of the two rear outside seating positions.

Canada only

SEATS AND RESTRAINT SYSTEMS

Each top tether bracket is designed to anchor only one child restraint. Attaching more than one child restraint to a single bracket could cause the anchor to come loose or even break during a crash. A child or others could be injured if this happens. To help prevent injury to people and damage to your vehicle, attach only one child restraint per bracket.

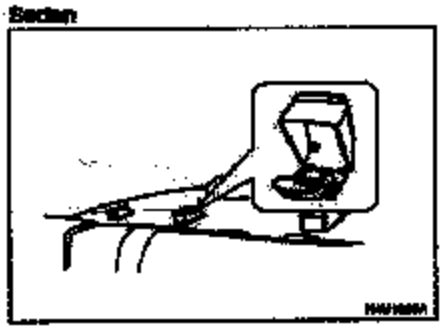
Once you have the top strap anchored, you'll be ready to secure the child restraint itself. Tighten the top strap when and as the child restraint manufacturer's instructions say.

Top Strap Anchor Location

Top strap anchors are already installed in your vehicle for the three rear seating positions.

Do not use a child restraint with a top strap in the right front passenger's position because there is no place to anchor the top strap.

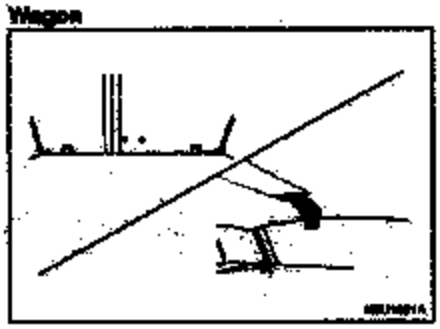
Sedan



You will find the anchors on your vehicle behind the rear seat on the filler panel.

Pull the front part of the plastic cover upward to access the top strap anchors.

Wagon

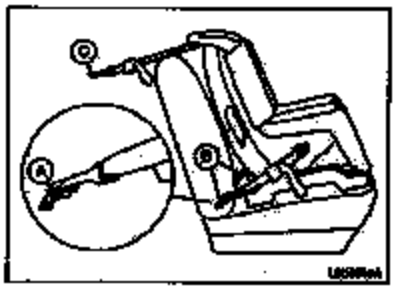


Top strap anchors are located at both sides of the floor mat in the rear cargo area behind the rear seat end at the center of the upper rear roof.

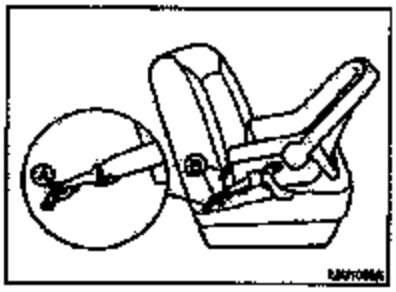
Securing a Child Restraint with Top Strap

Install the child restraint system as follows:

1) Remove the luggage compartment cover (if equipped).
2) Secure the child restraint on the rear seat using the procedure described in "Securing a Child Restraint in a Rear Seat Position" of this section.
3) Pull the front part of the plastic cover upward to access the top strap anchors.
   For the Wagon model, open the plastic cover to access the center top strap anchor. Side top strap anchors are



In order to use the system, you need either a forward-facing child restraint that has attaching points (B) at its base and a top tether anchor (C), or a rear-facing child restraint that has attaching points (B), as shown here.



With this type of child restraint, use the LATCH system instead of the vehicle's safety belts to secure the child restraint.

If a LATCH-type child restraint isn't attached to its anchorage points, the restraint won't be able to protect the child correctly. In a crash, the child could be severely injured or killed. Make sure that a LATCH-type child restraint is properly installed using the anchorage points. If your child restraint is not designed for the LATCH system, use the vehicle's safety belts to secure the restraint, following the instructions that come with that restraint, and also the instructions in this manual.

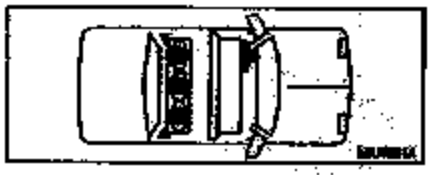
Securing a Child Restraint Designed for the LATCH System (Rear)

1) Find the anchors for the seating position you want to use, where the bottom of the seatback meets the back of the seat cushion.
2) Put the child restraint on the seat.
3) Attach the anchor points on the child restraint to the anchors in the vehicle. The child restraint instructions will show you how.
4) If the child restraint is forward-facing, attach the top strap to the top strap anchor. See "Top Strap" in this section. Tighten the top strap according to the child restraint instructions.
5) Push and pull the child restraint in different directions to be sure it is secure.

To remove the child restraint, simply unhook the top strap from the top tether anchor and then disconnect the lower anchor points.

