

Insurance Institute for Highway Safety Crashworthiness Evaluation

Crash Test Report 2000 Subaru Legacy (CF00005)

Vehicle identification number: 4S3BE6357Y7205144
Body style: Midsize four-door sedan
Engine/transmission: Longitudinal 2.5-liter 4-cylinder, 4-speed automatic, 4-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
- Rear seat head restraints (all seating positions)

Other standard safety features:

- Four-wheel antilock brakes
- Daytime running lamps

Optional safety features:

- Driver and right front passenger seat-mounted side airbags

Vehicle specifications (provided by manufacturer):

Wheelbase:	265 cm
Overall length:	468 cm
Overall width:	174 cm
Curb weight:	1,472 kg

Vehicle specifications (measured):

Front bumper to firewall:	115 cm
Curb weight:	1,496 kg
Test weight:	1,600 kg (54% front, 46% rear)
Overall width:	174 cm

Nominal test parameters:

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

Crash test date:

February 15, 2000

Figure 1
Precrash and Postcrash Side Views — 2000 Subaru Legacy



Summary

A 2000 Subaru Legacy was crash tested on February 15, 2000 into a fixed deformable barrier at 39.8 mi/h (64.0 km/h) and a 40 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 0-1 cm. Resultant intrusion in the driver footwell measured 7 cm at the footrest and 10-18 cm at other places on the toepan. All doors remained closed during the crash and opened with ease afterwards. Upward buckling of the driveshaft tunnel tipped the driver seat forward and toward the B-pillar.

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 1 cm of shoulder belt webbing. A net amount of 8 cm of webbing (or a total of 9 cm including the tensioner-retracted length) spooled off the retractor, including about 6 cm from the force-limiting mechanism. The airbag contacted the dummy's face during deployment. During rebound from the airbag, the dummy's head contacted only the head restraint. After the crash, the upper end of the steering column had moved neither upward nor rearward.

The right leg had a maximum tibia-femur displacement of -13 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 48 cm behind its center of gravity (170 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 40 percent.

Structural Performance

All doors remained closed during the crash. The driver door aperture shortened 1 cm, as measured at the lower edge of the window. Despite slight shingling of the driver door over the left rear door, the driver door and the other three doors opened easily after the crash.

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.

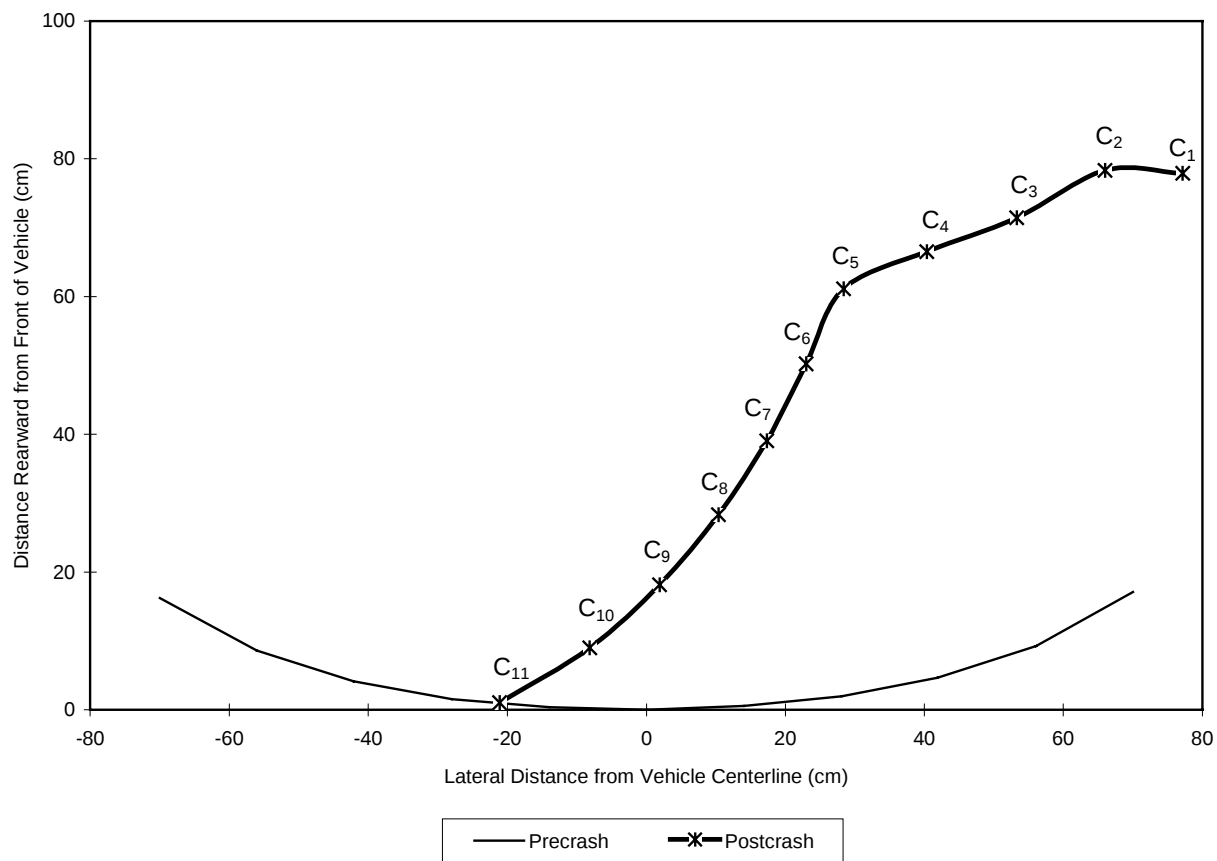
Upward buckling of the driveshaft tunnel tipped the driver seat forward and toward the B-pillar.

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, floor stiffeners, and radiator and engine supports, which are visible in Figure 4.

Figure 2
Overhead View of Crash Deformation — 2000 Subaru Legacy



Figure 3
Front Bumper Cover Crush Contour — 2000 Subaru Legacy



	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)	78	78	71	67	61	50	39	28	18	9	1
Precrash Contour (cm)	17	9	5	2	1	0	0	2	4	9	16
Resulting Crush (cm)	61	69	66	65	60	50	39	26	14	0	-15

The length of the reference line was 140 cm precrash and 98 cm postcrash.

Figure 4
Preocrash and Postcrash Views from Below — 2000 Subaru Legacy

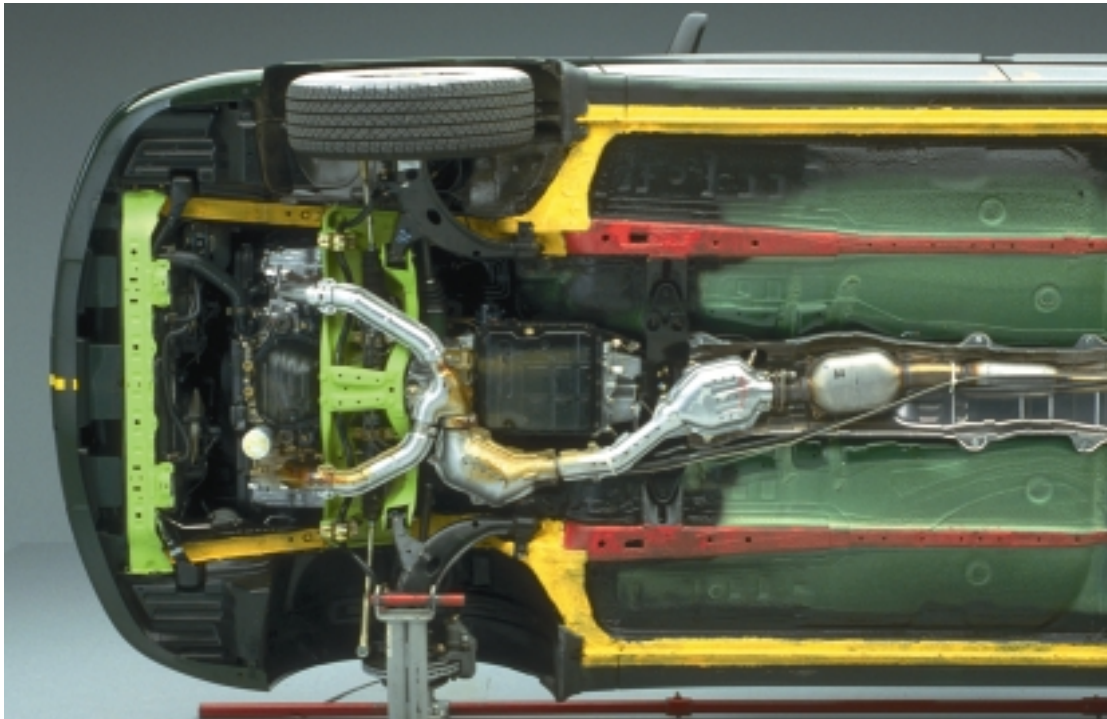
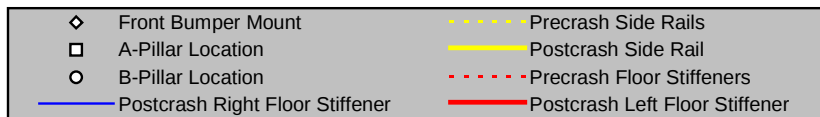
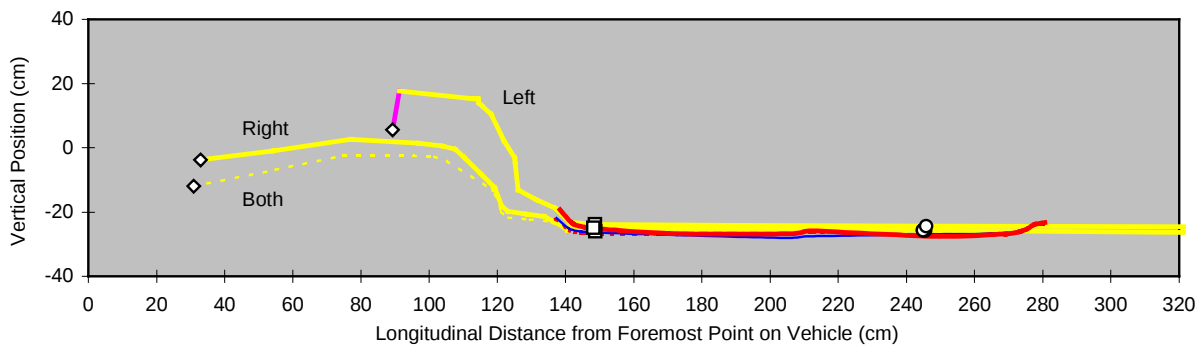
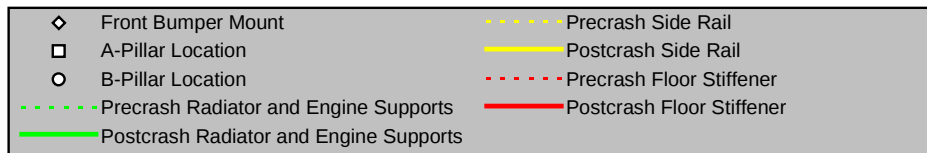
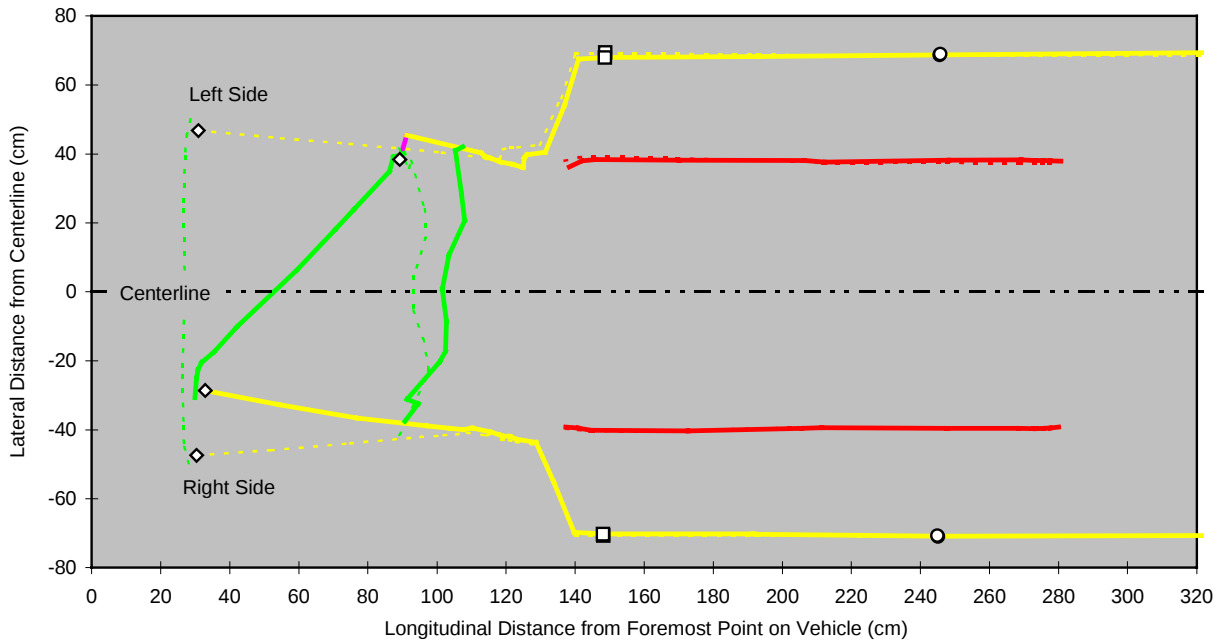


Figure 5
Structural Deformation, Views from Below and Side — 2000 Subaru Legacy



* After the crash, the position of the leading segment of the left side rail (indicated by —) was approximated because this segment could not be adequately accessed due to the crush.

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 Subaru Legacy				
Selected Locations*	Longitudinal	Lateral	Vertical	Resultant
Steering column (cm)	0	3	0	3
Left lower instrument panel (cm)	0	0	-1	1
Right lower instrument panel (cm)	-1	0	-2	3
Brake pedal (cm)	-13	-3	5	14
Left toepan (cm)	-9	-2	3	10
Center toepan (cm)	-17	-4	5	18
Right toepan (cm)	-9	-2	4	10
Footrest (cm)	-7	-1	1	7
Average displacement of the four seat-attachment bolts relative to reference system (cm)	-1	1	0	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 62 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 36 ms into the crash and appeared to be fully inflated at 60 ms.

Passenger: The corner-mounted passenger airbag deployed at an angle and is equipped with tear seams that control its shape during inflation. 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 at both front seating positions. The front belts also are equipped with pyrotechnic crash tensioners and mechanical force-limiting mechanisms. 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, 1 cm of webbing was pulled by the belt crash tensioner into the retractor through the D-ring, as measured by a pull-string mounted between the webbing and B-pillar trim just above the D-ring. A net amount of 8 cm of webbing (or a total of 9 cm including the tensioner-retracted length) was pulled from the retractor through the D-ring, as measured by a second pull-string mounted between the retractor housing and the webbing beyond the retractor. Postcrash investigation of the force-limiting torsion bar within the retractor spool indicated it was twisted about 150 degrees from its precrash orientation. This measure, combined with the estimated diameter of the retractor spool and stowed webbing (46 mm), suggested the force limiter contributed about 6 cm of webbing to the total amount pulled 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 driveshaft tunnel, to which the inboard seat-mounting rail is attached, tipped the driver seat slightly forward and outward against the B-pillar.

Steering Column

The upper end of the steering column did not move upward or rearward relative to the driver seat. There was some lateral displacement (3 cm leftward) of the column end after the crash.

Dummy Kinematics

Head, Neck, and Torso

Analysis of the high-speed film taken from camera positions D and E indicated the deploying airbag contacted the dummy's face at 46 ms into the crash. The dummy's face began to load the airbag at 62 ms (2 ms after the airbag was fully inflated). Paint transferred from the dummy's face indicated the nose contacted the airbag 3 cm above and 2 cm to the right of its center. During rebound from the airbag, the dummy leaned outboard slightly but moved straight back until the right upper rear of the head contacted the inboard part of the head restraint at about 254 ms, as indicated by head acceleration measurements. Table 2 provides the timing of these events.

Table 2 Restraint System Performance and Dummy Kinematics — 2000 Subaru Legacy	
Event	Time (ms)
Deployment of airbag	36
Airbag contacts face during deployment	46
Airbag fully inflated	60
Face begins to load airbag	62
Dummy's head contacts head restraint during rebound	254

Figure 6
Dummy and Vehicle Interior, Postcrash — 2000 Subaru Legacy



Legs and Feet

Left leg and foot: Paint transferred from the dummy's left knee indicated the knee contacted the instrument panel just above the knee bolster and near the left side of the steering column. Paint transferred from the dummy's left shin indicated the shin contacted the undamaged bolster directly below the knee impact location. The left foot was found slightly dorsiflexed and considerably everted, with the sole of the forefoot resting on the toepan just inboard of the footrest and the back of the heel on the floormat/carpeting.

Right leg and foot: Paint transferred from the dummy's right knee indicated the knee contacted the column-mounted ignition switch and the adjacent hard plastic portion of the lower edge of the instrument panel. Paint transferred from the dummy's right shin indicated the shin contacted the undamaged knee bolster directly below the knee impact location on the instrument panel. The right foot was found considerably inverted but in neutral dorsiflexion, with the heel resting on the floor and the lateral edge of the forefoot against the accelerator pedal, which in turn was not fully depressed against the toepan.

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 head excursion into the airbag. Table 3 provides a summary of the maximum head injury measurements recorded during the crash.

