Report Number: 208S-TRC-04-002

Vehicle Safety Compliance Testing for FMVSS 208 for Occupant Crash Protection Sled Test

Toyota Motor Manufacturing
2003 Toyota Tacoms Truck
NHTSA Number: C35108
TRC Inc. Test Number: S040413

Transportation Research Center Inc. 10820 State Route 347
East Liberty, OH 43319



Test Date: April 13, 2004
Report Date: April 26, 2004

Final Report

Prepared For:

U. S. Department of Transportation
National Highway Traffic Safety Administration
Office of Enforcement
Office of Vehicle Safety Compliance (NVS-220)
400 Seventh Street, S.W., Room No. 6115
Washington, DC 20590

This Final Test Report was prepared for the U.S. Department of Transportation, National Highway Traffic Safety Administration, under Contract No. DTNH22-03-D-01002.

conclusions expressed in this publication are Safety Administration, in the interest of in States Government assumes no liability for its contents or use thereof. If trade or manufacturers' Department of Transportation or the National This publication is distributed by the U.S. De publication and should not be construed as an endorsement. The United States Government does names or products are mentioned, it is only b not endorse products or manufacturers. those of the author(s) and not necessarily those of the partment of Transportation, National Highway Traffic cause they are considered essential to the object of the formation exchange. Highway Traffic Safety Administration. The United The opinions, findings, and

Test Performed By: Ronald D. Stoner, Engiecring Technician

Report Approved By:

Walter Dudek, Project Manager

Date

Transportation Research Center Inc.

Final Report Accepted By:

Contracting Officer's Technical Representa live (COTR),

NHTSA, Office of Vehicle Safety Complia

eted page authorized	Reproduction of completed page authorized	, P	Form DOT F 1700.7 (8-72)	Form DC	_
ges 22. Price	21, Number of Pages 216	f. (of this page)	19. Security Classif. (of this report) 20. Security Classif. (of this page) Unclassified Unclassified	19. Sec Unc	_
available from: rence Division '., NPO-230	Distribution Statement Copies of this report are available from: NHTSA Technical Reference Division Room 5108 400 Seventh Street, S.W., NPO-230 Washington, DC 20590	18, D.	1 7	Co Ply	·
			į.	None.	
3 Toyota Tacoma Truck Pickup Vehicle Safety Compliance Test Possible test failures identified	n a 2003 Toyota Tay Yffice of Vehicle Saft Mance, Possible tes	MRS conducted of fications of the (AVSS 208 com	An FMVSS 208 Section 13 compliance sled test was conducted on a 2003 Toyota Tacoma Truck Pickup truck, NHTSA No.C35108, in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure No. TP208S-01 for the determination of FMVSS 208 compliance. Possible test failures identified were as follows:	Au truck, I Proced	
			None Abstract		
ncy code	NVS-220		Office of Vehicle Safety Compliance (NVS-220) 400 Seventh Street, S.W., Room 6115 Washington, DC 20590 Simplemental Nature	⊼ 2 4 4 9 9	
Type of Report and Parint Covered Final Report April 2004			sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration Office of Enforcement		
n No. 01002	11. Contract or Grant No. DTNH22-03-D-01002		Transportation Research Ceater Inc. 10820 State Route 347 East Liberty, OH 43319	I	
Performing Organization Report No. 208S-TRC-04-002	8. Performing Organization 2085-TRC-04-04		Author(s) Walter Dudek, Project Manager Transportation Research Center Inc. Performing Organization Name and Address	%	
mization Code	 Report Date April 13, 2004 Performing Organization Code TRC 	Truck	The and Subtice Final Report of FMVSS No. 208 Compliance Sled Testing of a 2003 Toyota Tacoma Truck NHTSA No. C35108	L	
ulog No.	1 1	Government Accession No.	2.	. [
Technical Report Documentation Pag	Technical Report				

Table of Contents

¢n	Appendix D - Miscellaneous Test Informati
nformation	Appendix C - Manufacturer Provided Test h
	Appendix B - Data Plots
Α-	Appendix A - Photographs
	FMVSS 208 Seat Belt Guides and Hardwar
96	PMVSS 208 Seat Belt Retraction
52	FMVSS 208 Latch Plate Access
48	PMVSS 208 Belt Contact Force
ok46	FMVSS 206 Seat Belt Warning System Che
	FMVSS 208 Lap Belt Lockability
Off Device40	FMVSS 208 Passenger Air Bag Manual Car
39	FMVSS 208 Readiness Indicator
200	FMVSS 208 Air Bag Labels
Seat Belts	FMVSS 208 Rear Outboard Seating Position
1811on	FMVSS 208 Certification Label and Tire RIA
	÷
	Motion Picture Camera Locations
20	Camera Positions
÷	Vehicle Targeting Measurements
cations	Vehicle Data Summary and Accelerometer Locations.
18	Vehicle Accelerometer Placement
cupants13	Dummy Measurement Data for Front Seat Ot
12	Seat and Steering Column Positioning Data
11	Post-Impact Data
the Sled Test Vehicle7	General Test and Vehicle Parameter Data for
6	Sled Test Summary
3	Test Results Summary
	Test Procedure
	Рирозе
Page	Description

List of Photographs

A-10 A-10 A-10 A-10	Photograph Title Pre-Test Front View of Test Vehicle Mounted to Sied Pre-Test Left Side View of Test Vehicle Mounted to Sied Pre-Test Right Side View of Test Vehicle Mounted to Sled Pre-Test Right Side View Post-Test Windshield View Pre-Test Driver Dummy Position View with Door Open Pre-Test Driver Seat Track Position View Pre-Test Driver Seat Track Position View Pre-Test Driver Dummy Position Front View Pre-Test Driver Dummy Position View with Door Open
A-6. A-7.	Pre-Test Driver Dummy Position View with Door Open Post-Test Driver Dummy Position View with Door Open
A-8.	Pre-Test Driver Seat Track Position View
A-9,	Post-Test Driver Seat Track Position View
A-10.	Pre-Test Driver Dummy Position Front View
A-11.	Post-Test Driver Dummy Position Front View
A-12.	Pre-Test Passenger Dummy Position View with Door Open
A-13.	Post-Test Passenger Dummy Position View with Door Open
A-14.	Pre-Test Passenger Seat Track Position View
A-15.	Post-Test Passenger Seat Track Position View
A-16,	Pre-Test Passenger Dummy Position Front View
A-17.	Post-Test Passenger Dummy Position Front View
A-18.	Post-Test Driver Airbag View
A-19.	Post-Test Driver Dummy Removed from Vehicle Overall View
A-20.	Post-Test Driver Head Contact - View 1
A-21.	Post-Test Driver Head Contact - View 2
A-22.	Post-Test Driver Head Contact - View 3
A-23.	Post-Test Passenger Airbag View
A-24.	Post-Test Passenger Dummy Removed from Vehicle Overall View
A-25.	Pre-Test Driver Knee Bolster View
A-26.	Post-Test Driver Knee Bolster View
A-27.	Pre-Test Passenger Glove Box View
A-28.	Post-Test Passenger Glove Box View
A-29.	Pre-Test Vehicle Certification Label View

S040413

Purpose

test mode. requirements of FMVSS 208, "Occupant Crash Protection," in the impact simulation sled vehicle, a 2003 Toyota Tacoma Pickup truck, NHTSA No.C35108, meets the performance Contract No. DTNH22-03-D-01002. The purpose of this test was to determine if the subject Administration (NHTSA) by the Transportation Research Center Inc. (TRC Inc.) under of the FMVSS compliance test program conducted for the National Highway Traffic Safety This Federal Motor Vehicle safety Standard (FMVSS) 208 compliance sled test is part

Test Procedure

Data was obtained relative to PMVSS 204, "Occupant Crash Protection," performance Compliance (OVSC) Laboratory Test projecture No. TP-208S-01, dated January 15, 1998 This test was conducted in accord ance with NHTSA's Office of Vehicle Safety

sled was instrumented with one (1) light pulse and integrated velocity determinate sled firing circuit, and two (2) additional accelerometers: the primary accelerometer for accelerometer, which is prefiltered with an analog filter to 200 Hz as an integral part of the longitudinal accelerations. пипив специя The sled test vehicle was instrum 븕 pap to measure velocity and four (4) airbag firing pert on and a backup accelerometer. was instrumented with one with six 9 accelerometers to measure (1) longitudinal In addition, the

specified in Appendix B of the Latter outboard anthropomorphic test devices (dummie restrained by seat belts. sled test vehicle contained to designated seating positions atory Test Procedure. according to the dummy placement procedure (2) Part 572 E 50th percentile adult male The dummies were positioned in the front The dummies were not

lateral, and vertical forces and momenta fermur load cells to measure axial forces; and upper neck load cells to measure longitudinal, longitudinal, lateral, and vertical accelerations; chest deflection potentionneters; left and right Both dummies were instrumented with head and chest accelerometers to measure

and processed per Sections 11.7 through k 1.9 of the Laboratory Test Procedure The forty-one (41) data channels where digitally sampled at 12,500 samples per second

one (1) real-time motion picture camer high-speed motion picture cameras. The sled test event was recorded by the (1) real-time motion picture camera and six (6) pre-test and post-test conditions were recorded by

Test Regults Summary

This FMVSS 208 compliance sied test was conducted by TRC Inc. on 04/13/04.

mode as measured by Hybrid III 50^{th} percentile make dummies. comply with the performance requirements of FMVSS 208 in the impact simulation sled test The test vehicle, a 2003 Toyota Tacoma Truck, NHTSA No. C35108, does appear to

1530	556	3100 N	Neck Shear
2584	985	4000 N	Neck Compression
322	917	3300 N	Neck Tension
75.8	27.6	190 Nm	Neck Flexion
16.2	9.6	57 Nm	Neck Extension
1043	733	2250 lbs	Right Femur
882	1345	2250 lbs	Left Femur
0,4	1.2	3 inches	Chest Displacement
35.6	39.7	g 08	Chest g
339	258	1000	HIC
		Assessment Values	
Passenger	Driver	FMVSS 208 Max. Allowable injury	

in the data sheets that are included in this report. meet the other FMVSS 208 requirements for which it was tested. These results are shown The subject vehicle, a 2003 Toyota Tacoma Truck, NHTSA No. C35108, appears to

20.2 milliseconds after 0.5 g acceleration was measured by the firing circuit. Following positions. The dummies were not restrained by seat belts. The sled carriage was accelerated to 17.4 g with an integrated velocity change of 29.4 mph. The airbags were triggered at The sled test vehicle was equipped with air bags at the driver and passenger seating

the airbag event trigger signal was 20.7 ms after the 0.5 g acceleration level was indicated. subsequent digital data processing and hipping the acceleration signal to Channel Class 60,

S040413

Data Acquisition Explanations

There were no anomalies to report for this test.

Ç,

Sile est Summary

NHTSA number:

Test type:

Test date:

Test time:

Ambient temperature at impact area:

35108

lternate 208

#13/04

8

고

Vehicle year/make/ model/body style: |2003/Toyota/Tacoma/Truck

Dummy Info:

:Jype: Location:

Restraint:

Number of data channels:

tiver #230

Hybrid III 50th

Front passenger #314

ürbag ybrid III 50th eft front

Right front Airbag

ᅜ

Number of Cameras:

Real-time:

High-speed:

Door Opening Data: Left Front:

Hasy Hasy

Right Front:

Front Seat Data:

Seat track failure:

Seat back failure

Visible Dummy Contact Points:

Head:

Chest:

Right knee: Left knee:

> Mone pic

None None

irbag, windshield,

Airbag

m visor, roof liner

Knee bolster grani

Airbag Giove box Glove box

Φ

General Test and Vehicle Parameter Data for the Sled Test Vehicle

Test Vehicle Information:

model/body style: Vehicle year/make/

2003/Toyota/Tacoma/Truck

Color.

Super white

ă

NHTSA number:

STENIL 42N43Z

Engine data:

Placement:

Inline

Displacement: Cylinders:

2.4

5 speed,

X manual,

_automatic,

X overdrive

Date vehicle received:

06/25/03

<u>'</u>

Y Twd,

4wd

Final drive:

Transmission data;

and address: Dealer's name

Odometer reading:

Ed Shults Toyota

Bradford, PA 16701 880 East Main Street

š

Other: None

Ϋ́es

Power brakes Power steering Major Options:

Air conditioning Power windows

Power door locks

Z

ğ Ş

Remarks:

General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont'd.

Data from Vehicle's Certification Labe

Vehicle manufactured by: Toyota otor Manufacturing

Date of manufacture: 03/03

STENDARYA3Z

GVWR: 4250 II

GAWR: Front: 2200 Ibs

Rear: 2500 Ibs

Data from Vehicle's Tire Placard:

Tire pressure with maximum capacity rehicle load:

Front:

Rear:

Recommended tire size:

Load range:

Recommended cold tire pressure:

Front:

Rear.

Size of tires on vehicle:

Spare tire:

Vehicle capacity data:

Type of front seats:

Number of occupants:

Front

Rear

Total

Remarks:

29 psi

29 psi

P205/75R15

N/A lbs

29 psi

29 psi

205/75R15

205/75R15

Bench

General Test and Vehicle Parameter Data for the Sled Test Vehicle, Cont'd,

Weight of jest vehicle as received (with maximum fluids):

Total delivered weight	Total rear weight	Total front weight	Left front	Right front
2827.4 lbs	1218.0	1609.4 lbs	809.1 lbs	800.3
Ĭbş	lbs	lbs	lbs	Ibs
	(43.1% of total vehicle weight)	(56.9% of total vehicle weight)	Left rear	Right rear
	hicle wei	hicle wei	637.1 Ibs	580.9
	(mg	ght)	₽	듌

Calculation of test vehicle's target test weight:

RCLW = Rated Cargo and Luggage Weight

UDW = Unloaded Delivered Weight (2827.4 lbs)

DSC = Designated Seating Capacity (3)

RCLW = 300 lbs

Target test weight = UDW + RCLW + (Number of Hybrid III dummies x 167 lbs per dummy)

Target test weight = 2827.4 + 300.0+ 334.0 = 3461.4 lbs

Weight of test vehicle with two dummies and 298.1 lbs of cargo weight:

Right front Left front Total front weight Total rear weight	884.0 884.0 1768.0 1695.3	ibs ibs	Right rear 816.8 It Left rear 878.5 It (51% of total vehicle weight) (49% of total vehicle weight)	816.8 lbs 878.5 lbs aicle weight) ticle weight)	E E E
Total rear weight	1695.3	lbs	(49% of total vehicle weight)	ucle weigt	5
Total test weight	3463.3 lbs	ľbs			

Remarks:

Weight of ballast secured in vehicle cargo area: None

Components removed to meet target test weight: None

General Test and Vehicle Paracter d Data for the Sled Test Vehicle, Cont'd.

Test Vehicle Attitude:

As delivered door sill angle: 1.9° Nose Down

As tested door sill angle: 1.6° Nose Down

Fully loaded door sili angle: 1,3° Nose Down

Vehicle Wheelbase: 103.3 inches

Fuel System Data:

Fuel system capacity from owner's manual: 16.0 gallons

Uscable capacity figure furnished by COTR: 16.0 gallons

The roll angle measurements were within 1 inch of each other.

The left and right side measurements were 34.6 inches and 34.6 inches respectively.

Post-Impact Data

Test number:

NHTSA number:

04/13/04

Test date:

11.08

Test type: Test time:

impact angle:

Alternate 208

ç

Ambient temperature

at impact area:

70° F

Temperature in

occupant compartment:

70° F

Sled carriage velocity:

Measured velocity from the light trap device attached to the sled (backup): Integrated velocity from the integration of the entire sled acceleration: 29,4 ութի 28,9 ութի

Specified integrated velocity range:

28 to 30 mph

Sled carriage acceleration:

Acceleration:

17.4 g

Specified acceleration range: 16.0 g - 18.2 g

Sled carriage acceleration duration:

Time from T-0(-0.5 g) to 0.0 g:

126.3 ms

Specified acceleration duration: 120 - 130 ms

The sied acceleration curve was within the specified corridor.

Seat and Steering Column Positioning Data

Vehicle: 2003/Toyota/Facoma/Truck

NHTSA No.: C35108

Nominal Design Riding Position:

Driver Seat: Fixed

Passenger Scat: Fixed

Seat Fore and Aft Positions:

Driver Seat: Set to six neighbor rearward from the foremost position (7th of

12 notches)

Passenger: Set to six note hes rearward from the foremost position (7 $^{\rm th}$ of

12 notches)

Steering Column Adjustments:

Set to 3rd notch down from top notch

Dummy Measurement Data for Front Seat Occupants

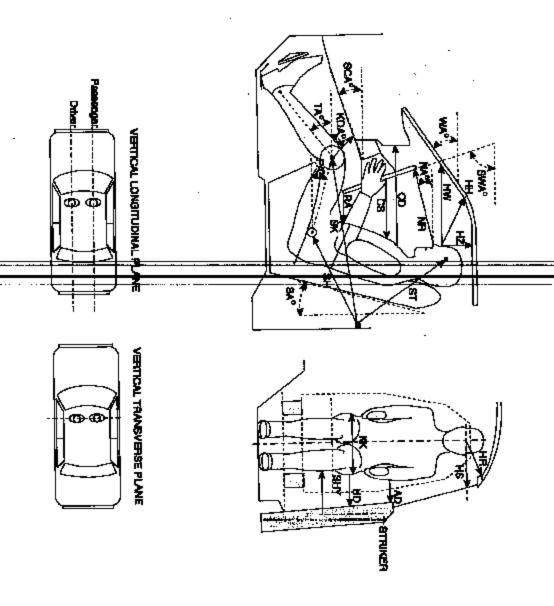
AD	Ð	HS	SHY		SH ⁴	•	SK	•	ST	, K	TA	PA	KDA	KDR	KDL	RA	S	θ	NA	NR	Ħ	WH	HH	ZH	SA	SCA	SWA	WA	Designation
Arm to door	H-point to door	Head to side window	Striker to H-point (Y dir.)	Striker to H-point angle	Striker to H-point	Striker to knee angle	Striker to knee	Striker to head angle	Striker to head	Knee to knee	Tibia angle	Pelvis angle	Outboard knee to dash angle	Right knee to dash	Left knee to dash	Rim to abdomen	Steering wheel to chest	Chest to dash	Nose to rim angle	Nose to rim	Head to side header	Head to windshield	Head to header	Head to roof	Seat back angle	Steering column angle	Steering wheel angle	Windshield angle	Type of Measurement
3.9 in	5.0 in	12.9 in	9,4 in	24.8°	14.1 in	4.9°	28.5 in	-70.1°	21.3 in	13.0 in	36.9°	23.3°	19.7°	7,8 in	7.7 in	8.2 in	14,4 in	23.2 in	12°	18.0 in	8.3 in	21.4 in	16.4 in	7.6 in	16.8°	63.8°	26.2°	39.70	Driver (Serial #230)
4.3 in	5.5 in	12.2 in	8.8 in	23.4°	14.5 in	3.40	29.2 in	-68.5°	21.9 in	10.6 in	41,80	23°	24,3°	6,1 in	5.9 in	NA	N/A	21.9 in	N/A	N/A	8.0 :	20.8 in	16.7 in	7.4 in	16.8°	N/A	NA	Ν̈́A	Passenger (Serial #314)

The seat back angle (SA°) is measured relative to vertical.

All other angles are measured relative to horizontal.

A negative angle indicates the measurement point was located below the striker.

Dummy Measurement Actations for Front Seat Occupants



Descriptions of Dummy Measurements

the dummy, take the measurement from the center of the bolt hole if the bolt is recessed. measurement. Also, when a measurement is to be taken to or from the center of a bolt on is less than 10 inches ignore the directions to use a level and approximate a level described is either parallel or perpendicular to the ground. If a measurement to be made When a level is to be used, it is to ensure that the line containing the two points

The following measurements are to be made within a vertical longitudinal plane.

- 臣 forehead (between his eyes) to the furthest point forward on the header. Head to Header, taken from the point where the dummy's nose meets his
- ¥ his forehead (between his eyes) to a point on the windshield. Use a level, Head to Windshield, taken from the point where the dummy's nose meets
- H Head to Roof, taken from the point where the dummy's nose meets his forehead (between his eyes) to the point on the roof directly above it. Use
- # ß to the dummy's chest. Use a level, Steering Wheel to Chest, taken from the center of the steering wheel hub
- θ to the dashboard placing the tape measure above the rim, whichever is a upper part of the steering wheel between the hub and the rim, or measure from this point to the closest point on the dashboard either between the rotate five inches of it downward toward the dummy to the point of Chest to Dash, place a tape measure on the tip of the dummy's chin and shorter measurement. See diagram. contact on the transverse center of the dummy's chest. Then measure
- ሯ steering wheel rim horizontally rearward to the dummy. Use a level Steering Wheel Rim to Abdomen, taken from the bottommost point of the
- Z makes with respect to the horizontal (NA). Nose to Rim, taken from the tip of the dummy's nose to the closest point on the top of the steering wheel rim. Also indicate the angle this line

^{*} Measurement used in Data Tape Reference Guide

Descriptions of Dunday Measurements, Cont'd.

1 ξĐ,

ğ the horizontal for the outboard knee (KDA) swinging the tape measure in continually larger arcs until it contacts the pivot bolt's outer surfle Left and Right Knees a to the closest point forward pashboard, taken from the center of the knee acquired

STKE

respect to the horizonta should be used. Use this measurement a firn the center of the H-poilt Striker to Hip, Knee, and taken (SHY). See diagrau X-Z plane measured from Y (transverse) direction should also be recorded. The measurement in the QVC. evice that can be rigidly connected to the striker Head, these measurements are to be taken in the from the striker to the H-point should also be the forward most center point on the striker to outer knee bolt, and head target. When taking The angles of these measurements with

The following measurements are to be made within a vertical transverse plane.

- 똤 height which allows a lityle measurement. Use a level. See diagram. In order to make this ha meets his forehead (between Head to Side Window pasurement, roll the window down to the exact en his eyes) to the outside of the side window. aken from the point where the dummy's nose
- ₹ arm segment where it the SID is used make the the Hybrid III dummy, me Arm to Door, taken filet Hybrid II dummy to the basurement from the center of the bottom of the he outer surface of the elbow pivot bolt on a ets the durnmy's torso. the from the bolt on the outer biceps. When a first point it hits on the door. In the case of a
- Ħ H-point to Door, taken from the H-point on the dummy to the closest point on the door. Use a level.
- 贸 of the header just allo the dummy's nose meets апшту. Head to Side Header, in his forehead (between his eyes) to the side edge asure the shortest distance from the point where the window frame, directly adjacent to the
- Measurement used in Data Tape Reference Guide Only outboard measurement is referenced in Data ced in Data Tape Reference Guide

16

<u>\$040413</u>

Descriptions of Dummy Measurements, Cont'd.

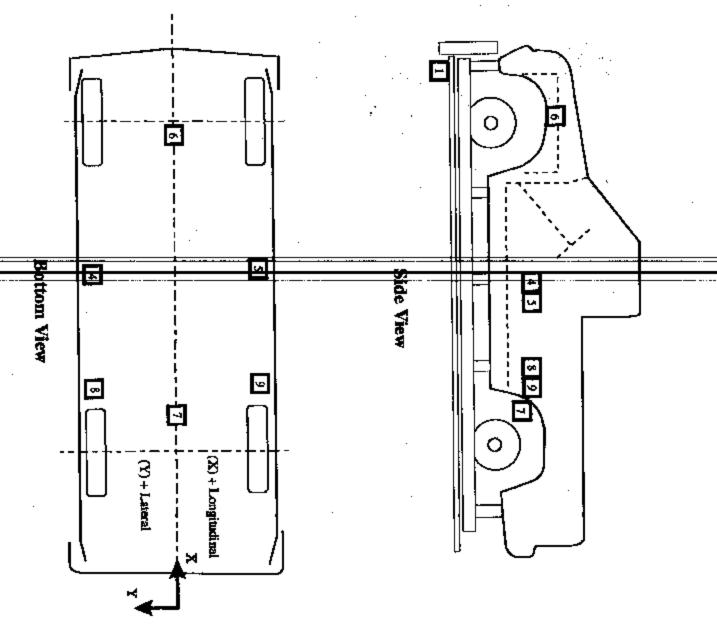
- AHS center point on the striker to the H-point. Use a level. See diagram. Striker to H-point, taken from a rod rigidly connected to the forward most
- 즛 measurement may not be exactly transverse.) distance between the outboard knee clevis flange surfaces. pivot bolt head outer surfaces. Knee to Knee, for Hybrid II dummies measure the distance between knee For Hybrid III dummies measure the (This

Angles

- S manufacturer. Seat Back Angle, find this angle using the instructions provided by the contact the COTR. If the manufacturer doesn't provide clear instructions
- PA If dummy with respect to the horizontal, to find the femur angle. connecting the H-point hole and the outer knee pivot bolt hole on a Hybrid this angle with respect to the horizontal. Measure the angle of the line Pelvis or Femur Angle, taken by inserting the pelvic angle gauge into the H-point gauging hole on the SID or the Hybrid III dummies and taking
- SWA Steering Wheel Angle, find this by placing a straight edge against the angle of the straight edge with respect to the horizontal. steering wheel rim along the longitudinal plane. Then measure the acute
- SCA Steering Column Angie, measured with respect to the horizontal by placing an inclinometer on the center of the underside of the steering
- Z Measure the angle made when taking the measurement NR with respect to the borizontal
- ΚĐΑ respect to the horizontal. Only get this angle for the outboard knee. See Knee to Dash Angle, the angle that the measurement KD is taken at with
- ₩A windshield exterior (measurement is made with respect to horizontal). Windshield Angle, place an inclinometer along the transverse center of the
- TA angle with respect to the horizontal. bolts. Then place an inclinometer on the straight edge and measure the Tibia Angle, use a straight edge to connect the dummy's knee and ankle

^{*} Measurement used in Data Tape Reference Guide

Vehicle Accelerometer Placement



Vehicle Data Summary and Accelerometer Locations, Cont'd,

TEST NUMBER: S040413 No. LOCATION	x	Y	z		SITIVE: RECTION		EGATIVE ¹ IRECTION
9 RIGHT VEHICLE FRANE LONGITUDINAL	51.0 in	20.7 in	NA	39.0 g	@ 100.2 ms	17.5 g	e 63.0 ms
10 DRIVER PRIMARY AIRBAG EVENT	NA	NA .	NA NA	1.0 volt	@ 20.7 ms		
11 PASSENGER PRIMARY AIRBAG EVENT	NA	NA	NÁ	1.0 volt	€ 20.7 ms		

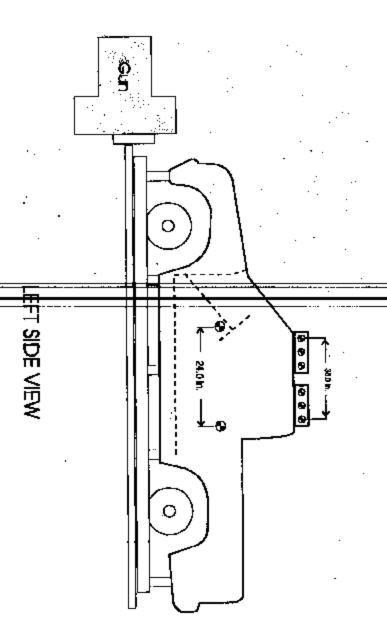
REFERENCE: X: + FORWARD FROM VEHICLE REAR SURFACE

Y: + RIGHTVARD FROM SLED CARRIAGE CENTERLINE

Sign convention per SAEJ211 March 1995.
 No positive data in time frame of interest.

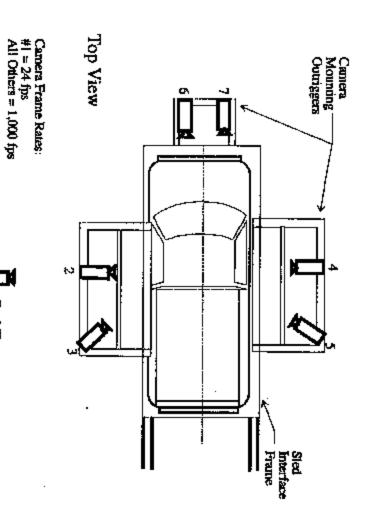
Vehicle Targeting Measurements

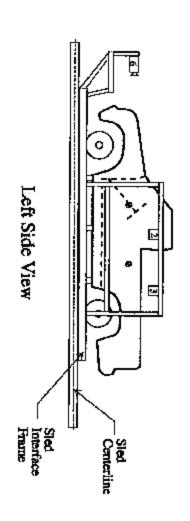
REFERENCE PHOTO TARGETS



21

Camera Positions





Real-Time Camera

Motion Picture Camera Locations

Vehicle year/make/model/body style: 2003/Toyota/Tacoma/Truck

NHTSA No.: C35108

Test Number: S040413

	Camera Number		_X	Camera Position	s ¹ Z	Camera Angle ²	Film Plane to Head Target	Camera Lens	Film Speed
	1	Pre- and Post-Test panning and					,	•	
		documentary	94.8 in	304.4 in	41.6 in	3.5°	290.0 in	6.7 mm	30 frames/s
	2	Left side view wide	70.4 in	72.4 in	52.6 in	-9.8°	58.1 in	13 mm	1000 frames/s
	- 3	Left side view over shoulder	97.4 m	50.4 in	63.5 in	-14.6	36,3 in	8 1.1m	1200 fiames/s
	4	Right side view wide	70.0 in	73.4 in	63.7 in	-9.7°	58.5 in	13 mm	1000 frames/s
23	5	Right side view over shoulder	100.3 in	49.8 in	62.5 in	-12.6°	36.0 in	8 mm	1035 frames/s
	6	Front view - driver ³	27.4 in	14.8 in	55.8 in	-7.3°	54.2 in	8 mm	312 frames/s
	7	Front view - passenger ³	27.5 in	16.5 in	56.3 in	-3.1°	53.9 in	8 mm	440 frames/s

X: Film plane to front of sled

Y: Film plane to sled centerline

Z: Film plane to top of sled

Angle: Film plane of camera downward from horizontal plane Cameras ran slower than 1,000 frames/second settings.

FMVSS 208 Occupant Injury Data

Vehicle: 2003/Toyota/Tacoma/Truck

NHTSA No.: C35108 Date:04/13/04

CHEST RESULTANT	Chest Channel Z	Chest Channel Y	Chest Channel X	HEAD RESULTANT	Head Channel Z	Head Channel Y	Head Channel X	Maximum Acceleration Values: (g)
VT 40.7	13.2	4.5	-39.2	T 107.1	26.9	45.3	-107.0	tion Driver Dummy #230
36.5	23.1	3.0	-34,0	75.3	-27.6	-26.6	-67.7	Passenger Dummy #314

Head Injury Criteria (HIC) Values:

$t_1 = (ms)$ 102.64 99.20
t ₂ = (ms) 138.64 125.36

The maximum HIC time interval from t₂ to t₂ is 36 milliseconds.

Chest Injury Criteria (Clip) Values:

CLIP (g) t ₁ = (ms) t ₂ = (ms)	39.7 103.65 106.61	35.6 114.42 117.38
$t_2 = (ms)$	106.61	117.38
Chest Deflection (in)	1.2	0.4

FMVSS 208 Octubent Injury Data, Cont'd.

Vehicle: 2003/Toyota/Tacoma/Truck

NHTSA No.: C35108 Date:04/13/04

Max. Compressive Femur Forces:		Driver Dummy #230	Passenger Dummy #314
Left Side (lbs)		1345	882
Right Side (lbs)		733	1043
	I		

Neck Injury Criteria:	Driver Dummy #230	Passenger Dummy #314
Peak Flexion Bending Moment (N-m)	27.6	75.8
Peak Extension Bending Moment (N-m)	9.6	16.2
Peak Axial Tension (N)	917	322
Peak Axial Compression (N)	985	2584
Peak Positive X-axis Shear (N)	556	1530
Peak Negative X-axis Shear (N)	161	276

DATA SHEET 3

Certification Label and Tire Placard Information

ю

The Placard

NA - Vehicle is not a passenger car and does not have a tire placard.

X This is not a passenger car (see the Item 1 above), but all or part of this information is still contained on a vehicle label and is reported here.

Recommended tire size P205/75R15	old tire inflation	Designated seating capacity rear Total Designated seating capacity	Designated seating capacity front	Vehicle Capacity Weight
JEBU BUIL	pressure front	5 5	No.	No.
29	28			

DATA SHEET 4

REAR OUTBOARD SHATING POSITION SEAT BELTS

VO, describe the seat belt installed, the seat to two less that which which was to be the seat belt which the seat belt which is the seat belt which it would be the seat belt which it would be the seat belt which it would be seat belt installed, the seat belt installed, the seat belt installed.	o all rear outboard seating positions have type 2 seat belts? Yes; No X	aboratory: TRC Inc. Test IT	HTSA NoC36108	
NO, describe the seat belt installed, the seat location, and any other information about the seat not would exclain why a type 2 seat belt was not installed.	ab 2 sent belts? Yes; No X	Test Technician(s): Stephen W. Bell	Test Date: 03/29/04	

REMARKS: Vehicle not equipped with lear seets.

DATA SHEET 5

AIR BAG LABELS (\$4.5.1)

NHTS Labon 1.1 1.1 1.2	NHTSA No. C35108 Test Date: 08/30/04 Laboratory: TRC Inc. Test Technician(s): Michael S. Postle 1. Air Bag Maintenance Label and Owner's Manual Instructions: (S4.5.1(a)) 1.1 Does the manufacturer recommend periodic maintenance or replacement of the air bag? Yes (Go to 1.2); X No. (Go to 2) 1.2 Does the vehicle have a label specifying air bag maintenance or replacement? Yes-Pass; No-FAIL 1.3 Does the label contain one of the following? Yes-Pass; No-FAIL
•	Check applicable schedule Schedule on label specifies month and year (Record date) Schedule on label specifies vehicle mileage (Record mileage) Schedule on label specifies interval measured from date on certification label (Record interval)
4.	is the label permanently affixed within the passenger compartment such that it cannot be removed without destroying or defacing the label or the sunvisor? Yes Pass No. East
5	
1.6	is the label in block capitals and numerals? Yes-Pass;No-FAIL
1.7	Are the letters and numerals at least 3/32 inches high? height of letters and numerals Yes_Pase: No.EAst
8	Does the owner's manual set forth the recommended schedule for maintenance or replacement?Yes-PassNo-FAIL
1. 1.00	Does the owner's manual: (S4.5.1(f)) Include a description of the vehicle's air bag system in an easily understandable formet? X Yes-Dass: No-FAII
22	
23	Include a statement that the air bag is a supplemental restraint at the front outboard seating positions? X Yes-Pass;No-FAIL
л 4	Emphasize that all occupants, including the driver, should always wear their seat belts whether or not an air beg is also provided at their seating positions to minimize the risk of severa injury or death in the event of a crash? X Yes-Pass: No-FAII
Ω !O	∣इ∺इं⇒∣
2.6	Explain that no objects should be placed over or near the air bag on the steering wheel or on the instrument panel, because any such objects could cause harm if the vehicle is in a crash severe enough to cause the air bag to inflate? X Yes-Pass: No-FAIL

- 27 S25? (Obtain the anawer to this queres (go to 2.7.1); X.No (go to 3)

 Explain the proper functioning of the Yes-Page: No East is the vehicle certified to meet the puirements of \$14.5, \$15, \$17, \$19, \$21, \$23, and detion from the COTR.) (\$4.5.1(f)(2))
 - 2.7.1 hopping and the properties of the properties of
- 2.7.2 Provide a summary of the actions it (S.4.5.1(1)(2)) Yes-Pass; __No-FAIL at may affect the proper functioning of the system?
- 2.7.3 Present and explain the main con (\$4.5.1(1)(2)(1)) Yes-Pass NO-FAIL hents of the advanced passenger air beg system?
- 274 Yes-Pass; __No-FAIL
 Explain how the components function system? (84.5.1 (f)(2)(II)) pogether as part of the advanced passenger air beg
- 2.7.5 __Yes-Pass; __No-FAIL Contain the basic requirements actions that may affect the proper ______Yes-Pass; _______No-FAIL proper operation, including an explanation of the kitioning of the system? (S4.5.1(f)(2)(iii))
- 2.7.6 suppression)? the vehicle certified ថ ₽ equirements of S192, ў ў q S23,2 (autometic
- _No, go to 2.7.7 Yes, continue with 2.7.6
- 2.7.6.1 Contain a complete description of the vehicle, including a discussion of e pessenger eir bag suppression system installed in any suppression zone? (S4.5.1(f)(2)(N))
- 2.7.6.2 __Yes-Pass; __No-FAIL Discuss the telltale light, specifying light is Illuminated? its location in the vehicle and explaining when the
- 2.7,7 Yes-Pass; No-FAIL

 Explain the interaction of the advanced passenger air bag system with other vehicle components, such as seat belts, seats or other components? (\$4.5.1(f)(2)(v)) Yes-Pass; No FAIL
- 2.7,8 Summarize the expected outcomes when child restraint systems, children and small teenagers or acults are both probably and improperly positioned in the passenger seat, including cautionary advice against improper placement of child restraint systems? (\$4.5.1(f)(2)(M))
- 27.9 Provide information on how to contract the vehicle manufacturer concerning modifications for persons with disabilities that may affect the advanced air bag system? (\$4.5.1(f)(2)(VII)) Yes-Pass; __No-FAIL Yes-Pase; persons with disabilities No FAIL
- ω Sun Visor Air Bag Warning Label (S4.5.1 (b)) Check only one of the following:

 X The vehicle is not certified to invet the requirements of S18, S21, and S28. (Obtain the enswer to this question from the COTR.) (S4.5.1(b)(1)) Go to 3.1 and skip 3.2 and
- (Obtain the answer to this qui sklp 3,1 and 3,3 The vehicle is certified to mee to requirements of S18, S21, and S23 before 9/1/03 ton from the COTR.) (S4.5.1(b)(2)) Go to S.2 ark Go to 3.2 and
- The vehicle is certified to meet it. (Obtain the answer to this question from the COTR.) (\$4.5.1(b)(3)) he requirements of \$18, \$21, and \$23 on 9/1/03 or
- 2 and skip 3.1 and 3.2 Vehicles not certified to meet the huirements of S16, S21, and S23

3.2,4	3.2.3 3.2.3		3.2 3.2	3.1.7	3.1.6	3.1.4	9.1.2	Ω 1.1 1.0
Driver sideYes-PassNo_FAIL Passenger sideYes-PassNo_FAIL Is the message area white with black text? (\$4.5.1(b)(2)(ii)) Driver sideYes-PassNo_FAIL Passenger sideYes-PassNo_FAIL	(94.5.1(b)(2)(iv)) Vehicles without back seats or the back seat is too small to accommodate a rear-facing child restraint may omit the statement "Never put a fear-facing child seat in the front." (54.5.1(b)(2)(v))) Driver sideYes-PassNo-FAIL Passenger sideYes-PassNo-FAIL is the label heading area yellow with the word "WARNING" and the alert symbol in black? (54.5.1 (b)(2)(i))	molding into the visor material) to either side of the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing the label or the sun visor? (\$4.5.1 (b)(2)) Driver side Yes-Pass No-FAIL Passenger side Yes-Pass No-FAIL Does the label conform in content to the label shown in Figure 8 or Figure 11 at each front outboard seating position? (\$4.5.1(b)(2)) (Vehicles without back seats may omit	Passenger side X Yes-PassNo-FAIL Vehicles certified to meet the requirements of S19, S21, and S23 before 9/1/03. (S4.5.1(b)(2)) Is the lebel permanently affixed (including permanent marking on the visor material or	Driver side X Yes-Pass No-FAIL Passenger side X Yes-Pass No-FAIL Is the pictogram at least 30 mm in diameter? (\$4.5.1 (b)(2)(III)) Actual diameter 31mm Driver side X Yes-Pass No-FAII	Driver side: Length 12.4 Width 2.6 Passenger side:Length 12.4 Width 2.6 Passenger side:Length 12.4 Width 2.6 Actual message area 32 cm² Driver side X Yes-Pass No-FAIL Passenger side X Yes-Pass No-FAIL Is the pictogram black with a red circle and shash on a white background? (S4.5.1(b)(2)(iii))	X Yes-Pass side X Yes-Pass age area white with X Yes-Pass side X Yes-Pass area at least 3	outboard seating position? (S4.5.1 (b)(1)) (Vehicles without back seats may omit the statement "The BACK SEAT is the SAFEST place for children." (S4.5.1(b)(1)(iv))) Driver side X Yes-Pass No-FAIL Passenger side X Yes-Pass No-FAIL Is the label heading area yellow with the word "WARNING" and the siert symbol in black? (S4.5.1 (b)(1)(i))	molding into the visor material) to either side of the sun visor at each front outboard seating position such that it cannot be removed without destroying or defacing \(\text{S4.5.1(b)(1)} \) CS4.5.1(b)(1)) Driver side \(\text{X} \) Yes-Pass \(\text{No-FAIL} \) Passenger side \(\text{X} \) Yes-Pass \(\text{No-FAIL} \) Does the label conform in content to the label shown in either Figure 6a or 6b (Figure 6b is for vehicles with passenger air had on off switches) or approximate to the label shown in either Figure 6a or 6b (Figure 6b is for vehicles with passenger air had on off switches) or approximate to the label shown in either Figure 6a or 6b (Figure 6b is for vehicles with passenger air had on off switches) or approximate to the label shown in either Figure 6a or 6b (Figure 6b is for vehicles with passenger air had on off switches)

No-FAIL	1	Passenger side Yes-Pass	
A FAIL	F	Driver sideYes-Pass	
		7. 5.	
Burn (a) (a) (a) (a)	-	Driver side: porting	J.D. /
bhrth? (S4.5.1(b)(3)(iii))		Passenger side Tes-Tess	9
	-	ı	
TAIL	= ₹	Is the pictogram year been	3,3.6
101 217 (94.5 10)(3)(iii)	7	Personnelle Teatron author	·
	ŧ		
	-	II (BATIOB)	
1	•••	Diver actual message area	
	-3	Passenger side:Length	
	3	Offver side: Length	
(84.5.1(b)(3)(0))	: 🗮	8	3.3.5
v		Passenger side Yes-Pass	
TO FAIL	t	Driver side Yes-Pass .	
k text? (\$4.5.1(b)(3)(ii))	횻	뜷	3.3.4
HO-FAIL	ᡛ	8de	
HO-FAIL		Driver side Yes-Pass	
			0,000
=	돩	ding area vetow	333
		side Yes-Pass	
THE PAIL	Ę	Driver side Yes Pass	
		front." (\$4.5.1(b)(3)(v)))	
toment "Never put a tear-fecing child seat in the	Ī	child restraint may omit the a	
beet is too small to scoommodete a real-racing	×	without back seats or the bax	
T place for children." (S4.5.1(b)(3)(N)) Veniciei	6	"The BACK SEAT is the SAF	
	Ī	seating position? (\$4.5.1(b)(2)) (\)	
the tabel shown in Figure 11 at each from outboard	7	Does the label conform in conten	3.3.2
OFAIL	₹	side 	
C-FASIL	ţ	Driverside Yes-Pass _	
		or the sun visor? (\$4.5.1 (b)(3))	
bt be removed without destroying or detacing the labe	호	seating position such that it cann	
either side of the sun visor at each front outboard	♥	molding into the visor material)	
ncluding permanent marking on the visor material of	Ŧ	is the label permanently affixed	3,3,1
		(S4.5.1(b)(3))	
ments of S19, S21, and S23 on 9/1/03 and later.	늏	₹	Ω 8
Q-FAIL	y	650	
O-FAIL	7	Driver side Yes-Pass	
	• ••	Passanger side: ength	
	•••	Driver side: ength	J.A. /
(\$4.5.1(b)(2)(ii))	ড	Passenger side res-rass	7
	,	Universide ree-rass	
Enground (3+.0.1(b)(e)(m/)	-	ard was	3.2.6
104 F 1 (5) (3) (11)	•	Passenger side Yes-Pass	•
TANK TANK	7	1	
	•	actual m	
	• •	Driver асты message area	
		Passanger side:Langth	
 		Driver side: Length	
(S4.5.1(b)(2)(l))		8	3.25

32

5 2 5	5.2.4	55 [2] (3)		5.2.2	5.2.1	უ ა	5.1.6	5.1.5	5.1.4		5.1.3	5.1.2	5,1.1	<u>51</u> 61	4.	,
Is the message area at least 30 cm ² ? (\$4.5.1(e)(1)(ii)) Length 10.0	. 1	(\$4.5.1 (e)(1)(i) X Yes-Pass: _No-FAIL	ren 12 end under 7 (8 No-Fall	X Yes-Pass No-FAIL Does the label conform in content to the label shown in Figure 77 (S4.5.1 (e)(1)(iii)	X Yes-Pass No-FAIL (ont seating positions? (S4.5.1(e)(1))	Actual message area	Length Width (S4.5.1(e)(2)(ii))	Is the message white with black text? (S4.5.1(e)(2)(li)) Yes-Pass;No-FAIL	Is the heading area yellow with black text? (\$4.5.1(e)(2)(!) Yes-Pass; No-FAIL	(Verticies without tags scale included the second in the second of the place for children." (84.6.1(e)(2)(iii)) Yes-Pass: No-Fall	Does the label conform in content to the label shown in Figure 9? (84.5.1(e)(2)	yes-Passno-FAIC ; by the label clearly visible from all therit seating positions? (S4.5.1(e)(2))	更 20 5	Label On the Dashboard Is the vehicle certified to meet the equirements of S18, S21, and S23? (Obtain the answer to this question from the COTR.) (S4.5.1(e)(2))	Is the pictogram at least 20 mm in glameser? (34.5.1 (0)(2)) Driver side: dlameter Passenger side:dlameter Ves-Pass	

Label Queine, Vertical and Horb

- Artwork Black Wigh White Blackground

Choie and Line Red With White Bedgreand

Bottom Ted Black — With Red Bullets on White Bedigmend

Top Text and Syndami -Black With Yellow Blackground



DEATH or SERVING MAJORY CHARGES

Children 12 not under carr in thind by the pirtup Top Oxfort 1927 in the 147822 pices for all least 15 wifer, 1927 in the 147822 pices for all least 15 wifer hand in processor from the air leag 14 miles can 18247 19275, and Children 1825 19340173

Figure 6a, Sun Visor Lebel Visible When Visor is in Down Foedlon,

Label Outling, Vertical and Horizontal Line Black

- Artwork Black With White Background

Bottom Text Black — with Part Burliets on White Bectground

Top Text and Symbol Black With Yallow Bedgrand

Circle and Line Red With White Background

Z

HEALT OF SHARES WITH A STANDARD CONTRACTOR OF THE SHARE WITH A STANDARD WITH A STANDARD CONTRACTOR OF THE SHARE WITH THE SHARE

ers con 454 highly and Cally Health Wilds

Agure 6b. Sun Visor Label Visible When Visor is in Down Position.

