Insurance Institute for Highway Safety
Crashworthiness Evaluation

Crash Test Report
2000 Nissan Sentra (CF00016)

Vehicle identification number: 3N1CB51D8YL304992
Body style: Small 4-door sedan
Engine/transmission: Transverse 1.8-liter 4-cylinder, 4-speed automatic, front-wheel drive

Standard crashworthiness features:

Driver and right front passenger front airbags
Dual-locking shoulder belts (all seating positions)
Shoulder belt upper anchorage height adjusters (front seating positions only)
Seat belt crash tensioners (pyrotechnic, front seating positions only)
Seat belt force-limiting mechanisms (front seating positions only)
Center rear lap/shoulder belt
Right front and all rear shoulder belt retractors are convertible from emergency to automatic locking for ease of child restraint use

Optional safety features:

Driver and right front passenger seat-mounted side airbags (designed to protect head and torso)
Four-wheel antilock brakes

Vehicle specifications (provided by manufacturer):

Wheelbase:	254 cm
Overall length:	450 cm
Overall width:	171 cm
Curb weight:	1,156 kg

Vehicle specifications (measured):

Front bumper to firewall:	108 cm
Curb weight:	1,202 kg
Test weight:	1,324 kg (58% front, 42% rear)
Overall width:	171 cm

Nominal test parameters:

40.0 mi/h (64.4 km/h), 40% overlap, deformable barrier face with slotted bumper

Crash test date:

May 2, 2000

Figure 1
Precrash and Postcrash Side Views — 2000 Nissan Sentra

Summary

A 2000 Nissan Sentra was crash tested on May 2, 2000 into a fixed deformable barrier at 39.8 mi/h (64.0 km/h) and a 41 percent overlap on the driver side. A Hybrid III 50th percentile male dummy was positioned in the driver seat with the lap/shoulder belt fastened.

Measures of intrusion taken after the crash indicated the lower instrument panel in front of the dummy moved rearward 5-7 cm. Resultant intrusion in the driver footwell measured 16 cm at the footrest and 15-20 cm at other places on the toepan. All doors remained closed during the crash. After the crash, the driver door required tools to open, and all other doors opened with ease.

The driver dummy was restrained by a three-point lap/shoulder belt and an airbag. During the crash, the belt crash tensioner activated and retracted about 5 cm of shoulder belt webbing. No more than 5 cm of webbing, including the tensioner-retracted length, spooled off the retractor during the crash, with the force limiting mechanism contributing about 3 cm. The airbag contacted the dummy's face during deployment. After rebounding from the airbag, the dummy's head moved outboard and contacted the upper B-pillar. After the crash, the upper end of the steering column had moved upward 1 cm and rearward 6 cm.

The maximum resultant head acceleration from the upper B-pillar contact was 146 g. The maximum right tibia-femur displacement was –14 mm.

Test Conditions

This vehicle had been tested previously in the Institute's Low-Speed Crash Test Program and subjected to an impact on the front corner of the passenger side at 5 mi/h (8 km/h) into a 30 degree angle barrier and a rear impact at 5 mi/h (8 km/h) into a flat barrier. All structural damage on the front was repaired prior to this test (see Appendix, Low-Speed Crash Test Damage Repair Estimate).

This test was conducted according to the procedures specified in the IIHS Offset Barrier Crash Test Protocol (Version VII). The Hybrid III dummy positioned in the driver seat was equipped with instrumented lower legs that included feet modified to include two accelerometers and to have a 45 degree dorsiflexion range with soft stops at all extremes of foot-ankle motion. All dummy seating parameters were set according to the procedures specified for Federal Motor Vehicle Safety Standard 208 compliance testing (49 *CFR* Part 571.208 § 11). The dummy's left foot was placed on the footrest.

Seat back, shoulder belt upper anchorage, and steering column adjustments were set according to the manufacturer's specifications for government crash testing. Other adjustments were set according to the procedure specified for Federal Motor Vehicle Safety Standard 208 compliance testing (49 *CFR* Part 571.208 § 7 and 8). After final positioning of the dummy, measurements from various parts of the dummy to a number of vehicle interior points were made. These

measurements and the seat back, shoulder belt upper anchorage, and steering column adjustments are described in the Appendix, Dummy Clearance Measurements.

Vehicle acceleration measurements were made by a triaxial arrangement of accelerometers mounted on the vehicle's longitudinal centerline and 62 cm behind its center of gravity (168 cm behind the front axle). The vehicle speed recorded just prior to impact was 39.8 mi/h (64.0 km/h), and the actual overlap was 41 percent.

Structural Performance

All doors remained closed during the crash. The driver door aperture shortened 5 cm, as measured at the lower edge of the window. The driver door required tools to manipulate the latch actuation rod plus additional force to open. All other doors opened with ease.

No fuel system leaks were observed after the crash. In addition, no fuel system leaks were observed when the vehicle was rotated onto its right side to allow postcrash photography.

Figure 2 shows the overhead view of the crash deformation. Figure 3 illustrates the precrash and postcrash contour measures of the front bumper cover profile and the resulting permanent crush. Figure 4 shows the precrash and postcrash views from below. Figure 5 illustrates the deformation of the side rails, door sills, and radiator and engine supports, which are visible in Figure 4.

Figure 2
Overhead View of Crash Deformation — 2000 Nissan Sentra

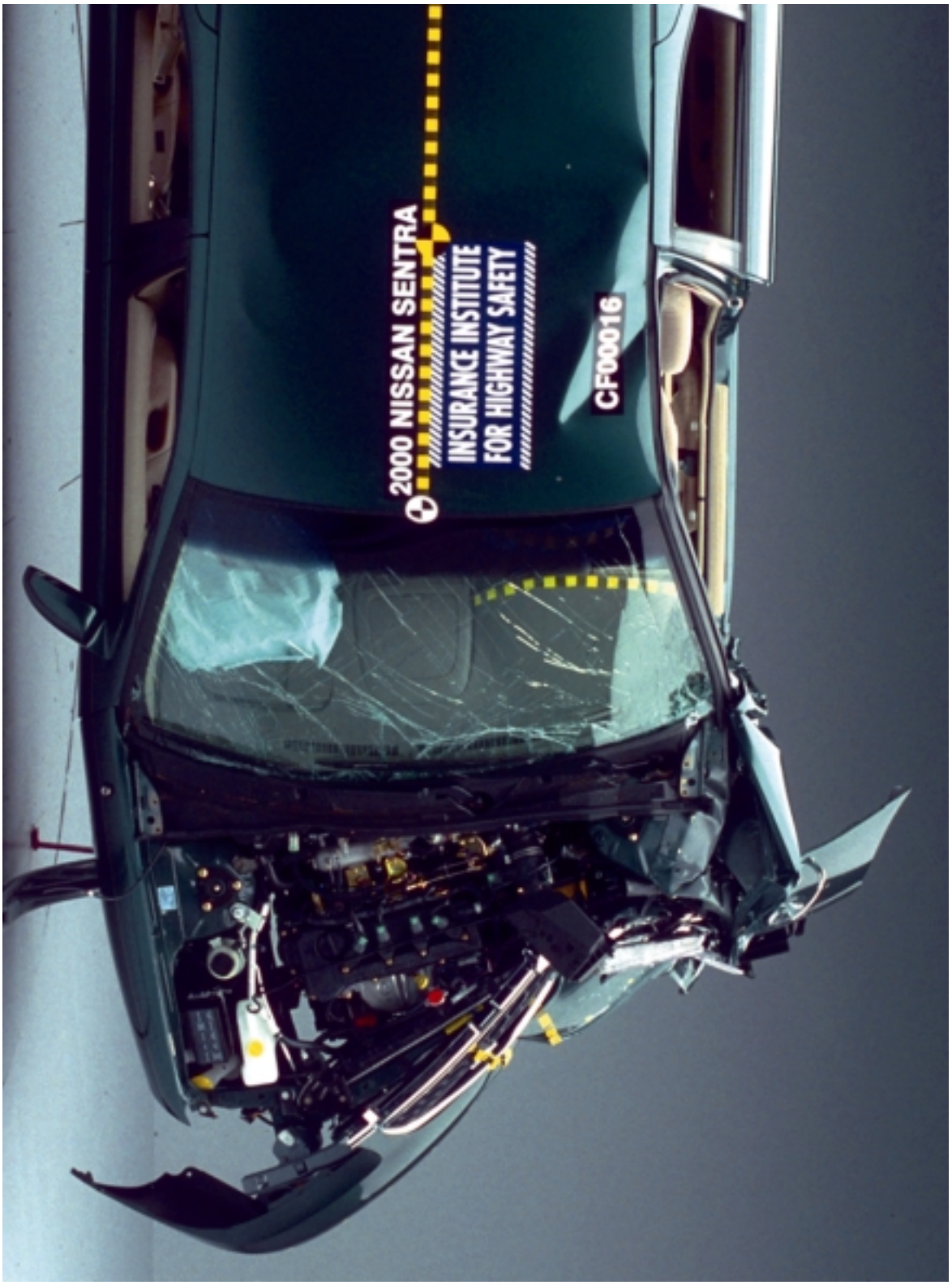
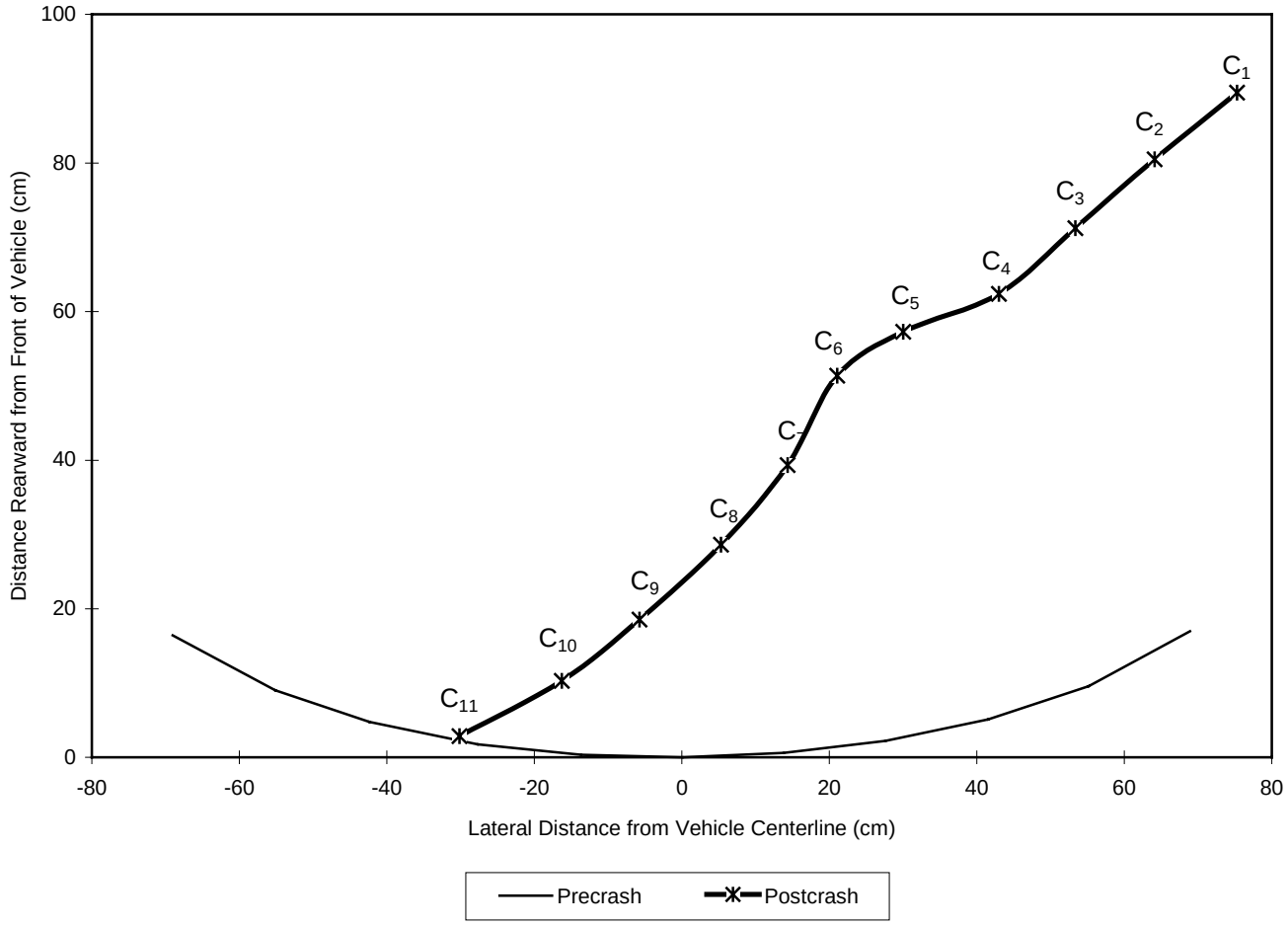


Figure 3
Front Bumper Cover Crush Contour — 2000 Nissan Sentra



	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8	C_9	C_{10}	C_{11}
Postcrash Contour (cm)	89	81	71	62	57	51	39	29	19	10	3
Precrash Contour (cm)	17	10	5	2	1	0	0	2	5	9	16
Resulting Crush (cm)	72	71	66	60	56	51	39	27	14	1	–13

The length of the reference line was 138 cm precrash and 105 cm postcrash.

Figure 4
Precrash and Postcrash Views from Below — 2000 Nissan Sentra

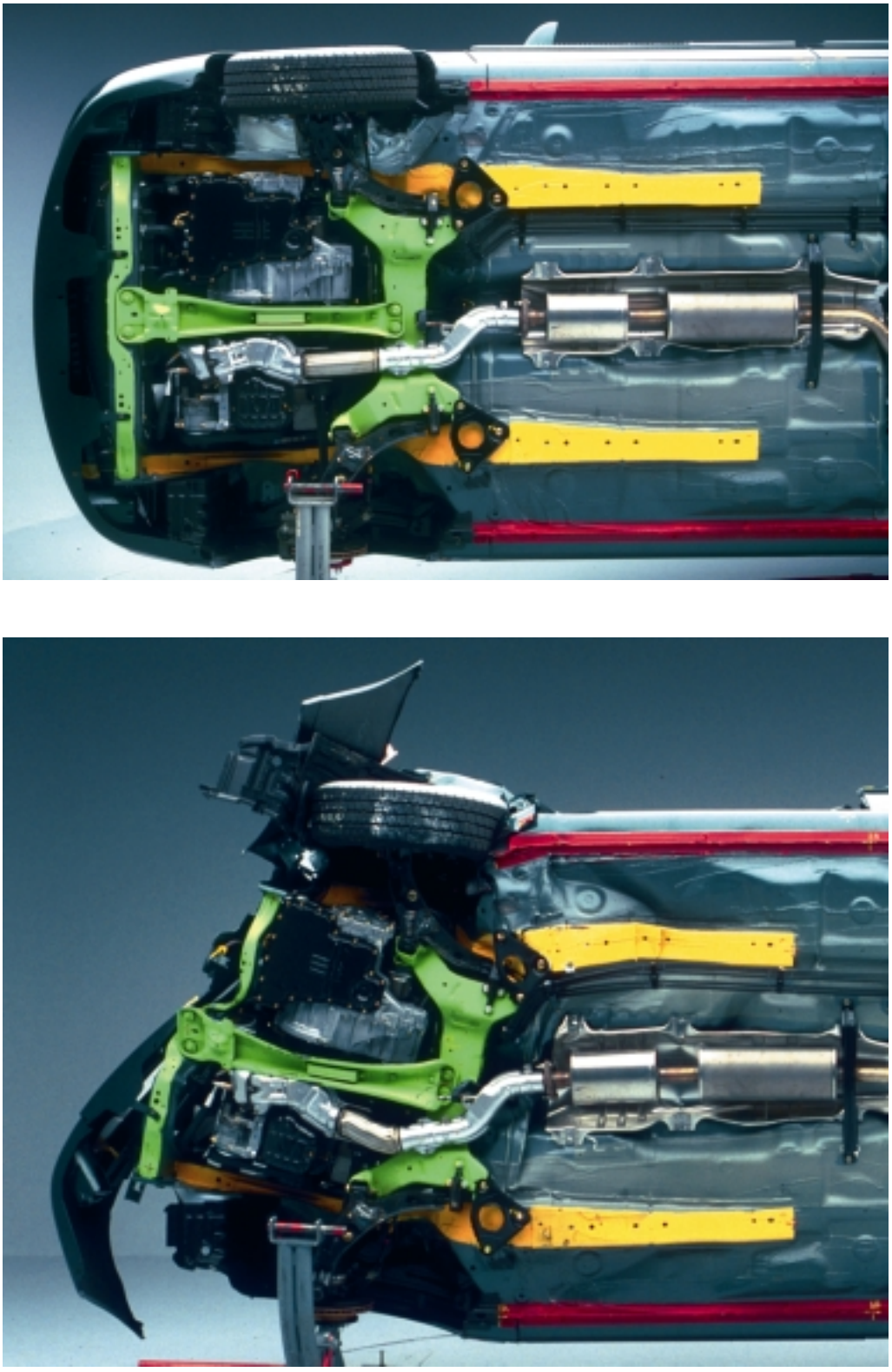
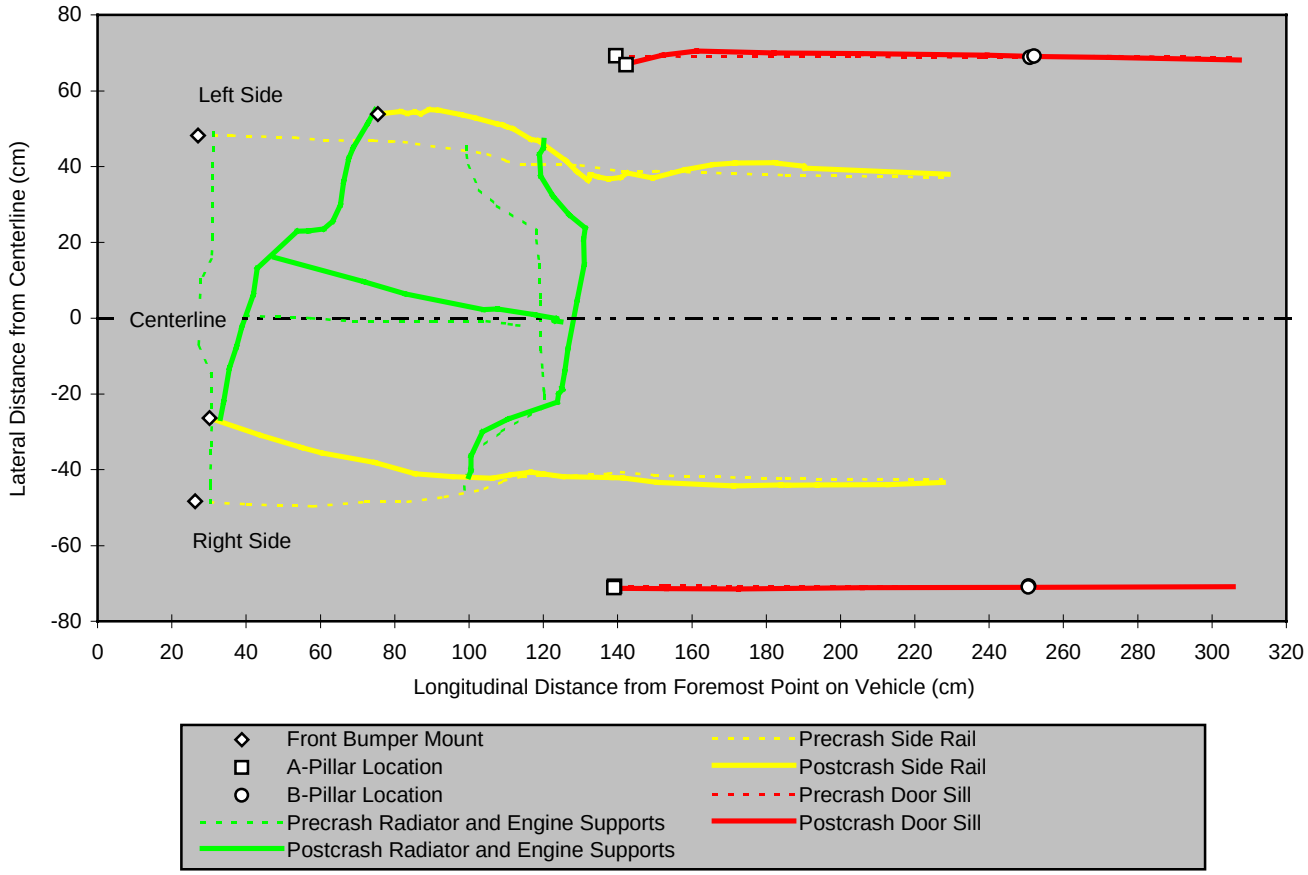
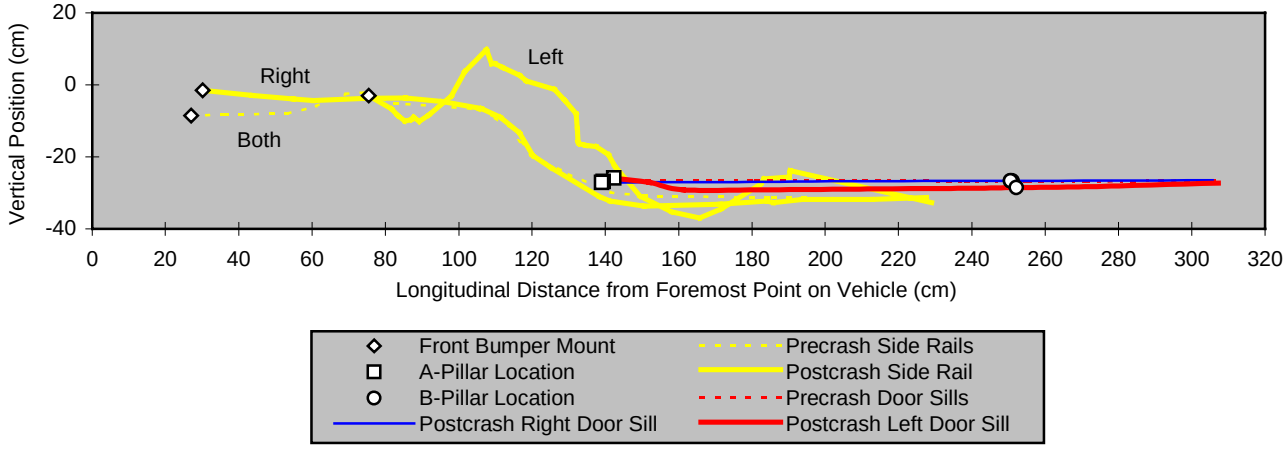