SEATS AND RESTRAINT SYSTEMS

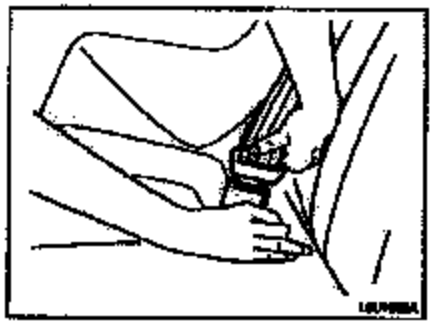
Securing a Child Restraint in a Rear Seat Position



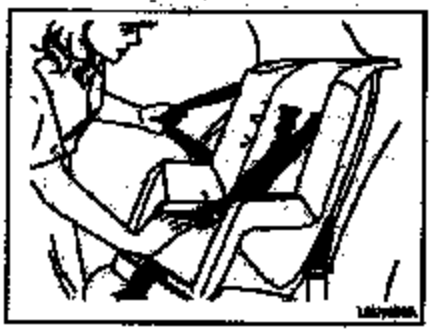
If your child restraint is equipped with the LATCH system, see "Lower Anchorages and Top Tethers for Children (LATCH System)" in this section. See "Top Strap" in this section if the child restraint has one.

If your child restraint does not have the LATCH system, you will be using the lap-shoulder belt to secure the child restraint in this position. Be sure to follow the instructions that come with the child restraint. Secure the child in the child restraint when and as the instructions say.

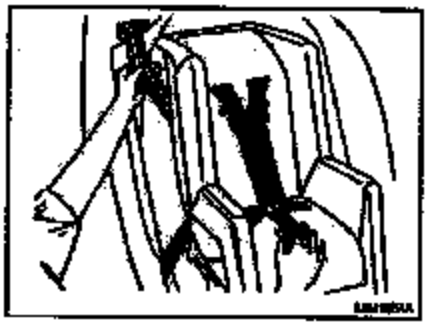
1) Put the restraint on the seat.
2) Pick up the latch plate, and run the lap and shoulder portions of the vehicle's safety belt through or around the restraint. The child restraint instructions will show you how.



3) Buckle the belt. Make sure the release button is positioned so you would be able to unbuckle the safety belt quickly if you ever had to.



4) Pull the rest of the shoulder belt all the way out of the retractor to get the look.



5) To tighten the belt, feed the shoulder belt back into the retractor while you push down on the child restraint. If you're using a forward-facing child restraint, you may find it helpful to use your knee to push down on the child restraint as you tighten the belt.
6) Push and pull the child restraint in different directions to be sure it is secure.

To remove the child restraint, just unbuckle the vehicle's safety belt and let it go back all the way. The safety belt will move freely again and be ready to work for an adult or larger child passenger.

Securing a Child Restraint in the Right Front Seat Position

Your vehicle has a right front passenger air bag. A rear seat is a safer place to secure a child restraint. See "Where to Put the Restraint" in this section.

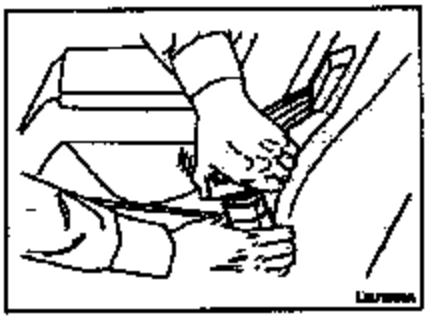
In addition, your vehicle has a passenger sensing system. The passenger sensing system is designed to turn off the right front passenger's frontal and side air bag when an infant or a small child is detected. See "Passenger Sensing System" and "Manual Seats" in this section for more information on this including important safety information.

A child in a rear-facing child restraint can be severely injured or killed if the right front passenger's frontal air bag inflates. This is because the back of the rear-facing child restraint would be very close to the inflating air bag. Even though the passenger sensing system is designed to turn off the passenger's frontal air bag under certain conditions, no system is fail-safe, and no one can guarantee that an air bag will not deploy under some unusual circumstances, even though it is turned off. Always secure a rear-facing child restraint in the rear seat, even if the air bag is off.

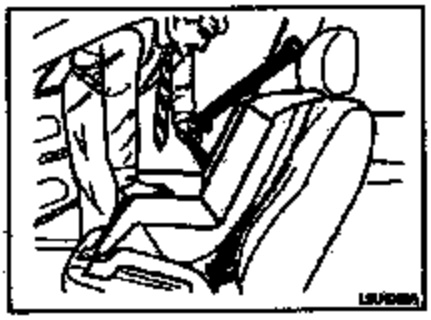
If you need to secure a forward-facing child restraint in the right front seat position, move the seat as far back as it will go before securing the forward-facing child restraint. See "Manual Seats" in this section.