Circle and Line Red With White Bedrignound

Artwork Black With

Text Yellow With Black Background



AIR BAG
WARNING

Figure 6c. Sun Visor Labe Visibi Position.

Visible When Visor is in Up

ate Outline and Hortzontal Line Black

- Bottom Text Black With White Background

Top Text and Symbol Black With Yellow Background

PEPRUNG

Children Can Be KILLED or INJURED by Passenger Air Bag

The back seed is the infect place for children 12 and under Nation same all children use seet belts or child seets.

Figure 7. Removable Lebel on Dash.

Label Outline, Vertical and Horizontal Lines Black



Figure 8. Sun Visor Label Visible when Visor is in Down Position.

Figure 9. Removable Label on Dash.

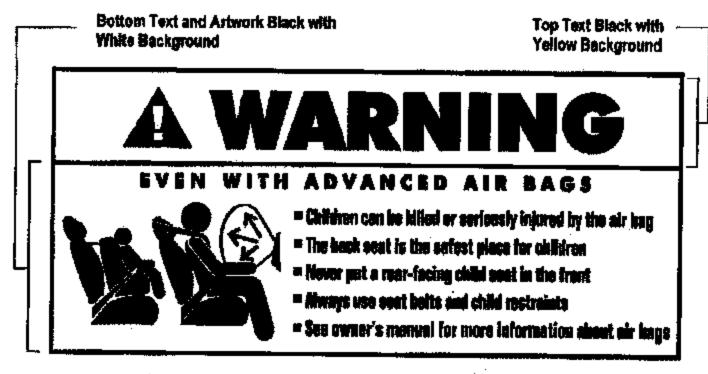


Figure 11. Sun Visor Label Visible when Visor is in Down Position.

FMVSS 208 READNESS INDICATOR (\$4.5.2)

VHTSA No. <u>C35108</u>	Test Date: 03/26/04
aboratory: THC Inc.	Test Technician(s): Stephen W. Ball
An occupant restraint system that deploys in the event of a crash shi with a readiness indicator. A totally mechanical system is exempt fro ega! Interpretation to Lawrence F. Hennetteriger on behalf of Breed)	An occupant restraint system that deploys in the event of a crash shall have a monitoring system with a readiness indicator. A totally mechanical system is exempt from this requirement. (11/8/94 ega! interpretation to Lawrence F. Hennetic ger on behalf of Breed)
X1. Is the system totally mechanical? (If YES this Data Sheet is complete.) X2. Describe the location of the readineds	Is the system totally mechanical? (If YES this Data Sheet is complete.) Describe the location of the readiness Indicator. Lower left hand comer of instrument panel
X3. Is the readness indicator clearly visible to the driver? X Yes-Pass; No-FAIL	ble to the driver?
X.4. Is a list of the elements in the occupant restraint system, being mo readiness indicator, provided on a liabel or in the owner's manual? X.Yes-Pass; No-FAIL	Is a list of the elements in the occupant restraint system, being monitored by the readiness indicator, provided on a liabel or in the owner's manual? X Yes-Pass; No-FAIL
 X.5. Does the vehicle have an on-off switch for the passenger air beg? X.Yes (go to 6) No (this form is complete) 	on-off shifton for the passenger air bag?
X.6. is the air bag readiness indicator of position? XYes-Pass; No-FAIL	is the air bag readiness indicator off when the passenger air bag switch is in the off position? XYes-Pass; No-FAIL

REMARKS:

Passenger Air Bag Menual Cut-Off Device (\$4.5.4)

3.1D.	 3 8	3.7 _3.8.] 3.6. 5.	34	32 32	<u>ရ</u> မှ	X 	NHTS
3.10. If seat adjustments, other than fore-aft, are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. N/A – No adjustments Angle of reference line as tested	at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward. NA - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the middle fore-aft position. (S8.1.2) N/A - The seat does not have fore-aft adjustment. If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat:	Draw a horizontal reference line on the side of the seat cushion. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent	N/A - No independent seat cushion height adjustment. Put the seat in its full rearward position. (S16.2.10.3.1)N/A - the seat does not have a fore-aft adjustment If the seat height is adjustable, put it in the full down position. (S16.2.10.3.1)	to the full rearward position. (\$16.2.10,3.1) N/A = No independent fore-aft seat cushion adjustment if the seat cushion height adjusts independent of the seat back, set this adjustment full down position. (\$16.2.10,3.1)	— N/A — No lumber equatment Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (\$16.2.10.2) N/A — No additional support adjustment If the seat cushion adjusts five and at independent of the cost back out the seat cushion adjusts five and at independent of the cost back out the seat cushion adjusts five and at independent of the cost back out the seat cushion adjusts five and at independent of the cost back out the seat cushion adjusts five and at independent of the cost back out the cost back out the seat cushion adjusts five and at independent of the cost back out the cost back out the cost back out the cost back of the cost back out the cost back	New, go to 4 Verification of the lack of room for a child restraint in the rear seat behind the <u>driver's seat</u> . (S4.5.4(b)) Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)	Is the vehicle equipped with an on-off switch that descrivates the air bag installed at the right front outboard seating position? X Yes, go to 2 No, this sheet is complete Does the vehicle have any forward-facing rear designated seating positions? (S4.5.4(a)) Yes, go to 3	NHTSA No. <u>035108</u> Test Date: <u>03/30/04</u> Laboratory: <u>TRC Inc.</u> Test Technician(s): <u>Michael S. Postle</u>

X7.2.1 on the telltale? Yes - Pass, go to 7.3 X No go to 7.2.2 X 7.2.2 within 25 mm of the telltale? X Yes - Pass No - FAIL	No - FAIL No - FAIL 7. Telltale light (\$4.5.4.3) 7.1 Is the light yellow? \$4. Yes - Pass No - FAIL 7.2 Are the words "PASSE	X5. Is the on-off do XYes - Pass No - FAIL X6. Is there a tellit X Yes - Pass	ess tmore Go to 4 X4. Does the device X Yes - Pass	_3.12.2.2 Locate point of back of the control of th	mi	cushio cushio perper Record Record Record Locate point of from the driver.	3.12 Is the driver se Yes, go to 3 No, po to 3. 8.12.1 Bucker 3.12.1.1 Locate drivers	3.11. The seat back angle, if ac position for a 50th percen (\$4.5.4.1 (b) and \$8.1.3) NA - No seat back an Manufacturer's design seat back angle.
? , go to 7.3 7.2.2 of the telltale? 5	4.5.4.3) w/7 S4.5.4.3(a)) 'PASSENGER AIR'B	vice separate from th	than 720 mm - Pats re than 720 mm - FAII e than 720 mm - FAII 4 ce turn the air bag on	Locate the longitudinal horizon point of the rear seat cushion. back of the rear seat to the load back of the rear seat to the load.	tance 720 mm - Pass 720 mm - FAIII (Including splt) mark a vertical	cushion is delemined of the perpendicular to the longitudina Record the width of the seat Record the distance from the exception of the longitudinal highlight point of the rear seat custion of the front of the seat tack driver's seat.	Is the driver seat a bucket seat? Yes, go to 3.12.1 and skip 3.12.2 No, go to 3.12.2 and skip 3.12.1. Bucket seats: Locate and mark a vertical Fland driver's seat cushion. (522.2)	The seat back angle, it adjustable, is set position for a 50th percentile adult initial in (S4.5.4.1 (b) and S8.1.3) NA – No seat back angle adjustment Manufacturer's design seat back angle Tested seat back angle
_mm from the edge of the telitale light	4G OFF" (S4.5.4.3(b))	e ignition switch? (S4.5.4.2) when the passenger air bag is turned off? (S4.5.4.2)	and off using the vehicle's ignition key? (\$4.5.4.2)	rizontal line in plane B that is tangent to the highest lidn. Measure along this line from the front of the seat lear of the seat back of the front seat.	perch seats): Plane B through the center of the steering wheel	perpendicular to the longitudinal centerline of the vehicle. Record the width of the seat Record the distance from the edge of the seat to Plane B. Locate the longitudinal harizontal line in plane B that is tangent to the highest point of the rear seat custion behind the driver's seat. Measure along this line from the front of the seat back of the rear seat of the seat back of the driver's seat.	river seet a bucket seat? go to 3.12.1 and skip 3.12.2 go to 3.12.2 and skip 3.12.1. Bucket seats: Locate and mark a vertical Flane B through the longitudinal centerline of the seat driver's seat cushion. (522.2.1.3) The longitudinal centerline of a bucket seat	3.11. The seat back angle, if adjustable, is set at the manufacturer's nominal design roung position for a 50th percentile adult in the manner specified by the manufacturer. (\$4.5.4.1 (b) and \$8.1.3)

X7.3 Does the teltale remain Illuminated while the air bag is turned off? (\$4.5.4.3c)) (Leave the air bag off for 5 minutes.)

X Yes - Pass

No - FAIL

X7.4 is the teltale illuminated while the air bag is turned on? (\$4.5.4.3(d))

__Yes -- FAIL XNo -- Pass

×7.5 Is the telltale combined with the air bag readiness indicator? (S4.5.3(e)) Yes - FAIL

XNo -- Pass

|<u>X</u>|X| |8,00 Owner's manual

Does the owner's m switch? (S4.5.4.4(a)) manual contain complete instructions on the operation of the on-off

XYes – Pass

No − FAIL

X82 Does the owner's manual contain a statement that the on-off switch should only be used when a member of one of the following risk groups is occupying the right front passenger seating position? (\$4.5.4.4(b))

there is no back seat

Infants:

the rear seat is too small to accommodate a child restraint

there is a medical condition that must be monitored constantly

Children aged 1 to 12: there is no back seat

space is not always available in the rear seat

Medical condition: medical risk causes special risk for passenger there is a medical condition that must be monitored constantly

greater risk for harm then with the air beg on

X Yes -- Pags

No - FAIL

X8.3 on-off switch at other times? Does the owner's manual contain a warning about the safety consequences of using the

X Yes - Pass

No - FAIL

A SHEET 8

LAP SELIT
Passenger cars, trucks, bits
vehicles with a GVWR bf1 IT LOCKABILITY
sees, and multipurpose passenger
10,000 pounds or less. (\$7.1.1.5)

Complete one of these forms for **each** designated seating position that can be adjusted to forward-facing or that is a forward-facing seat, other than the driver's seat (S7.1.1.5(a), <u>and</u> that has seat belt retractors that are not solely judomatic locking retractors. (S7.1.1.5(c))

VHTSA No. C35(08		Test Date: 03/30/04
aboratory: TRC Inc.	Ø.	Technician(s): Michael S. Postle
DESIGNATED SEATING POSITION: Rightfront passenger	- 	ront passanger
_N/A - No retractor is at this position _N/A - The retractor is an automatic locking retractor ONLY	-	retractor ONLY
X.1. Record test fore-aft seat position. Rull rear (S7.1.1.5 (c)(1))	- 2 -	rear .
(Any position is acceptable.) X 2. Does the lab belt portion of the set	∺	(Any position is acceptable.) Does the sap belt portion of the selft belt in the forward-facing sest or seat that can be

- ķ adjusted to forward-facing consist of a locking device that does NOT have to be attached by the vehicle user to the seat belt wabbing, retractor, or any other part of the vehicle. (\$7.1.1.5 (a)) X Yes-Pass; NOFAIL
- Does the lap belt portion of the selft belt in the forward-facing seat or seat that can be adjusted to forward-facing consist of a locking device that does NOT require inventing, twisting or deforming of the belt withoning. (\$7.1.1.5 (a)) X Y66-Pass; No FAIL
- Buckle the seat bell. (\$7.1.1.5(c)(
- ధౢౢౢౢౢౢౢౢౢౢౢ _ocate a reference point A on the aft belt buckle. (S7.1.1.5(c)(2))
- end of the lap belt or lap belt porti Locate a reference point B on the alchment hardware or retractor assembly at the other
- ķ Does the vehicle user need to take a bet portion of the seat beit in any jou of the seat belt assembly. (\$7.1.1.5(c)(2))
 ome extion to activate the locking feature on the lap
 ward-facing seat or seat that can be adjusted to
- <u>|×</u> Does the vehicle owner's manual include a description in words and/or diagrams describing how to activate the locking feature so that the seat belt assembly can tightly secure a child restraint system and how to deactivate the locking feature to remove the child restraint system. (\$7.1.1.5(b)) No-FAIL
- ķ Adjust the lap belt or lap belt portion of the seat belt assembly according to say procedures recommended in the vehicle owner's manual to activate any locking feature so that the webbing between points A and B is at the maximum length allowed by the belt system. (\$7.1.1.5(c)(2) & \$7.1.1.5(q)(1))

 Measure and record the distance between points A and B along the longitudinal centerline of the webbing for the lap belt or lap belt portion of the seat belt assembly. XYes-Pass; __No-FAIL
 Adjust the lap belt or lap belt portion
- 쑳 (S7.1,1.5(c)(2))
- ķ that is 5 inches or more shorter th (S7.1.1.5(c)(3)) Readjust the belt system so that t Measured distance between A an webbing between points A and B is at any length the maximum length of the webbing.

REMARKS:	≱ 15.	×		× 19	× 12	<u>×</u>
RKS:	X Yes-Pass;No-FAIL Subtract the measurement in 9 from the measurement in 13. Is the difference 3 inches or more? (S7.1.1.5(c)(8)) 9-13= 22.2inches; X Yes-Pass;No-FAIL	Measured distance between A and B <u>50.3</u> inches (\$7.1.1.5(c)(6)) Subtract the measurement in 13 from the measurement in 12. is the difference 2 inches or less? (\$7.1.1.5(c)(7)) 13-12= <u>,1.8</u> inches;	are installed as part of the lap belt or lap belt portion of the seat belt assembly, apply the load at a rate less than the threshold value for lock-up specified by the manufacturer.) Maintain the load for at least 5 seconds. Measure and record the distance between points A and B along the longitudinal centerline of the webbing. (\$7.1.1.5(c)(5)) Record onset rate .25 Lysec (spec. 10 to 50 bysec) (\$7.1.1.5(c)(5))	Webbing write the preced is being applied. (57.3.1,5(c)(4)) Messured distance between A and B 48.5 Increase the load to 50 pounds at a rate of no more than 50 pounds per second. Attain the load in not more than 5 seconds. (If webbing constitute and provided in not more than 5 seconds.)	parallel to the longitudinal axis of the vehicle and passing through the seeting reference point of the designated seating position. Apply the preload in a horizontal direction toward the front of the vehicle with a force application angle of not less than 5 degrees nor more than 15 degrees above the horizontal. (\$7.1.1.5(c)(4)) Measured force application angle 10 degrees Measure the length between points A and B along the longitudinal centerline of the	To the lap belt or lap belt portion of the seat belt assembly, apply a preload of 10 pounds using the webbing tension pull device in Figure 5. Apply the load in a vertical plane

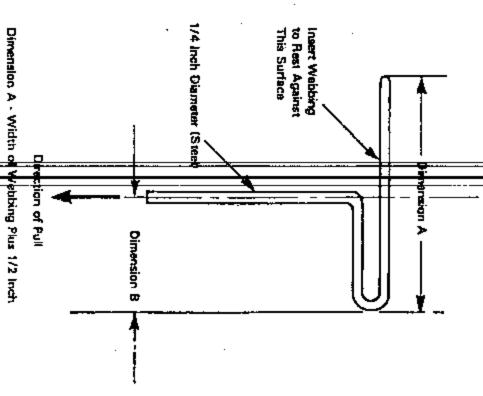


Figure 5. - Webbing Tension Pull Device

Dimension B - 1/2 of Dim

ension A

FMVSS 208 SEAT BELT WARNING SYSTEM CHECK (S7.8)

X 1. The occupant is in the driver's seat.	Laboratory: TRC Inc.	NHTSA No. C35108
seat	Test Technician(s):	
	Test Technicisn(s): Michael S. Postle	Test Date: 03/30/04

- The seat belt is in the stowed position.
- The key is in the "on" or "start" position.
- ダ<mark>ダ</mark>ダ The time duration of the audible signal beginning with key "on" or "start" is Beconds
- The occupant is in the drived's seat.
- The seat bett is in the stowed position.
 The key is in the "on" or "start" position.
- %|X|X|X \$0.50.50 The time duration of the warning light beginning with key "on" or "start" is seconds.
- ᇲ The occupant is in the driver's seat.
- extended. The seat belt is in the latched position and with at least 4 inches of belt webbing
- The key is in the "on" or "start" position.
- 보 보고 The time duration of the audible signal beginning with key "on" or "start" is
- XX 5.4 0 seconds.
 The occupant is in the driver's seat.
- extended. The seat belt is in the latched position and with at least 4 inches of belt webbing
- The key is in the "on" or "start" position.
- ᇗ The time duration of the warning light beginning with key "on" or "start" is
- |X |7. 0 seconds.
 Complete the following table with the data from 4, 8, 12 and 16 to determine which option Desn SI

	_			_			,		_			_	-	
. 49 HSCC						S7.3 (a)(2)						57.3 (a)(1)		
AG HOLD BY THE WALL AND WALL BY THE BOARD AND THE BOARD AN	start	Key on or	Belt stowed &	start	Key on or	Belt latched &	start	Key on or	Belt stowed &	start	Key on or	Belt latched &		
			Item 8			item 16			Item 8 >60 ¹			tem 16 0		Warning light
		seconds	4 to 8		seconds .	4 to 8		minimum	spuoses 09			0 seconds*	specification	Weming light
			ltem 4			21. wet			Item 4 6			Item 12_0		Audible signal
		seconds	4 to 8			C seconds**		8BCOINGS	4 to B			D seconds**	specification	Audible signal

49 USCS @ 30124 does NOT allow an audible signal to operate for more than 8 seconds.
 0 seconds means the light or audible signal are NOT permitted to operate under these conditions. See 7/12/00 interpretation to Patrick Raher of Hogan and Hartson

ઢ

¹ Light stays on continuously.

- 쌇 B. The seat belt warning system meets the requirements of (manuficial section)

 X S7.3 (a)(1)

 S7.3 (a)(2)

 FAIL - Does NOT meet the requirements of either option

 Note wording of visual warning: (\$7.3(a)(1) and \$7.3(a)(2))

 Fasten Seat Belts

 Fasten Belts

 X Symbol 101

 FAIL - Does not use any of the spowe wording or symbol the requirements of (manufacturers may comply with
- ×19.

S040413

BELT CONTACT FORCE (\$7.4.3)

NHTSA No. C35108	Laboratory: TRC Inc.	DESIGNATED SEATING POSITION: <u>Driver</u>	Test all Type 2 seat betts other then outboard designated seating positions	X 1. Does the vehicle incorporate a v Yes (this form is complete)	X No (cominue with this check sheet) X 3. Position the seat's adjustable lumbar supports so retracted or deflated adjustment position. (S8.1.3)	X N/A – No lumbar adjustment X 4. Position any adjustable parts of the state of th		X 5. If the seat cushion adjusts fore and aft, indit to the full rearward position. (\$16.2.10.3.1) X N/A = No independent fore-aft seat cust	X 6. If the seat cushion height adjusts full down position. (\$16.2.10.3.1)	 X N/A - No independent seat cushkon height adjustment Put the seat in its full rearward position. (\$16.2.10.3.1) 			10. Using only the controls that char	seat positions. Mark the side of of the vehicle that does not adjust	at a time and mark each detent a seats, mark only the full rearware constitutions with the following: E for	position, label the closest adjust- rearward.	X 11. Using only the controls that charge the seat in the fore-	full rearward position and then p (S8.1.2)	X Mid position. If there is no m to the rear of the midpoint. Desc		possible to the nonzontal (\$15.210.3.2.1)	Manusulpa on I SAF V
Test Date: 09/30/04	Test Technician(s): Michael S. Postle	N: Driver	Test all Type 2 seat beits ofher then those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat beit.	Does the vehicle incorporate a webbing tension-relieving device? Yes (this form is complete)	X No (continue with this check sheet) Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (S8.1.3)	NA – No lumbar adjustment Position any adjustable parts of the seat that provide exhibitors is involved to that they are	in the lowest or most open adjustment position. (S16.2.10.2) X NVA - No additional support adjustment	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (\$16.2.10.3.1) X. N/A — No independent fore-aft seat cushion adjustment.	If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (\$16.2,10.3.1)	eat cushkn height adjustment. erd position, (S16.2.10.3.1)	N/A - the seat does not have a fore-aft adjustment	Learnent	Using only the controls that change the seat in the fore-aft direction, mark the fore-aft	seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat towerd one detent	et a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: E for full forward 14 for mid-	position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.	Using only the controls that change the seat in the fore-aft direction, place the seat in the	en place the seat in the middle fore-aft position for this test.	If there is no mid position, put the seat in the closest adjustment position midpoint. Describe the location of the seat: 1 adjustment position rear	longer horizontal,, use those edjustments to maintain the reference line as closely as		818.2 (0.3.2.1)

- × 13. The seat back angle, if adjustable, is set at the manufacturer's nominal design riding position for a 50th percentile adult male in the manner specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)

 X N/A – No seat back angle adjustment
 Manufacturer's design seat back angle

 Eixed

Fixed 16.8 degrees

- × Position the test dummies according Appendix B and include the position to dummy position placement instructions in ng check sheets.
- ×15. Fasten the seat belt latch.
 Pull either 12 inches of belt webbing whichever is less, from the retractor. by the maximum evallable emount of belt webbing, and then release it, allowing the belt webbing to
- ×17. return to the curring ______the centerlife (S10.8) Using a force measuring defrom the dummy's chest and release midsagittal line on the dummy's ch belt webbing. of the upper torso bett webbing crosses the c. At that point pull the belt webbing out 3 inches until it is within one such from the dummy's chest. We with a full scale range of no more than 1.5 expendicular to the dummy's chest exerted by the

Contact force 0.334 b.
X. 0.0 to 0.7 pounds - Pass
greener then 0.7 pounds -

BELT CONTACT FORCE (\$7.4.3)

시 성 * * * * * * *				X7. #			X X	نِ ت	Tes outboa	DESIGN	Laboratory:	NHTSA No.
If seat adjustments other than fore-aft are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (\$16.2.10.8.2.1) X. N/A — No adjustments Reference line andle as tested C degrees	N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, piace the seat in the full rearward position and then piace the seat in the middle fore-aft position for this test. (S8.1.2) X Mid position. If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat:1 adjustment position rear of mid	Draw a horizontal reference line on the side of the seat cushion. Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.	N/A - the seat does not have a fore-aft adjustment If the seat height is adjustable, put it in the full down position. (\$16.2.10.3.1) XNVA - No seat height adjustment	full down position. (\$16.2.10.3.1) X N/A — No independent seat cushion height adjustment. Put the seat in its full rearward position. (\$16.2.10.3.1)	to the full rearward position. (\$16.2.10.8.1) X N/A — No independent fore-aft seat cushion adjustment If the seat cushion neight adjusts independent of the seat back, set this adjustment to the	in the lowest or most open adjustment position. (\$16.2.10.2) N/A — No additional support adjustment if the seat cushion adjusts fore and aft, Independent of the seat back, set this adjustment	 No (continue with this check sheet) Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (\$8.1.3) N/A No lumbar adjustment 	Does the vehicle incorporate a webbing tension-relieving device? Yes (this form is complete)		DESIGNATED SEATING POSITION: _Right from passenger	xy: TRC Inc. Test Technician(s): Michael S, Postle	No. C35108 Test Date: 03/30/04

- × 3 The seat back angle, if adjustable lis position for a 50th percentile equit in (S4.5.4.1 (b) and S8.1.3) set at the manufacturer's nominal design riding ale in the manner specified by the manufacturer.
- X N/A No seet back engle adjustr 룕

Tested seat back engle

- 쏬 Position the test dummles according Appendix B and include the position 16.8 degrees
 to dummy position placement instructions in gibble sheets.
- Fasten the seat belt latch.
- 현 현 Pull either 12 inches of belt webbilg or the maximum available amount of belt webbing, whichever is less, from the retractor and then release it, allowing the belt webbing to
- ×17. return to the dummy's chest

 Locate the point where the centerfine of the upper torso belt webbing crosses the

 Locate the point where the centerfine of the upper torso belt webbing out 3 inches

 The control is a control of the dummy's cried to be upper torso belt webbing out 3 inches the dummy's cried to be upper torso belt webbing out 3 inches the dummy's cried to be upper torso belt webbing out 3 inches the dummy's cried to be upper torso belt webbing crosses the belt webbing. pounds, measure the contact force (S10.8) from the dummy's chest and releage measure the contact force of dipendicular to the dummy's chest exerted by the ge with a full scale range of no more than 1.5 until it is within one inch from the dummy's chest

Contact force 0.254

X_0.0 to 0.7 pounds - Pass

greater than 0.7 pounds -3

LATCHPLATE ACCESS (\$7.4.4)

NHTSA No.	4 NoC35108 Test Date: _08/30/04
Laboratory:	itory: TRC inc. Test Technician(s): Michael S. Postje
DESIG	DESIGNATED SEATING POSITION: <u>Driver</u>
Test all froutboard seat bet.	Test all front outboard seat beits other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat beit.
Ķ1.	Position the seat's adjustable lumber supports so that the lumber support is in its lowest, retracted or deflated adjustment position. (8.1.3)
N N	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (\$16.2.10.2)
ķς	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (\$16.2.10.3.1)
×I 4.	X N/A - No independent fore-att seat cushion adjustment. X n/A - No independent fore-att seat cushion adjustment to the fitthe seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (S16.2.10.3.1) X n/A - No independent seat cushion belief adjustment.
<u>×</u> 5	Put the seat in its full rearward position. (\$16.2 t0.3.1) N/A - the seat does not have a fore-aft adjustment
β¢	If the seat height is adjustable, put it in the full down position. (\$16.2.10.3.1) X N/A - No seat height adjustment
<u>×</u> × 8	Draw a horizontal reference line on the side of the seat cushion Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a particle positions.
	at a time and mark each detent as was done for the full rearward position. For power seats, move the seat roward one detent at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
ë X	— N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the forwardmost fore-aft position for this test. (S10.7)
<u>X</u> 10.	if seet adjustments, other than fore-sit, are present and the horizontal reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. N/A — No adjustments Reference line angle as tested 0

- × The seat back angle, if equistable, is set at the manufacturer's nominal design riding position for a 50th percentile adultingle in the manufacturer specified by the manufacturer. (S4.5.4.1 (b) and S8.1.3)
- X N/A No seat back angle adjust

Fixed

Teated seat back angle

- × 12 3 positioning procedure may need to be position. Note on the Appendix A be Position the test dummy using the position the Part 572, Subpart E dµr ō sitioning check sheet any deviations necessary to ocedures in Appendix A. ifny.) Include the positioning check sheet with this e made because the seat is in its forward most 16.8 degrees (Some modifications to the
- × Position the adjustable seat belt and brage in the manufacturer's nominal design position for a 50th percentile adult male occupant.

 Attach the inboard reach string to the base of the head following the instructions on
- × Figura
- × Attach the outboard reach string to the torso sheath following the instructions on Figure 3. Place the latch plate in the stowed position.
- ᄣ Extend inboard reach string in front of the dummy and then backward and outboard to the latch plate to generate an arc of the reach envelope of the test dummy's arms. Is the latch plate within the reach envelope? stch plate within the reach envelo X Yes - Pass ₹
- ×18. latch plate within the reach envelo Extend outboard reach string in fron of the dummy and then backward and outboard to the reach envelope of the test dummy's arms. Is the
- × 19, X Yes - Pass ___NO Is the latch plate within the inboard X Yes - Pass_ LNO-FAIL (them 17) or outboard (item 18) reach envelope?
- 뙹 to the latch plate or buckle?

 X Yes - Pass NO - EAR Using the clearance test block, speci the vehicle seat and the side of vehi ified in Figure 4, is there sufficient dearance between be interior to allow the test block to move unhindered

FAL

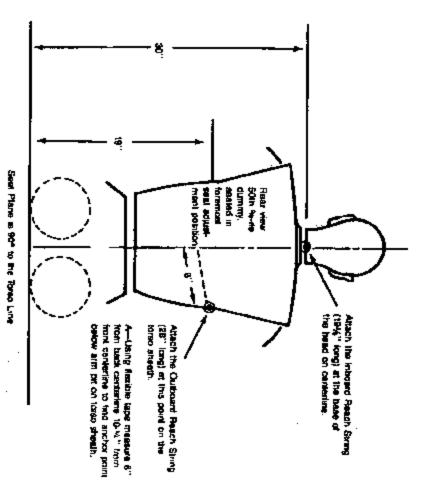
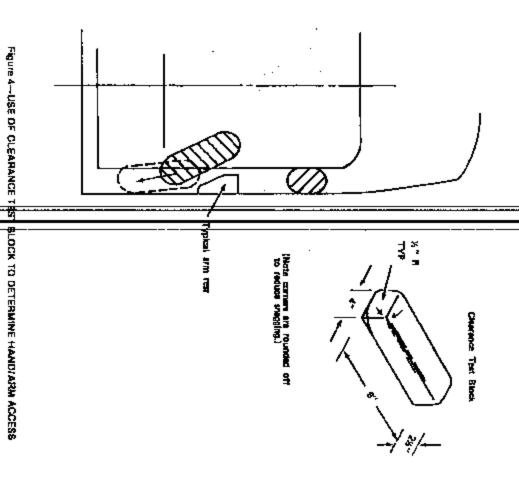


Figure 3. Location of Anchoring Points for Latchplate Seach Limiting Chains or Strings to Test for Latchplate Accessibility Using Subpart & Test Davice



LATCHPLATE ACCESS (\$7.4.4)

NHTS Labor DESIG	NHTSA NoC35108 Test Date: _08/30/04 Laboratory: _TRC Inc Test Technician(s): _Michael S. Postle DESIGNATED SEATING POSITION: Birth from passanger
Test all fr outboard sear belt,	Test all front outboard seat balts other than those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt.
ķ	Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. (8.1.3) X N/A - No lumbar adjustment
×	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (\$16.2.10.2) X. N/A — No additional support adjustment.
×	If the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment to the full rearward position. (\$16.2.10.3.1)
×:	If the seat cushion height adjusts independent of the seat back, set this adjustment to the full down position. (\$16.2.10.8.1) Y N/A No independent role and accordance to the seat back, set this adjustment to the full down position. (\$16.2.10.8.1)
× 5.	Put the seat in its full regressed position. (S16.2.10.3.1) N/A - the seat does not have a fore-aft adjustment
ģī.	If the seat height is adjustable, but it in the full down position. (\$16.2.10.3.1) X N/A - No seat height adjustment
۲۱ <u>۵</u>	Draw a horizontal reference line on the side of the seat cushion Using only the controls that change the seat in the fore-aft direction, mark the fore-aft seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that chose not argued for manual scale may the seat forward one directly.
	et a time and mark each detent as was done for the full rearward position. For power seats, mark only the full reenward, middle, and full forward positions. Label three of the positions with the following: F for full forward, M for mid-position (if there is no mid-position, label the closest adjustment position to the rear of the mid-point), and R for full rearward.
<u>×</u> 9.	N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the full rearward position and then place the seat in the forwardmost fore-aft position for this test. (S10.7)
<u>×</u> 10.	

- × H (S4.5.4.1 (b) and S8.1.3)

 X N/A ~ No seet back angle adjust
 Manufacturer's dealgn seet back an The seat back angle, ** adjustable, is position for a 50th percentile adux in set at the manufacturer's nominal design riding ale in the manner specified by the manufacturer.

Tested seat back angle 16,8 degrees

않 positioning procedure may need to be position. Note on the Appendix A be position the Part 572, Subpart E during Position the test durniny using the be made because the seat is in its forward most positioning check sheet any deviations necessary to iny.) Include the positioning check sheet with this cedures in Appendix A. (Some modifications to the

- |× Position the adjustable seat belt alichbrage in the manufacturer's nominal design position for a 50th percentile adult male occupant.

 Attach the inboard reach string to the base of the head following the instructions on
- × Figure 3.
- Attach the outboard reach string to the torse sheath following the instructions on Figure 3.
- Place the latch plate in the stowed
- **₩**₩ letch plete within the reach envelo Extend inboard reach string in front latch plate to generate an arc of the t of the dummy and then backward and outboard to the seach envelope of the test dummy's arms. Is the
- ×16. X Yes - Pass _____NO
 Extend outboard reach string in from
 the latch plate to generate an arc of
 fatch plate within the reach envelope of the dummy and then backward and outboard to the reach envelope of the test dummy's arms. Is the
- X Yes Pass ş
- × 18 is the latch plate within the inboard X Yes-Pass (them 17) or outboard (term 18) reach envelope?
- |× to the latch plate or buckle?

 X Yes - Pass NO - FAI the vehicle seat and the side of vehicle the later of vehicle seat and the side of vehicles the later of the later. fied in Figure 4, is there sufficient dearance between the interior to allow the test block to move unhindered
- 80 F≱E

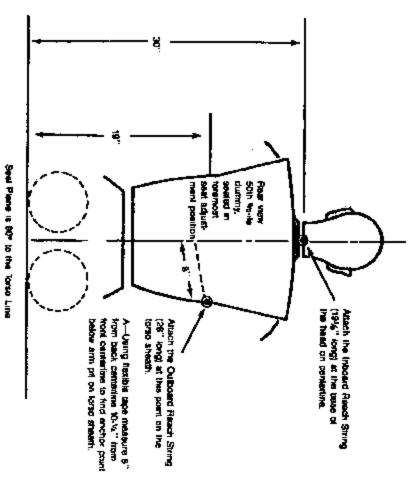
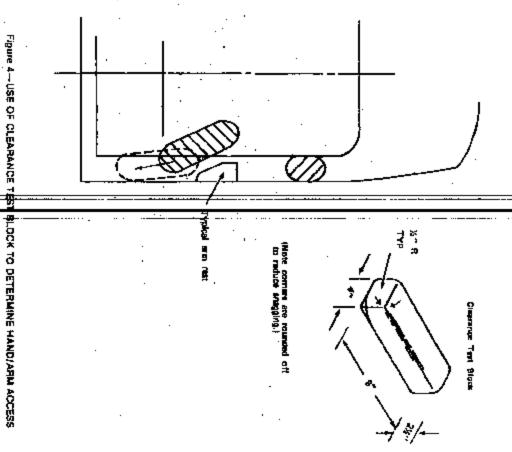


Figure 3. Location of Anchoring Points for Latchplate Reach Limiting Chains or Strings to fast for Latchplate Accessibility Deing Subpart 2 heat Device



SEAT BELT RETRACTION (S7.4.5)

NHTSA No.	No. C35108 Test Date: 03/29/04
Laboratory:	tory: TRC inc. Test Technician(s): Michael S. Postle
DESIG	DESIGNATED SEATING POSITION: Driver
GWWF	GVWR: 4250 bs
Test	Test all front outboard seat belts, except those in walk-in van-type vehicles and those at front outboard seating positions in passenger cars. Complete a form for each applicable seat belt.
ξ	is the vehicle a passenger car or walk-in van-type vehicle?Yes, this form is complete
×2	X_No Position the seat's adjustable lumbar supports so that the lumbar support is in its lowest, retracted or defleted adjustment position. (S6.1.3)
×β	X NA - No lumber edjustment Position any adjustable parts of the seet that provide additional support so that they are In the lowest or most open adjustment position. (\$16.2.10.2)
<u>×</u>	X N/A - No additional support adjustment if the seat back, set this adjustment if the seat cushion adjusts fore and aft, independent of the seat back, set this adjustment
(To the full rearward position.) (\$16.2.10.3.1) X N/A — No Independent fore-aft seet cushion adjustment
ķ	full down position. (S16.2.10.3.1) X. N/A – No independent seat cushion height adjustment.
× 6.	Put the seat in its full rearward position. N/A - the seat does not have a fore-att adjustment
<u>×</u> 7.	If the seat height is adjustable, put it in the full down position. (\$8.1.2) X N/A — No seat height adjustment
× ZIX	Draw a horizontal line on the side of the seat cushion. Using only the controls that change the seat in the fore-aft direction, merk the fore-aft.
	seat positions. Mark the side of the seat and a reference position directly below on a part of the vehicle that does not adjust. For manual seats, move the seat forward one deterit at a time and mark each deterit as was done for the full regovered position. For power
l× 9.	N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the middle fore-aft position. (S8.1.2)
	If there is no mid position, put the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat: 1 adjustment position rear of true mid
×μ	If seat adjustments, other than fore-sit, are present and the reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (\$16.2-10.3.2)
	N/A - No seet adjustments

X X X 22 22 24 25 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 26 2	X 20.	× 19.			× × ₹₹	×15.		¥.14.2	, No.	× ; 4	×13.	, ±2 ×	<u>×</u> 11.
E IT O	To the extent practicable keep the thighs and the legs in a vertical plane (\$10.5) and rest the thighs on the seat cushion while resting the feet on the floorpan or toe board.	(S10.4.2.1) 23.1 pelvic angle (20° to 25°) Set the distance between the outboard knee devis flange surfaces at 10.6 inches.	(S10.4.2.1 and S10.4.2.2) <u>0.1</u> horizontal inches from the point 0.25 below the determined H-point (0.5 inch max.) (S10.4.2.1) 0.2 vertical inches from the point 0.25 below the determined H-point (0.5 inch max.)	es spe	(S10.4.1.1 & S10.4.1.2) Rest the thighs on the seat cushion. Position the H-point of the dummy within 0.5 inch of the vertical dimension and 0.5 inch of the thigh the H-point of the dimension and 0.5 inch of the H-point of the thigh the H-point of the thigh the H-point of the thigh the thing the thigh the thigh the thigh the thigh the thigh the thigh t	Distance from the vehicle centert(e)to Plane B Stow outboard armiests that are dapable of being stowed. (\$7.4.5) Remove the arms of a Subpart E durinny and place it in the seat such that the midsagittal plane is coincident with Plane B and the upper torso rests against the seat back.	e to the center of the steering w		Locate and mark a vertical Plane B through the longitudinal centerline of the seat. The longitudinal centerline of a bucket seat cushion is determined at the widest part of the seat cushion. Measure perpendicular to the longitudinal centerline of the vehicle. Record the width of the seat. Record the distance from the edge of the seat to Plane B.		8 3 5 6 3	X N/A - No seat beck angle adjustment Manufacturer's design seat back angle Tested seat back angle Tested seat back angle 16.6 degrees If adjustable, set the head restraint at the full up and full forward position. (\$8.1.3) Any adjustment of the head restraint set be used to position it full forward. For example, if it adjustment of the head restraint set be used to position it full forward.	

×24 4 pound load applied is the belt system equipped with a tension relieving device? Apply a 2 to 4 pound tension load to the lap belt. (S10.9)

×26.

- X25.1 Yes, continue

 X.No, go to 26

 Introduce the maximum amount of stack into the upper torso bet that is recommended by the vehicle manufacturer in the vehicle owner's manual. (\$10.8). Go to 25.
- |× 26 Check the statement that applies to this test vehicle:
- 8 The torso and lap belt webbing of the seat belt system automatically retracts to a stowed position when the adjacent vehicle door is in an open position and the seat belt latch plate is released. Pass
- ×26.2 The torse and lap belt webbing of the seat belt system automatically retracts when the seat belt latch plate is released. X Pass
- Neither A or B apply. P
- X 27. With the webbing and hardware in the stowed position are the webbing and hardware prevented from being pinched when the door is closed?
- |× 88 tension-relieving device, does the belt system fully retract when the tension-relieving ××× device is deactivated? If this test vehicle has an open body (without doors) and has a belt system with a XYes - Pass NO-FAIL

Yes - Pass NO - FAIL

	SEAT BELT RETRACTION (S7.4.5)
NHTSA No.	No. C35108 Test Date: 03/29/04
Laborat	Laboratory: TRC Inc. Technician(s): Michael S. Poste
DESIGN	DESIGNATED SEATING POSITION: Right passenger
GVWH:	4250 lbs
Test :	Test all front outboard seat belts, except those in welk-in van-type vehicles and those at front outboard seating positions in bassenger cars. Complete a form for each applicable seat belt.
ř	ls the vehicle a passenger car or walk-in var⊱type vehicle?Yas, this form is complete
ά X	Position the seat's adjustable lumber supports so that the lumbar support is in its lowest retracted or defiated adjustment position. (SB.1.3)
ļ× ω	Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. (\$16.2.10.2) Y N/A – No additional support adjustment
×4.	M O σ.
ķ	7 3
×6.	Put the seat in its full rearward postion. N/A - the seat does not have alighte-all adjustment
<u>×</u> 7.	3 -
××,	
	of the vehicle that does not adjust. For manual seats, move the seat forward one deten at a time and mark each detent as was done for the full rearward position. For power seats, mark only the full rearward, middle, and full forward positions. Label three of the positions with the following: Fifty full forward, M for mid-position (if there is no mid-positions).
, K	realward. N/A - The seat does not have a fore-aft adjustment. Using only the controls that change the seat in the fore-aft direction, place the seat in the middle fore-aft position. (SB.1.2) If there is no mild position, but the seat in the closest adjustment position to the rear of the midpoint. Describe the location of the seat: 1 adjustment position rear of true mid.
× 10,	If seat adjustments, other than followit, are present and the reference line is no longer horizontal, use those adjustments to maintain the reference line as closely as possible to the horizontal. (S16.2.10.3.2) NA - No seat adjustments Reference angle as tested Occurred.

\$\ \$\\$\\$ \$	× × × × × × × × × × × × × × × × × × ×	∑ 19.			X17. X18.	× 15. 15.	× 14.2	 <u>4</u>	× بن	× 13	≱	<u>X</u> 11.
raster the sett belt around the duminy. Remove all slack from the lap belt portion. (\$10.9) Pull the upper torso webbing out of the retractor and allow it to retract, repeat this four times. (\$10.9)	To the extent practicable keep the thighs and the legs in a vertical plane (\$10.5) and rest the thighs on the seat cushion while resting the feet on the floorpan or toe board.	sangle (20° to 25°) ance between the outboard insee classes (210 & inches) (210 &)	(810.4.2.1) O2 vertical inches from the point 0.25 below the determined H-point (0.5 inch max.) (S10.4.2.1)	equipment and procedures specified in SAE J826 (APR 1980). (810.4.2.1) Then measure the pelvic angle with respect to the horizontal using the pelvic angle gage. Adjust the dummy position until these three measurements are within the specifications, (S10.4.2.1 and S10.4.2.2) _0.2_ horizontal inches from the point 0.25 below the determined H-point (0.5 inch max.)	(\$10.4.1.1 & \$10.4.1.2) Rest the thighs on the seat cushion. Position the H-point of the dummy within 0.5 inch of the vertical dimension and 0.5 inch of the horizontal dimension of a point 0.25 inch below the H-point determined by using the	Distance from the vehicle centerline to the center of the steering wheel 14.0 inches Distance from the vehicle centerline to Plane B Stow outboard ammosts that are capable of being stowed. (\$7.4.5) Remove the arms of a Subpart E dummy and place it in the seat such that the midsagittal plane is coincident with Plane B and the upper torso rects against the seat back.		No, go to 14.2 and skip 14.1. No, go to 14.2 and skip 14.1. Bucket seats: Locate and mark a vertical Plane B through the longitudinal centerine of the seat. The longitudinal centerline of a bucket seat cushion is determined at the widest part of the	NVA - No adjustable upper sert belt anchorage Manufacturer's specified anchorage position. Tested anchorage position 1 down from full up Is the driver seat a bucket seat? See for to 14 1 and 545 14 2	rotates, rotate it such that the head restraint extends as far forward as possible. X_N/A - No head restraint adjustment Place any adjustable seat belt anchorages at the vehicle manufacturer's nominal design position for a 60th percentile adult male occupant (SB.1.3)	X N/A - No seat back angle adjustment Manufacturer's design seat back angle Fixed Tested seat back angle 18.8 degrees Tested seat back angle 18.8 degrees If adjustable, set the head restraint at the full up and full forward position. (S8.1.3) Any adjustment of the head restraint shall be used to position it full forward. For example, if it	The seat back angle, if exilustable, is set at the manufacturer's nominal design hiding position for a 50th percentile adult male in the manner specified by the manufacturer.