Figure 5
Structural Deformation, Views from Below and Side – 2000 Nissan Sentra





Various measures of intrusion were made after the crash. These residual measures of intrusion typically are less than the maximum deformation that occurs during the crash. The coordinate reference system for these measures is described in the IIHS Offset Barrier Crash Test Protocol (Version VII). The measures of deformation shown in Table 1 have been adjusted to better reflect the displacement of the various target locations relative to the driver, based on the locations of the four driver seat-attachment bolts. The average displacement of the seat-attachment bolts relative to the reference system also is shown in Table 1.

Table 1
Residual Measurements of Intrusion Relative to Driver Seat — 2000 Nissan Sentra

Selected Locations*	Longitudinal	Lateral	Vertical	Resultant
Steering column (cm)	–6	–4	1	7
Left lower instrument panel (cm)	–7	–4	1	8
Right lower instrument panel (cm)	–5	–4	1	6
Brake pedal (cm)	–13	3	3	14
Left toepan (cm)	–19	–5	3	20
Center toepan (cm)	–18	–4	3	18
Right toepan (cm)	–15	–3	3	15
Footrest (cm)	–16	–4	1	16
Average displacement of the four seat attachment bolts relative to reference system (cm)	–1	2	–1	n/a

* All measurements taken on driver side. From the driver's position, positive is forward, left, and up.

Restraint System Performance

Airbags

Driver: The uninflated driver airbag is approximately 63 cm in diameter, and the excursion of its center when inflated is limited by two tethers. The airbag is vented by two holes located at positions corresponding to 10 and 2 o'clock on the forward-facing surface of the airbag. Analysis of the high-speed film taken from camera positions B and E indicated the airbag deployed at 26 ms into the crash and appeared to be fully inflated at 52 ms.

Passenger: The top-mounted passenger airbag deployed at an angle and is untethered. The cylinder-shaped airbag is vented by two holes located at the lateral ends. The airbag did not contribute to windshield damage during deployment.

Seat Belts

This vehicle is equipped with dual-locking lap/shoulder belts with sliding latch plates at all seating positions and adjustable upper anchorage points, pyrotechnic crash tensioners, and mechanical force-limiting mechanisms at the driver and right front seating positions. The front inboard lower anchorage points are attached to and move with the seats. The front outboard lower anchorage points are bolted to the sills at the base of the B-pillars. During the crash, 5 cm of webbing was pulled by the belt crash tensioner into the retractor through the D-ring, as determined by film analysis of the movement of a tape strip on the belt webbing near the dummy's shoulder. Postcrash investigation of the force-limiting torsion bar within the retractor spool indicated it was twisted about 65 degrees from its precrash orientation. This measure, combined with the estimated diameter of the retractor spool and stowed webbing (45 mm), suggested the force limiter contributed about 3 cm of webbing to the total amount pulled through the D-ring. A pull-string mounted between the webbing and the B-pillar trim indicated that no more than 5 cm of total webbing was spooled out of the retractor during the crash. Inspection of the shoulder belt webbing revealed a 5 cm long abrasion on the webbing where it moved through the D-ring.

Seat

Postcrash examination of the driver seat rails indicated no discernible movement of the seat in its tracks during the crash. Deformation of the floor under the driver seat caused the seat to tip slightly outboard.

Steering Column

The upper end of the steering column moved upward 1 cm and rearward 6 cm relative to the driver seat.

Dummy Kinematics

Head, Neck, and Torso

Analysis of the high-speed film taken from camera position E indicated the deploying airbag contacted the dummy's face at 34 ms into the crash. The dummy's face began to load the airbag at 54 ms, about when the airbag became fully inflated. Paint transferred from the dummy's face indicated the nose contacted the center of the airbag. On rebound from the airbag, the head moved outboard, and the center rear part of the head contacted the upper B-pillar at 235 ms (time determined from head acceleration data). The head then moved inboard as the dummy settled back into the seat. Table 2 provides the timing of these events.

Table 2 Restraint System Performance and Dummy Kinematics — 2000 Nissan Sentra	
Event	**Time (ms)**
Deployment of airbag	26
Airbag contacts face during deployment	34
Airbag fully inflated	52
Face begins to load airbag	54
Back of head contacts B-pillar	235

Figure 6
Dummy and Vehicle Interior, Postcrash — 2000 Nissan Sentra

Legs and Feet

Left leg and foot: Paint transferred from the dummy's left knee indicated the knee contacted the instrument panel 2 cm directly above the left instrument panel intrusion reference point. The knee also contacted the lower left corner of the steering column trim. Paint transferred from the dummy's left shin indicated the shin contacted the bolster below the knee impact location on the instrument panel. The shin also contacted the edge of the coin storage compartment door. The left foot was found fully dorsiflexed and considerably everted, with the sole of the forefoot suspended over the footrest and the back of the heel resting in a downward buckle in the floormat/carpeting on the floorpan.

Right leg and foot: Paint transferred from the dummy's right knee indicated the knee contacted the steering column and ignition switch. The ignition key was bent, and the small plastic trim panel around the ignition switch was found dislodged and caught between the knee and shin skin. Paint transferred from the dummy's right shin indicated the shin contacted the knee bolster below and to the left of the right instrument panel intrusion reference point. The right foot was found slightly dorsiflexed and somewhat everted. The sole at the heel was pressed against the intruded toepan, and the lateral edge of the forefoot was touching the accelerator pedal, which had been bent to the right.

Dummy Injury Measures

Head

The maximum vector resultant head accelerations were recorded and the HICs were calculated during an interval that corresponds with the dummy's rebound into the left B-pillar. The maximum resultant head acceleration from the upper B-pillar contact was 146 g at 239 ms. Table 3 provides a summary of the maximum head injury measurements recorded during the crash.

Table 3
Head Injury Measurements — 2000 Nissan Sentra

Measure	Published Tolerance Threshold	Result	Time (ms)
Vector resultant acceleration (g)	80	146	239
Vector resultant acceleration — 3 ms clip (g)	80	68	237-240
Head Injury Criterion (HIC)	1000	428	237-240
Head Injury Criterion — 15 ms interval (HIC-15)*	700	428	237-240

* Canadian Motor Vehicle Safety Regulations (Standard 208) allow the resultant head acceleration to exceed 80 g in airbag-equipped vehicles if HIC-15 is less than 700 (Transport Canada, 1998).

Neck

Table 4 provides a summary of the maximum neck injury measurements recorded during the crash. None of the recorded neck force measures exceeded the magnitude-duration injury criteria (Figures A-13 to A-16).

Table 4
Neck Injury Measurements — 2000 Nissan Sentra

Measure	Published Tolerance Threshold	Result	Time (ms)
A-P shear force (kN)	±3.1	–0.6	239
Axial compression force (kN)	4.0	0.4	240
Axial tension force (kN)	3.3	1.6	95
Flexion bending moment (Nm)	310	63	120
Extension bending moment (Nm)	122	39	245

Chest

Table 5 provides a summary of the maximum chest injury measurements recorded during the crash.

Table 5
Chest Injury Measurements — 2000 Nissan Sentra

Measure	Published Tolerance Threshold	Result	Time (ms)
Vector resultant spine acceleration — 3 ms clip (g)	60	41	99-103*
Rib compression (mm)	–50	–30	105
Sternum deflection rate (m/s)	–8.2	–1.3	81

* The acceleration level that was continuously maintained for at least 3 ms is indicated. There was no level associated with an interval of exactly 3 ms in duration.

Legs and Feet

Left leg and foot: None of the injury measures exceeded the published threshold values.

Right leg and foot: The maximum right tibia-femur displacement was –14 mm at 95 ms.

Table 6 provides a summary of the maximum leg and foot injury measurements recorded during the crash.

Table 6
Leg and Foot Injury Measurements — 2000 Nissan Sentra

Measure	Published Tolerance Threshold	Left		Right	
		Result	Time (ms)	Result	Time (ms)
Femur axial force (kN)	–9.1*	–2.8	93	–1.4	97
Tibia-femur displacement (mm)	–15	–8	95	–14	95
Upper Tibia					
L-M moment (Nm)	±225	57	96	–46	98
A-P moment (Nm)	±225	122	92	–86	60
Vector resultant moment (Nm)	225	124	92	86	60
Index	1.00	0.55	92	0.47	60
Lower Tibia					
L-M moment (Nm)	±225**	–18	82	–94	65
A-P moment (Nm)	±225**	62	93	69	96
Vector resultant moment (Nm)	225**	63	92	97	65
Axial force (kN)	–8.0**	–1.3	39	–3.3	63
Index	1.00	0.28	92	0.51	65
Foot					
A-P acceleration (g)	±150	–64	70	–58	61
I-S acceleration (g)	±150	–49	69	–74	59
Vector resultant acceleration (g)	150	79	69	85	61

* This critical value is for instantaneous loading. Femur loads are compared with magnitude-duration injury criteria in Figures A-24 and A-37.

** These published thresholds are for fractures of the tibia. Ankle and foot injuries have been associated with bending moments as low as 50-100 Nm, and heel fractures have been associated with axial forces as low as –6.0 kN.

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Appendix

Low-Speed Crash Test Damage Repair Estimate

Dummy Clearance Measurements

Graph Index — index to graphs of time plots of dummy and vehicle data

Manufacturer's window sticker

Low-Speed Crash Test Damage Repair Estimate

2000 Nissan Sentra Small Four-Door Sedan: 5 mi/h Front into Angle Barrier

Test Number: LA00010
VIN: 3N1CB51D8YL304992
Mileage: 126
Features: Driver and passenger front airbags, air conditioning, automatic transmission, power mirrors, keyless entry system, power door locks, power windows, heated back glass, tilt steering wheel, cruise control, two-stage paint.

	Part		Labor	
Description	**Mfg. No**	**Price**	**Operation**	**Hours**
Bumper reinforcement, front	620365M030	$155.52	Replace *	1.2
Bumper cover, front			Repair	1.5
Bumper cover, front			Refinish	3.6
Bumper mounting bracket, left front	622115M000	12.93	Replace *	0.2
Bumper mounting bracket, right front	622105M000	12.93	Replace *	0.2
Headlamp assembly, left			Remove/reinstall	0.4
Headlamp assembly, right	260105M026	195.65	Replace *	0.4
Headlamps			Aim	0.5
Radiator support			Repair *	2.0
Radiator support			Refinish	0.4
Coolant recovery tank			Remove/reinstall	0.2
Inner fender assembly, right front			Repair *	1.0
Fender, right front			Repair/align *	0.5
Fender skirt, right front	638425M000	30.40	Replace *	0.3
Frame sidemember, right front			Repair *	1.0
Frame sidemember, right front			Refinish	0.3
Reservoir, windshield washer			Remove/reinstall	0.5
Unibody, right front			Set up/pull/align*	2.0
Bumper cover retainer bracket, right front			Repair*	0.2
Coolant recovery tank support bracket	648804M420	6.82	Replace	0.1
Paint and materials		77.40		
Total Parts		$491.65		
Total Labor		561.00		16.5
Grand Total		$1,052.65		

* This item was repaired or replaced as indicated before the 40 mi/h frontal offset test.

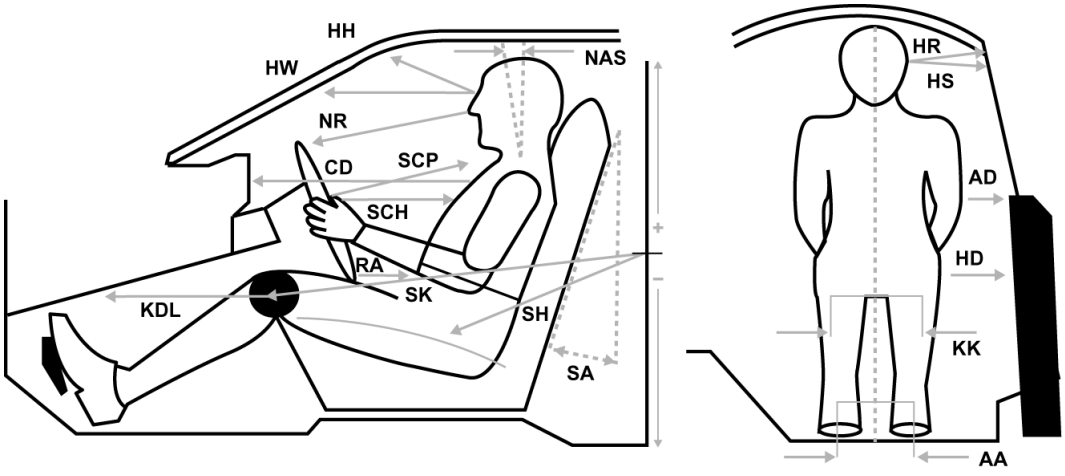
Dummy Clearance Measurements

Test Number: CF00016
Vehicle Make/Model: Nissan Sentra
Vehicle Model Year: 2000
Seat Type: Manually adjusted bucket seat (fore/aft, and seat back angle)

Manufacturer's Specifications
Seat Back Information: Reclined to 6th locking position from topmost position
Upper Belt Anchorage: Set to topmost of 4 positions
Steering Column Adjustment: Set to midpoint of tilt adjustment range

Location	Code	Measure	Location	Code	Measure
Head to header	HH	289	Neck angle, torso 90	NAT90	20.1°
Head to windshield	HW	565	Neck angle, seated**	NAS	5.3°
Nose to rim	NR	362	Torso angle (NAT90 – NAS)	TA	14.8°
Chest to dash	CD	591	Striker to knee***	SK	574
Rim to abdomen	RA	179	Striker to knee angle***	SKA	–1.5°
Knee to dash, left	KDL	195	Striker to H-point, horizontal	SHH	213
Knee to dash, right	KDR	185	Striker to H-point, vertical	SHV	–154
Steering wheel to chest, horizontal	SCH	270	Ankle to ankle	AA	319
Steering wheel to chest, perpendicular	SCP	346	Knee to knee	KK	346
Steering wheel to chest, reference	SCR	342	Arm to door	AD	10
Hub to chest, minimum	HCM	234	H-point to door	HD	130
Pelvic angle	PA	24.7°	Head to A-pillar	HA	505
Seat back angle*	SA	13.9°	Head to roof	HR	205
			Head to side window	HS	235

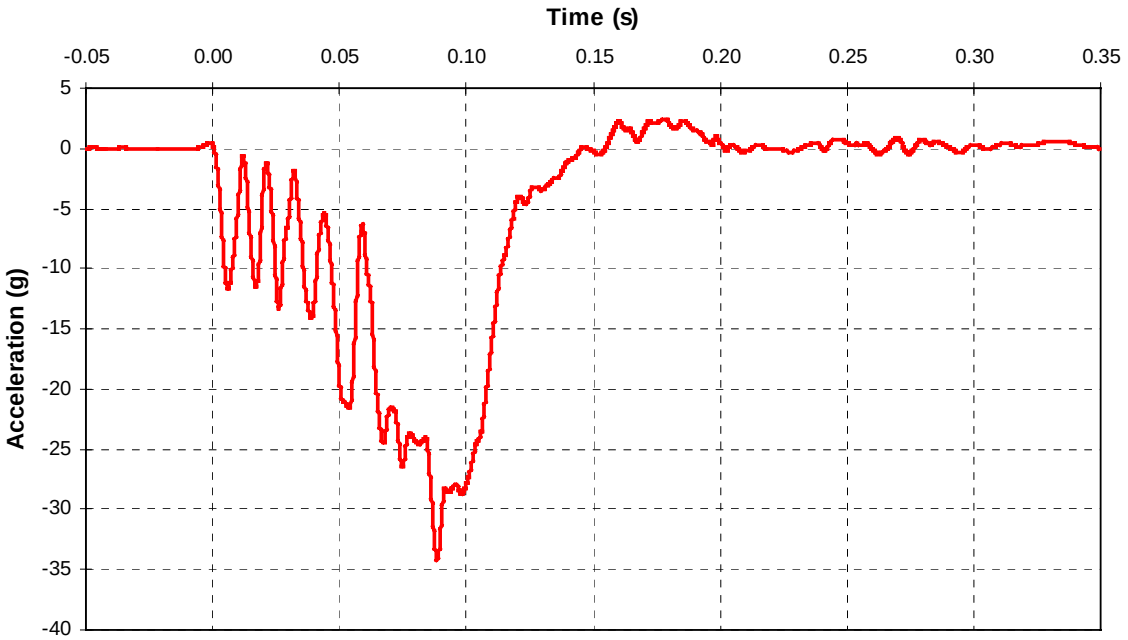
All distance measurements are in millimeters (mm).
* As measured from vertical on head restraint post.
** Dummy's neck bracket was adjusted to –5.3° to achieve a level instrumentation plane.
*** These measurements were made in a vertical plane containing the striker and parallel to the driver door sill.