If you need to secure a forward-facing child restraint in the right front seat, you will be using the lap-shoulder belt to secure the child restraint, even if the child restraint is equipped with the LATCH system. Be sure to follow the instructions that came with the child restraint. Secure the child in the child restraint when and as the instructions say.

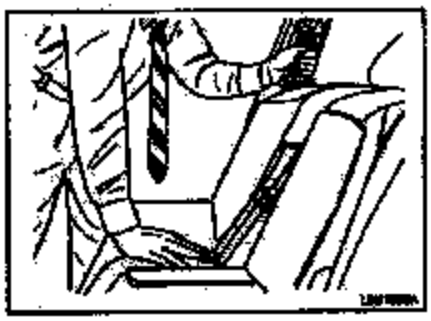
1) Your vehicle has a right front passenger's frontal air bag. See "Passenger Sensing System" in this section. Always secure a rear-facing child restraint in the rear seat, even if the air bag is off. If your child restraint is forward-facing, move the seat as far back as it will go before securing the child restraint in this seat. See "Manual Seats" in this section.
   When the passenger sensing system has turned off the right front passenger's frontal and side air bag, the passenger air bag off indicator should light. See "Passenger Sensing System" in this section.
   A thick layer of additional material such as a blanket, or aftermarket equipment such as seat covers heaters or massagers, located between the seat cushion and the child restraint or small occupant, can affect how the passenger sensing system operates. Remove any additional material from the seat cushion before installing/securing the child restraint or small occupant.
2) Put the child restraint on the seat.
3) Pick up the latch plate, and run the lap and shoulder portions of the vehicle's safety belt through or around the restraint. The child restraint instructions will show you how.



4) Buckle the belt. Make sure the release button is positioned so you would be able to unbuckle the safety belt quickly if you ever had to.



5) Pull the rest of the shoulder belt all the way out of the retractor to set the lock.



6) To tighten the belt, feed the shoulder belt back into the retractor while you push down on the child restraint. You may find it helpful to use your knee to push down on the child restraint as you tighten the belt.
7) Push and pull the child restraint in different directions to be sure it is secure.
8) If the air bag is off, the passenger air bag off indicator located in the clock display in the center of the instrument panel will be lit.

To remove the child restraint, just unbuckle the vehicle's safety belt and let it go back all the way. The safety belt will move freely again and be ready to work for an adult or larger child passenger.

Supplemental Restraint System (air bags)

This section explains the frontal and side impact air bag systems.

This section of the owner's manual describes the protection provided by your vehicle's SUPPLEMENTAL RESTRAINT SYSTEM (advanced air bags). Please read and follow ALL these instructions carefully to minimize your risk of severe injury or death in the event of a collision.