Table 3 Head Injury Measurements — 2000 Subaru Legacy			
Measure	Published Tolerance Threshold	Result	Time (ms)
Vector resultant acceleration (g)	80	49	108
Vector resultant acceleration — 3 ms clip (g)	80	47	104-107
Head Injury Criterion (HIC)	1000	394	83-119
Head Injury Criterion — 15 ms interval (HIC-15)*	700	209	97-112

* 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 Subaru Legacy			
Measure	Published Tolerance Threshold	Result	Time (ms)
A-P shear force (kN)	±3.1	−0.4	161
Axial compression force (kN)	4.0	0.2	327
Axial tension force (kN)	3.3	2.1	106
Flexion bending moment (Nm)	310	24	165
Extension bending moment (Nm)	122	21	110

Chest

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

Table 5 Chest Injury Measurements — 2000 Subaru Legacy			
Measure	Published Tolerance Threshold	Result	Time (ms)
Vector resultant spine acceleration — 3 ms clip (g)	60	48	103-106
Rib compression (mm)	−50	−32	111
Viscous criterion (m/s)	1.0	0.2	108

Legs and Feet

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

Right leg and foot: The right leg had a maximum tibia-femur displacement of –13 mm at 99 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 Subaru Legacy					
Measure	Published Tolerance Threshold	Left		Right	
		Result	Time (ms)	Result	Time (ms)
Femur axial force (kN)	–9.1*	–2.5	106	–2.8	99
Tibia–femur displacement (mm)	–15	–8	78	–13	99
Upper Tibia					
L–M moment (Nm)	±225	–31	73	51	72
A–P moment (Nm)	±225	77	76	96	104
Vector resultant moment (Nm)	225	80	105	101	104
Index	1.00	0.4	76	0.46	104
Lower Tibia					
L–M moment (Nm)	±225**	65	111	–65	81
A–P moment (Nm)	±225**	93	111	45	84
Vector resultant moment (Nm)	225**	114	111	78	82
Axial force (kN)	–8.0**	–1.7	82	–2.3	79
Index	1.00	0.53	111	0.4	82
Foot					
A–P acceleration (g)	±150	–79	78	–53	77
I–S acceleration (g)	±150	–66	78	–46	49
Vector resultant acceleration (g)	150	103	78	62	49

* This critical value is for instantaneous loading. Femur loads are compared with magnitude-duration injury criteria in Figures A-23 and A-34.

** 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 Subaru Legacy Midsize Four-Door Sedan: 5 mi/h Front into Angle Barrier

Test Number: LA00002

VIN: 4S3BE6357Y7205144

Mileage: 254

Features: Driver and passenger airbags, four-wheel antilock brakes, air conditioning, automatic transmission, power mirrors, power door locks, power windows, heated back glass, tilt steering wheel, cruise control, two-stage paint

Description	Part		Labor	
	Mfg. No	Price	Operation	Hours
Bumper reinforcement, front	57711AE09A	\$299.95	Replace*	1.9
Headlamp assembly, right	84001AE12A	249.95	Replace	
Headlamps			Aim	0.5
Frame sidemember end, right front			Repair/align*	1.0
Frame sidemember end, right front			Refinish	0.3
Fender, right front			Repair/align	0.2
Paint and materials		5.40		
Total Parts		\$555.30		
Total Labor		132.60		3.9
Grand Total		\$687.90		

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

Dummy Clearance Measurements

Test Number: CF00005
Vehicle Make/Model: Subaru Legacy
Vehicle Model Year: 2000
Seat Type: Manually adjusted bucket seat (fore/aft and seat back angle)

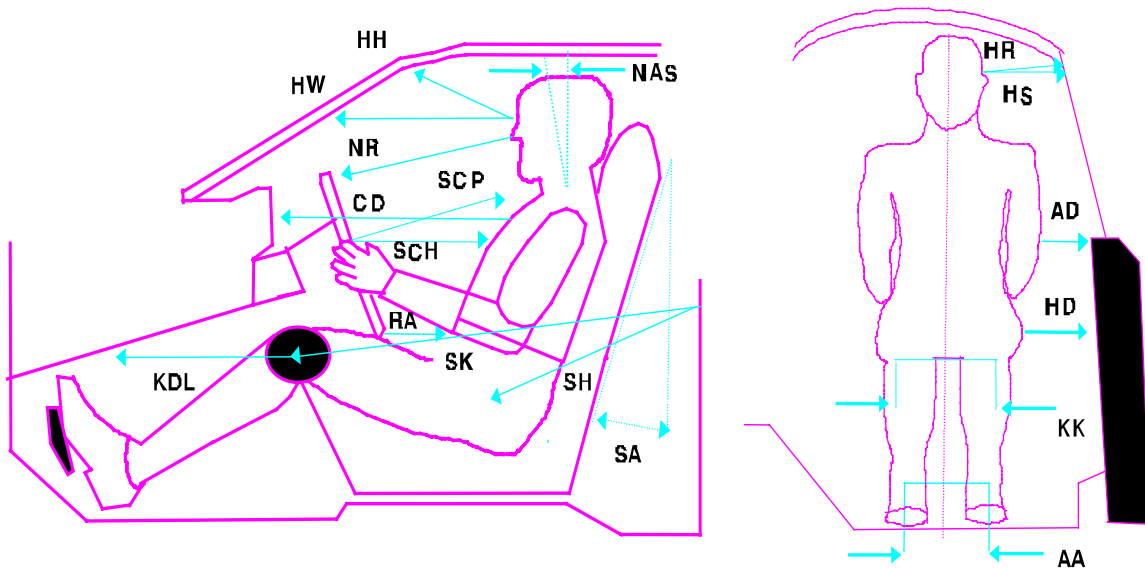
Manufacturer's Specifications

Seat Back Information: Reclined rearward to 4th locking position (1st locking position is most upright)
Upper Belt Anchorage: Set to 2nd of 5 positions from top
Steering Column Adjustment: Set to middle of tilt adjustment range

Location	Code	Measure	Location	Code	Measure
Head to header	HH	309	Neck angle, torso 90	NAT90	22.1°
Head to windshield	HW	526	Neck angle, seated	NAS	6.8°
Nose to rim	NR	400	Torso angle (NAT90 – NAS)	TA	15.3°
Chest to dash	CD	646	Striker to knee*	SK	552
Rim to abdomen	RA	194	Striker to knee angle*	SKA	3.1°
Knee to dash, left	KDL	219	Striker to H-point, horizontal	SHH	171
Knee to dash, right	KDR	207	Striker to H-point, vertical	SHV	108
Steering wheel to chest, horizontal	SCH	296	Ankle to ankle	AA	285
Steering wheel to chest, perpendicular	SCP	385	Knee to knee	KK	335
Steering wheel to chest, reference	SCR	376	Arm to door	AD	113
Hub to chest, minimum	HCM	246	H-point to door	HD	121
Pelvic angle	PA	24.9°	Head to A-pillar	HA	500
Seat back angle	SA	7.5°	Head to roof	HR	220
			Head to side window	HS	227

All distance measurements are in millimeters (mm).

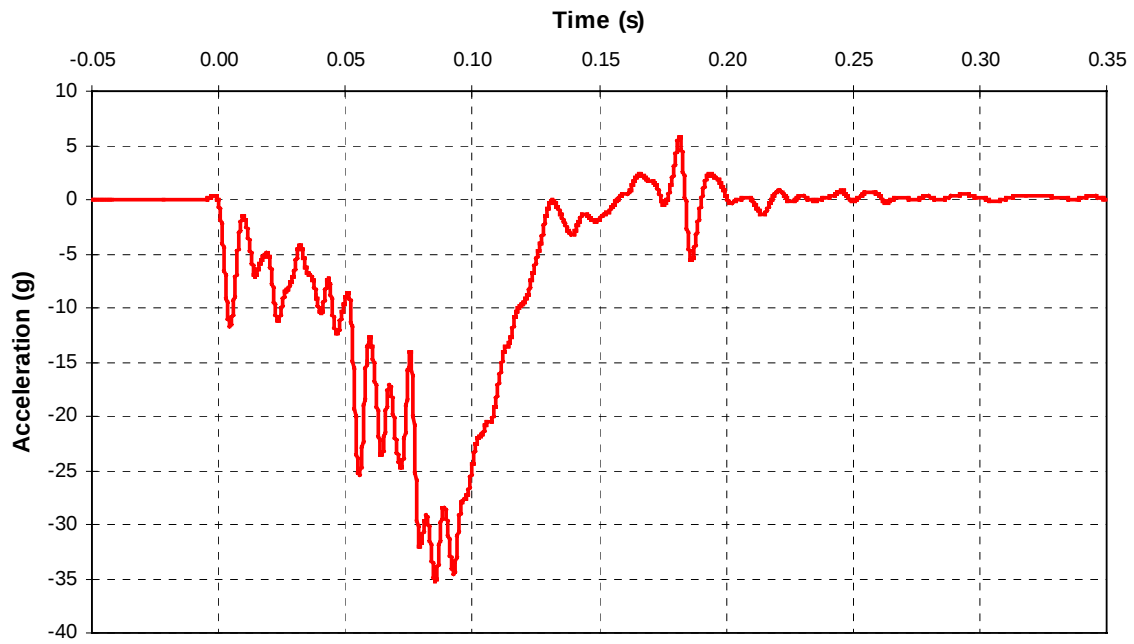
* These measurements were made in a vertical plane containing the striker and parallel to the driver door sill.



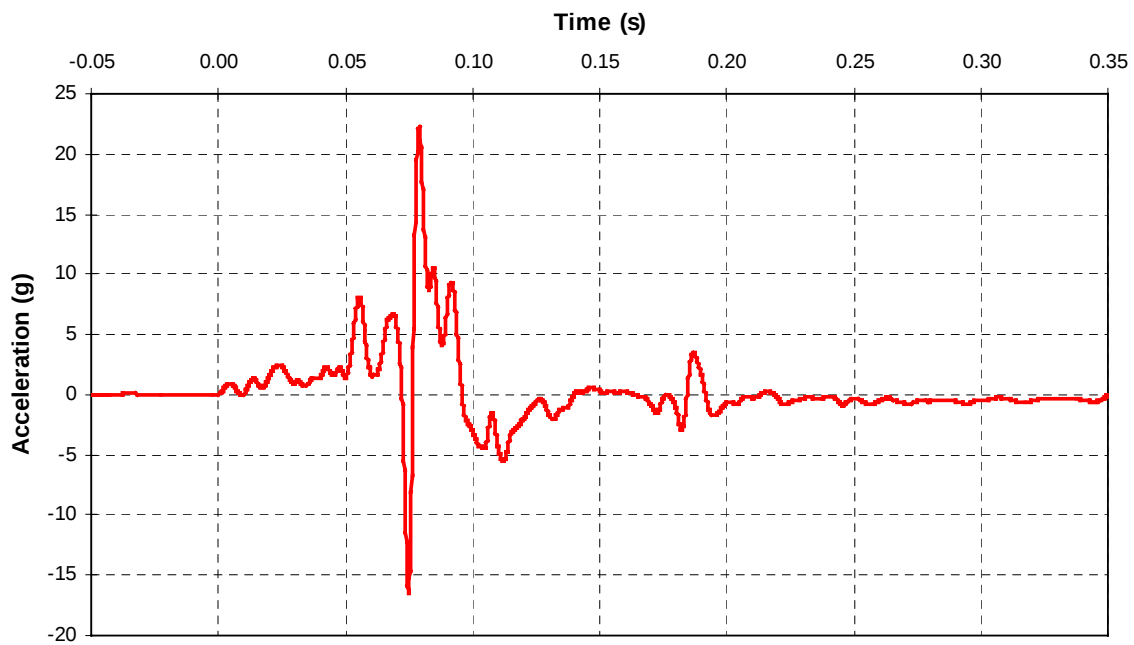
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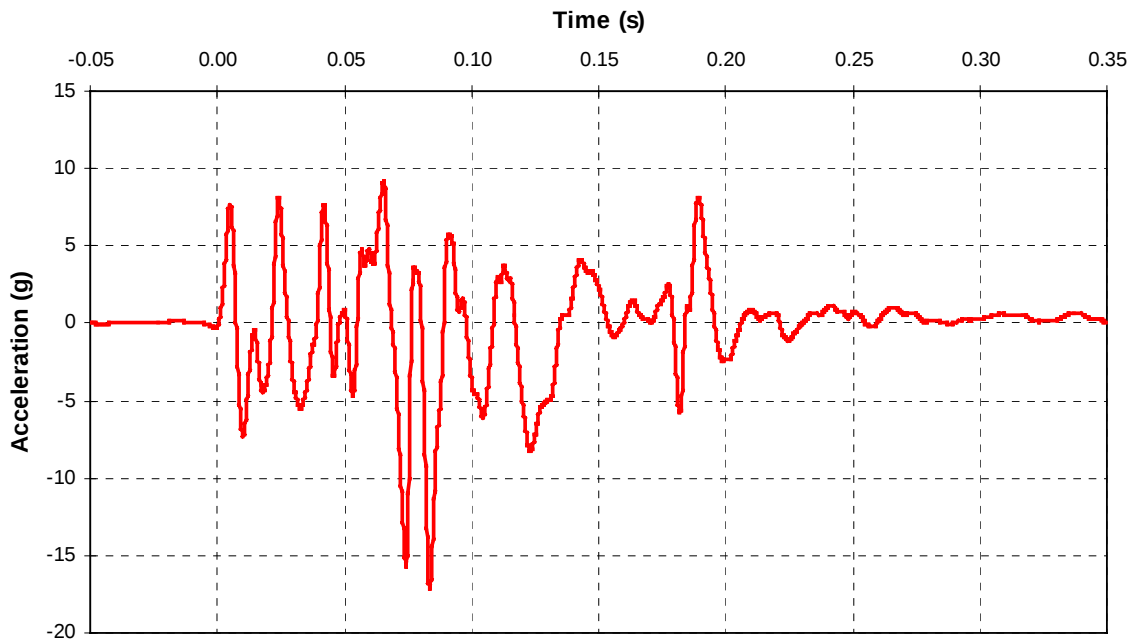
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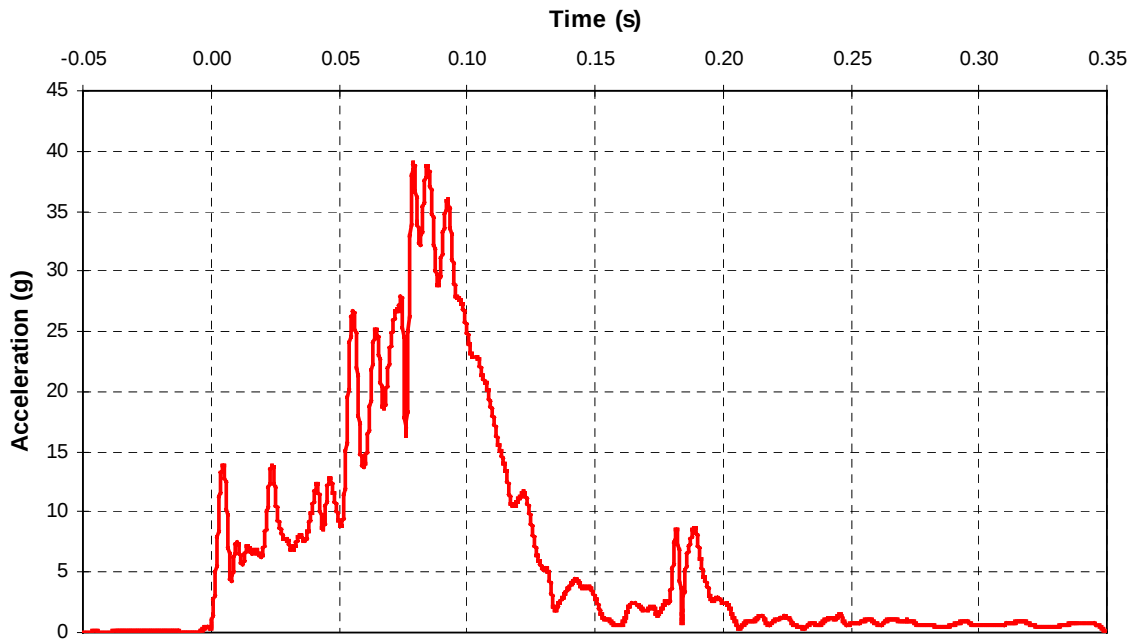
A- 2 CF00005 2000 Subaru Legacy Vehicle Lateral Acceleration



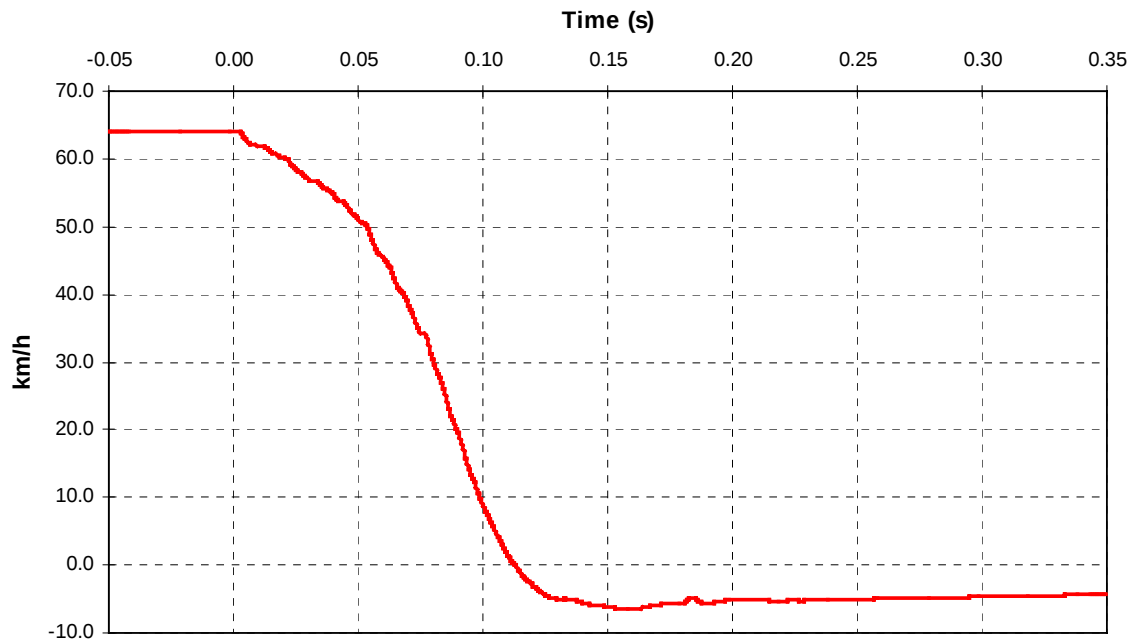
A- 3 CF00005 2000 Subaru Legacy Vehicle Vertical Acceleration