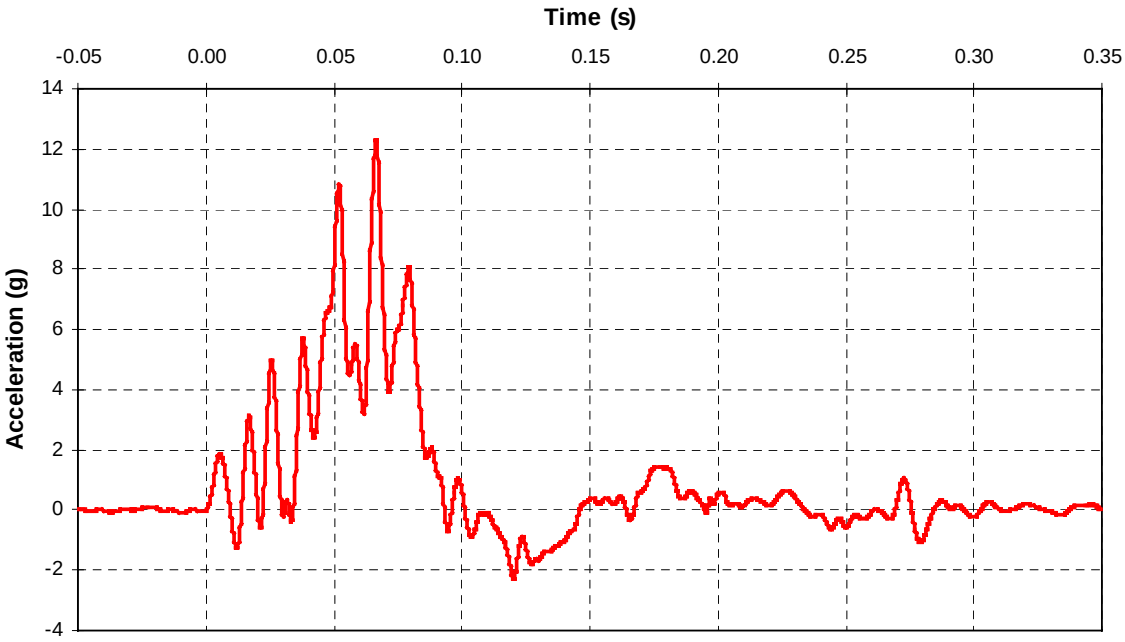
Graph Index

A-47 Right foot A-P acceleration
A-48 Right foot I-S acceleration

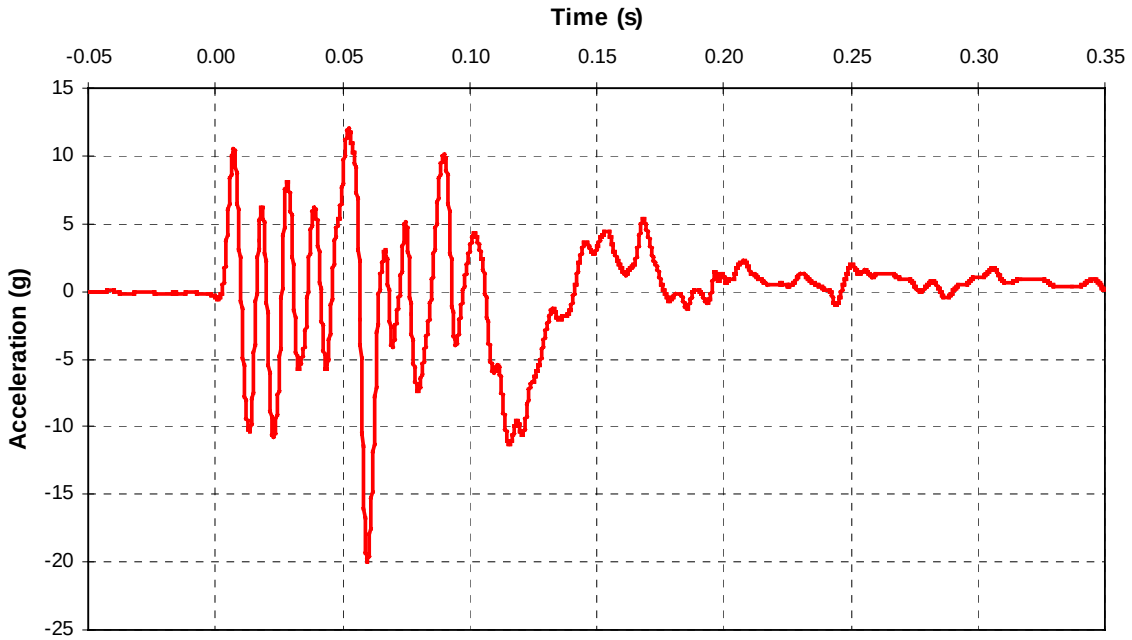
A- 1 CF00016 2000 Nissan Sentra Vehicle Longitudinal Acceleration



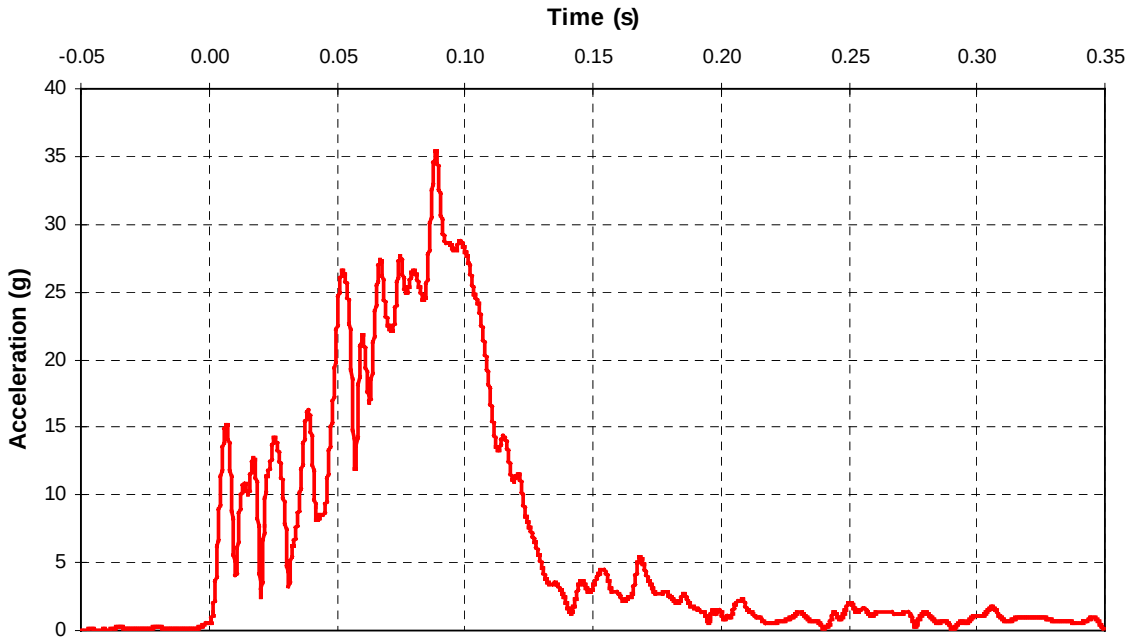
A- 2 CF00016 2000 Nissan Sentra Vehicle Lateral Acceleration



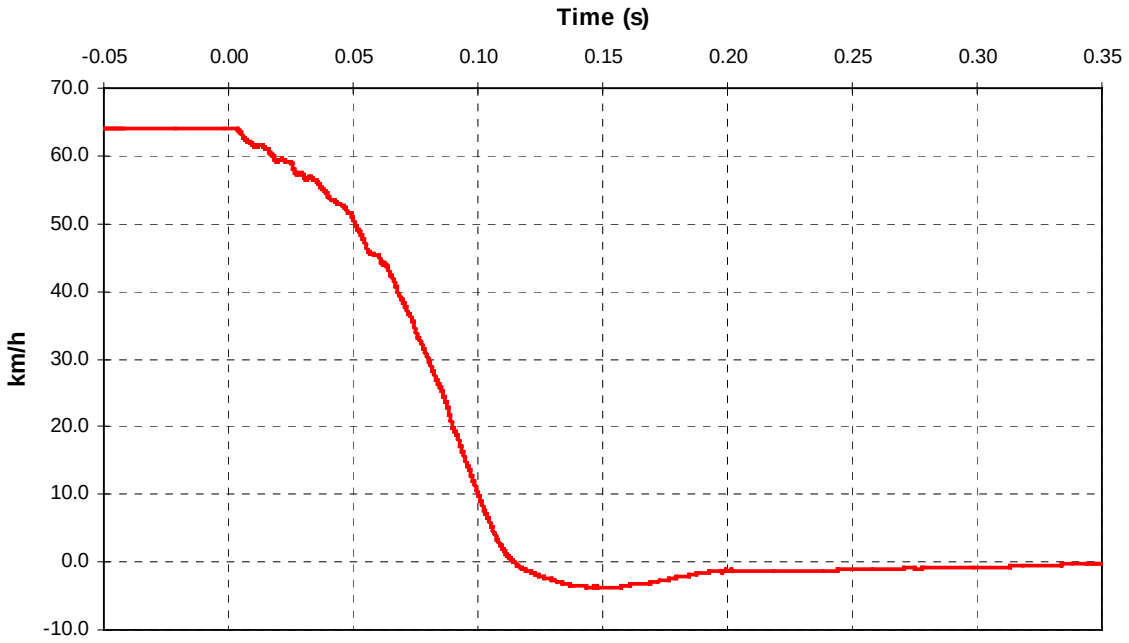
A- 3 CF00016 2000 Nissan Sentra Vehicle Vertical Acceleration



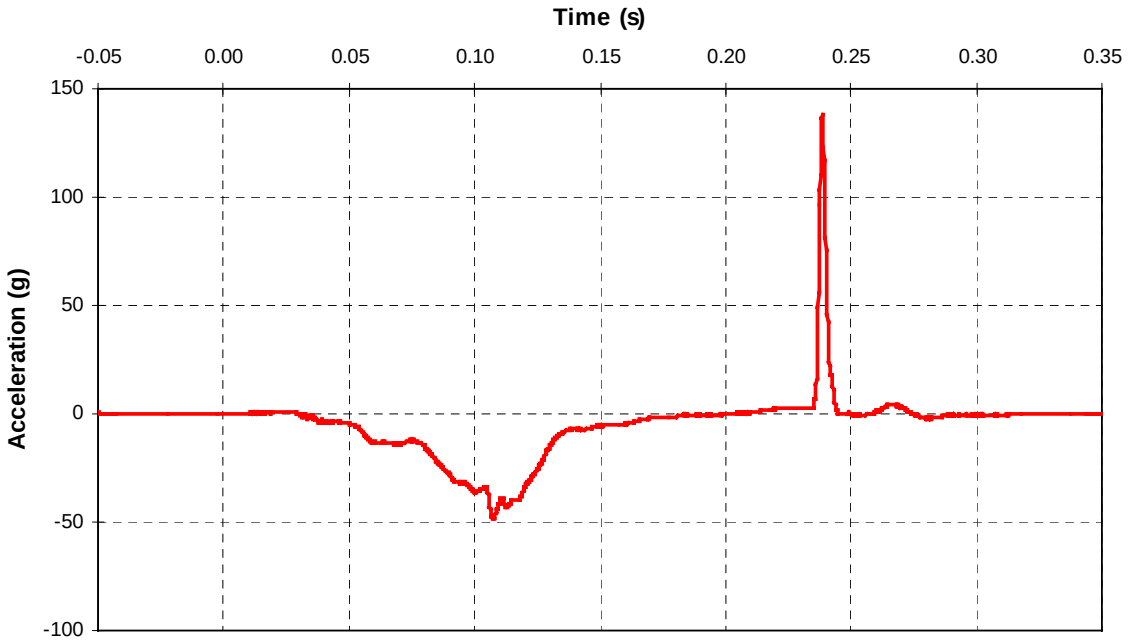
A- 4 CF00016 2000 Nissan Sentra Vehicle Vector Resultant Acceleration



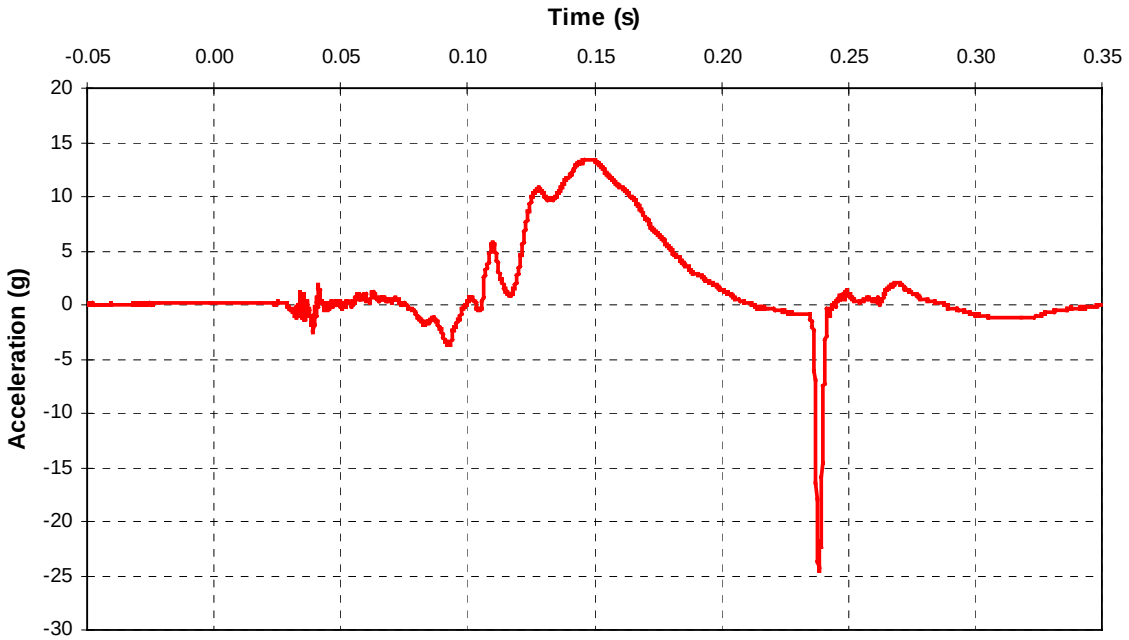
A- 5 CF00016 2000 Nissan Sentra Integration of Vehicle Longitudinal Acceleration



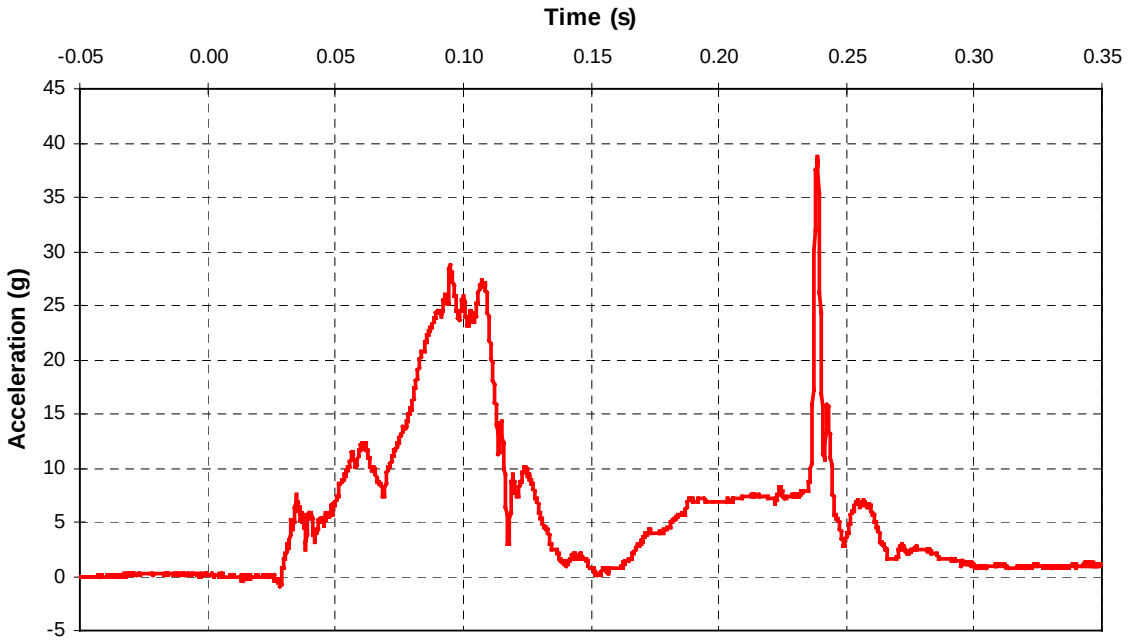
A- 6 CF00016 2000 Nissan Sentra Head A-P Acceleration



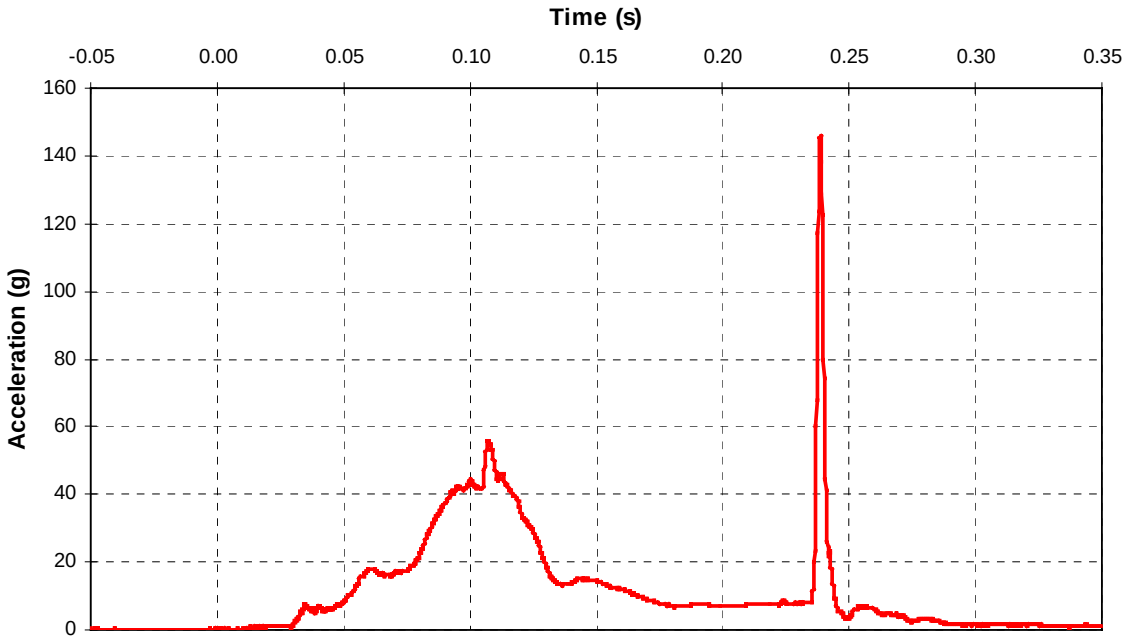
A- 7 CF00016 2000 Nissan Sentra Head L-M Acceleration



