

REPORT NUMBER 225-GTL-06-001

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

**FORD MOTOR CO.  
2006 FORD FIVE HUNDRED, PASSENGER CAR  
NHTSA NO. C60200**

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



OCTOBER 13, 2006

**FINAL REPORT**

**PREPARED FOR**

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

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Prepared By: Debbie Messick  
Approved By: Grant Farnam  
Approval Date: 10/12/06

FINAL REPORT ACCEPTANCE BY OVSC:

Accepted By: Edward E. Chan  
Acceptance Date: 10/12/06

|  |                                    |   |
|--|------------------------------------|---|
| 1. Report No.<br>225-GTL-06-001  | 2. Government Accession No.<br>N/A | 3. Recipient's Catalog No.<br>N/A   |
| 4. Title and Subtitle<br>Final Report of FMVSS 225 Compliance Testing of<br>2006 FORD FIVE HUNDRED, PASSENGER CAR<br>NHTSA No. C60200  |                                    | 5. Report Date<br>October 13, 2006  |
|  |                                    | 6. Performing Organ. Code<br>GTL  |
| 7. Author(s)<br>Grant Farrand, Project Engineer<br>Debbie Messick, Project Manager   |                                    | 8. Performing Organ. Rep#<br>GTL-DOT-06-225-001   |
| 9. Performing Organization Name and Address<br>General Testing Laboratories, Inc.<br>1623 Leedstown Road<br>Colonial Beach, Va 22443   |                                    | 10. Work Unit No. (TRAIS)<br>N/A  |
|  |                                    | 11. Contract or Grant No.<br>DTNH22-02-D-01043  |
| 12. Sponsoring Agency Name and Address<br>U.S. Department of Transportation<br>National Highway Traffic Safety Admin.<br>Safety Enforcement<br>Office of Vehicle Safety Compliance (NVS-220)<br>400 7 <sup>th</sup> Street, S.W., Room 6111<br>Washington, DC 20590  |                                    | 13. Type of Report and Period<br>Covered<br>Final Test Report<br>July 6 – September 25, 2006  |
|  |                                    | 14. Sponsoring Agency Code<br>NVS-220   |
| 15. Supplementary Notes  |                                    |   |
| 16. Abstract<br>Compliance tests were conducted on the subject, 2006 Ford Five Hundred 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.<br>Test failures identified were as follows:<br>NONE |                                    |   |
| 17. Key Words<br>Compliance Testing<br>Safety Engineering<br>FMVSS 225   |                                    | 18. Distribution Statement<br>Copies of this report are available from<br>NHTSA Technical Reference Div.,<br>Rm. PL-403 (NPO-230)<br>400 7 <sup>th</sup> St., S.W. Washington, DC 20590<br>Telephone No. (202) 366-4946 |
| 19. Security Classif. (of this report)<br>UNCLASSIFIED   | 21. No. of Pages<br>99             | 22. Price   |
| 20. Security Classif. (of this page)<br>UNCLASSIFIED   |                                    |   |

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## SECTION 1

### PURPOSE OF COMPLIANCE TEST

#### 1.0 PURPOSE OF COMPLIANCE TEST

A 2006 Ford Five Hundred 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 2006 Ford Five Hundred Passenger Car. Nomenclature applicable to the test vehicle are:

A. Vehicle Identification Number: 1FAFP23106G104130

B. NHTSA No.: C60200

C. Manufacturer: FORD MOTOR COMPANY

D. Manufacture Date: 07/05

#### 1.2 TEST DATE

The test vehicle was subjected to FMVSS No. 225 testing during the time period July 6 through September 25, 2006.

## 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 2006 Ford Five Hundred Passenger Car appeared 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 2006 Ford Five Hundred Passenger Car.



DATA SHEET 1  
SUMMARY OF RESULTS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 6 – SEPTEMBER 25, 2006  
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 | <u>  X  </u> | <u>      </u> |
| DSP b | <u>  X  </u> | <u>      </u> |
| DSP c | <u>  X  </u> | <u>      </u> |

**C. LOCATION OF TETHER ANCHORAGES**

|       | PASS         | FAIL          |
|-------|--------------|---------------|
| DSP a | <u>  X  </u> | <u>      </u> |
| DSP b | <u>  X  </u> | <u>      </u> |
| DSP c | <u>  X  </u> | <u>      </u> |

**D. LOWER ANCHORAGE DIMENSIONS**

|       | PASS         | FAIL          |
|-------|--------------|---------------|
| DSP a | <u>  X  </u> | <u>      </u> |
| DSP b | <u>  X  </u> | <u>      </u> |
| DSP c | <u>  X  </u> | <u>      </u> |

DATA SHEET 1 CONTINUED  
SUMMARY OF RESULTS

**E. CONSPICUITY AND MARKING OF LOWER ANCHORAGES**

|       | PASS         | FAIL          |
|-------|--------------|---------------|
| DSP a | <u>  X  </u> | <u>      </u> |
| DSP b | <u>  X  </u> | <u>      </u> |
| DSP c | <u>  X  </u> | <u>      </u> |

**F. STRENGTH OF TETHER ANCHORAGES**

|       | PASS           | FAIL           |
|-------|----------------|----------------|
| DSP a | <u>  X  </u>   | <u>      </u>  |
| DSP b | <u>  X  </u>   | <u>      </u>  |
| DSP c | <u>  N/A  </u> | <u>  N/A  </u> |

**G. STRENGTH OF LOWER ANCHORAGES (Forward Force)**

|       | PASS           | FAIL           |
|-------|----------------|----------------|
| DSP a | <u>  N/A  </u> | <u>  N/A  </u> |
| DSP b | <u>  N/A  </u> | <u>  N/A  </u> |
| DSP c | <u>  X  </u>   | <u>      </u>  |

**H. STRENGTH OF LOWER ANCHORAGE (Lateral Force)**

|       | PASS           | FAIL           |
|-------|----------------|----------------|
| DSP a | <u>  N/A  </u> | <u>  N/A  </u> |
| DSP b | <u>  N/A  </u> | <u>  N/A  </u> |
| DSP c | <u>  N/A  </u> | <u>  N/A  </u> |

**I. OWNER'S MANUAL**

|  | PASS         | FAIL          |
|--|--------------|---------------|
|  | <u>  X  </u> | <u>      </u> |

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

RECORDED BY:   G. Farrand  

DATE:   09/25/06  

APPROVED BY:   D. Messick

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

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 6, 2006  
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 an 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: 3

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))

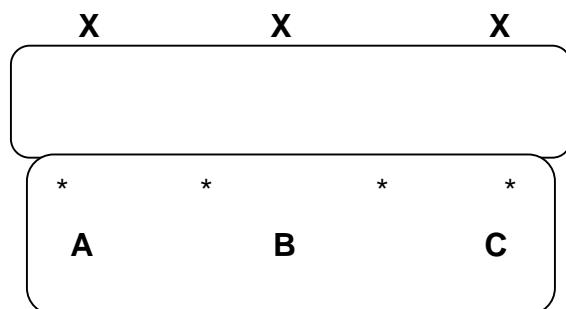
Number of provided tether anchorages (can be additional CRAS) indicate if a built-in child restraint is counted as a tether anchorage (NOTE: a built-in child restraint can only be counted toward either the required number of CRAS or tether anchorages, not both):           3          

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:           G. FARRAND          

DATE:           07/06/06          

APPROVED BY:           D. MESSICK

DATA SHEET 3  
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 6, 2006  
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 back.

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? YES

If NO, skip to next question

If YES, is it outside of the tether strap wraparound area? YES

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: G. FARRAND

DATE: 07/06/06

APPROVED BY: D. MESSICK



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: G. FARRAND

DATE: 07/06/06

APPROVED BY: D. MESSICK



DATA SHEET 3B  
LOCATION OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 6, 2006  
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 shelf behind seat back.

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? YES

If NO, skip to next question

If YES, is it outside of the tether strap wraparound area? YES

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: G. FARRAND

DATE: 07/06/06

APPROVED BY: D. MESSICK

DATA SHEET 4  
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 6, 2006  
TEST LABORATORY: GENERAL TESTING LABORATORIES  
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Outboard Lower Anchorage bar diameter: 6.04 mm  
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 6.06 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): 37 mm  
Length ≥ 25mm = PASS Length < 25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 26 mm  
Length ≥ 25mm = PASS Length < 25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 45 mm  
Length ≤ 60mm = PASS Length > 60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 35 mm  
Length ≤ 60mm = PASS Length > 60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 12.1°  
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: 36 mm  
Distance ≤ 70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 35 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: 160 mm  
Distance  $\geq$  120mm = PASS      Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 150 mm  
Distance  $\geq$  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: G. FARRAND

DATE: 07/06/06

APPROVED BY: D. MESSICK

DATA SHEET 4A  
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 6, 2006  
TEST LABORATORY: GENERAL TESTING LABORATORIES  
OBSERVERS: GRANT FARRAND, JIMMY LATANE

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

Outboard Lower Anchorage bar diameter: 6.05 mm  
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 6.07 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): 36 mm  
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 32 mm  
Length ≥25mm = PASS Length <25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 45 mm  
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 45 mm  
Length ≤60mm = PASS Length >60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 11.9°  
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: 40 mm  
Distance ≤70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 40 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: 168 mm  
Distance  $\geq$  120mm = PASS      Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 158 mm  
Distance  $\geq$  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: G. FARRAND

DATE: 07/06/06

APPROVED BY: D. MESSICK

DATA SHEET 4B  
LOWER ANCHORAGE DIMENSIONS

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 6, 2006  
TEST LABORATORY: GENERAL TESTING LABORATORIES  
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 CENTER (DSP B)

Outboard Lower Anchorage bar diameter: 6.06 mm  
6mm ± 0.1 mm = PASS Other size = FAIL (S9.1.1(a))

Inboard Lower Anchorage bar diameter: 6.07 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): 26 mm  
Length ≥ 25mm = PASS Length < 25mm = FAIL(S9.1.1(c) (i))

Length of the straight portion of the bar (inboard lower anchorage): 32 mm  
Length ≥ 25mm = PASS Length < 25mm = FAIL(S9.1.1(c) (i))

Length between the anchor bar supports (outboard lower anchorage): 35 mm  
Length ≤ 60mm = PASS Length > 60mm = FAIL(S9.1.1(c) (ii))

Length between the anchor bar supports (inboard lower anchorage): 45 mm  
Length ≤ 60mm = PASS Length > 60mm = FAIL(S9.1.1(c) (ii))

CRF Pitch angle: 15.1°  
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: 66 mm  
Distance ≤ 70mm = PASS Distance > 70mm = FAIL

Distance between point Z on the CRF and the front surface of inboard anchor bar: 66 mm  
Distance ≤ 70mm = PASS Distance > 70mm = FAIL

DATA SHEET 4B CONTINUED

DESIGNATED SEATING POSITION: ROW 2 CENTER (DSP B)

Distance between SgRP and the front surface of outboard anchor bar: 181 mm  
Distance  $\geq$  120mm = PASS      Distance < 120mm = FAIL

Distance between SgRP and the front surface of inboard anchor bar: 183 mm  
Distance  $\geq$  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: G. FARRAND

DATE: 07/06/06

APPROVED BY: D. MESSICK



DATA SHEET 5  
CONSPICUITY AND MARKING OF LOWER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: JULY 7, 2006  
TEST LABORATORY: GENERAL TESTING LABORATORIES  
OBSERVERS: GRANT FARRAND, JIMMY LATANE

DESIGNATED SEATING POSITION: ROW 2 LEFT SIDE (DSP A), ROW 2 RIGHT SIDE (DSP C), AND ROW 2 CENTER (DSP B)

MARKING (Circles)

Diameter of the circle: 15 mm

Diameter  $\geq 13\text{mm}$  = PASS

Diameter  $< 13\text{mm}$  = FAIL (S9.5(a)(1))

Does the circle have words, symbols or pictograms? YES Lower Anchor Symbol

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: 60 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: 10

Distance  $\leq 25\text{mm}$  = PASS

Distance  $> 25\text{mm}$  = FAIL (S9.5(a)(3))

CONSPICUITY (No Circles)

Is the anchor bar or guide visible when viewed from a point  $30^\circ$  above the horizontal in a vertical longitudinal plane bisecting the anchor bar or guide? YES

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), ROW 2 RIGHT SIDE (DSP C), AND ROW 2 CENTER (DSP B)

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: G. FARRAND

DATE: 07/07/06

APPROVED BY: D. MESSICK

DATA SHEET 6  
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: SEPTEMBER 25, 2006  
TEST LABORATORY: GENERAL TESTING LABORATORIES  
OBSERVERS: GRANT FARRAND, JIMMY LATANE  
TEST NO: 5633

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

SFAD: 2

Seat Back Angle: 25° FIXED

Location of seat back angle measurement: 2D Template

Head Restraint Position: FIXED

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 sec.