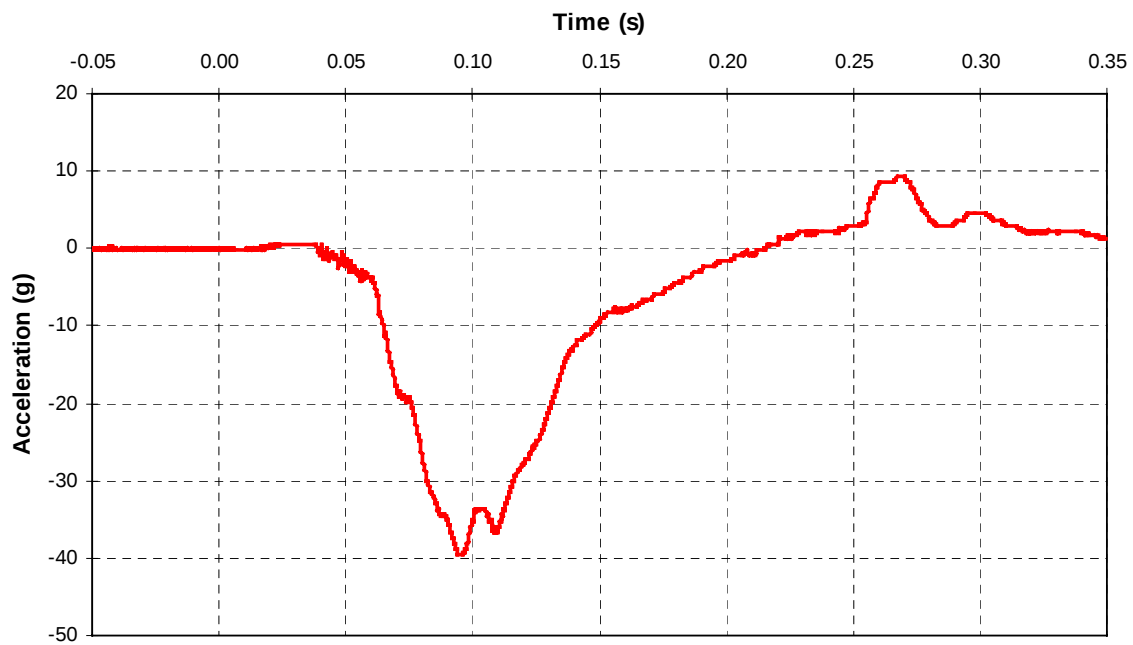
A- 4 CF00005 2000 Subaru Legacy Vehicle Vector Resultant Acceleration



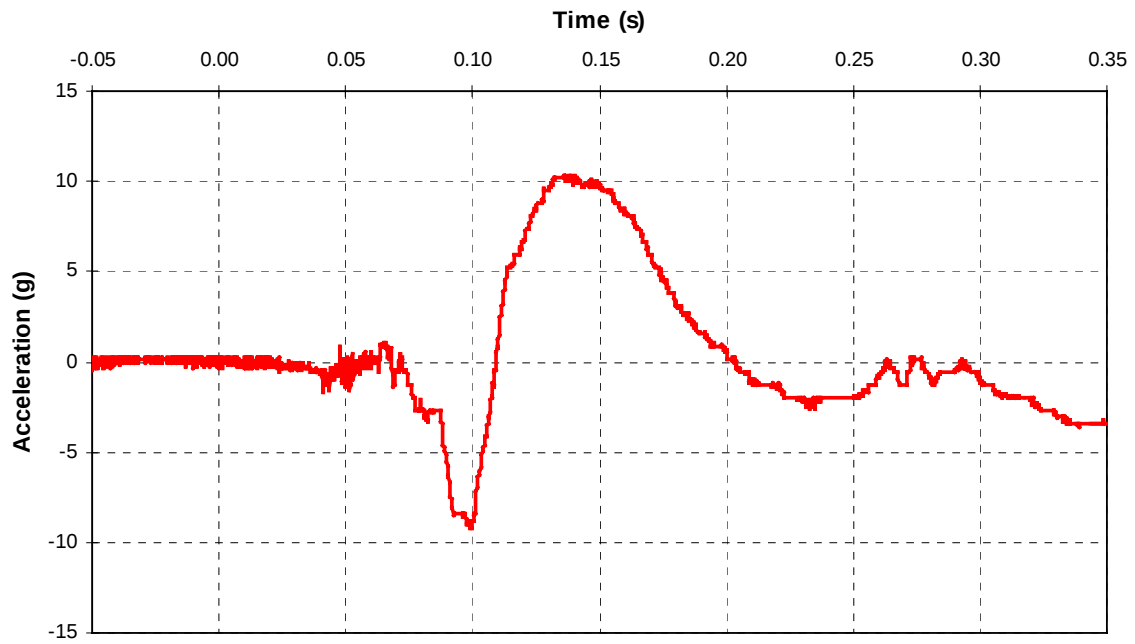
A- 5 CF00005 2000 Subaru Legacy Integration of Vehicle Longitudinal Acceleration



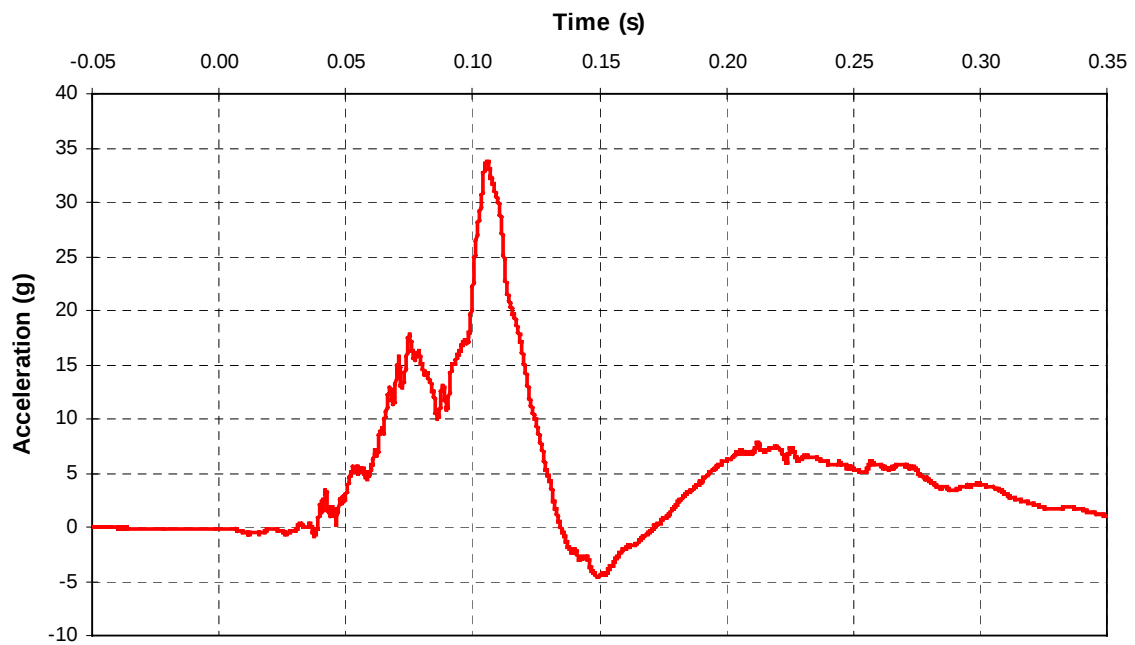
A- 6 CF00005 2000 Subaru Legacy Head A-P Acceleration



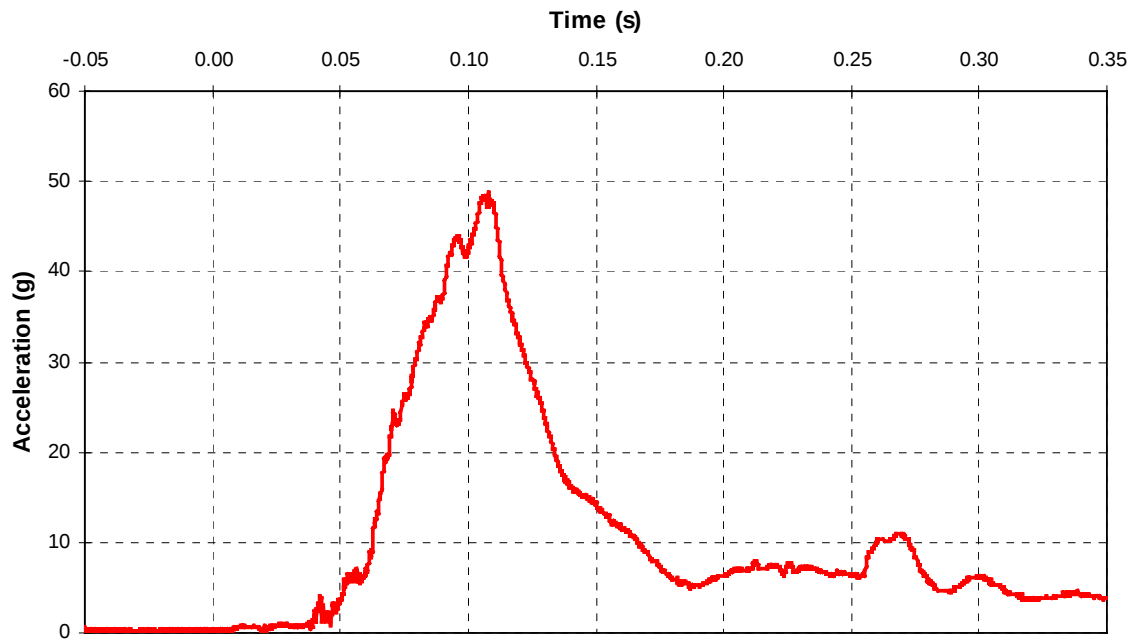
A- 7 CF00005 2000 Subaru Legacy Head L-M Acceleration



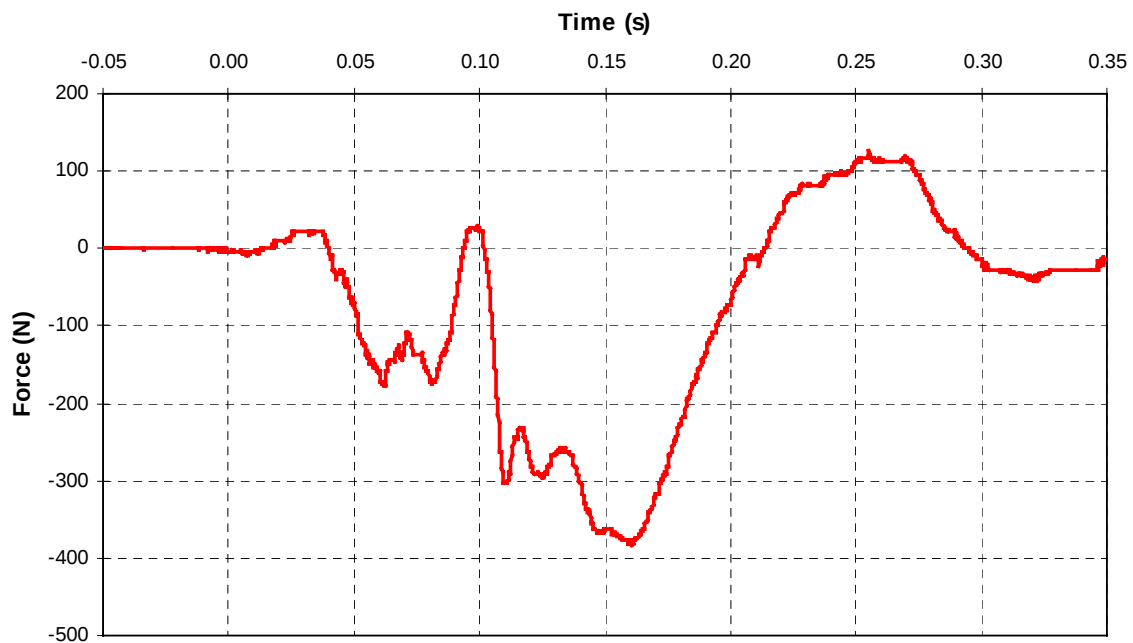
A- 8 CF00005 2000 Subaru Legacy Head I-S Acceleration



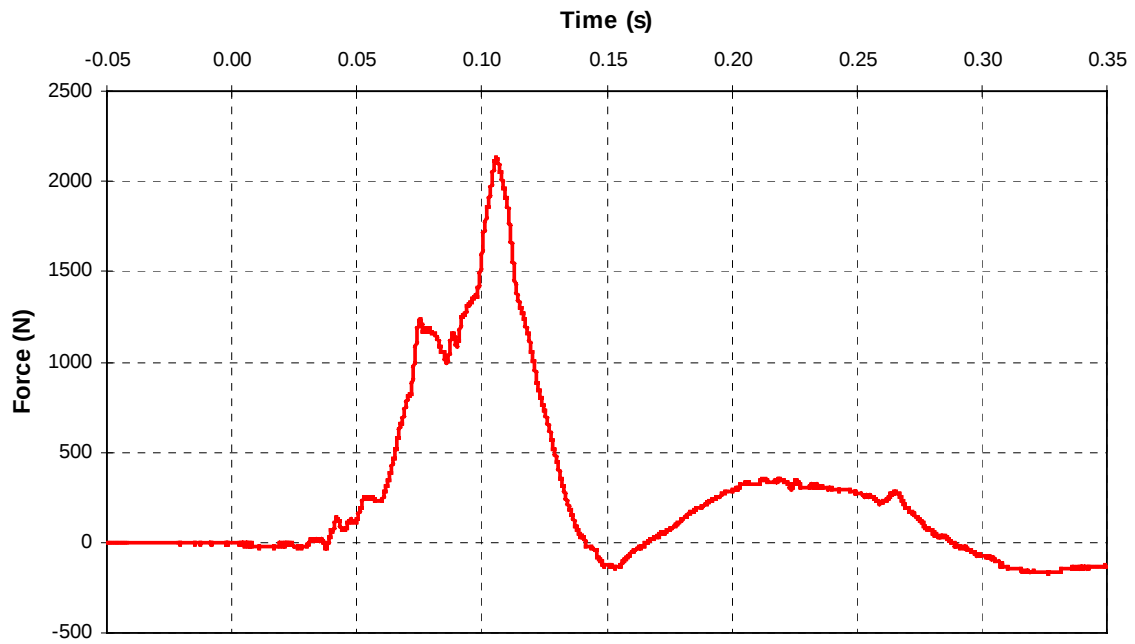
A- 9 CF00005 2000 Subaru Legacy Head Vector Resultant Acceleration



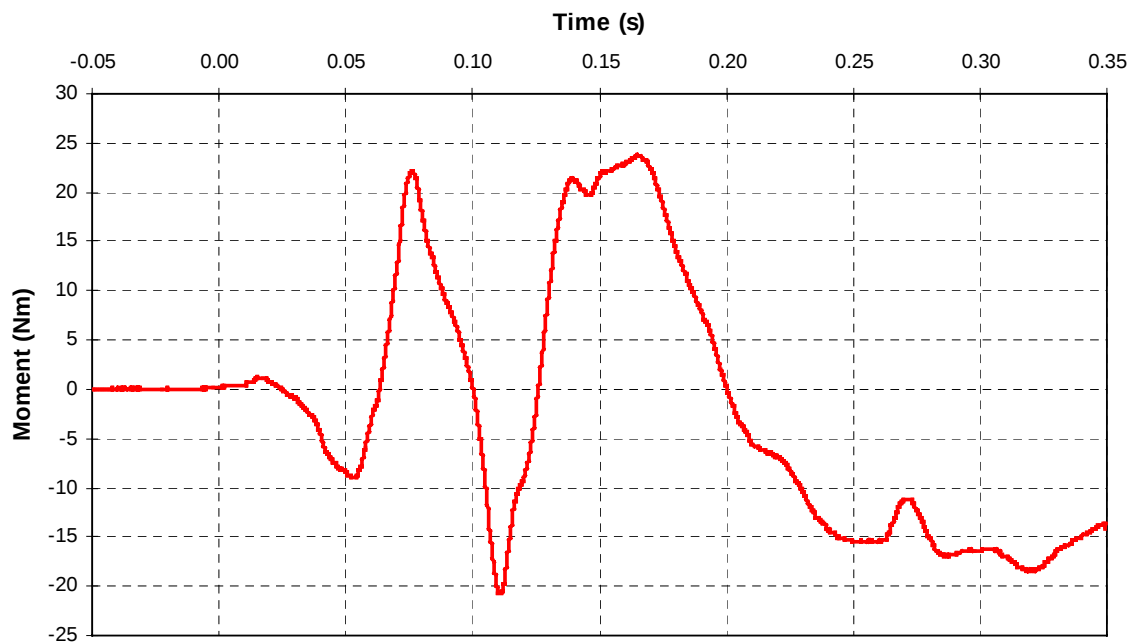
A- 10 CF00005 2000 Subaru Legacy Neck A-P Shear Force