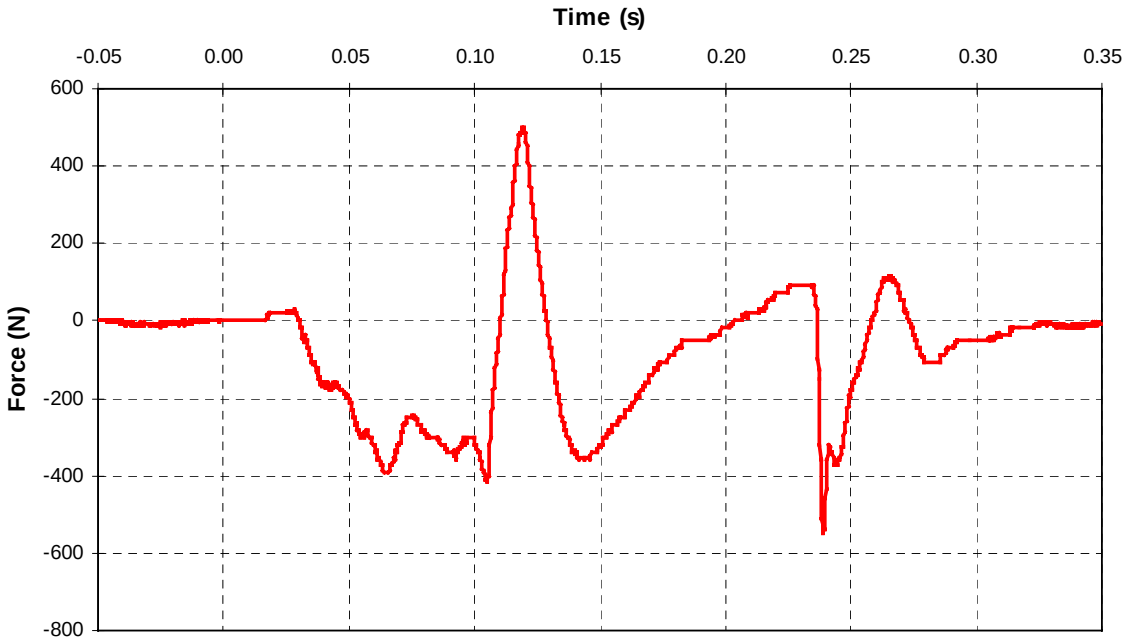
A- 8 CF00016 2000 Nissan Sentra Head I-S Acceleration



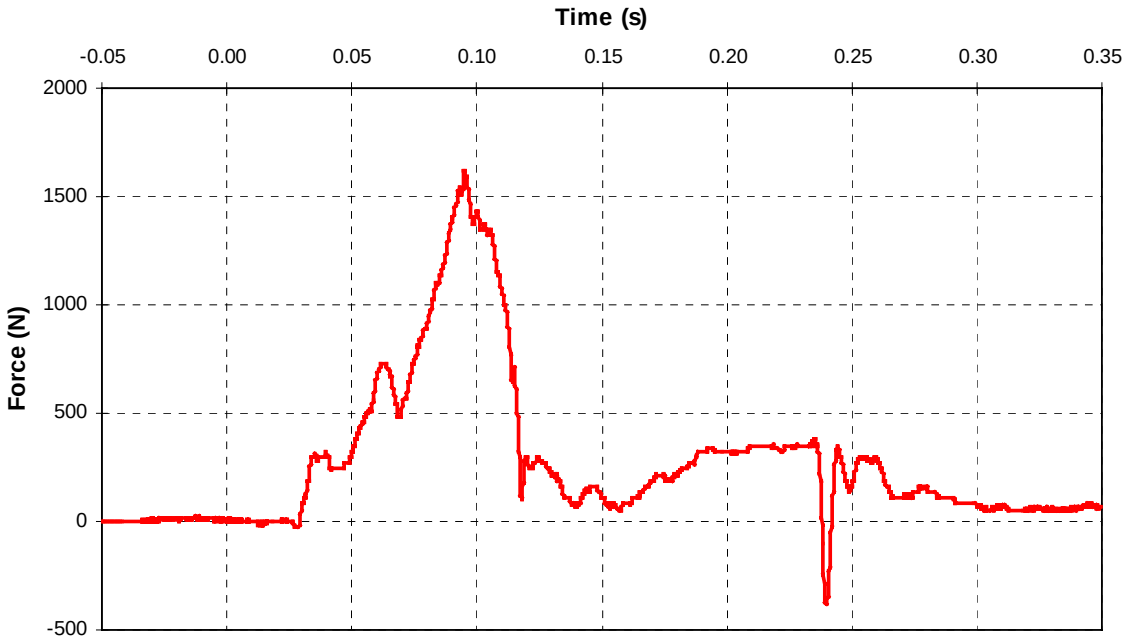
A- 9 CF00016 2000 Nissan Sentra Head Vector Resultant Acceleration



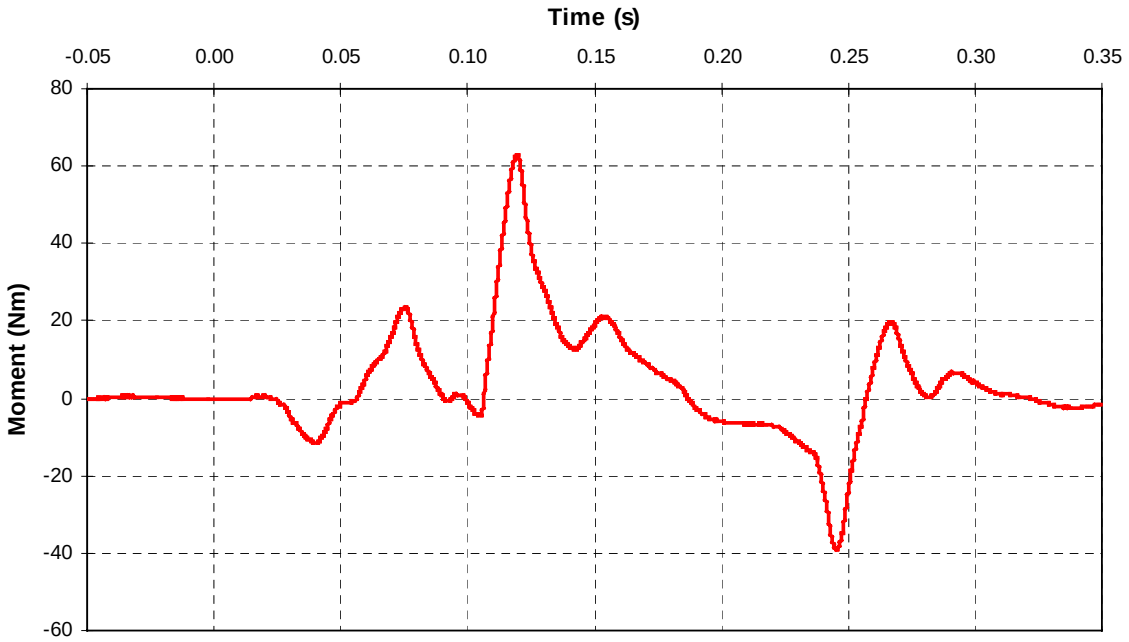
A- 10 CF00016 2000 Nissan Sentra Neck A-P Shear Force



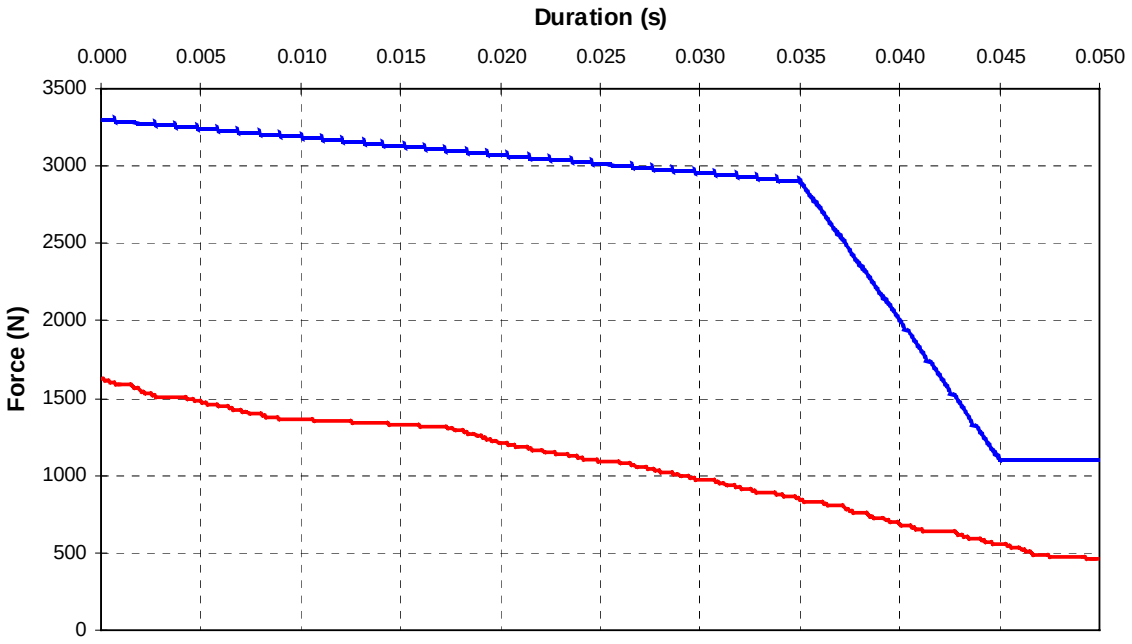
A- 11 CF00016 2000 Nissan Sentra Neck Axial Force



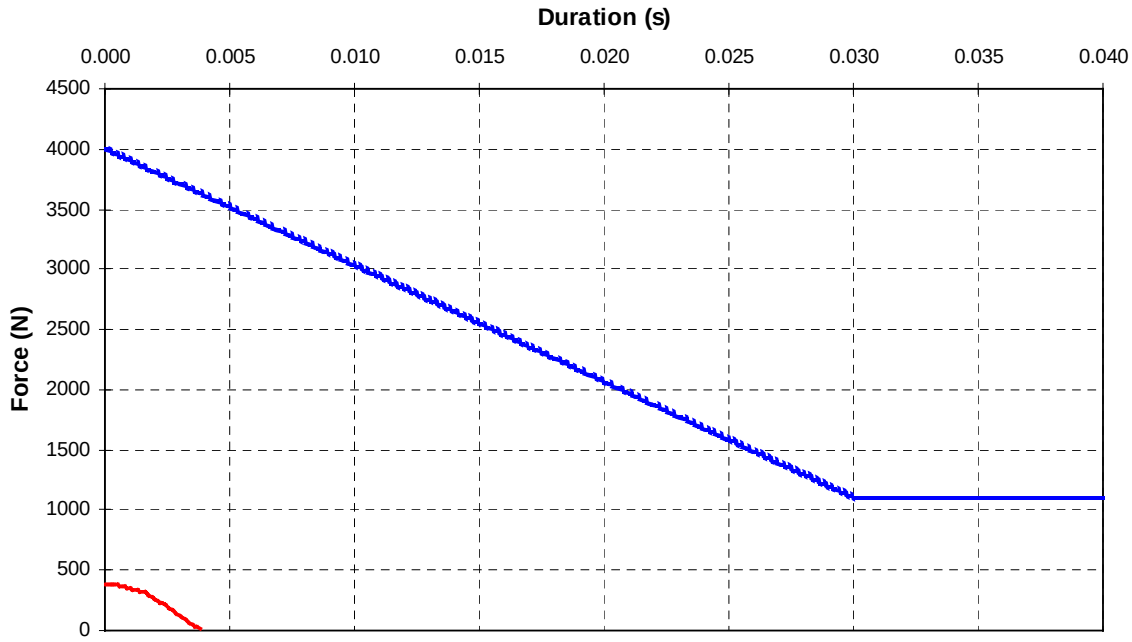
A- 12 CF00016 2000 Nissan Sentra Neck Occipital A-P Moment



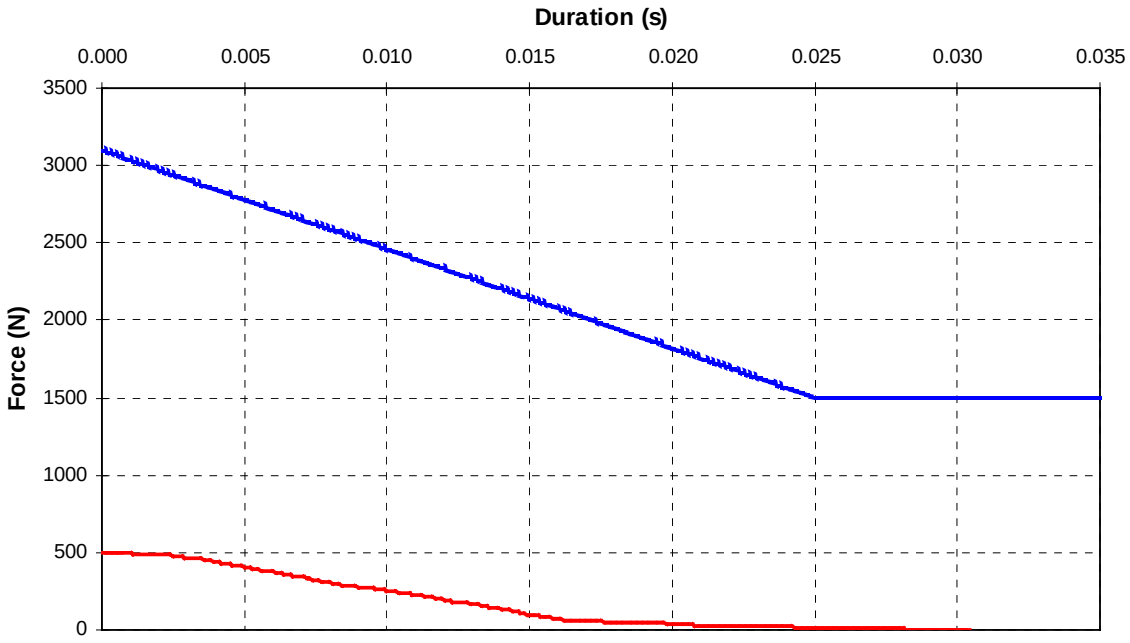
A- 13 CF00016 2000 Nissan Sentra Neck Tension Analysis



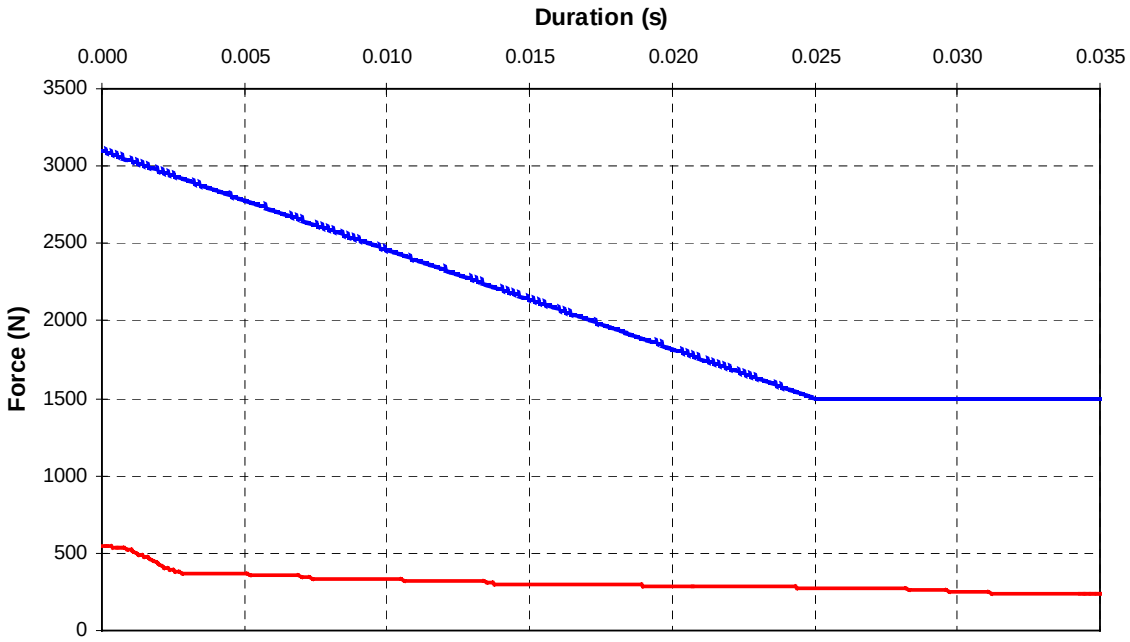
A- 14 CF00016 2000 Nissan Sentra Neck Compression Analysis



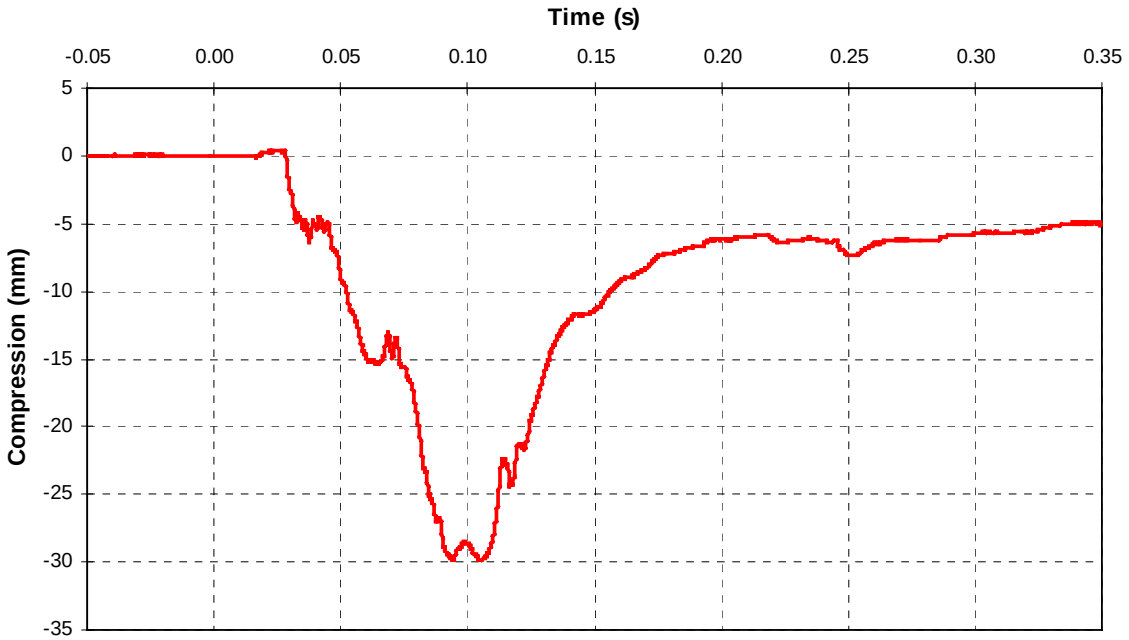
A- 15 CF00016 2000 Nissan Sentra Neck A-P Shear (Positive) Analysis