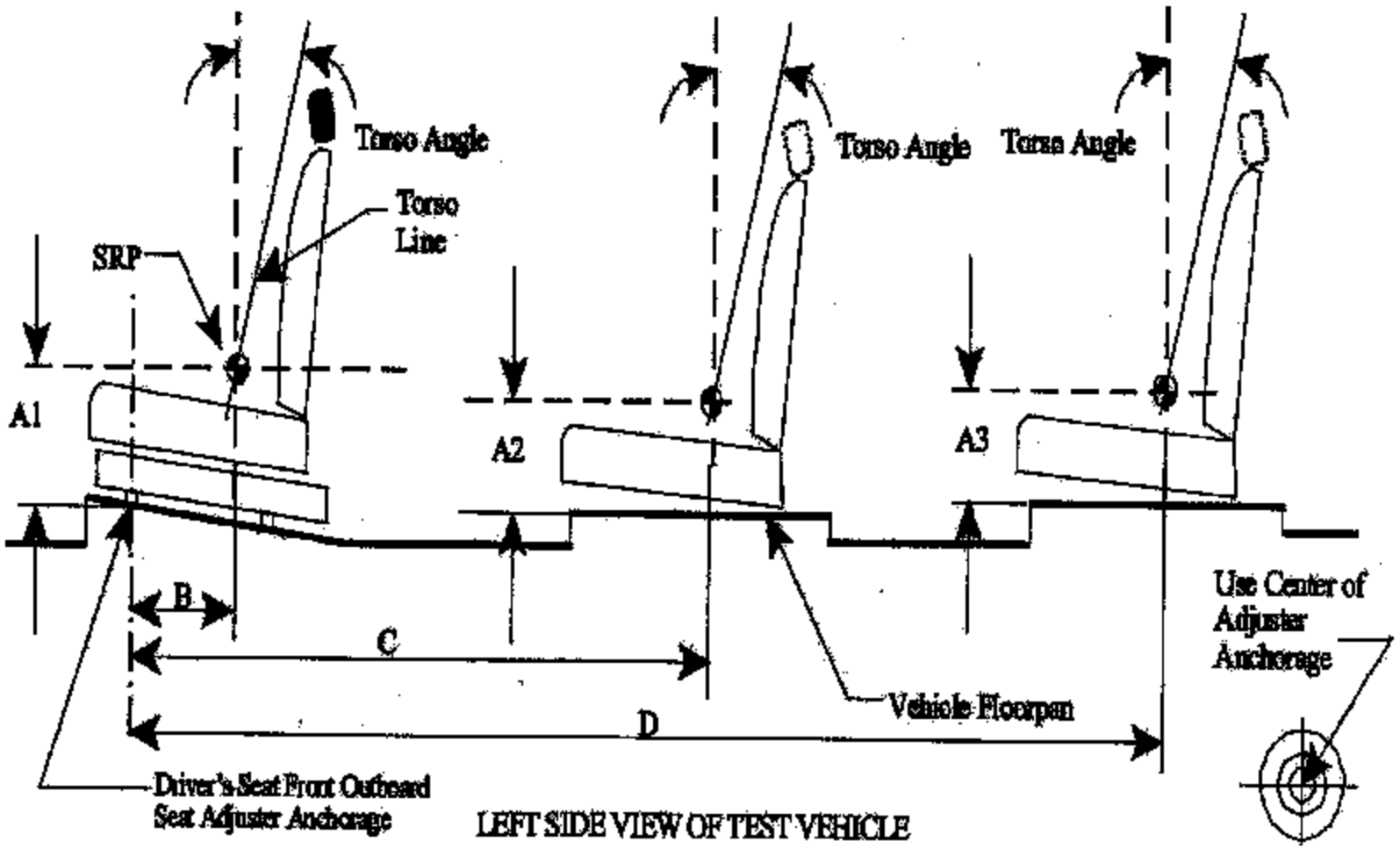
Your vehicle has an advanced frontal air bag for the driver and an advanced frontal air bag for the right front passenger. Your vehicle also has side impact air bags for the driver and right front passenger.

Your vehicle is equipped with a Supplemental Restraint System consisting of the following components in addition to a lap-shoulder belt at each front seating position.

APPENDIX B
MANUFACTURER'S DATA

SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA
FOR FMVSS 225
(All dimensions in mm[1])

Model Year: 2005 ; Make: Suzuki ; Model: Forenza ; Body Style: 4-Door Notchback Sedan
Seat Style: Front row: Bucket ; Second row: Bench ; Third row: -



LEFT SIDE VIEW OF TEST VEHICLE

Table 1. Seating Positions[1] and Torso Angles

		Left (Driver Side)	Center (if any)	Right
A1		(Driver) 213	-	(Front Passenger) 213
A2		78	80	78
A3		-	-	-
B		323	-	323
C		1139	1109	1139
D		-	-	-
Torso Angle (degree)	Front Row	25	-	25
	Second Row	27	22	27
	Third Row	-	-	-

Note: 1. All dimensions are in mm. If not, provide the unit used.

SEATING REFERENCE POINT
FOR FMVSS 225
(All dimensions in mm)

Model Year: 2005 ; Make: Suzuki ; Model: Forenza ; Body Style: 4-Door Notchback Sedan
Seat Style: Front row: Bucket ; Second row: Bench ; Third row: -