Maximum force (14,950 N ± 50 N): 14,914 N

Tested simultaneously with another DSP? NO

COMMENTS: Displacement at maximum load 55 mm.

RECORDED BY: G. FARRAND

DATE: 09/25/06

APPROVED BY: D. MESSICK

DATA SHEET 6A  
STRENGTH OF TETHER ANCHORAGES

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: SEPTEMBER 25, 2006  
TEST LABORATORY: GENERAL TESTING LABORATORIES  
OBSERVERS: GRANT FARRAND, JIMMY LATANE  
TEST NO: 5634

DESIGNATED SEATING POSITION: ROW 2 CENTER (DSP B)

SFAD: 1

Seat Back Angle: 25° FIXED

Location of seat back angle measurement: 2D Template

Head Restraint Position: FIXED

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 sec.

Maximum force (14,950 N ± 50 N): 14,923 N

Tested simultaneously with another DSP? NO

COMMENTS: Displacement at maximum load 82 mm.

RECORDED BY: G. FARRAND

DATE: 09/25/06

APPROVED BY: D. MESSICK

DATA SHEET 7  
STRENGTH OF LOWER ANCHORAGES (Forward Force)

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: SEPTEMBER 25, 2006  
TEST LABORATORY: GENERAL TESTING LABORATORIES  
OBSERVERS: GRANT FARRAND, JIMMY LATANE  
TEST NO: 5635

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

Seat Back Angle: 25° FIXED

Location of seat back angle measurement: 2D Template

Head Restraint Position: FIXED

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: 421 N/S

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

Maximum force (10,950 N ± 50 N): 10,995 N

Displacement, H1 (at 500 N): 0.0

Displacement, H2 (at maximum load): 44 mm

Displacement of Point X: 44 mm (H2-H1)  
Displacement > 175 mm = FAIL (S9.4.1(a))

Tested simultaneously with another DSP? NO

Distance between adjacent DSP's: 280 mm

COMMENTS:

RECORDED BY: G. FARRAND

DATE: 09/25/06

APPROVED BY: D. MESSICK

DATA SHEET 8  
OWNER'S MANUAL

VEH. MOD YR/MAKE/MODEL/BODY: 2006 FORD FIVE HUNDRED PASSENGER CAR  
VEH. NHTSA NO: C60200; VIN: 1FAFP23106G104130  
VEH. BUILD DATE: 07/05; TEST DATE: SEPTEMBER 25, 2006  
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: G. FARRAND

DATE: 09/25/06

APPROVED BY: D. MESSICK

SECTION 4  
INSTRUMENTATION AND EQUIPMENT LIST

TABLE 1 - INSTRUMENTATION & EQUIPMENT LIST

| EQUIPMENT              | DESCRIPTION                    | MODEL/<br>SERIAL NO. | CAL. DATE     | NEXT CAL.<br>DATE |
|------------------------|--------------------------------|----------------------|---------------|-------------------|
| COMPUTER               | AT&T                           | 486DX266             | BEFORE<br>USE | BEFORE<br>USE     |
| LOAD CELL              | INTERFACE                      | 215709               | 09/06         | 09/07             |
| LINEAR<br>TRANSDUCER   | SERVO SYSTEMS                  | 20                   | BEFORE<br>USE | BEFORE<br>USE     |
| SEAT BELT<br>LOAD CELL | TRANSDUCER                     | 135                  | BEFORE<br>USE | BEFORE<br>USE     |
| SEAT BELT<br>LOAD CELL | TRANSDUCER                     | 137                  | BEFORE<br>USE | BEFORE<br>USE     |
| LEVEL                  | STANLEY                        | 42-449               | 02/06         | 02/07             |
| FORCE GAUGE            | CHATILLON                      | 8761                 | BEFORE<br>USE | BEFORE<br>USE     |
| CALIPER                | N/A                            | Q9322365             | BEFORE<br>USE | BEFORE<br>USE     |
| CRF                    | MEASUREMENT<br>FIXTURE         | GTL CRF              | BEFORE<br>USE | BEFORE<br>USE     |
| SFAD 1                 | FORCE<br>APPLICATION<br>DEVICE | GTL SFAD 1           | BEFORE<br>USE | BEFORE<br>USE     |
| SFAD 2                 | FORCE<br>APPLICATION<br>DEVICE | GTL SFAD 2           | BEFORE<br>USE | BEFORE<br>USE     |

SECTION 5  
PHOTOGRAPHS





2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.1  
LEFT SIDE VIEW OF VEHICLE



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.2  
RIGHT SIDE VIEW OF VEHICLE



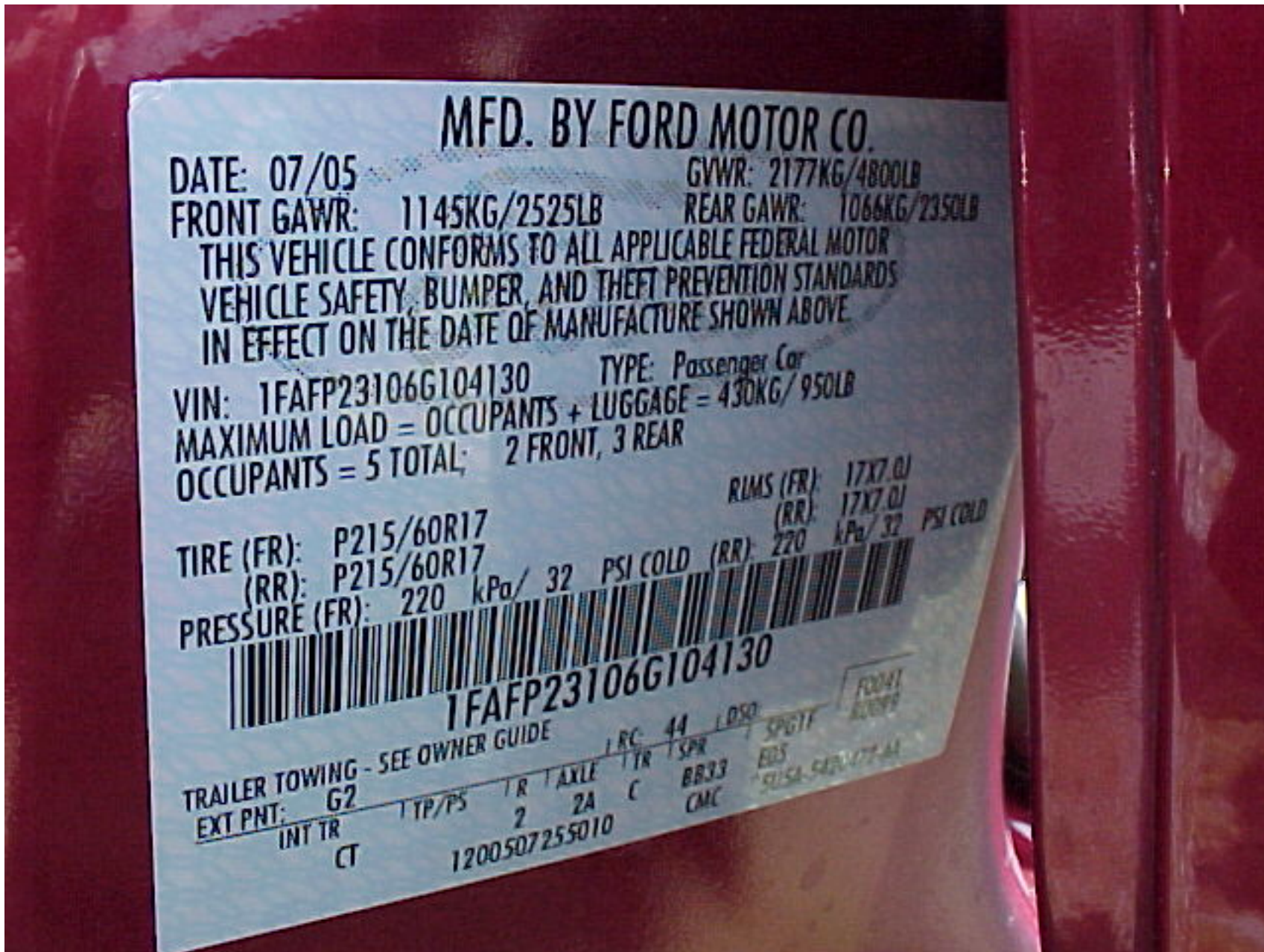
2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.3  
¾ FRONTAL VIEW FROM LEFT SIDE OF VEHICLE



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.4  
¾ REAR VIEW FROM RIGHT SIDE OF VEHICLE



**MFD. BY FORD MOTOR CO.**

DATE: 07/05

GVWR: 2177KG/4800LB

FRONT GAWR: 1145KG/2525LB

REAR GAWR: 1066KG/2350LB

THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY, BUMPER, AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.

VIN: 1FAFP23106G104130 TYPE: Passenger Car  
MAXIMUM LOAD = OCCUPANTS + LUGGAGE = 430KG/950LB  
OCCUPANTS = 5 TOTAL; 2 FRONT, 3 REAR