- ×24. Apply a 2 to 4 pound tension load to
 4 pound load applied he lap belt. (S10.9)
- × Yes, continue

 X No, go to 26

 Introduce the maximum amount of is the bell system equipped with a la sion relieving device?
- X 26.1 the vehicle manufacturer in the veitic Check the statement that applies to ack into the upper torso bet that is recommended by a owner's manual (S10.9). Go to 25.
- 第 |×2 The torso and lap belt webbing of to position when the adjacent vehicle Pess seat belt system automatically retracts to a stowed or is in an open position and the seet belt latch
- ×26.2 plate is released. Pass
 The torso and up belt webbing of the second seco seat belt letch plate is released. UA seat belt system automatically retracts when the
- ×27. 26.8 With the webbing and hardware prevented from being pinched whe Neither A or B apply. Ē the stowed position are the webbing and hardware the door is closed?
- |× XYes - Pass
 If this test vehicle has an open tension-relieving device, does the device is deactivated? dy (without ocors) who has tension-relieving (without doors) and has a belt system with e

X,N/A ___Yes - Pass ___NO - FAIL

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

× × ×	× 10. 18 18 18 18 18 18 18 18 18 18 18 18 18		Xe. The Y	X7. The liberal sense.	X 6. Alax Ref N	X.5. Does vehicle	X4. In the	X3. In the	X2 IS THE	X1. Is the (S7.4	Test seat be seatin	DESIGNATE	Laboratory: TRC inc.	NHTSA No.
designated seating position, accessible with the center encan be adjusted (without moving the amnest)? (\$7.4.6.2) X Yes - PassNO - FAIL	West moved backward into position. (37.4.0.2) X Yes - PassNO - FAIL Is the inboard receptacle end of the seat belt a	adjusted. (S7.4.5.2) Yes - PassN The buckle and latch behind the seat when	belt is unlatched. (S7.4.6.2) X_Yes - PassNO - FAI The buckle and latch plate of behind the seat when the se	X_Yes - PassNO - FAJL The buckle and latch behind the seat when	NO - FAIL NO - FAIL No - FAIL Sentify the part(s) on top or above the seat. X seat belt latch plate; X buckle; X seat belt webbing are the remaining two seat belt parts accessible under n	No: this form is complete. No: this form is complete. Does one of the following three period or above conditions other than when belt is vehicle occupant)? (\$7.4.5.1(a))	Yes; this form is complete X No; got to 4 Is the webbling designed to pand seat back? (S7.4.6.1(a))	XNo; got to 3 is the seat movable so that the sp is the seat movable so that the sp secondary function? (S7.4.6.1(b))	Yes; this form is complete X No; got to 2 Is the seat removable? (\$7.4.6.1(b)) Yes: this form is complete	ls the seat cushion mo (S7.4.6.1 (b))	eat belts except those in walk-in van seating positions in pessenger cars.	DESIGNATED SEATING POSITION:	TRC Inc.	C35108
g position, access without moving the _NO - ∓AJL	Mara into position. _NO - FAIL eptacle end of the	NO - FAIL NO - FAIL the plate do not p nen the seat back	(S7.4.6.2) _NO - FAL which plate do not p	plate do not p	toporabowa: te; Xbuckle; oseat belt pan	amplete. wing three part of or above th when belt har \$7.4.5.1(a))	mpiate ned to pass thr .6.1(a))	o that the spec S7.4.6.1(b))	mplete ? (S7.4.6.1(b) mplete	wable so that	in walk-in van ssenger cars,	SITION: <u>Driver</u>		
sible with the ce e armrest)? (S7	seat belt asse	ass through the	ese through the	ass through the npletely retract	the seat. X seat belt we	s, the seed belt a seat cushion dware is intenti	ough the seat o	;e formarty occi		the seat back s	type vehicles a Complete a for	*	st Technician(s)	
nter ermrest in a (4.6.2)	mbly, installed in	guides or cond loided forward a	guides or cond sition to which it	guides or cond ed or, if the belt	sobing nder normal con	latch plate, the under normal conally pushed by	pushion or betwe	upled by the sea		serves a function	ınd those at fron rm for each appl): Michael S. Po	Test Date
any position to w	the front outboo	ults provided an s far as possibie	uits provided and is designed to b	uits provided an	ditions?	buckle, or the se nditions (i.e., shind the seat by	en the seet cus	t can be used fo		other than seat	t outboerd desig kable seet belt.		ostle	09/30/04
designated seating position, accessible with the center enthreat in any position to which it can be adjusted (without moving the armrest)? (\$7.4.6.2) X_Yes - PassNO - FAIL	then moved backward into position. (37.4.0.2) X_Yes - PassNO - FAIL Is the inboard receptable end of the seat belt assembly, installed in the front outboard.	adjusted. (S7.4.6.2) X_Yes - PassNO - FAIL The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and the months behave the foldable.	belt is unlatched. (S7.4.6.2) X_Yes - PassNO - FAL The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat is moved to any position to which it is designed to be	X_Yes - Pass	NO - FAIL NO - FAIL NO - FAIL Kerntify the part(s) on top or above the seat. X seat belt latch plate; X buckle; X seat belt webbing X seat hatch plate; X buckle; X seat belt webbing X seat belt latch plate; X buckle; X seat belt webbing	No: this form is complete. No: this form is complete. Does one of the following three parts, the seat belt latch plete, the buckle, or the seat belt webbing, stay on top of or above the seat cushlon under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)? (S7.4.5.1(a))	Yes; this form is complete X.No; got to 4 Is the webbing designed to pass through the seat cushion or between the seat cushion and seat back? (S7.4.6.1(a))	\underline{X} No; got to 3 is the space formerly occupied by the seat can be used for a secondary function? (\$7.4.6.1(b))		is the seat cushion movable so that the seat back serves a function other than seating? (\$7.4.6.1 (b))	Test seat beits except those in walk-in var⊢type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat bett.		Test Technician(s): <u>Michael S. Postle</u>	Test Date:03/30/04

SEAT BELT GUIDES AND HARDWARE (\$7.4.6)

STHN	NHTSA No Test Date:03/30/04
Labor	Laboratory: THC Inc. Test Technician(s): Michael S. Postle
DESI	DESIGNATED SEATING POSITION: Right right passenger
Test	Test seat beits except those in walk-in varietype vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat bett.
ێؚ	Is the seat cushion movable so that the seat back serves a function other than seating? (S7.4.6.1 (b))
š X	Yes; this form is complete X.No; got to 2 Is the seat removable? (\$7.4.6.1(b))
اب پ	Is the seat movable so that the spatial formerly occupied by the seat can be used for a secondary function? (\$7.4.6.1(b)) Yes; this form is complete X No: cot to 4
≭	Is the webbing designed to pass thiough the seat cushion or between the seat cushion and seat back? (\$7.4.6.1(a)) X Yes: go to 5. No: this form is complete
, 5	Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e.,
× 20	Identify the part(s) on top or above the seat. X seat belt latch plate; X buckle; X beat belt webbing Are the partering two seat belt parts accessible under normal conditions?
è	X Yes - Pass NO - FAIL
X 7.	The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retracted or, if the belt is nonretractable, the belt is unlatched. (\$7.4.6.2)
Ë	buckle and late and the seat what test (\$7.4.6.2)
įκ	The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position, (\$7.4.6.2)
× ö	
× <	can be adjusted (without moving the turnrest)? (87.4.6.2)

67 S040413

SEAT BELT GUIDES AND HARDWARE (S7.4.6)

belt is unlatched. (\$7.4.6.2) X Yes - PassNO - FAI X 8. The buckle and latch plate of behind the seat when the seadulusted. (\$7.4.6.2) X Yes - PassNO - FAI X Yes - PassNO - FAI X 9. The buckle and latch plate of behind the seat when the set then moved backward into position. X Yes - PassNO - FAI X 10. Is the inboard receptable endesignated seating position, can be adjusted (without mothers). X Yes - PassNO - FAI X Yes - PassNO - FAI X Yes - PassNO - FAI	identify the par X_seat belt let X_seat belt let X_6. Are the remain X_Yes - Pass X_Yes - Pass NO - FAIL X_7. The buckle and behind the seat	X Yes: go to 5. No: this form X.5. Does one of the webbing, stay or conditions other vehicle occupan X Yes - Pass NO - FAIL	Yes; this fon Yes; this fon X No; got to 4 X 4. Is the webbing and seal back	XNo; got to 2 X2. Is the seat rem Yes; this for XNo; got to 3 X s the seat mox	Test seat belts excep seating position X 1. Is the seat cus (S7.4.6.1 (b)) Yes; this for	DESIGNATED SEATING POSITION:	Laboratory: TRC Inc.	NHTSA No. <u>C35108</u>
belt is unlatched. (\$7.4.6.2) X Yes - PassNO - FAIL The buckle and latch plate do not pass through the guides or condults provided and fall behind the seat when the seat is moved to any position to which it is designed to be adjusted. (\$7.4.6.2) X Yes - PassNO - FAIL The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the seat back, if foldable, is folded forward as far as possible and then moved backward into position. (\$7.4.6.2) X Yes - PassNO - FAIL Is the inboard receptable end of the seat belt assembly, installed in the front outboard designated seating position, accessible with the center arminest in any position to which it can be adjusted (without moving the arminest)? (\$7.4.6.2) X Yes - PassNO - FAIL X Yes - PassNO - FAIL	identify the part(s) on top or above the seat. X_seat belt latch plate; X_buckle; X_seat belt webbing. Are the remaining two seat belt parts accessible under normal conditions? X_Yes - Pass X_Yes - Pass NO - FAIL The buckle and latch plate do not pass through the guides or conduits provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and fall behind the seat when the belt is completely retreated or it to be the first provided and the first provided a	X Yes: go to 5. No: this form is complete. Does one of the following three parts, the seat belt latch plate, the buckle, or the seat belt webbing, stay on top of or above the seat cushion under normal conditions (i.e., conditions other than when belt hardware is intentionally pushed behind the seat by a vehicle occupant)? (\$7.4.6.1(a)) X Yes - Pass NO - FAIL	secondary function? (37.4.6.1(b)) —Yes; this form is complete —Yes; this form is complete —X No; got to 4 Is the webbing designed to pass through the seat cushion or between the seat cushion and seal back? (\$7.4.6.1(a))	X.No; got to 2 Is the seat removable? (\$7.4.6.1(b)) Yes; this form is complete X.No; got to 3 Is the seat movable so that the space formerly occupied by the seat can be used for a is the seat movable so that the space formerly occupied by the seat can be used for a	Test seat belts except those in walk-in van-type vehicles and those at front outboard designated seating positions in passenger cars. Complete a form for each applicable seat belt. 1. Is the seat cushlon movable so that the seat back serves a function other than seating? (S7.4.6.1 (b)) Yes; this form is complete	TING POSITION: Center front passenger	Test Technician(s): Mic	8 Test Date: 03/30/04

Appendix A

Photographs

<u>~</u>

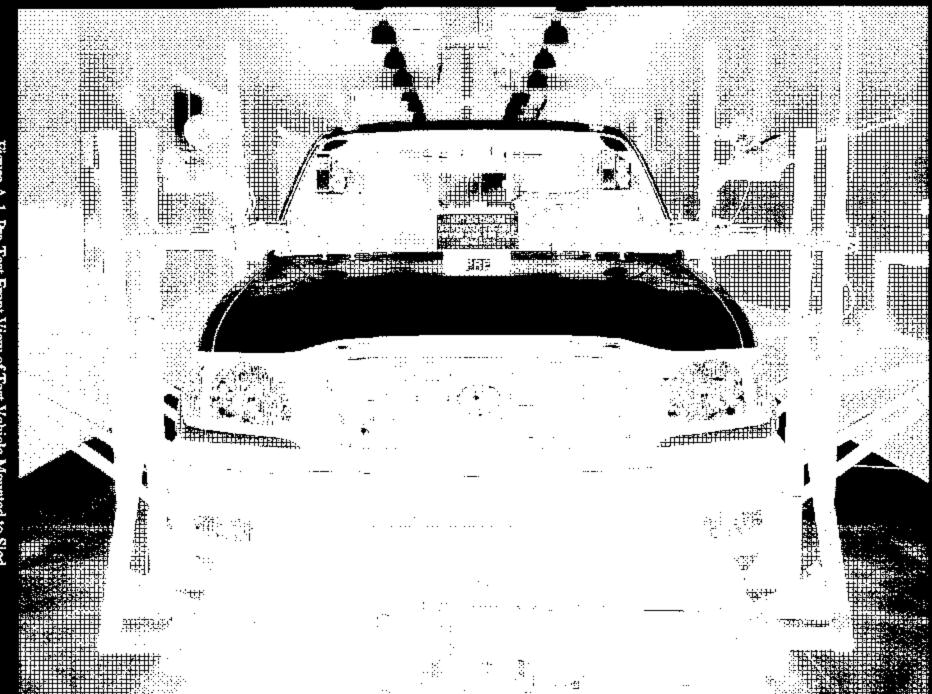


Figure A-1 Pre-Test Front View of Test Vehicle Mounted

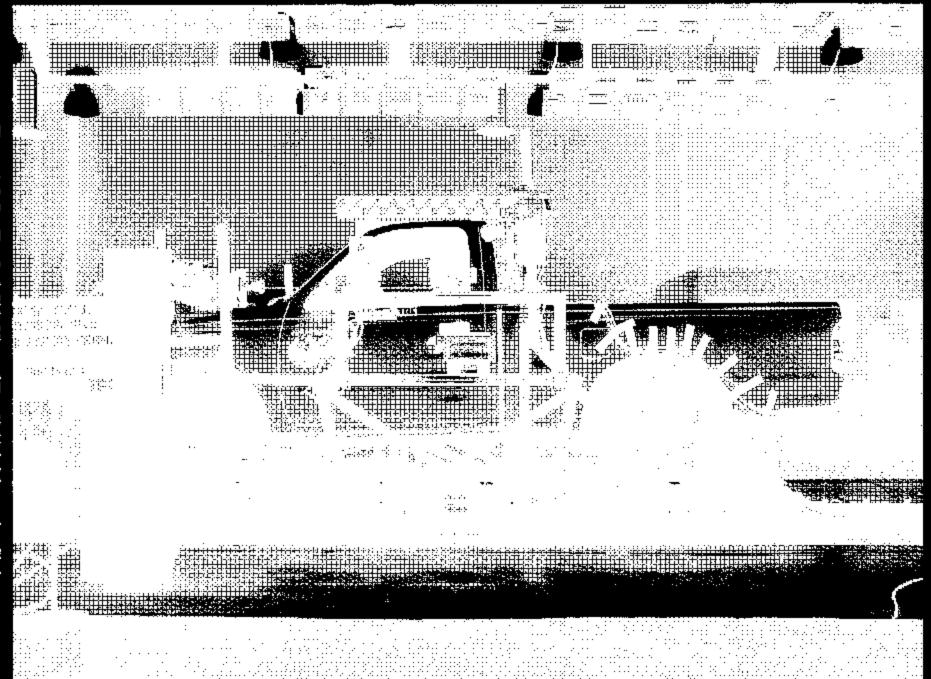


Figure A-2 Pre-Test Left Side View of Test Vehicle Mounted

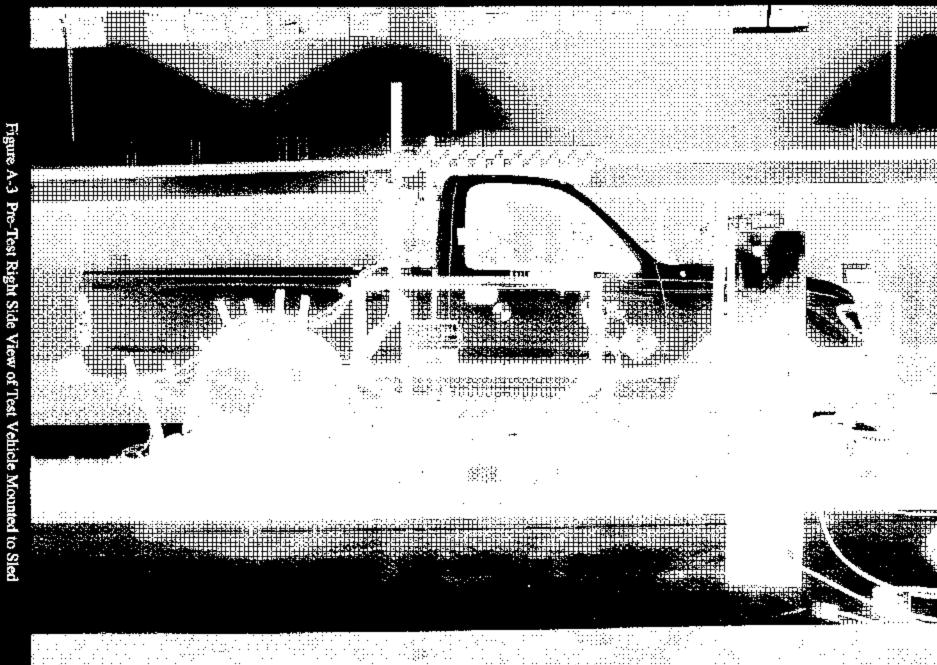
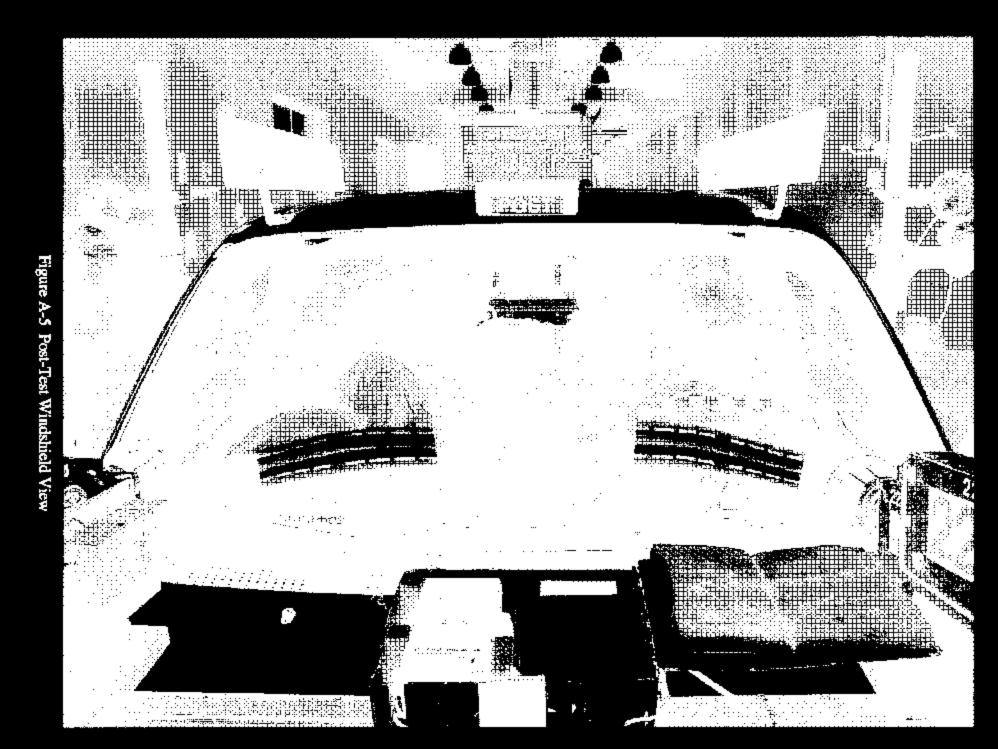




Figure A-4 Pre-Test Windshield View



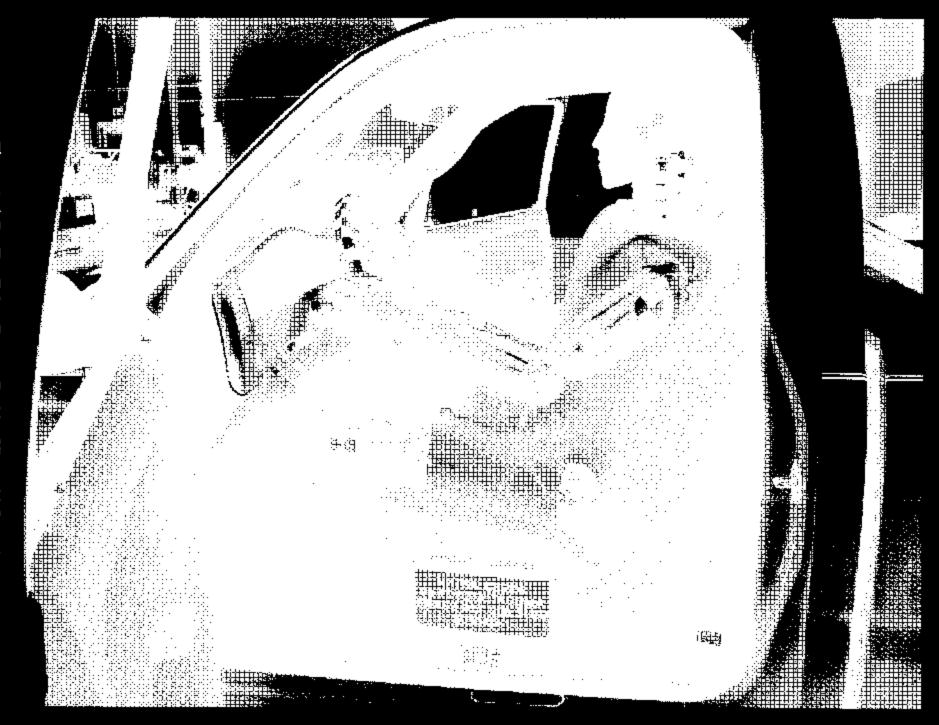


Figure A-6 Pre-Test Driver Dummy Position View with Door Open

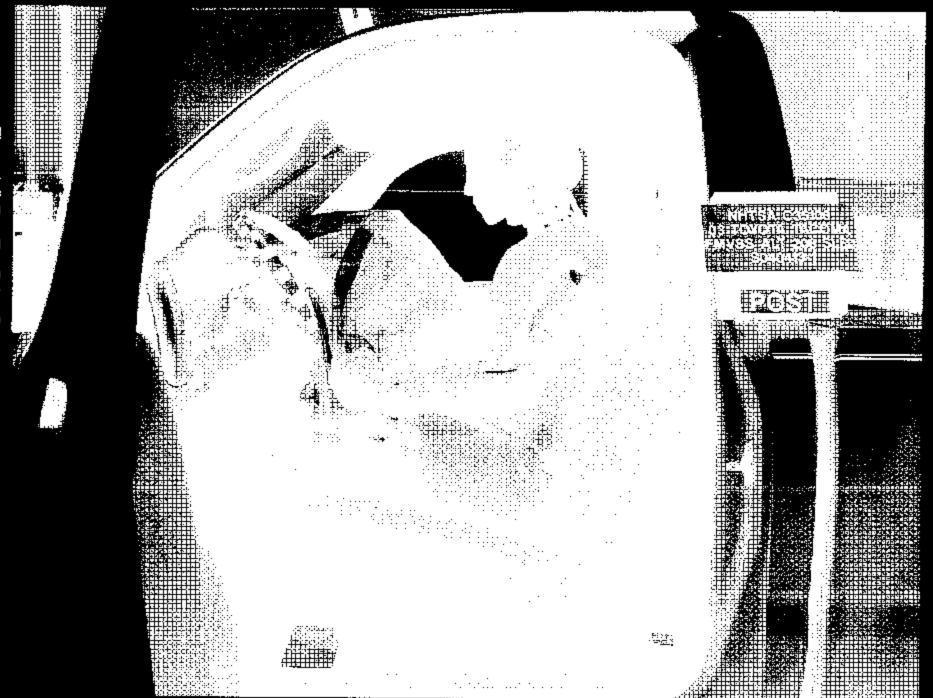
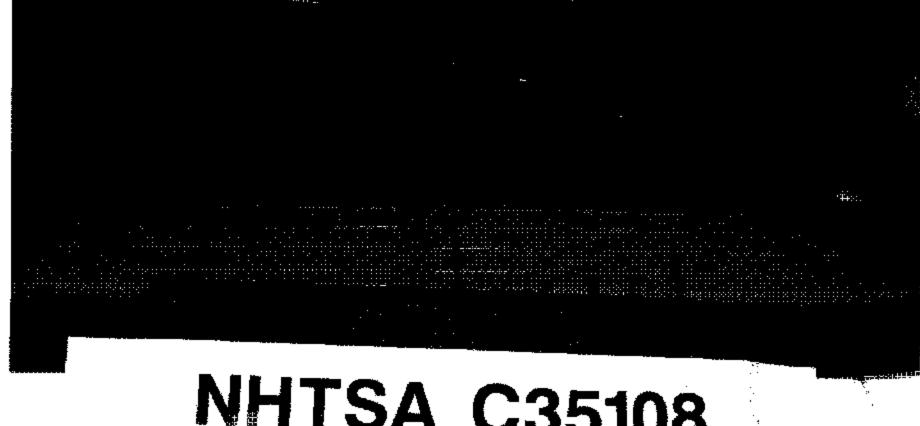
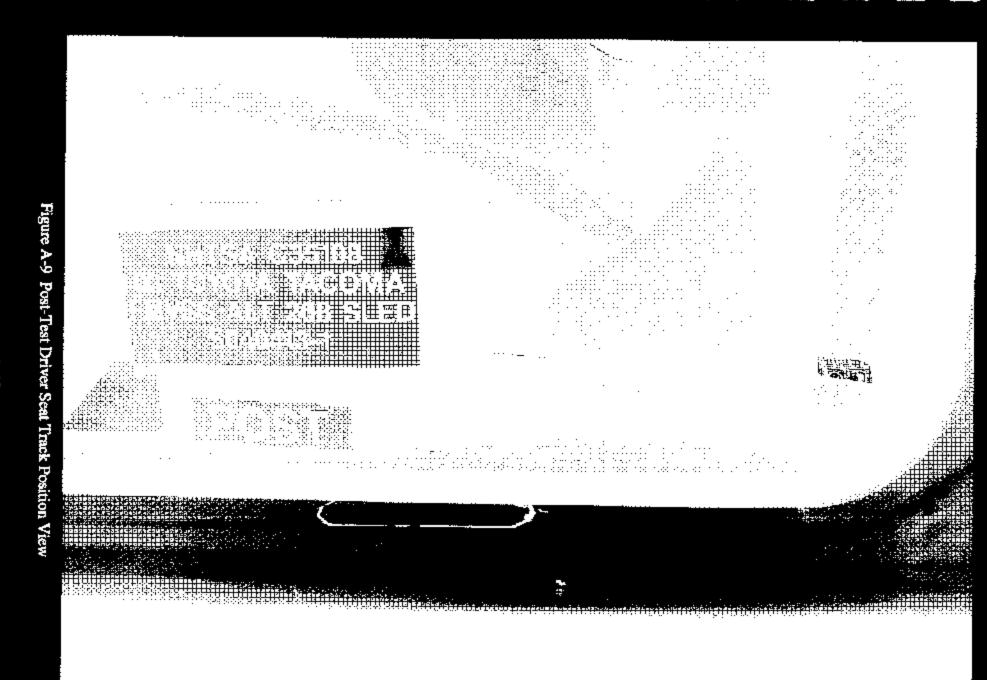
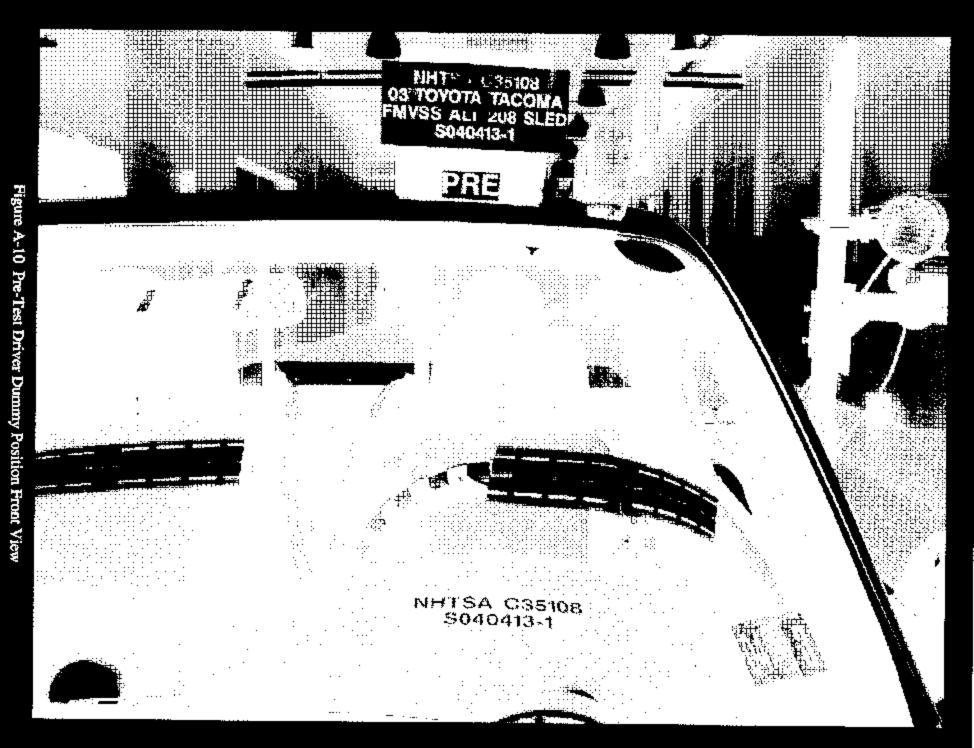


Figure A-7 Post-Test Driver Dummy Position View with Door Open



NHTSA C35108 03 TOYC A TACOMA MVSS AT 208 SLED S040413-1





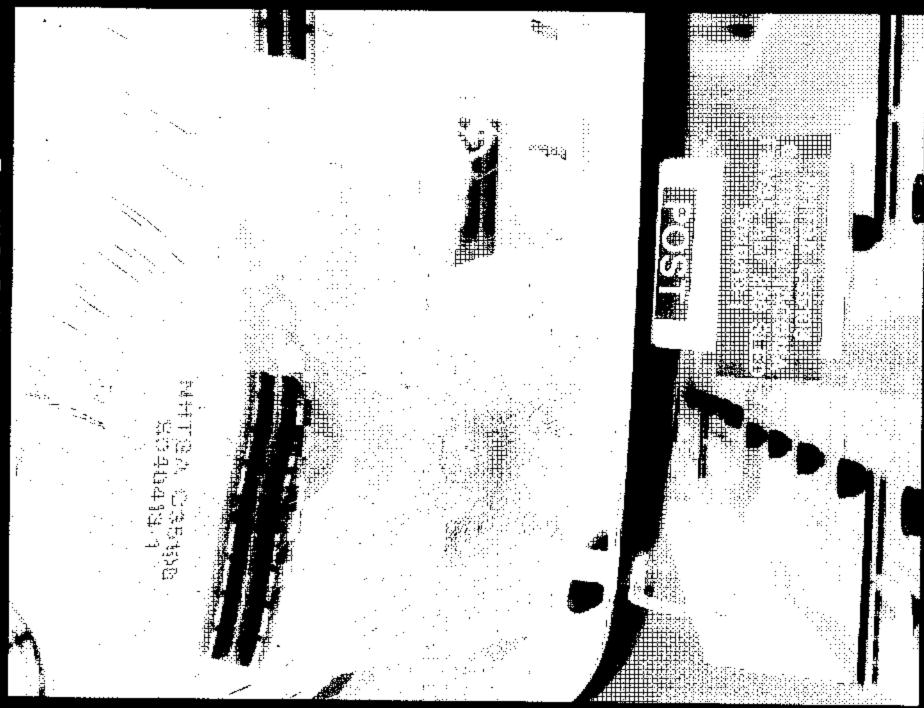
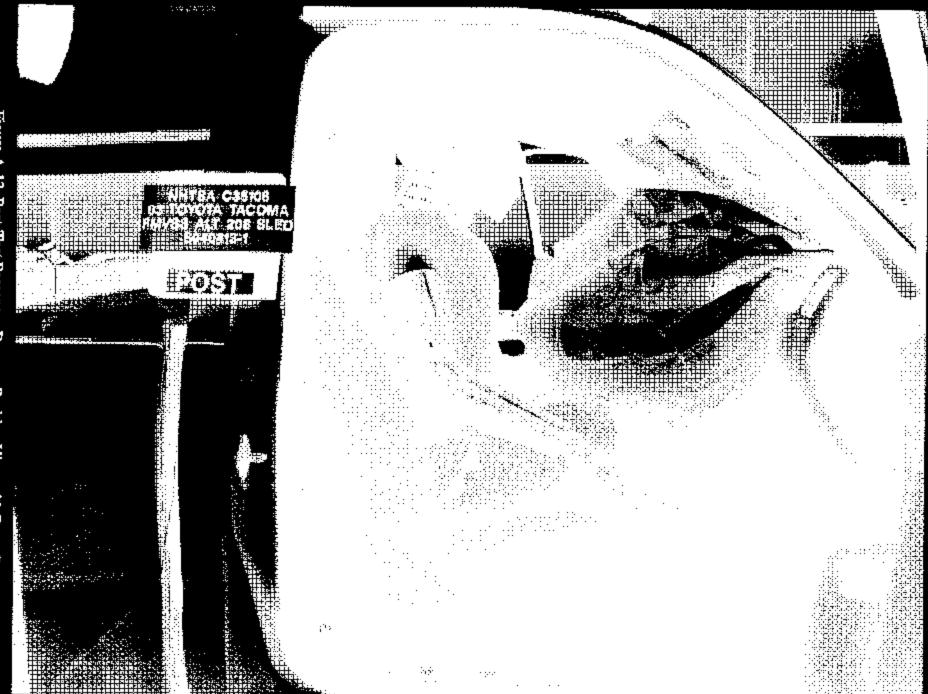


Figure A-11 Post-Test Driver Dummy Position Front View



seager Dummy Position View with Door Open



ë Pe A-13 Post-Test Passenger Dummy Position View with Door Open

(all)

NHTSA C35108

03 TOYOTA TACOMA

FMVSS ALT 208 SLED

S040413-1

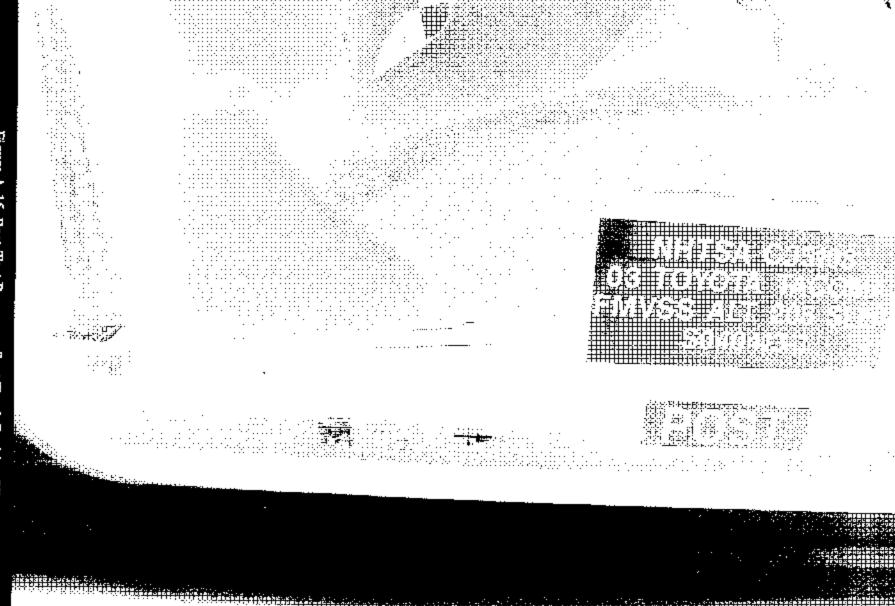


Figure A-15 Post-Test Passenger Seat Track Position View

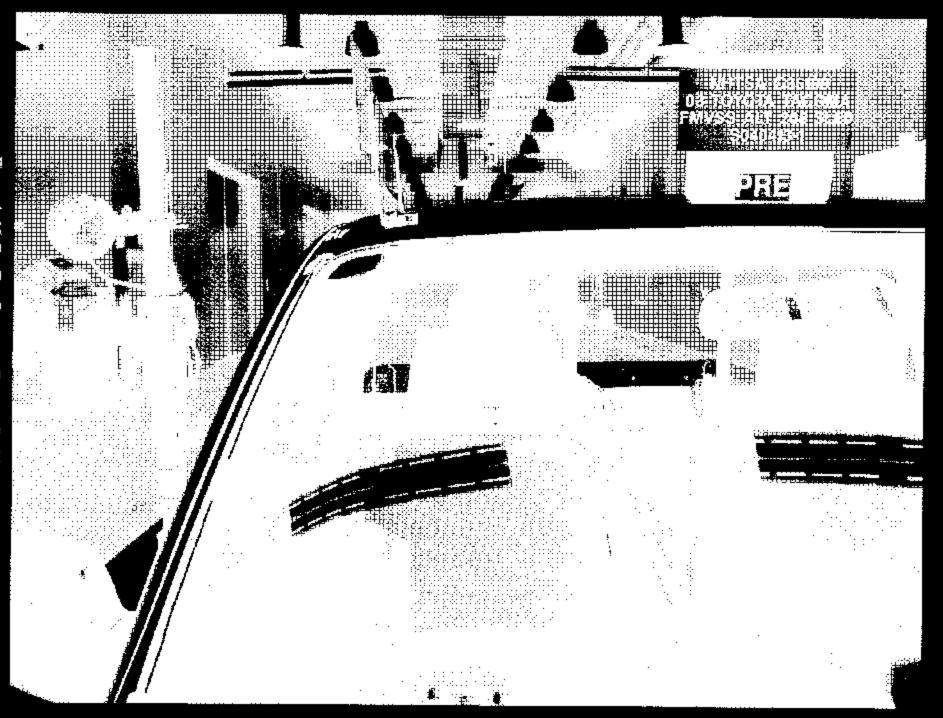
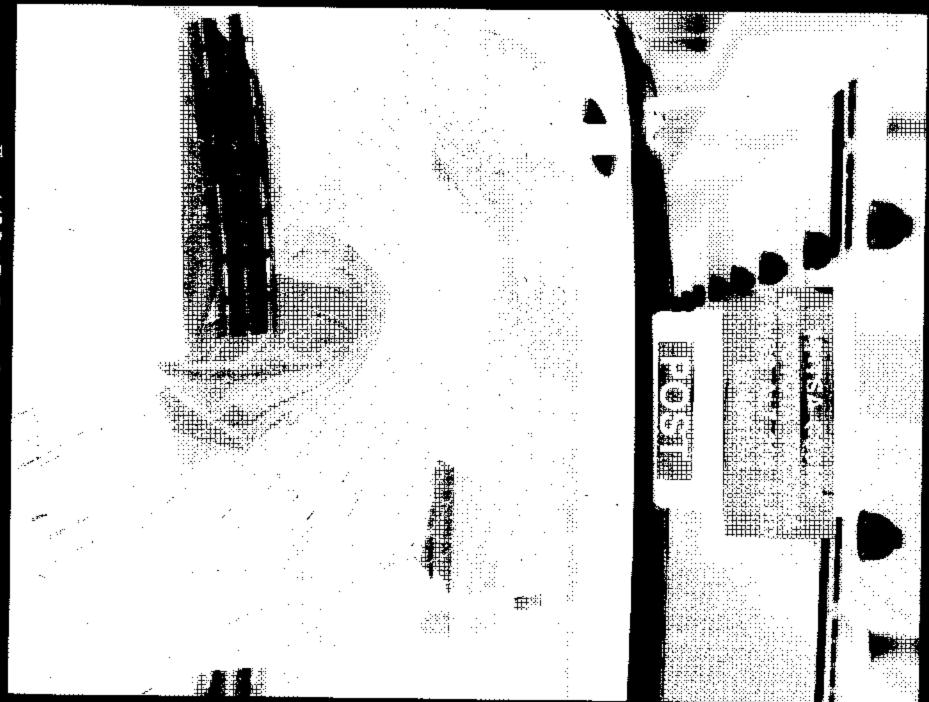


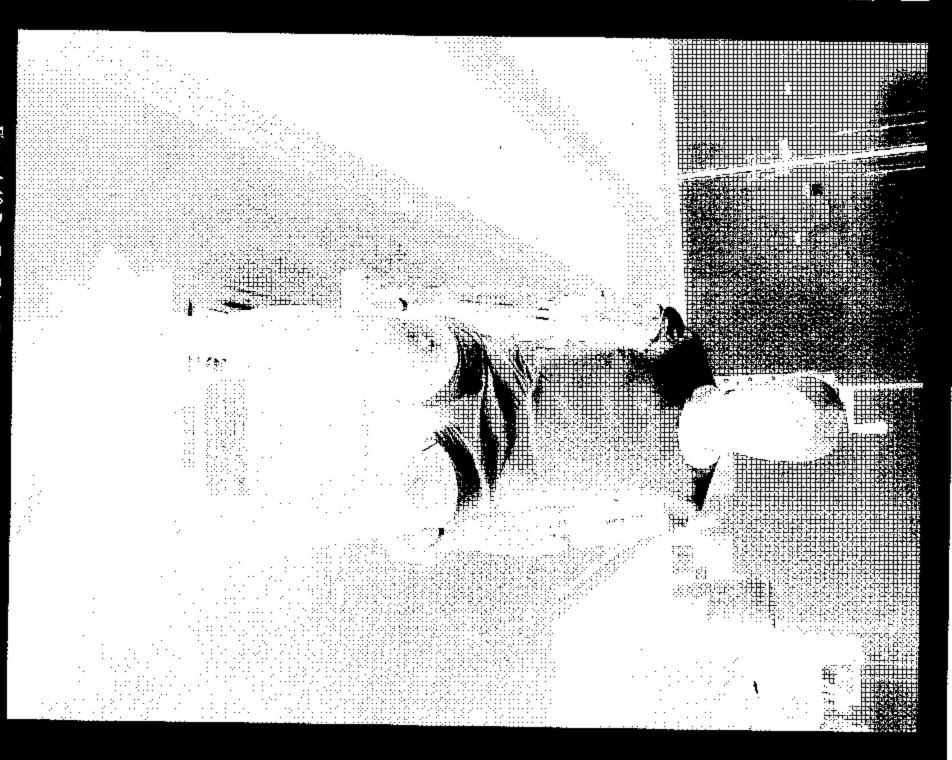
Figure A-16 Pre-Test Passenger Dummy Position Front View

S040413



A-17 Post-Test Passenger Dummy Position Front View

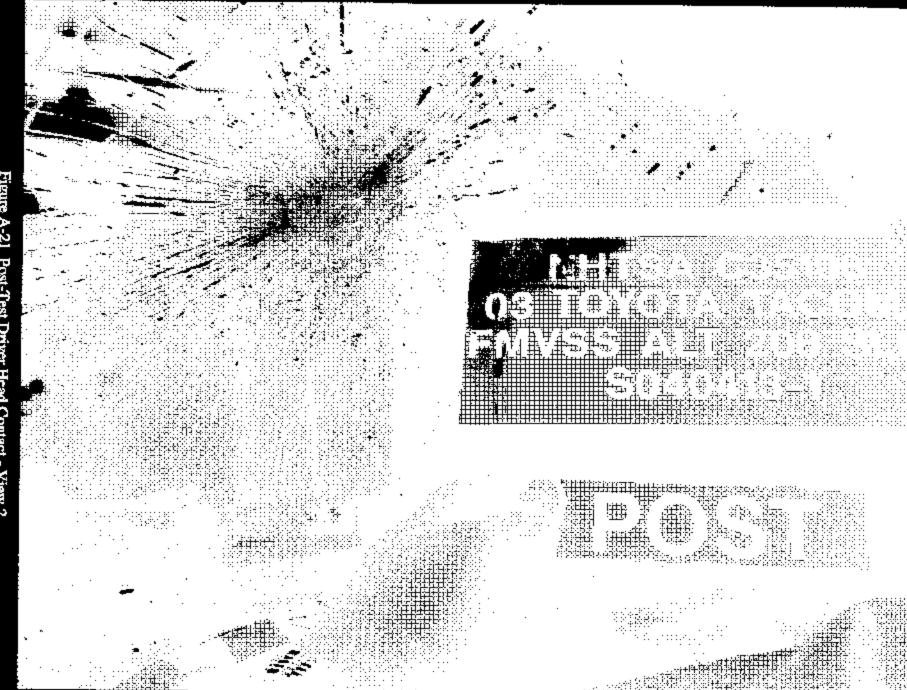




4-19 Post-Test Driver Dummy Removed from Vehicle Overall



Figure A-20 Post-Test Driver Head Contact - View 1



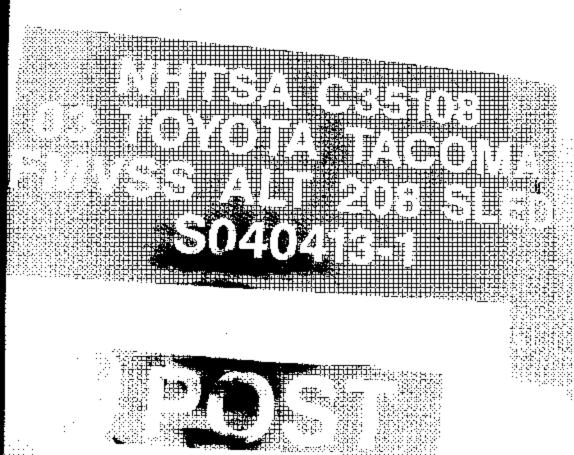


Figure A-22 Post-Test Driver Head Contact - View 3



Higure A-23 Post-Test Passenger Airbag View

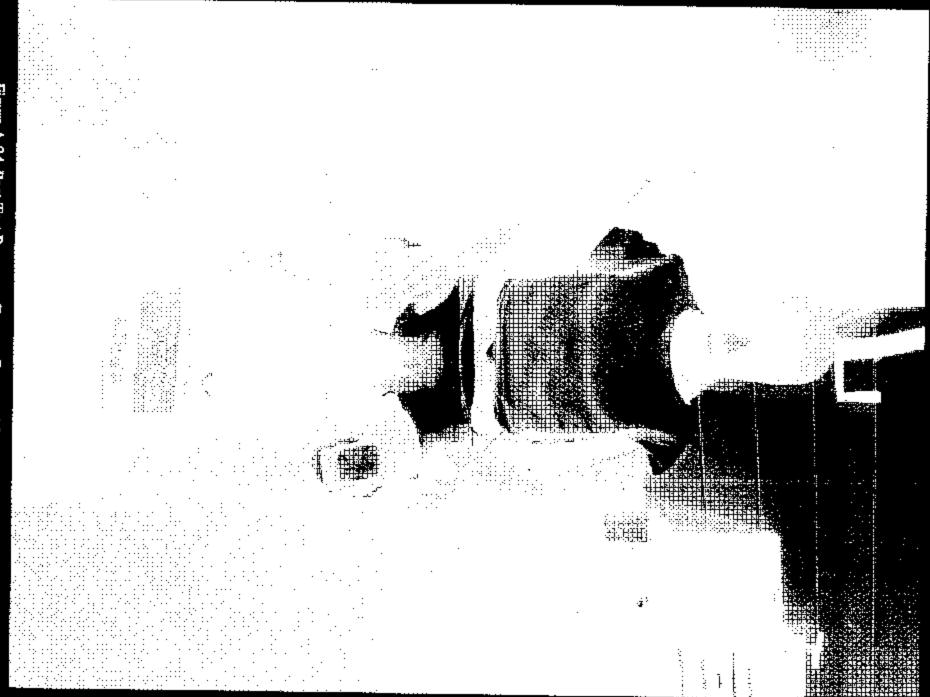


Figure A-24 Post-Test Passenger Dummy Removed from Vehicle Overail View



NHTSA C35108
03 TOYOTA TACOMA
FMVSS ALT 208 SLE
S040413-1





Figure A-26 Post-Test Driver Knee Bolster View



Figure A-27 Pre-Test Passenger Glove Box View



Figure A-28 Post-Test Passenger Glove Box View

A-30

MFD.BY TOYOTA MOTOR MANUFACTURING CALIFORNIA.INC.
DATE 03/03 GVWR: 1920KG (4250LB)
GAWR: FRT. 1000KG (2200LB) WITH 1920 TIRES. RIMS. AT TIRES. ABLE FEDERAL MOTOR STANDARDS IN EFFECT PREVE VEHICLE SAFE RZN140L-TRMDKAB C/TR 040/FZ10 A/TM A02A/