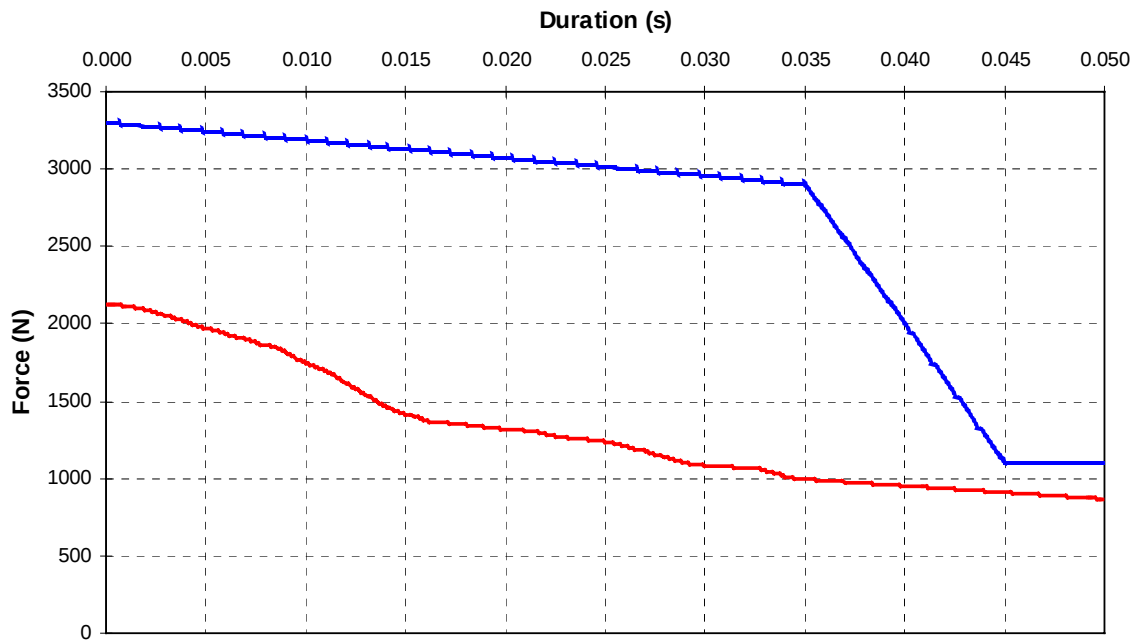
A- 11 CF00005 2000 Subaru Legacy Neck Axial Force



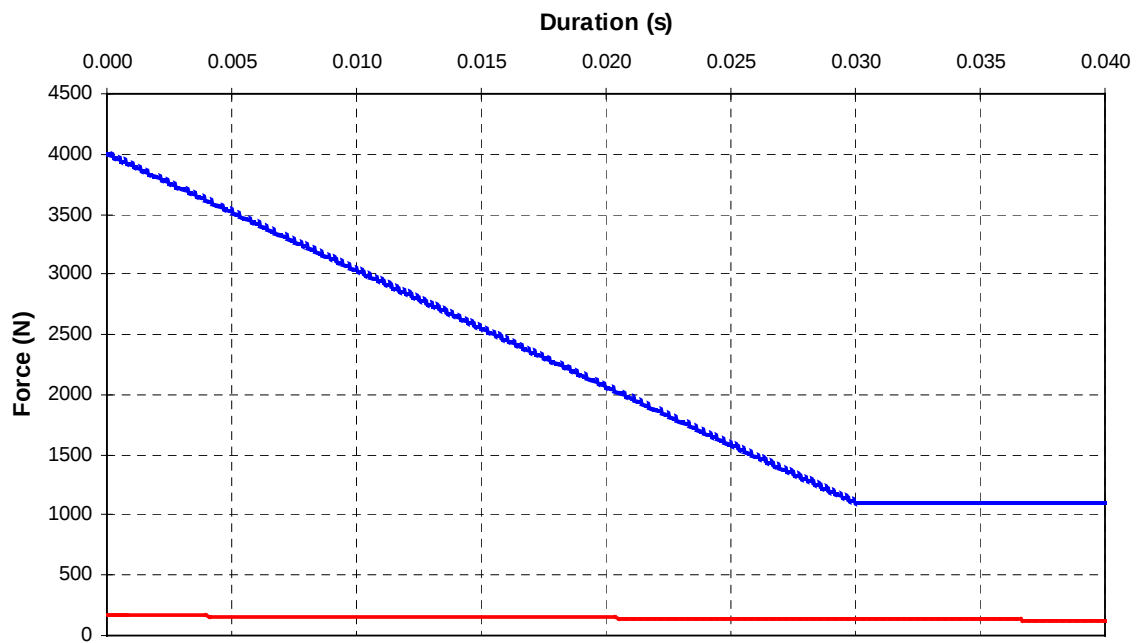
A- 12 CF00005 2000 Subaru Legacy Neck Occipital A-P Moment



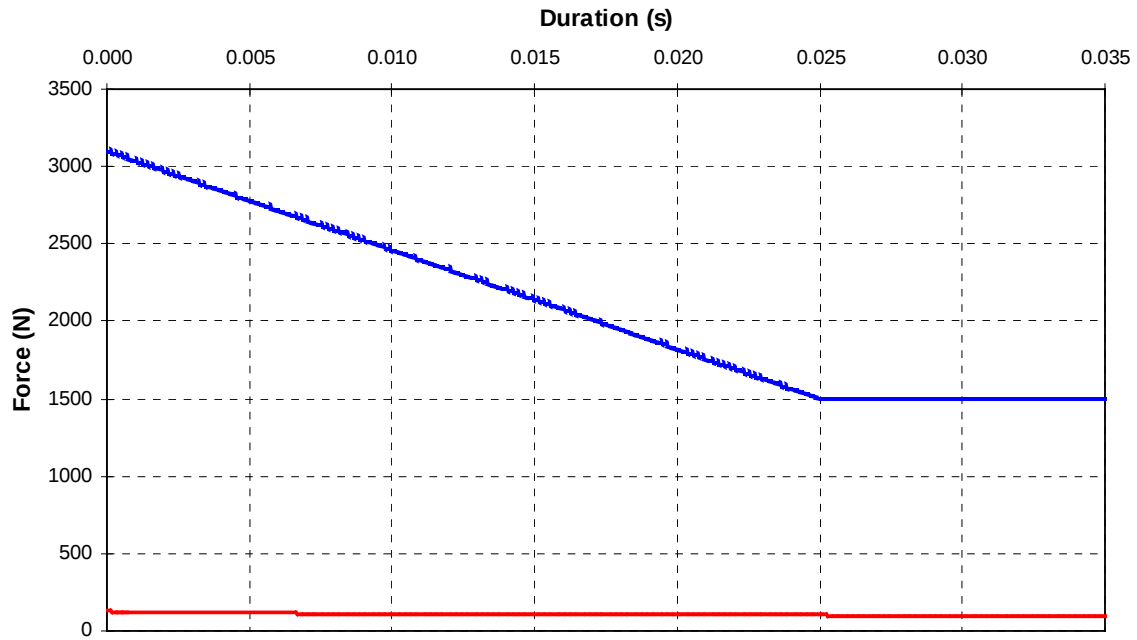
A- 13 CF00005 2000 Subaru Legacy Neck Tension Analysis



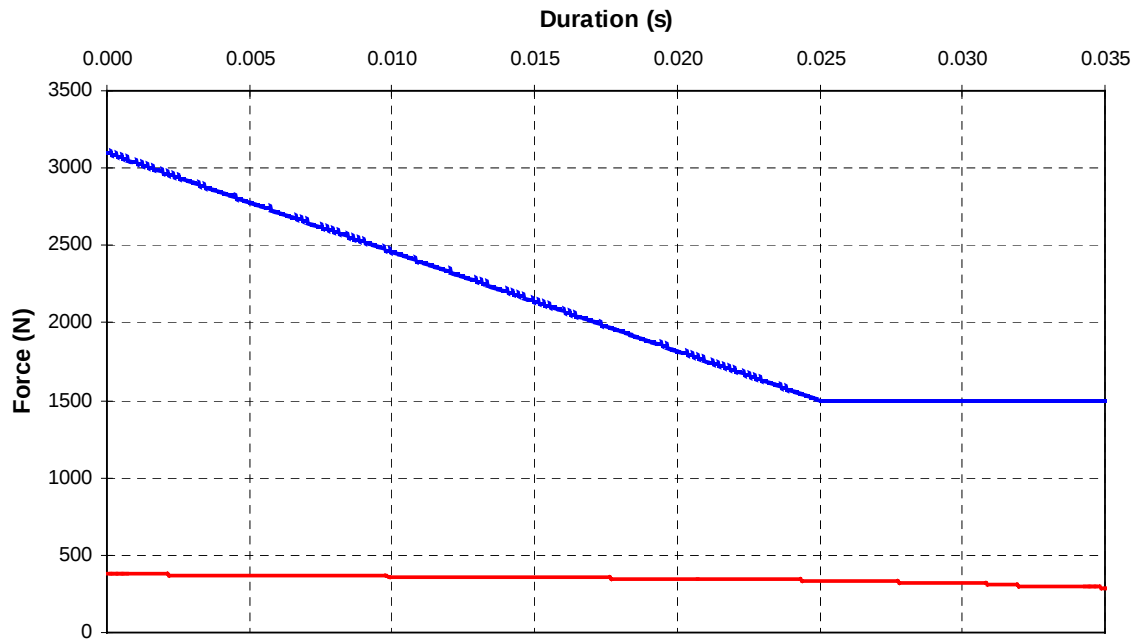
A- 14 CF00005 2000 Subaru Legacy Neck Compression Analysis



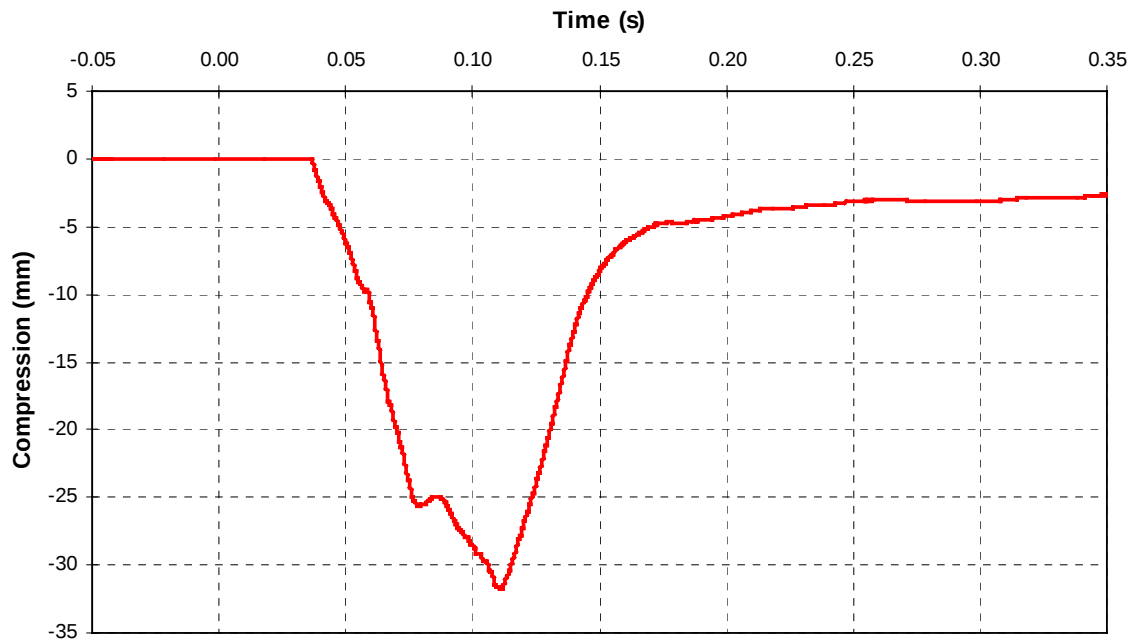
A- 15 CF00005 2000 Subaru Legacy Neck A-P Shear (Positive) Analysis



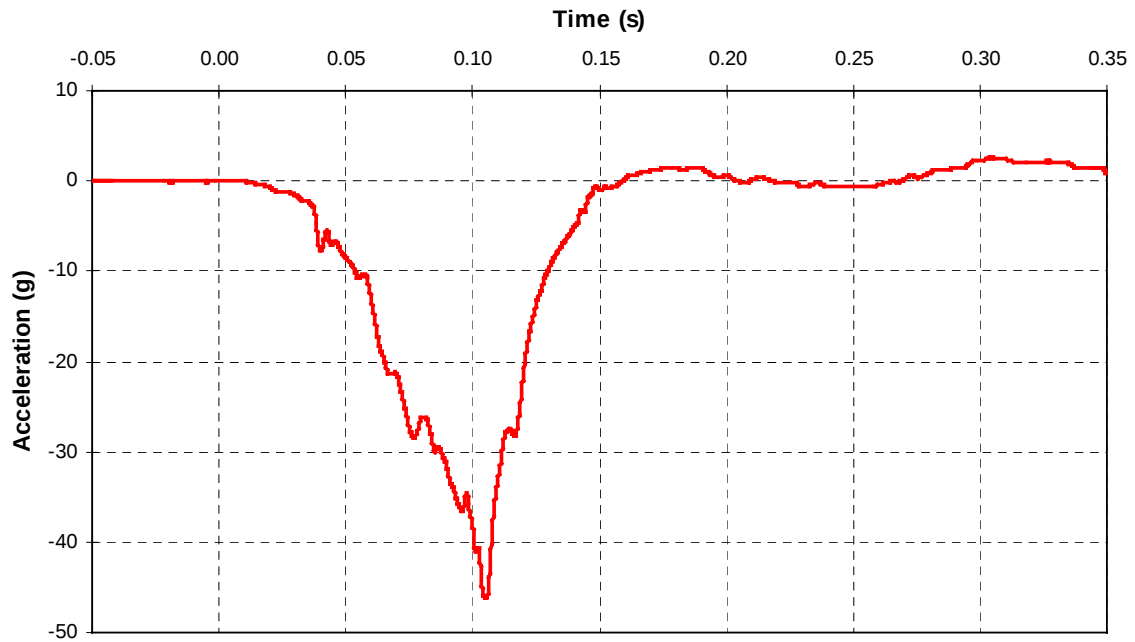
A- 16 CF00005 2000 Subaru Legacy Neck A-P Shear (Negative) Analysis



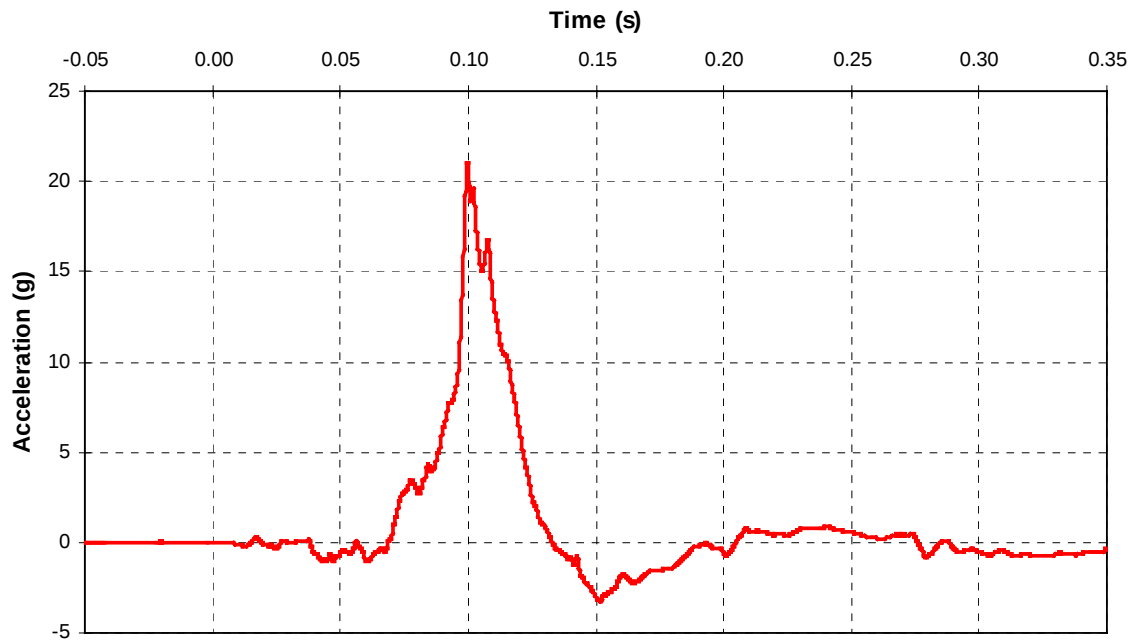
A- 17 CF00005 2000 Subaru Legacy Chest Compression



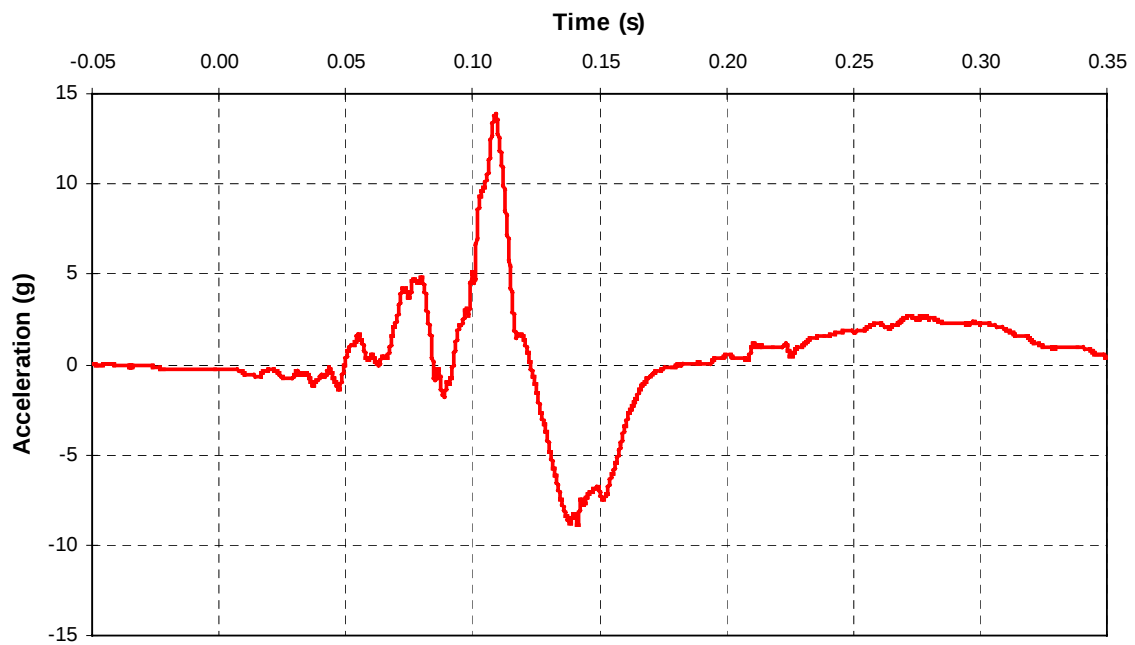
A- 18 CF00005 2000 Subaru Legacy Chest A-P Acceleration