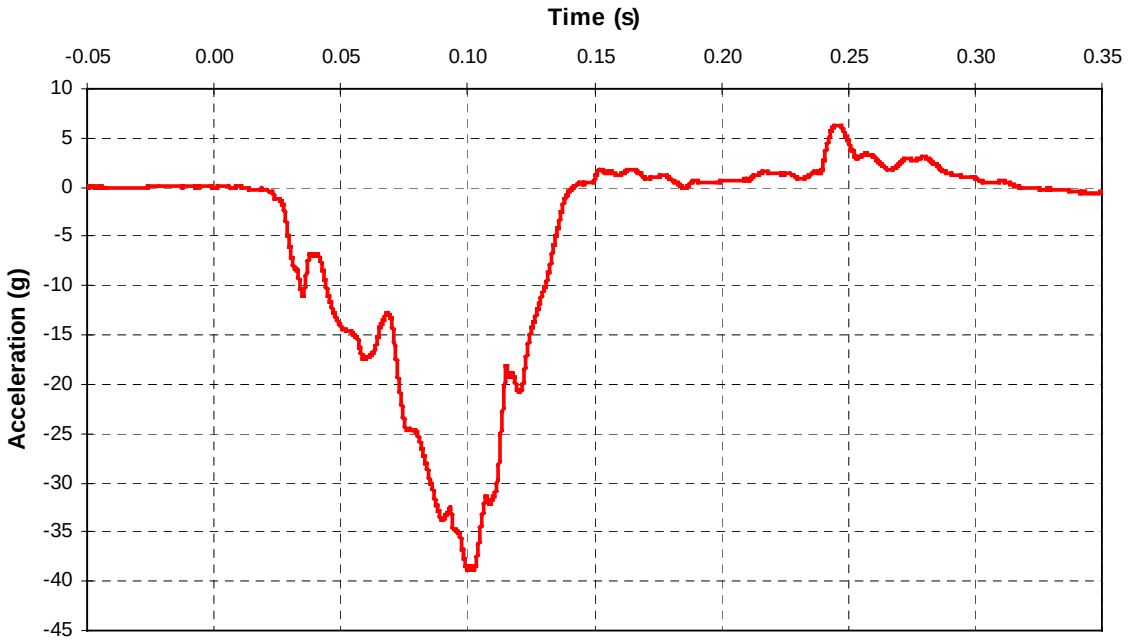
A- 16 CF00016 2000 Nissan Sentra Neck A-P Shear (Negative) Analysis



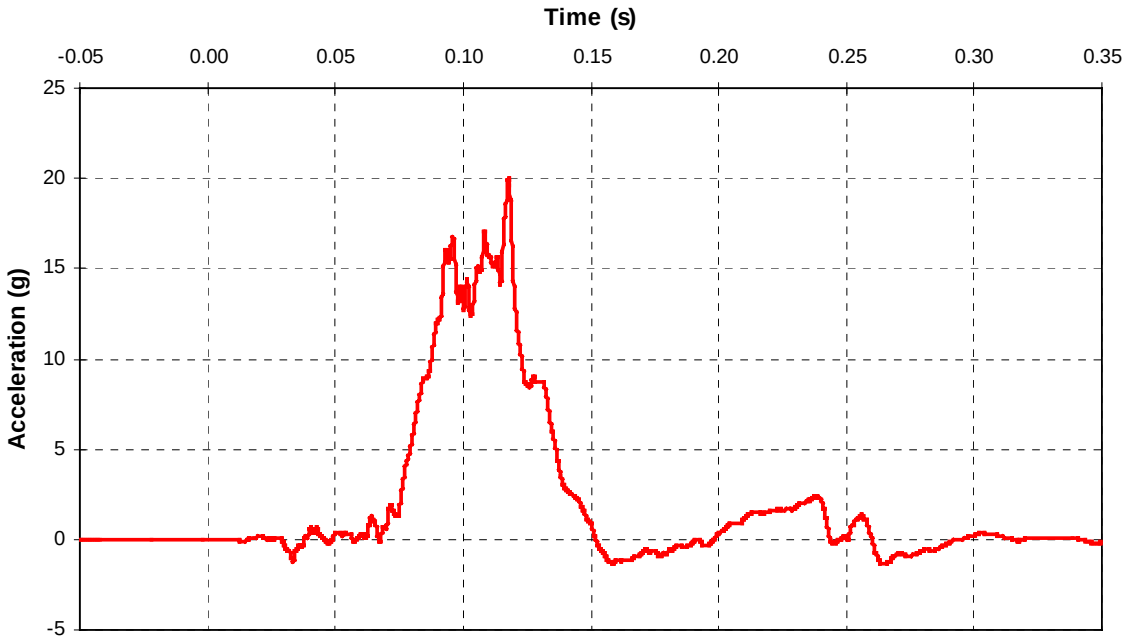
A- 17 CF00016 2000 Nissan Sentra Chest Compression



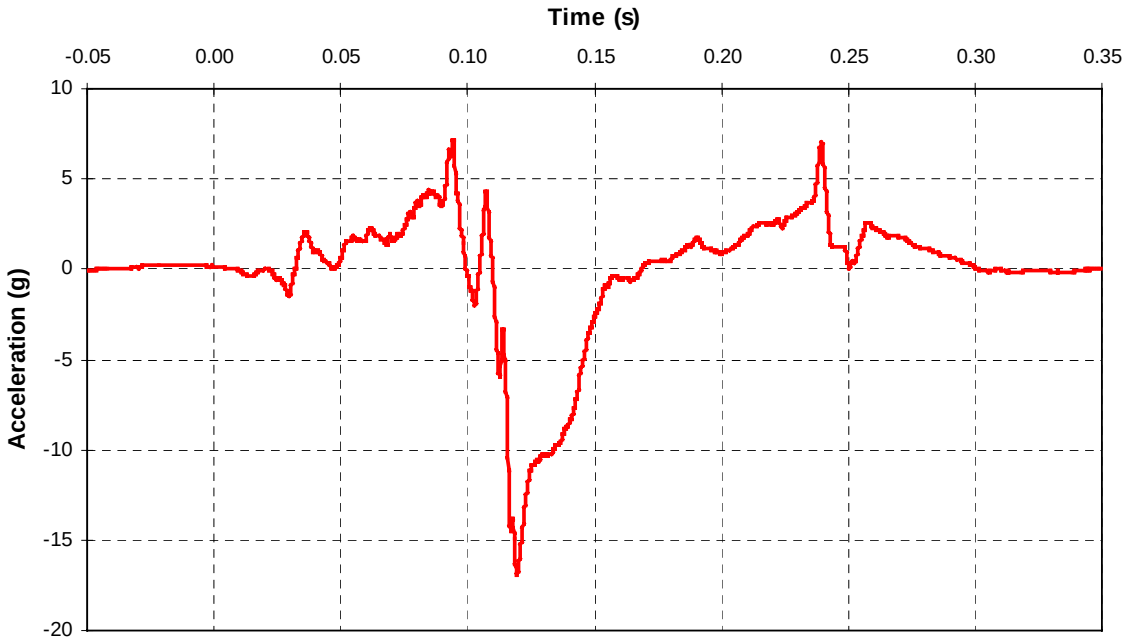
A- 18 CF00016 2000 Nissan Sentra Chest A-P Acceleration



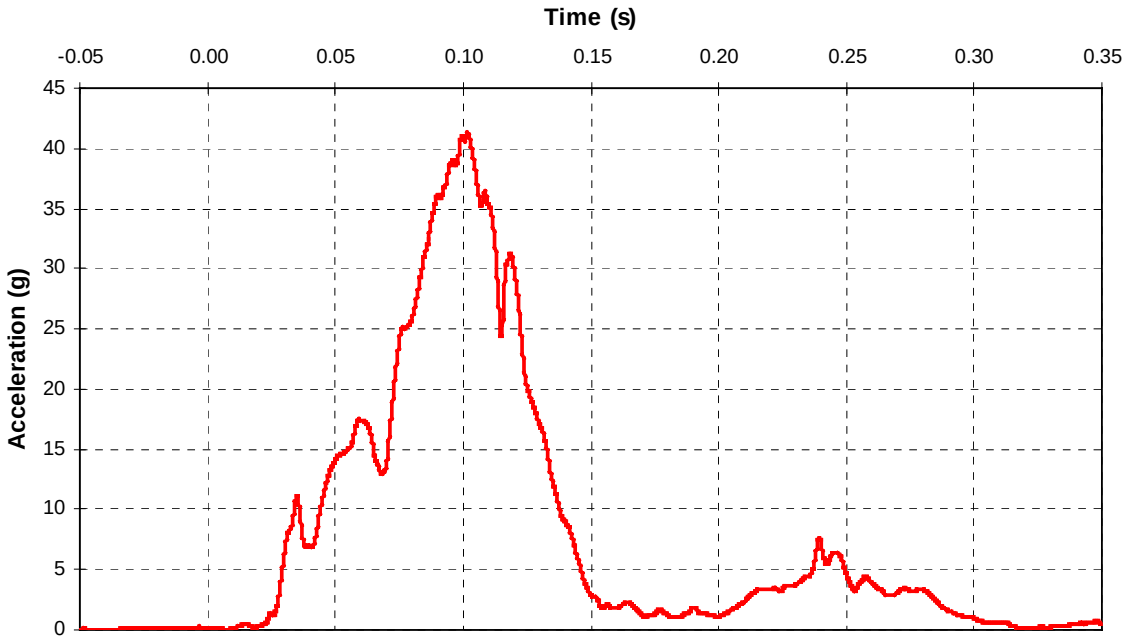
A- 19 CF00016 2000 Nissan Sentra Chest L-M Acceleration



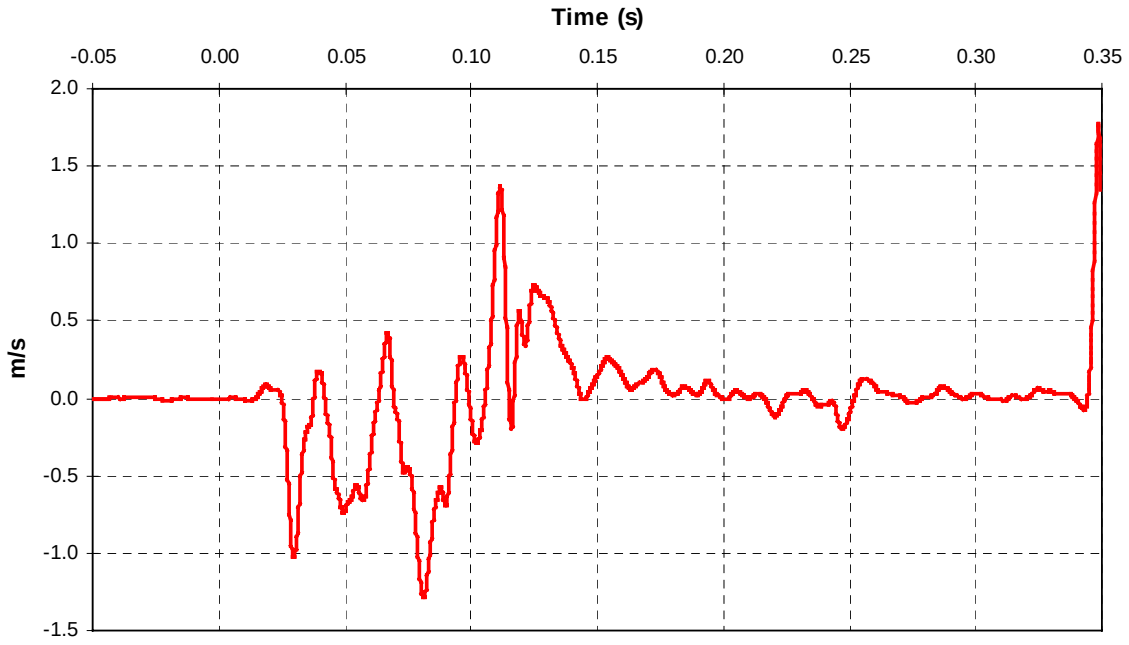
A- 20 CF00016 2000 Nissan Sentra Chest I-S Acceleration



A- 21 CF00016 2000 Nissan Sentra Chest Vector Resultant Acceleration

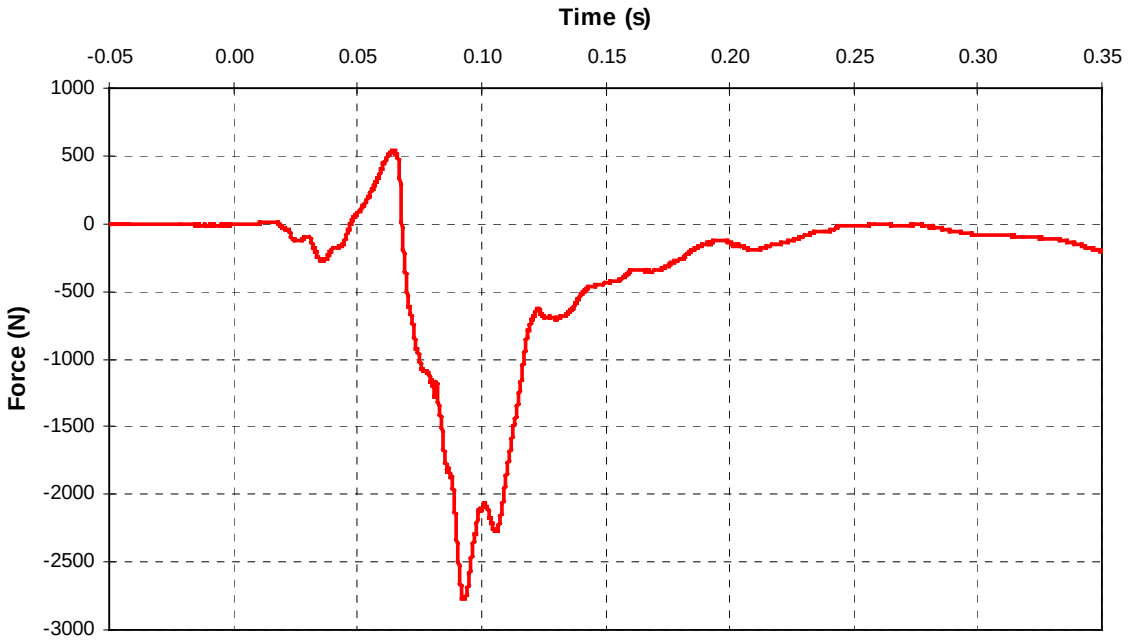


A- 22 CF00016 2000 Nissan Sentra Sternum Deflection Rate

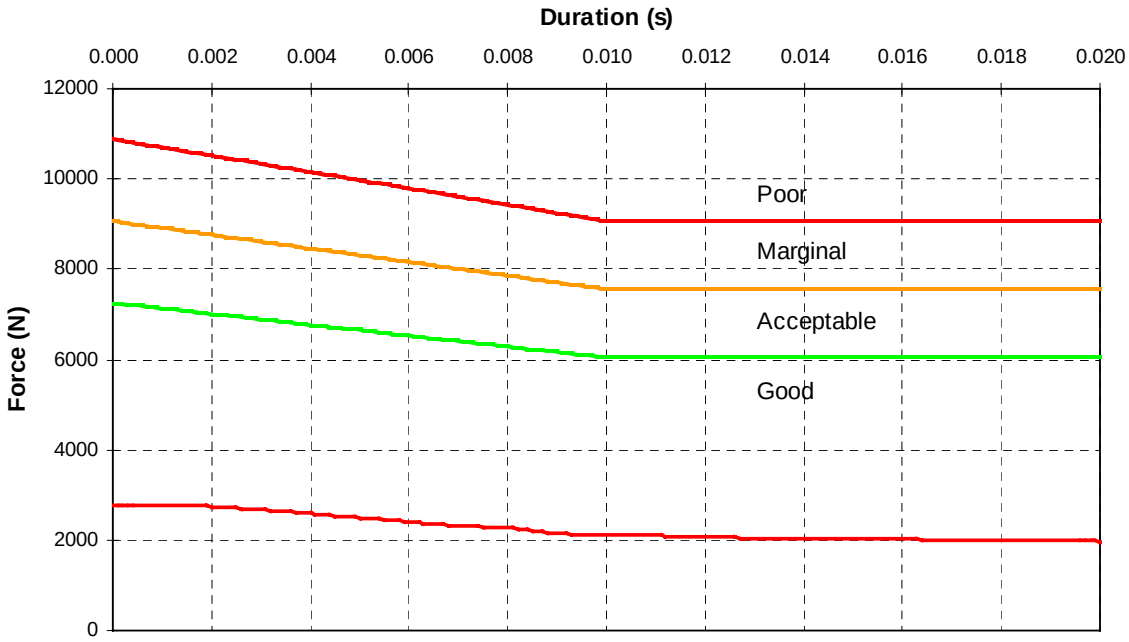


Sternum deflection rate is calculated from the sternum deflection filtered to CFC 60

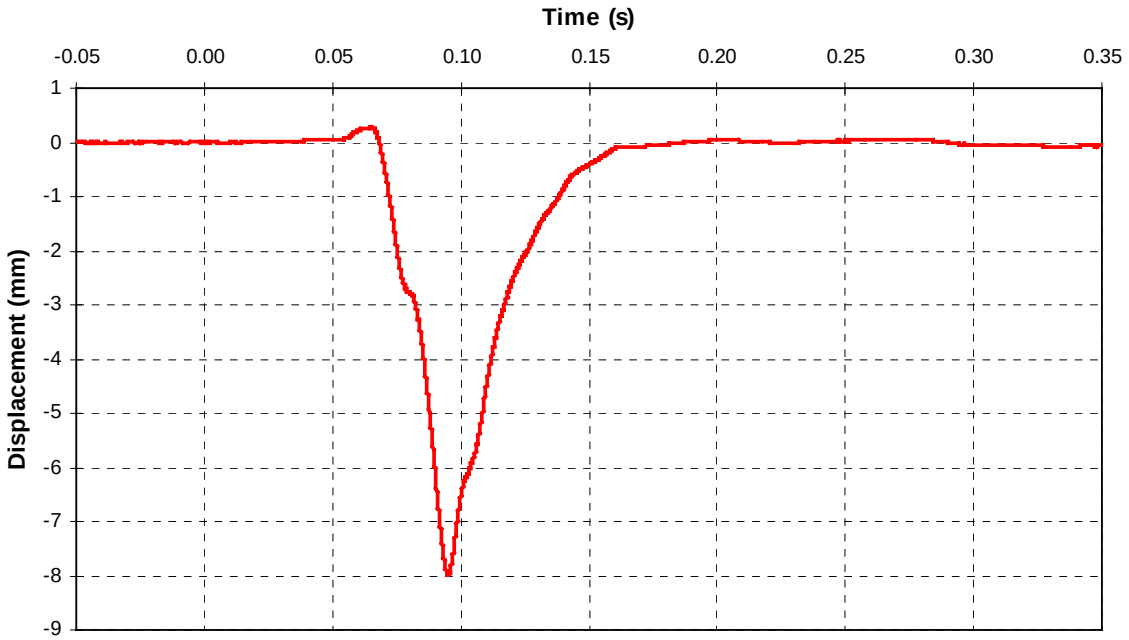
A- 23 CF00016 2000 Nissan Sentra Left Femur Axial Force



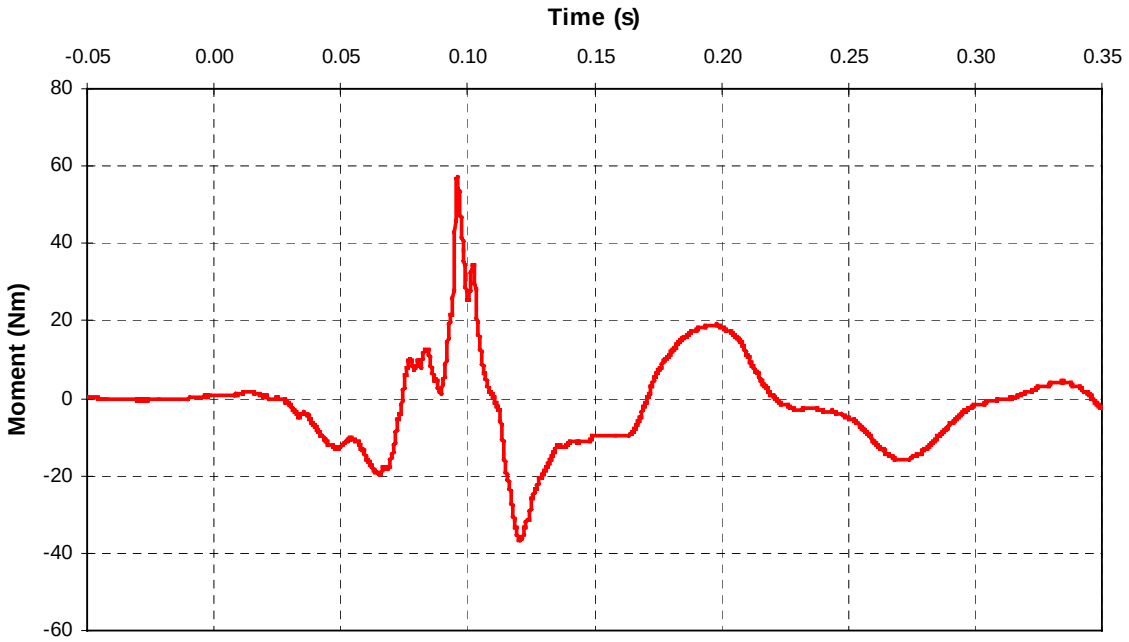
A- 24 CF00016 2000 Nissan Sentra Left Femur Axial Force Analysis