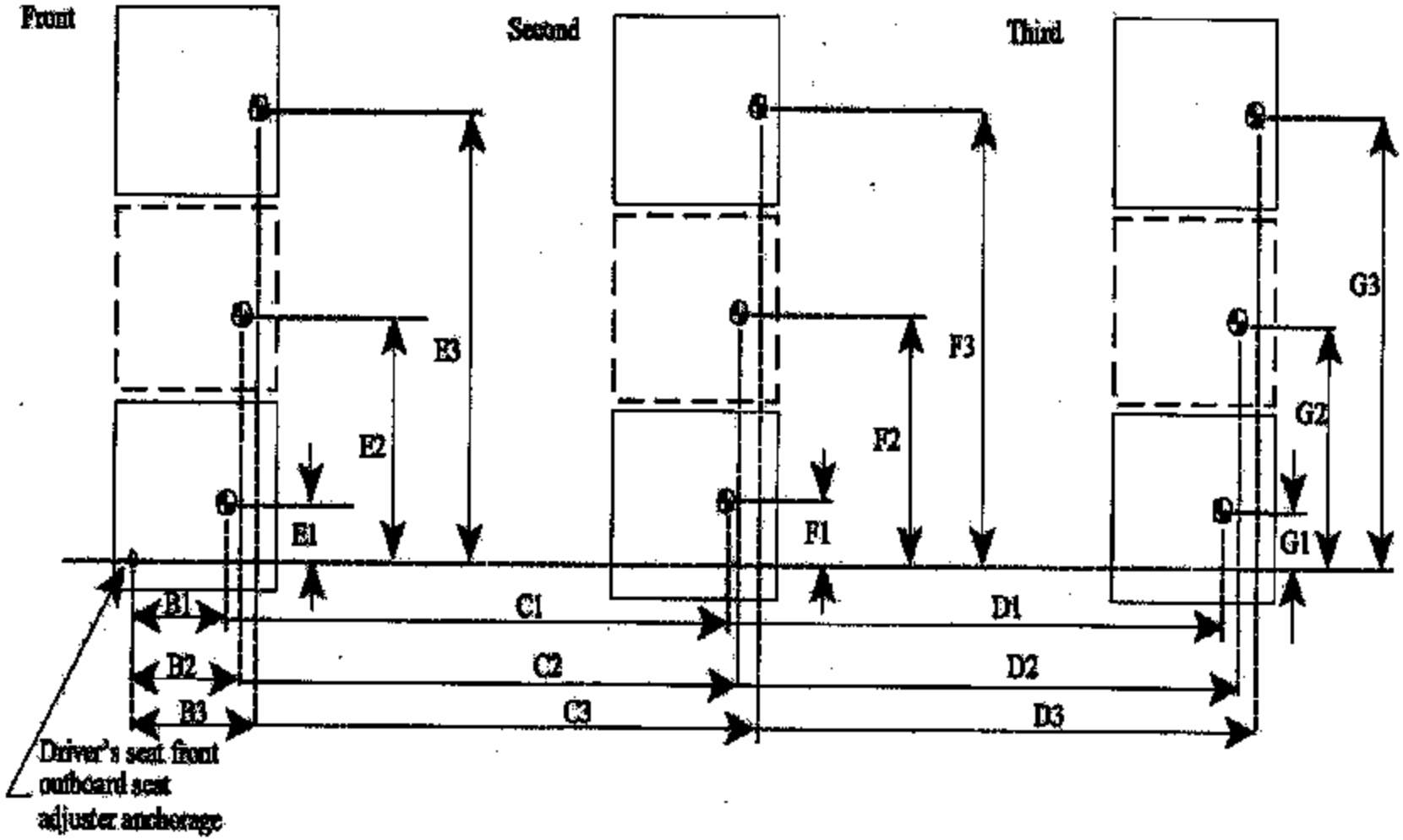


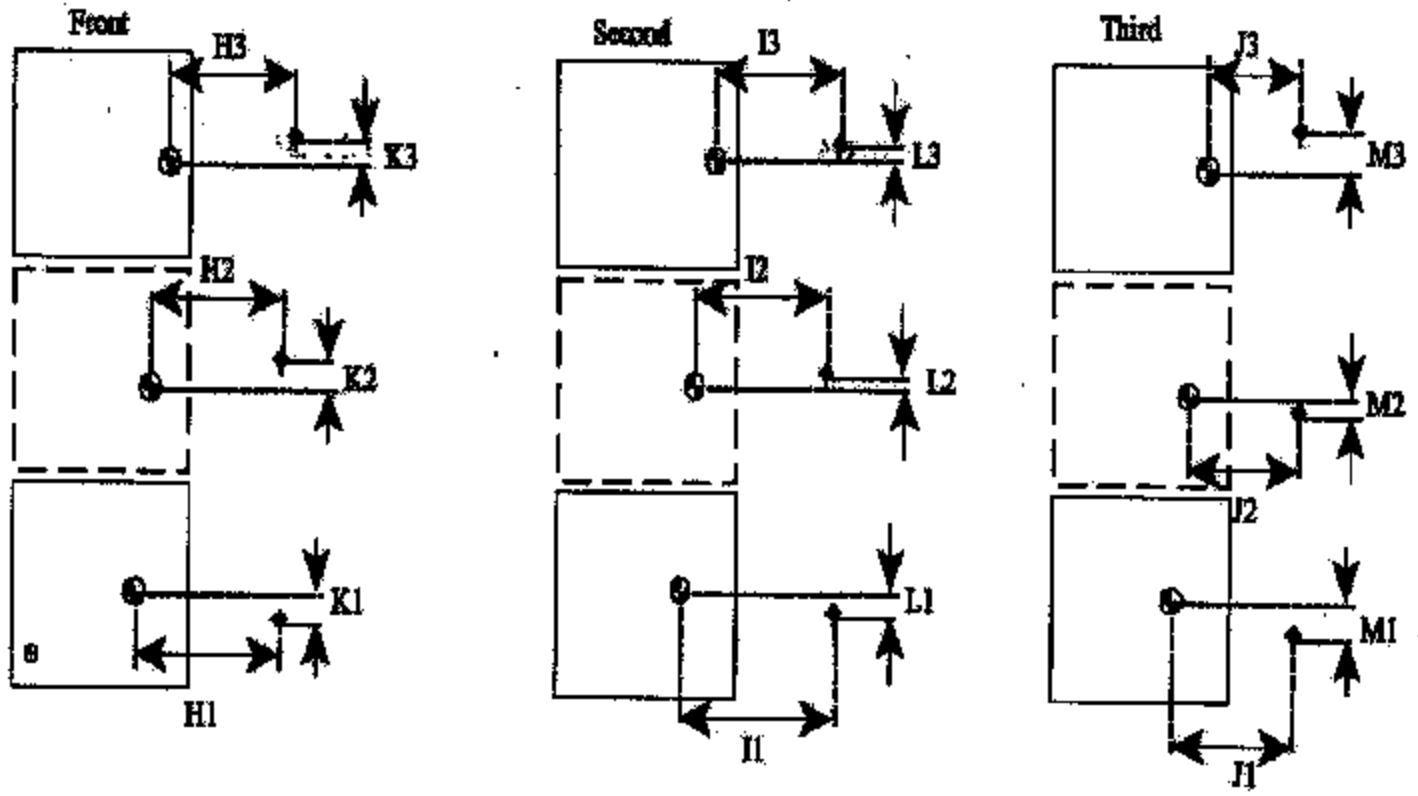
Table 2. Seating Reference Point and Tether Anchorage Locations