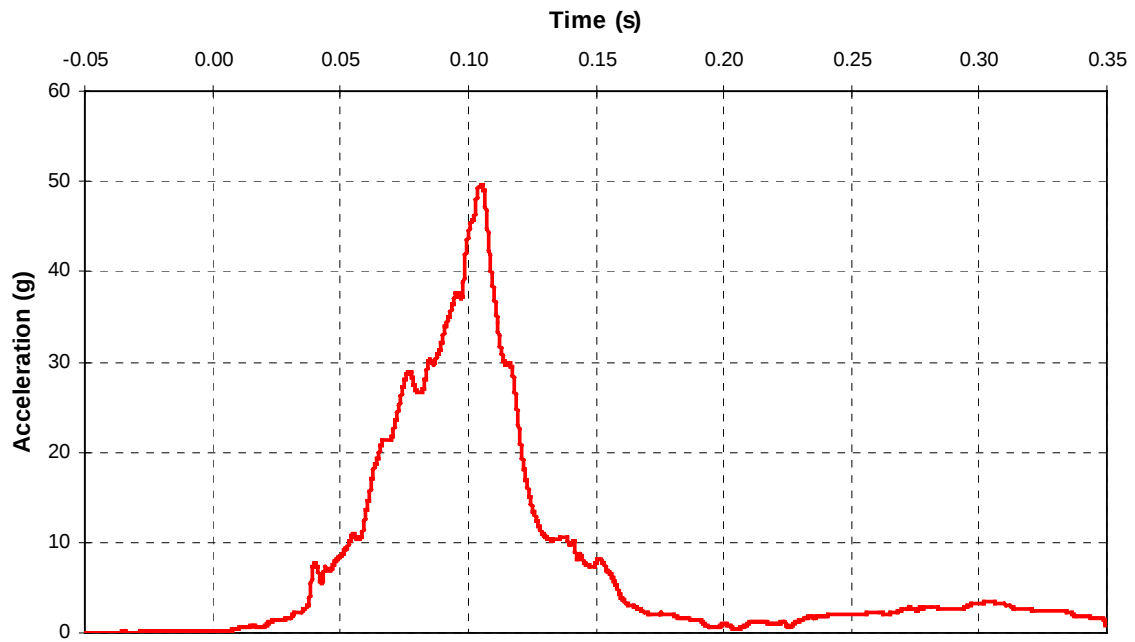
A- 19 CF00005 2000 Subaru Legacy Chest L-M Acceleration



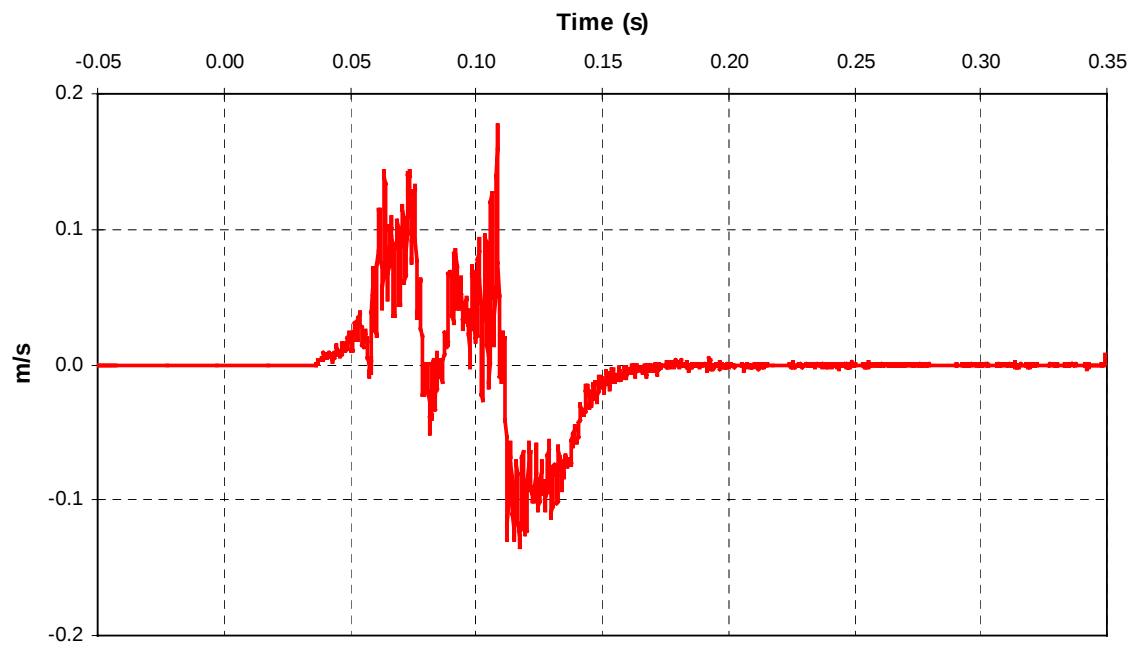
A- 20 CF00005 2000 Subaru Legacy Chest I-S Acceleration



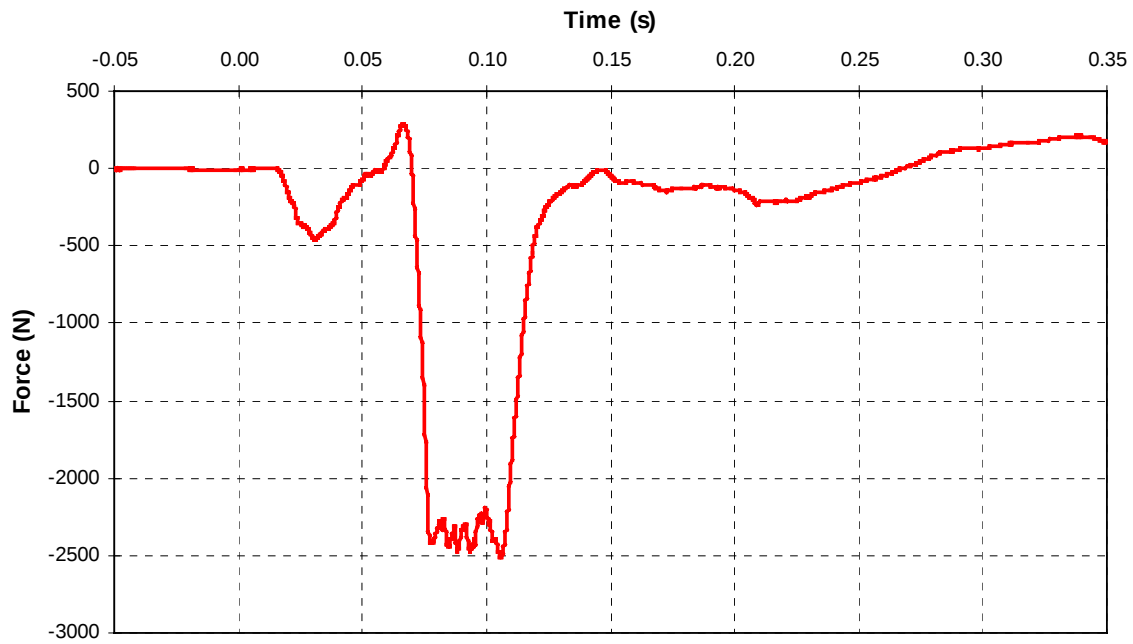
A- 21 CF00005 2000 Subaru Legacy Chest Vector Resultant Acceleration



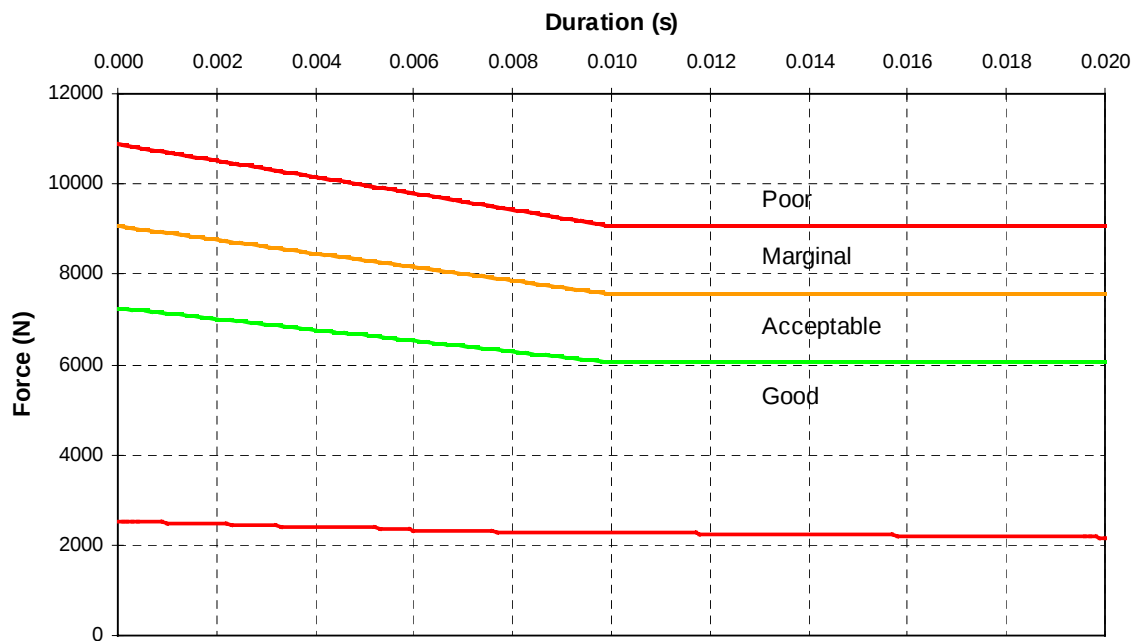
A- 22 CF00005 2000 Subaru Legacy Viscous Criterion



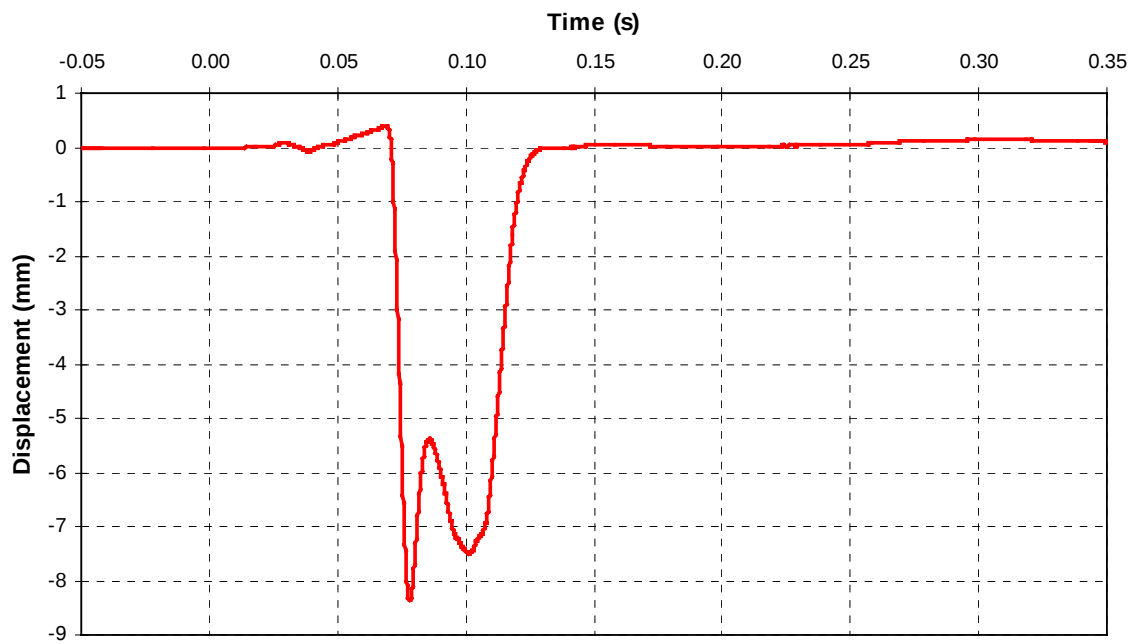
A- 23 CF00005 2000 Subaru Legacy Left Femur Axial Force



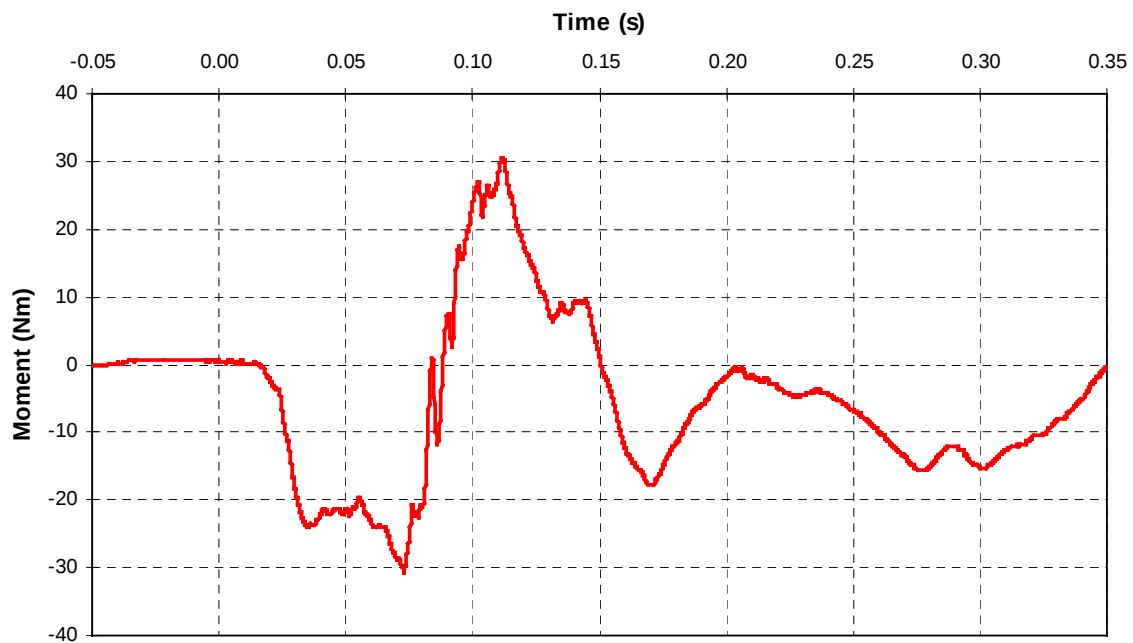
A- 24 CF00005 2000 Subaru Legacy Left Femur Axial Force Analysis



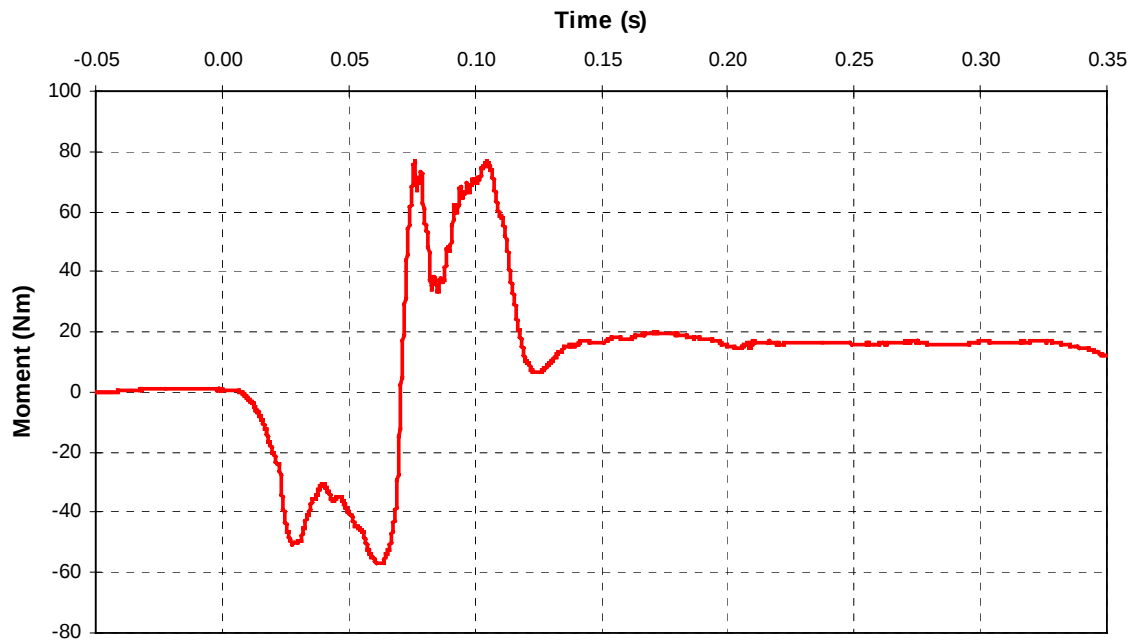
A- 25 CF00005 2000 Subaru Legacy Left Tibia-Femur Displacement