TIRE (FR): P215/60R17  
(RR): P215/60R17

RIMS (FR): 17X7.0J  
(RR): 17X7.0J

PRESSURE (FR): 220 kPa/ 32 PSI COLD (RR): 220 kPa/ 32 PSI COLD



1FAFP23106G104130

TRAILER TOWING - SEE OWNER GUIDE  
EXT PNT: G2

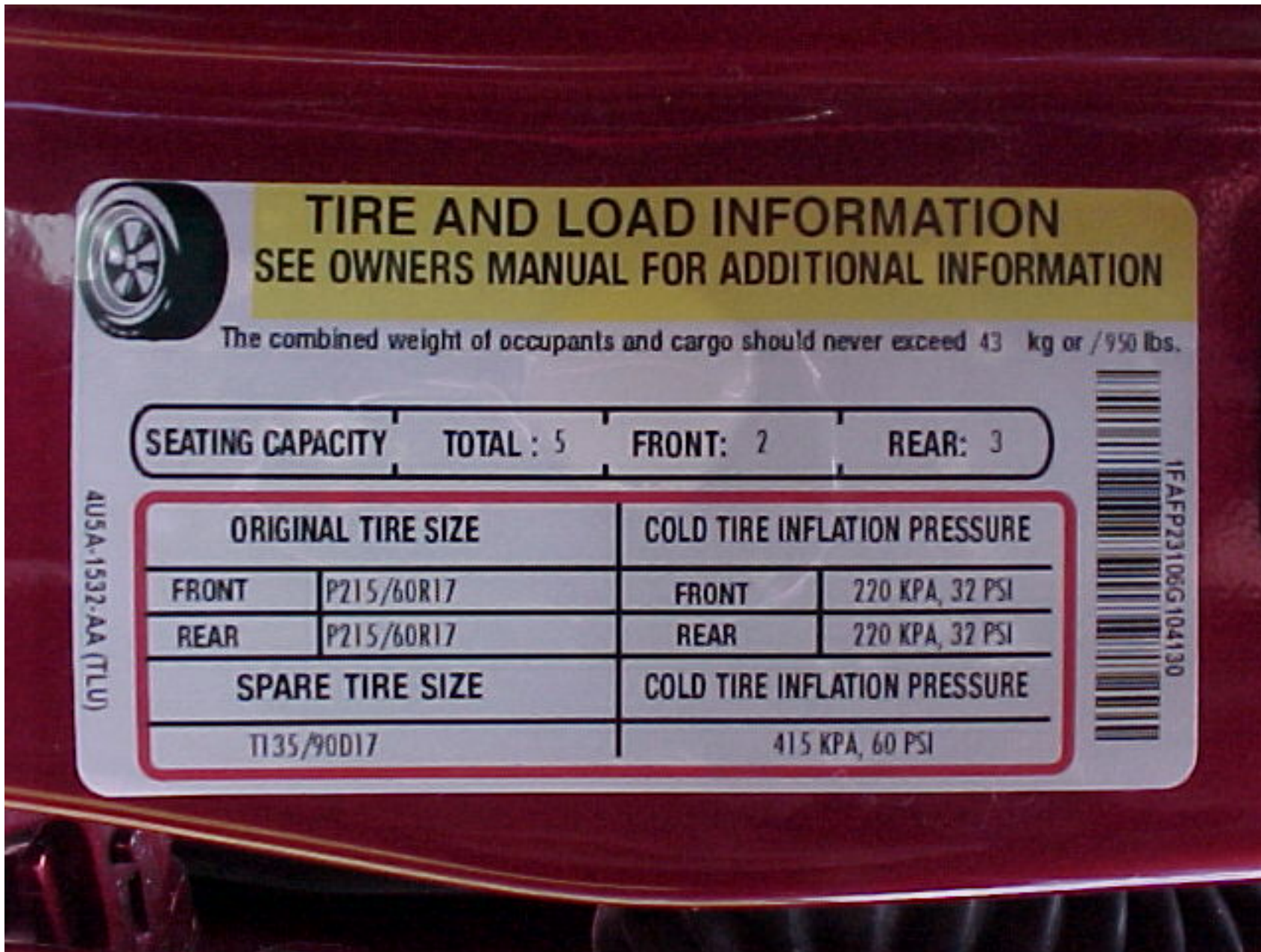
INT TR CT

1RC 44 L DSO  
1R 1R 1SPR  
1YP/PS 2 2A C BB33 EDS  
CMC SUSA-5420177-44

FORD  
GROUP

2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.5  
VEHICLE CERTIFICATION LABEL



2006 FORD FIVE HUNDRED  
 NHTSA NO. C65401  
 FMVSS NO. 225

FIGURE 5.6  
 VEHICLE TIRE INFORMATION LABEL



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.7  
ROW 2, LEFT SIDE, LOWER ANCHORS, PRE-TEST



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.8  
ROW 2, LEFT SIDE, TOP TETHER ANCHOR,  
PRE-TEST





2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.9  
ROW 2, CENTER, TOP TETHER ANCHOR,  
PRE-TEST



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.10  
ROW 2, RIGHT SIDE, LOWER ANCHORS, PRE-TEST



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.11  
ROW 2, RIGHT SIDE, TOP TETHER ANCHOR,  
PRE-TEST



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.12  
OVERALL VIEW OF ROW 2 SEATING POSITIONS,  
PRE-TEST



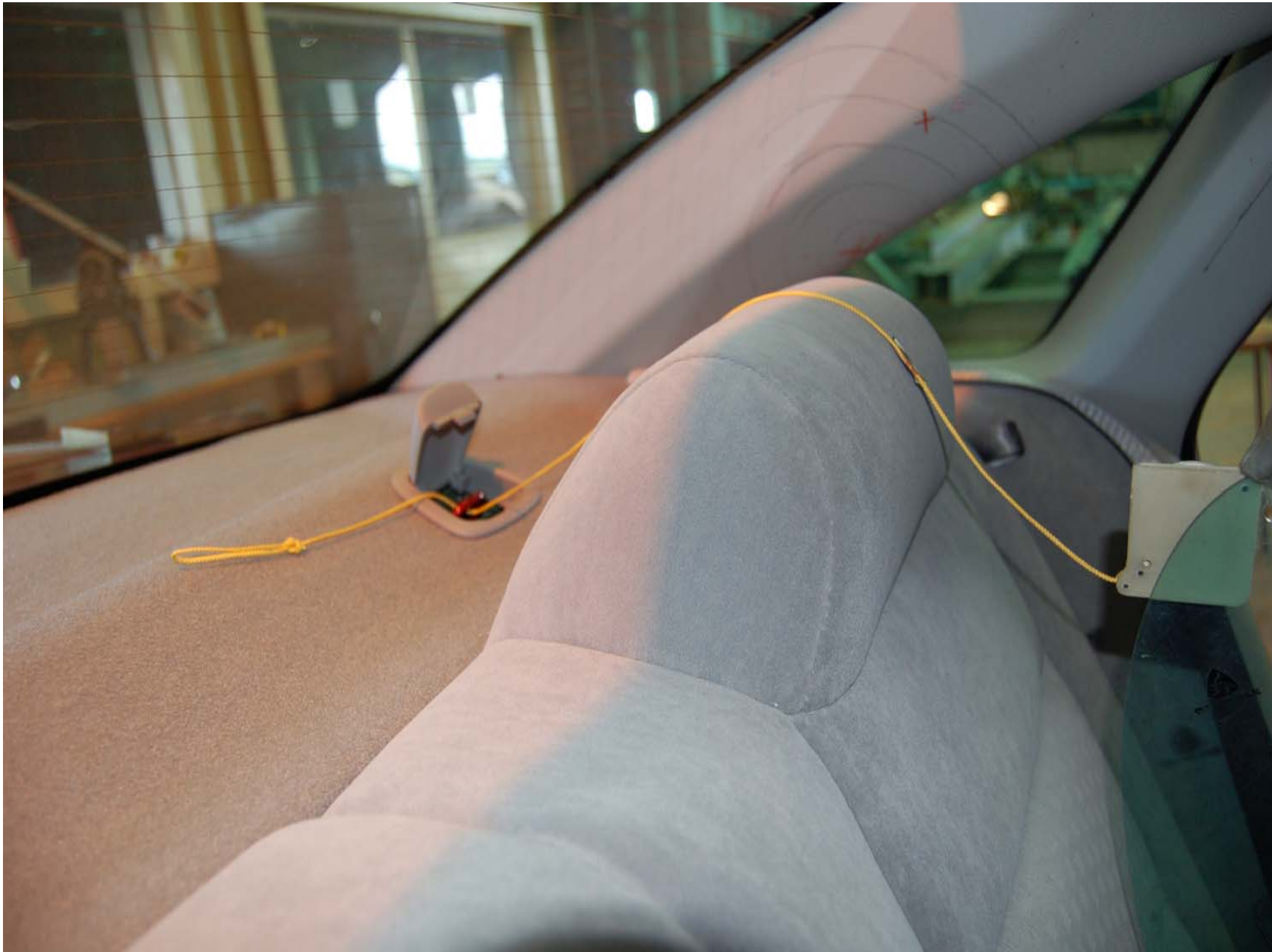
2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.13  
ROW 2, LEFT SIDE WITH CRF



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

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



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.15  
ROW 2, LEFT SIDE TOP TETHER ROUTING



2006 FORD FIVE HUNDRED  
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FMVSS NO. 225

FIGURE 5.16  
ROW 2, RIGHT SIDE WITH CRF





2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

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



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.18  
ROW 2, RIGHT SIDE TOP TETHER ROUTING



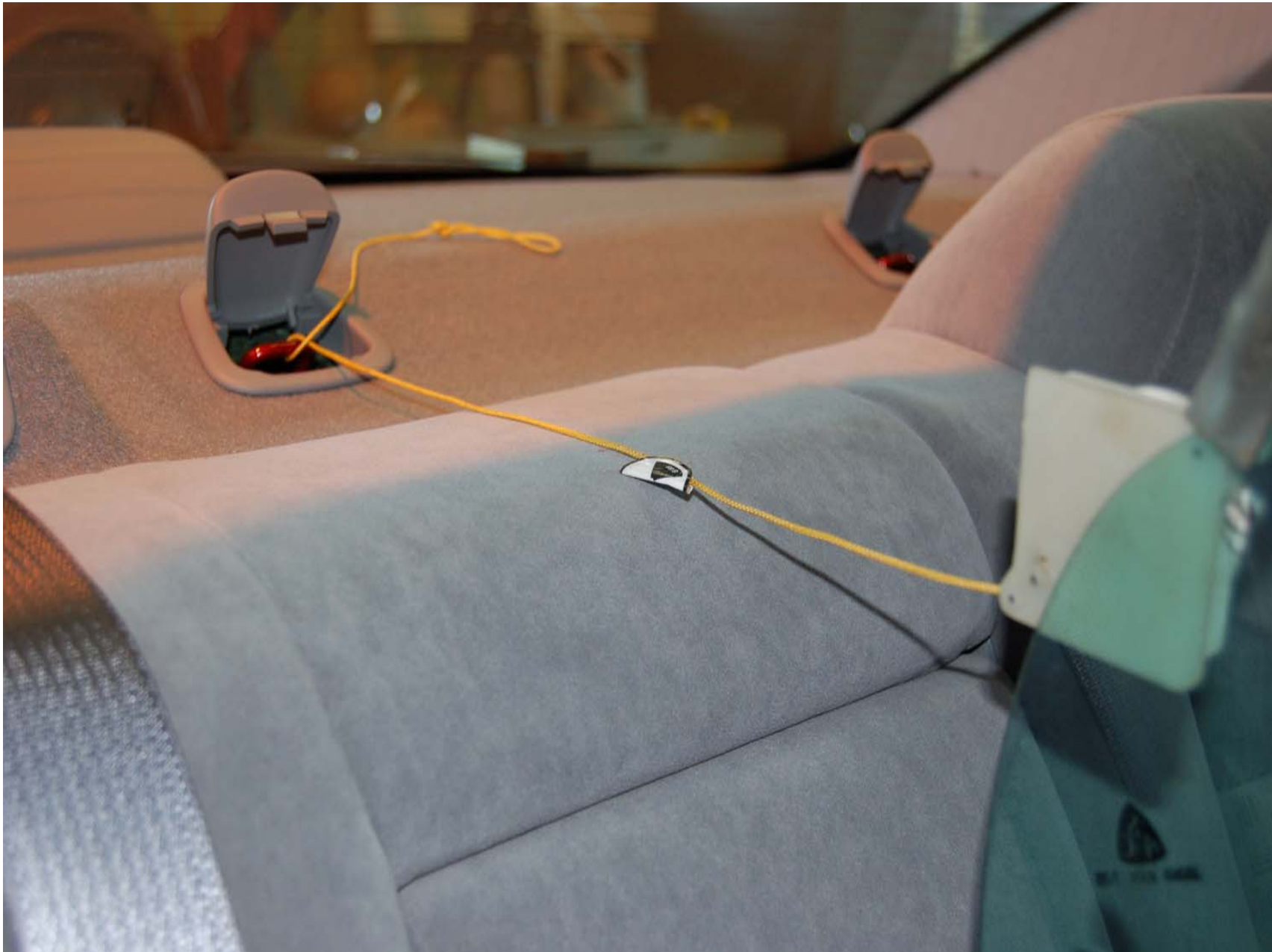
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NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.19  
ROW 2, CENTER WITH CRF



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.20  
ROW 2, CENTER WITH 2-D TEMPLATE



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.21  
ROW 2, CENTER TOP TETHER ROUTING



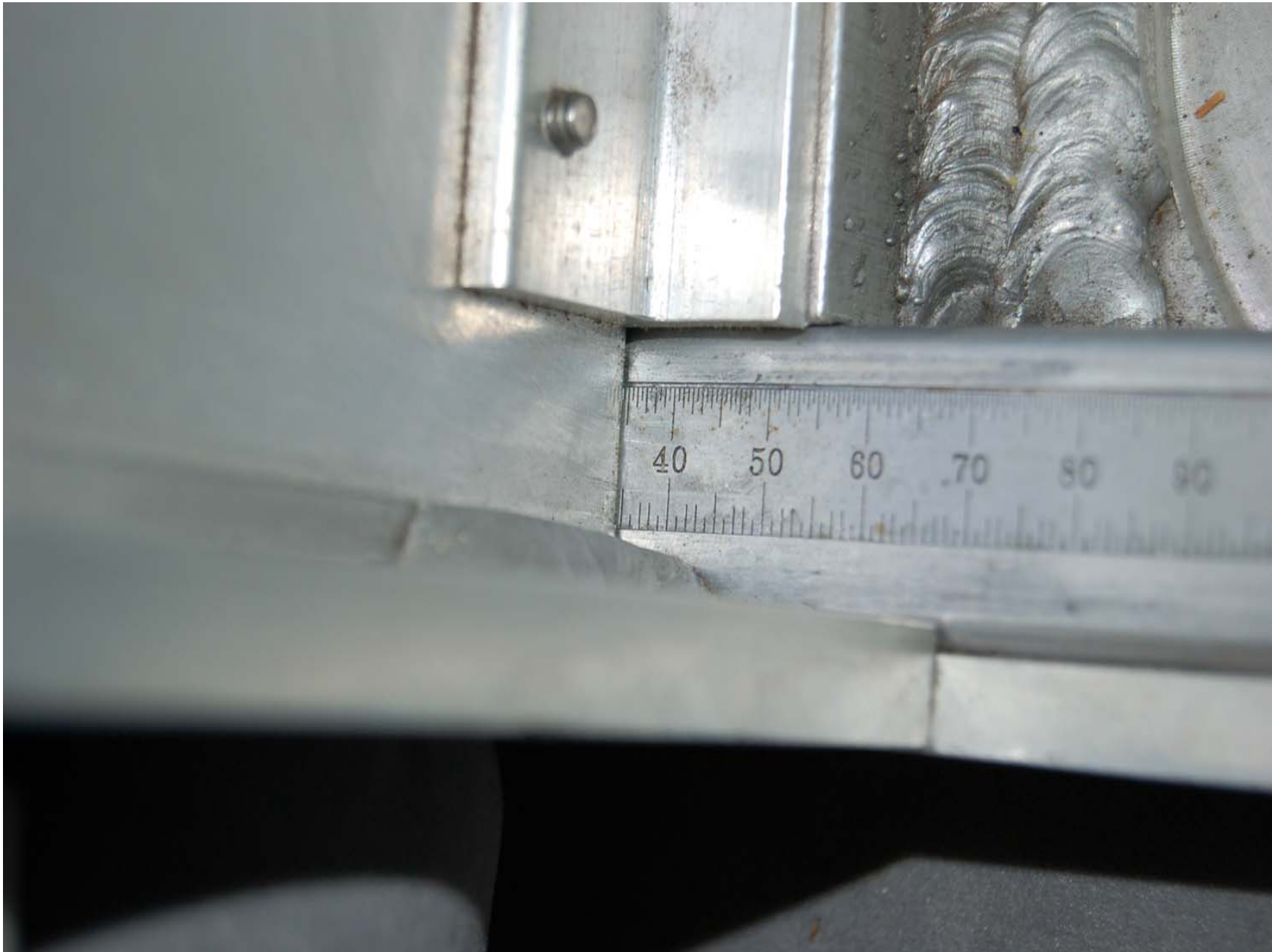
2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.22  
ROW 2, RIGHT SIDE INBOARD CRF MEASUREMENT



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NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.23  
ROW 2, RIGHT SIDE, OUTBOARD CRF MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.24  
ROW 2, LEFT SIDE INBOARD CRF MEASUREMENT





2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.25  
ROW 2, LEFT SIDE OUTBOARD CRF MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.26  
ROW 2, CENTER LEFT SIDE CRF MEASUREMENT



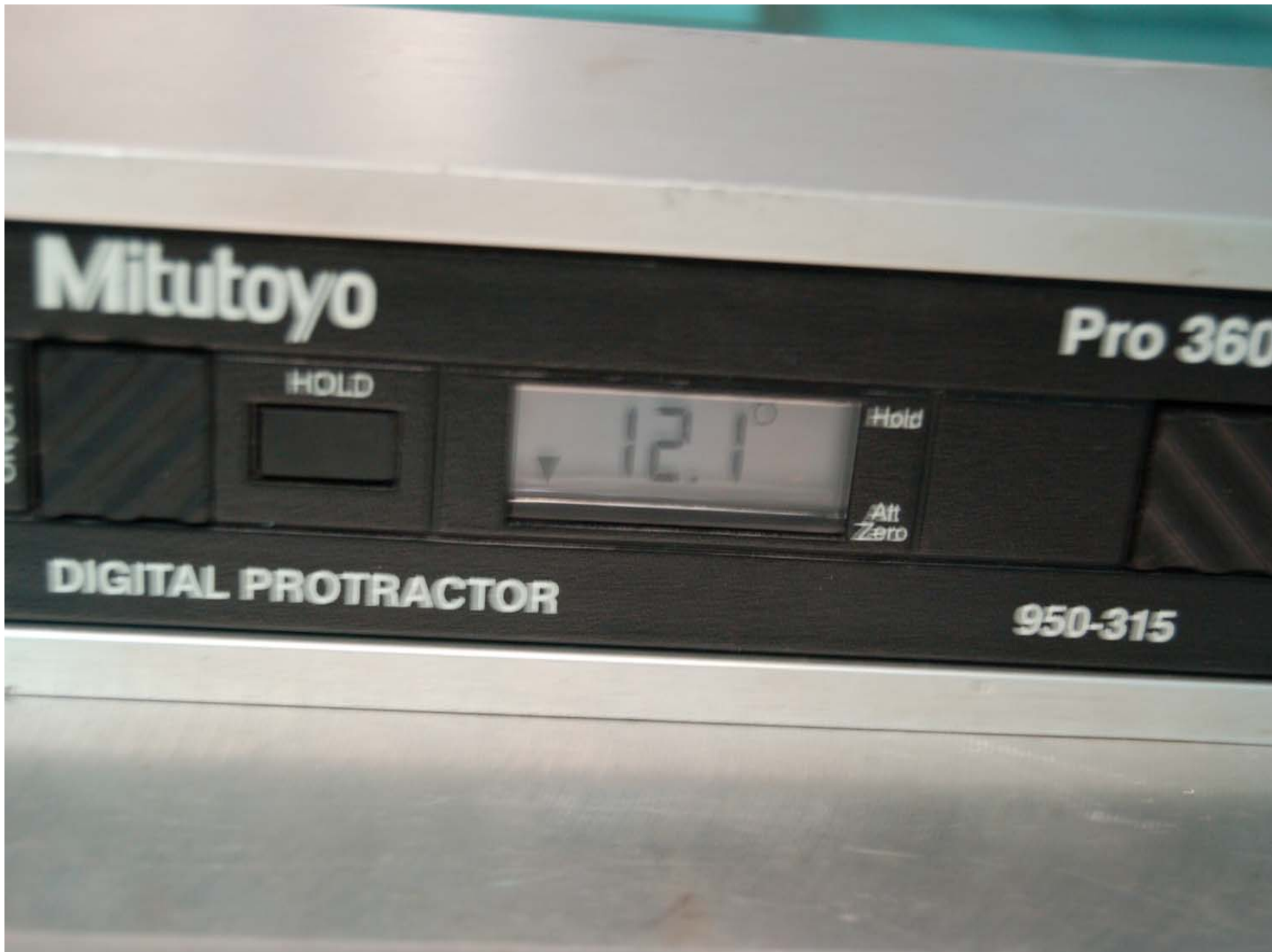
2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.27  
ROW 2, CENTER RIGHT SIDE CRF MEASUREMENT



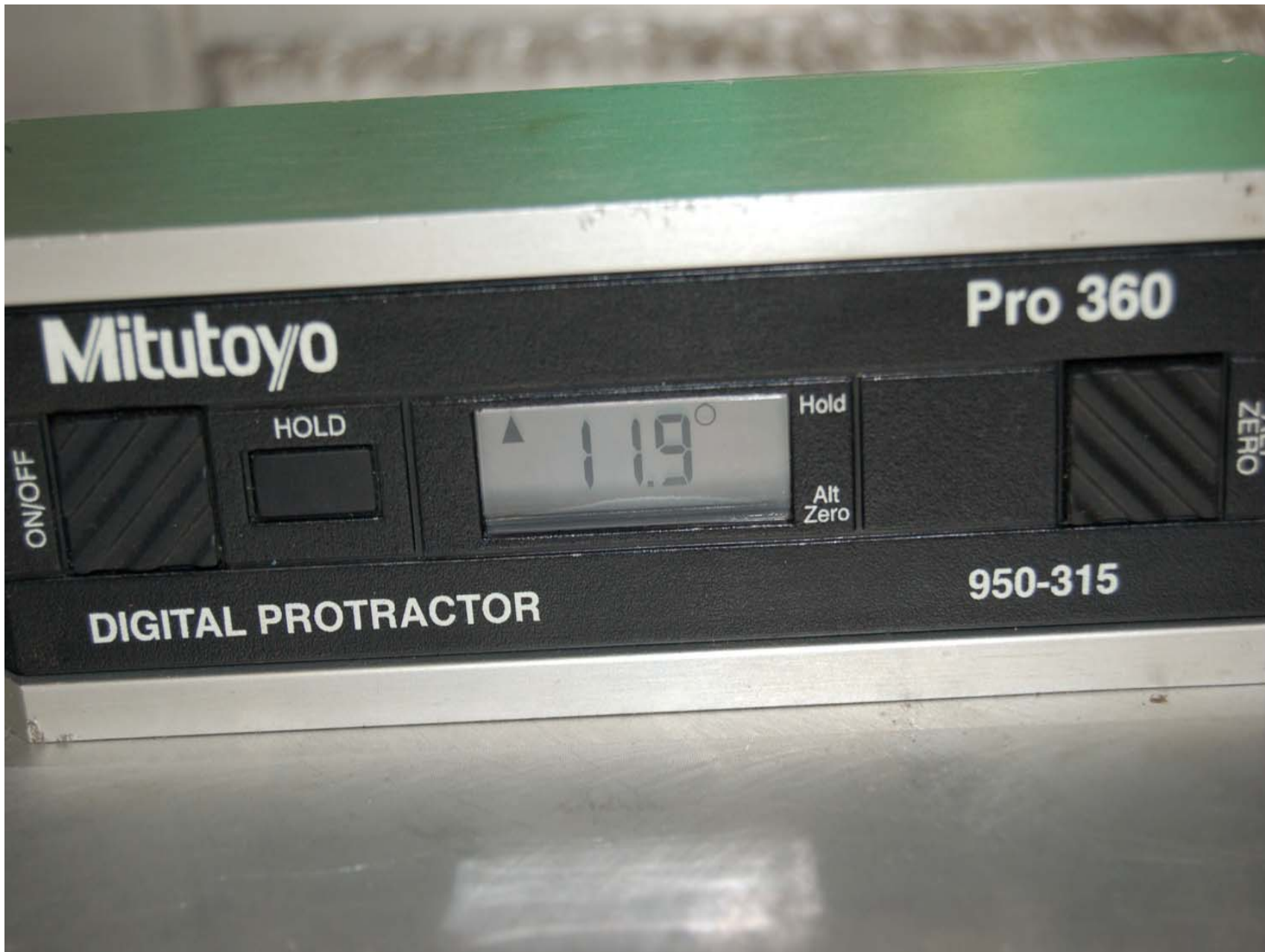
2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.28  
SYMBOL MEASUREMENT



2006 FORD FIVE HUNDRED  
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FMVSS NO. 225

FIGURE 5.29  
ROW 2, LEFT SIDE CRF PITCH MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.30  
ROW 2, RIGHT SIDE CRF PITCH MEASUREMENT



2006 FORD FIVE HUNDRED  
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FMVSS NO. 225

FIGURE 5.31  
ROW 2, CENTER CRF PITCH MEASUREMENT



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FMVSS NO. 225

FIGURE 5.32  
ROW 2, LEFT SIDE OUTBOARD SRP MEASUREMENT





2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.33  
ROW 2, LEFT SIDE INBOARD SRP MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.34  
ROW 2, RIGHT SIDE OUTBOARD SRP MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.35  
ROW 2, RIGHT SIDE INBOARD SRP MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.36  
ROW 2, CENTER LEFT SRP MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.37  
ROW 2, CENTER RIGHT SRP MEASUREMENT



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.38  
¾ LEFT REAR VIEW OF VEHICLE IN TEST RIG



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.39  
3/4 RIGHT FRONT VIEW OF VEHICLE IN TEST RIG



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.40  
PRE-TEST ROW 2, LEFT SIDE WITH SFAD 2





2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.41  
POST TEST ROW 2, LEFT SIDE WITH SFAD 2



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.42  
PRE-TEST ROW 2, RIGHT SIDE WITH SFAD 2



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.43  
POST TEST ROW 2, RIGHT SIDE WITH SFAD 2



2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.44  
PRE-TEST ROW 2, CENTER POSITION WITH SFAD 1



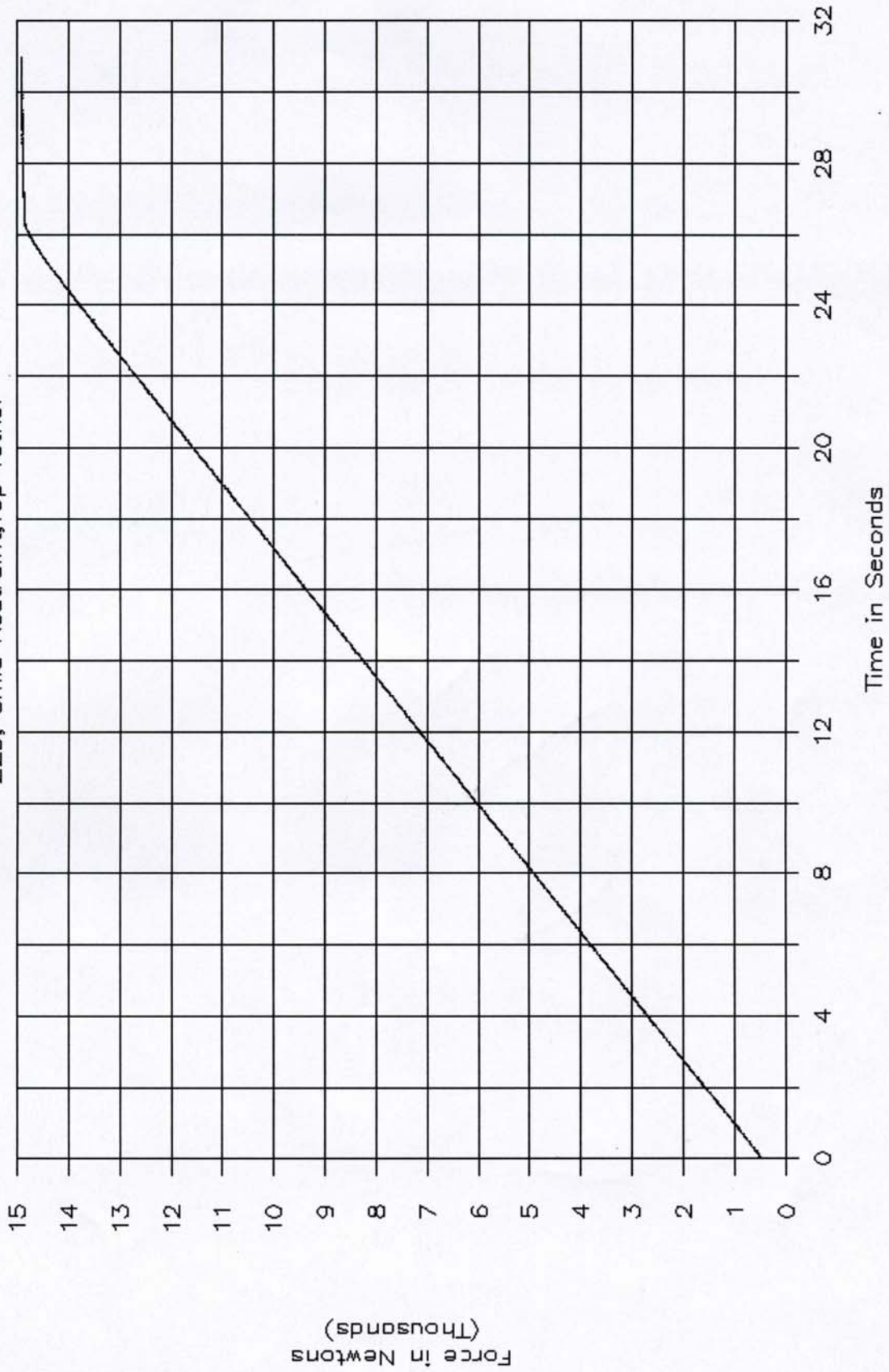
2006 FORD FIVE HUNDRED  
NHTSA NO. C65401  
FMVSS NO. 225

FIGURE 5.45  
POST TEST ROW 2, CENTER POSITION WITH SFAD1

SECTION 6  
PLOTS

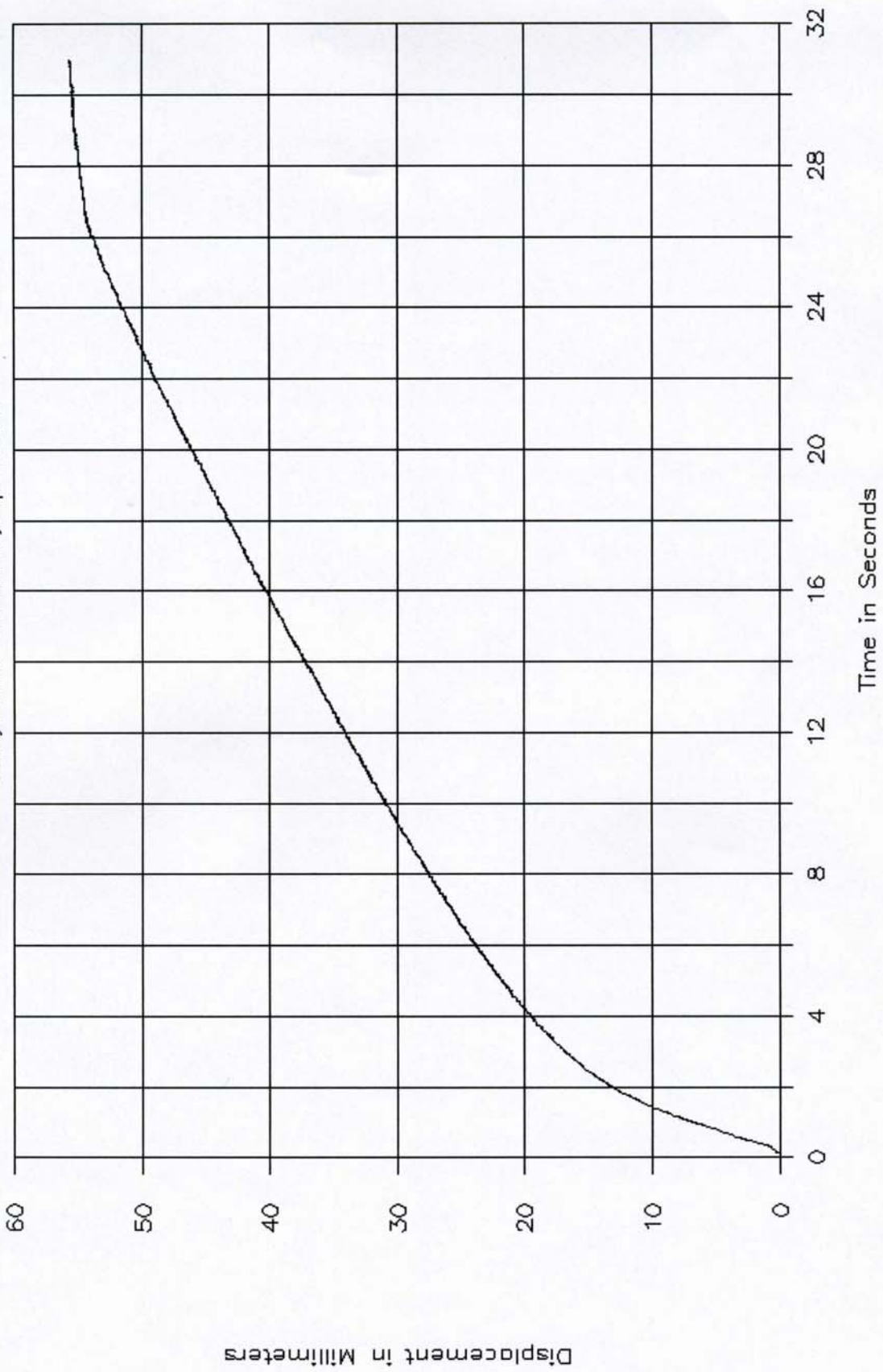
# GTL 5633, NHTSA C60200

225, Child Restraint, Top Tether



GTL 5633, NHTSA C60200

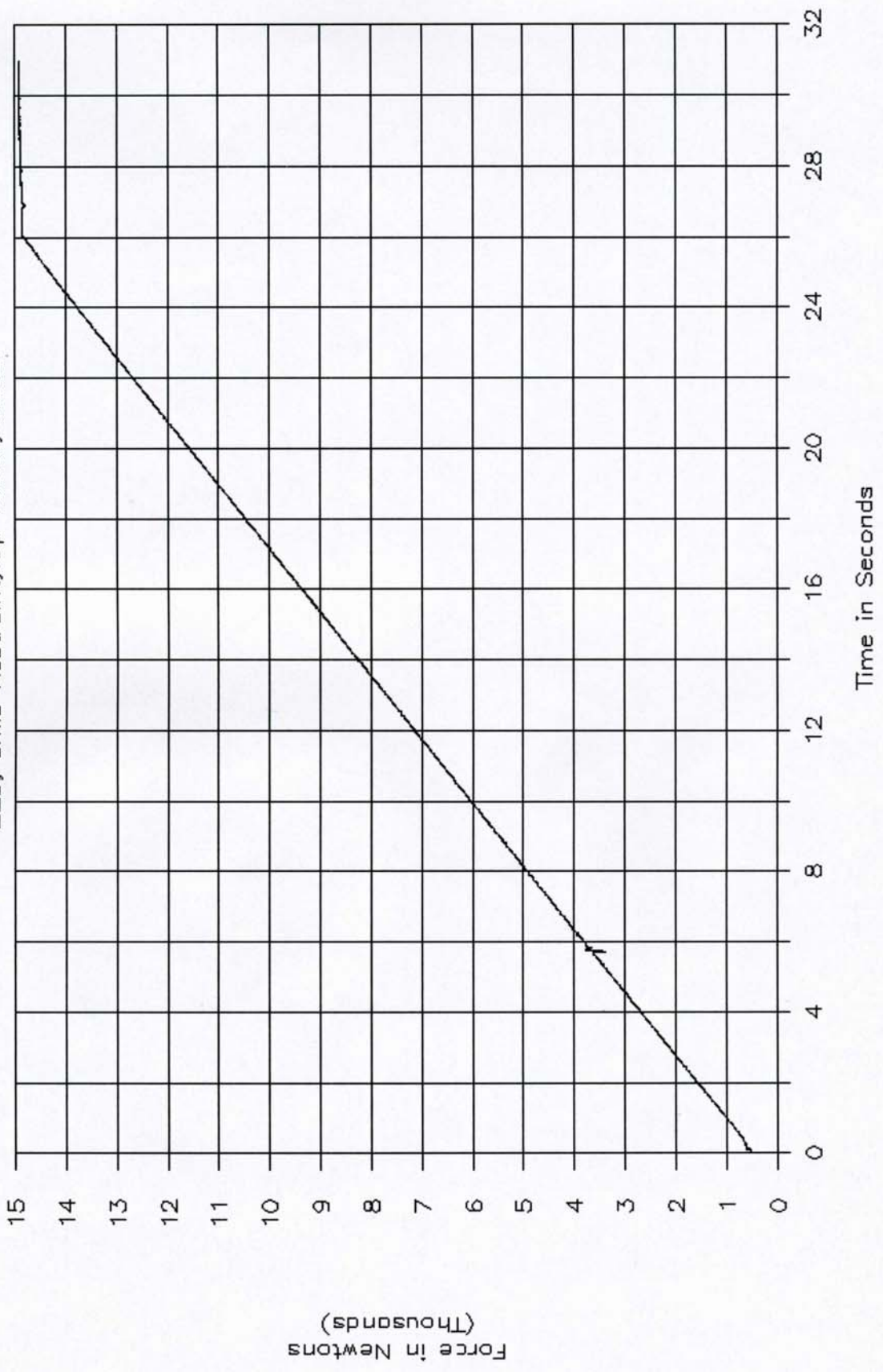
225, Child Restraint, Top Tether





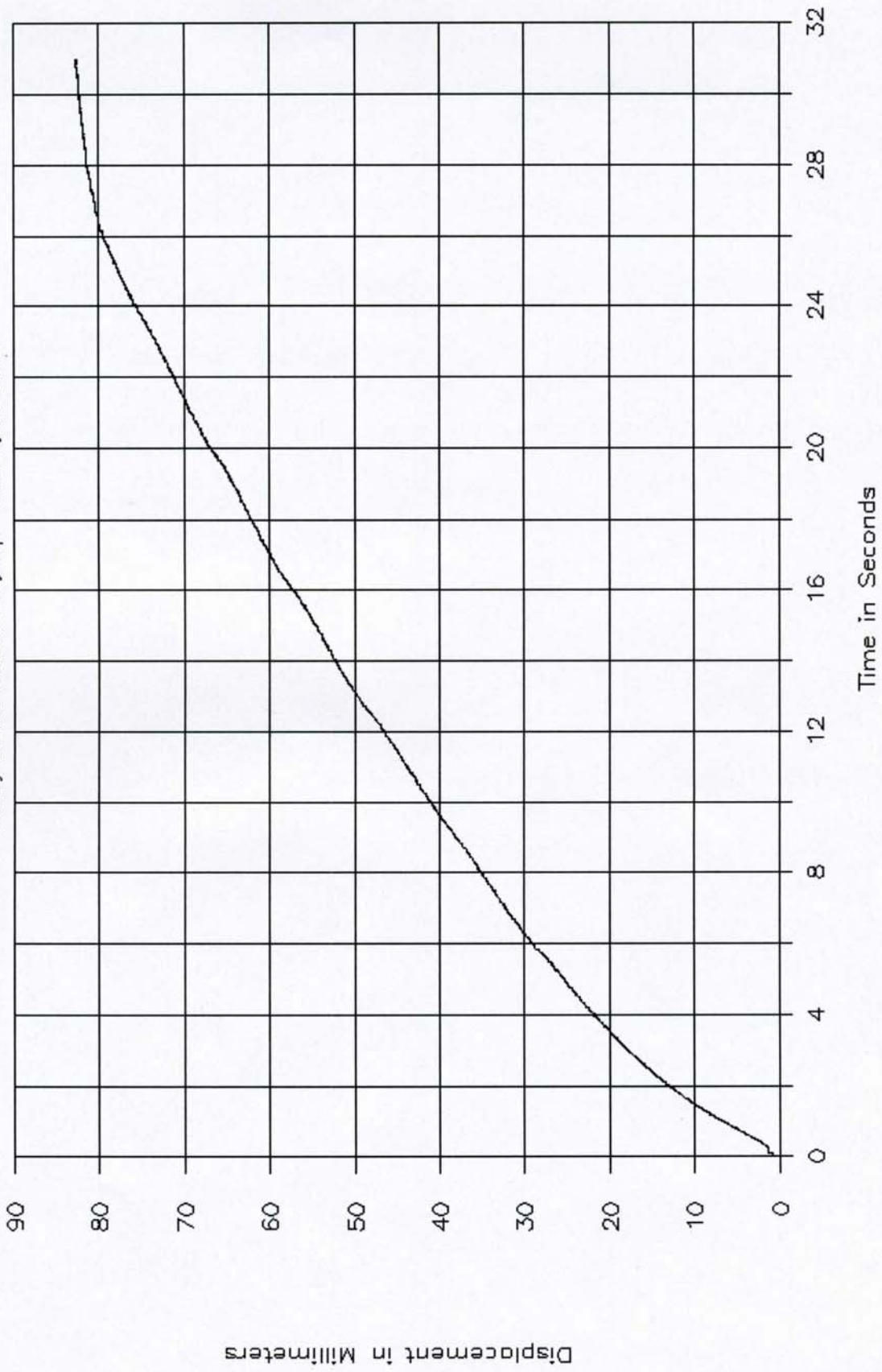
GTL 5634, NHTSA C60200

225, Child Restraint, Top Tether, Center.



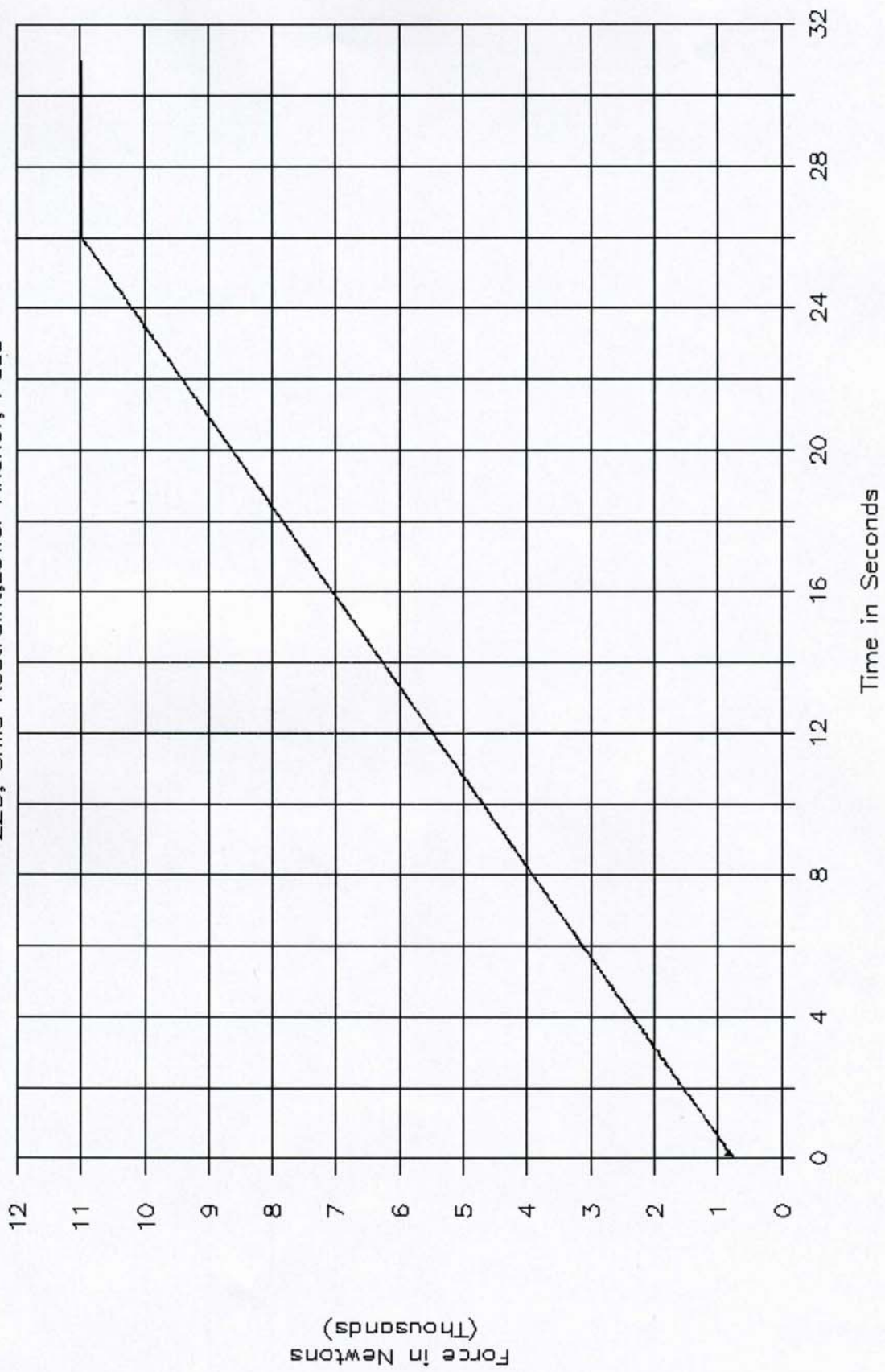
GTL 5634, NHTSA C60200

225, Child Restraint, Top Tether, Center.



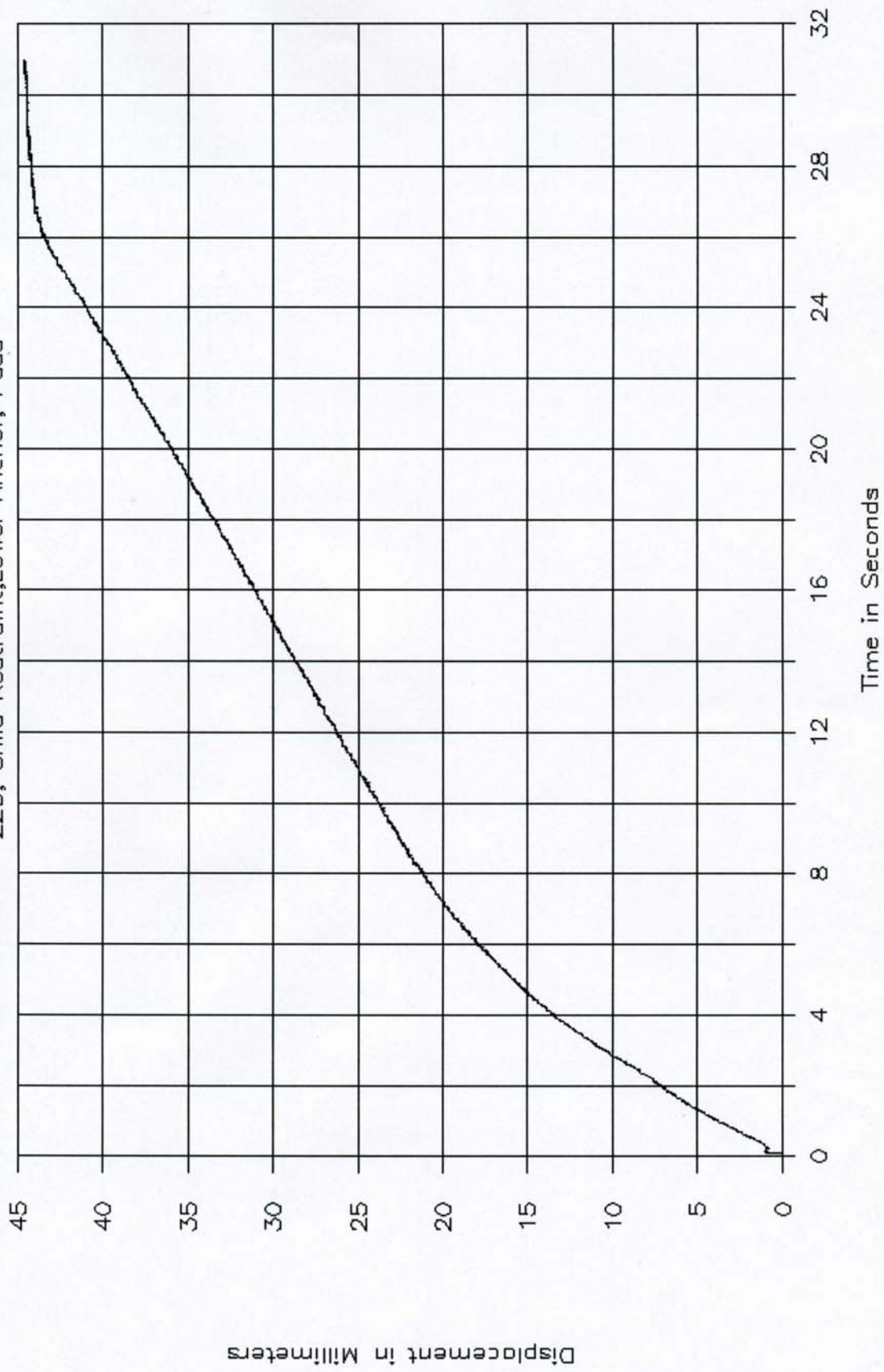
# GTL 5635, NHTSA C60200

225, Child Restraint, Lower Anchor, Pass



# GTL 5635, NHTSA C60200

225, Child Restraint, Lower Anchor, Pass



APPENDIX A  
OWNER'S MANUAL CHILD RESTRAINT INFORMATION

## Seating and Safety Restraints

**!** Move a child to a different seating location if the shoulder belt does not stay positioned on the shoulder during use.

**!** Follow all instructions provided by the manufacturer of the booster seat.

**!** Never put the shoulder belt under a child's arm or behind the back because it eliminates the protection for the upper part of the body and may increase the risk of injury or death in a collision.

**!** Never use pillows, books, or towels to boost a child. They can slide around and increase the likelihood of injury or death in a collision.

### SAFETY SEATS FOR CHILDREN

#### Child and infant or child safety seats

Use a safety seat that is recommended for the size and weight of the child. Carefully follow all of the manufacturer's instructions with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

When installing a child safety seat:

- Review and follow the information presented in the *Airbag Supplemental Restraint System* section in this chapter.
- Use the correct safety belt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.



## Seating and Safety Restraints

- Place seat back in upright position.
- Put the safety belt in the automatic locking mode. Refer to *Automatic locking mode*.

- LATCH lower anchors are recommended for use by children up to 48 lb (22 kg) in a child restraint. Top tether anchors can be used for children up to 60 lb (27 kg) in a child restraint, and to provide upper torso restraint for children up to 80 lb (36 kg) using an upper torso harness and a belt-positioning booster.

Ford Motor Company recommends the use of a child safety seat having a top tether strap. Install the child safety seat in a seating position with LATCH and tether anchors. For more information on top tether straps and anchors, refer to *Attaching safety seats with tether straps* in this chapter. For more information of LATCH anchors refer to *Attaching safety seats with LATCH (Lower Anchors and Tethers for Children) attachments* in this chapter.

**!** Carefully follow all of the manufacturer's instructions included with the safety seat you put in your vehicle. If you do not install and use the safety seat properly, the child may be injured in a sudden stop or collision.

**!** Rear-facing child seats or infant carriers should never be placed in front of an active passenger airbag.

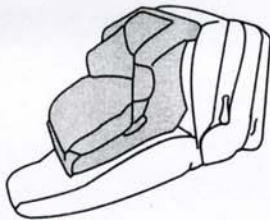
### Installing child safety seats with combination lap and shoulder belts

**!** Airbags can kill or injure a child in a child seat. **NEVER** place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat all the way back.

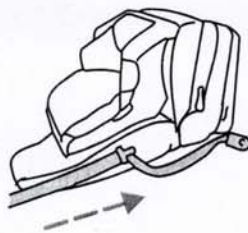
**!** Children 12 and under should be properly restrained in the rear seat whenever possible.

## Seating and Safety Restraints

1. Position the child safety seat in a seat with a combination lap and shoulder belt.



2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.

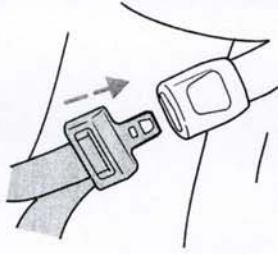


3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.



## Seating and Safety Restraints

4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.

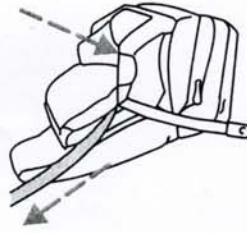


5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is pulled out and a click is heard.



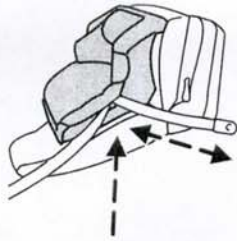
6. Allow the belt to retract. The belt will click as it retracts to indicate it is in the automatic locking mode.

7. Pull the lap belt portion across the child seat toward the buckle and pull up on the shoulder belt while pushing down with your knee on the child seat.



## Seating and Safety Restraints

8. Allow the safety belt to retract to remove any slack in the belt.
9. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place. To check this, grab the seat at the belt path and attempt to move it side to side and forward. There should be no more than one inch of movement for proper installation.



10. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 2 through 9.

Check to make sure the child seat is properly secured before each use.

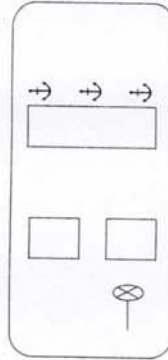
### Attaching child safety seats with tether straps

Most new forward-facing child safety seats include a tether strap which goes over the back of the seat and hooks to an anchoring point. Tether straps are available as an accessory for many older safety seats. Contact the manufacturer of your child seat for information about ordering a tether strap.

The rear seats of your vehicle are equipped with built-in tether strap anchors located behind the seats as described below.

The tether anchors in your vehicle are located under a cover marked with the tether anchor symbol (shown with title).

The tether strap anchors in your vehicle are in the following positions (shown from top view):



**!** Attach the tether strap only to the appropriate tether anchor as shown. The tether strap may not work properly if attached somewhere other than the correct tether anchor.

1. Position the child safety seat on the seat cushion.

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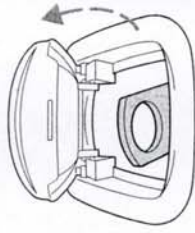
## Seating and Safety Restraints

2. Route the child safety seat tether strap over the back of the seat. For vehicles with adjustable head restraints, route the tether strap under the head restraint and between the head restraint posts, otherwise route the tether strap over the top of the seatback.



3. Locate the correct anchor for the selected seating position.

4. Open the tether anchor cover.



5. Clip the tether strap to the anchor as shown.



**!** If the tether strap is clipped incorrectly, the child safety seat may not be retained properly in the event of a collision.

6. Install the child safety seat tightly using the LATCH anchors or safety belts. Follow the instructions in this chapter.

7. Tighten the child safety seat tether strap according to the manufacturer's instructions.

**!** If the safety seat is not anchored properly, the risk of a child being injured in a collision greatly increases.

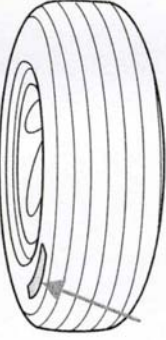
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## Tires, Wheels and Loading

### INFORMATION ABOUT UNIFORM TIRE QUALITY GRADING

New vehicles are fitted with tires that have a rating on them called Tire Quality Grades. The Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example:



- **Treadwear 200 Traction AA Temperature A**

These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.

Tire Quality Grades apply to new pneumatic tires for use on passenger cars. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104(c)(2).

**U.S. Department of Transportation-Tire quality grades:** The U.S. Department of Transportation requires Ford Motor Company to give you the following information about tire grades exactly as the government has written it.

#### **Treadwear**

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half (1 1/2) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

#### **Traction AA A B C**

The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

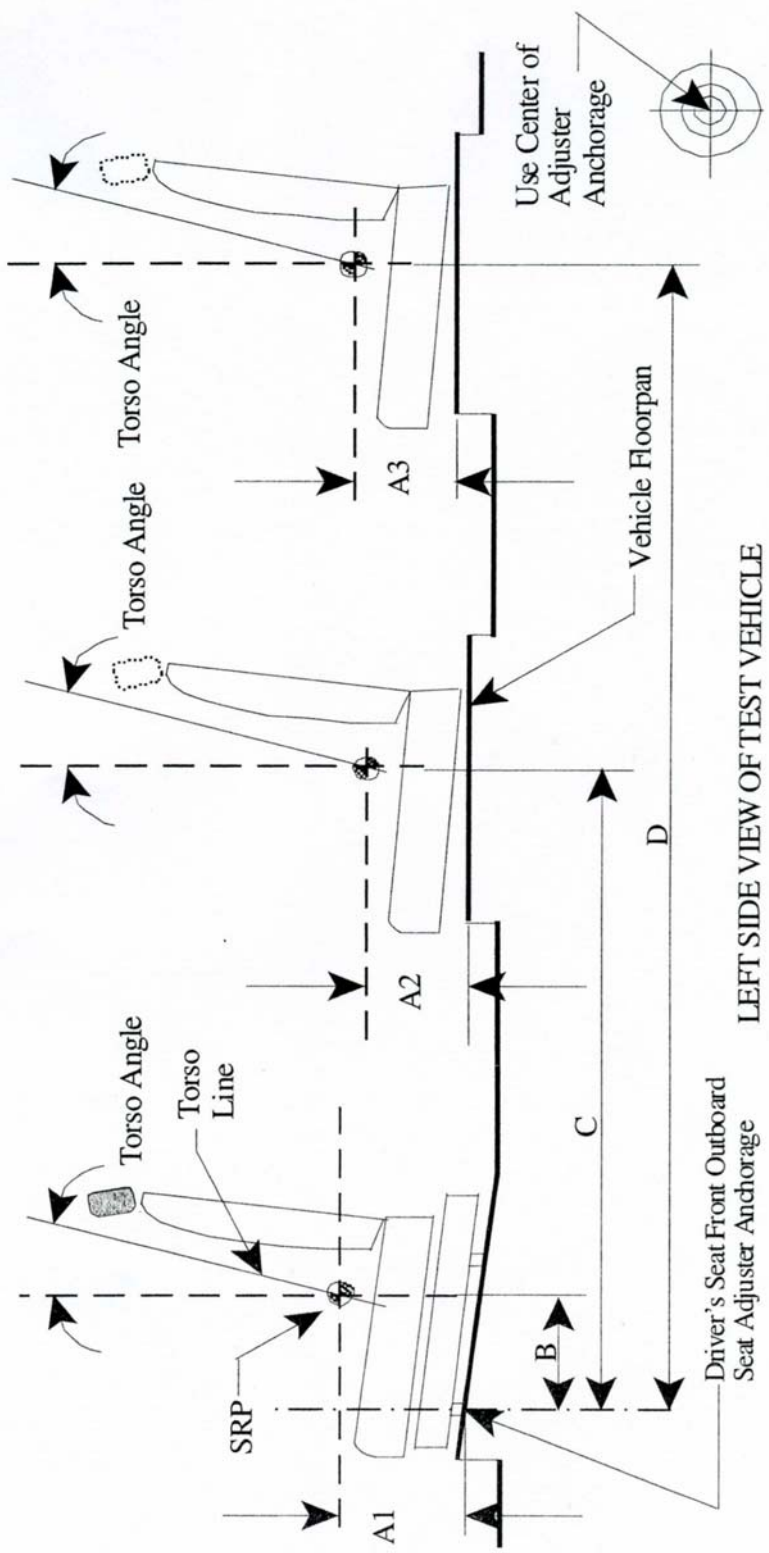
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APPENDIX B  
MANUFACTURER'S DATA

SEAT REFERENCE POINT (SRP) AND TORSO ANGLE DATA  
FOR FMVSS 225

(All dimensions in mm)

Model Year: 2006; Make: Ford; Model: Five Hundred; Body Style: 4 Door Sedan  
Seat Style: 3 Pass Bench; Front row: 3 Pass Bench, Third row: N/A



LEFT SIDE VIEW OF TEST VEHICLE

Table 1. Seating Positions<sup>1</sup> and Torso Angles

|                      | Left (Driver Side) | Center (if any) | Right   |
|----------------------|--------------------|-----------------|---------|
| A1                   | 281.54             | NA              | 281.54  |
| A2                   | 286.54             | 311.54          | 286.54  |
| A3                   | N/A                | N/A             | N/A     |
| B                    | 388                | N/A             | 388     |
| C                    | 1310.78            | 1285.78         | 1310.89 |
| D                    | N/A                | N/A             | N/A     |
| Torso Angle (degree) | Front Row          | N/A             | 22      |
|                      | Second Row         | 25              | 25      |
|                      | Third Row          | N/A             | N/A     |

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: 2006; Make: Ford; Model: Five Hundred; Body Style: 4Dr Sedan  
Seat Style: Front row: 3 Buckets; Second row: 3 Passenger Bench; Third row: NA

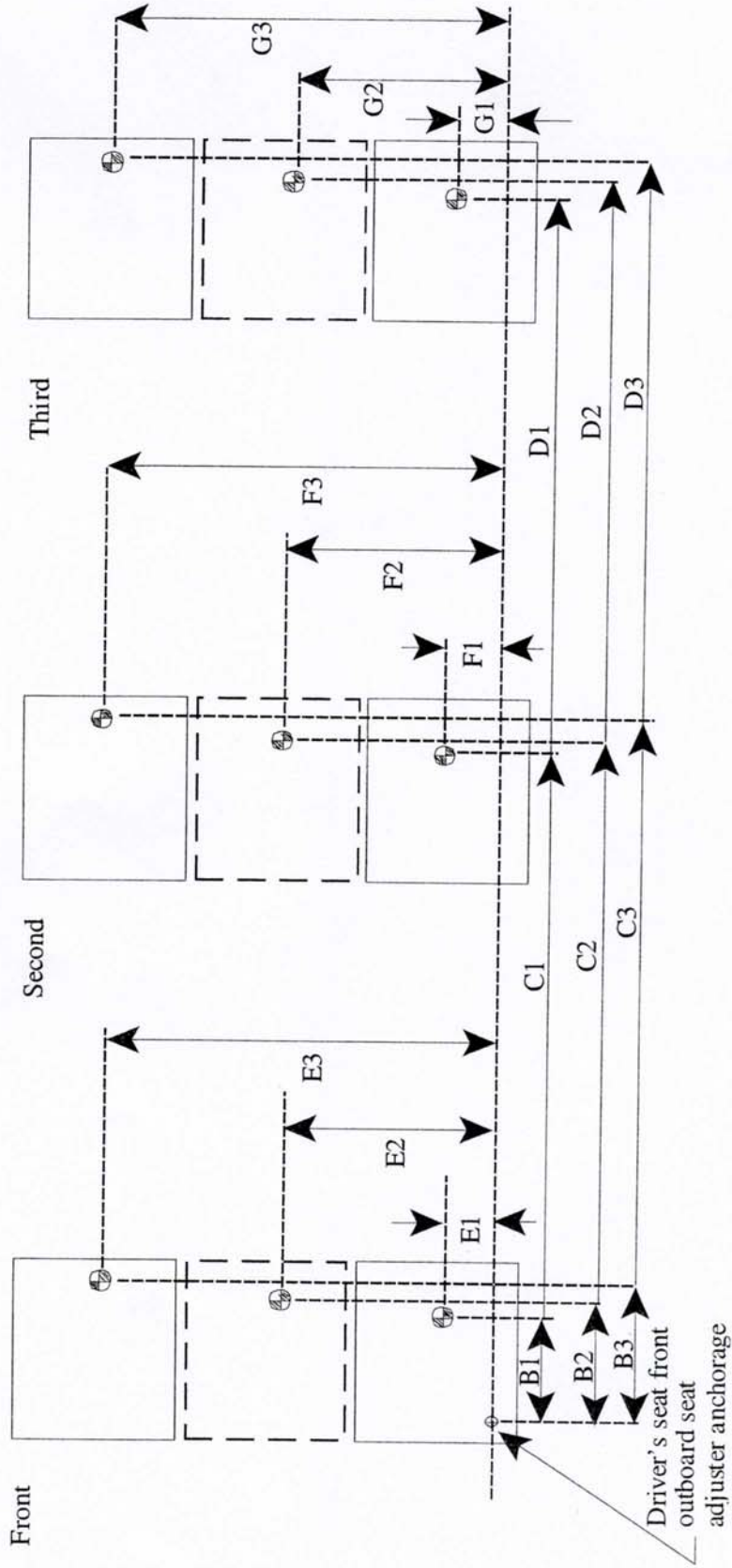


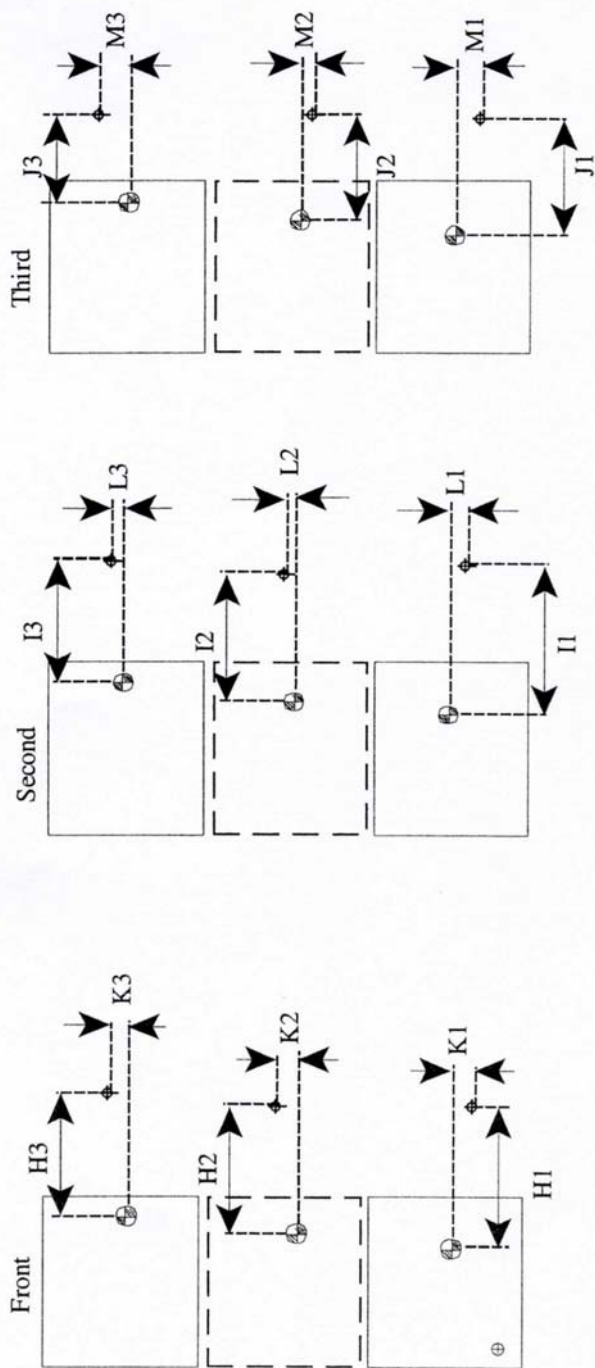
Table 2. Seating Reference Point and Tether Anchorage Locations

| Seating Reference Point (SRP) |    | Distance from Driver's front outboard seat adjuster anchorage <sup>1</sup> |
|-------------------------------|----|--|
| Front Row                     | B1 | 388  |
|                               | E1 | 203.84   |
|                               | B2 | N/A  |
|                               | E2 | N/A  |
|                               | B3 | 388  |
|                               | E3 | 960.24   |
| Second Row                    | C1 | 1310.78  |
|                               | F1 | 202.04   |
|                               | C2 | 1285.78  |
|                               | F2 | 582.04   |
|                               | C3 | 1310.78  |
|                               | F3 | 962.04   |
| Third Row                     | D1 | N/A  |
|                               | G1 | N/A  |
|                               | D2 | N/A  |
|                               | G2 | N/A  |
|                               | D3 | N/A  |
|                               | G3 | N/A  |

Note: 1. Use the center of anchorage.

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

Model Year: 2006; Make: Ford; Model: Five Hundred; Body Style: 4 Dr. Sedan  
 Seat Style: Front row: 3 Buckets; Second row: 3 Passenger Bench; Third row: NA



⊕: 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

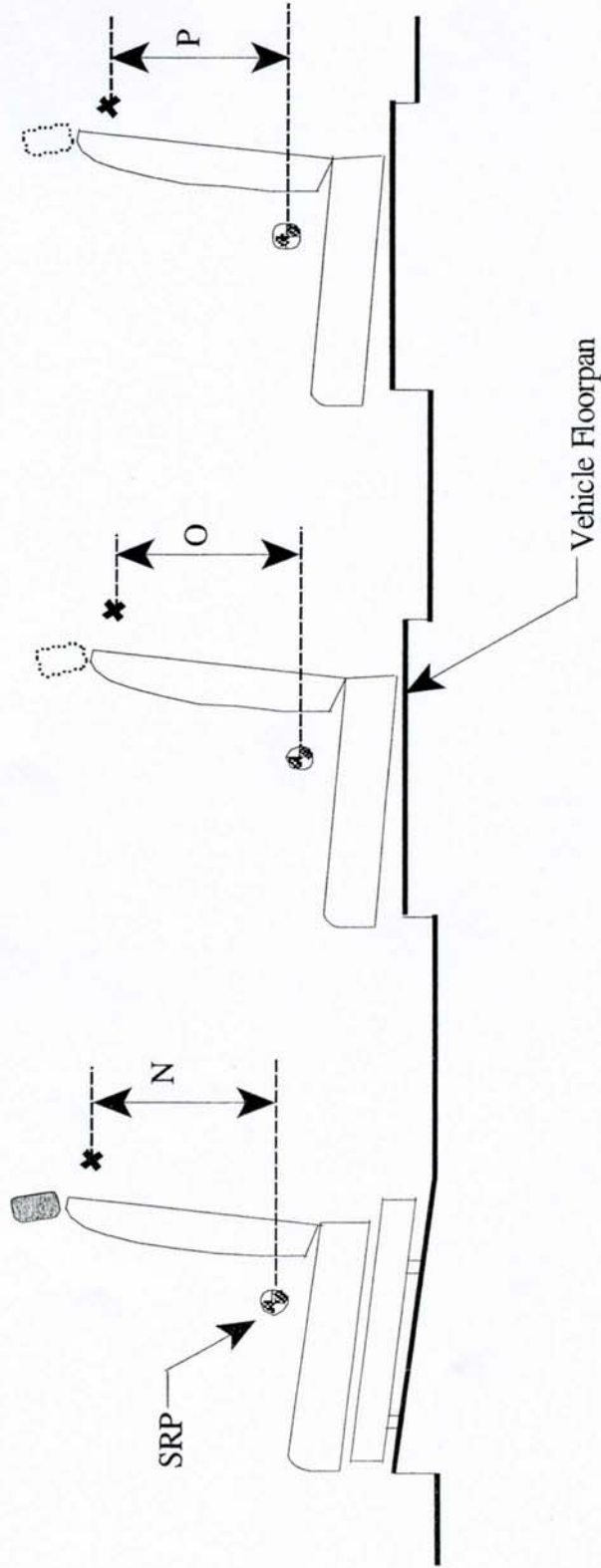
| Seating Reference Point (SRP) | Distance from SRP |     |
|-------------------------------|-------------------|-----|
| Front Row                     | H1                | N/A |
|                               | K1                | N/A |
|                               | H2                | N/A |
|                               | K2                | N/A |
|                               | H3                | N/A |
|                               | K3                | N/A |
| Second Row                    | I1                | 684 |
|                               | L1                | 0   |
|                               | I2                | 709 |
|                               | L2                | 0   |
|                               | I3                | 684 |
|                               | 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: \_\_2006\_\_; Make: \_\_Ford\_\_; Model: \_\_Five Hundred; Body Style: 4 Dr Sedan\_  
Seat Style: \_\_Front row: \_\_Buckets; Second row: 3 Passenger Bench\_\_; Third row: \_\_N/A\_\_



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)                                      | 494.79 |
|             | O2 (Center)                                    | 469.79 |
|             | O3 (Right)                                     | 494.79 |
| Third Row   | P1 (Left)                                      | NA     |
|             | P2 (Center)                                    | NA     |
|             | P3 (Right)                                     | NA     |

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

For each vehicle, provide the following information:

1. **How many designated seating positions exist in the vehicle?**

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2. **How many designated seating positions are equipped with lower anchorages and tether anchorages? Specify which position(s).**

Each of the three rear seat positions is equipped with a tether anchorage, and the outboard seats are also equipped with lower anchorages. Additionally, the lower anchorages are equally spaced across the rear seat to allow a child seat to be installed at the rear center seating position. If three child safety seats are to be installed, the lower anchors should be used for the center seat, and lap/shoulder belts should be used for the outboard seats.

3. **How many designated seating positions are equipped with tether anchorages? Specify which position(s).**

All three of the rear seating positions.

4. **Lower Anchorage Marking and Conspicuity:** Whether the anchorages are certified to S9.5 (a) or S9.5 (b) of FMVSS 225.

The anchorages are certified to S9.5 (a) of FMVSS 225.