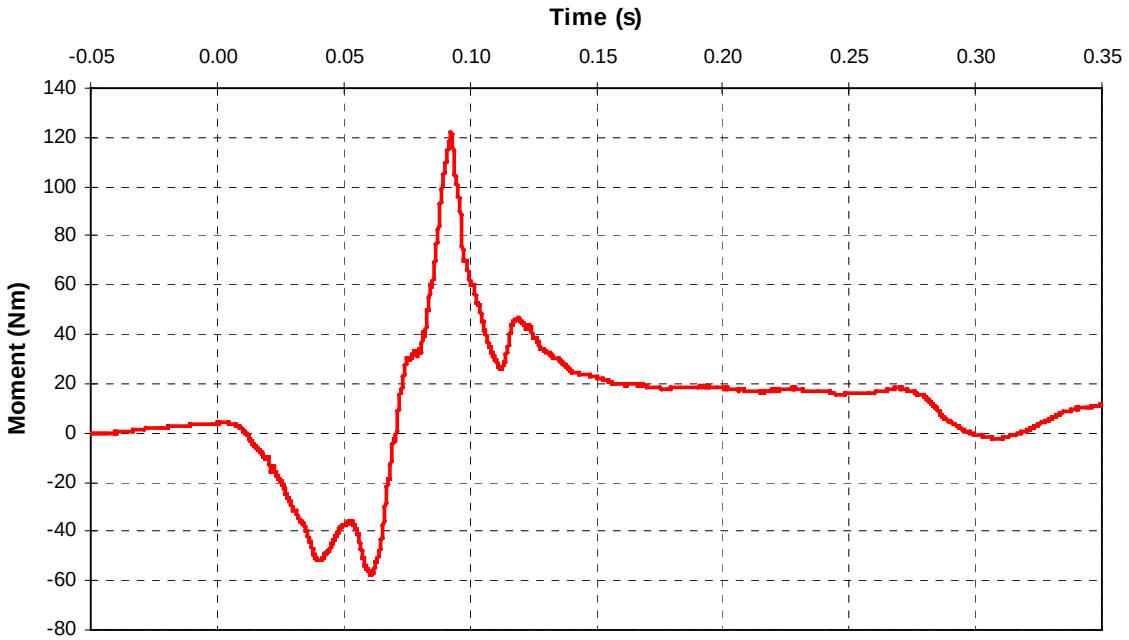
A- 25 CF00016 2000 Nissan Sentra Left Tibia-Femur Displacement



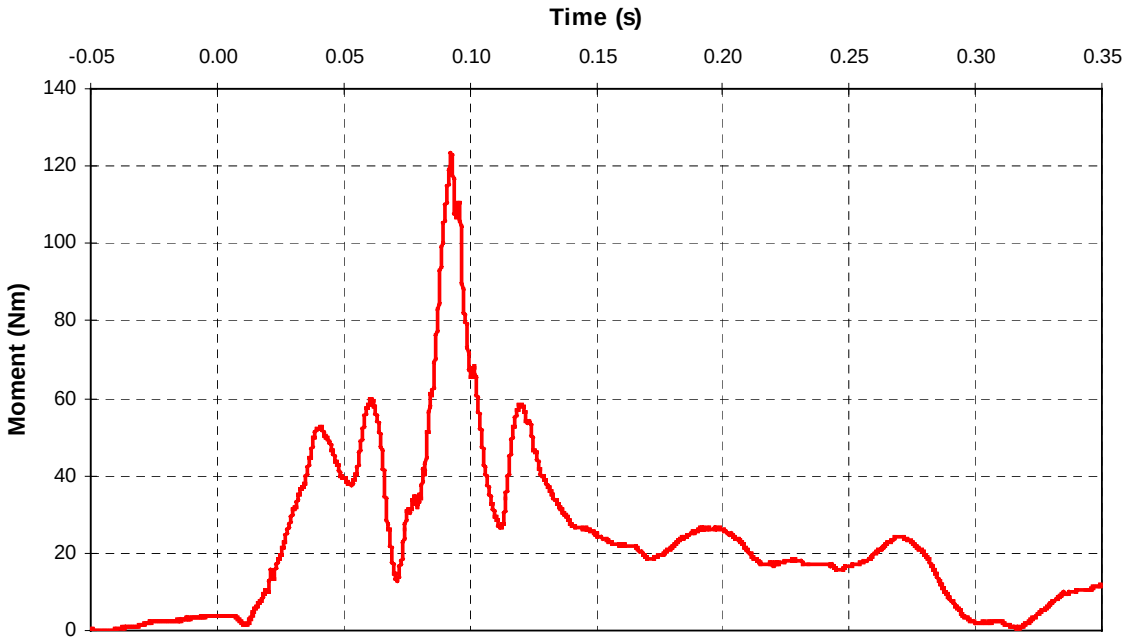
A- 26 CF00016 2000 Nissan Sentra Left Upper Tibia L-M Moment



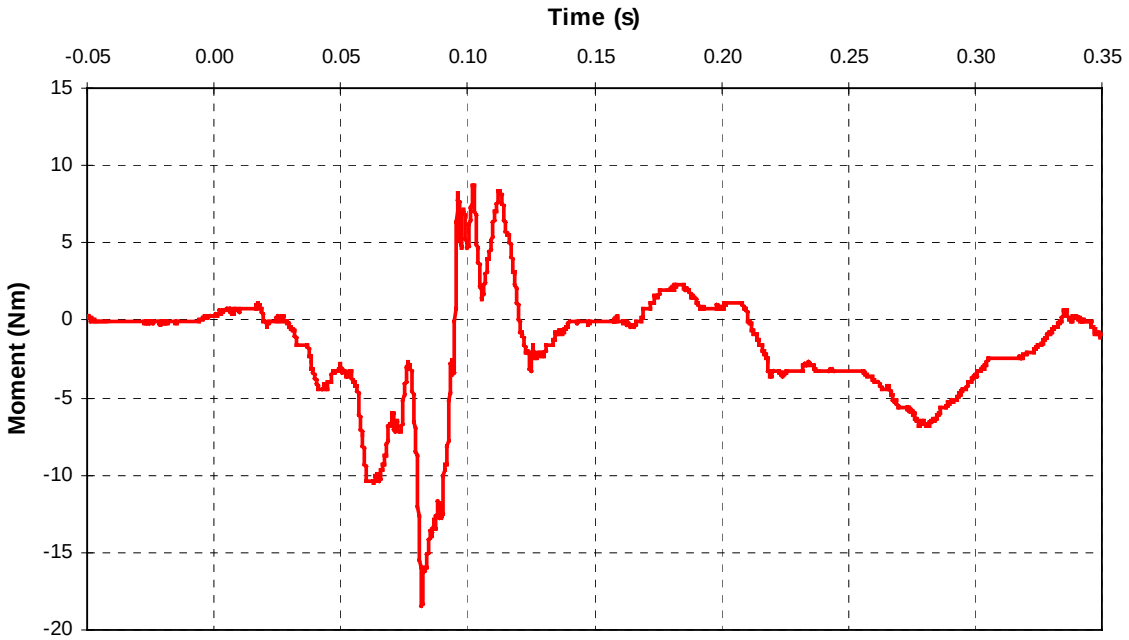
A- 27 CF00016 2000 Nissan Sentra Left Upper Tibia A-P Moment



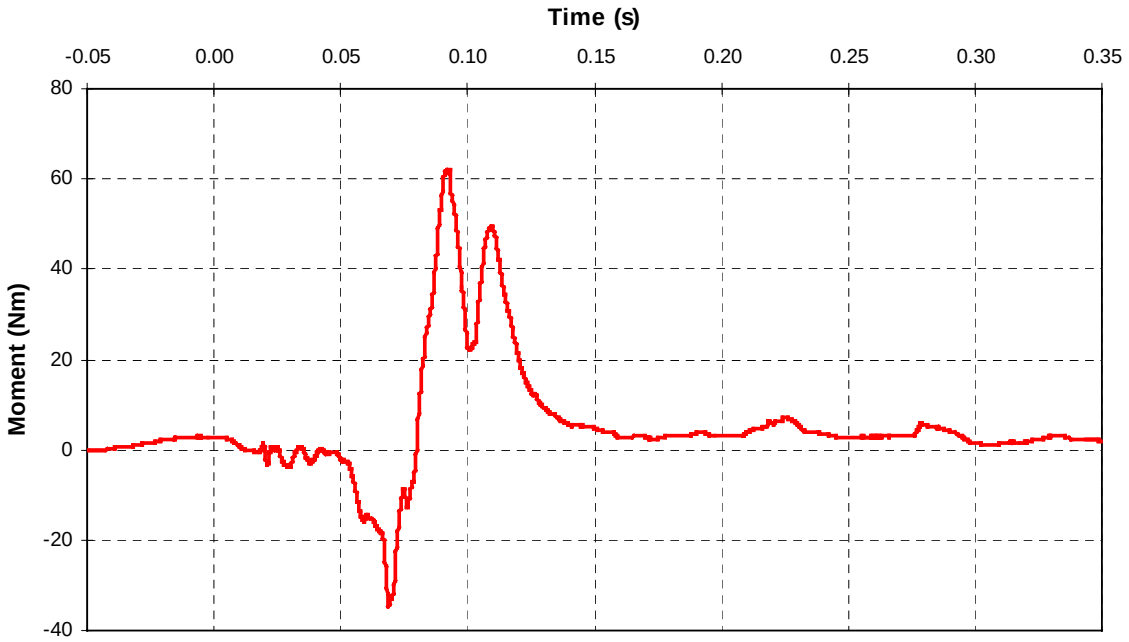
A- 28 CF00016 2000 Nissan Sentra Left Upper Tibia Vector Resultant Moment



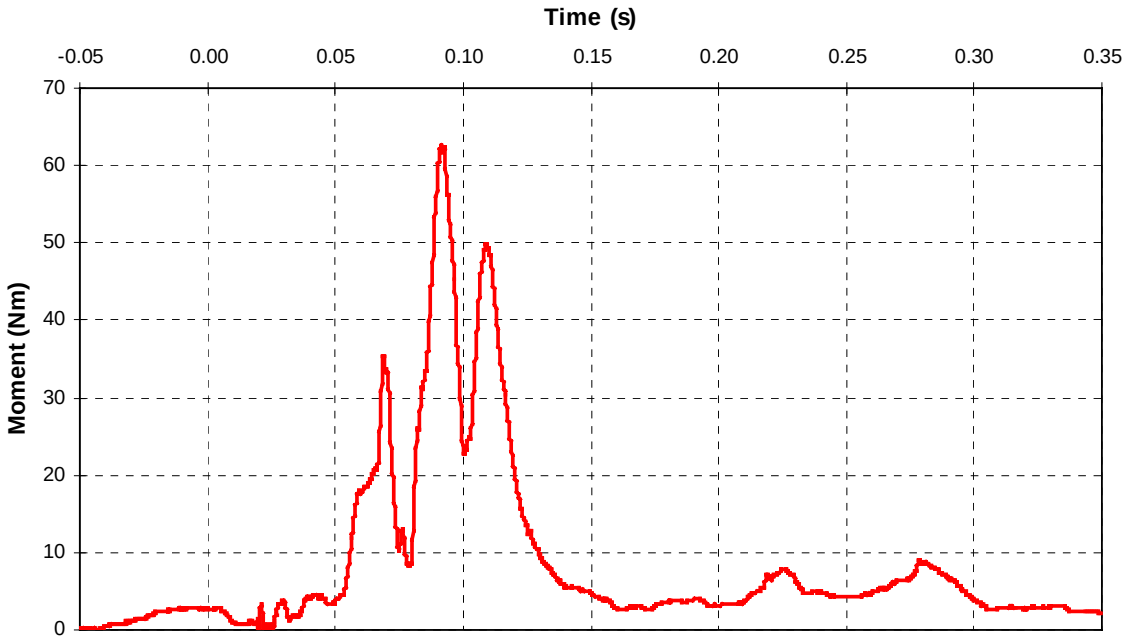
A- 29 CF00016 2000 Nissan Sentra Left Lower Tibia L-M Moment



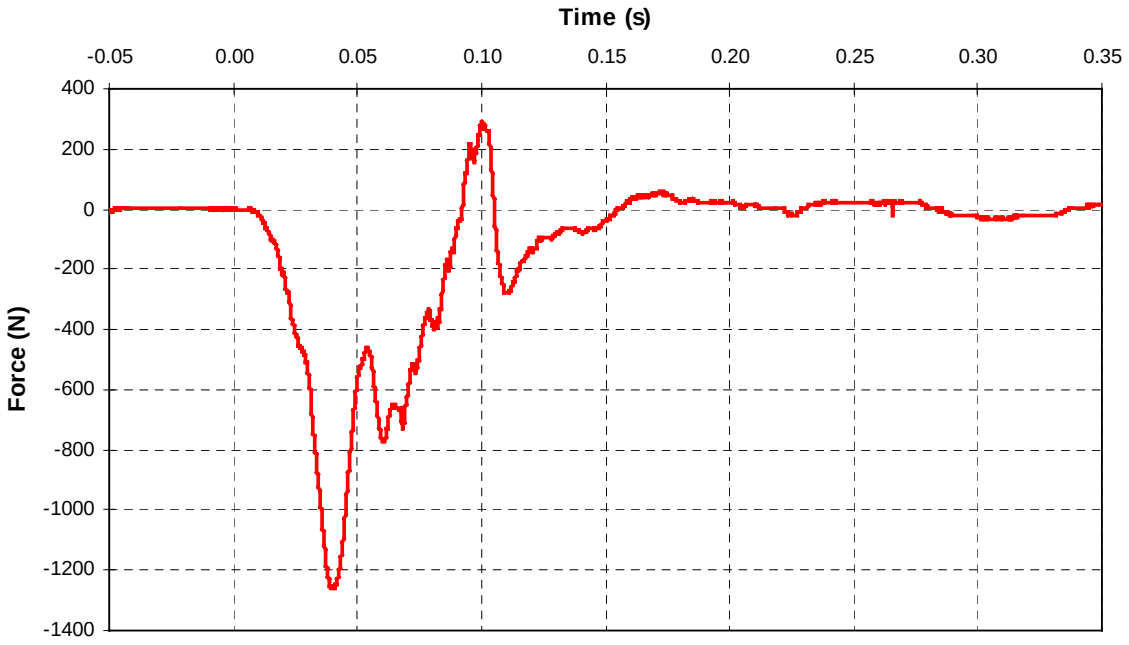
A- 30 CF00016 2000 Nissan Sentra Left Lower Tibia A-P Moment



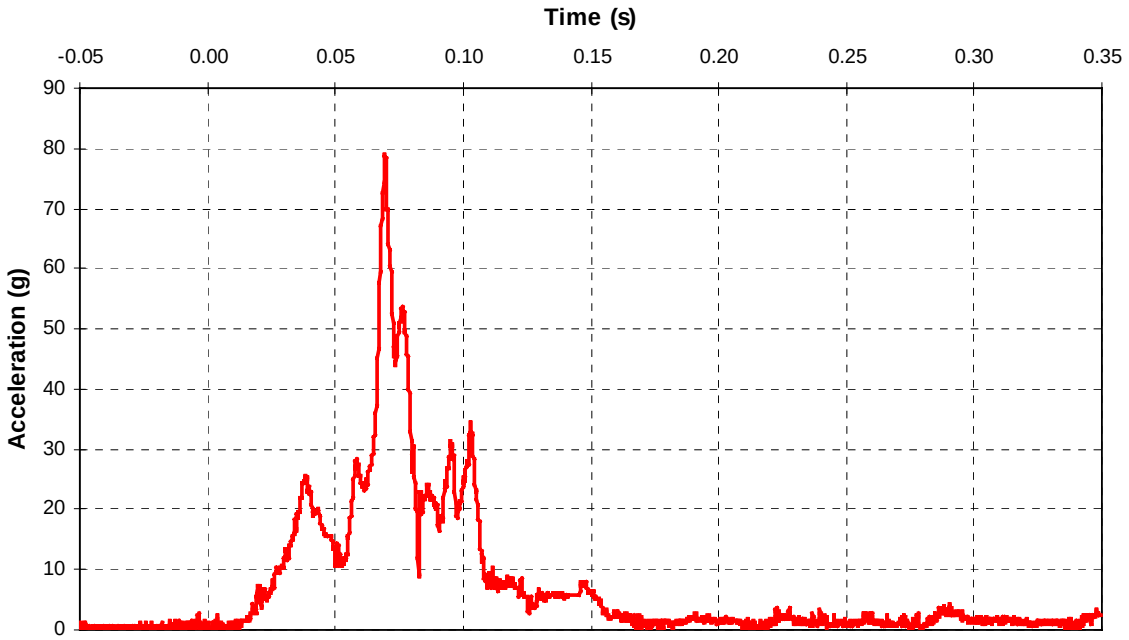
A- 31 CF00016 2000 Nissan Sentra Left Lower Tibia Vector Resultant Moment



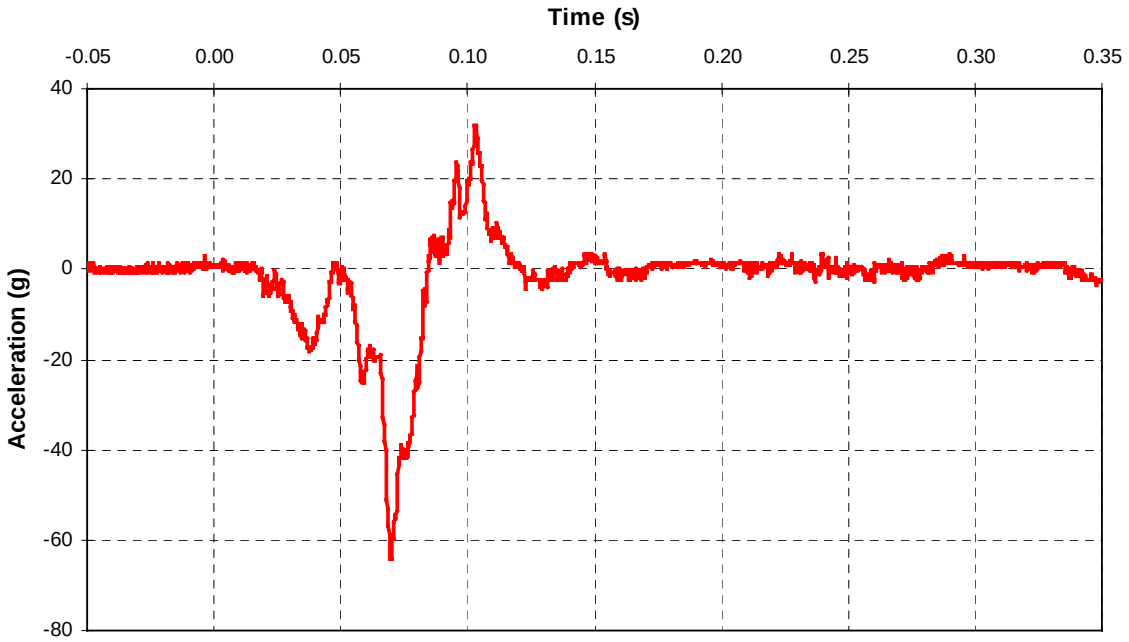
A- 32 CF00016 2000 Nissan Sentra Left Lower Tibia Axial Force



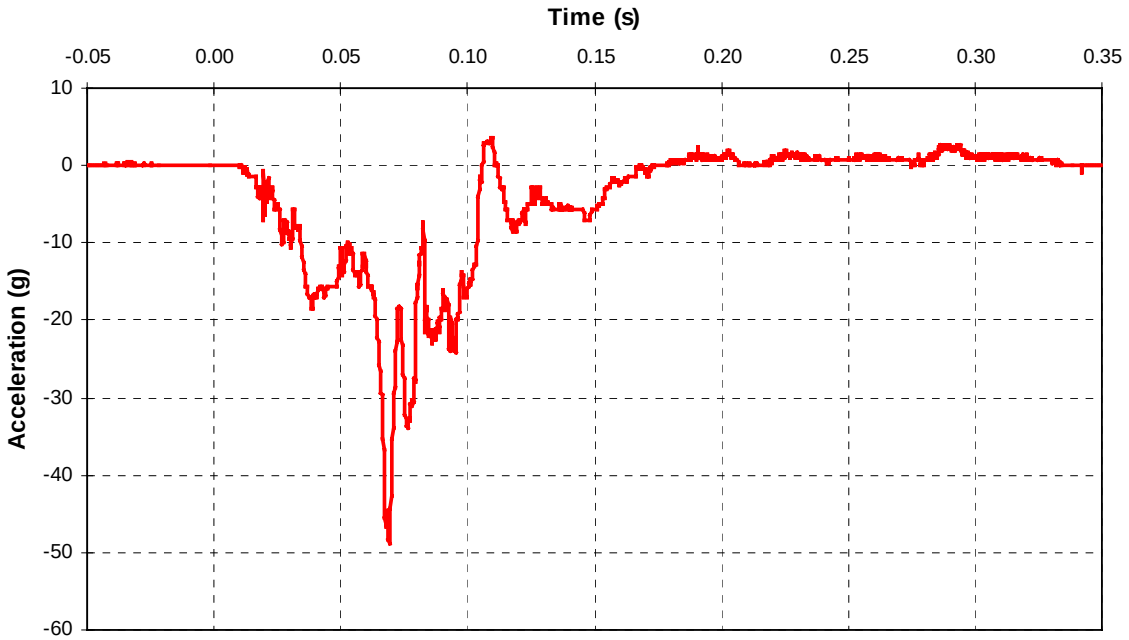
A- 33 CF00016 2000 Nissan Sentra Left Foot Vector Resultant Acceleration



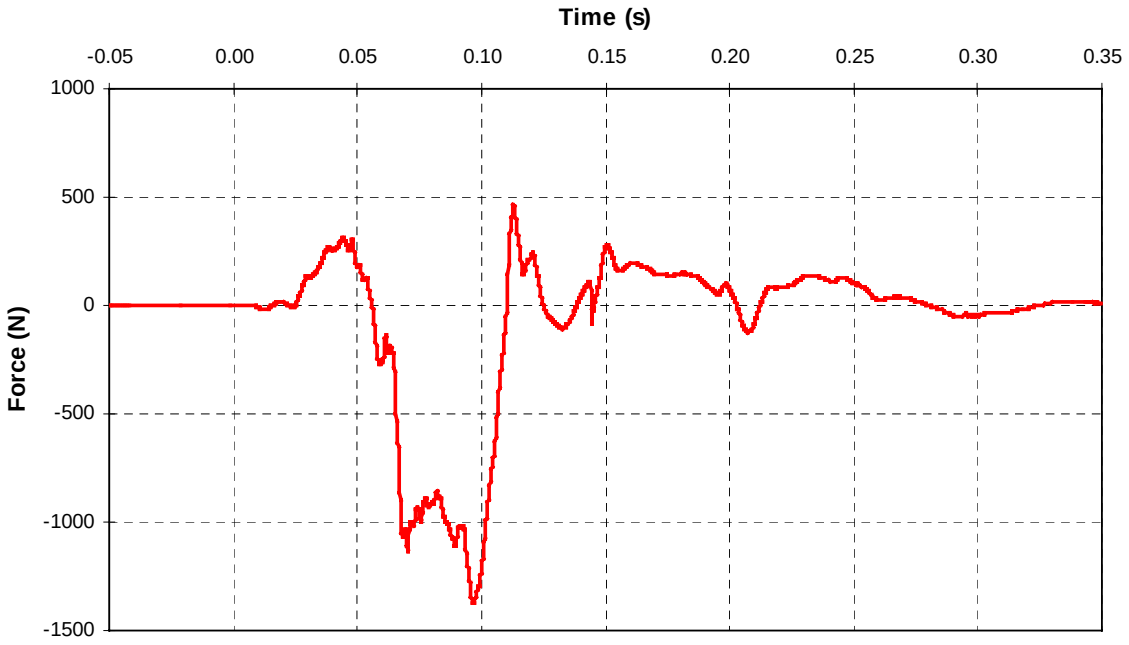
A- 34 CF00016 2000 Nissan Sentra Left Foot A-P Acceleration



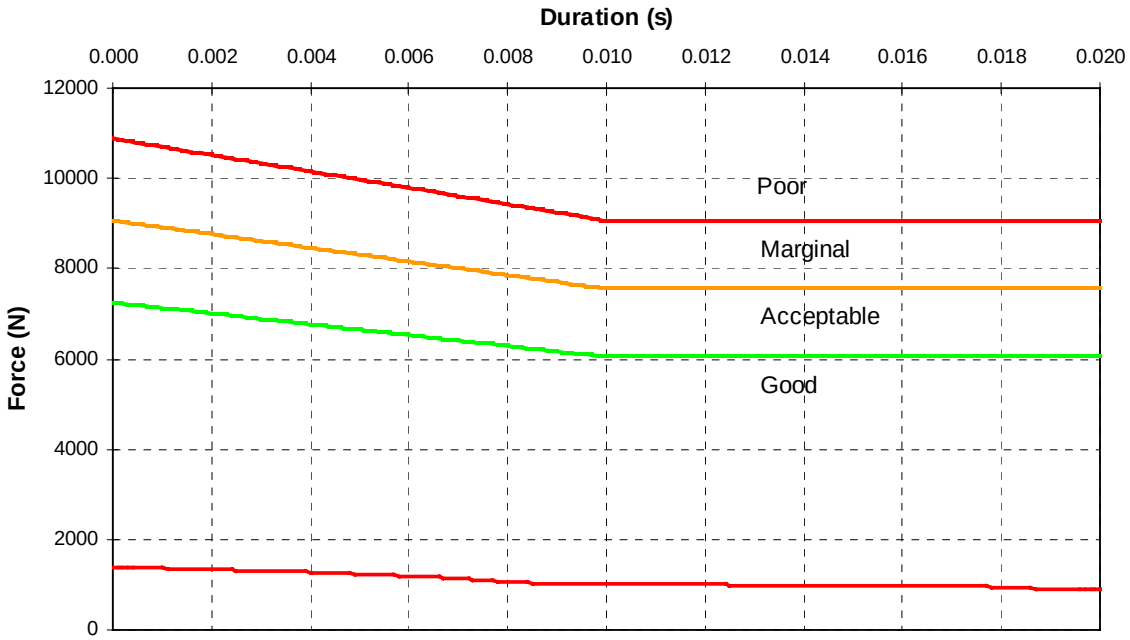
A- 35 CF00016 2000 Nissan Sentra Left Foot I-S Acceleration



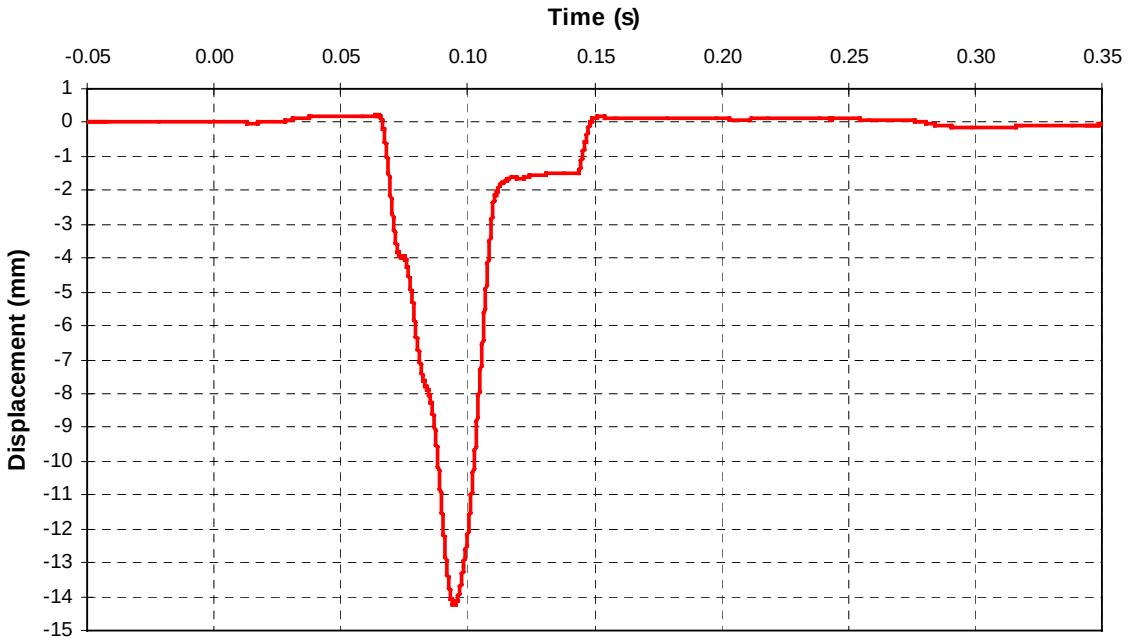
A- 36 CF00016 2000 Nissan Sentra Right Femur Axial Force



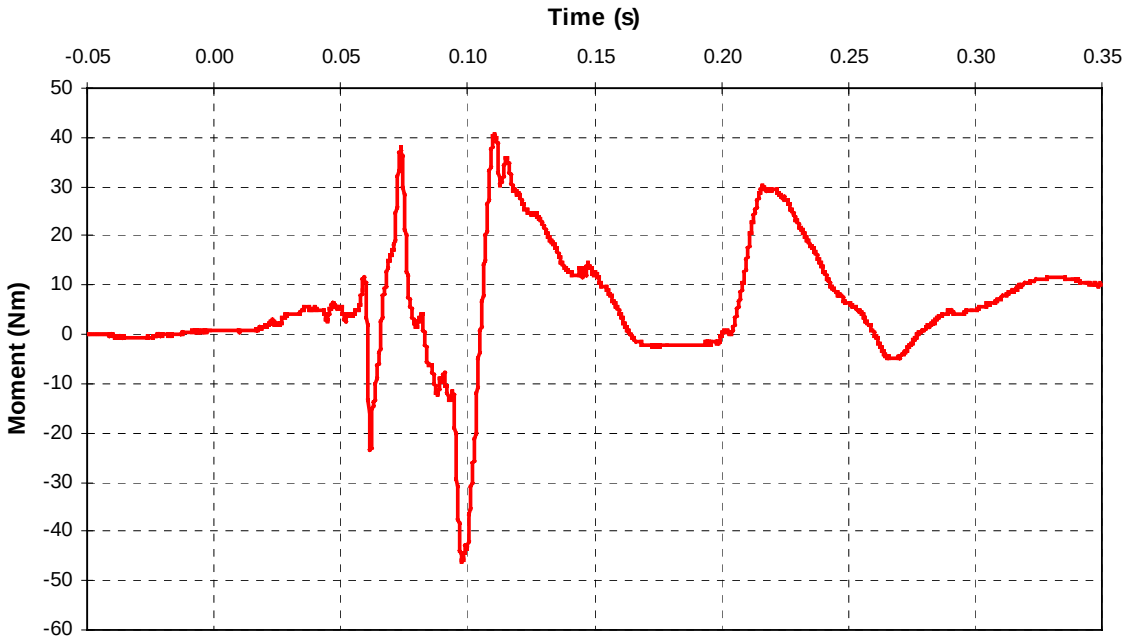
A- 37 CF00016 2000 Nissan Sentra Right Femur Axial Force Analysis



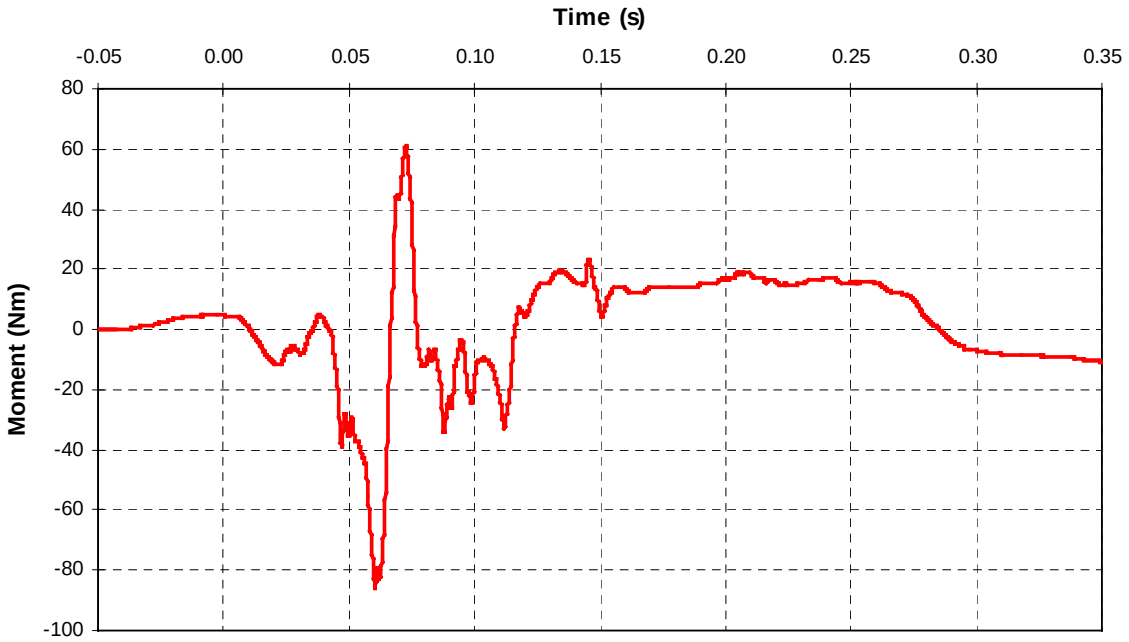
A- 38 CF00016 2000 Nissan Sentra Right Tibia-Femur Displacement



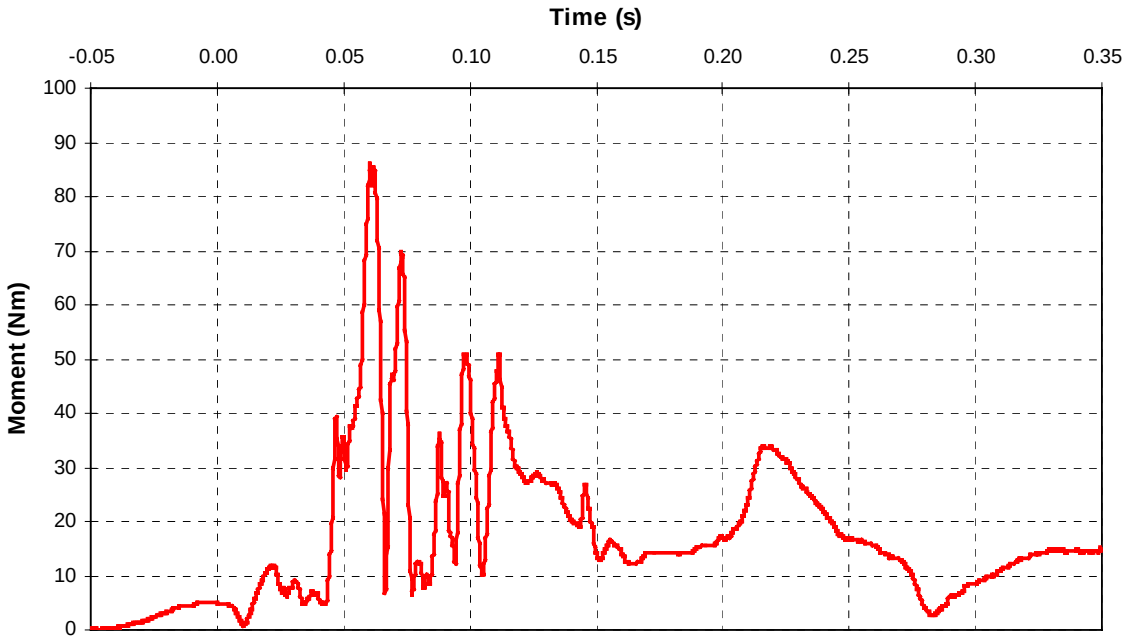
A- 39 CF00016 2000 Nissan Sentra Right Upper Tibia L-M Moment



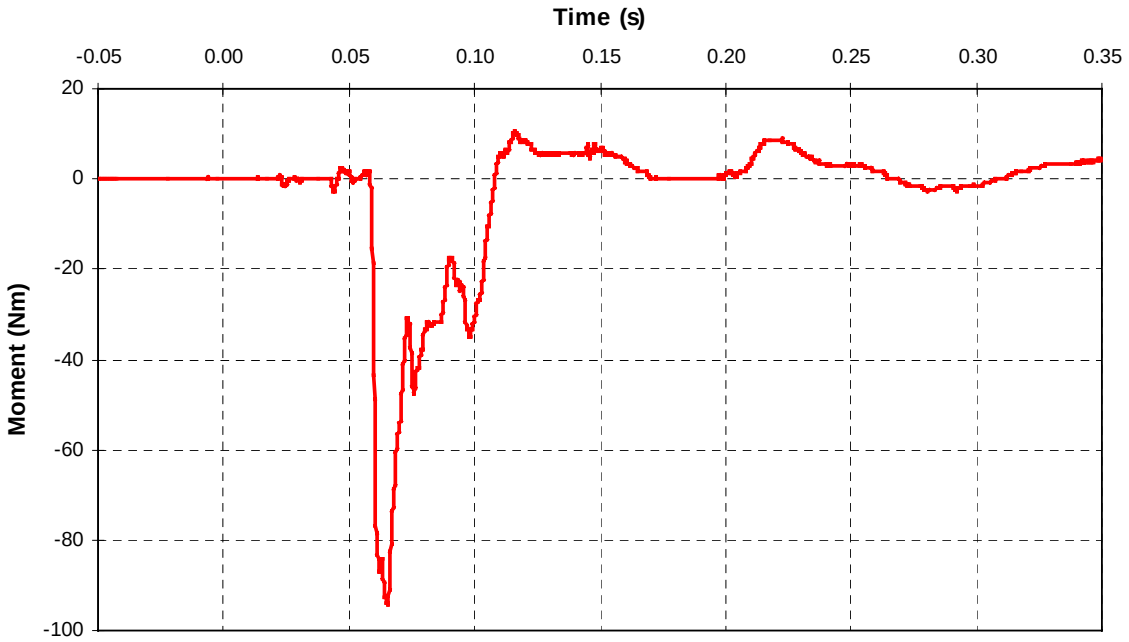
A- 40 CF00016 2000 Nissan Sentra Right Upper Tibia A-P Moment



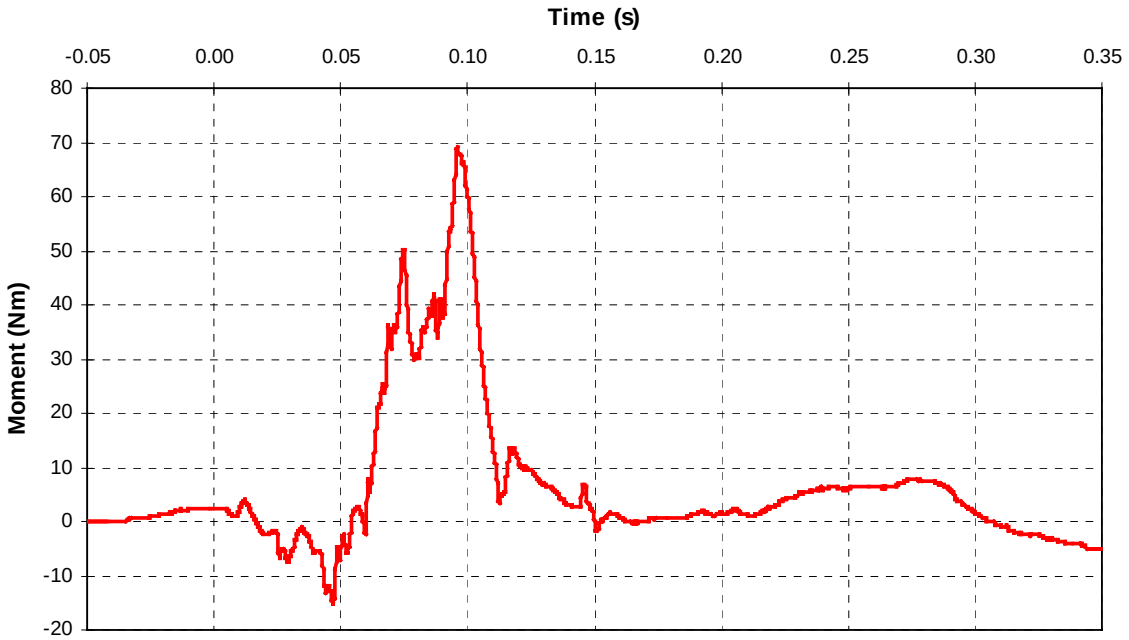
A- 41 CF00016 2000 Nissan Sentra Right Upper Tibia Vector Resultant Moment



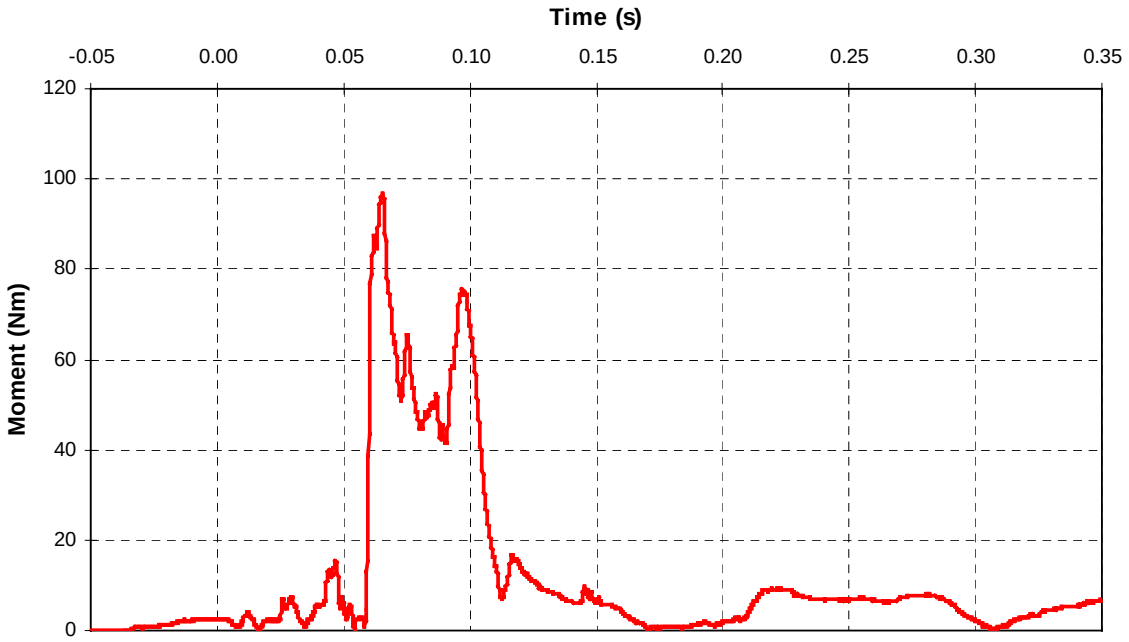
A- 42 CF00016 2000 Nissan Sentra Right Lower Tibia L-M Moment



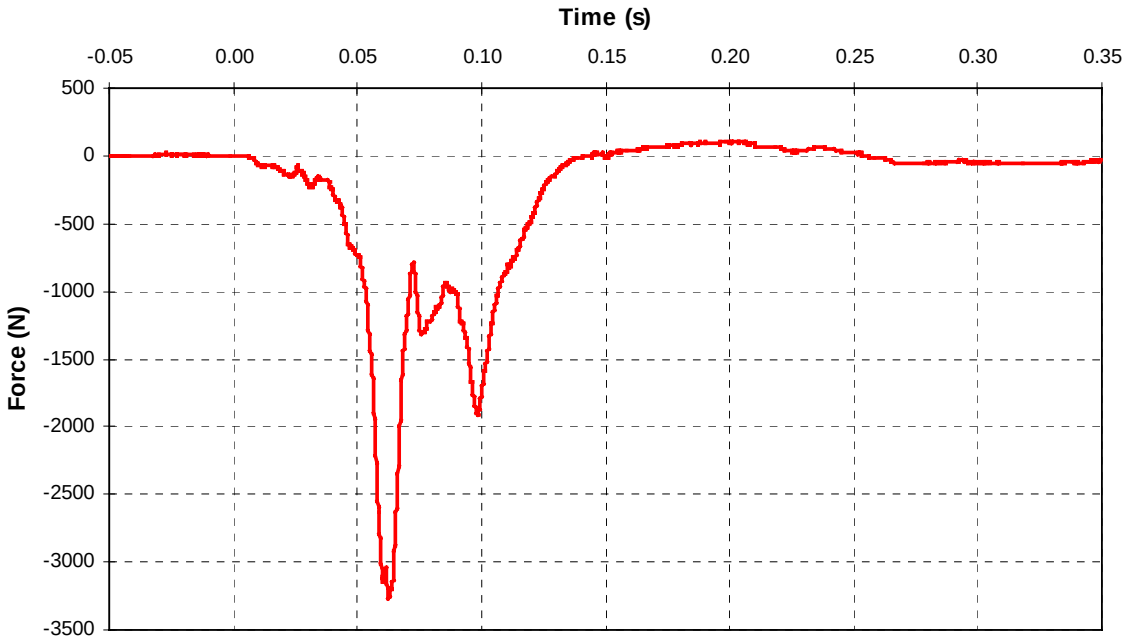
A- 43 CF00016 2000 Nissan Sentra Right Lower Tibia A-P Moment



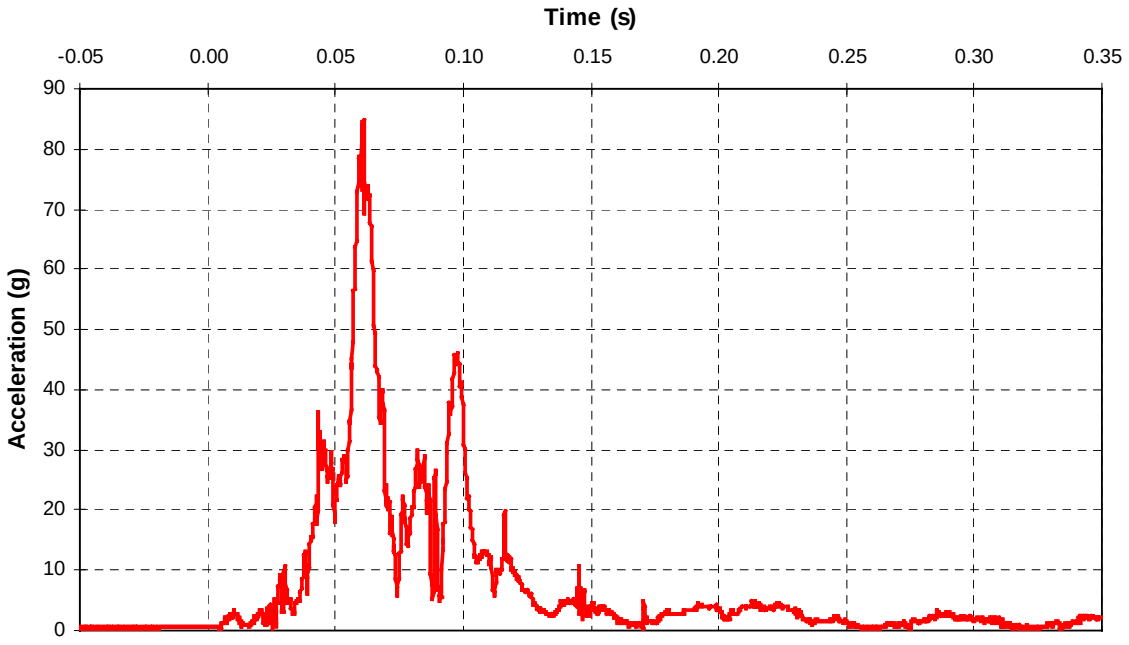
A- 44 CF00016 2000 Nissan Sentra Right Lower Tibia Vector Resultant Moment



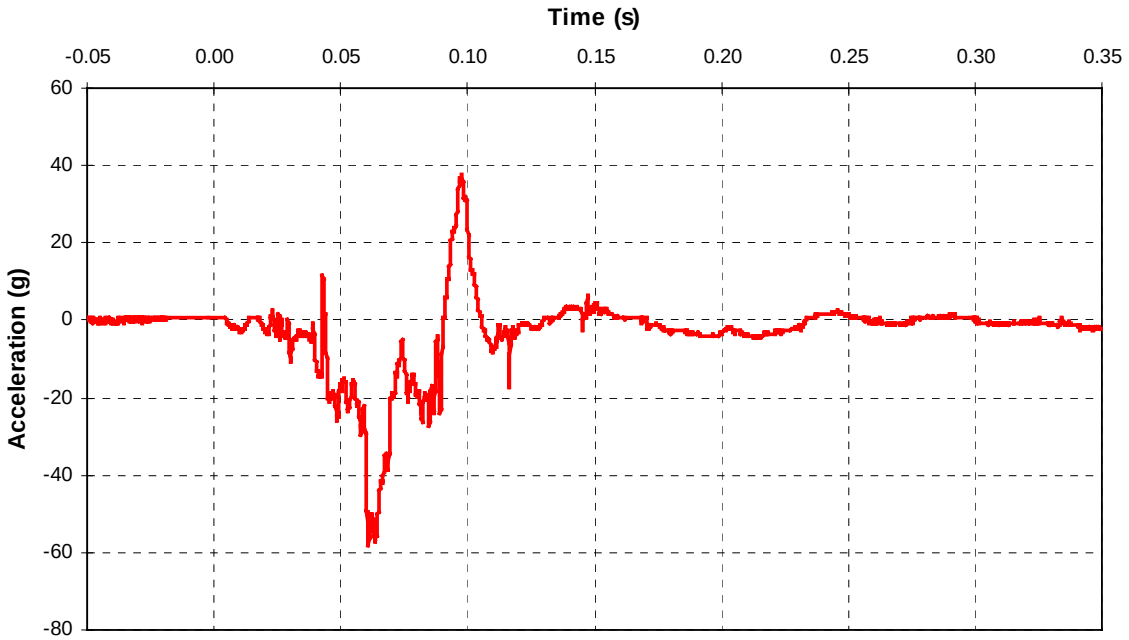
A- 45 CF00016 2000 Nissan Sentra Right Lower Tibia Axial Force



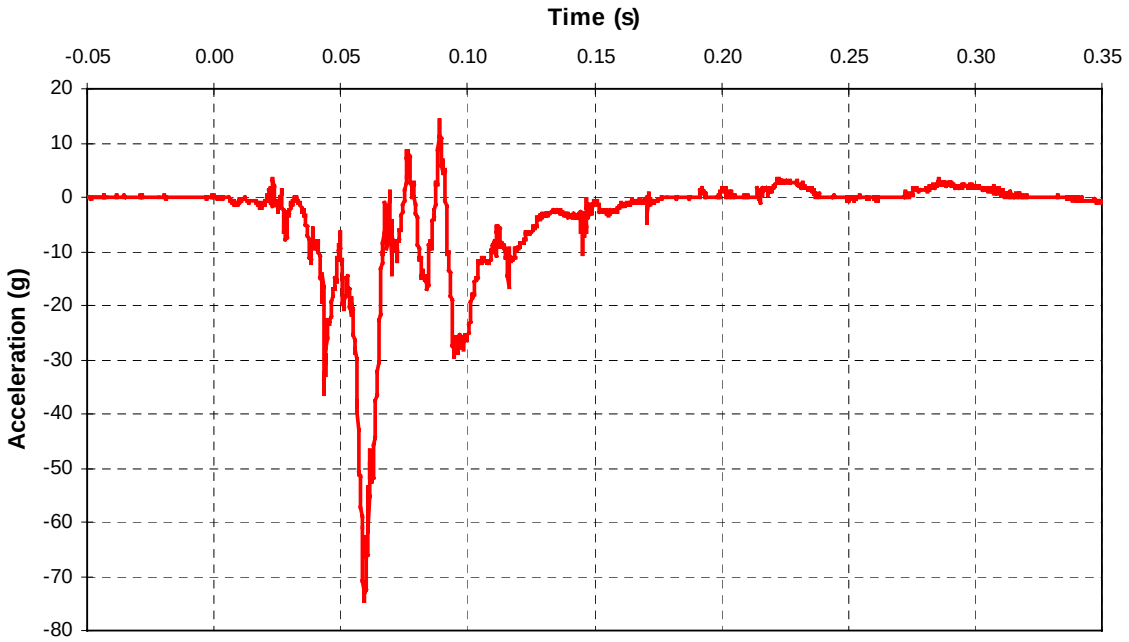
A- 46 CF00016 2000 Nissan Sentra Right Foot Vector Resultant Acceleration



A- 47 CF00016 2000 Nissan Sentra Right Foot A-P Acceleration



A- 48 CF00016 2000 Nissan Sentra Right Foot I-S Acceleration



NISSAN 2000 NISSAN SENTRA GXE

AUTOMATIC TRANSMISSION
Color: DW2 JADED

AN UNCOMMONLY NEW SEDAN

Standard Equipment Included at No Extra Charge

MECHANICAL AND PERFORMANCE
1.8L DOHC 126 HP, 4-Cylinder Engine
4-Speed Automatic Transmission with Overdrive
Multi-Link Beam Rear Suspension
Independent Strut Front Suspension
Power-Assisted Vented Front Disc / Rear Drum Brakes
Rack and Pinion Power Steering
13.2 Gallon Fuel Tank
185/65R14 All-Season Tires with 14" Steel Wheels
Overdrive Cancel Switch

EXTERIOR STYLING
Body-Colored Front Grille and Body Side Moldings
Body-Colored Door Handles, Bumpers, and Mirrors
Flush-Mounted Multi-Parabola Halogen Headlamps
Electric Rear Window Defroster
Center High-Mount Stop Lamp (In Trunk Lid)
Fixed Mast Antenna
Dual Power Outside Mirrors

INTERIOR FEATURES
5-Passenger Seating Capacity
Velour Seat Cloth
Adjustable Front Seats
Dual Seat Lifters on Driver Side Only
Front Door Panels with Cloth Inserts & Side Pockets
Fuel Level and Coolant Temperature Gauges

COMFORT AND CONVENIENCE
Power Windows with One-Touch Auto Down
Power Door Locks
100 Watt AM/FM/CD Audio System w/ 4 Speakers
CFC-Free Air Conditioning
Cruise Control
Trunk Lamp
Dual Visor Vanity Mirrors with Covers
12-Volt DC In-Dash Power Source
Rear Assist Grips
Battery Saver Function
Full Side and Rear Trunk Trim
Door Ajar Warning Lamp
Tilt Steering Column
Variable Intermittent Windshield Wipers
Front Ashtray and Coin Box
Tachometer and Dual Trip Odometer
Front and Rear Cup Holders
Center Console with Lid
Day and Night Rear View Mirror
Driver's Side Rear Coat Hook
Low Fuel Warning Lamp

SAFETY AND SECURITY
Dual Front Air Bags
Pipe-Style Steel Side-Door Guard Beams
Front Seat Belts with Pretensioners & Load Limiters
3-Point Seat Belts in all Seating Positions
ALR/ELR Seat Belt System for all Passenger Seats
Child Safety Rear Door Locks
Energy Absorbing Steering Column and Bumpers
"Fasten Front Seat Belt" Warning Light
Seat Belt Warning Chimes
Front and Rear Crumple Zones

Manufacturer's Suggested Retail Base Price	14,299.00
Options Included by Manufacturer	
CONVENIENCE PACKAGE	150.00
60/40 SPLIT FOLD-DOWN REAR SEAT	
REMOTE KEYLESS ENTRY/TRUNK RELEASE	
CONVENIENCE NET W/TRUNK HOOKS	
REAR AUXILIARY POWER OUTLET	
VALET KEY	
FLOOR MATS	79.00
FEDERAL EMISSION CONTROL SYSTEM	
Destination Charges	520.00
Total*	**15,048.00**

Compare this vehicle to others in the **FREE FUEL ECONOMY GUIDE** available at the dealer.

CITY MPG

26

HIGHWAY MPG

33

Actual Mileage will vary with options, driving conditions, driving habits and vehicle's conditions. Results reported to EPA indicate that the majority of vehicles with these estimates will achieve between

22 and 30 mpg in the city and between

28 and 38 mpg on the highway.

2000 NISSAN SENTRA GXE
108 CUBIC INCH ENGINE,
4 CYLINDERS,
FUEL INJECTION,
FEEDBACK FUEL SYSTEM,
4-SPEED AUTOMATIC TRANSMISSION,
CATALYTIC CONVERTER,
FEDERAL EMISSION CONTROL SYSTEM

Estimated Annual Fuel Cost:
$621

For Comparison Shopping,
all vehicles classified as
COMPACT

have been issued mileage ratings ranging from 00 to 00 mpg city and to mpg hwy.

Dealer: PASSPORT NIS/ALEXANDRIA
150 S. PICKETT STREET
ALEXANDRIA VA 22304

Transport Method: TRUCK
Final Assembly Point: SMYRNA

This vehicle qualifies for Nissan's
Security+Plus Vehicle Protection Plan
The only service agreement backed by Nissan!
Ask your dealer for details, or call
1-800-NISSAN-6 for information.

* Does not include dealer installed options & accessories, local taxes or license fees, does not include manufacturer's recommended pre-delivery service. This label has been applied pursuant to federal law. Do not remove prior to delivery to the ultimate purchaser.

2000 2000 NISSAN SENTRA GXE
VIN: 3N1CB51D8YL304992

42210-304992 DW2 3545

PM 3497 36 3545 A DAS PB06 105584 3497 H PM 031600 - 7253