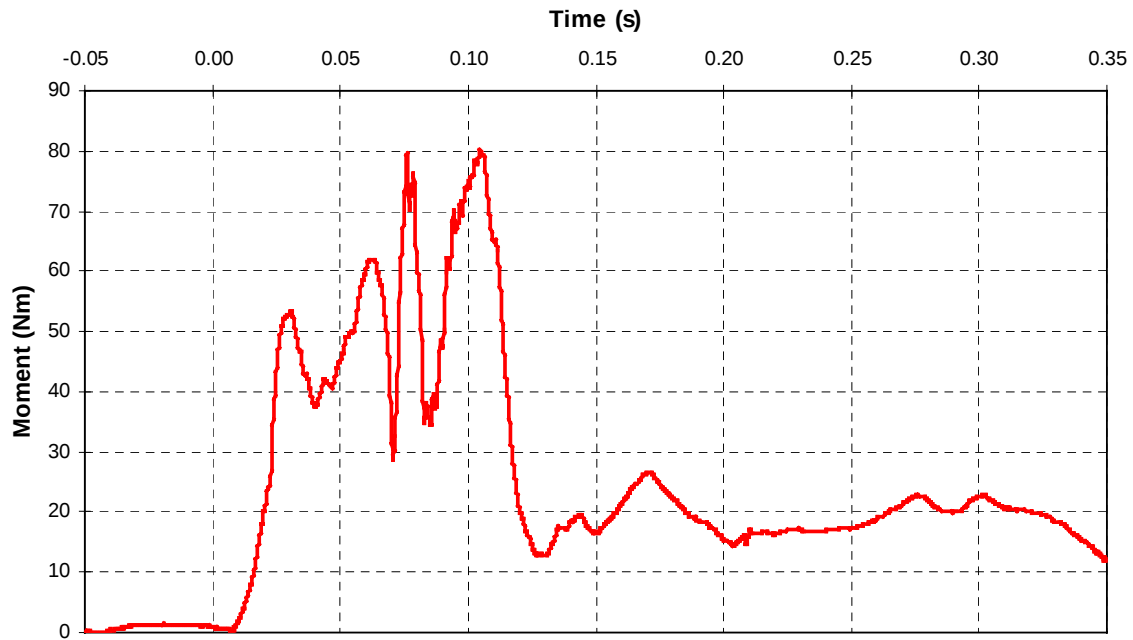
A- 26 CF00005 2000 Subaru Legacy Left Upper Tibia L-M Moment



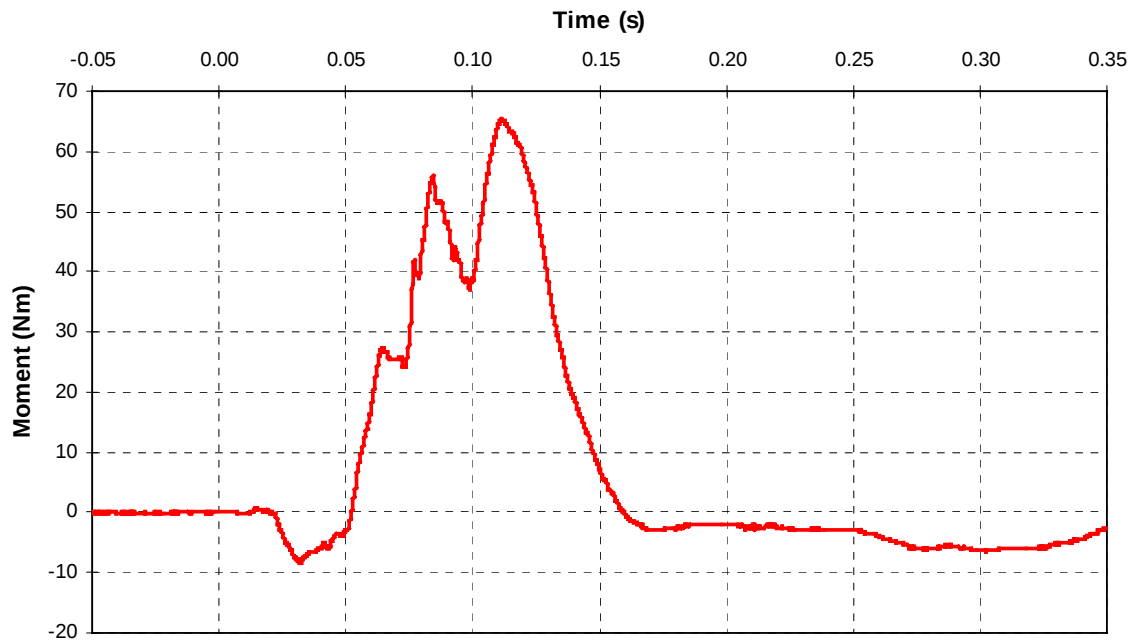
A- 27 CF00005 2000 Subaru Legacy Left Upper Tibia A-P Moment



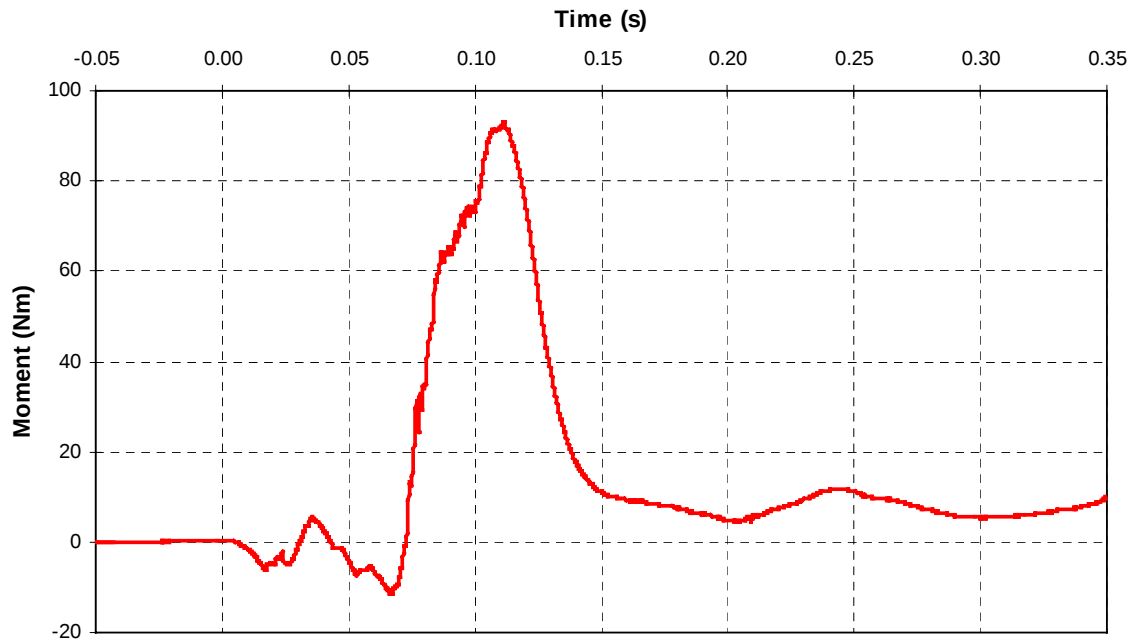
A- 28 CF00005 2000 Subaru Legacy Left Upper Tibia Vector Resultant Moment



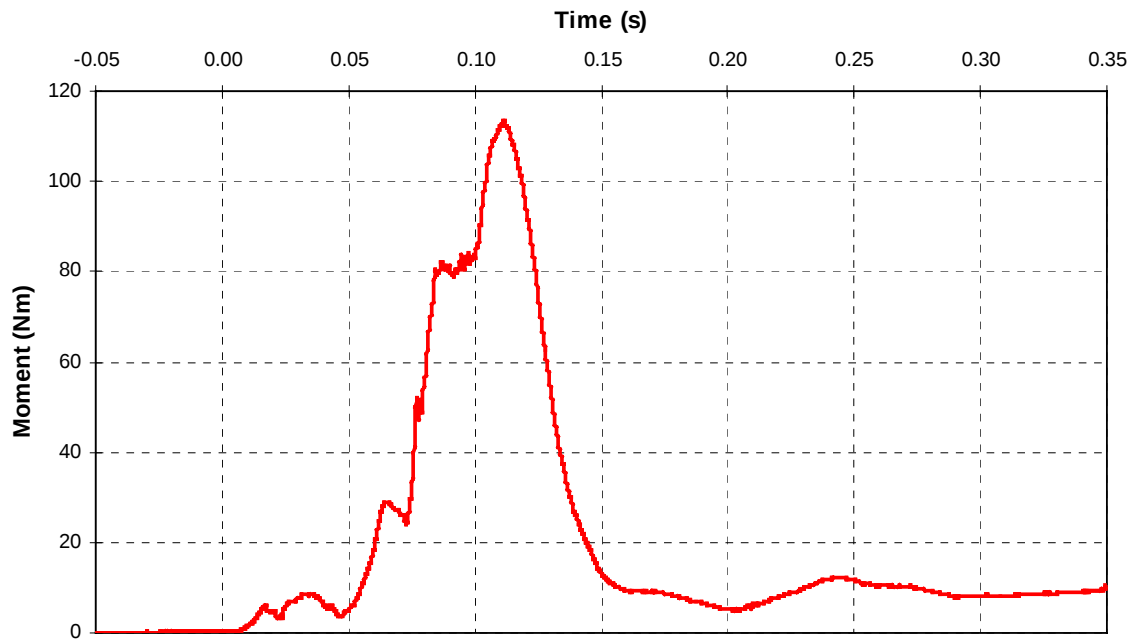
A- 29 CF00005 2000 Subaru Legacy Left Lower Tibia L-M Moment



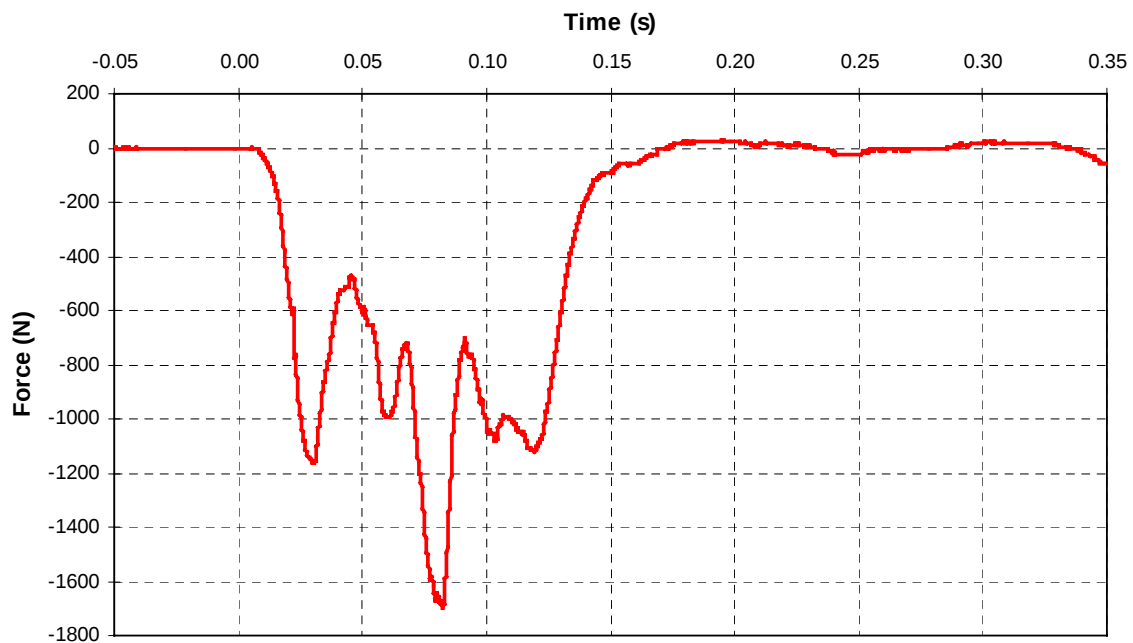
A- 30 CF00005 2000 Subaru Legacy Left Lower Tibia A-P Moment



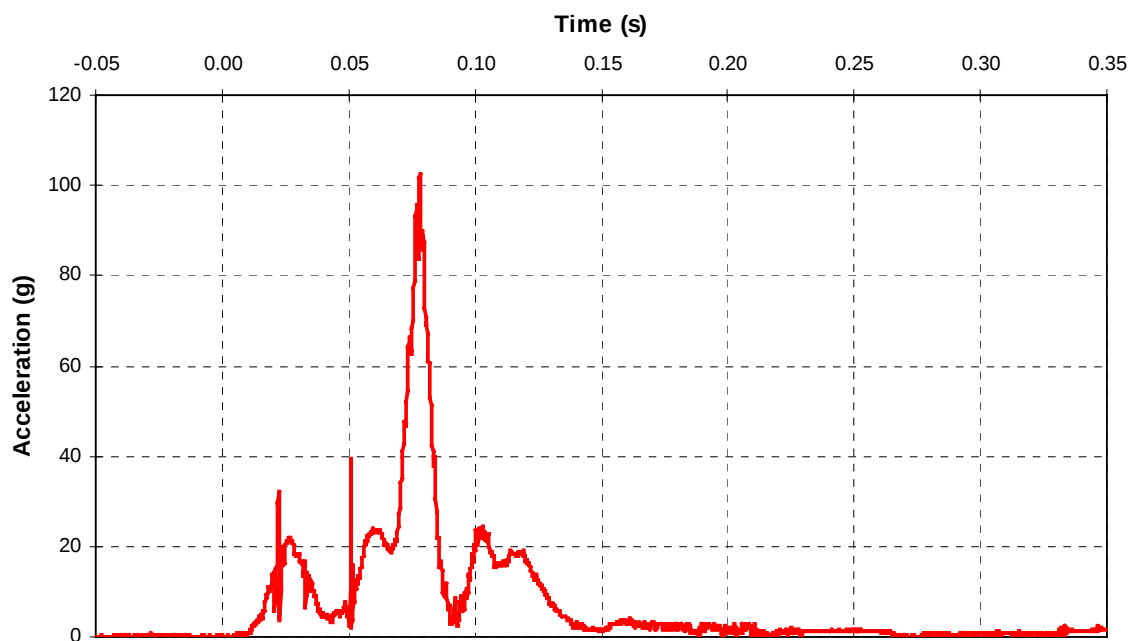
A- 31 CF00005 2000 Subaru Legacy Left Lower Tibia Vector Resultant Moment



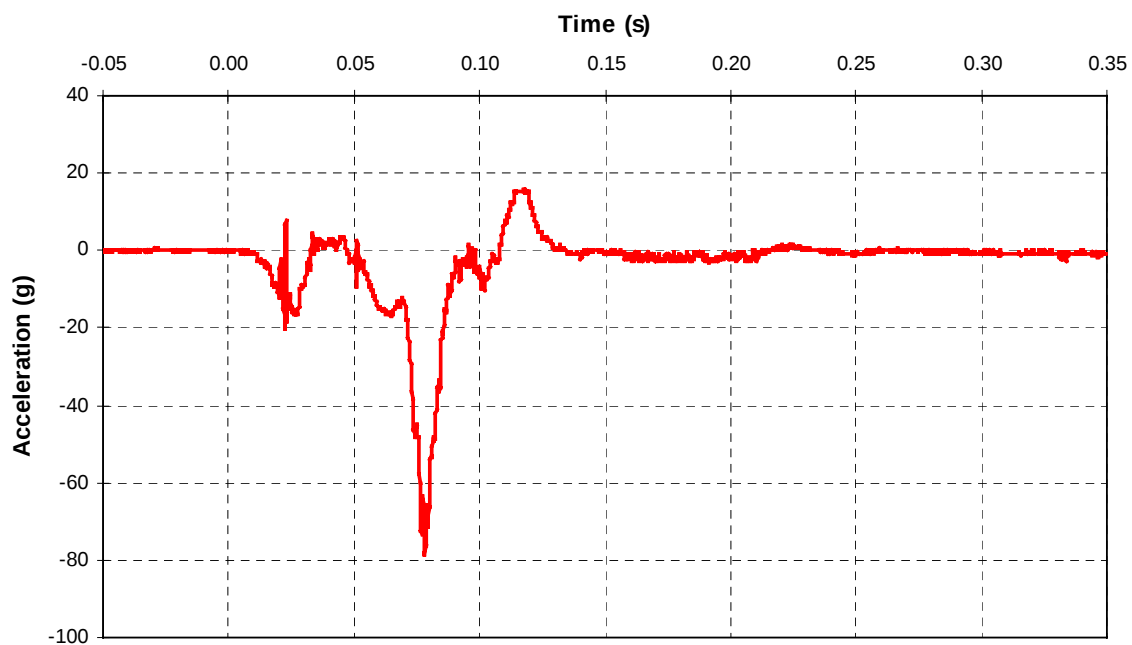
A- 32 CF00005 2000 Subaru Legacy Left Lower Tibia Axial Force



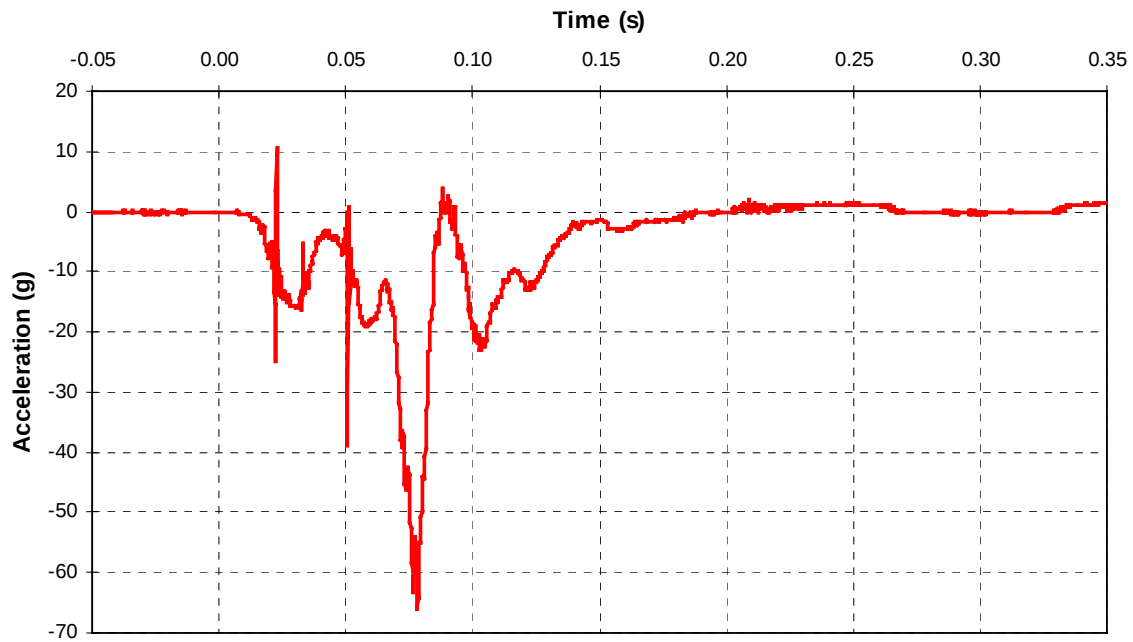
A- 33 CF00005 2000 Subaru Legacy Left Foot Vector Resultant Acceleration