W59

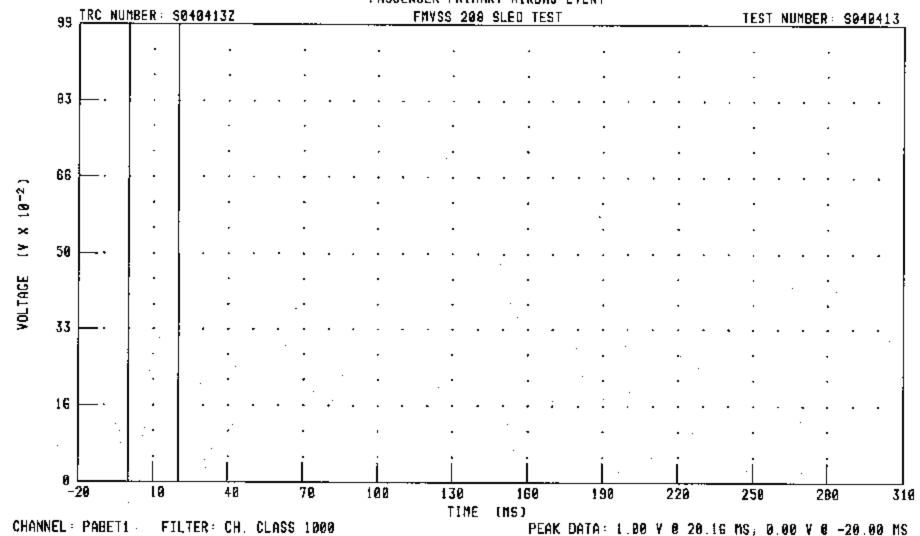
Appendix B

Data Piots

7

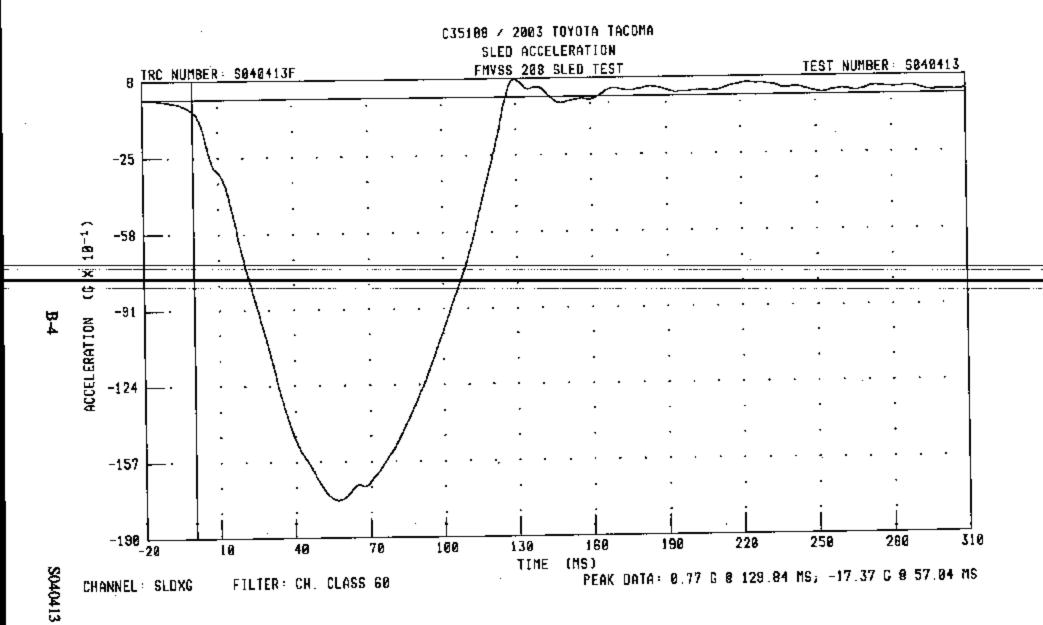
C35108 / 2003 TOYOTA TACONA SLED ACCELERATION 60 TRC NUMBER S048413F TEST NUMBER: \$040413 FMVSS 208 SLED TEST 0 X 18-1) -69 9 -120 **B-2** ACCELERATION -180 -240 -300 L 135 150 120 90 105 60 75 30 45 15 TIME [MS] S040413 PEAK DATA: 0.77 C 8 129.84 MS; -17.37 G 8 57.04 MS FILTER: CH. CLASS 60 CHANNEL: SLDXC

C35108 / 2003 TOYOTA TACOMA PASSENGER PRIMARY AIRBAG EVENT

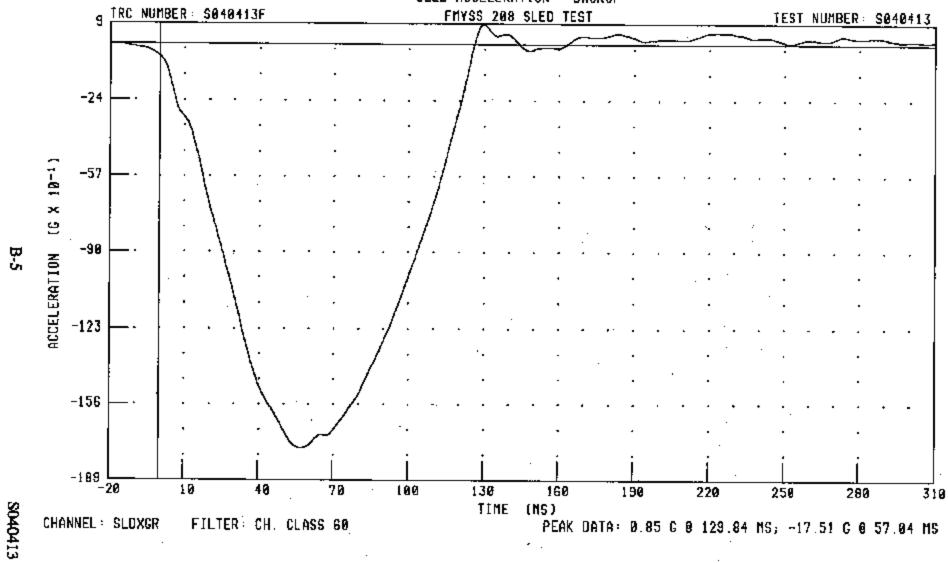


B-3

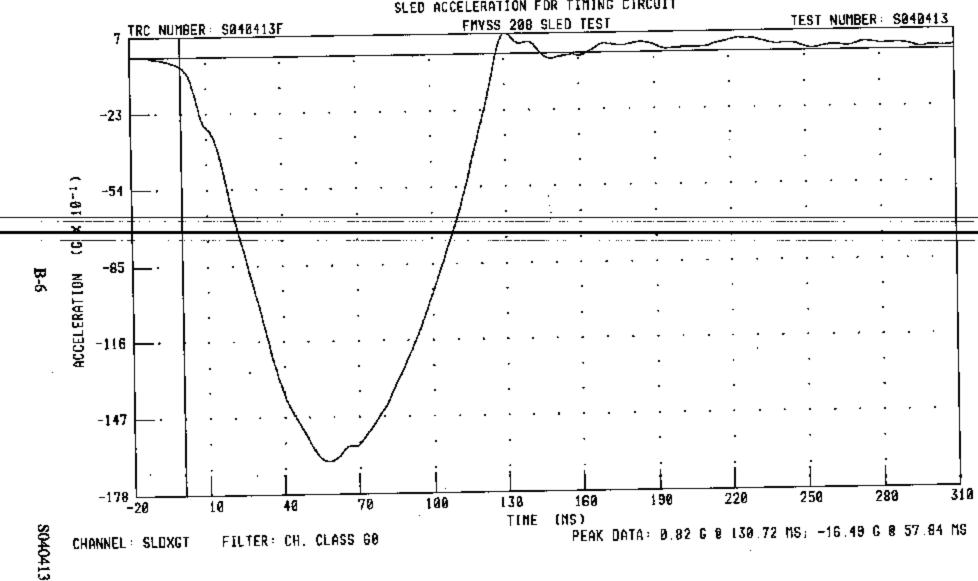
S040413



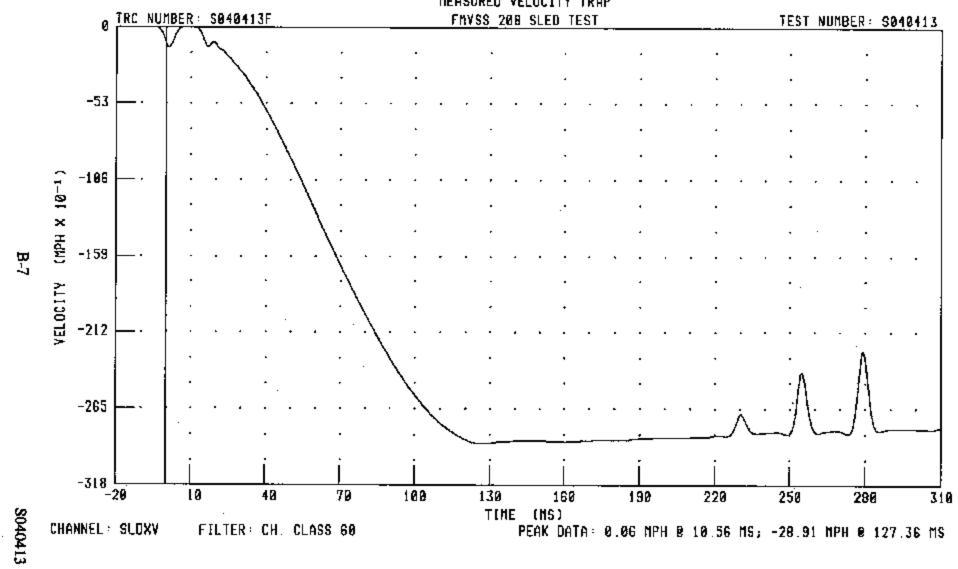
C35108 / 2003 TOYOTA TACOMA SLED ACCELERATION - BACKUP

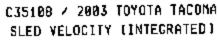


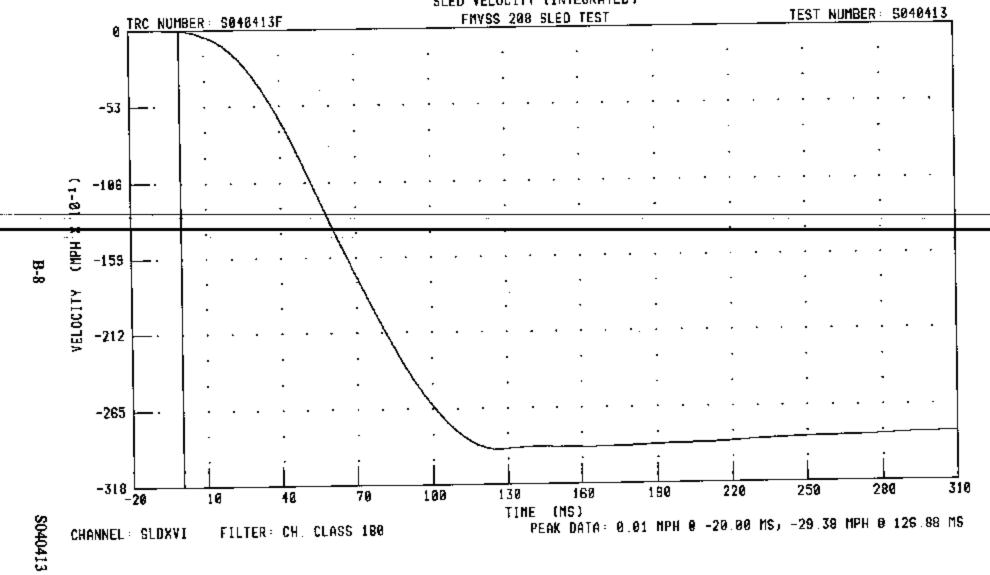
C35108 / 2003 TOYOTA TACOMA SLED ACCELERATION FOR TIMING DIRCUIT



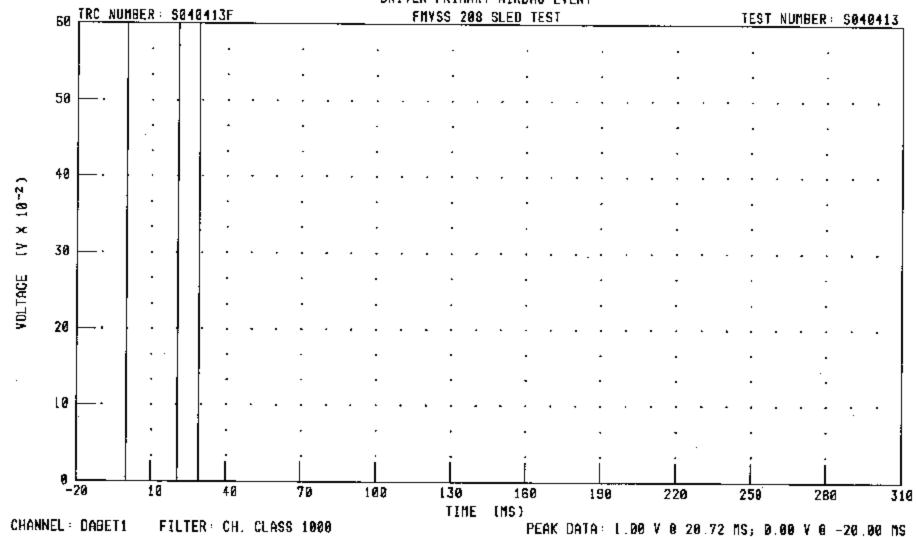
C35108 / 2003 TOYOTA TACOMA MEASURED VELOCITY TRAP







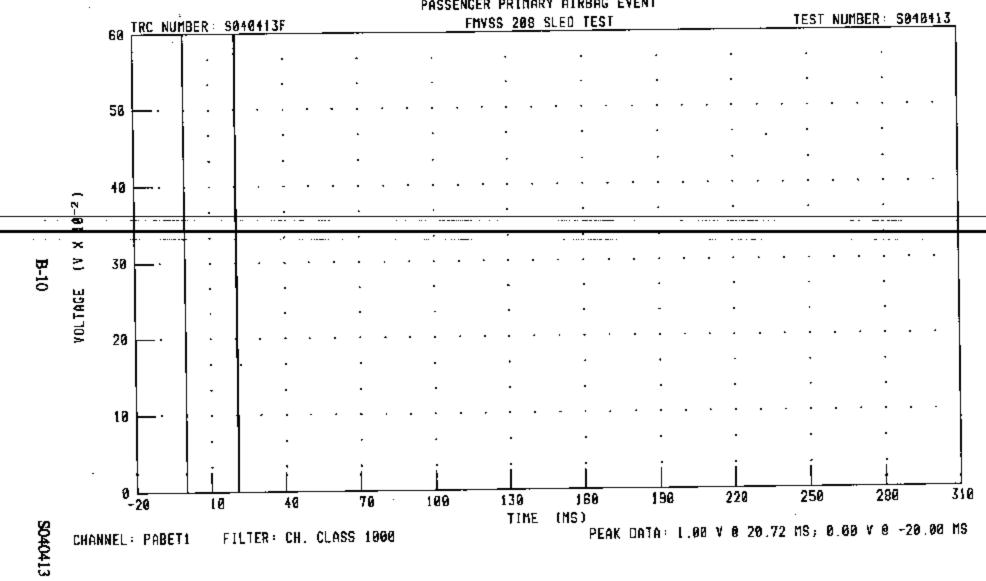
C35108 / 2003 TOYOTA TACOMA DRIVER PRIMARY AIRBAG EVENT



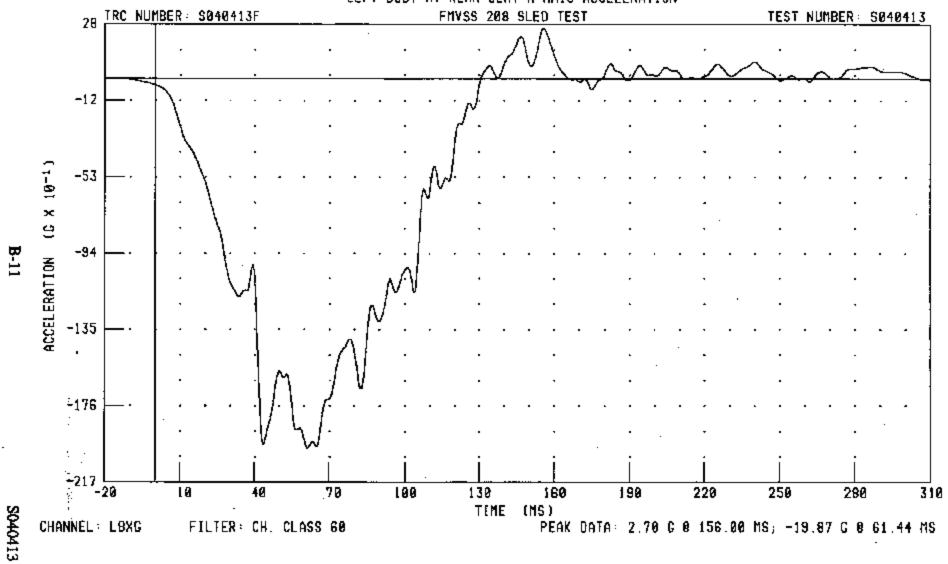
B-9

S040413

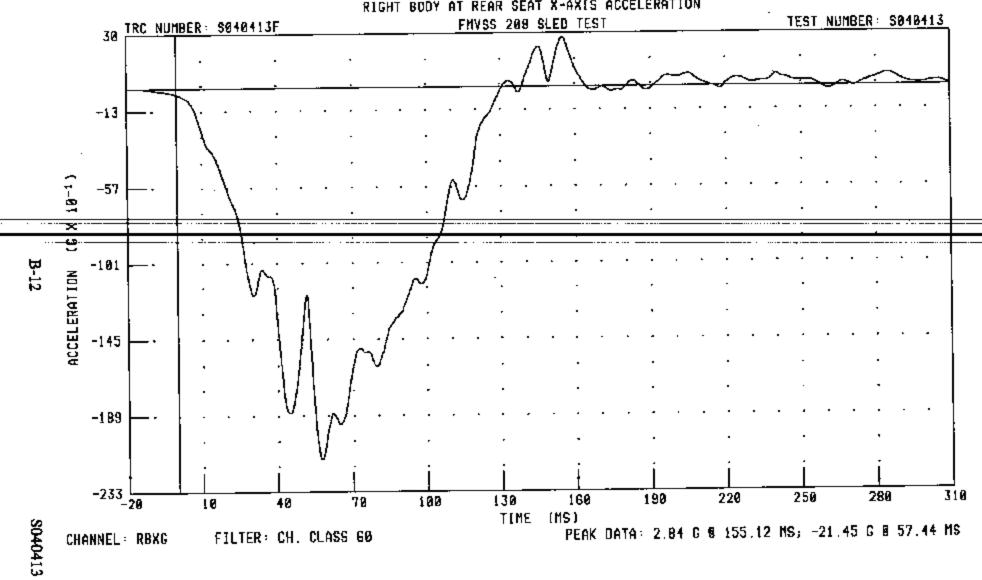
C35108 / 2003 TOYOTA TACOMA PASSENGER PRIMARY AIRBAG EVENT



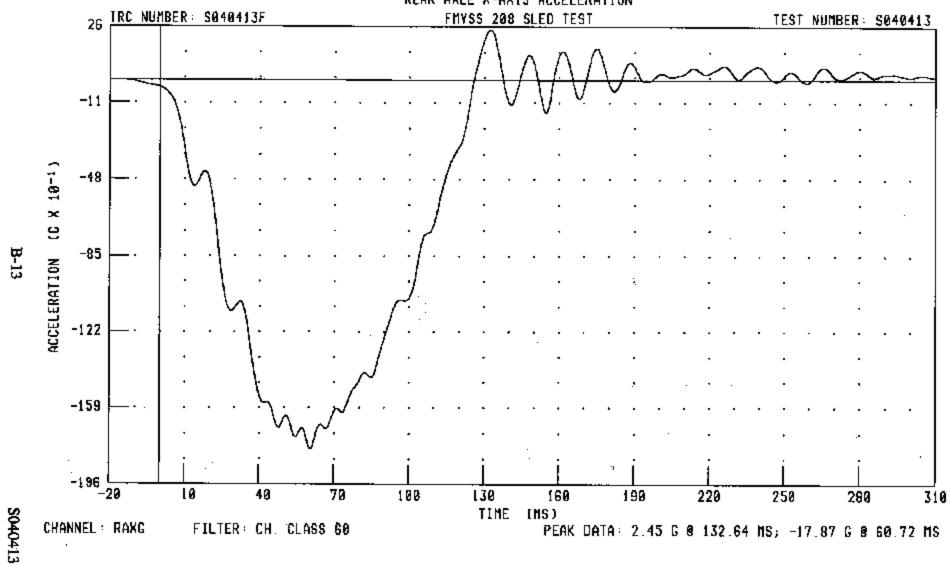
C35108 / 2003 TOYOTA TACOMA LEFT BODY AT REAR SEAT X-AXIS ACCELERATION



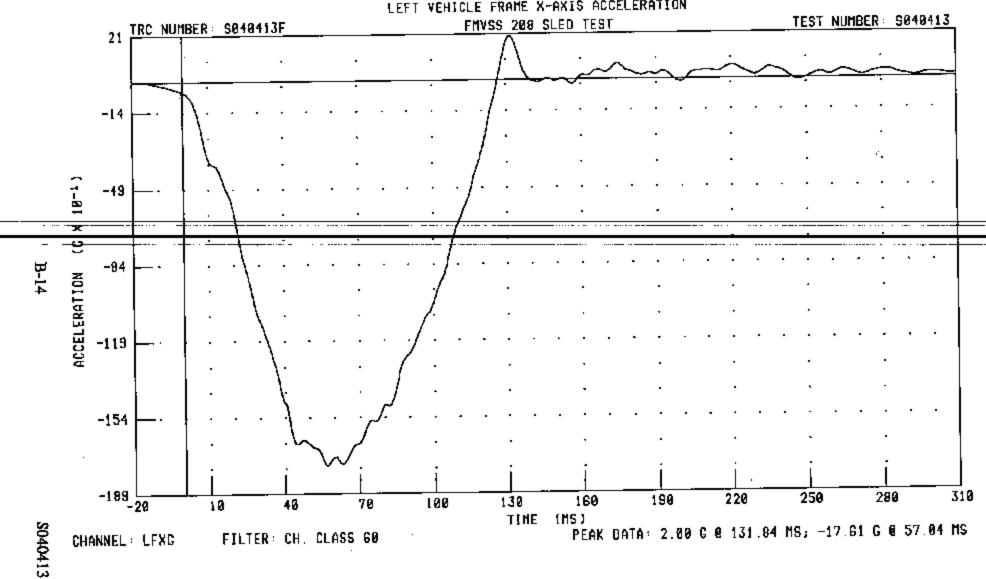
C35198 / 2003 TOYOTA TACOMA RIGHT BODY AT REAR SEAT X-AXIS ACCELERATION



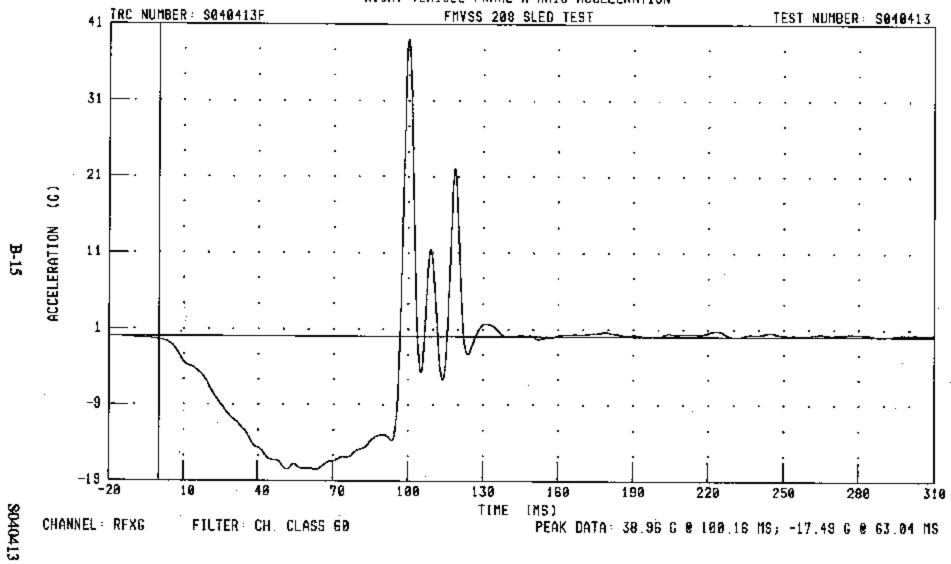
C35108 / 2003 TOYOTA TACOMA REAR AXLE X-AXIS ACCELERATION



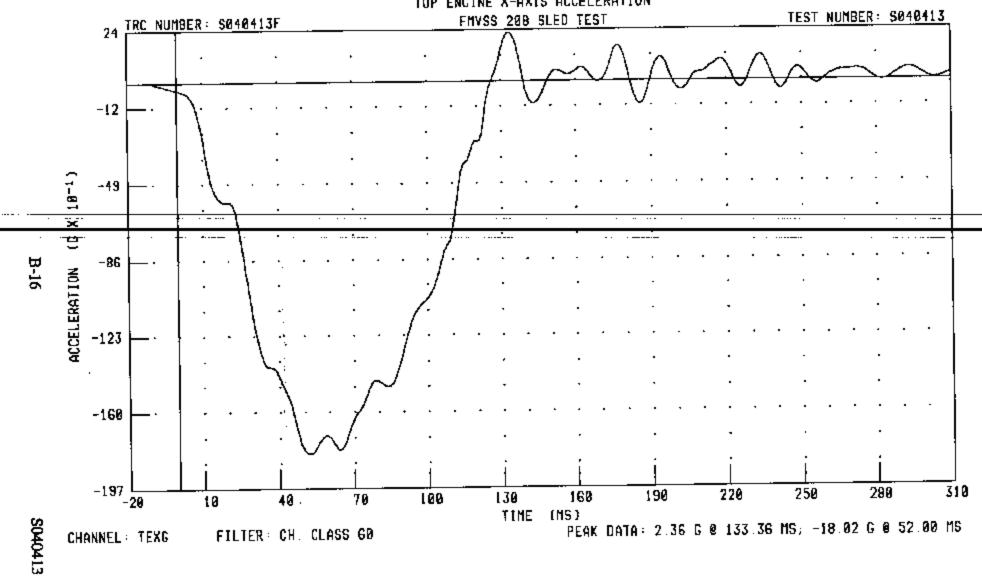
C35108 / 2003 TOYOTA TACOMA LEFT VEHICLE FRAME X-AXIS ACCELERATION



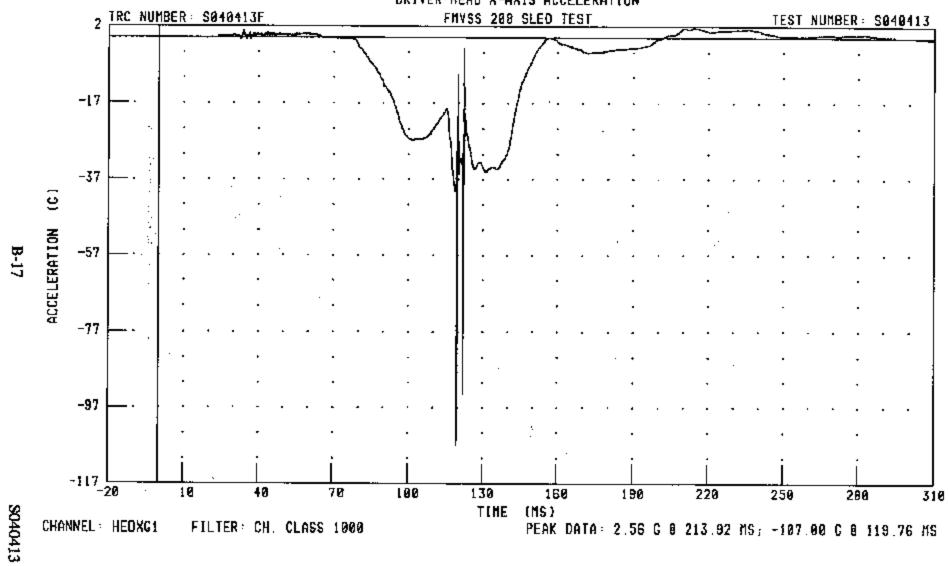
C35108 / 2003 TOYOTA TACONA RIGHT VEHICLE FRAME X-RXIS ACCELERATION



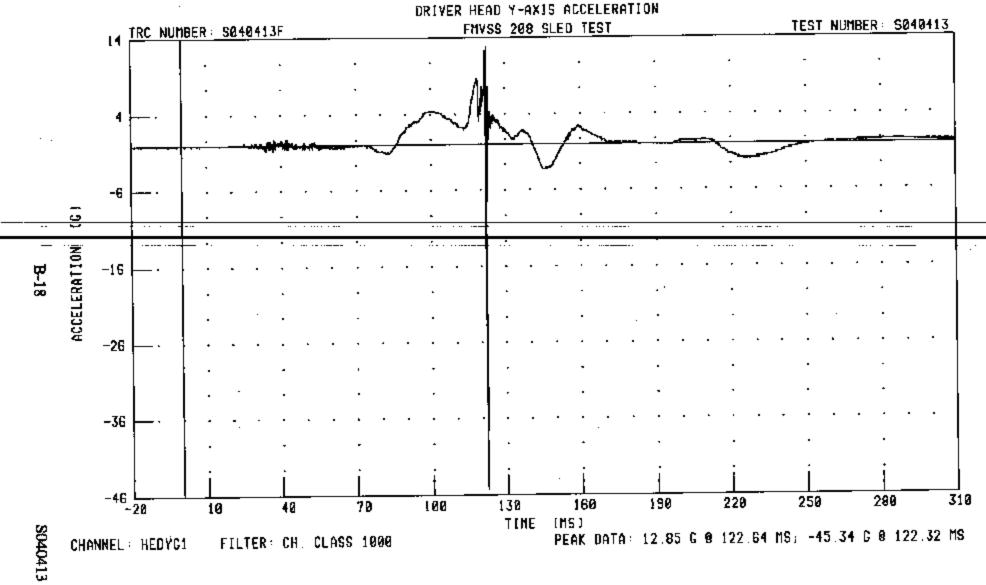
C35108 / 2003 TOYOTA TACOMA TOP ENGINE X-AXIS ACCELERATION



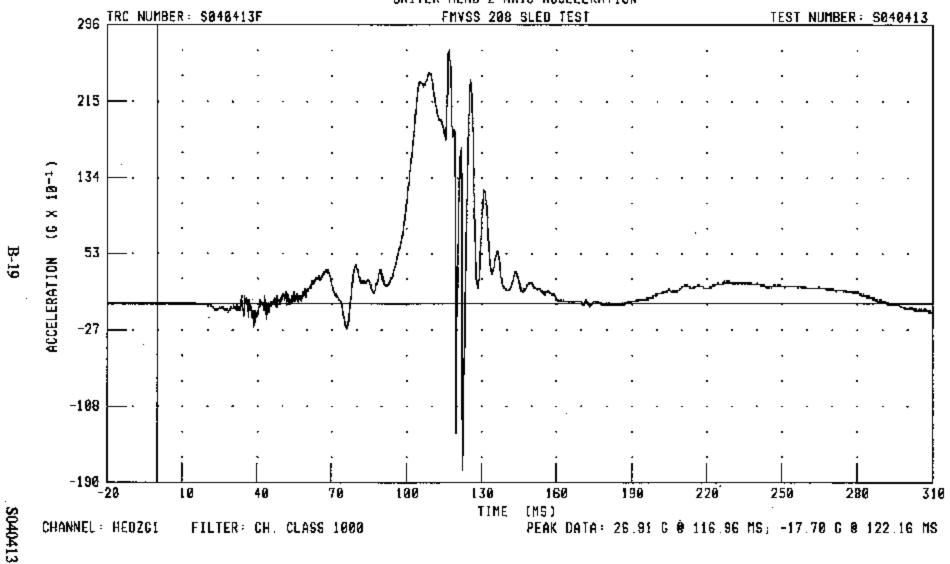
C35108 / 2003 TOYOTA TACOMA DRIVER HEAD X-AXIS ACCELERATION



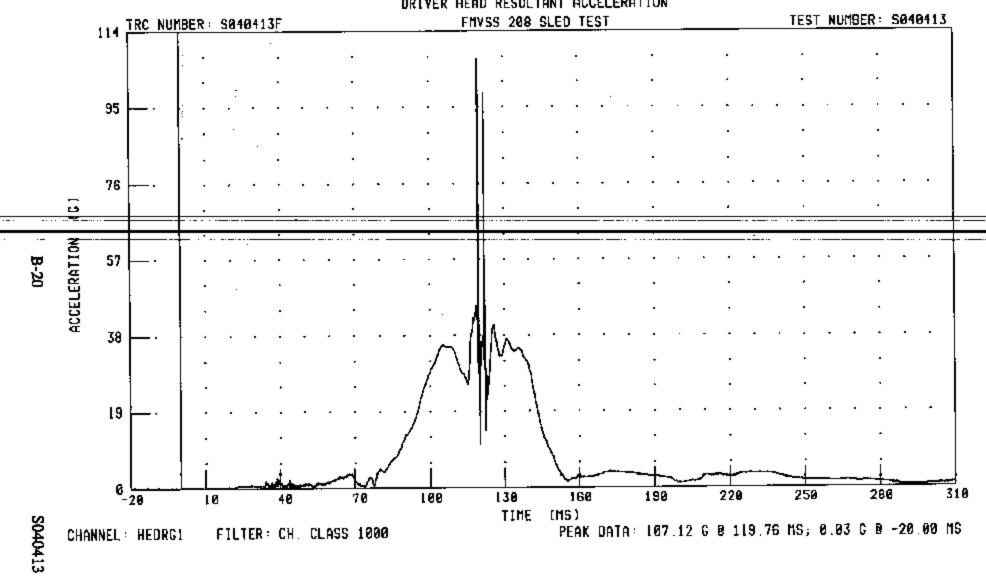
C35108 / 2003 TOYOTA TACOMA



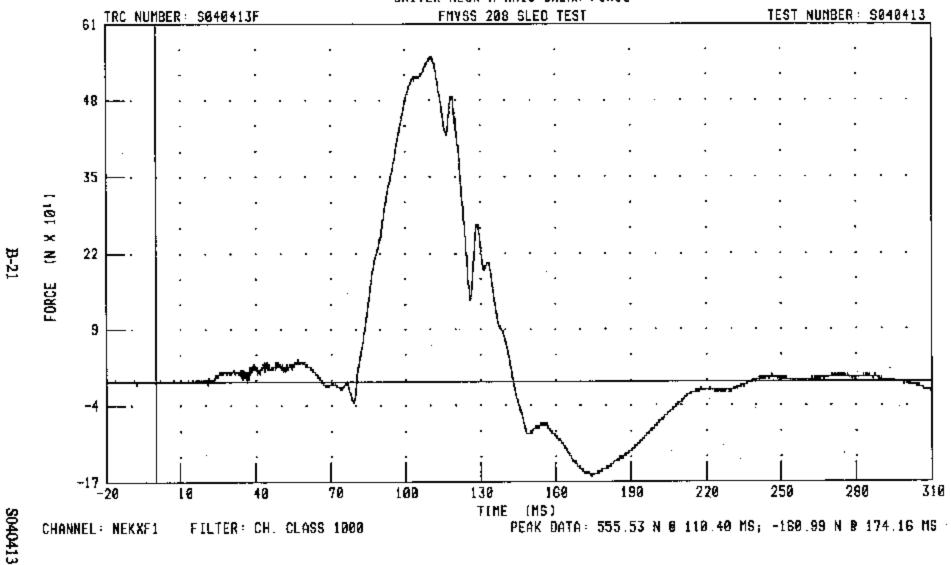
C35108 / 2003 FOYOTA TACOMA DRIVER HEAD Z-AXIS ACCELERATION



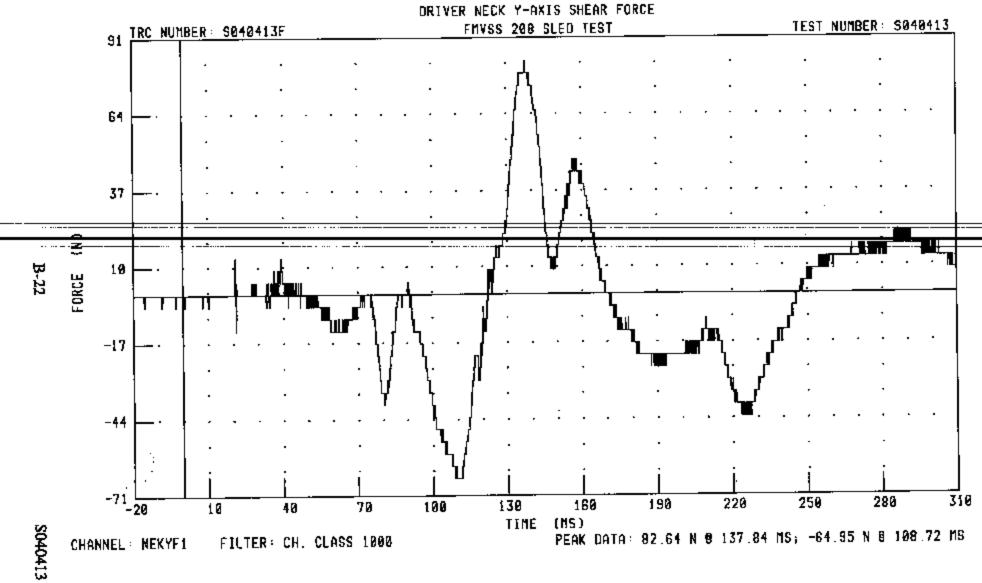
C35108 / 2003 TOYOTA TACOMA
DRIVER HEAD RESULTANT ACCELERATION



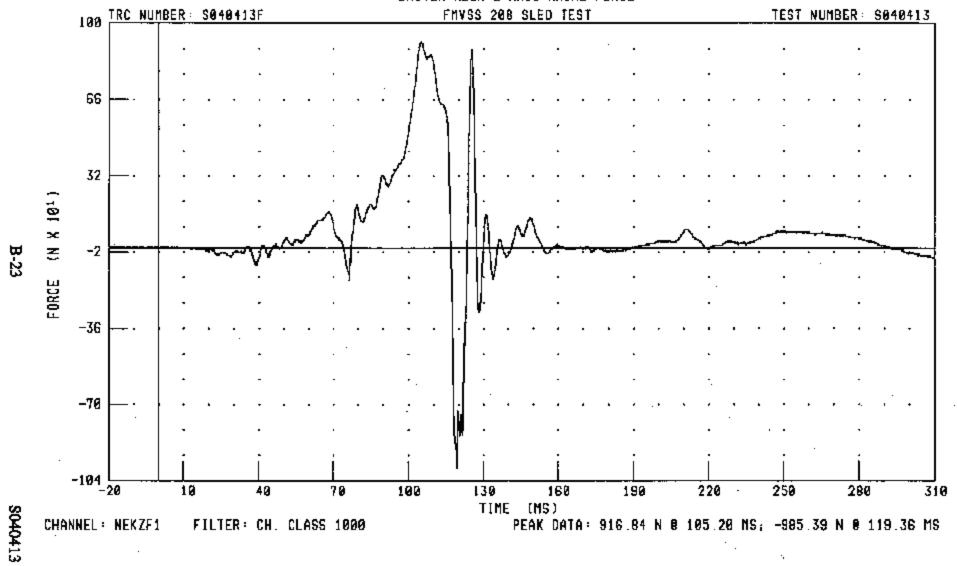
C35108 / 2003 TOYOTA TACOMA DRIVER NECK X-AXIS SHEAR FORCE



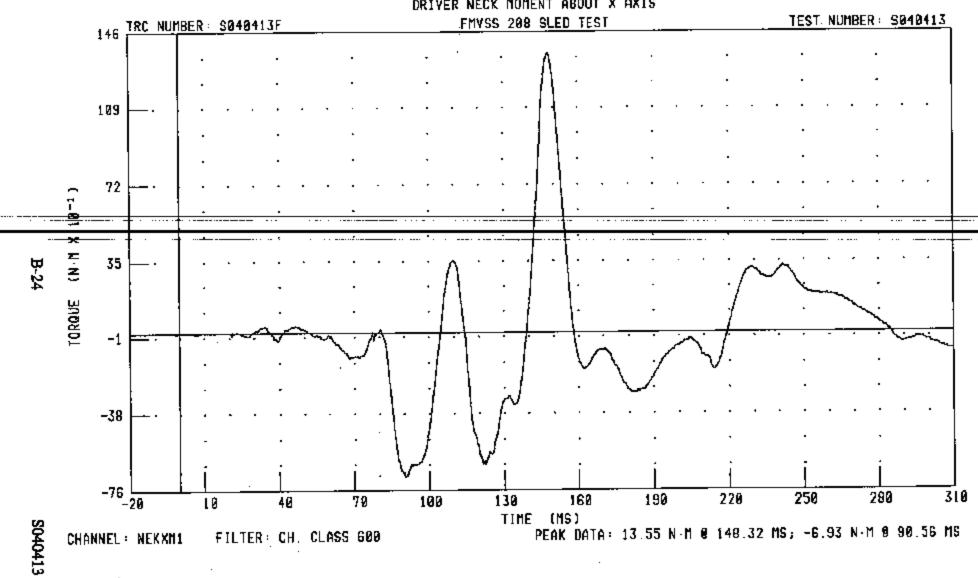
C35108 / 2003 TOYOTA TACOMA RIVER NECK Y-AXIS SHEAR FORCE



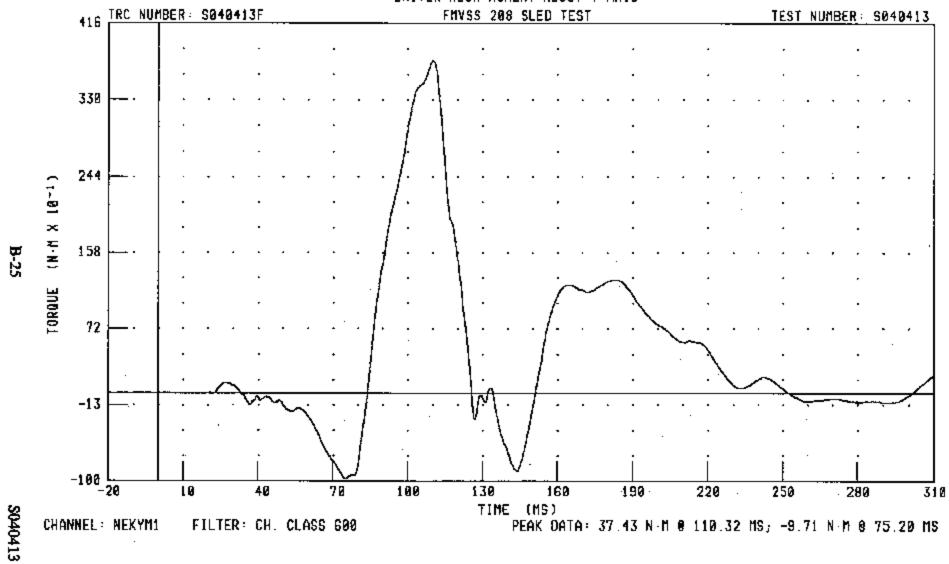
C35108 / 2003 TOYOTA TACONA DRIVER NECK Z-AXIS AXIAL FORCE