Seating Reference Point (SRP)		Distance from Driver's front outboard seat adjuster anchorage[1]
Front Row	B1	323
	E1	240
	B2	-
	E2	-
	B3	323
	E3	940
Second Row	C1	1139
	F1	255
	C2	1109
	F2	590
	C3	1139
	F3	925
Third Row	D1	-
	G1	-
	D2	-
	G2	-
	D3	-
	G3	-

Note: 1. Use the center of anchorage.

TETHER ANCHORAGE LOCATIONS
FOR FMVSS 225
(All dimensions in mm)

Model Year: 2005 ; Make: Suzuki ; Model: Forenza ; Body Style: 4-Door Notchback Sedan
Seat Style: Front row: Bucket ; Second row: Bench ; Third row: -



●:SRP

✦: Tether anchorage

Note: 1. The location shall be measured at the center of the bar.

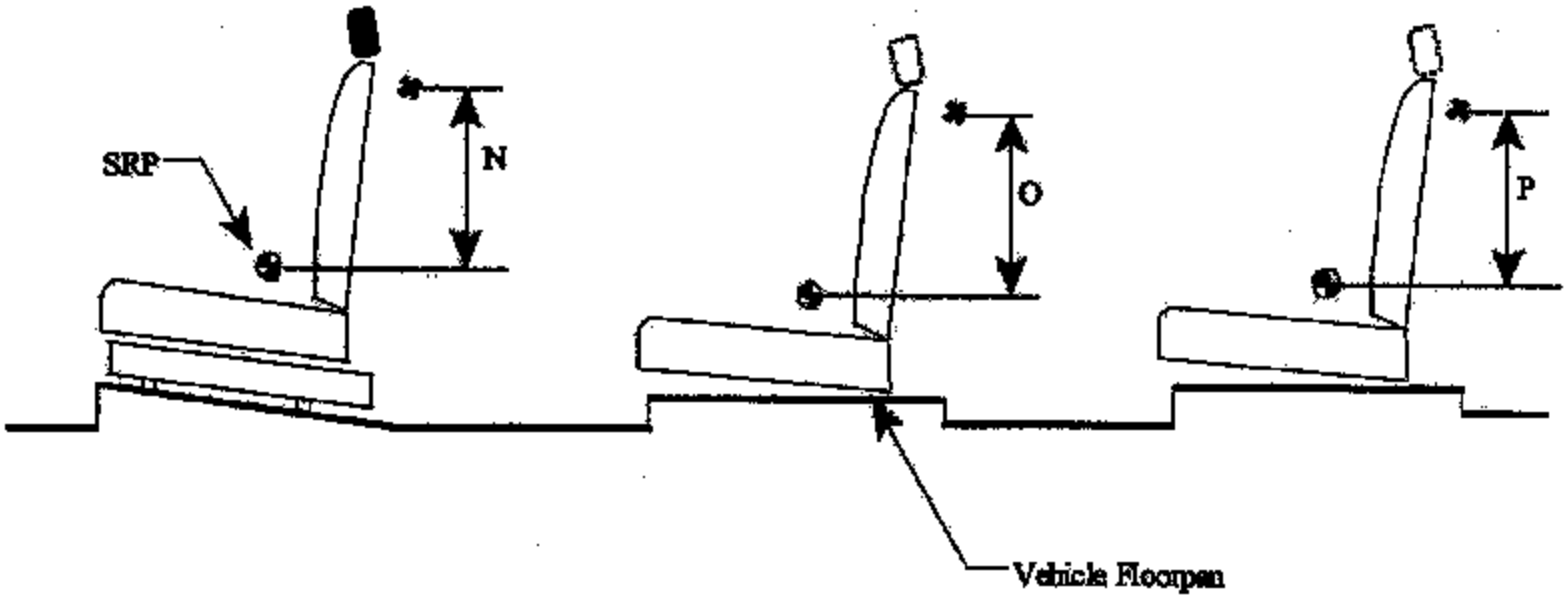
Table 3. Seating Reference Point and Tether Anchorage Locations