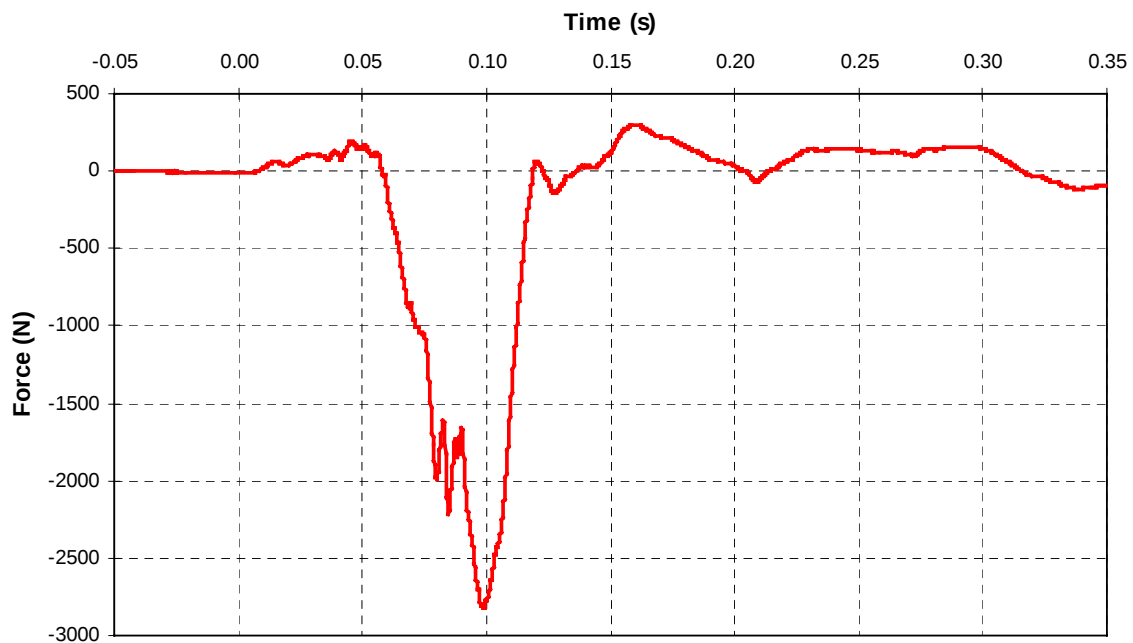
A- 34 CF00005 2000 Subaru Legacy Left Foot A-P Acceleration



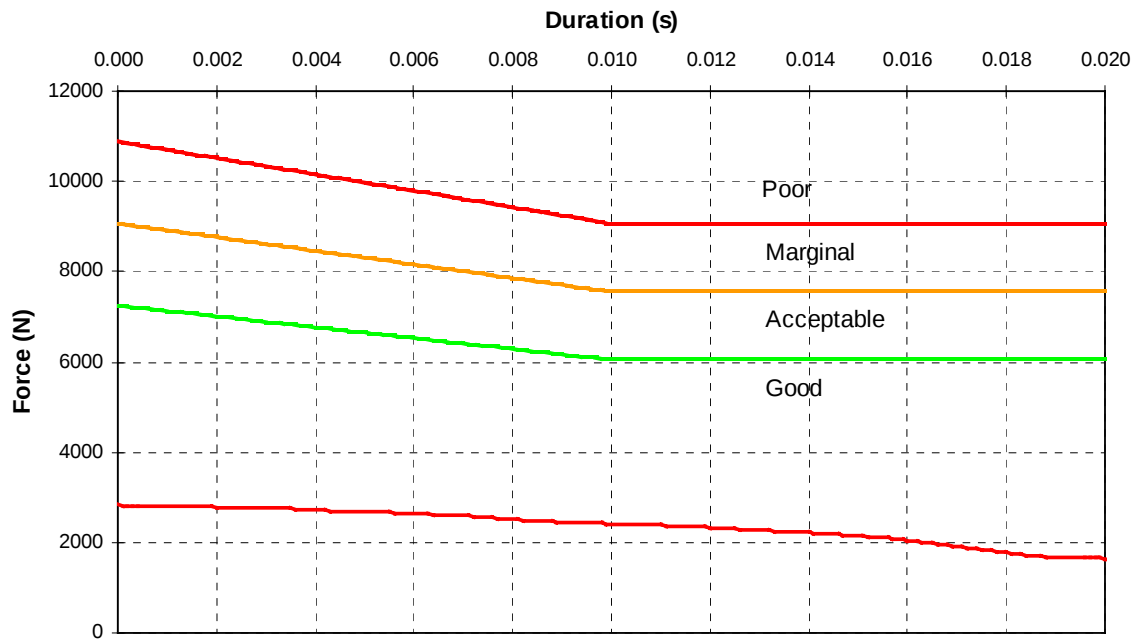
A- 35 CF00005 2000 Subaru Legacy Left Foot I-S Acceleration



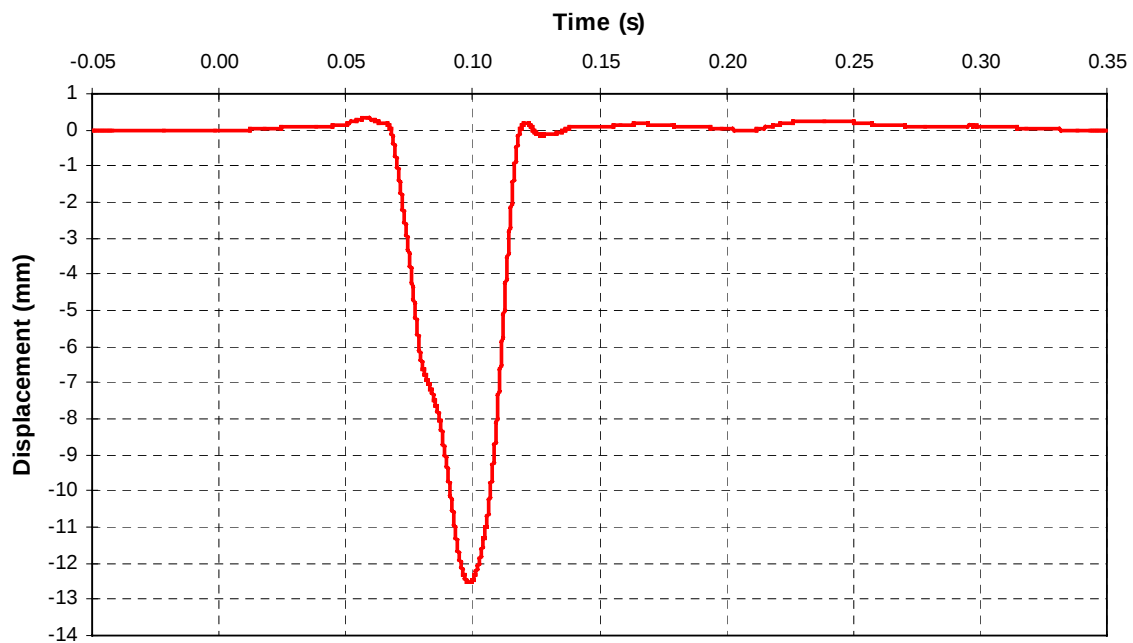
A- 36 CF00005 2000 Subaru Legacy Right Femur Axial Force



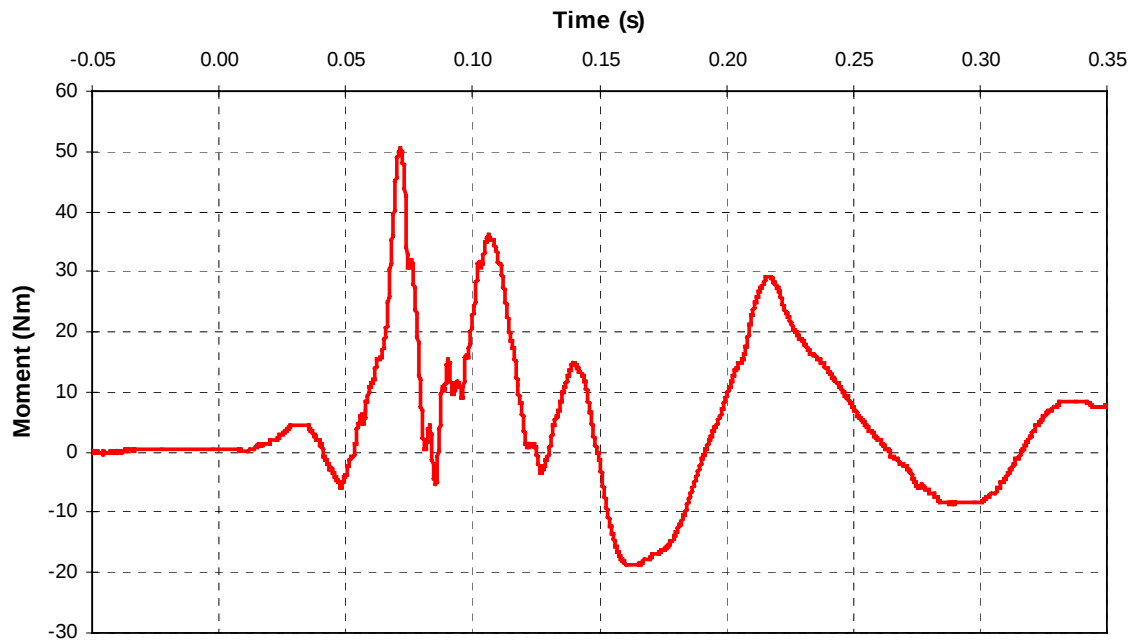
A- 37 CF00005 2000 Subaru Legacy Right Femur Axial Force Analysis



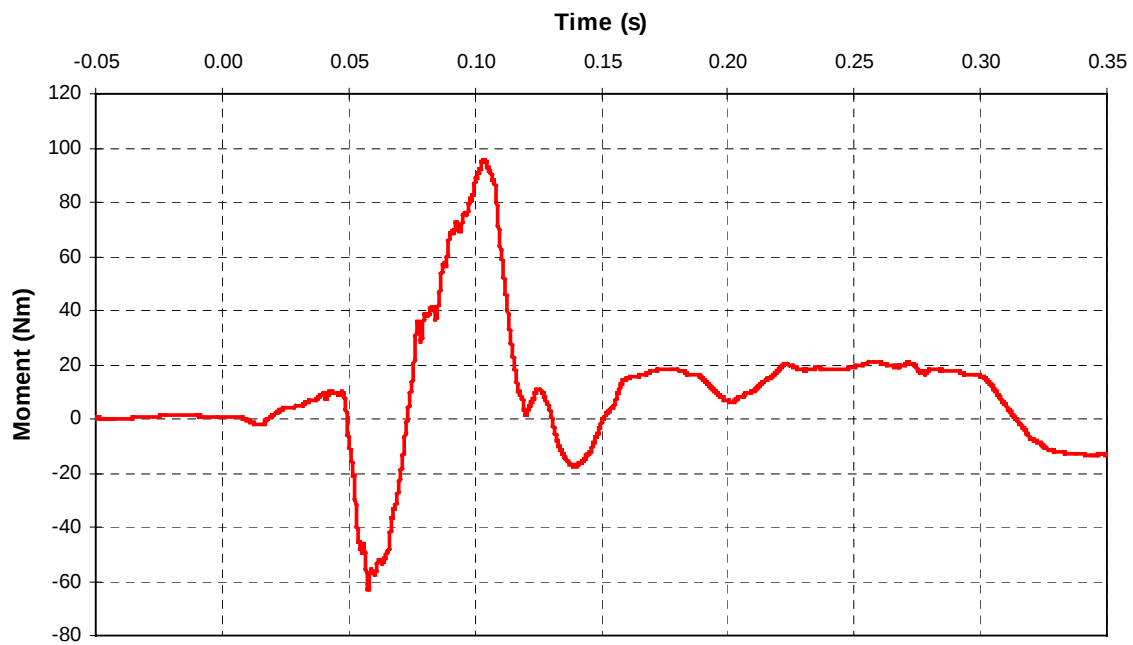
A- 38 CF00005 2000 Subaru Legacy Right Tibia-Femur Displacement



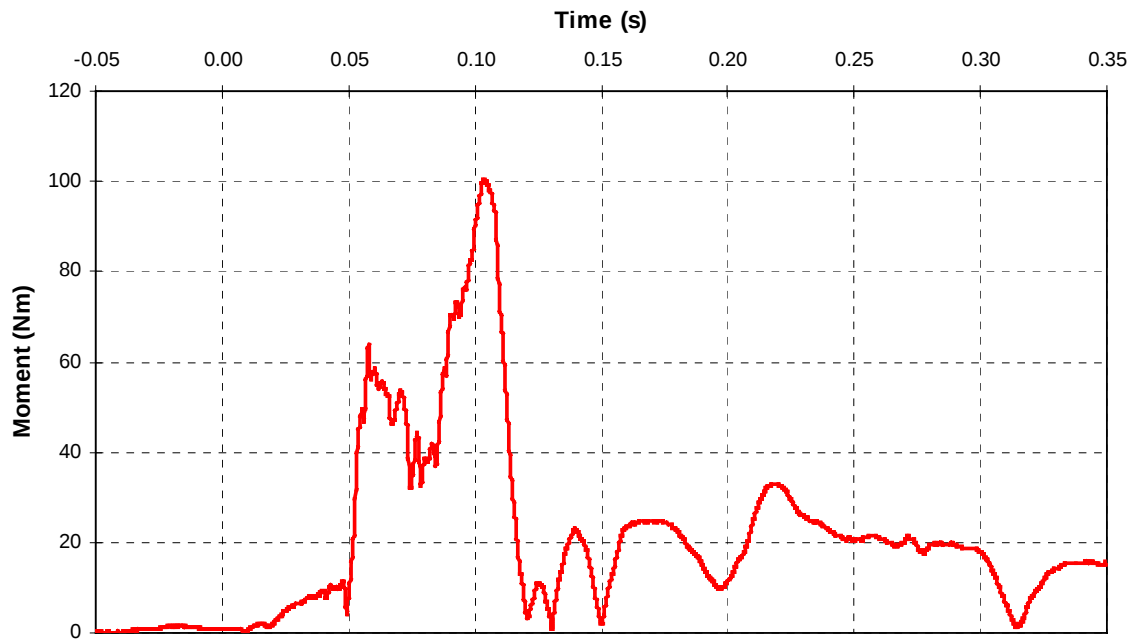
A- 39 CF00005 2000 Subaru Legacy Right Upper Tibia L-M Moment



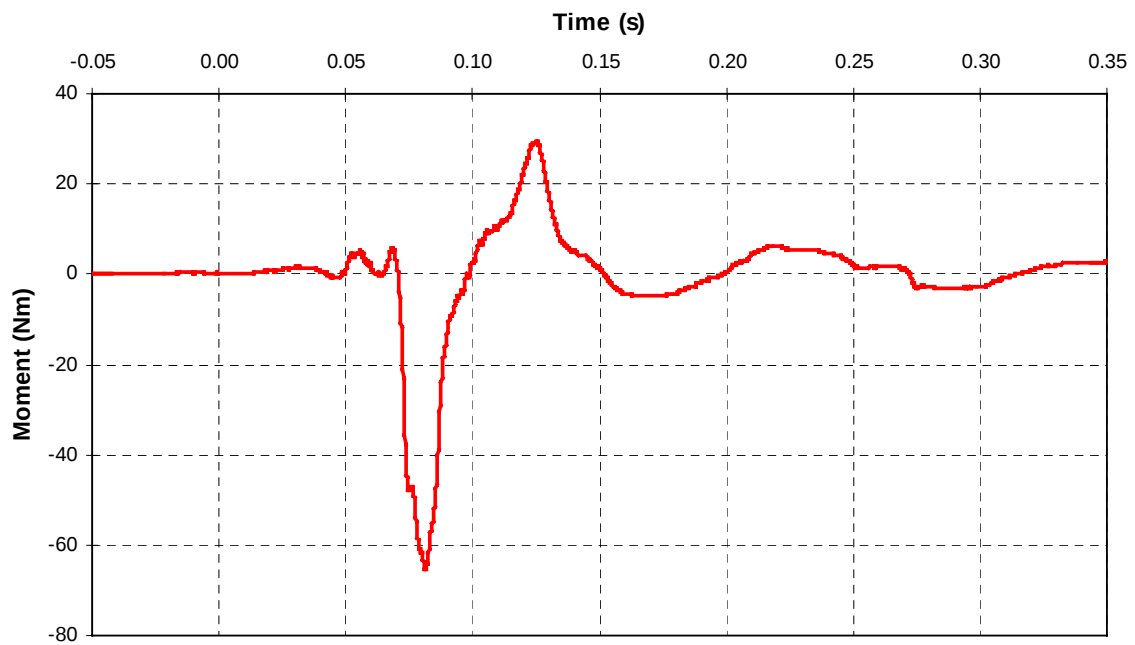
A- 40 CF00005 2000 Subaru Legacy Right Upper Tibia A-P Moment



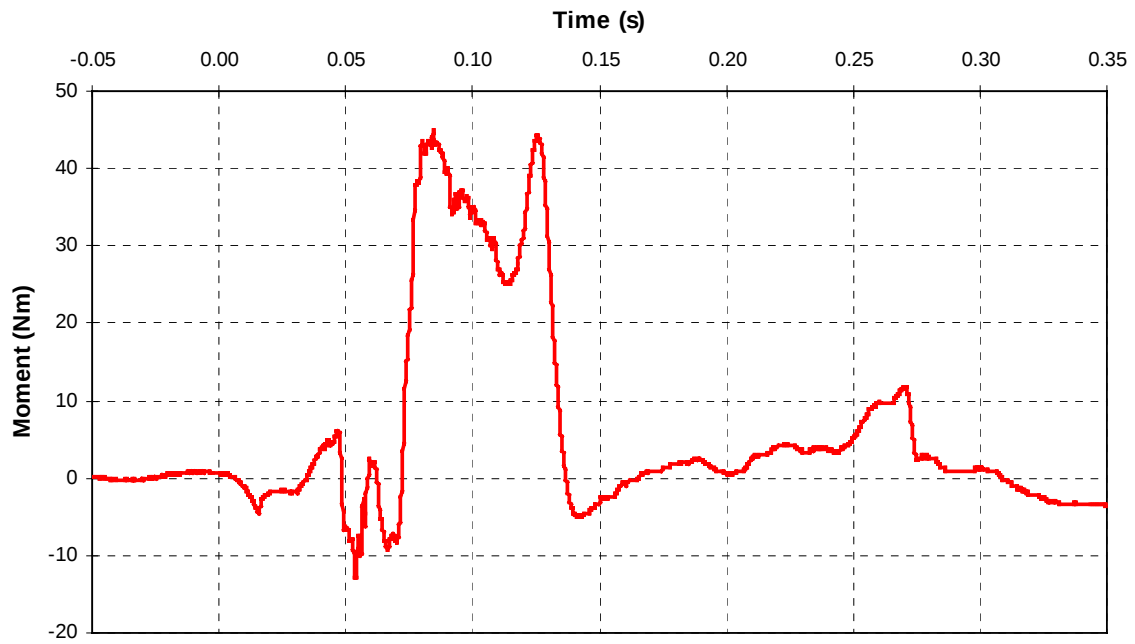
A- 41 CF00005 2000 Subaru Legacy Right Upper Tibia Vector Resultant Moment



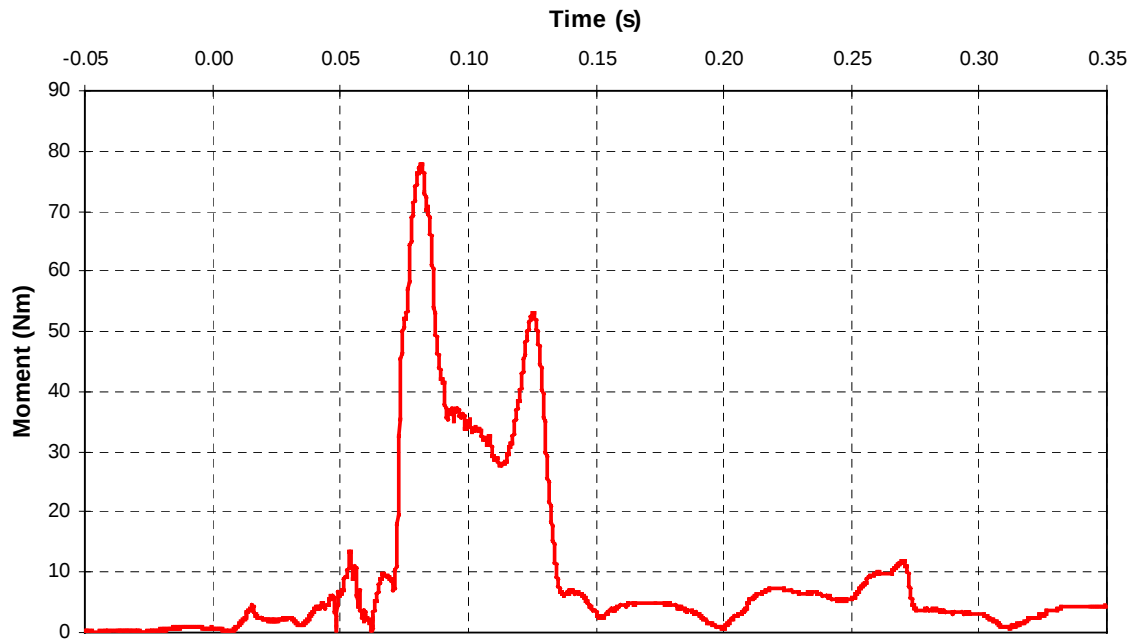
A- 42 CF00005 2000 Subaru Legacy Right Lower Tibia L-M Moment



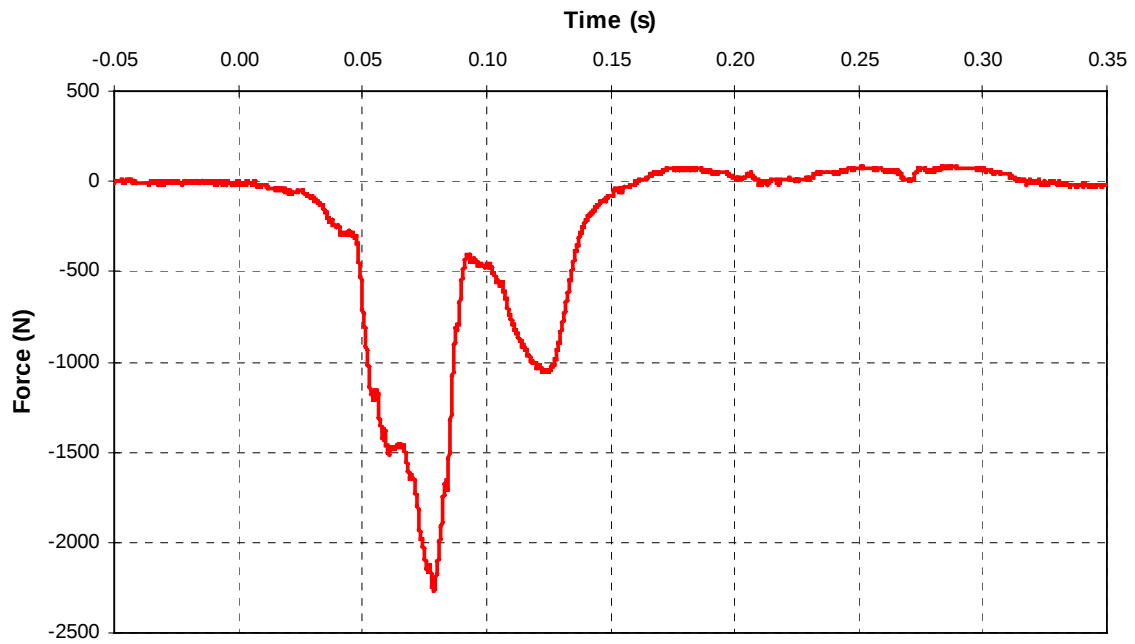
A- 43 CF00005 2000 Subaru Legacy Right Lower Tibia A-P Moment



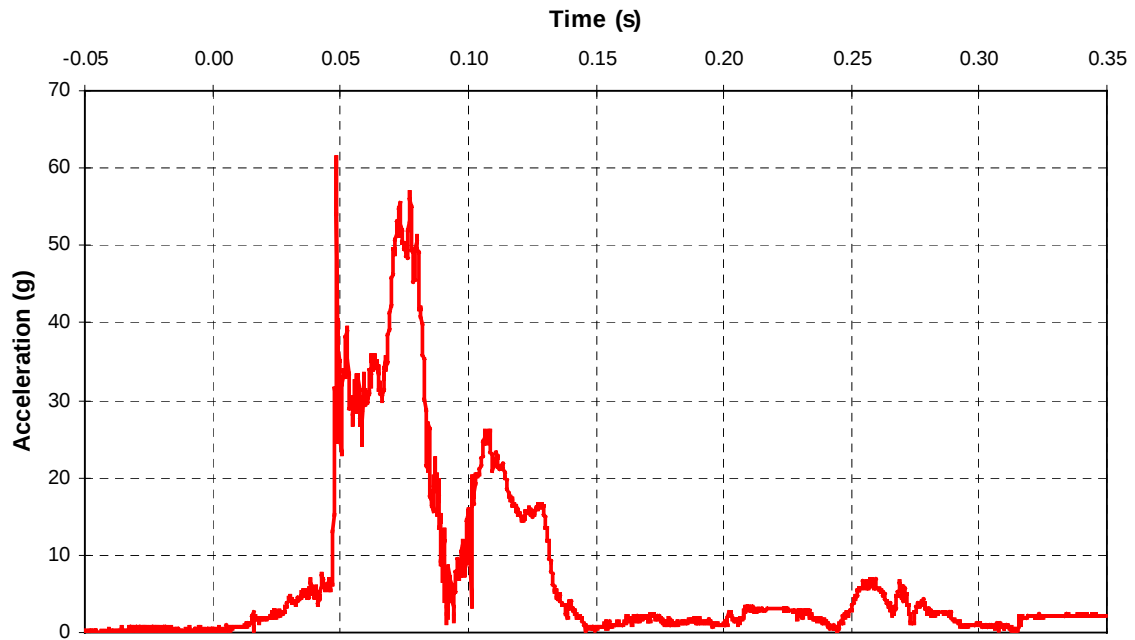
A- 44 CF00005 2000 Subaru Legacy Right Lower Tibia Vector Resultant Moment



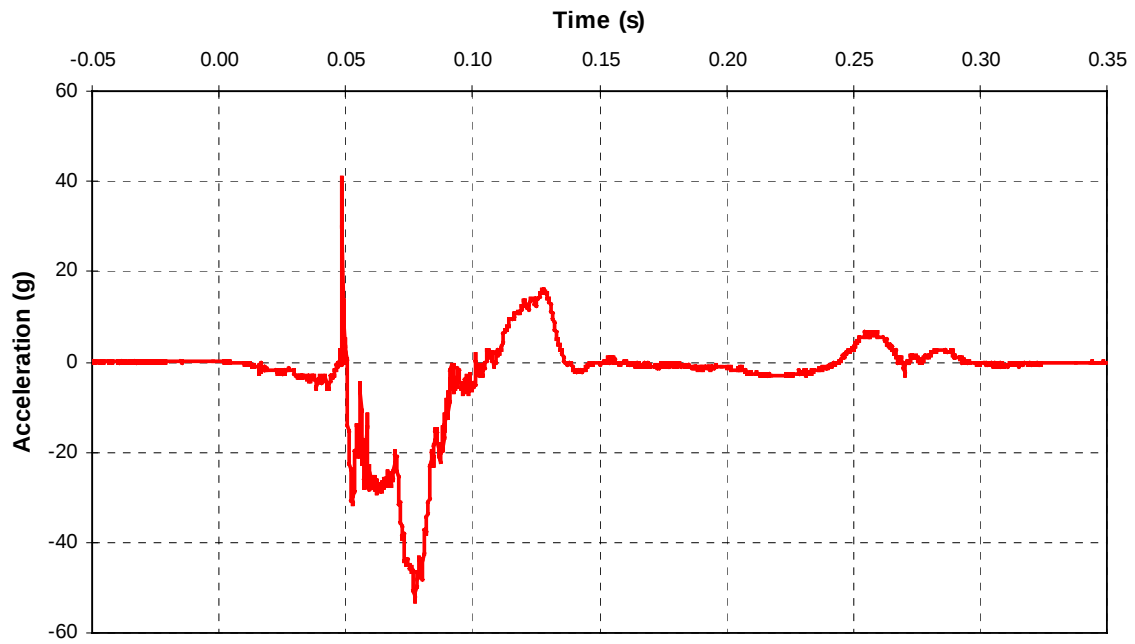
A- 45 CF00005 2000 Subaru Legacy Right Lower Tibia Axial Force



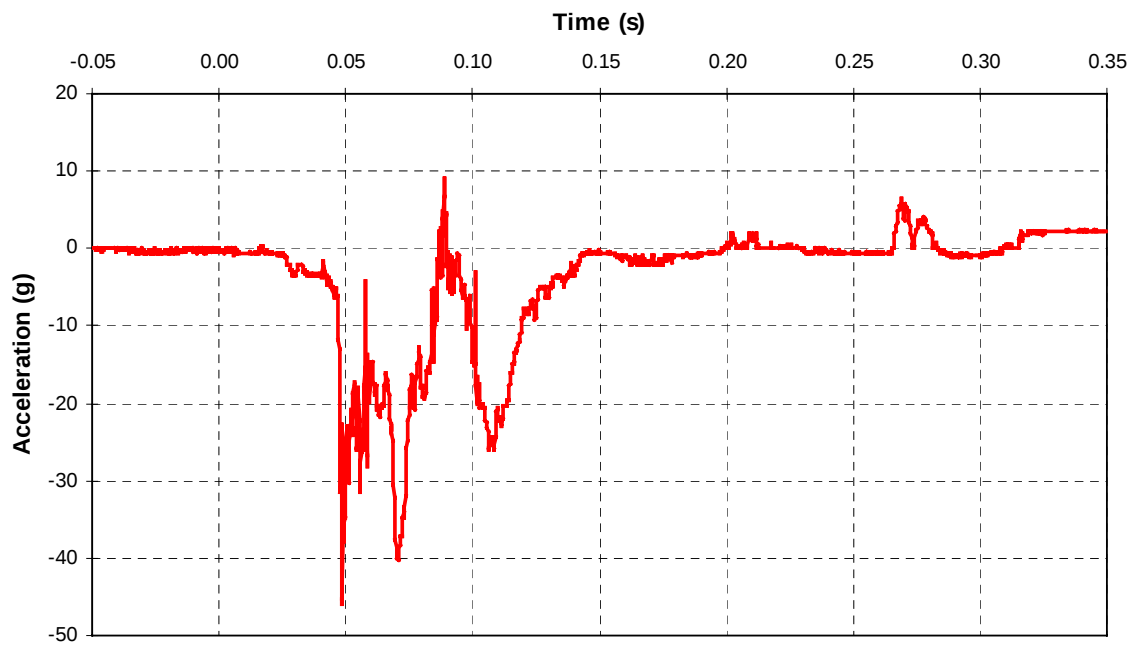
A- 46 CF00005 2000 Subaru Legacy Right Foot Vector Resultant Acceleration



A- 47 CF00005 2000 Subaru Legacy Right Foot A-P Acceleration



A- 48 CF00005 2000 Subaru Legacy Right Foot I-S Acceleration



SUBARU

**** 2000 SUBARU LEGACY L SEDAN ALL-WHEEL DRIVE ****
4-SPEED AUTOMATIC TRANSMISSION
TIMBERLINE GREEN PEARL PAINT

Standard Features

Items featured below are included at NO EXTRA CHARGE in the Standard Vehicle Price shown at right.

SAFETY *****

- ALL-WHEEL DRIVE (AWD)
- 4-CHANNEL ANTI-LOCK BRAKING SYSTEM (ABS)
- 4-WHEEL DISC BRAKES
- DUAL FRONT AIR BAGS (SRS)
- SIDE-IMPACT DOOR BEAMS
- 5-MPH IMPACT-ABSORBING BUMPER
- DAYTIME RUNNING LIGHTS
- 3-PT. FRONT SEATBELTS, HEIGHT ADJUSTABLE WITH PRETENSIONERS & FORCE LIMITERS
- REAR SEATBELTS, 3-PT. ALL SEAT POSITIONS
- CHILD SAFETY LOCKS, REAR DOORS

PERFORMANCE *****

- 2.5L HORIZONTALLY OPPOSED SOHC ENGINE
- 4-WHEEL FULLY INDEPENDENT SUSPENSION
- VARIABLE POWER-ASSISTED STEERING
- MULTI-LINK REAR SUSPENSION
- FRONT & REAR STABILIZER BARS
- 205/60 R15 ALL-SEASON RADIAL TIRES

COMFORT & CONVENIENCE *****

- AIR CONDITIONING (NON-CFC REFRIGERANT)
- AM/FM CASSETTE STEREO WITH 4 SPEAKERS
- POWER WINDOWS WITH DRIVER'S AUTO DOWN
- POWER DOOR LOCKS & DUAL POWER MIRRORS
- CRUISE CONTROL
- HEADLIGHT AUTO-OFF W/IGNITION SWITCH
- OVERHEAD MAP LIGHTS
- REAR SEAT TRUNK PASS-THRU
- TILT ADJUSTABLE STEERING COLUMN
- INTERMITTENT WINDSHIELD WIPERS
- CARGO AREA GROCERY BAG HOOKS
- 12V POWER OUTLET AND ASHTRAY
- DUAL FRONT & REAR CUPHOLDERS

LIMITED WARRANTIES *****

- 3 YR/36K MI BASIC W/ROADSIDE ASSISTANCE
- 5 YR/60,000 MILE POWERTRAIN
- 5 YR/UNLIMITED MILEAGE RUST PERFORMANCE
- SEE OWNER INFO KIT & WARRANTY FOR DETAILS

Compare this vehicle to others in the FREE GAS MILEAGE GUIDE available at the dealer.

City MPG

22



Highway MPG

27

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

18 and 26 mpg in the city and between 22 and 32 mpg on the highway. ESTIMATED ANNUAL FUEL COST: \$ 719.00

2000 SUBARU LEGACY AWD SEDAN
 2.5 LITRE ENGINE, 4 CYLINDERS,
 4-SPD AUTO TRANS.

For Comparison Shopping,
 all vehicles
 COMACT

MULTI-POINT FUEL INJECTION, have been issued mileage ratings ranging from 15 to 42 mpg city and 21 to 49 mpg highway. (FEEDBACK FUEL SYSTEM) CALIF. EMISSION CONTROL SYST

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 SILVER SPRING, MD 20904

Standard Vehicle Price

Manufacturer's
 Suggested Retail Price
\$19,195.00

OPTIONAL EQUIPMENT AND OTHER ITEMS

****SUBARU ALL-WHEEL DRIVING SYSTEM****
 To achieve maximum Traction and Performance, every Subaru integrates a unique system combining All-Wheel Drive with a symmetrically balanced horizontally opposed engine and an optimally tuned independent suspension. The result is superior Handling and Control in all driving conditions.
STANDARD ON ALL SUBARU VEHICLES

4-SPEED AUTOMATIC TRANSMISSION	\$ 800.00
POPULAR EQUIPMENT GROUP 2	\$ 164.00
FLOOR MATS	
SPLASH GUARDS	
CD PLAYER	\$ 356.00
TWEETER KIT	\$ 100.00

TOTAL VEHICLE & OPTIONS	\$ 20,615.00
DESTINATION AND DELIVERY	\$ 495.00
Total Suggested Retail Price	\$ 21,110.00

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