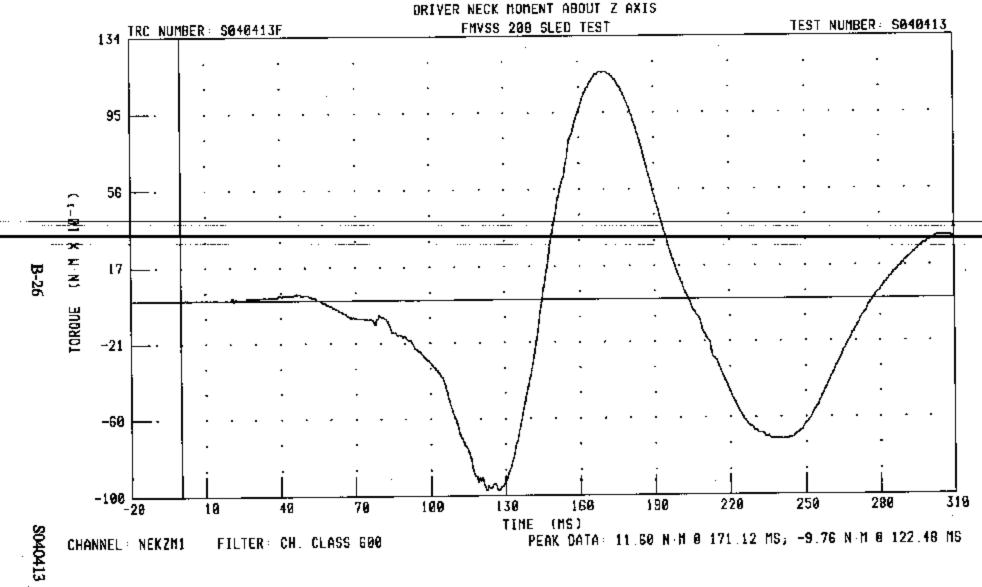
C35108 / 2003 TOYOTA TACOMA DRIVER NECK NOMENT ABOUT X AXIS



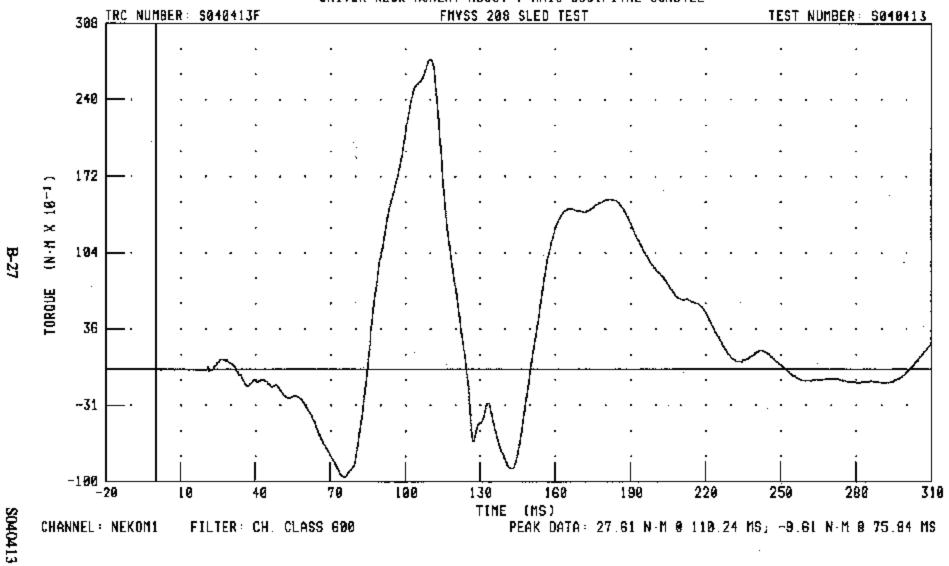
C35108 / 2003 TOYOTA TACOMA DRIVER NECK MOMENT ABOUT Y AXIS



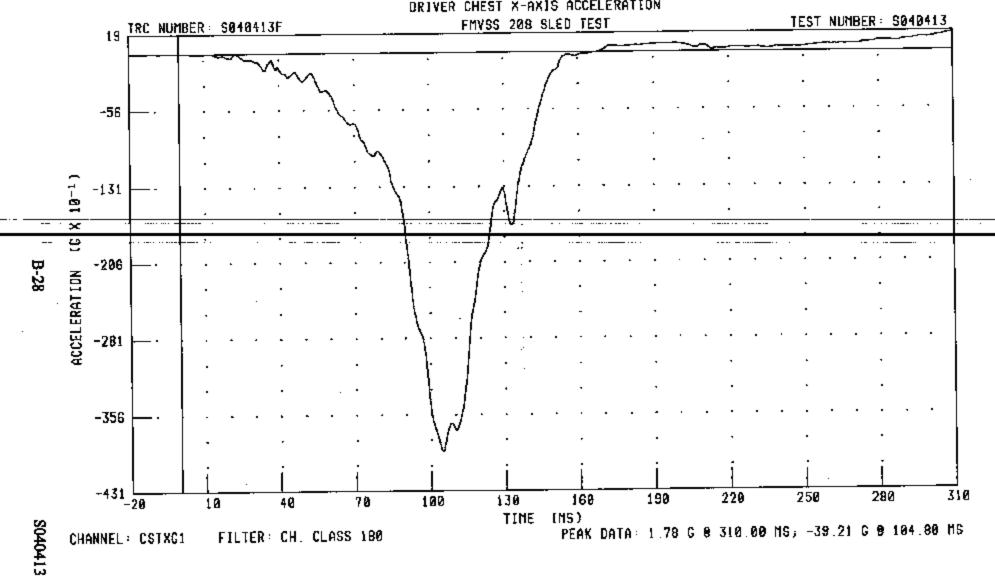
C35108 / 2003 TOYOTA TACOMA DRIVER NECK MOMENT ABOUT Z AXIS



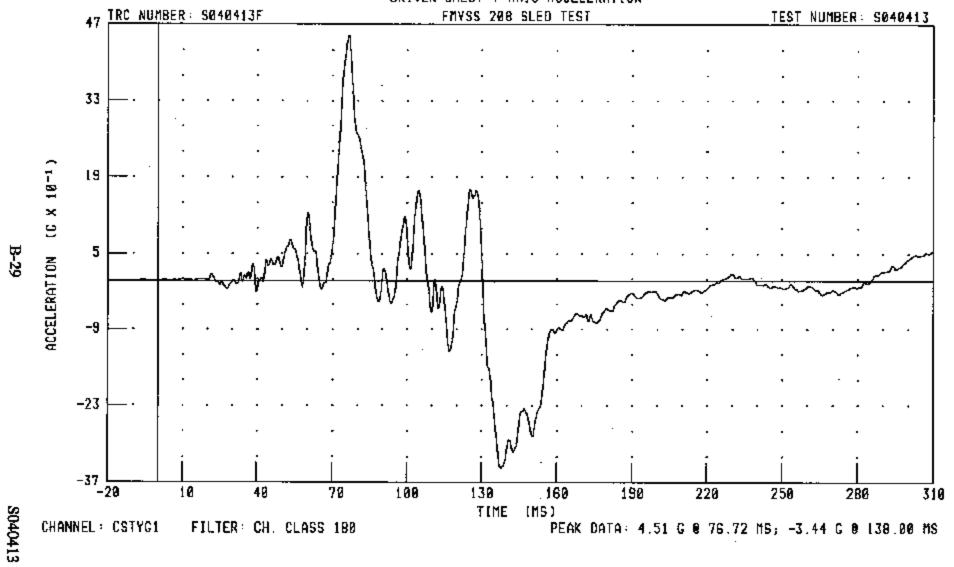
C35108 / 2003 TOYOTA TACOMA
ORIVER NECK MOMENT ABOUT Y AXIS DCCIPITAL CONDYLE



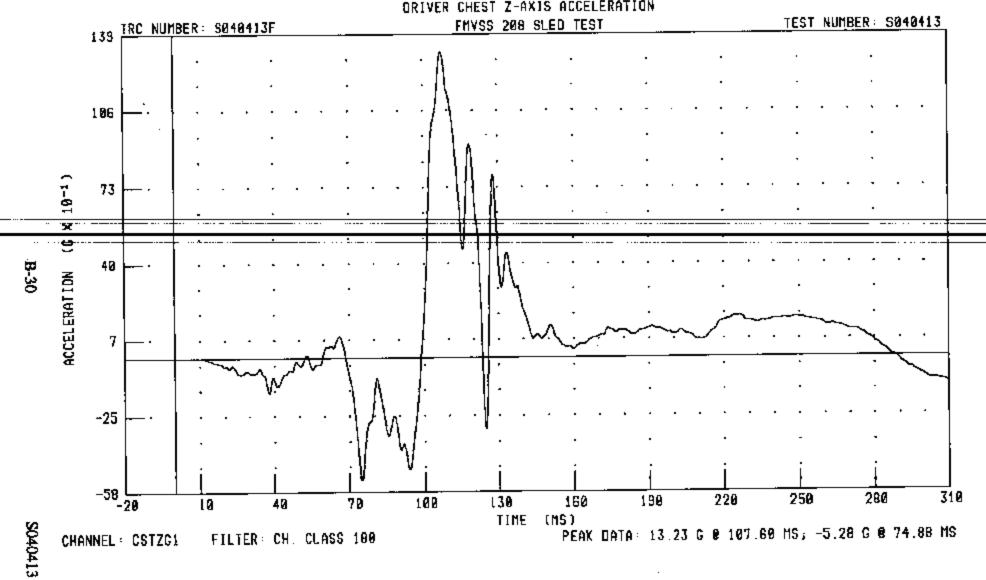
C35108 / 2003 TOYOTA TACOMA DRIVER CHEST X-AXIS ACCELERATION



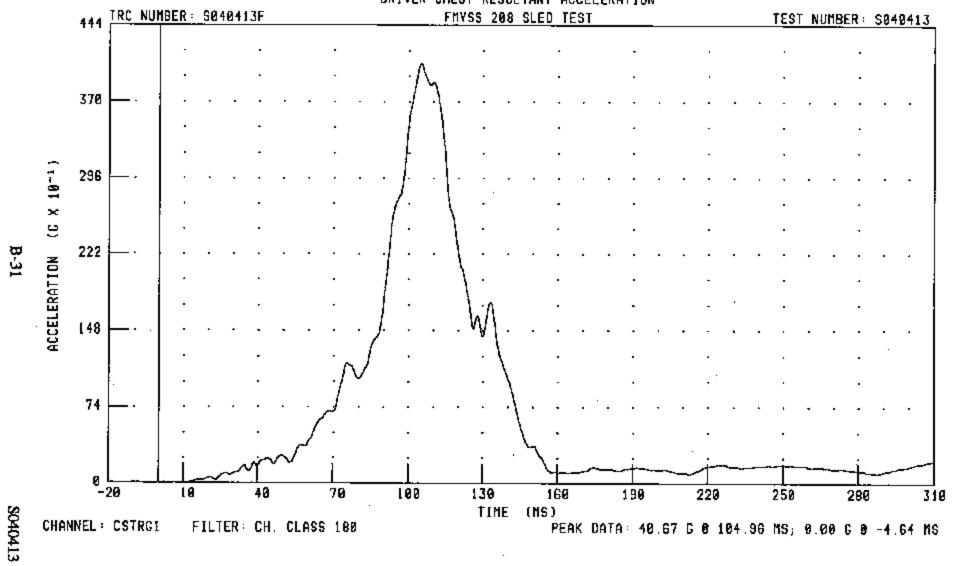
C35108 / 2003 TOYOTA TACOMA DRIVER CHEST Y-AXIS ACCELERATION



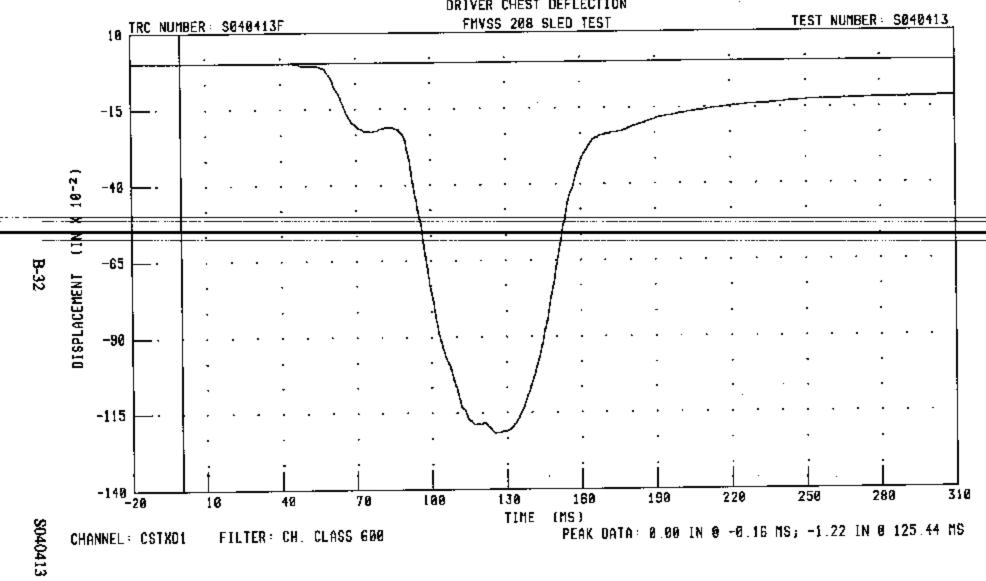
C35108 / 2003 TOYOTA TACOMA ORIVER CHEST Z-AXIS ACCELERATION



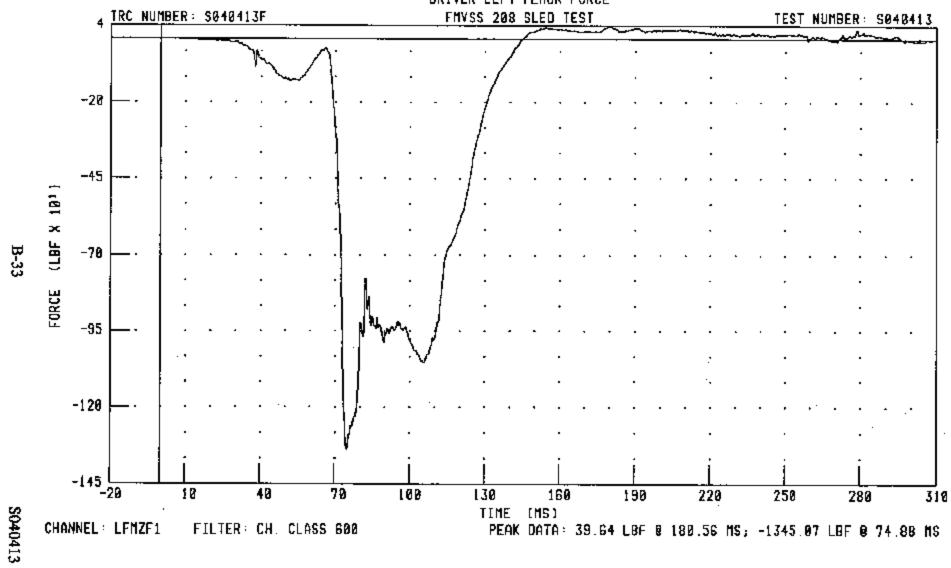
C35108 / 2003 TOYOTA TACDMA DRIVER CHEST RESULTANT ACCELERATION

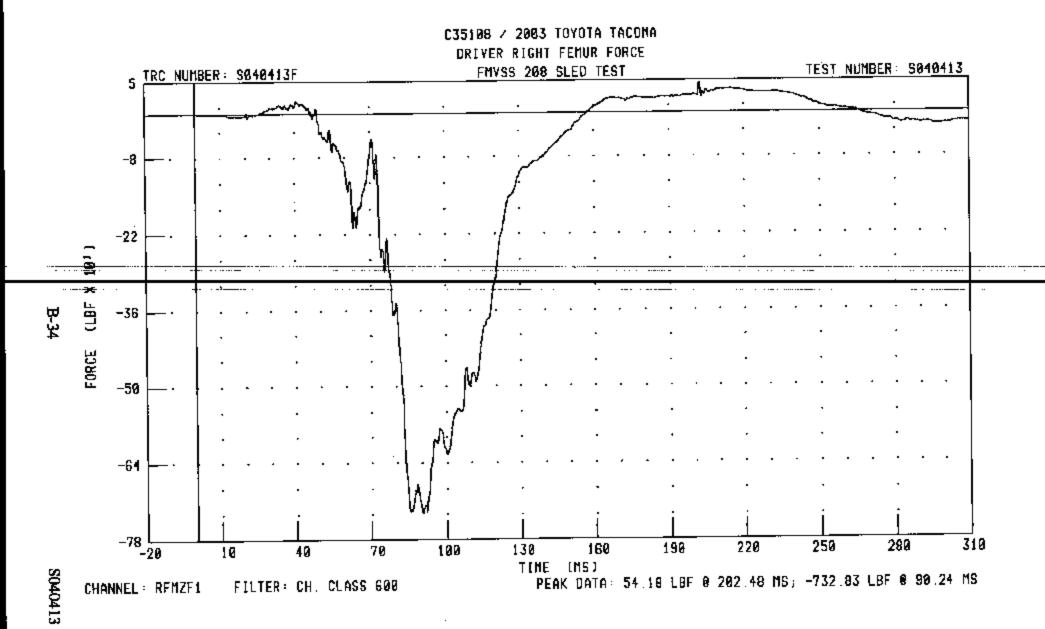


C35108 / 2003 TOYOTA TACOMA DRIVER CHEST DEFLECTION

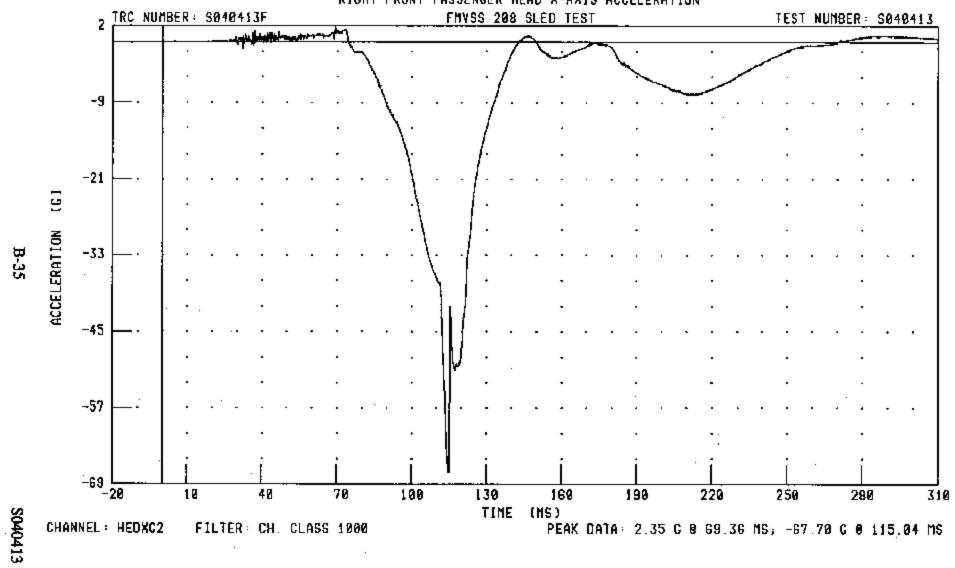


C35108 / 2003 TOYOTA TACOMA DRIVER LEFT FEMUR FORCE

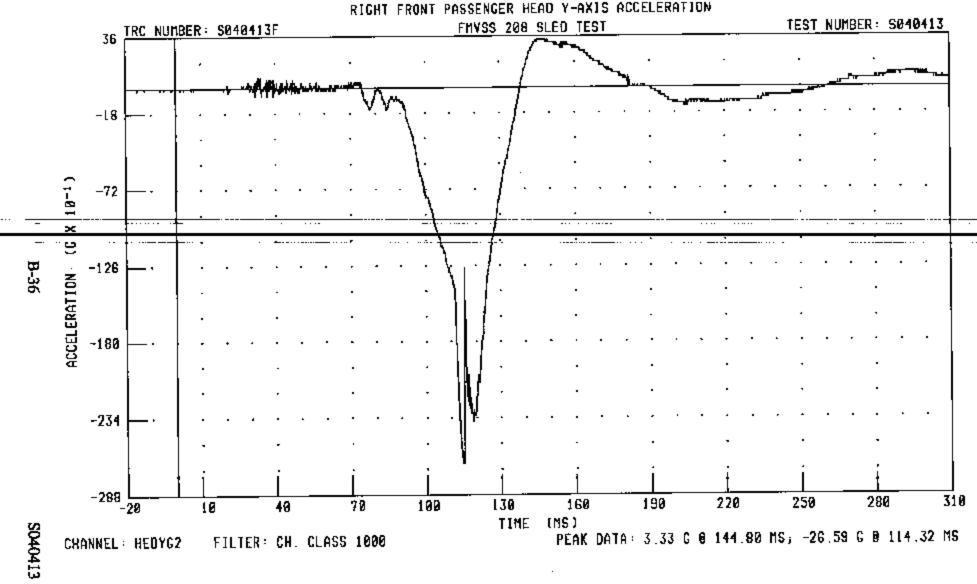




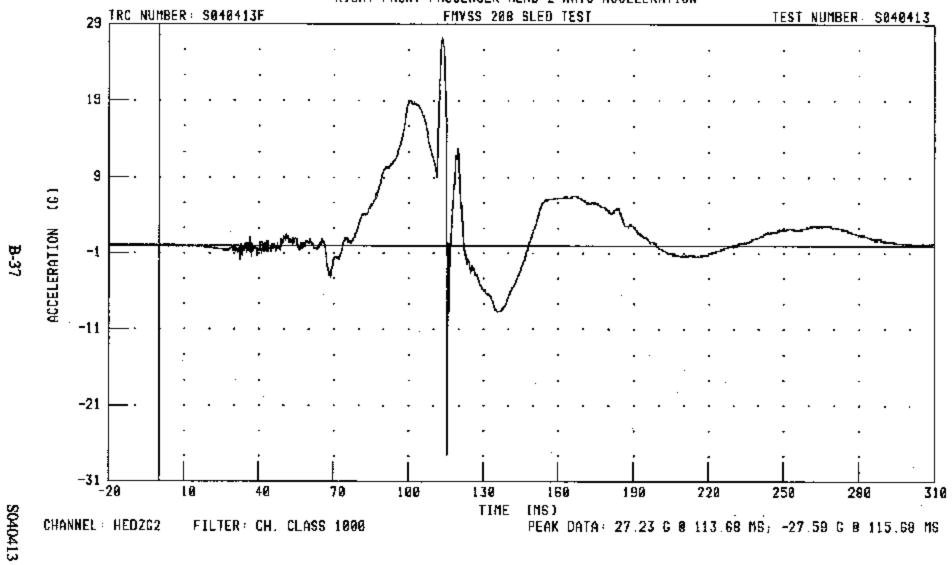
C35108 / 2003 TOYOTA TACOMA
RIGHT FRONT PASSENGER HEAD X-AXIS ACCELERATION



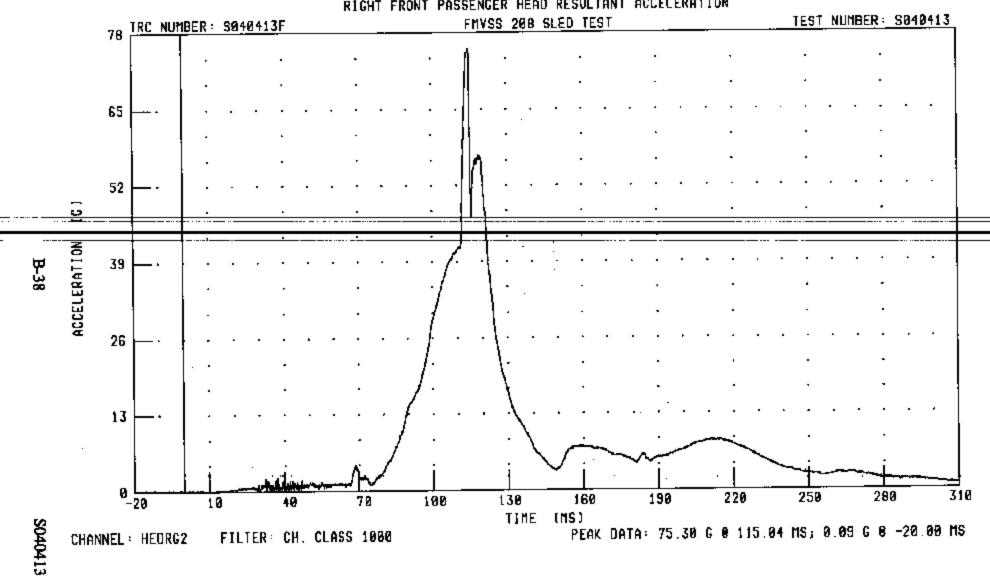
C35108 / 2003 TOYOTA TACOMA
RIGHT FRONT PASSENGER HEAD Y-AXIS ACCELERATION



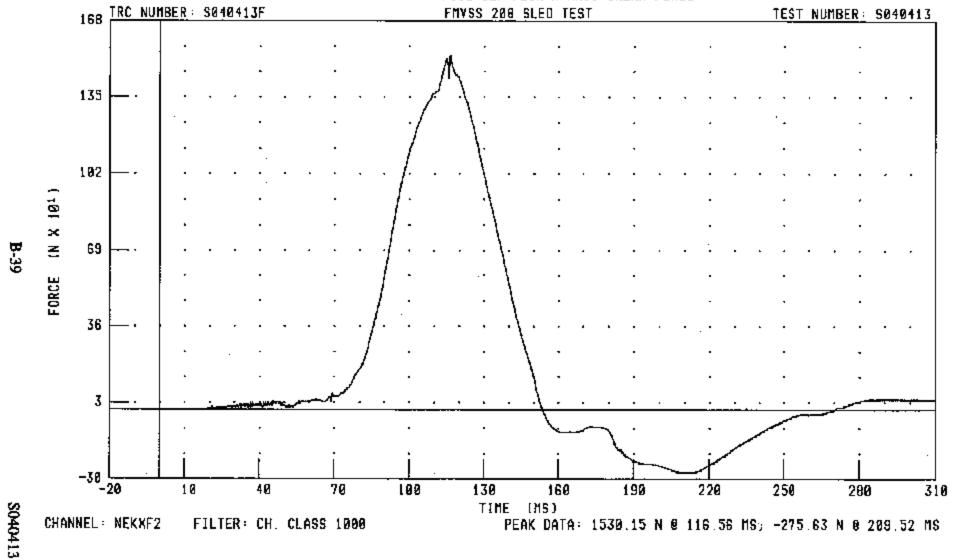
C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER HEAD Z-AXIS ACCELERATION



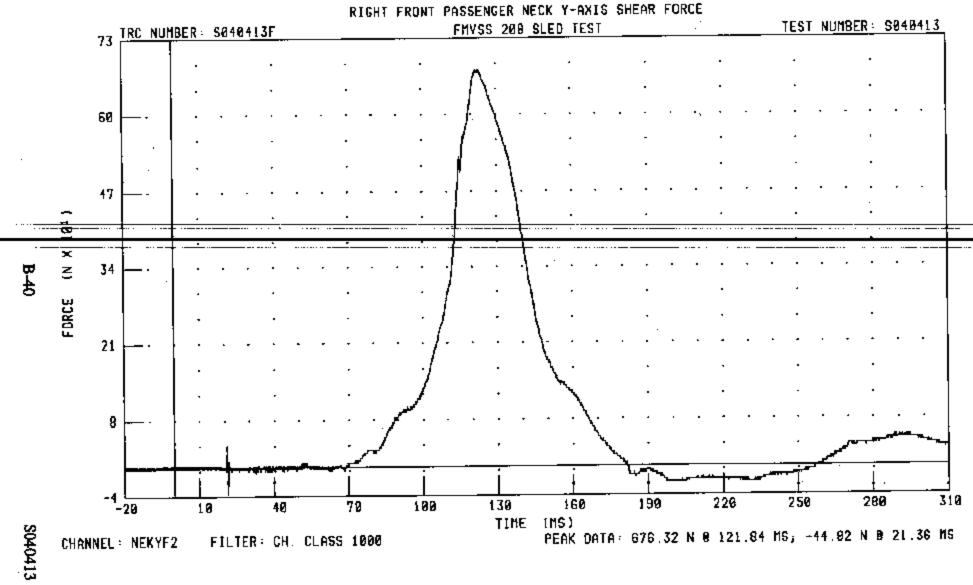
C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER HEAD RESULTANT ACCELERATION



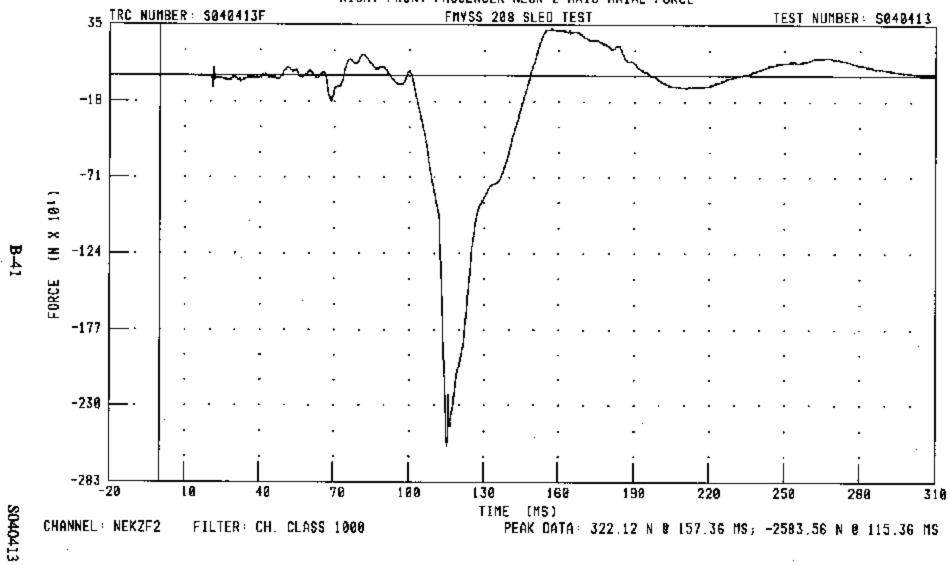
C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENCER NECK X-AXIS SHEAR FORCE



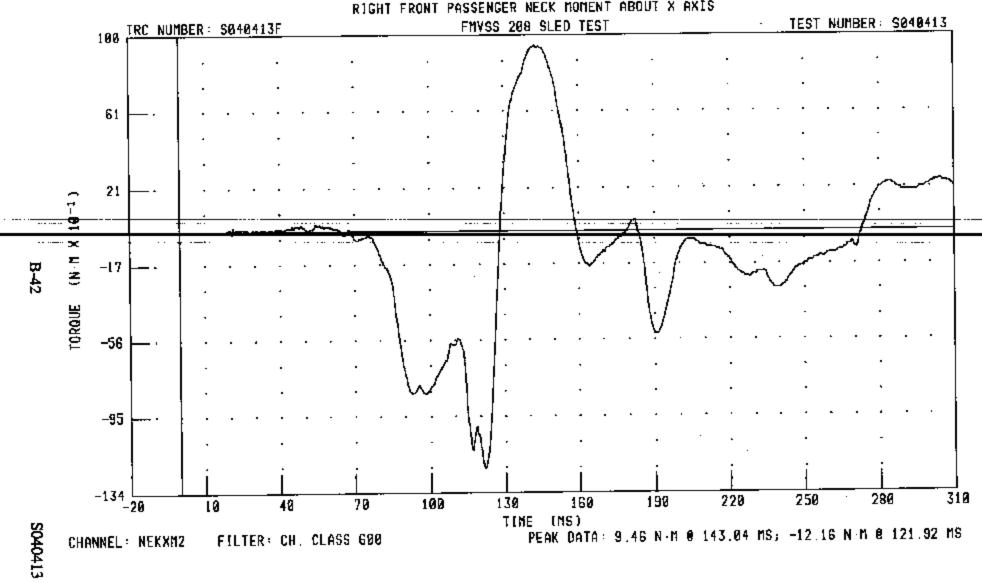
C35188 / 2003 TOYOTA TACOMA IGHT FRONT PASSENGER NECK Y-AXIS SHEAR FORCE



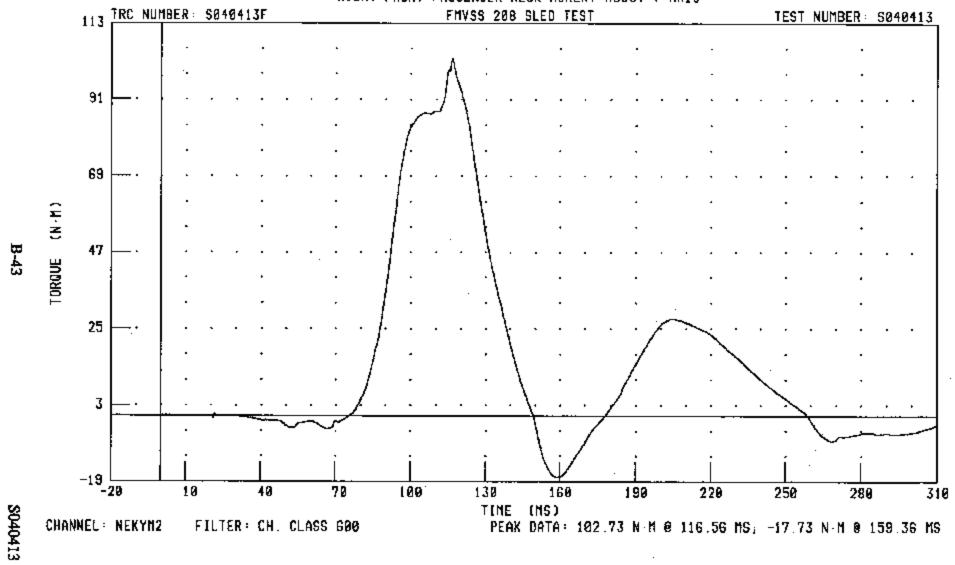
C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER NECK Z-AXIS AXIAL FORCE



C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER NECK MOMENT ABOUT X AXIS

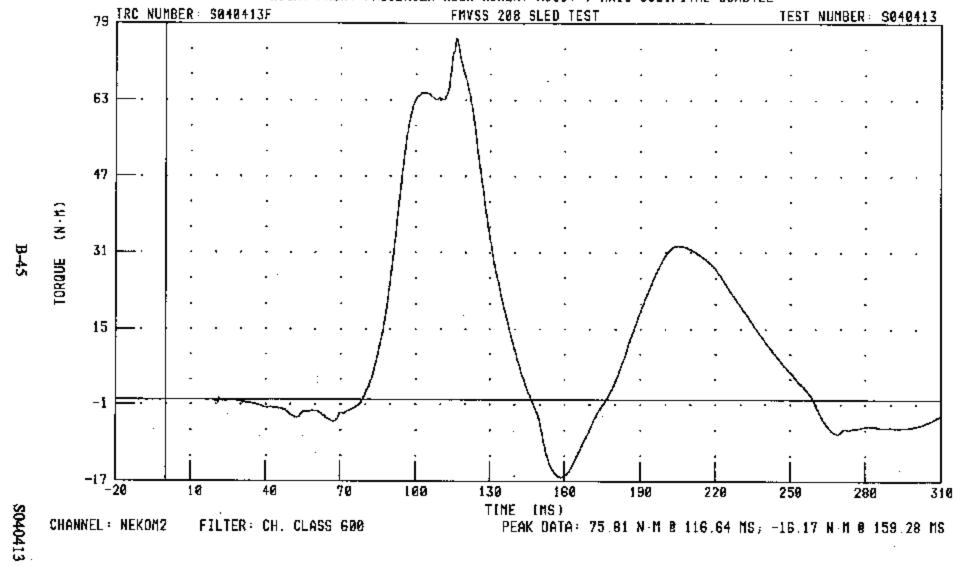


C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER NECK MOMENT ABOUT Y AXIS

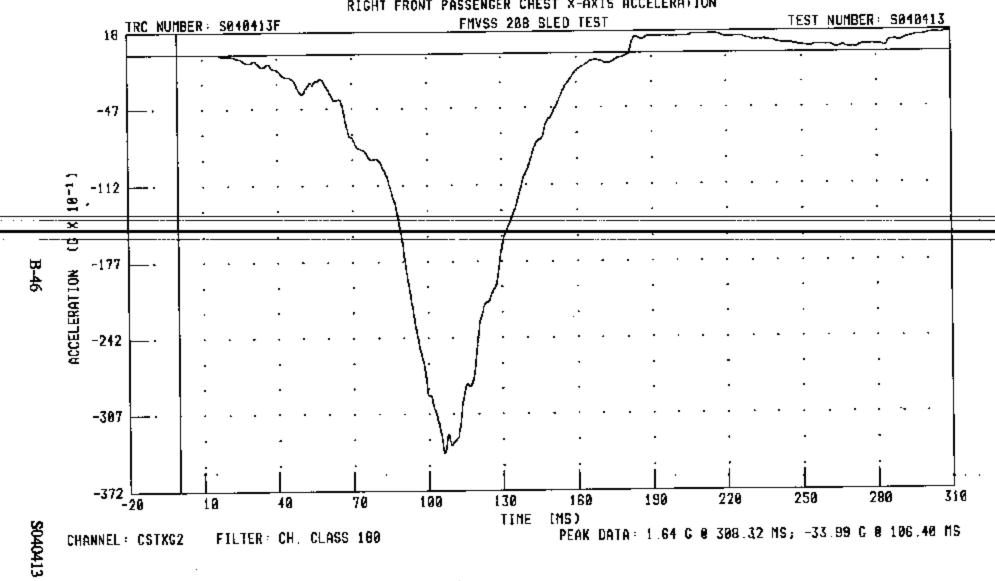


C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER NECK MOMENT ABOUT Z AXIS 262 TRC NUMBER: \$848413F TEST NUMBER: \$040413 FMVSS 208 SLED TEST 200 138 E.N. 76 TORQUE 14 -48 -110 <u>-</u>20 228 250 280 310 198 160 130 78 100 10 TIHE [MS] S040413 PEAK DATA: 24.01 N.H 8 130.80 MS; -10.89 N.M 8 203.76 MS CHANNEL: NEKZM2 FILTER: CH. CLASS 600

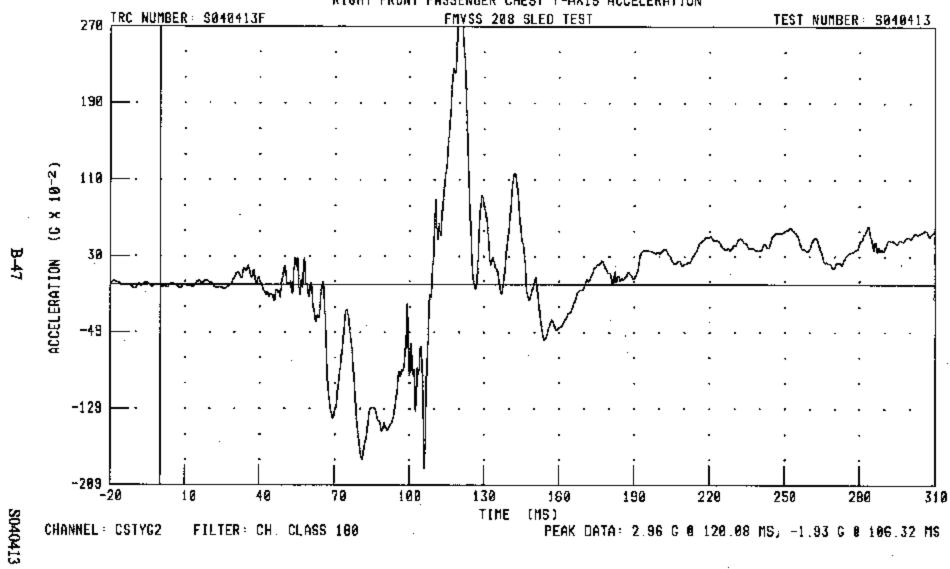
C35108 / 2003 TOYOTA TACONA RIGHT FRONT PASSENGER NECK MOMENT ABOUT Y AXIS OCCIPITAL CONDYLE



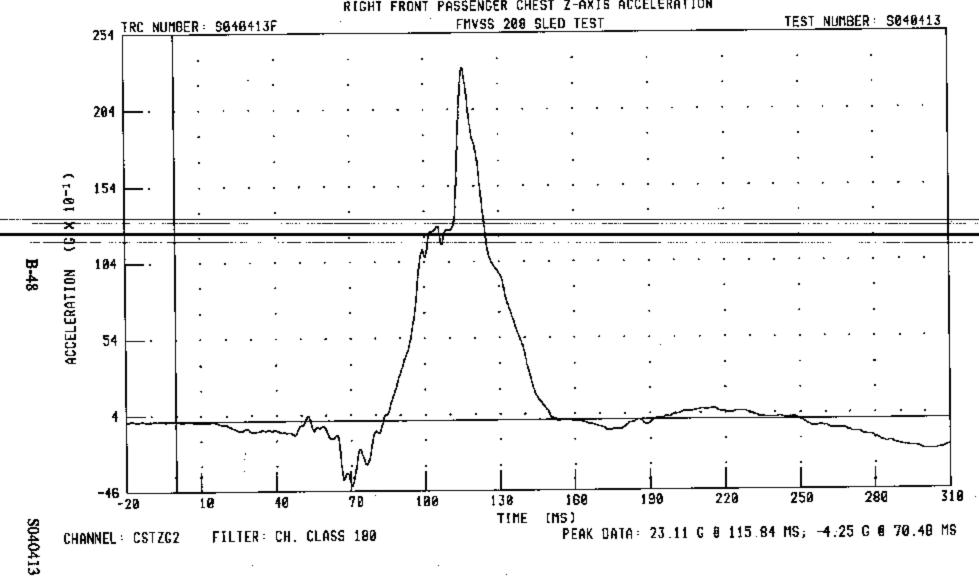
C35108 / 2003 TOYOTA TACOMA
RIGHT FRONT PASSENGER CHEST X-AXIS ACCELERATION



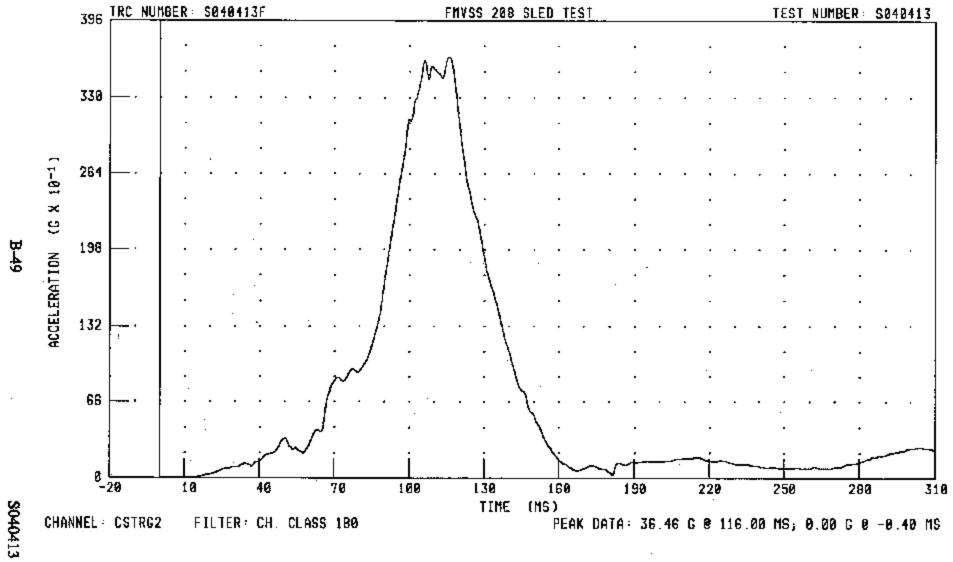
C35108 / 2003 TOYOTA TACOMA
RIGHT FRONT PASSENGER CHEST Y-AXIS ACCELERATION



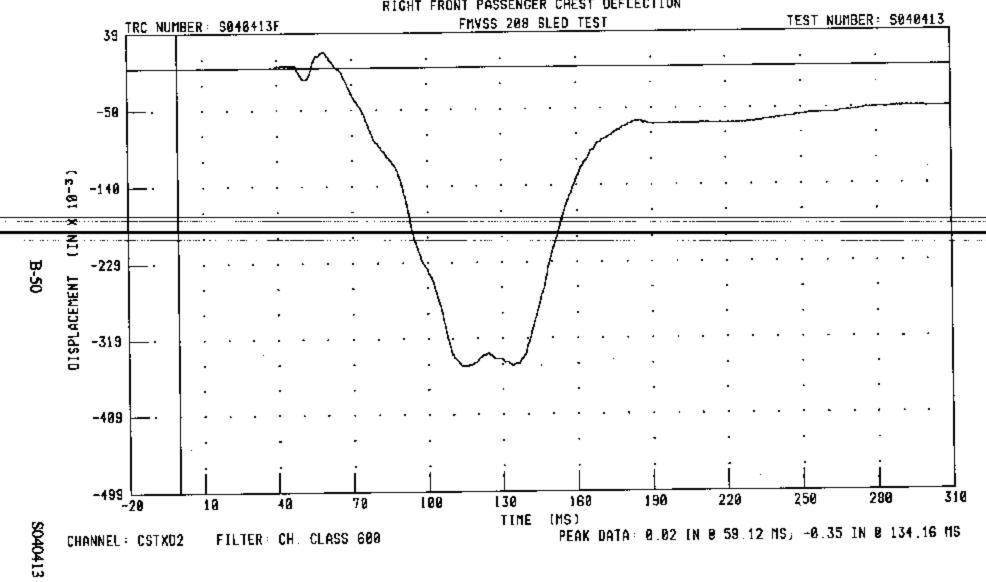
C35108 / 2003 TOYOTA TACOMA
RIGHT FRONT PASSENGER CHEST Z-AXIS ACCELERATION



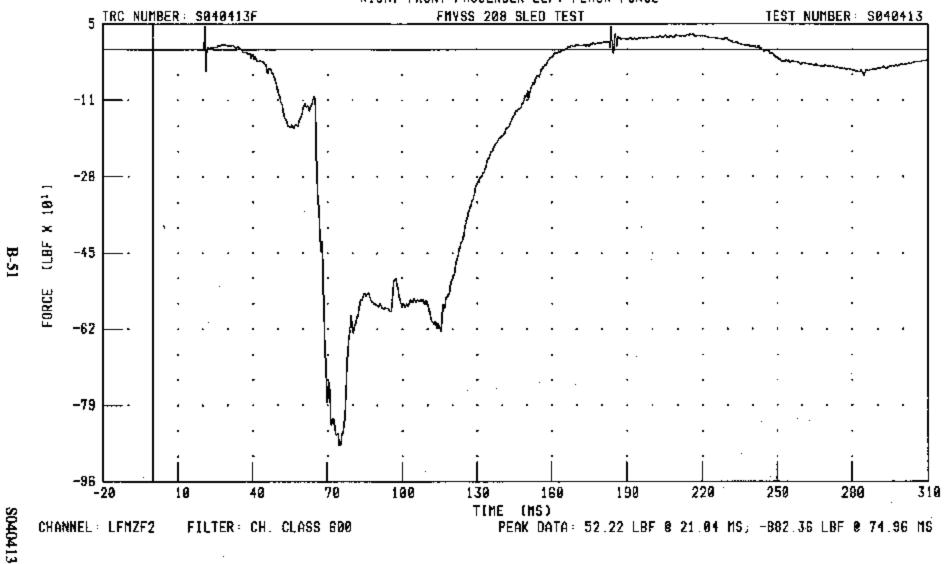
C35108 / 2003 TOYOTA TACONA RIGHT FRONT PASSENCER CHEST RESULTANT ACCELERATION



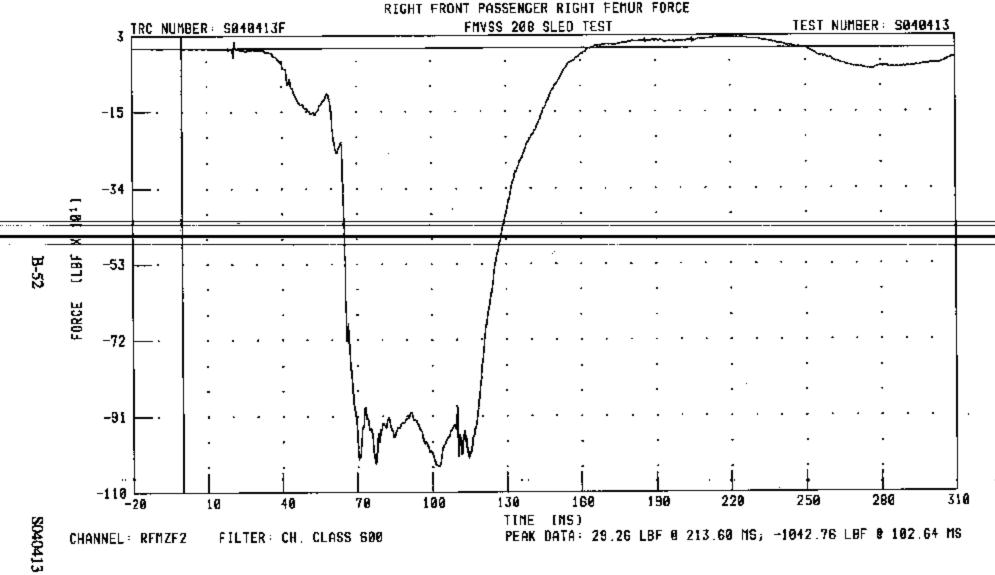
C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER CHEST DEFLECTION



C35108 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER LEFT FEMUR FORCE



C35100 / 2003 TOYOTA TACOMA RIGHT FRONT PASSENGER RIGHT FEMUR FORCE



Appendix C

Manufacturer's Vehicle Information

CH

S040413

NHTSA'S REQUES (NSA-31CQL THE 2002 FOYOTA TACOMA TOYOTA'S RESPONSE TO REQUEST ON FMVSS No. 208 FOR DA-208-010924-X)

0 Please inform OVSC to which sections of PMVSS No.208 the subject vehicle is cartified regard to the these sections. Provide a copy of the certification with respect to dynamic tests in which est reports for all the applicable impact tests with , peat belts are festened and seat belts are unfastened.

Response 1

FM/VSS No. 208. The air bag restraint system of the 2004 Hoyota Tacoma meets the requirements of \$13

We provide the summary reports for from: I angular barrier impact test with the safety manual belts fastened at 30mph as Attachment I-1 through I-7.

restraint system are provided as Attachment [48 and 1-9. And the summary reports of our certification tests for the sled test with only the automatic

Q2, and the MY 2001 air bag system, (2) Provide the following: (1)describe with respect to children and out of philtion. FMVSS No.208 performance, and (4) describe any features that might affect performance explain what other vehicle ch the difference between the MY 2002 air bag system riges have been made that might have affected of explain what other restraint changes have been made,

Since Toyota Tacoma is not a new design vehicle/model, the following information are provided;

- (1) There is no difference between the MX
- (2) No other restraint changes
- (3) No other vehicle changes, that might he ve affected FMVSS208 performance
- (4) No features, that might affect perform with respect to children and out of position.

Ģ, If the vehicle was certified with unrestrained dimminies to meet the requirements of \$13, describe how to disnoment the air bags from the vehicle sensors and connect them to the niggering mechanism used in the sled test. Describe the method used in outlification to determine when to trigger the air bag and the system used to trigger the air bag.

For air bags with dual stage or multistage inflators describe when the stages are triggand severity. and provide data to show that this is similar to what would occur in a crash of similar

Кезродве 3

bag as Attachment II-1. We provide the illustration which shows the location of the air bag connector to disconnect the air

And we describe the air bag triggering system used in certification test in Attachment II-2.

Air bag with dual stage or multistage inflators is not used in the 2002 Toyota Tacoms

Ş State for any safety belt system in this vehicle whether or not it is equipped with a tension-relieving device. S7.4.2 if the tension-relieving device is used. Provide a copy of the information furnished in accordance with

Response 4

Tension-relieving device is not used in the 2002 Toyota Tacoma.

Š FMVSS No. 208, S8.1.5 allows the manufacturer the option of having movable vehicle windows and vents were opened or closed for the certification tests windows and vents placed in the closed position. State whether the vehicle's movable

Response 5

Both sides of the front and rear windows were opened and rear vents were closed during the tests

Š Submit during placement measurements, including diagrams or photographs which show provide the individual dummy placement measurements dыпылу щевяшетсять. exactly where measurements were taken. Where possible, use the dimension shown in the diagram to Enclosed is a diagram of some of OVSCs

Response 6

addition, we provide our diagrams and measurement data in section 11 of Attachment IV-1. The durnmy placement measurement data in the OVSC form is provided in Attachment III, and in

Q.7. State whether the vehicle has a foot rest for the driver

Response 7

A foot rost is provided for the driver

င္ပ



Q. 8. Provide the seat positioning, steering column positioning, and fuel tank data on the enclosed form. If more than one from seating, steering column or fuel tank configuration are available on this vehicle, provide separate information for each. In addition, provide the seating reference point for each sept for the lockable seat belt requirement in S7.1.1.5. column positioning, and fuel tank data on the

We provide the seat positioning, steering bottom positioning, and fuel tank data a IV-1, and the seating reference point for each seat as Attachment IV-2 through IV-6. hmn positioning, and fuel tank data as Attachment

Š. If the vehicle is equipped with adjustable seat belt anchorages, provide the manufacturer's nominal design position for a 50th perpentile adult male occupant

Response 2
See section 9 of the Attachment IV-1

Q.10. For all certification barrier tests, resulting injury criteria (i.e., HIC, chi the resulting injury oritoria (i.e., HIG and where applicable neck moments and neck moments and forces). est accoleration, chest compression, and femur loads, wide the speed at impact, vehicle test weight, and and forces). For all certification sled tests, provide chest acceleration, chest compression, featur loads,

We provide the speed at impact, vehicle test weight, and resulting injury criteria certification test in Attachment I-1 through I/9 in response to your request No.1. weight, and resulting injury criteria recorded for each

Q.11. When vehicle components must be perhoved to obtain the proper test weight for the barrier test, what components do you recent recommend removal? thend for removal and in what priority order do you

Response 11

The recommended parts for vehicle weight squistment are listed in Attachment V.

Q.12. If the vehicle uses a pressure vessel to or engineering analysis to demonstra ϕ that it meets all the requirements S9.1. inflats the air bag, provide a copy of the test reports

Response 12

We provide the approval letters of Rescand VI-1 for the passenger's air bag. and Special Program Administration as Attachment

Q.13. If the vehicle uses an explosive dev report or engineering analysis to den ice to inflate the air bag, provide a copy of the onstrate that it meets all the requirements of S9.2

Response 13

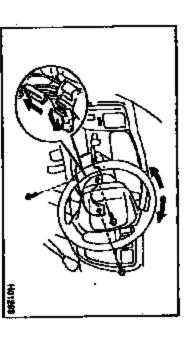
VI-2 for the driver's air bag We provide the approval letters of Research and Special Program Administration as Attachment

TOOP DOO TOT TWE TOT TO BANK OFF

THE SECOND CAME OF

į

OF THE AIR BAG CONNECTOR



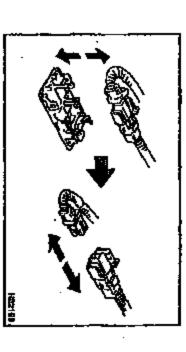
DRIVER SIDE AIR BAG

- (1) Remove the 3 screws and steering column lower cover as shown in the illustration.
- (2) Disconnect the airbag connector of the spiral cable.



PASSENGER SIDE AIR BAG

- Remove the glove compartment door.
- (2) Disconnect the airbag connector.

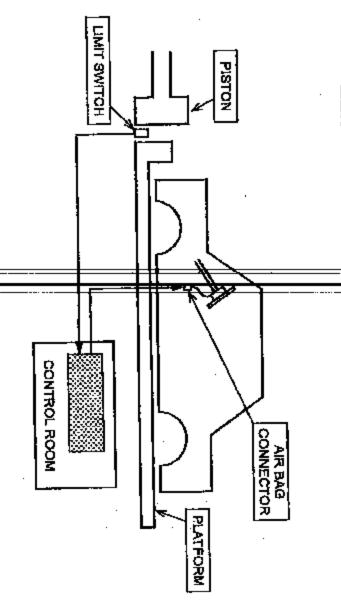


AIR BAG TRIGGERING SYSTEM FOR SLED TEST

...

TARR 201 LAS WELL ARTER EAST

. .



- ۲ The timing of the initiation of the platform acceleration is measured by the limit switch that is installed between the piston and the platform.
- \sim Connect the limit switch, air bag and higher computer which controls the frigger time for the air bag.
- Ľ When the platform acceleration is initiated, the limit switch send out a signal to the Master computer
- 4. Master computer controls the trigger the for the air bag with the limit switch signal.
- Ņ At 20ms from the time that 0.5G is mis trigger signal to the air bag. shired on the platform, Master computer send out the

ST - Striker to Head

CS - Steering Wheel to Chest TA

Seet Back Angle Line

SWA* i

SCA

HR - Head to Reader

HZ - Head to Roof

CD - Chest to Dash

RA - Rim to Abdomen

KDL/KDR - Knee to Dash

KDA - Knee to Dash Angle

NR - Nose to Rim

HV - Head to Windskield

PA - Palvic Angle SA - Şent Back Angle

SCA - Steering Column Angle

- Striker to H-Point

DUMMY MEASUREMENTS FOR FRONT SEAT PASSENGERS

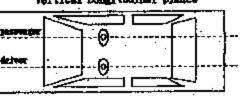
- Striker to Knee

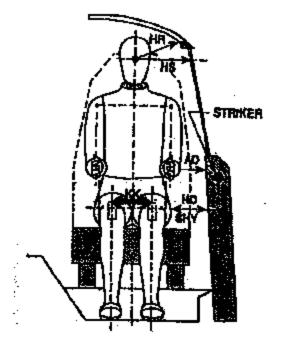
- Nose to Rim Angle

~ Tibial Angle

SWA - Steering Wheel Angle WA - Windshield Angle

Vertical Longitudinal planes





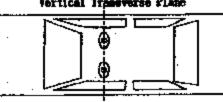
- Read to Side Header

- Bead to Side Window

- Arm to Door

- H-Point 10 Door - Striker to H-Point (Y Dir.) - Knee to Knee

Vertical Transverse Plane



08/25/04 THU 08:22 S040413 [TX/RX NO 8191]

ATTIACHMENT III

UVBC NVS/221

DUMMY POSITIONING IN VEHICLE PRONT SEAT MEASUREMENT TABLE

Beguler Cab

3.9inch (100mm) : Separate Seat 4.3inch(108mm) : BenchiSeat	PA A	4.3inch (110mm) ; Separate Set 4.8inch(118mm) ; Bench Sea	₽ B
6.5Inch (185mm) : Separate Seat 6.8Inch(173mm) : Bench Seat	<u> </u>	6.5inch (185mm) : Separate & 6.8inch(173mm) : Bench Seat	ŒĔ
12.2(nch (310mm) : Separate Sept 12.5(nch (318mm) : Bench Seat	<u> </u>	12.2inch (310mm) : Separate Stat 12.5inch(318mm) : Bench Seat	SH
6.5inch (165mm)		6.5Inch (165mm)	VES.
16.9inch (440mm) ANGLE ND	ā	16.9lnch (440mm) ANGLE	HB
29,5inch (750mm) ANGLE ND	중	29.6inch (750mm) ANGLE	SK
25.2inch (640mm) ANGLE ND	1	25.2inch (640mm) ANGLE	ST
10.2lnch (290mm)	=	10.6inch (270mm) : Separate Se 11.0inch(280mm) : Bench Seat	X
ND		8	,V.L
ND	 	ND	PA°
6.7inch (170mm) ANGLE(KDA°) NO		7.1inch (180mm)	EDR
6.7Inch (170mm)	8	7.1inch(180mm) ANGLE(KDA°)	KDL
nch (200mm)		7,00	R.A
nch (295mm)	8	11.6	S
19.1Inch (485mm)		21.9Inch (555mm)	CD
ANGLE(NA°) ND		16.5inch (420mm)	NR
9.1inch (230mm) : Separate Sest 9.5inch(240mm) : Bench Seat	- A-	9.1inch (230mm) : Separate Seat 9.5inch(240mm) : Bench Seat	TH
22.2inch (565mm)		22.2inch (565mm)	WH
18.1inch (410mm)		16.1inch (410mm)	H
8.3mch (210mm)		8.3inch (210nvn)	뜅
ND		NO	SA.
ND .	يو		\$CA°
ND	Z		\$WA°
ם	Ž		WA.°
PASSENGER	_	DRIVER	
	ŀ		

AJTACEMENT IV

INFORMATION FOR NHTSA REGARDING THE 2002 TACOMA FICK UP (TEST CONDITIONS FOR CRASH TEST)

The following are design related matters necessary for conducting the barrier crash test.

4 4

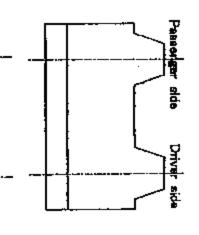
1. Useable Fuel Tank Volume 16. C gallons 18.5 gallons

94% of useable volume 92% of uspable volume 15, 0 gallons 14.7 gallone 17. 0 gs/kons 17. 4 gs/kons

2. Vehicle Capacity Weight

Rated Cargo & Luggage Weight • • 300 **b**a

Designated Seating Capacity



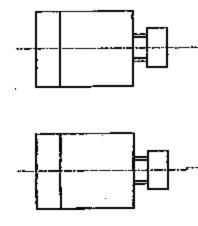
Bench Seat : ω

ę

Sprit Bench Seat : 3

q

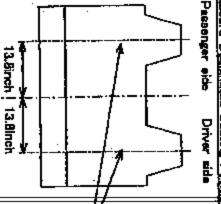
Separate Seat : 2



3. Tire Infletion Pressure

P205/75R15 (Fr P236/55R18 (Fr: P225/75R15 (Fr: P265/70R18 (Fr: 26 pei , Rr: 26 psi , Rr: 26 pai , Rr: 26 pei , Rr: 29 psi) 29 psi) 29 29 pt) Ø,





(Bench Seet)

13.8inofx(350mm) outboard of the vertical plane which includa vahiole center.

Designated Seating Position = Center of Head restraint



(350mm)

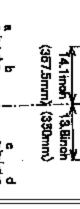
(350mm)

3.0inoh(75.0mm)

3,0lnoh(75,0mm) 2.7erok(68.5mm)

3,2Inch(82.5mm)

Designated Seating Position



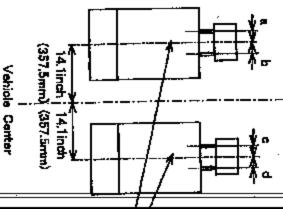
(Separate Seat)

3.Dinok 75.0mm)

3.0moh(75.0mm)

3.0indh(75,0mm) 3.0Inoh(75.0mm)

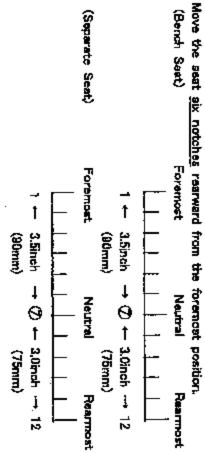
Designated Seating Position



lacoma

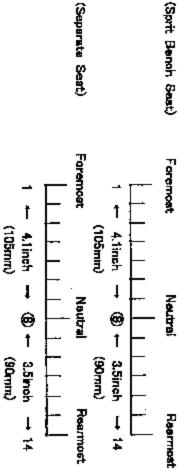
Designated Seet Slide Position

Regular Cab Front Seat (Driver & Passenger Side)



Extra Cab & Double Cab Front Seat (Driver & Passenger Side)

Move the seat seven notches rearward from the foremost position. (Sprit Bench Seat) Foremost Neutre



6. Designated Seat Back Position

Regular Cab

Separate Seat	Bench Sent	Seat Type
Recline four notches rearward from the most upright position. Upright	Most upright position. ① Upright	Driver's Seat
from the most upright position. Upright	Most upright position. Upright	Passenger's Seat

1acom a

Extra Cab & Double Cab

	Separata Seat		Sprit Bench Seat	Seat Type
 Cpright	Recline to	 Uprigat	Recline five from the r	
9	Recline four notabes resoward from the most upright position.		Regime five notches regressed from the most upright position.	Driver's Seat
Upright 1 (6)	Recline four notohes rearward from the most upright position.	Upright	Recine four notches rearward from the most upright position.	Passanger's Seet

7. Other east adjustment :

Lumber support Restmo

Vertical adjuster LOWert

8. Steering column engle ::

Tilt column:

the upright position. Tilt three notates downward from

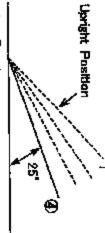
the rooker panel. Steering column angle is 25.0 to

9. Shoulder Belt Anchor Position :

We conducted our certification tests with the adjustable shoulder belt connection locked in the second position from the upper most.

Ö Anthropomerphic Test Device

Driver Passenger HYBRID-11 HYBRID-II



Rocker Panel

0 Θ ☻ Θ → Most upper position ← Test position

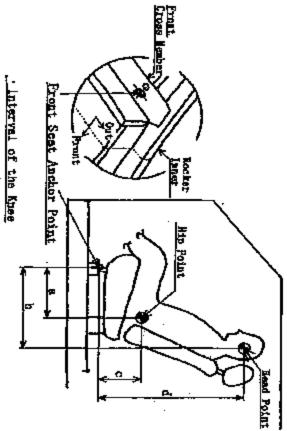
Dummy Clearence Dimensions

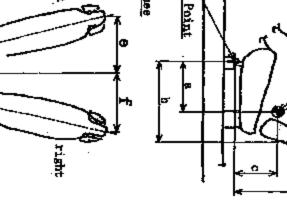
If the dummies are properly positioned on the adjusted seating system, the dimensions are as follows:

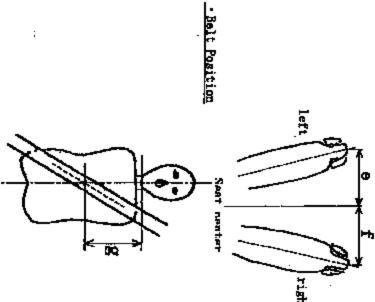
REGULAR CAB

Driver







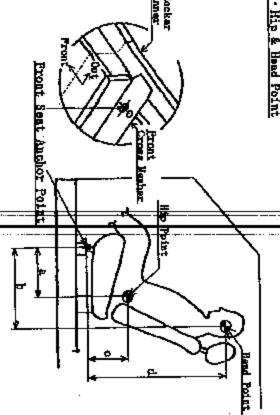


					31,53				
_	o	b	P		}	E-	D	Ь	p
ŒN	8, 7inch (222am)	ND.	11. 1 inch (283mm)	Driver	DOLENE CAR	UN	8. Binch (224mm)	CA.	10, 6 inch (268cm)

ŧ		4		
4. 7i noh (120km)	Separate Seat: 5. 9inch (150mm)	6. 3inch (160mm)	Bench & Sprit Bench Seat:	Driver

02	
5. Sinch (140pm)	Driver





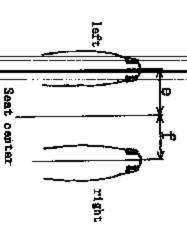
BRCULAR CAB

α.	o	<u> </u>	a .	<u>-</u>
3	8, 8 inch (224mm)	3	10.6 inch(268mm)	Driver

EXTRA & LIQUIDIE CAB

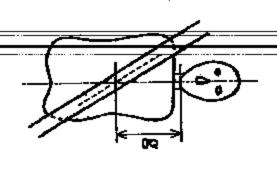
ļ	ď.	e .	Ь	•	
	3	8. 7 inch (222mm)	MD	11.1 inah(289mm)	Driver

· Interval of the anse



* 1	I	
3. 91 nch (100mm)	3.9inch (100mm)	Paspenger

· Belt Position



94		
5, 5 inch (140mm)	Passenger	

SEATING REFERENCE POINT (SRP) AND TORSO ANGLE DATA FOR FMVSS 201,202,203,207 & 210

4-11-11-11-11

1

(All dimensions in inches)

Model Year._ 2002 Model : Make: TOYOTA : Model: TACOMA

Body Style: REGULAR CAB ; Seat Style: Fr Bench Seat

27

FRONT E(degraes) SgRP ANGLE TORSO VEHICLE FLOORPAN Driver's Seat Front Outboard Seat Adjuster Anchorage SEAT ADJUSTER MECHANISM TORSO ANGLE ∌¤ TORSO LINE REAR Serr When Tested to FMVSS 202 · Anchorage Use Center of FLOORPAN PICHE!

LEFT SIDE VIEW OF TEST VEHICLE

חד	E	0	C	В	A		DIMENSION
				13. 50	8, 54	Outboard	FRONT, A1
	24°			13, 66	9, 17	Center	T, A1
	1					Outboard	REAR, A2
					\setminus	Center	7. A2

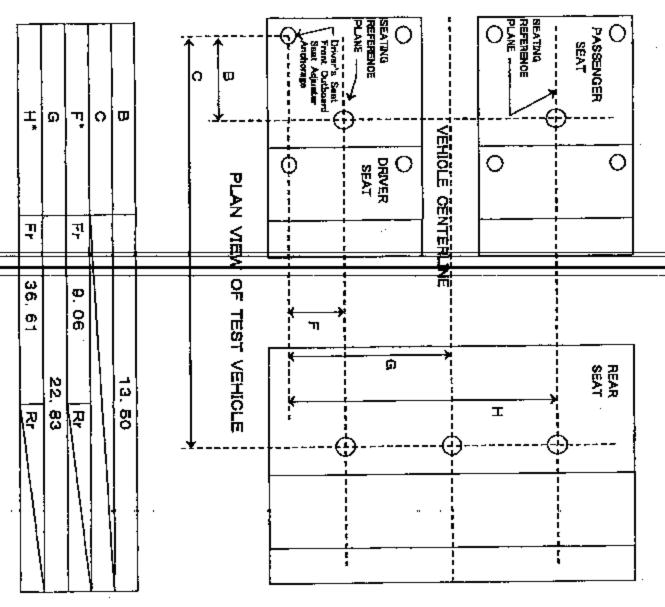
T#7/04H

101

SEATING REFERENCE POINT FOR FMVSS 201,202,203,207 & (SRP) AND TORSO 210 ANGLE DATA

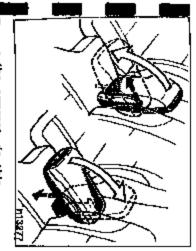
(All dimensions in Inches)

Body Style: REGULAR CAB Model Year: 2002 Model Seat St : Make TOYOTA Fr Banch 무 Seat Model: TACOMA



* Provide all dimensions needed to locate SRP.

Armrest



To use the armrest, do this.

down the To raise: To lower: Put the lock release strap and ermrest

strap and up the armrest. Push down the lock release

MOTICE

avoid putting heavy loads on it. To prevent damage 8 ₹ armraat,

Seat belts-Seat belt precautions

injury in accidents. the chance of injury and/or the severity of strained at all times with the seat belts provided. Failure to do so could increase passengers in the vehicle be properly re-Toyota strongly urges that the driver and

The seat belts provided for your vehicle are designed for people of adult size. large enough to properly wear them.

Child. Use a child restraint system appropriate for the child until the child becomes large enough to properly wear the vehicle's seat belts. See "Child restraint" for details,

REGULAR CAB MODELS-

If a child is too large for a child restraint system, the child should sit in the seat Beat beft. and must be restrained using the vehicle's

vehicle's seat belt. According to sockent statistics, the child is safer when properly restrained in the rear seat than in the If a child is too large for a child restraint system, the child should sit in the rear seat and must be restrained using the front seat XTRA-CAB and DOUBLE CAB MODELS restrained using

> serious injury to the child. tion of accident occurs and the seat belts are not warn properly, the force of the repid infig-If a child must sit in the front seat, the seat belts should be worn properly. If an the airbag may cause death or

Jury or death during emergency braking or a collision. Aiso, do not let the child sit restraint. on your lap. It does not provide sufficient unrestrained child could suffer serious inkneel on either rear or front seats. Do not allow the child to atend up ₹ ę

separate seats, move the seat fully backnot cross over the neck). On models with of the vehicle (so the shoulder belt does or youth sit slightly closer to the center a bench seat, have a small-framed person 3-point type sent belt. On models with Small-framed person or youth ī

Walet. possible over the hips and not on the should be worn securely and as specific use of a seat beit. Ask your doctor Pregnant woman. Toyota recommends the recommendations. 둫 ĕ ğ

8

recommendations ry, first check with your doctor for specific use of a seat balt. Depending on the inju-Injured person. Toyota recommends the

CAUTION

Whenever or a collision. Otherwise, they are much more likely property Persons suffer serious bodily injury or ath in the event of sudden braking should ride in wearing their **#** vehicle is moving. their seats

the following: When using the aest beits, observe

- Use the belt for only one person at two or more peoplea time. Do not use a single belt for -even children.
- much. The seat batta provide maximum protection when the seatbacks are in the upright peaktion. (Refer to the seat adjustment instructions.} Avoid reclining the eastbacks too
- · Be careful not to damage the they do not get caught or pinched webbing or hardware. Take care that the Best or side

- Inspect the belt system periodically. Check for outs, fraying, and loverts. Demaged parts should be modify the system. Do not disassemble 0000 7 9
- Keep the ers—they may severely weaken the belts. (See "Cleaning the interior" use bleech, dys, or abrasive eleansolution or lukswerm water. they need cleaning, was a mild scap in Saction 5.) belta cisan and dry. Hever
- Replace the belt assembly (includsevers impact. The entire assembly ing boits) if it has been used in a 300 enolago De Taplaced Š demage

beits -Front and rear outside seat



in the seat. To fasten your buit, pull it out of the retractor and insert the tab only) and alt up straight and well back into the buckle Adjust the sest as needed (front seats

ģ 헏 the buckle. will hear a click when the tab locks

to your size and the seat position. The seat bett length automatically adjusts

extend, and you can move around freely. slow, easy motion will allow the best to eudden stop or on Impact. It also may lock if you lean forward too quickly. A The retractor will lock the belt during

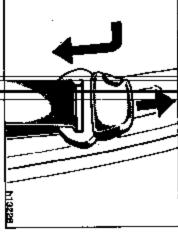
the be lfthes ě ent beit cannot be pulled out of the r, firmly pull the beit and release will then be able to smoothly pull out of the retractor.

E V pletely ₩hen 'une Bra restre System 8 8 positio 音画 t' in this section.) To free the belt fully retract the belt and then pull t out once more. extended and is then retra-ightly, the belt is lacked in passenger's shoulder bett is comused to hold the child restraint securely (For details, see "Child end cannot be extended. This feathen retracted #IA!



- A Ħ tab and buckle are locked and the belt is not twisted. inserting the tab, make sure
- 8 not insert coins; clipt, etc. buckle as this may prevent ; i properly latching the tab : ğ
- 울물 = ž 3 3 nally, immediately contact your I the seat belt is fixed. pta dealer. Do not use the seat he sest bolt does not function 3 in lugary. adult occupant tt cannot YOU

32



anchor-Spet bette š adjustable showider

your size. Adjust the si ider enchor position to

and slide the To reise: Slide To lawer: Puer aligher down. enchor

After adjustment

make sure the anchor is

lacked in position

CAUTION

falling off your shoulder. Failure to so could reduce the amount Alwaya make sure the choulder bett is positioned across the center of your shoulder. The belt should be protection in an accident and cause kapt away from your neck, but not evere injuries in a cotileion.

ep as low on Ē 113010

흫 <u>2</u> jet the position of the ulder bette. iap and

2 2 Š rour hips—not an your waist, then ad-it to a snug fit by pulling the shoulder tion the lap belt as low as upward through the latch plate. possible

CAUTION

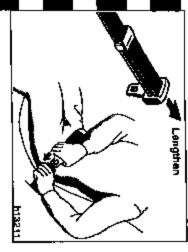
- ě Both high 30 DOS other 1 h-positioned lap belts and tiling belts could couse suri-nice due to sliding under belt during a collision or dended result. Keep the betterned as low on hips
- ahoulder safety, not piace the your arm.



Tract. To release the bell, press the buckle-riesse button and allow the belt to r

tracts make sure it remains untwisted as it d If the belt does not retract smoothly, it out and check for kinks or twists. I Ě

Front and rear center seat belt



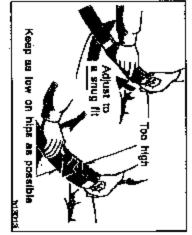
Sit up straight and well back in the seat. To fasten your belt, insert the tab into the buckle.

you will hear a click when the tab locke into the buckle.

If the belt is not long enough for you, hold the tab at a right angle to the belt and pull on the tab.

A CAUTION

- After inserting the tab, make sure the tab and buokle are looked and that the belt is not twieted.
- Do not insert coins, clips, etc. in the buckle as this may prevent you trom properly latching the tab and buckle.
- If the sest belt does not function normally, immediately contact your Toyota desiar. Do not use the sest until the sest belt is fixed, it cannot protect an adult occupant or your child from injury.



Remove excess length of the belt and adjust the belt position.

To shorten the belt, pull the free end of the bett.

Position the lap belt as low as possible on your hips—not on your waist, then adjust it to a snug fit.

CAUTION

Both high-positioned and loose-fitting lap belts could cause earlous injuries due to eliding under the tepbelt during a collision or other unintended result. Keep the tap belt positioned as low on hips as possible.

—Stowing the rear seat buckies (xtre-cab models)



To release the belt, prese the buckle-release button.



The buckles can be fixed when not in use.

When taking out the buckle from the holder, pull on the belt webbing to remove the buckle from the lower portion.

-Seat belt extender

If your sest bolts cannot be tastened securely because they are not long enough, a personalized seat belt extender is available from your Toyota dealer free of charge.

Please contact your local Toyota dealer so that the dealer can order the proper required length for the extender. Bring the heaviest cost you expect to wear for proper measurement and selection of length. Additional ordering information is available at your Toyota dealer.

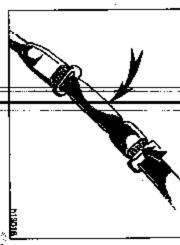


h13212

When using the seat belt extender, observe the following precautions. Fellure to follow these instructions could reduce the effectiveness of the seat belt resirent system in case of vehicle accident, increasing the chance of personal injury.

 Never use the meat belt extender if you can fasten the seat belt without it.

Remember that the extender provided for you may not be ease when used on a different vehicle, for another person, or at a different secting position than the one originally intended.



To connect the extender to the seat beit, insert the tab into the seat beit buckle so that the "PRESS" signs on the buckle-release buttons of the extender and the seat beit are both facing outward as and wn.

You will hear a click when the tab locks into the bucks.

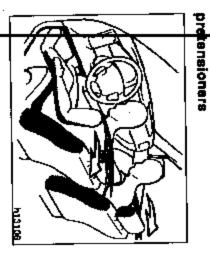
When releasing the seat belt, press on the buckle-release button on the extender, not on the sout belt. This helps prevent damage to the vehicle interior and extender itself.

When not in Jude, remove the extender and stars in the vehicle for future use.

CAUTION

- After inserting the tab, make sure the tab and buckle are looked and that the seat balt extender is not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent you from property latching the tab and buckle.
- If the seat belt does not function normally, immediately contact your Toyota dealer. Do not use the seat until the seat belt is fixed. It cannot protect an adult occupant or your child from injury.

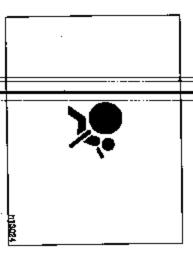
-Front seat belt



The driver and front passenger's seat both pretensioners are designed to be activated in response to a severe frontial impact.

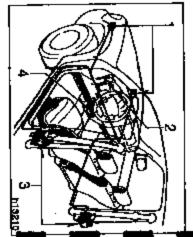
Whyn the airbag sensor detects the shock of a severe frontal impact, the front seat beits are quickly drawn back in by the retractors so that the balts anually restrain the front seat occupants.

The front seet belt pretensioners are activated even with no passenger in the front west



This indicator comes on when the ignition key is turned to the "ON" position. It goes off either about 6 seconds. This means the front seat belt pretensioners are operating properly.

This warning light system monitors the airbag sensor assembly, front airbag sensors, front select best prefensioner assemblies, intraders warning light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" in Section 1–5.)



The front seat belt pretensioner system mainly, consists of the following components and their locations are shown in thill litustration.

- 1. Front eirbeg sensors
- 2, SRS warning light
- Front seat beit pretensioner assemblies
- 4. Airbag sensor assumbly

The front seat belt pretensioners are controlled by the airbeg sensor assembly. The airbeg sensor assembly consists of a sating sensor and airbeg sensor.

When the front seat belt pretensioners are ctivated, an operating noise may be eard and a smail amount of smake-like gas may be released. This gas is harmless and does not indicate that a fire is ocurring.

ence the front seat best pretensioners have been activated, the seat best retractors remain locked.

⚠ CAUTION

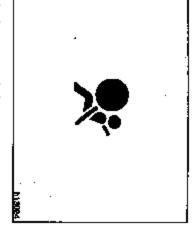
Do not modify, remove, atrike or open the front seat belt pretensioner acmembiles, sirbag sensor or surrounding area or wiring. Doing any of these may cause sudden operation of the front seat belt pretensioners or disable the system, which could resulf in death or serious injury.

Failure to follow these instructions can result in death or serious injuries. Consult your Toyots dealer shout any repairs and modifications.

NOTICE

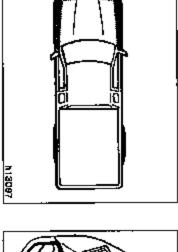
Do not perform any of the following oblanges: without consulting your Toyots desier. Such changes can interfers with proper operation of the front seet bell pretensioners in some cases.

- Installation of electronic devices such as a mobile two-wey radio, cassette tape player or compact disc player
- ◆Aspairs on or near the front seat beit pretensioner assemblies
- ◆ Modification of the suspension system
- Modification of the front and atruoture
- Attachment of a grilla guard (bull bar, kangaroo bar, etc.), anowplow, whiches or any other equipment to the front and
- Repairs made on or near the front fenders, front and structure or console



This front seat belt pretenationer system has a service reminder indicator to inform the driver of operating problems. If any of the following conditions occurs, this indicates a malfunction of the airbags or pretenationers. Contact your Toyota dealer as soon as possible to service, the vehicle.

- The light does not come on when the ignition key is turned to the "ON" posttion, or the light remains on.
- The light comes on or fleshes while driving.
- If either front seat belt does not retract or can not be pulled out due to a malfunction or activation of the relevant front seat belt pretensioner.



In the following cases, contact your Toyota dealer as soon as possible:

- The front part of the vehicle (sheded in the illustration) was involved in an accident that was not severe enough to cause the front seat belt pretensioners to operate.
- Either front seat belt pretensioner assembly or aurrounding area is scratched, cracked, or otherwise damaged.



manual on-off switch)

(vohicles with passenger airbag

passenger airbag

SRS driver airbag and front

The SRS (Supplemental Restraint System) airbage are designed to provide further protection for occupants in the following seats in addition to the primery safety protection provided by the seat betta.

- Models with separate front seats—The SRS airbags are designed to protect the driver and front passenger.
- Models with bench front seats—The SRS airbegs are designed to protect the driver and right-front passenger.
 They are not designed to protect occupant in the center position.

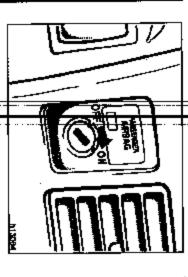
In response to a severe frontal impact, the SRS airbage work together with the seat belts to help prevent or reduce injury by inflating. The SRS airbags help to reduce injuries mainly to the driver's or front passenger's head or chest directly hitting the steering wheel or dashboard. When the passenger airbag manual on-off switch is in the "ON" position, the front passenger airbag is activated even with no passenger in the front seat.

Be sure to wear your seat belt properly. Your vehicle is equipped with a crash sensing and diagnostic module, which will record the use of the seat belt restraint system by the driver when the SRS airbags are inflated.

IÐ CAUTION

Ĉ deahi ğ Toyot one to the eterring wheel or pard during airbag deployment e killad or seriously injured. lyse or front passenger who is strongly recommends that:

- 7 듄 **≅** 籄 driver att as far back as poe-from the steering wheel white maintaining control of the ve-
- 7 ä front passenger alt as far back e ja la so from the deathboard.
- <u>•</u> vahiole occupante be properly eined using the evallable



ger airbeg min front passens on-off awitc to the "OFF" tional. Turning fight on the pessenger at **Menus**i on-o front passands wystem is a indicator light. Turning the passent is airbag minual on-off switch alockse to the 'Chi' position makes and the 'Chi' position makes to the 'Chi' position m ell come on when the g system. The indicator eirbeg eyatem has the passenger einbeg vitch counterclockwise ition disables the front airbeg system

BWitch! See "Passenge 7 7 ection for airbag manual detail. PA-Off

CAUTION

- · Hake 9 2 that the indicator light is
- Do not turn off the passenger sirseating position. cupying the right front passenger group ideatified in TABLE 1 is ocwhen a member of a passenger risk bug manual on-off awitch except
- When the passenger sirtuag manual on-off switch is turned off, the your vehicle safety systems com provide to you in certain accidents the front passenger sirbes can flate in a collision and turning 3 duce the accupant protection which paraonal ncrease passenger sirbag will not the likelihood 믘 Ŧ

8

TABLE 1: A PASSENGER RISK ê

5 ant. An infant (less than 1 year old) who must ride∣in the front seat because:

- VBhiic e has no rear seat;
- Vehicle has a rear seat too small to accommodate rear-facing intent seat;
- The infant has a medical condition which, according makes it necessary for the infant to ride in the from can constantly monitor the child's candition. 900 \$

infant's physician, so that the driver

illid age 1 to 12. A child age 1 to 12 must ride the front seat bacause:

Vehicle has no rear seat:

O

- Although children ages 1 to 12 ride in the rear children ages 1 to 12 sometimes must ride in the available in the rear seat(s) of vehicle; or x(s) whenever possible. rit because no space is Ħ
- makes it necessary for the child to ride in the front constantly monitor the child's condition. The child has a medical condition which. according so that the the child's physician.

⁰ dical condition. ner physicien: A passenger has a medical condition which according ត

Causes the passenger airbeg to pose a special rip for the passenger.

Makee the potential harm from the passenger sirbad in potential harm from turning off the sirbag and allowing to hit the dashboard, or windshield 5 8 a crash greater than the githe passenger, even if 200

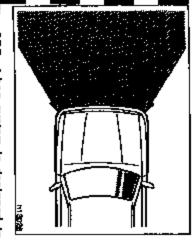
HTSA at 1-800-424-8393 or Transport Canada at r more detailed information concerning the passenged risk group, please contect ITSA at 1-800-424-9393 or Transport Canada at I-800-333-0371.



h13024

This indicator comes on when the ignition key is turned to the "ON" position it goes off after about 6 seconds. This means the SRS sirbage are operating properly.

sors, warning buzzers" in Sect ing wiring and power sources. (For detail see "Service remainder indicators an biles, infletors, warning light, interconnec surbag sameor assembly, front euroag sen-This warning light system monitors front seet beit pretensioner asser Section 툂 ŧ



activate in response to a severe frontal impact within the shaded area between \$ The SRS airbog eystem is dealgned to arrows in the illustration.

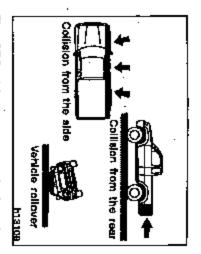
does threshold level, comparable to an approxi-mate 25 km/h (15 mph) collision when impacting straight into a fixed barrier that ty of the impact is above the designed The SRS airbags will deploy if the severinot move or deform.

may not deploy. above threshold level, the SRS sirbsgs If the severity of the impact is below the

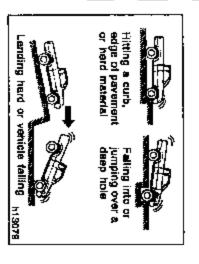
42

considerably higher if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on the bed of a truck, etc.). of the vehicle "underrides", or goes under, collision (e.g. a collision in which the nose impact, or if it is involved in an underride However, this threshold velocity will be

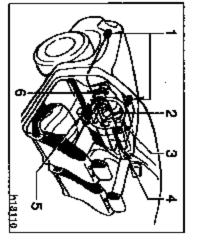
wear your seat beits properly. For the safety of all occupants, always pretensioners will not operate alt together. lower zone of airbag sensor detection and activation the SRS airbags and seat beit It is possible that in some collisions at the



abijislon. side or rear collision, if it rolls over, or inflate if the vehicle If it is involved in a low-speed frontal eirbaga are is involved in not deelgned to



ous impact occurs to the underside of your vehicle. Some examples are shown in the illustration. The SRS airbaga may deploy if a sert-



tions are shown in the illustration. the following components, and their loca-The SRS elithen system consists mainly of

- Front airbag sansors
- Airbag module for driver (aurbag and inflator)
- Passenger airbag menual on-off switch
- Airbag module for front passenger (airbag and inflator)
- Airbag sensor assembly
- SRS warning light

The airbag sensor assembly consists of a safing sensor and airbag sensor.

ဂုပ္ပ

the forward motion of the occupants airbags with non-toxic gas to help restrain gers the airbag inflators. Then a chemical reaction in the inflators quickly fills the detect deceleration and the system trig-In a severe frontal impact, the sensors

any potential skin intration. residue as soon as possible to prevent skin irritation. Be sure to wash have delicate skin, it may cause a minor does not indicate a fire. This gas is and residue along with non-toxic gas. fairly loud noise and release some smoke When the airbags inflate, they produce a mally harmless; however, for those who off any 귷 3

abrasions and awelling. system is designed to reduce serious inju-Deployment of the airbags happens in a ries, it may also cause minor burns fraction of a second, so the airbags must inflete with considerable force. While

hub; deshboard) may be hot for sev minutes, but the airbags themselves inflate only once. not be hot. Parts of the sirbag module (steering whee The airbags are designed several

A crast severe enough to inflate the airbags may break the windshield as the vehicle buckles. In vehicles with a passenger sirbag the windshield may also be damaged by absorbing some of the furce of the inflating airbag.

CAUTION

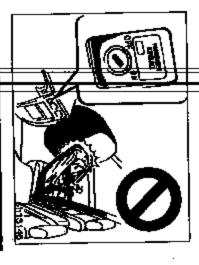
a collision, or front pa be killed of tems. The The SRS a ecoldent death or chase prod į ry protect only at a may then d During sudo thrown out wear their possengers in an accide gion. To e atructions a 9 ## B Ħ 3 in the vehicle must beits properly. Wear-beit properly during an elected the chances of principal injury or being of the vehicle. For inire maximum protection int, the driver and all in the vahide must andously injured by the age if they do not was: a sent bette property. per side meet belt eyeog system is designed bott ayatam, saa d presentions concernity to the airbag which enger can move forof the driver side and ploy during the callnt aget occupants n braking just before n unrestrained driver rect comtact with section. 9

Infants and children can be killed or seriously injured by the deploying airbegs. An infant or child who is too arguil to use a cost belt should be properly secured using a child restriaint system. As to Xtracab models, Toyota recommends that all infants and children be placed in the rear seal of the vehicle and properly restrained. The rear seat is the safest for infante and children. For instructions concerning the installation of a child restraint system, see "Child restraint in this section.

CAUTION

4

A member of a passenger risk group erbuid never sit or be occupied in the right trant passenger sent with ailbag manual on-off switch in the "CN" position. (For details, see "SRS driver and front passenger sirbage" in this section.)



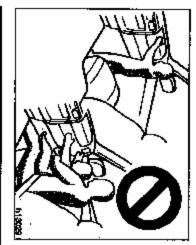
CAUTION

e Never initial a rear-facing child retraint system on the right front each with the passenger cirching manual pr-off switch in the "ON" position in the event of an accident, the force of the rapid initiation of the front passenger sirbeg can cause death or serious injury to the child.

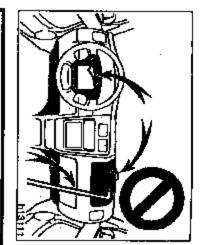
• A forward-facing child rectraint eyatem which belongs to a passenger risk group should never be installed on the right front seat with the passenger sirbeg manual on-off switch a enger sirbeg manual on-off switch in the "ON" position, because the force of the deploying sirbeg count child in forward seating position.

For instructions concerning th installation of a child restraint syltem, see "Child restraint" in this section.

Do not sit on the edge of the seat or lean over the dashboard when the vehicle is in use, since the airbage inflate with considerable speed and force. Otherwise you may be killed or seriously injured. Sit up straight and well back in the seat, and always use your seat balt properly.



- Do not allow a child to stand up or to kneel on the front passenger seat, since the airbay inflates with considerable speed and force. Otherwise, the child may be killed or seriously injured.
- Do not hold a child on your tap or in your arms. Use a child restraint system in the rear seat. For instructions concerning the installation of a child restraint system, see "Child restraint" in this section.



 Do not put objects or your pets on or in front of the dashboard or steering wheel pad that houses the sirbag system. They might restrict inflation or oxuse death or serious injury as they are projected restrict ward by the force of the deploying sirbage. Likewise, the driver and front passenger should not hold objects in their arms or on their kness.

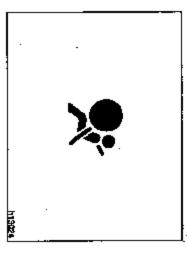
Do not modify or remove any wiring. Do not modify, remove, strike or open any components such as the steering wheel pad, steering wheel, column cover, front passenger airbag or airbag cover, front passenger airbag or airbag sensor assembly.
 Doing so may cause sudden SRS airbag inflation or disable the system, which could result in death or serious injury.

Failure to follow these instructions on result in death or serious injury. Consult your Toyota dealer about any repairs and modifications.

NOTICE

Do not perform any of the following changes without consulting your Toyota desier. Buch changes can interfere with proper operation of the SRS airbeg system in some cases.

- Installation of electronic devices such as a mobile two-way radio, cassette tape player or compact disc player
- Modification of the suspension system
- Modification of the front end structure
- Attachment of a grille guard (bull bar, kangaroo bar, etc.), anowplow, winches or any other equipment to the front and
- Flapsire made on or near the front fenders, front and structure, console, attenting column, steering wheel or destinant mean the front passenger sirbey

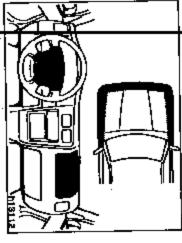


This SRS airbag system has a service reminder indicator to inform the driver of operating problems. If either of the following conditions occurs, this indicates a malfunction of the airbags. Contact your Toyote dealer as soon as possible to service the vehicle.

- The light does not come on when the ignition key is turned to the "ON" position, or the light remains on.
- The light comes on white driving.

ი 23

S040413



In the following cases, contact your Toyota dealer as soon as possible:

- The SRS front airbags have been inflated.
- The front of the vehicle (shaded in the illustration) was involved in an accident that was not severe enough to cause the SRS einbage to inflate.
- The pad section of the steering wheel or front passenger airbsg cover [shaded in the illustration) is scratched, cracked, or otherwise damaged.

MOTICE

manual on-off switch)

passenger sirbag (vahioles without passenger sirbag

Do not discorract the battery cables before conducting your Toyota dealer.



The SRS (Supplemental Restraint System) sirbage are designed to provide further projection for the driver and front passagger in addition to the primary existy protection provided by the east bette.

in response to a severe frontal impact, the SRS airbags work together with the seat belts to help reduce injury by infleting. The SRS airbags help to reduce injuries mainly to the driver's or front passanger's head or chest caused by directly hitting the steering wheel or dashboard. The front passanger sirbag is activated even with no passenger in the front seat.

#8

You vehicle is equipped with a crash sensing and diagnostic module, which will reach the use of the seat belt restraint system by the driver when the SRS airbags are inflated.

Д САИТЮН

The driver or front passenger who is too close to the steering wheel or dephased during sirbag deployment can be killed or serkquety injured.

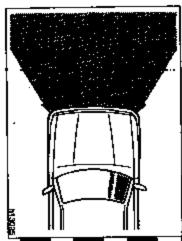
Toyota strongly recommends that:

- The driver sit as far back as possible from the steering wheel while still maintaining control of the vebicle.
- The front passenger sit as far back as possible from the dashboard.
- All vehicle cooppents by properly cetrained using the available seat pelts.



This indicator comes on when the ignation key is turned to the "ON" position. It goes officialist about 6 seconds. This means that SRS sirbage are operating properly.

This werning light system monitors the airbag sensor assembly, front sirbag sensors, front seet belt pretensioner assembles, inflated, warning light, interconnecting wiring and power sources. (For details, see "Service reminder indicators and warning buzzers" in Section 1–5.)



The SRS girbag system is designed to activate in response to a severe fronta impact within the shaded area between the arrows in the illustration.

113024

The SRS airbags will deploy if the sever ty of the impact is above the designed threshold level, comparable to an approximate 25 km/h (15 mph) collision when impacting straight into a fixed barrier the does not move or deform.

If the severity of the impact is below the above threshold level, the SRS airbag may not deploy.

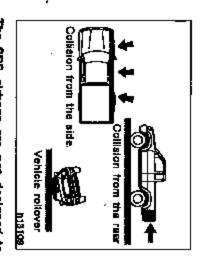
C-26

S040413

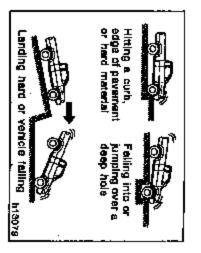
ଞ

However, this threshold velocity will be considerably higher if the vehicle strikes an object, such as a parked vehicle or sign pole, which can move or deform on impact, or if it is involved in an underride collision (e.g. a collision in which the nose of the vehicle "underrides", or goes under, the bed of a truck, etc.).

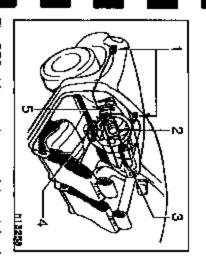
It is possible that in some collisions at the lower zone of sirbag sensor detection and activation the SRS airbags and seat belt pretensioners will not operate all together. For the safety of all occupants, always wear your seat belts properly.



The SRS alrhags are not designed to inflate if the vahicle is involved in a side or rear collision, if it rolls over, or if it is involved in a low-append frontal collision.



The SRS eirbage may deploy if a cerious impact occurs to the underside of your vehicle. Some examples are shown in the illustration.



The SRS airbag system consists mainly of the following components, and their locations are shown in the illustration.

- 1. Front airbeg sensors
- Airbag module for driver (airbag and inflator)
- Airbag module for front passenger (airbag and inflator)
- Airbag sensor assembly
- 5. SRS warning light

The airbag sensor assembly consists of a sefing sensor and airbag sensor.

in a severe frontal impact, the sensors detect deceleration and the system triggers the sirbag inflators. Then a chemical reaction in the inflators quickly fills the airbags with non-toxic gas to help restrain the forward motion of the occupants.

When the airbags inflate, they produce a feirly loud noise and release some smoke and residue along with non-toxic gas. This does not indicate a fire. This gas is normally harmless; however, for those who have delicate skin, it may cause a minor skin irritation. Be sure to wash off any residue as soon as possible to prevent any potential skin irritation.

Deployment of the airbags happens in a fraction of a second, so the airbags must inflate with considerable force. While the system is designed to reduce serious injuries, it may also cause minor burns or abrasions and swelling.

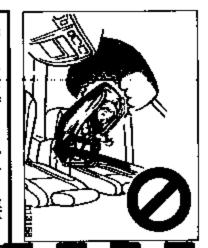
Parts of the airbag module (steering wheel hub, dashboard) may be hot for several minutes, but the airbags themselves will not be hot. The airbags are designed to irritate only once.

A crash severe enough to inflate the airbage may break the windshield as the vehicle buckles. In vehicles with a passenger airbag the windshield may also be damaged by absorbing some of the force of the inflating airbag.

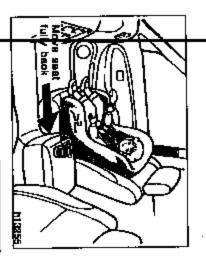
CAUTION

5 * ∄ <u>0</u> ◒ ath or serious lating sirbage if they do not wear g the seet belt system, see "Seat rown out of the vehicle. For in-ructions and precautions concerng a seat belt properly during an cident reduces the chances of ring sudden braking just before collision, an unrestrained driver front passenger can move forted into direct contact with or e SRS airbag system is designed by as a supplement to the prime-protection of the driver side and killind or neriously injured by the ne. The front seat occupants can nt passenger side seat belt eye ar their seat balte properly. Wearan accident, the driver and all seengers in the vehicle must n. To ensure maximum protection ee proximity to the airbag which available sext belts properly. then deploy during the polit-In this section. injury or

> 돭 Improperty or earlous infants 🖶 atrongly Phouga ô ing sirbsp tion of a c ly restro children be placed in the of the vehicle and proper-ned. The reer sent is the illd restraint system, see pint" in this section. roperly secured using a concerning the installs-An intent or child who children can be killed injured by the deployleted and/or restrained ayatem. Toyota

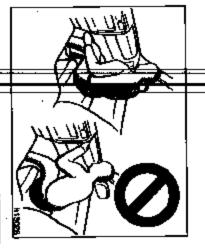


 Never initial a rear-facing child reetraint system on the front passonger seat because the force of the rapid inflation of the front passonger sirbag can cause death or serious injury to the child.

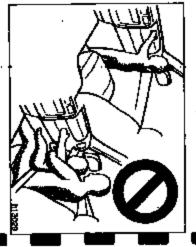


52

I forward-facing child restraint systym should be allowed to be installed on the front passenger ant only when it is unavoidable. Allways move the seet as far back as possible, because the torce of the deploying front passenger airag could cause death or serious hjury to the child. For instructions concerning the installation of a child restraint system, see "Child patraint" in this section.



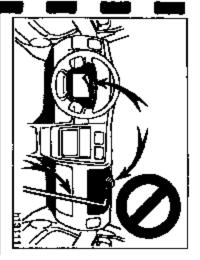
or lean over the deathboard when or lean over the deathboard when the vehicle is in use, since the sinbage entire with considerable speed and force. Otherwise you may be killed or seriously injured. Sit up erright and well back in the seat, said always use your court belt properly.



- Do not allow a child to stand up or to kneel on the front peasenger sent, since the sirbug inflates with considerable speed and force. Otherwise, the child may be killed or serieusly injured.
- Do not hold a child on your lap or in your arms. Use a child restraint system in the rast seat. For instructions opnoarning the installation of a child restraint system, see "Child restraint" in this section.

C-28

S040413



• Do not put objects or your pete on or in front of the dashboard or steering wheel pad that houses the alrhag system. They might restrict inflation or cause dasth or serious injury as they are projected rearward by the force of the deploying airbags. Likewise, the driver and front passenger should not hold things in their arms or on their kness.

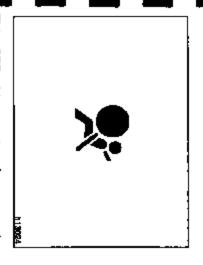
ing. Do not modify or remove any wining. Do not modify, remove, atrike or open any components such as the steering wheel pad, steering wheel, column cover, front passenger airbag ocver, front passenger airbag or airbag sensor assembly. Doing so may cause sudden SRS airbag inflation or disable the system, which could result in death or serious injury.

Pallure to follow these instructions can result in death or perious injury.

NOTICE

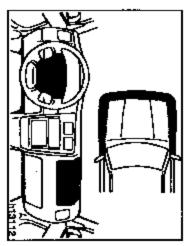
Do not perform any of the following changes without consulting your Toyota dealer. Such changes can interfere with proper operation of the SRS sirbeg system in some cases.

- Installation of electronic devices such as a mobile two-way radio, cassistic taps player or compact disc player
- Modification of the suspension system
- Modification of the front and atructure
- Attachment of a grilla guard (bull bar, kangaroo bar, stc.), anowplow, winches or any other equipment to the front and
- Repairs made on or near the front fenders, front and structure, console, steering column, steering wheel or dashboard near the front passenger airbag



This SRS airbag system has a service reminder indicator to inform the driver of operating problems. If either of the following conditions occurs, this indicates a mainuration of the airbags. Contact your Toyota dealer as anon as possible to service the vehicle.

- The light does not come on when the ignition key is turned to the "ON" position, or the light remains on.
- The light comes on while driving.



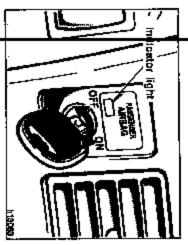
In the following cases, contact your Toyota dealer as soon as possible:

- The SRS front eirbegs have been inflated.
- The front of the vehicle (sheded in the fillustration) was involved in an accident that was not severe enough to cause the SRS airbags to inflate.
- The pad section of the steering wheel or front passenger atroag cover (shaded in the illustration) is scratched, cracked, or otherwise damaged.

NOTICE

Do not disconnect the battery cables before contacting your Toyote dealer.

ş P88 9 enger airbag manual some models) iff switch



9 5 = # 5 불 BLE 1 to occupying the right front inger seating position. (For details, SAS driver airbag and front par-or wirbag" in this section.) ow usage, if necessary, of a memhe from passinger sirbag in order on-off awitch is designed to disa passenger risk group identified

줱 ne on-off switch as failows:

POSIT 정 le**s**ni 큵 ø 9 **.** key into the keyhole and turn it front passenger sirbag on: Turn clockwise to the *ON" position. front passenger airbag off: counterclockwise to the ģ

8

front passenger The indicator of the comes on birbag system when the • ₽,

CAUTION

- Make sure t net the indicator light is
- group ident seating # Do not to Dulkdno bag manen iber of a passenger riek Med in TABLE 1 ie oc right front passanger on-off 91 15 Je Buesend awitch except
- When the p en-on sult and increas duce the employent protection which your vehicle safety systems can the front flate in a provide to cplishinger airbig manual willch is turned aff, the benger sirbig will not in-cplision and turning off deenger sirbeg can reou in cortain accidents the likelihood of Beriinjuriee.

passenger For detalls, Hege. "SRS driver and front 5 section.

Child restraint-Child restraint precautions

Toyota strongly urgss the use of child restraint systems for children small enough to use them.

laws of all 60 states in the U.S.A.

Your vehicle conforms to child restraint system. Canada now require the use SAEJ1819

ø

Heat beit. end must be restrained using the vehicle's system, the child should sit in the seat If a child is too large for a child restraint S 88 "Seat beits" ğ detaits

CAUTION

• For effective protection in bile accidents and sudden stops, a child must be properly restrained, your arms is not a substitute for a aize of the child, Holding a child in system depending on the ego and using a seat belt or child restraint you and the egainst the windshield, or between child restraint system. dent, the child can vehicle's 9 Interior. 3 Ì BUTOMP crushed ***

hicles with passenger sirbag manu-

REGULAR CAB NODELS roper child restraint eystem which

TRA-CAB MODELS onforms to the size of the child.

Toyota atrongly urgan use of a proper child matraint system which proper child matraint street of the child, natalled on the rear seat. According to accident etailstics, the child he reer seat then in the front seat agfar when properly restrained in

con position. 12 in a passenger risk group on the right front seat with the passenger irring manual on-off switch in the 'ON" position. In the event of an nflation of the passanger sirbeg an cause death wer put infant or child age 1 to the child. the force 9 of the Pidas

> tion_) front p detalle, a TOY TO BWINCH IN 9 10 12 mg it a passenger risk group held front east, make sure langer sinbag manual on-off an the "OFP" position and indicator light is on. (and "SHS driver sirbeg i senger sirbeg" in this s t put infant or child age

돌 Make dar manufat iter and that the system is tallation instructions prothat you have complied 를

> Vehicles manual on-off switchwithout passanger a rbac

- Toyota the rear seat than in the front seat installed on the rear seat. According to sociolant statistics, the child conforms to the size of the child Toyota strongly urges use of a proper child restraint system which is eafer when properly restrained in
- Never install a rear-facing child recan cause death or serious injury of the rapid inflation of the airba straint system on the front seat. In is installed on the front seat. a rear-facing shild restraint system
- Undesa, it is unevoidable, atraint system on the front sest. 7 a forward-facing 8 8
- seat only when it is unavoidat Always move the seat so far but as possible, because the force A forward-facing child restraint sys tem ehould injury to the bag could cause death installed on deploying front passenger the front passenger, when it is unavoidable. ę Ļ

့

-Child restraint system

A child restraint system for a small child or beby must itself be properly restrained on the seet with either the lap belt or the lap portion of the lap/ shoulder belt. You must carefully consult the manufacturer's instructions which accompany the child restraint system.

To provide proper restraint, use a child restraint system following the manufacturer's instructions about the appropriate age and size of the child for the child restraint system.

install the child restraint system correctly following the instructions provided by its manufacturer. General directions are also provided under the following litustrations. The child restraint system should be installed on the rear seat if your vehicle is equipped with rear seats. According to socident statistics, the child is safer when

in the front seat.

properly restrained in the rear seat than

CAUTION

Vehicles with passenger sirbeg manual on-off switch—

- Never put infant or child age 1 to 12 in a passenger risk group on the right front seat with the passenger airbag menual on—off switch in the "ON" postion, in the event of an accident, the force of the rapid inflation of the passenger sirbag out cause death or serious injury to the child.
- If you must put infent or child age 1 to 12 in a passenger risk group on the right front seat, make sure the passenger sirbeg manual on-off ewitch is in the "OFF" position and that the indicator light is on. (For details, see "SRS driver sirbeg and front passenger sirbeg" in this section.)
- After installing the child restraint system, make sure it is secured in place according to the manufacturer's instructions. If it is not reatrained accuraty, it may cause death or serious injury to the child in the event of a sudden stop or accident.

Vahicles without passenger sirbag manual on-off switch—

- Never install a rear-facing child restraint system on the front seat. In the event of an accident, the force of the rapid inflation of the airbag can cause death or serious injury if a rear-facing child restraint system is installed on the front seat.
- Unless it is unevoidable, do not install a forward-facing child restraint system on the front seat.
- A forward-facing child restraint system should be allowed to be installed on the front passenger seat only when it is unavoidable. Always move the seat as far back as possible, because the force of the deploying front passenger sirbag could cause death or serious injury to the child.
- After installing the child restraint system, make sure it is separed in place according to the manufacturer's instructions. If it is not restrained securally, it may cause death or serious injury to the child in the event of a sudden stop or accident.

When not using the child restraint system, keep it secured with the seet belt or place it somewhere other than the passenger compartment. This will prevent it from injuring passengers in the event of a sudden stop or accident.

Your vehicle has anchors for securing the top strap of a child restraint system.

—Types of child restraint system

Child restraint systems are classified into the following 3 types depending on the child's age and size.

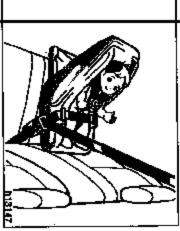
- (A) Infant seat
- (B) Convertible seat
- (C) Booster seat

install the child restraint system following the instructions provided by its manufacturer.

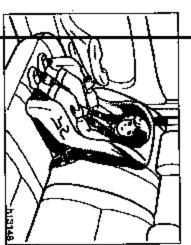
For instructions on how to use the anchor bracket, see "—Using a top strap" in this section.

The child restraint lower enchareges approved for your vehicle may also be used. See "—Installetion with child restraint lower encharages" in this section.

<u>ငှဒ</u>ျ

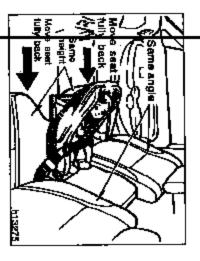


€ mant seat



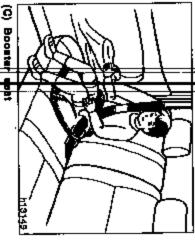
Ŷ Convertible

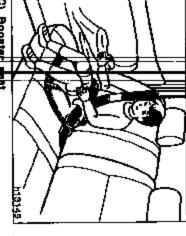
8



CAUTION

- ing a child restraint system in the center position, adjust both sent cushions to the same position and align both sentbacks at the same angle. Otherwise, the child restraint system cannot be securely repitt bench seat only: When rained and this may cause death serious injuries in a collision.
- traint eystem at another position. etailation, the driver's seat allow aufficient the child position does

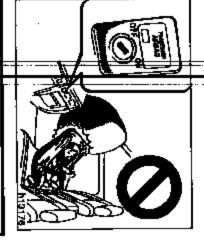




—Installation with 2-point type seat belt (vehicles with passenger

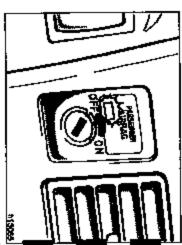
airbag manual on-off switch)

position only. (A) INFANT SEAT INSTALLATION An infant sout is used in rear-facing



₽ CAUTION

at on-off by in the even of the rapid atraint syste 70V87 1382 Beat with passenger sirbag manu-tich in the "ON" position. Inflation of the front pasd can cause death or en on the front passenger of an accident, the force to the child. a rear-facing child re-

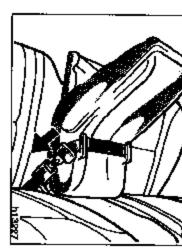


When you install a rear-tecing child restraint system on the front passenge sent, turn the passenger sirbag menual on-off switch counterclockwise to the "OFF" position. (For details, see "SR driver sirbag and front passenger si bag (vehicles with passenger sirbag manual on-off switch)" in this section.) system is off. The Indicator light comes on when th

C-32

CAUTION

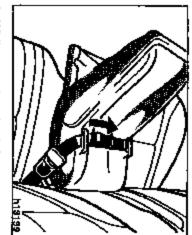
If you must install a rear-fiscing child restraint system on the front passenger seat, make sure the passenger airbag manual on-off switch is in the "OFF" position and that the indicator light is on.



 Run the center lap belt through or around the Infant seat following the instructions provided by its menufacturer and insent the tab into the buckle taking care not to twiet the Jap belt.

Д САПТЮМ

- After inserting the tab, make sure the tab and buckle are locked and that the lap belt le not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent you from properly latching the tab and buckle.
- If the sext belt does not function normally, it cannot protect your child from injury. Contact your Toyota deeler immediately. Do not use the child restraint system until the sext belt is fixed.



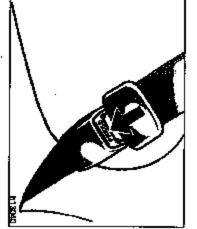
R

 White pressing the infant seat firmly against the seat cushion and seatback, tighten the lap belt by pulling its free end to hold the infant seat securely.



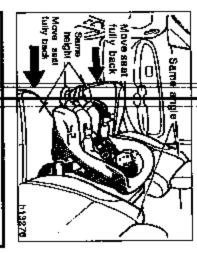
A CAUTION

Push and pull the child restraint eyetem in different directions to be sure it to secure. Follow all the installation instructions provided by its manufacturer.



To remove the intent seat, press the buckle-release button.

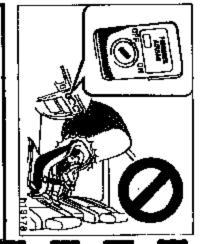
(8) CONVERTIBLE SEAT INSTALLATION A convertible seat is used in forward-facing and rear-facing position depending on the child's age and size. When installing, follow the manufacturer's instructions about the applicable child's age and size so well se directions for installing a child restraint system.



CAUTION

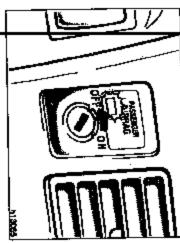
- Spitt bench align both cushione to center pha or seriou atrained angla. Othe ing a chi d restraint system in the this may wise, the child restraint apot be escurely rethe same position and sector at the same sest only: When mpuriss in a collision. cause death instal-
- or the driver's seat position does not allow quificient apace for safe install the child restraint statem at another position.

2



CAUTION

Rear-facing child restraint system:
Never install a rear-facing child restraint system on the front pessanger
sent with the passenger sirbeg manual on-off switch in the "ON" position,
in the event of an accident, the force
of the rapid inflation of the front passanger airbeg can cause death or serious injury to the child.



When you install a rear-facing child restrant system on the front passenger send manual on-bit switch counterclockwise to the "OFF" position. (For details, see "SRS driver airbag and front passenger airbag" in this section.)

The indicator light corners on when the system is off.

CAUTION

- If you must install a rear-facing child restraint system on the front passenger seet, make sure the passenger arried manual on-off switch is in the 'OFF" position and that the indigs or light is on.
- position DEMURITE IT ã Forward+ deat with šnakalied Straint deployin > the passanger airbag ng position. arbag could cause death ding child restraint bysinjury to the child in forcause the force of the should ward-tacing 랿 DOM: 8



 Run the center lap belt through a ground the convertible seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the lap belt.

C-34

№ САИПОК

- After inserting the tab, make sure the tab and buckle are locked and that the lap belt is not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent you from properly letching the tab and buckle.
- If the seaf belt does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use the child restraint system until the seat belt is fixed.



 While pressing the convertible seat firmly against the seat cushion and seatback, tighten the lep belt by pulling its free end to hold the convertible seat securely.

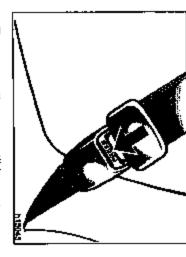


CAUTION CAUTION

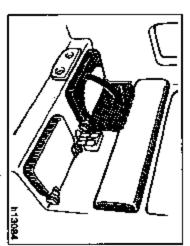
Push and pull the child restraint system in different directions to be sure it is securs. Follow all the installation instructions provided by its manufacturer.

8

—Installation with 3-point type seat beit (vehicles with passenger airbag manual on-off switch)



To remove the convertible seat, press the buckle-release button.



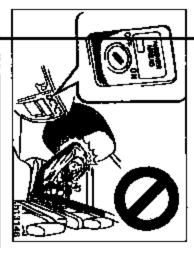
WHEN INSTALLING ON THE REAR SEAT (xtrs-cab models):

Raine the bottom cuehion before instailing the child restraint system.

If your child restraint system is too large, you can use the folding table as an auxillery support. For instructions about how to stand the table, see "Rear cup holder (xtra-cab models)" in Section 1-9.



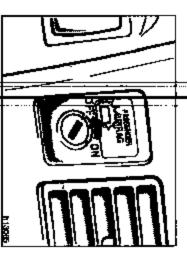
(A) INFANT SEAT INSTALLATION An infant seat is used in reer-facing position only.



CAUTION

7 ş nt system on the right front seat the passenger sirbeg manual on-switch in the "ON" position. In whitch in the "ON" position, in event of an accident, the force of rapid inflation of the front paser airbag can cause death or injury to install a rear-facing child the ohlid, 7

88



driver sirbeg straint system OPP" poets seat, turn the When you poettid passanger airbag manuai dil a rear-facing child re-which belongs to a paeproup on the right from and front passenger airn. (For detaile, see "SRS counterclockwise to the ection.)

The indicator 7 light comes 3 when the

System 1

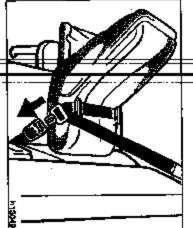


restraint system on the right front seat, make sure the front passunger airbag manual on-off switch is in the "OFF" position and that the indicator If you must install a rear-facing child

h18282

CAUTION

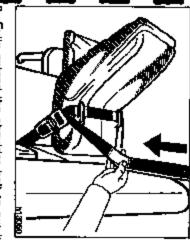
- our proper driving position. This an equal death or serious injury o not install a child restraint sys-om on the rear seat if the child extraint system interferse with the Š ase of sudden braking or a coll+ o the child and front passenger in om seat lock mechanism or
- not allow sufficient apace for taffs natalization, inetall the child re-the driver's sent 7 position does į



taking car Flum the instruction er and or ground Inp and shoulder belt through of the infant seat following the one provided by its manufacturineers the tab into the buckle are not to twist the belt. Keep pertion of the belt tight.

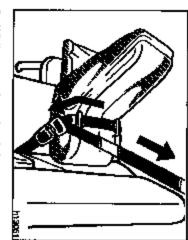
₽ CAUTION

- After inserting the tab, make surithe tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.
- Do not insert coine, clips, etc. the buckle as this may prevent you from properly latching the tab and
- If the post belt does not function Toyota dealer immediately. Do no normally, it cannot child from injury. the east belt is fixed use the child restraint system unt CENNOX X protect You YOU?

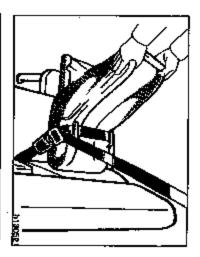


- Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted even slightly, it cannot be extended.
- To hold the infant seat securely, make sure the belt is in the lock mode before Jetting the belt retract.

5



 While pressing the infent seat firmly against the seat cushlon and seatback, let the shoulder belt retract as far as it will go to hold the infent seat securely.

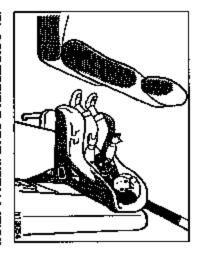


CAUTION

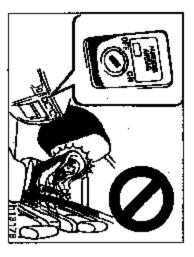
Push and pull the child restraint aystem in different directions to be sure it is secure. Follow sit the installation instructions provided by its manufacturer



4. To remove the infant seat, press the buckle-release button and allow that belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.

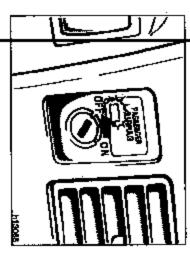


(B) CONVERTIBLE SEAT INSTALLATION
A convertible seat is used in forwardfacing and rear-facing position depending on the child's age and size. When
installing, follow the manufacturer's
instruction about the applicable child's
age and size as well as directions for
installing a child restraint system.



CAUTION

Rear-facing child restraint system:
Never inetall a restricting child reatraint system on the right front seat
with the passenger sirbeg manual onoff awkich in the "ON" position, in
the event of an accident, the force of
the rapid inflation of the front passenger sirbeg can cause death or exrious injury to the child.



AN CAUTION

If you must install a rear-facing child restraint system on the right front seat, make sure the passenger sirbeg manual on-off switch is in the "OFF" position and that the indicator light is on.

CAUTION

Forward-tacing child restraint system: A forward-tacing child restraint system which belongs to a passenger risk group should never be installed on the right front seat with the possenger sirbag manual on-off switch in the "CN" position, because the force of the deploying sirbag could cause death or serious injury to the child in torward seating position. (For details, see "SRS driver and front passenger sirbags" in this section.)

When you install a rear-tecing child restraint system which belongs to a passenger risk group on the right front sent turn the passenger sirbeg manual on-aff switch counterclockwise to the "Oper" position. (For details, see "SRS driver and front passenger sirbage" in this section.)

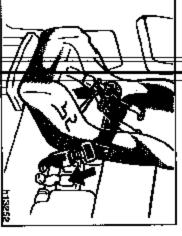
The indicator light comes on when the system is off.

ĸ



CAUTION

- po not install a child restraint ayatem on the rear seat if the child settraint system interferes with the rort seat lock mechanism or with your proper driving position. This can cause death or serious injury to the child and front passenger in super of audden braking or a collition.
- If the driver's seat position does not allow sufficient space for safe netalistion, install the child redraint system on the rear right seat.



1. Aun the lab and shoulder beit through or around the convertible seat following the instructions provided by its manufacturer and insert the tab into the bucket taking care not to twist the beit. Keep the lap portion of the bett tight.

A CAUTION

- After inserting the tab, make sure the tab and buckle are locked and that the lap and shoulder portions of the belt are not twisted.
- Do not insert coint, clips, etc. in the buckle as this may prevent you from property intching the tab and buckle.
- of the seat belt does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use the child restraint system until the seat belt is fixed.

C-38

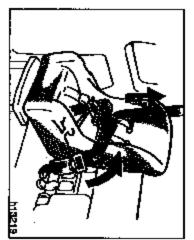
S040413



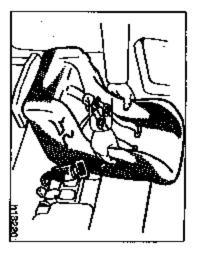
Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted slightly, it cannot be extended.

To hold the convertible seat securely, make sure the belt is in the lock mode before letting the belt retract.

7

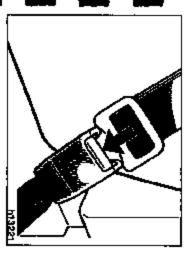


 While pressing the convertible seat firmly against the seat cushion end seatback, let the shoulder belt retract as far as it will go to hold the convertible seat securely.

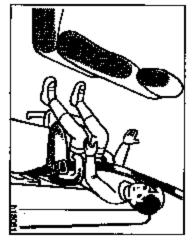


○ CAUTION

Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.



4. To remove the convertible seat, press the buckle-release button and allow the belt to retract completely. The belt will move freely again and be ready to work for an adult or older child passenger.



(C) BOOSTER SEAT INSTALLATION
A baceter seat to used in forward-facing position only.

Д САЛПОН

A forward-facing child restraint system which belongs to a passanger risk group should naver be installed on the right front seat with the passenger airbay manual on-off switch in the "ON" position, because the force of the deploying airbay could cause death or serious injury to the child in forward seating position. (For details, asse "SRS driver sirbay and front passenger airbay" in this "section.)



the lap and shoulder best through or spound the booster seat and child following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the best.

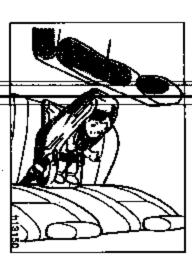
Make sure the shoulder belt is correctly acrose the child's shoulder and that the lap belt is positioned as low as possible on child's hips. See "Seat belts" for details

CAUTION

- Always racks sure the shoulder belt is positioned across the center of child's shoulder. The belt should be kept sway from child's neck, but not tailing off child's shoulder. Fellure to to so could reduce the amount of protection in an accident and cause swious injuries in a collision.
- 10000-11# ohlid's blid 2 Both Nigh d se possible. tended result. eltioned as low t during a collision or ositioned lap befts beita couid causa seridue to silding under Keep the 9 ã
- ehoulded belt under shild's arm.
- After inearting the tab, make sure the tab and buckle are locked and that the kip and shoulder portions of the best are not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent your child from properly letching the cab and buckle.

if the seat best does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use the child restraint system until the seat; beit is fixed.

--instalization with 2-point type seat best (vehicles without passenger sirbeg manual on-off switch)



(A) INFART SEAT INSTALLATION
An infant seet is used in rear-facing position only.

Ņ

w the belt to retract.

ess the buckle-release button and al-

remove the child restraint system.

h13223

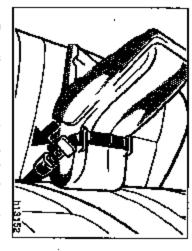


MOLLINYS 🕎

- Do not:Install a child restraint system on the rear seat if it interfered with the lock machenism of the front seats. This can cause death or serious injury to the child and front passenger in case of sudden braking or a collision.
- elf the driver's seat position does not ellew sufficient space for ear installation, install the child re etraint system on the rear right

76

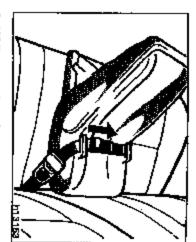
9



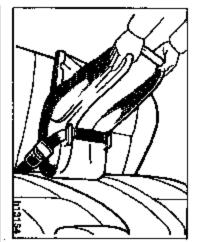
 Run the center tap belt through or around the infant seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the tap belt.

⚠ CAUTION

- After inserting the tab, make sure the tab and buckle are locked and that the lop beit is not twisted.
- Do not insert coins, allps, sto. In the buckle as this may prevent you from property latching the tab and buckle.
- If the seat belt dose not function normally, it cannot protect your child from injury. Contact your Toyota desire immediately. Do not use the child restraint system until the seat belt is fixed.

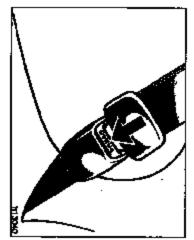


 While pressing the infant seat firmly against the seat cushlon and seatback, tighten the lap belt by pulling its free end to hold the infant seat securely.



A CAUTION

Push and pull the child restraint eyetern in different directions to be sure it to secure. Follow all the installation instructions provided by its manufacturer.



To remove the infant seat, press the buckle-release button.



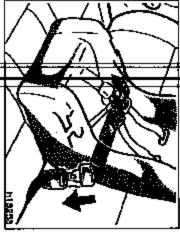
(B) CONVERTIBLE SEAT INSTALLATION A convertible seat is used in forward-facing and rear-facing position depending on the child's age and size. When installing, follow the manufacturer's instructions about the applicable child's age and size as well as direction for latelling of a child restraint system.



CAUTION

- To not install a child restraint system on the rear seat if it interferes with the lock mechanism of the front seats. This can cause death or serious injury to the child and front passenger in case of sudden braking or a collision.
- the driver's seat position does not allow sufficient specs for safe lettellation, install the child restraint system on the rear right east.

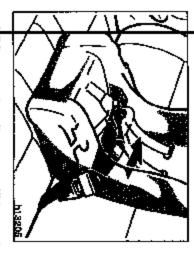
뿅



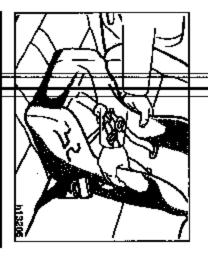
1. Hun the center lep belt through or around the convertible seat following the inequations provided by its manufacturer and insert the tab into the buckle taking care not to twist the lep belt.

\land САПТЮН

- e After inserting the tab, make sure the tab and buckle are locked and that the lap belt is not twisted.
- Do not insert poins, clips, etc. in the buckle as this may prevent you from properly tatching the tab and buckle.
- e if the eject belt does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use the child restraint system until the sent; belt is fixed.

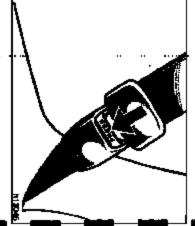


While pressing the convertible seat
 -frmly against the seat cushion and
 seatback, tighten the lap belt by pulling
 its free end to hold the convertible seat
 securely.



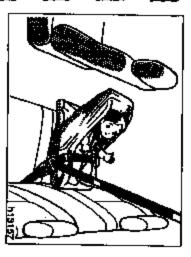
CAUTION

Push and pull the child restraint system in different directions to be sure it is secure. Pollow all the installation instructions provided by its manufacturer.



 To remove the convertible ceat, pres the buckle-release button.

Installation with 3-point type seat belt (vehicles without passenger airbag manual on-off switch)



(A) INFANT SEAT INSTALLATION ... An infant seet is used in rear-facing position only.



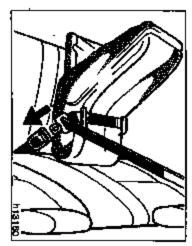
A CAUTION

e Never inetall a rear-facing child restraint system on the front passedger seat because the force of the rapid inflation of the front passenger sirbag can cause death or earlous injury to the child.



- Do not install a utild restraint ayetem in the rear seat if it interfers with the lock machanism of the front seats. This can cause doubth or serious injury to the child and front passenger in case of sudden braking or a oblision.
- If the driver's seat position does not allow sufficient space for safe installation, install the child restraint system on the rear right seat.

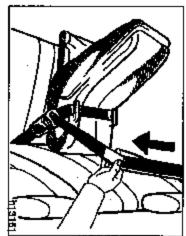




 Run the lap and shoulder belt through or around the infant seet following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

Д САППОН

- After inserting the tab, make euro the tab and buckle are locked and that the Jap and shoulder portions of the belt are not twisted.
- Do not insert coins, clips, etc. in the buckle as this may prevent you from properly letching the tab and buckle.
- If the east belt does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use the child restraint system until the seat belt is fixed.

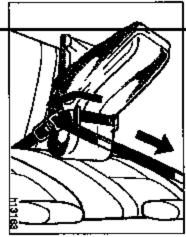


 Fully extend the shoulder beit to put it in the lock mode. When the beit is then retracted even slightly, it cannot be extended.

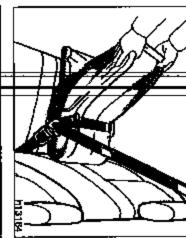
To hold the infant seet securely, make sure the belt is in the lock mode before letting the belt retract.

C43

S040413

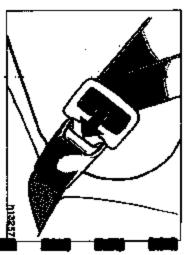


 While pressing the infant seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the infant seat securely.

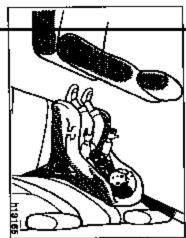


CAUTION

Push and put the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.

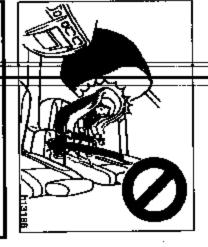


To remove the infant seat, press the buckle-release button and allow the belt to retract completely. The ball will move freely again and be ready twork for an adult or older child passenger.



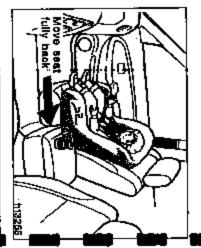
(B) CONVERTIBLE SEAT INSTALLATION

A convertible seat is used in forwardfacing and rear-facing position depending on the child's age and size. When installing, follow the manufacturer's instructions about the applicable child's age and size as well as directions for installing a child restraint system.



CAUTION

Never install a rear-facing child reetraint eyptem on the front passenger sect phosuse the force of the rapid inflition of the front passenger airbog can cause death or earloue injury to the child.



• A forward-tacing child restraint system should be allowed to be installed on the front seat only when it is unavoidable. Alway move the seat se far back as possible, because the force of the deploying sirbeg could cause death or sectious injury to the child.



- Do not install a child restraint system in the rear aset if it interferce with the lock mechanism of the front seate. This can cause death or serious injury to the child and front passenger in case of sudden braking or a collision.
- If the driver's seat position does not allow sufficient space for eafe installation, install the child restraint system on the rest right seat.



 Run the lap and shoulder belt through or around the convertible seat following the instructions provided by its manufacturer and insert the tab into the buckle taking care not to twist the belt. Keep the lap portion of the belt tight.

CAUTION

- After inserting the tab, make cure
 the tab and buckle are looked and
 that the lap and shoulder portions
 of the belt are not twisted.
- Do not insert come, clips, etc. in the buckle as this may prevent you from properly latching the tab and buckle.
- If the seat belt does not function normally, it cannot protect your child from injury. Contact your Toyota dealer immediately. Do not use the child restraint system until the seat belt is fixed.





- Fully extend the shoulder belt to put it in the lock mode. When the belt is then retracted slightly, it cannot be extended.
- To hold the convertible seat securely, make sure the belt is in the lock mode before latting the belt retract.

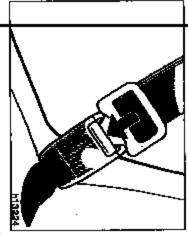


 While pressing the convertible seat firmly against the seat cushion and seatback, let the shoulder belt retract as far as it will go to hold the convertlible seat securely.

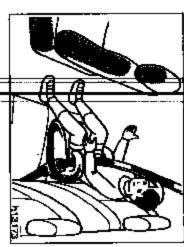


CAUTION

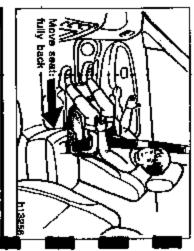
Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.



4. To remove the convertible seat, press the buckle-release button and allow the best to retrect completely. The best will move freely again and be ready to work for an adult or older child passenger.

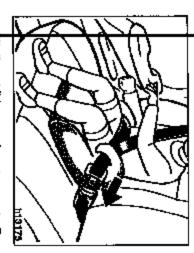


(C) BOOSTER SEAT INSTALLATION
A booster went is used in forward-facing position priy.



CAUTION

A forward-facing child reatraint system should be allowed to be installed on the front seat only when it is unavoidable. Always move the seat as far back as possible, because the force of the deploying sirbag could cause death or serious injury to the child.



 \$it the child on a booster seat. Run he lep and shoulder belt through or dround the booster seat and child folbwing the instructions provided by its chanufacturer and insert the tab into the buckle taking care not to twist the left.

Maile sure the shoulder belt is correctly across the child's shoulder and that the lep belt is positioned as low as possible on child's hips. See "Seat belta" for details.

CAUTION

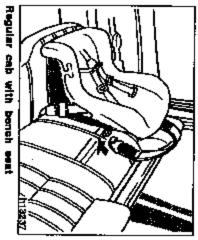
왊

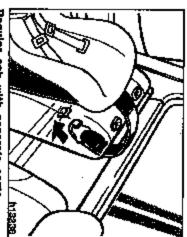
- Always make sure the shoulder belt is positioned across the center of child's shoulder. The belt should be kept ewer from child's nack, but not falling off child's shoulder. Fall-urs to do so could reduce the amount of protection in an accident and cesses serious injuries in a collision.
- Both high-positioned tap belts and loose-fitting belts could cause earlous injuries due to sliding under the lap belt during a collision or other unintended result. Keep the lap belt obstitioned so low on a child's hips as possible.
- ehoulder best under child's erm.
- After inadring the tab, make sure the tab and buckle are locked and that the tab and shoulder portions of the belt are not twisted.
- Do not insert opine, olips, etc. In the buckle as this may prevent your child from properly fatching the tab and buckle.

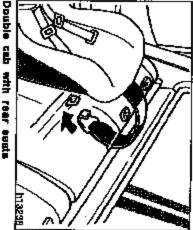
e if the seat belt does not function normally, it cannot protect you child from injury. Contact you Toyota dealer immediately. Do not use the child restraint system until the seat belt is fixed.

To remove the child restraint system, press the buckle-release button and allow the belt to retrect.

(regular and double cab models) -Using a top strap

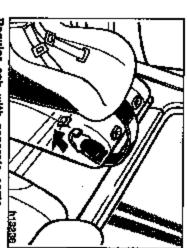






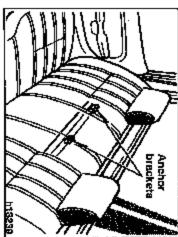
cats with rear easts

of a top strap. Follow the procedure below for a child restraint system that requires the use

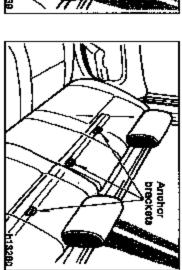


Regular 8 with separate **#1804**

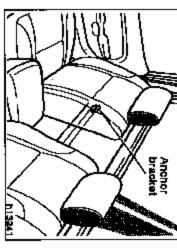
8



Regular cab with bench seat



Double cap with rear seats



Ragular cab **₫** separete segte

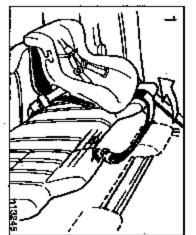
to attach the top strap. Use the anchor bracket on the back panel

Regular cab models—

passenger seating position. Anchor brackets are installed for (each)

Double cab models-

rear seating position. Anchor brackets are installed for each



TO USE THE ANCHOR BRACKET:

Regular oab with banch seat-

1. Pull the seatback release lever then letch the hook anto the anchor bracket. ewing the seatback forward slightly,

Return the soutback to its original position.

S040413

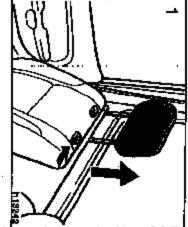


 Fix the child restraint system with the seat balt and lighten the top stap.

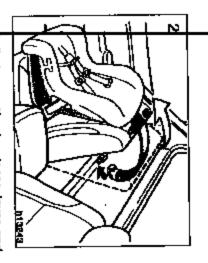
For instructions on installing the child restraint system, see "Child restraint" in this section.

CAUTION

- when returning the seathsick to its original position, make sure the seathside a securety looked by pushing forward end renresard on the top of the seathsick.
- Make suits the top strap is securally letched, and check that the child restraint existen is escure by pushing and pulling it is different directions. Follow all the installation instructions provided by its manufacturer.



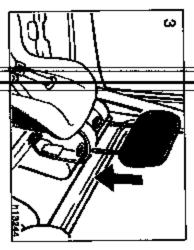
Regular cab with separate seats—
1. Remove the passenger head restraint.



82

 buil the seatback release lever and wring the seatback forward slightly, then latch the hook onto the anchor pracket.

heturn the seatback to upright position.



Fix the shild restraint system with the east beit and tighten the top strep.

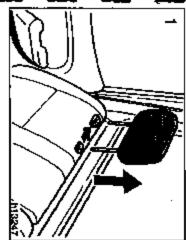
the passenger head re-

Replac

For instructions on installing the child restraint system see "Child restraint" in this section.

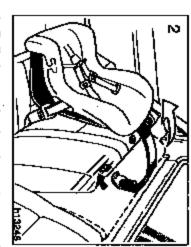
CAUTION

- When returning the seatback to it original position, make sure the seatback is securely looked by pushing forward and rearward of the top of the seatback.
- Make sure the top strap is securely latched, and check that the child restraint system is secure by pueling and pulling it in different directions. Follow all the installation instructions provided by its manufacturer. :



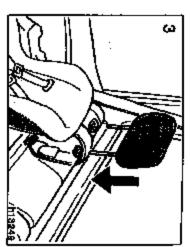
Dauble cab with rear seats-

Remove the head restraint (outside position only).



'n Pull the seathack release lever and awing the seatheak forward elightly, then latch the hook onto the anchor bracket.

1 Heturn the seatback to upright post-



Fix the child restraint system with the seat best and tighten the top File

position only). Replace the head restraint (outside

For instructions on installing the child re-straint system, see "Child restraint" in this section.

CAUTION

¥

- from operating property. 0 the top of the seatback. suathers in securely tocked pushing forward and rearward original position, make sure swatback is securely tooken When returning the eastback to 60 will prevent the uset locked Failure to
- Make sure the top strap is securely intohed, and check that the child restraint system is secure by push-ing and pulling it in different direc-tions. Follow all the installation in-structions provided by ite menutec-



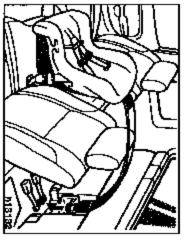


outside poeition



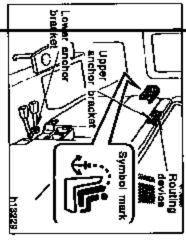
poettion

of a top strap. Follow the procedure below for a child restraint system that requires the use



center pog(lat)

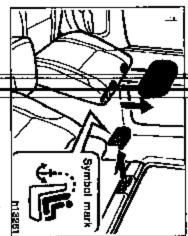
S040413



Use the routing device and the anchor bractet to attach the top strap.

Upper suchor bracket is installed for right-front passenger's seating position, lower enchor bracket is installed for front center seating position (with split banch seat) or right-rear seating position.

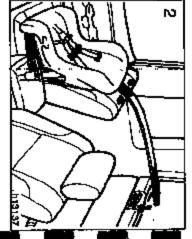
This symbol indicates the locations of user ready anchor bracket.



TO USE THE ANCHOR BRACKET:

t. Remove the passenger head restraint.

Lightly push down on the top ourface of the anchor bracket cover with the symbol mark shown in the illustration then pull it forward to ramove.



Fix the phild restraint system with the seatt belt.

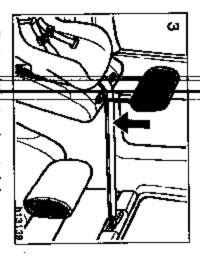
Latch the hook onto the anchor bracket on the back panel and tight on the top strap.

For instructions on installing the child restraint system, see "Child restraint" in this section.



8

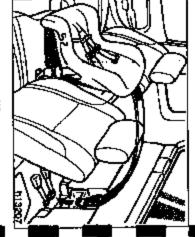
Make sure the top strap is encurely letched, and check that the child restraint system is accure by pushing and pulling it in different directions. Follow all the installation instructions provided by its manufacturer.



3. Replace the head restraint.

Store the removed cover in a safe place such as the place box.

Be sure to replace the cover when the anchor bracket is not in use.



Front center position—

Fix the child restraint system with the

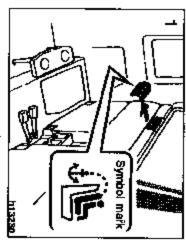
seat bett.
Latch the hook onto the rear lower equipmen bracket and tighten the top straighter instructions on installing the child restraint system, see "Child restraint" in this section.

C-50

S040413

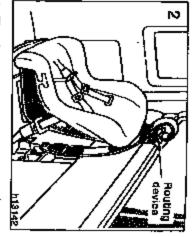
A CAUTION

Make sure the top strap is securely latched, and check that the child restraint system is secure by pushing and pulling it in different directions. Follow all the installation instructions provided by its manufacturer.



Rear outside position-

 Lightly push down on the top surtace of the anchor bracket cover with the symbol mark shown in the Riustration, then pull it forward to remove.



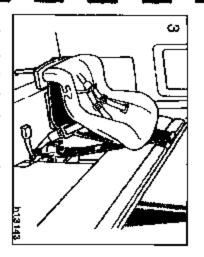
Fix the child restraint system with the seat belt.

Route the top strap through the routing device as shown in the ii-

For instructions on installing the child restraint system, see "Child restraint" in this section.



Make sure the top strap is not twisted.



Letch the hook onto the rear lower anchor bracket and tighten the top strap.

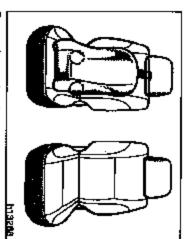
Store the removed cover in a safe place such as the glove box.

Be sure to replace the cover when the anchor bracket is not in use.

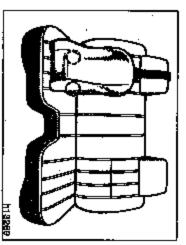
⊘ CAUTION

Make sure the top strap is securely latched, and check that the child restraint system is secure by pushing and pulling it in different directions. Follow all the installation instructions provided by its manufacturer.

—installation with child restraint lower anchorages (regular cab and xtre-cab models)



Separate seet



Bench seat

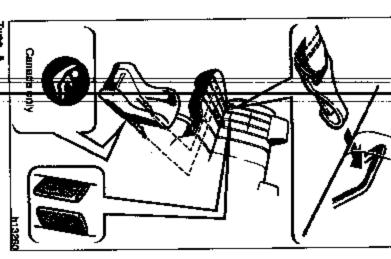
S040413

9

9 % ┋ illed in the outside positions of the ema complying with the FNV88225 CMVS0210.2 specifications are e anchorages for the child restraint ppedfloations

BBE pec 3 쿩 ion of the front seat (non-spik bench trate and aplit bench seat) or right between the seat cushion and seat-on the right side of the front seats nchorages are installed in the clear-

浧 ₹ eint system with a seat belt on the be fixed to these anchorages. In this restraint systems complying with the it is not necessary to fix the child or CMVSS210.2 apadification



ğ >

ö

wmers in Canada

₫ 2000 /atam. ites the presence of a lower connecsymbol on a child restraint system

ZST 왍 D RESTRAINT ALLATION **Nales**

궟 ì

- 4 at cushion and seatback and confirm the position of the TOWN. anchorages near the ŧ ciegrance Tetween Ē 9 9 ₽
- 7 e anchorages and tighten the lower tch the hooks of lower straps onto

P

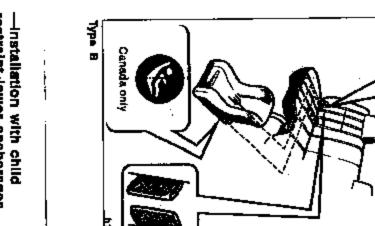
- ed cushion and seathers a second resident of the iden the clearance between Rback. anohorages near the tag on ₹ 7
- Ņ . tch the bugkles onto the anchor
- e to ∓ <u>₹</u> ur child reetraint system has a top , it should be enchored. (For the lation of the top strep, age "--Using Strep" In this section.) (For the

instruction For the 요 공 공 공 공 공 atton Tuel detaile. peddinbe refer to the ¥ <u>68c</u>

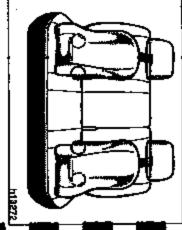
CAUTION

- Winds u 7 cill drestraint system, be there are no irregular ob-ued the anchorages or that bett is not caught.
- Puen e 7 eyetem ö instructions provided by different directions to OTUFOT. pull the child restraint isecure. Follow all the ¥
- After and child restraint or recime the
- ¥ehtclee blint eyetem should never with presenger sirbed

Child rest position, Ward see memual o off ewitch in the "ON" sirbag could onuse \$ d on the front passenger ing position. injury to the child in forscawan the force of the



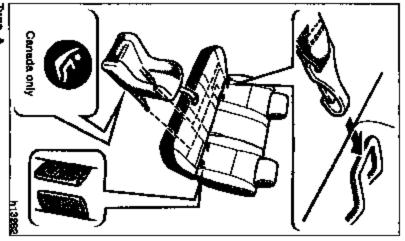
(double cab models) restraint lower anchorages



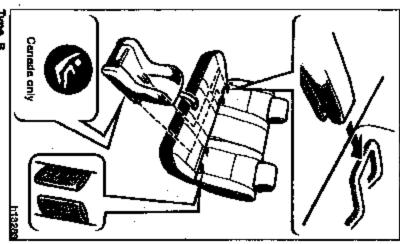
FORF SOM. installed in the outside positions of th systems complying with the FMVSS22 Lower encharages for the child restrain CMV98210.2 specifications

can be fixed with these anchorages, this case, it is not necessary to fix child restraint system with a seat bett Child restraint systems complying with the FMVSS225 or CMVSS210.2 specification The anchorages are installed in the clear-ance between the seat cushion and seatback for outside positions of the reer sea: vehicle.

S040413



Type A



700

For owners in Canada

tor eyetem. The symbol on a child restraint system indicates the presence of a lower connec-

员 INSTALLATION RESTRAINT

RELEAS

ĭγpo }

- 1. Widen the er anchorages near the tag on seathack. and confirm the position of the lowsest quehion and sestback cieerance between - Fitte
- Latch the hooks of lower atraps onto the anchorages and tighten the lower

7

- 1. Widen seat cushion and seathank a little and confirm the position of the low-**Pesthack**
- Latch the busides onto the anchor-9
- strap, it should be anchored. (Firstelledon of the top strap, see "a top strap' in this section.) If your child restraint system has a ĝ ,

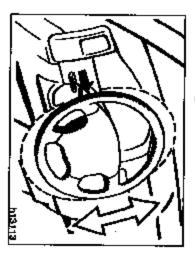
ន

product. Instruction For the installation details, refer to the manual equipped Š **98**C1

CAUTION

- When using the lower anahorages for the child restraint system, be the seat belt is not caught. sure that there are no irregular ob-
- Push and pull the child restraint system in different directions to be sure it is secure. Follow all the installation instructions provided by its manufacturer.
- After securing the child restraint system, never recline the sept.
- Do not install a child restraint oys-tem on the rear sent if it interferes with the lock machanism of the ä front cests. This can cause death or serious injury to the child and front passenger in case of collision. audden brak-

Tilt steering wheel



Hold the steering wheel, pull the look release lever toward you, tilt the steer-ing wheel to the desired angle and re-To change the steering wheel angle: The the 940

5 When the steering wheel is in a low posilock release lever. it will opring up as you release

CAUTION

- Do not adjust the steering wheel while the vahicle is moving. Doing coour resulting in death or serious so may cause the driver to mishan-die the vehicle and an eccident may
- After adjusting the steering wheel, sure it is looked in position. THOO DITE OF 14 SULANDE to make

NAME AND LOSS OF DEALER WHE/WHITESS:

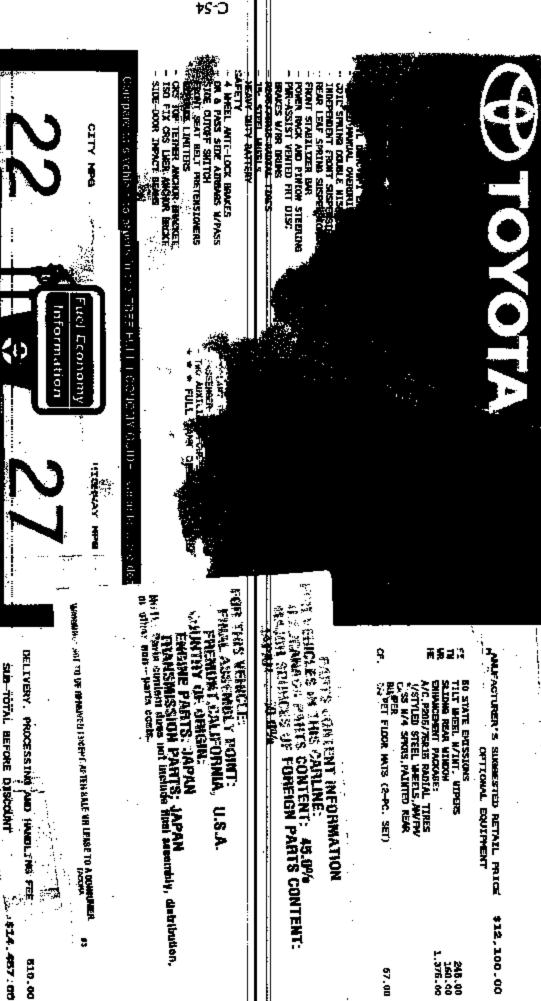
TOTAL

\$18.967.00

동

EXTRA VALUE PACKAGE

MSRP DISCOUNT



Appendix D

Miscellaneous Test Information

P

Channel Report

Nume of Test 040413

System K3600

Name of DAU DAU3

04/13/2004 9:07:10 AM

Chen.#	Sensor #	Maemonic	Description	Dir.	Range		Pol. Cal.	_	Group	Mig.	Model
3000	C15351	SLDXGR	SLED GLONG.	7 F	199.58523 200.05001	te de	- 03/15/2004 - 03/15/2004		CETIS CETIS	Endevoo Endevoo	7231C
3003	SLDXV	SLDXV	SLED VELOCITY		164.82632	KTZ/T	- 07/31/2003	•	CELL	TRC	SLDXV
300	SLDXGT	SLDXGT	SLED TRIGGER/SLDXGT	Rear	189.76668	æ	- 07/15/2003	OK	<u>-</u>	Endeveo	723IC
36 56 57	AD4H9	HEDXCI	Head Accel X	Rou	400.70593	e 0 1	- 03/15/2004		230n	Endevco	7231C
3006	AD4J7	HEDYG!	Head Accel Y	Left	398.61264	04	03/15/2004		230n	Endeveo	7231C
3007	AD418	HEDZGI	Head Accel Z	ę,	398.92477	99	- 03/15/2004		230n	Endevco	7231C
300g	1716-023 5-FX	NEXX	Neck Force X	H	8893.5209	Z	- 03/15/2004	, -	230n	Denton	1716
3000	1716-0235-FY	NEKYFI	Neck Force Y	Щ	8890.2239	z	+ 03/15/2004	e	230n	Demon	1716
2012	1716 0235 FZ	NEK ZEI	Neck Force 7	Hd	13341.671	Z	+ 03/15/2004	Ç	2300	Denton	1716
3013	1716-0235-MX	NEKXMI	Neck Moment X	农田	282.88566	X-ig	- 03/15/2004		230	Denton	1716
3014	1716-0235-MY	NEKYMI	Neck Moment Y	음	283.00437	Š	+ 03/15/2004		230n	Denton	1716
₹3015	1716-0235-MZ	NEKZMI	Neck Moment Z	ğ	282.84026	S	+ 03/13/2004		2300	Denton	1/16
3016	ACTR4	CSTXGI	Chest Accel X	Twd.	400.04588	ÇĠ	+ 03/13/2004		100.7	Ellocyco	72310
3017	ACTT4	CSTYGI	Chest Accel Y	Į.ef	399,13157) (PC)	- 03/13/2004		730n	Budevoo	72310
3018	ACTW0	CSIZO	Chest Parlantion Y		013877.00	#	+ 03/16/2004	2	230	Servo	14CB1-2847
3000	2430-984	FMZH	Left Remur Force Z 60	Kince		Z	+ 03/15/2004	2	230n	GSE	2430
3021	2430-985	REMZEI	Right Fernur Force Z \$1511	Kues	13345.845	z	+ 03/15/2004	OK K	230n	GSE	2430
3022	APDJ3	HEDXG2	Head Accel X	Rwd	400.74513	æ	- 03/15/2004	OK.	314n	Bndevco	7231C
3023	AGHP8	HEDYG2	Hend Accel Y	Left	400.51315	90	- 03/15/2004	OK	314n	Endevco	723.IC
3024	APD60	HEDZG2	Head Accel Y	ф	399.51932	200	- 03/15/2004	õ	3140	Endeviso	7231C
3025	1716A-1221-FX	NEKXP2	Neck Force X	£	8889.9769	z	- 03/15/2004	0×	3140	Denton	1716A
3026	1716A-1221-FY	NEKYF2	Neck Force Y	FH	8898,2041	Z	+ 03/15/2004	읒	314n	Denton	1716A
3027	1716A-1221-FZ	NEKZP2	Neck Force Z	æ	13342.680	Z	+ 03/15/2004	OK	354n	Denton	1716A
1028	1716A-1221-MX		Neck Moment X	Z.	283.0004	12	- 03/15/2004	S	3141	Deaton	17.16A
3029	1716A-1221-MY	NEKYM2	Neck Moment Y	윱		Ŗ	+ 03/15/2004	e	31 4 n	Dentop	1716A
3030	1716A-1221-MZ	NEKZMI2	Neck Moment Z	ξ	283.12378	Z P	+ 03/15/2004	8	314n	Denton	1716A
	C13010	CSTXG2	Chest Accel X	P&L	400.88947	Ord	+ 03/15/2004	o R	3140	Endevco	7231C
	C14563	CSTYG2	Chest Accel Y	Ľ æ	402.12687	(F)	- 03/15/2004	OK K	3140	Endevco	7231C
₩ 3033	AD343	CS17202	Chest Accel Z	Down	400,49436	œ	+ 03/15/2004	ò	3140	Endevco	7231C

page I of 2

Channel Report

ţ,	عاد		1 (4	اما د	د ا) [_		, Lu	_
4	2 2	Ş	9	9	6.7	8	S	3034	chan
P28089	P28948	P33003	P33/39	P34003	P33562	2450-982	2450-962	14CB1-2847-041	hannel Report
RFXG	LFXG	RAXG	TEXC	RBXG	LBXG	RFMZF2	THWZH2	CSTXD2	
RT VEHICLE FRAMB	CT VEHICLE PRAME	REAR AXLE	TOP OF ENGINE BLOCK	Right Body At Rear Seat	Left Body At Rear Seat	Right Fernur Force Z 98	Left Femur Force Z 91	Chest Deflection X	
FWD	FWD	æ	FWD	Fwd	Fwd	Knee	Knee	Strom	
199.94220	200.27694	200.16263	199,72109	200.25187	200.12977	13342.089	13340.907	101.14479	
99	gra	7 9	DQ	60	02	Z	Z	mm	
+	+		+	+	+	+	+	+	
01/28/2004	02/05/2004	03/17/2004	03/31/2004	03/31/2004	03/31/2004	03/15/2004	03/15/2004	03/16/2004	
0K	Š	Ş	Š	œ,	e	Š	OK.	읒	
<u>.</u>	Ļ	<u>-</u>	<u>_</u>	<u>_</u>	<u>-</u>	314n	314n	314n	
Endevco	Endeveo	Endeveo	Endevco	Endeveo	Endevco	GSE	GSE	Servo	94/
7264C-2K-2-180	7264C-2K-2-180	7264C-2K-2-180	7264C-2K-2-180	7264C-2K-2-180	7264C-2K-2-180	2430	2430	[4CB]-2847	04/13/2004 9:07:10 AM

Digital and System Channel Report

2004-04-13 09:06:20

D-4	0 0110	5# 11	bk 12	blt 13	bit 14	M2H = M: 15	bit position	Yeg	enable	Name of Test 040413
00000000	•	-	-	-	C (⇒		Yes 3500	le Channel	040413
:		PABETI	DABETI	Switch			short		Short Name	
:		PA	DR	Вж			long	dig0	Туре	System K3600
		PASS, ALRBAG EVENT - PRIMARY	DRIV. AIRBAG EVENT - PRIMARY	Backup Switch			6			
i		KY	RY					ם	b	Name of DAU DAU3
:		~	; 5	i			descriptio	DAT33500	Data File	
	 						-	KM3650 Sequencer	Module Type	descriptio

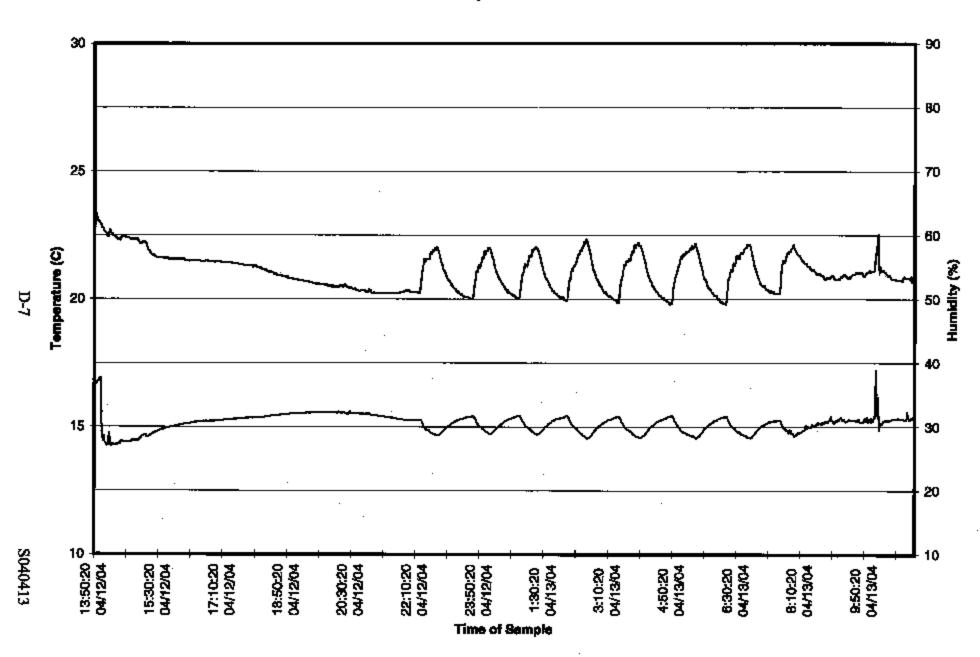
Dommy	230n	Type HYBRID III 50TH	Descriptio	NHTSA - 230n HYBRID III 50TH, CAL DUE 9-15-04 (DKS 3-16-04)1211	III SOTH CAI		\$9-15-04 (DKS 3-16-04)J211	
Chsuam	Location	Model	Name	Manufacturer	Sens./mV/V/		Fullscal	Caldat	Pos Output	Flip
HEDXG	Head Accel X	· 7231C	AD4H9	Endeveo	1861010	99	750	3/15/2004	Reer	-
HEDYG	Head Accel Y	7231C	AD417	Endevco	0.01961	ng i	750	3/15/2004	Lel	-
HEDZO	Head Accel Z	7231C	AD4J8	Endevco	0.0193	94	750	3/15/2004	Ç	-
NEKXF	Neck Force X	1716	1716-0235-FX	Deplon	0.0001919	z	8896.4	3/15/2004	Hd Fd,Cst Rr	-
NEKYF	Neck Porce Y	1716	1716-0235-FY	Denton	0.0001879	Z	8896.4	3/15/2004	Hd LLCM Rt	o
NEKZP	Neck Force Z	1716	1716-0235-FZ	Denton	0.0000936	Z	13344.6	3/15/2004	Hd Up,Cst Dn	ф
NEXXM	Neck Montent X	1716	1716-0235-MX	Denton	0.0058955	Ż	282.5	3/16/2004	Rt Ear to Rt Shid	-
NERYM	Neck Moment Y	1716	1716-0235-MY	Denton	0.0058266	Z	282.5	3/15/2004	Can to Stram	0
NEKZM	Neck Moment Z	1716	1716-0235-MZ	Demon	0.0083228	Ÿ	282.5	3/15/2004	Chan to Lt. Shild	0
CSTXG	Chest Accel X	723IC	ACTR4	Endeveo	0.01969	90	750	3/15/2004	Fwd	0
CSTYC	Chest Accel Y	723IC	ACTT4	Endevco	0.01929	DE:	750	9/16/2004	Left	_
CSTZG	Chest Accel Z	723IC	ACTW0	Endevoo	0.01973	()CI	750	3/15/2004	Down	0
CSTXD	Chest Deflection X	[4CB]-2847	85427-1	Servo	1.1403	3	8	3/16/2004	Strom Away Fran Spo	0
LPMZF	Left Fernur Force Z 60	60 2430	2430-984	CUSE	0.000071	Z	13344.7	3/16/2004	Knee Fd, Pel Rr	0
RFMZF	Right Person Porce Z S 15 1	2430	2430-985	CSE	0.0000695	Z	13344.7	9/15/2004	Knee Fd, Pel Re	0
•		•								

Chanaton HEDYG HEDYG HEDZG NEKYF		Type HYBRID III 50TH Model 7231C 7231C 7231C 1716A 1716A	Descriptio] Name APD33 AGHP8 APD60 1716A-1221-FX 1716A-1221-FX	NRTSA - 314n HYBRID III 50TH. CAL DUE 9-15-04 (DRS 3-15-04)J2)1 Manufacturer Sens./mVV/ Fullecal Cnidnt Pos 4 Endevoo 0.02012 g -750 3/15/2004 Rwd Endevoo 0.01908 g 750 3/15/2004 Left Endevoo 0.02067 g 750 3/15/2004 Hd Fl Denton 0.0001899 N 8896.4 3/15/2004 Hd Ll	III 59TH CAL Sens./mV/V/ 0.02012 0.01908 0.02067 0.0001949 0.0001899	DUE 9-15-0 Fullocal 8 75 8 75 8 75 8 75 N 8896 N 8896	15-04 (I Illecal 750 750 750 8896.4	Onldat Onldat 9/15/2004 9/15/2004 9/15/2004 9/15/2004 9/15/2004	JJZ11 Pos Onipert Rwd Left Up Hd Fd,Cst Rt Hd LL,Cst Rt
HEDXG	Head Accel X	7231C	APD33	Endeveo Endeveo	0.02012	ka 60		9/15/2004 9/15/2004	
HEDYG	Head Accel Y	7231C	AGHP8	Endevoo	0.01908) (FG		3/15/2004	
HEDZG	Hood Accel Y	7231C	APD60	Enderco	0.02067	(to		8/15/2004	
NEKXT	Neck Force X	1716A	1716A-1221-FX	Denion	0.0001949	z		3/15/2004	
NEKYP	Neck Force Y	1716A	1716A-1221-FY	Denton	0.0001899	z		9/15/2004	
NEKZF	Neck Force Z	1716A	J716A-1221-FZ	Denton	0.0000998	7	3344.6	3/15/2004	Hd Up, Cst Dn
NEXX	Neck Moment X	1716A	1716A-1221-MX	Denton	0.0060898	ż	282.5	3/15/2004	Rt Ear to Rt Shid
NEKYM	Neck Moment Y	1716A	1716A-1221-MY	Denton	0.0056741	Ż	282.5	3/15/2004	
NEKZM	Neck Moment Z	1716A	1716A-1221-MZ	Dectors	0.0085101	Ż	282.5	3/15/2004	
CSTXC	Chest Accel X	7231C	C13010	Endevco	0.02936	6 0	750	3/15/2004	
OYTEO	Chest Accel Y	7231C	C14563	Endevco	0.02961		750	3/15/2004	
CSTZG	Chest Accel 2	723IC	AD343	Enderco	0.01937	*	750	3/15/2004	
(ST.18)	Chest Delivering X	14CB1-2847	HAPTERS TRANS	Servo	1.1249	B	8	3/16/2004	Strom Away Fram Spo
HZMPI	Fill Femun Force Z 91		2430-962	355	0.000000	‡	1334.7	0/15/D001	Kine Fd.P4 Pe
RPMZF	Right Femur Force Z 98	Z 98 2430	2430-982	GSE	0.0000678	2	3344.7	13344.7 3/15/2004 Knee Fd.Pei Rr	
I									

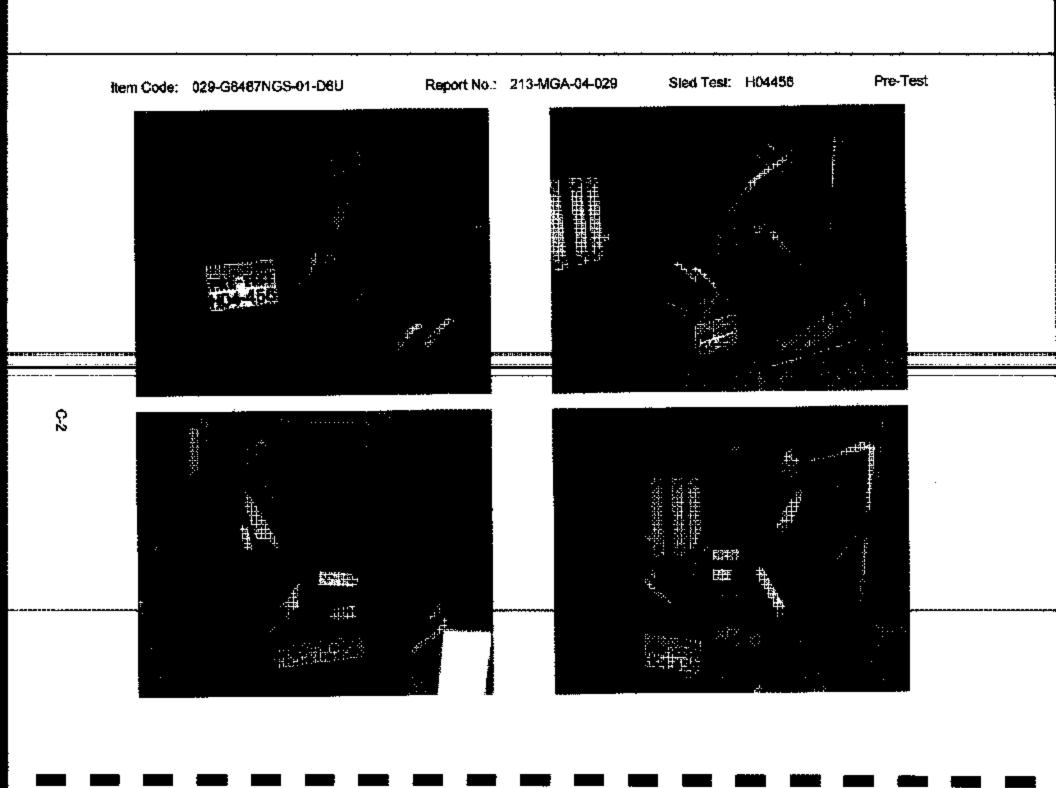
Tueeday, April 13, 2004 914n

8040413

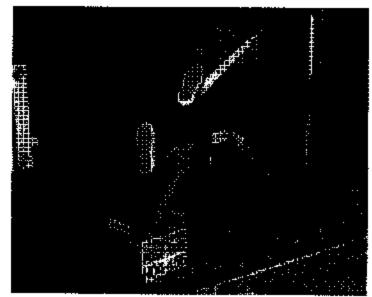
C35108 2003 Toyota Tacoma S040413



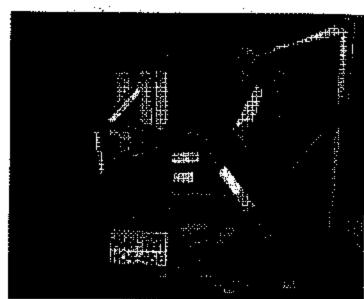


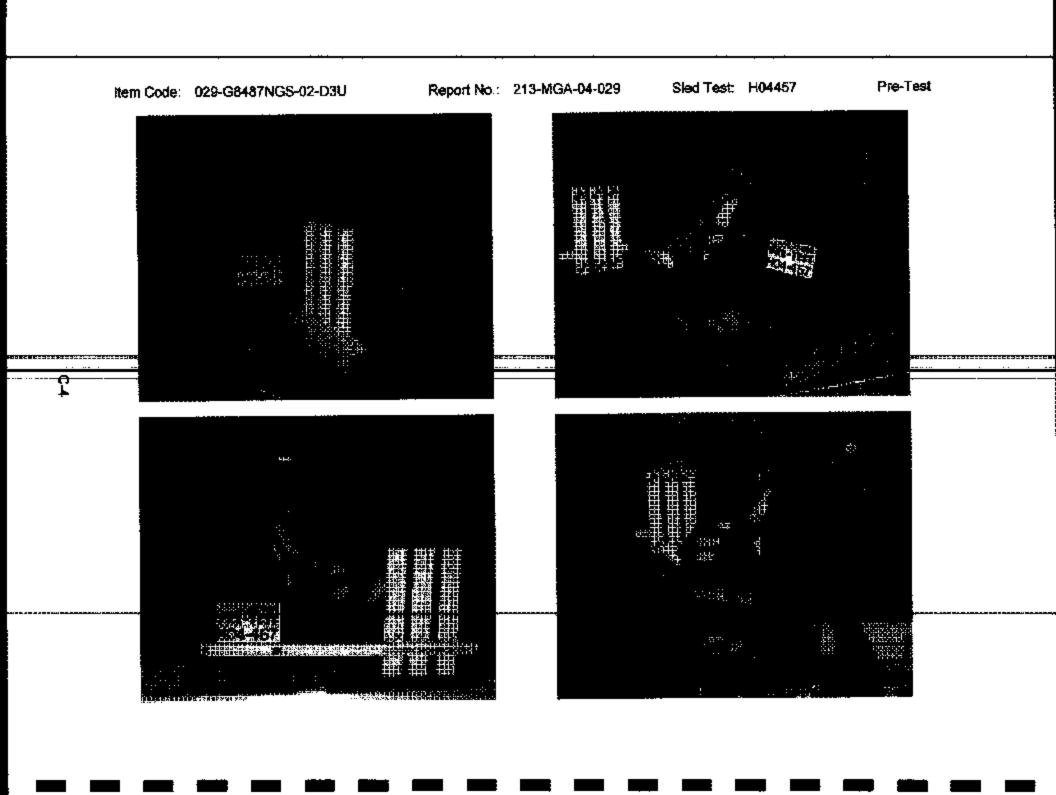










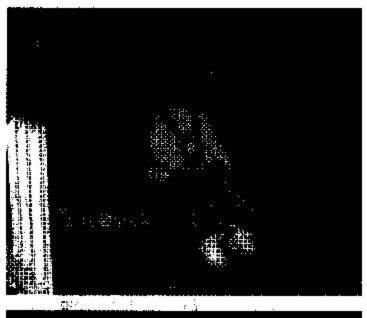


Item Code: 029-G8487NGS-02-D3U

Report No.: 213-MGA-04-029

Sled Test: H04457

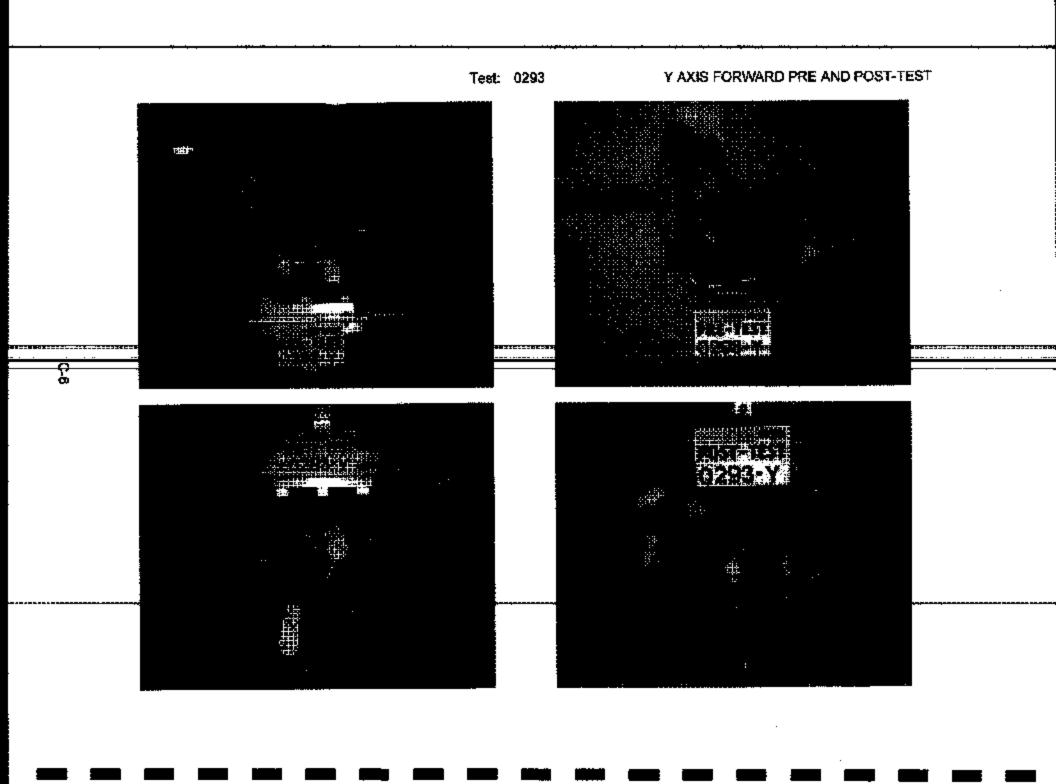
Post-Test





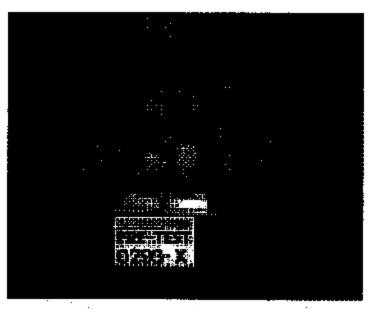


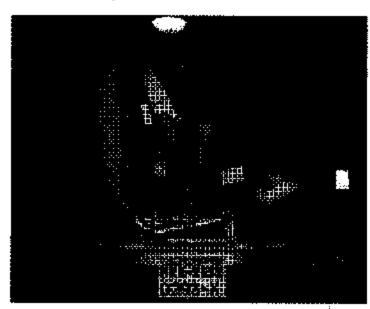


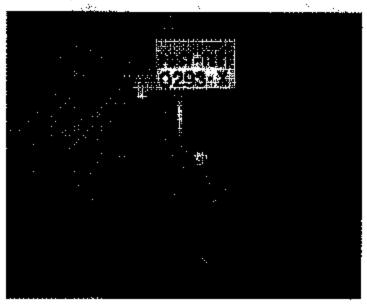


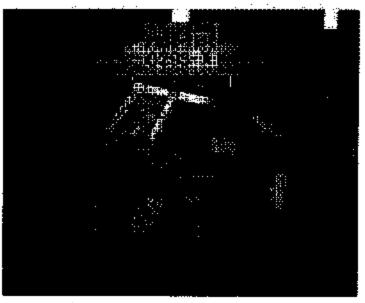
Test: 0293

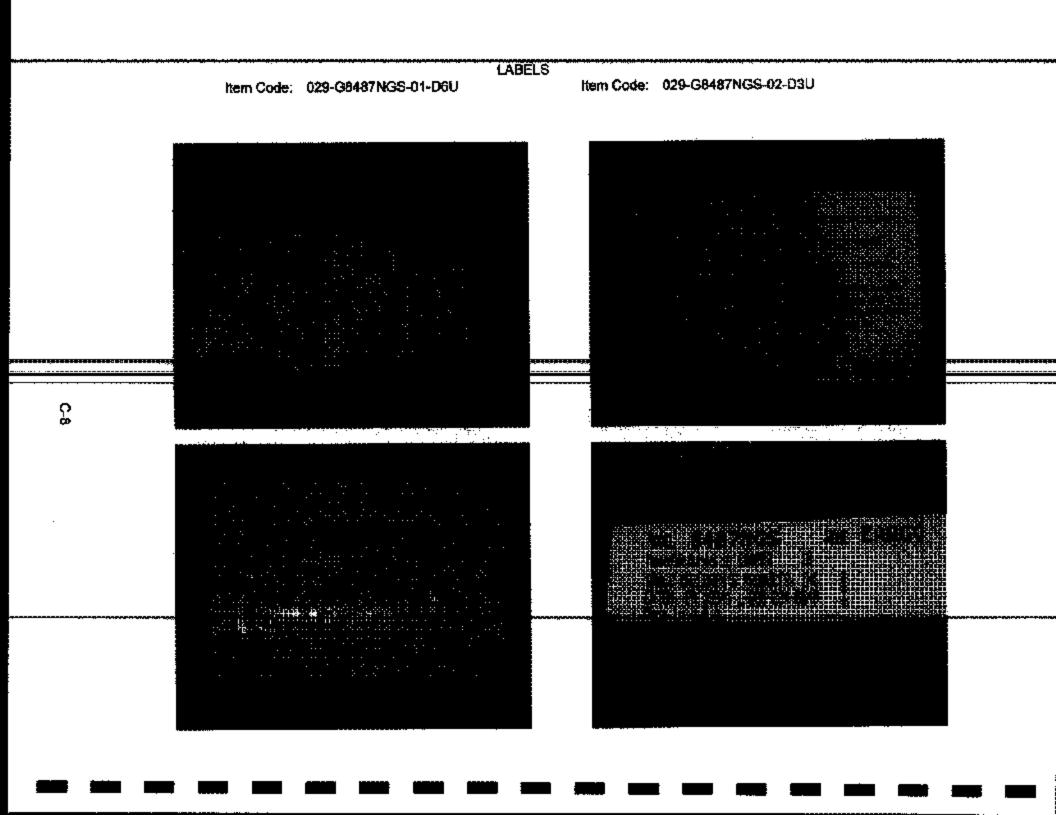
X AXIS LATERAL PRE AND POST-TEST











Item Code: 029-G8487NGS-01-D6U

Item Code: 029-G8487NGS-02-D3U