Seating Reference Point (SRP)	Distance from SRP	
Front Row	H1	N/A
	K1	N/A
	H2	N/A
	K2	N/A
	H3	N/A
	K3	N/A
Second Row	I1	1008
	L1	0
	I2	1035
	L2	0
	I3	1008
	L3	0
Third Row	J1	N/A
	M1	N/A
	J2	N/A
	M2	N/A
	J3	N/A
	M3	N/A

Note: 1. Use the center of anchorage.

TETHER ANCHORAGE LOCATIONS - VERTICAL
FOR FMVSS 225
(All dimensions in mm)

Model Year: 2005 ; Make: Suzuki ; Model: Forenza ; Body Style: 4-Door Notchback Sedan
Seat Style: Front row: Bucket ; Second row: Bench ; Third row: -



LEFT SIDE VIEW OF TEST VEHICLE

Table 4. Vertical Dimension For The Tether Anchorage

Seating Row	Vertical Distance from Seating Reference Point	
Front Row	N1 (Driver)	N/A
	N2 (Center)	N/A
	N3 (Right)	N/A
Second Row	O1 (Left)	114
	O2 (Center)	61
	O3 (Right)	114
Third Row	P1 (Left)	N/A
	P2 (Center)	N/A
	P3 (Right)	N/A

Note: 1. All dimensions are in mm. If not, provide the unit used.

Test Procedures Used for Compliance Tests

Tether Anchorages

Seating Location		FMVSS Section(s) - Req.
Front	Driver	N/A
	Center (if any)	N/A
	Right (if any)	N/A
Second	Left	S6.2.1 , S6.3.1 , S4.4
	Center	S6.2.1 , S6.3.1 , S4.4
	Right (if any)	S6.2.1 , S6.3.1 , S4.4
Third	Left	N/A
	Center	N/A
	Right	N/A
Fourth	Left	N/A
	Center	N/A
	Right	N/A

Lower Anchorages

Seating Location		FMVSS Section(s) - Req.
Front	Driver	N/A
	Center (if any)	N/A
	Right (if any)	N/A
Second	Left	S9.4
	Center	N/A
	Right	S9.4
Third	Left	N/A
	Center	N/A
	Right	N/A
Fourth	Left	N/A
	Center	N/A
	Right	N/A

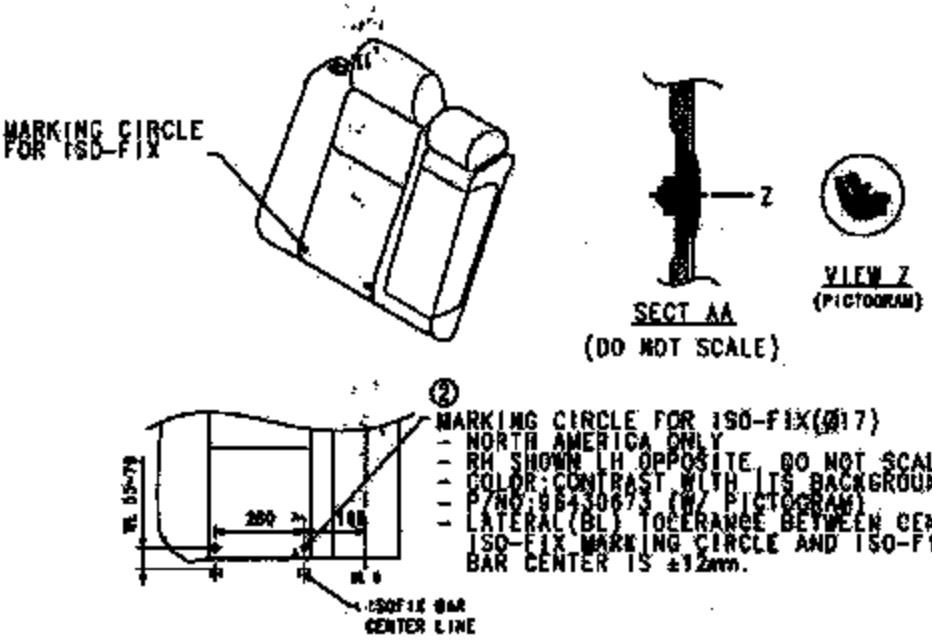
For each anchorage system, provide the following information:

1. **Lower Anchorage Dimensions:** Whether the anchorages are certified with S15.1.2.1 of FMVSS No. 225.
   O.K
2. **Lower Anchorage Location:** Whether the anchorages are certified with S15.1.2.2 of FMVSS No. 225. If the anchorages are certified with S15.1.2.2, provide the pitch, roll and yaw angles.

   Roll : -1.1° (RH) / +0.9° (LH) / Pitch : +10.3° (RH) / +10.4° (LH)

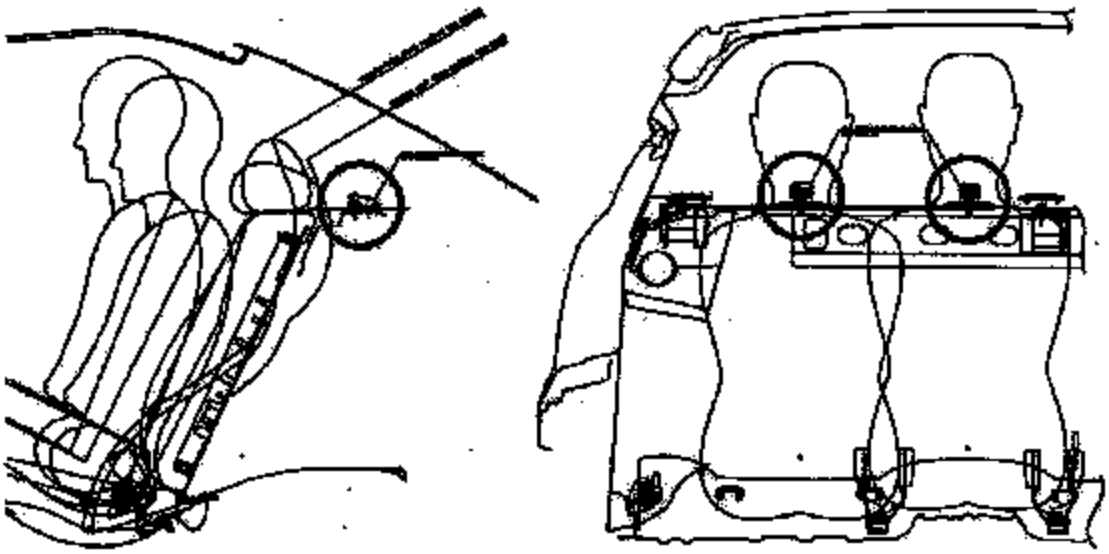
   Yaw : +0.9° (RH) / +0.9° (LH)

3 **Lower Anchorage Marking and Conspicuity:** Whether the anchorages are certified with S15.4 of FMVSS No. 225. If guidance fixtures are used, provide the location of the seating systems that are equipped with the guidance fixture.



Lower Anchorage Marking and Conspicuity
-ISOFIX circle markings with pictogram are used.
(4EA/vehicle,material:ABS)
-Above Picture shows the location of marking in the seat

4. **Location of Tether Anchorage:** Applicable section of FMVSS No. 225 for the option used for its certification.



Above Picture shows the locations of Tether Anchor in the vehicle.

5. **Number of Tether Anchorage:** Applicable section of FMVSS No. 225 for the option used for its certification

3 Point

APPENDIX C
LABORATORY NOTICE OF TEST FAILURE

LABORATORY NOTICE OF TEST FAILURE TO OVSC

FMVSS NO.: 225 TEST DATE: 08/10/05

LABORATORY: General Testing Laboratories, Inc.

CONTRACT NO.: DTNH22-02-D-01043 ; DELV. ORDER NO.:

LABORATORY PROJECT ENGINEER'S NAME: Grant Farrand

TEST VEHICLE MAKE/MODEL/BODY STYLE: 2005 Suzuki Forenza

VEHICLE NHTSA NO.: C50505 : VIN: KL5JD56Z15K080227

VEHICLE MODEL YEAR: 2005 : BUILD DATE: 08/04

TEST FAILURE DESCRIPTION: The lower child restraint anchor bars for the 2nd row seating positions are more than 70 mm behind point Z when measured with the CRF. (Anchors measure 75 mm).

S225 REQUIREMENT, PARAGRAPH S15.1.2.2(1) :Not more than 70 mm Behind point Z of the CRF.

NOTIFICATION TO NHTSA (COTR): Amanda Prescott

DATE: 08/10/05 BY: Grant Farrand

REMARKS: