

Shock Impact Low (3.05 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

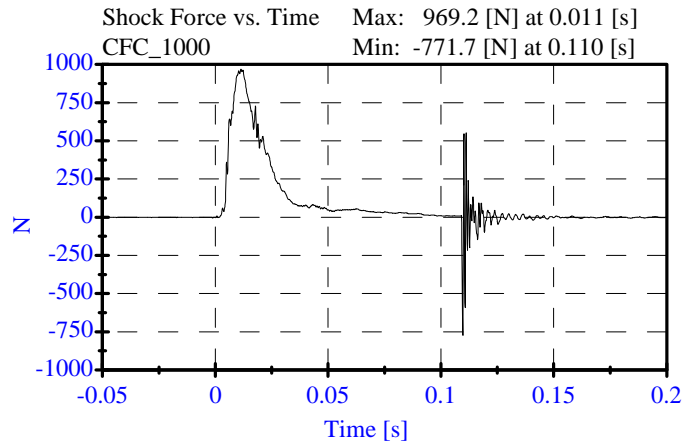
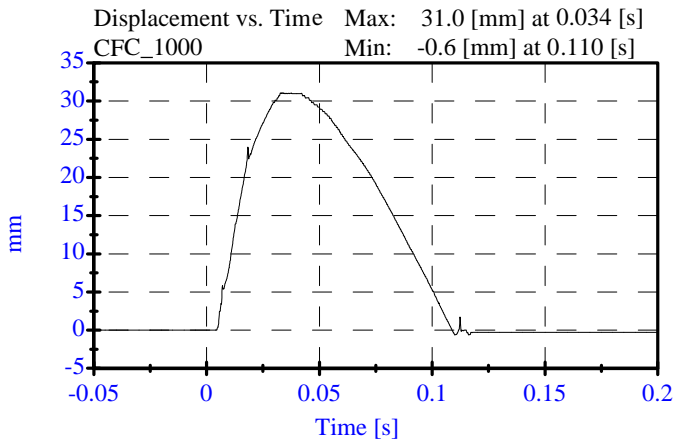
ATD Serial No: 905

Date: 08-01-07

Sequential Test Number: 1 File: 905SL 08-1-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Displacement:	30.00-35.00 mm	31.05 mm	Passed
Maximum Force:	836.00-1125.00 N	969.22 N	Passed
Impact Test Velocity:	3.05 m/s		
Damper Identification:	905		
Damper Setting:	5		



Shock Impact Med (4.27 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 905

Date: 08-01-07

Sequential Test Number: 1 File: 905SM 08-1-07

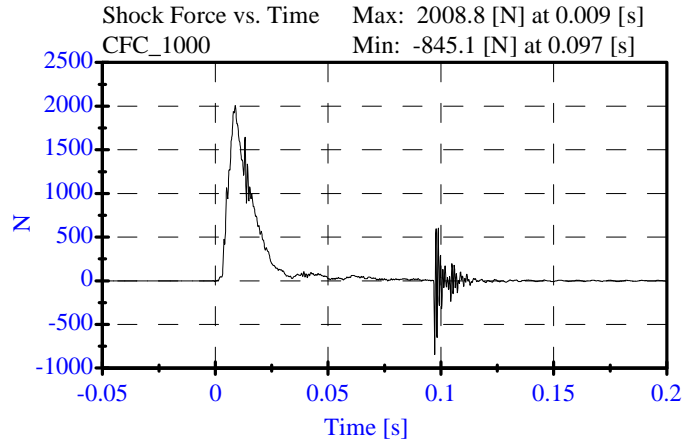
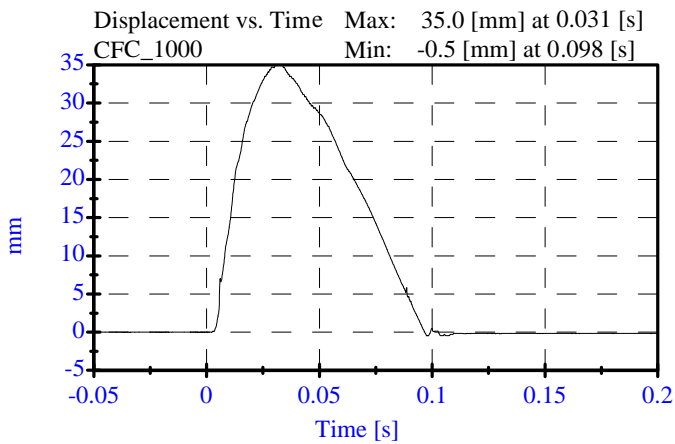
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Displacement:	32.00-37.00 mm	34.98 mm	Passed
Maximum Force:	1730.00-2099.00 N	2008.82 N	Passed

Impact Test Velocity: 4.27 m/s

Damper Identification: 905

Damper Setting: 5



Shock Impact High (6.10 m/s)

PRE TEST

CONFIGURED FOR LEFT SIDE IMPACT

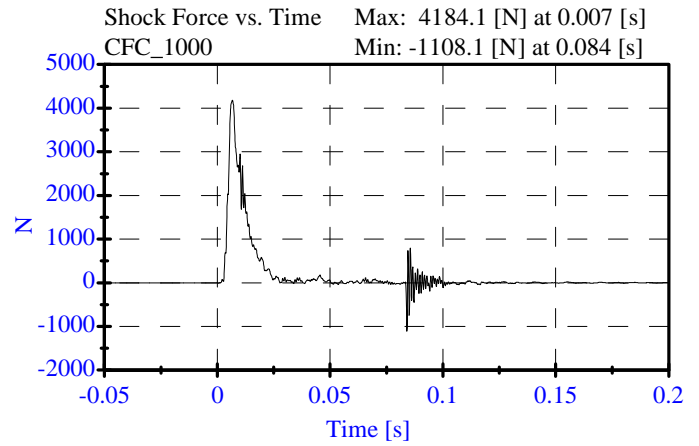
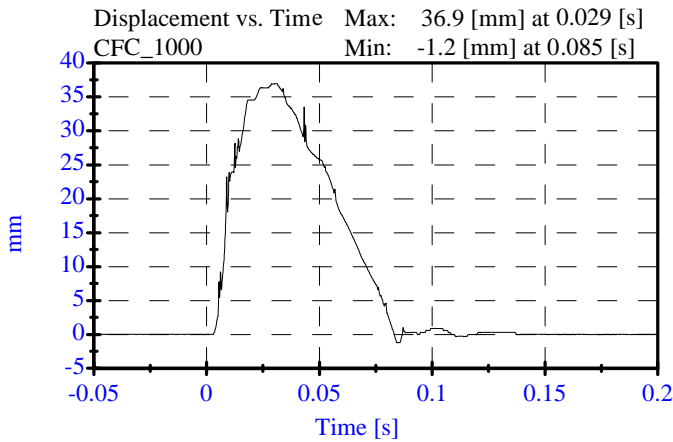
ATD Serial No: 905

Date: 08-01-07

Sequential Test Number: 1 File: 905SH 08-1-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Displacement:	33.00-40.00 mm	36.94 mm	Passed
Maximum Force:	3741.00-4448.00 N	4184.07 N	Passed
Impact Test Velocity:	6.10 m/s		
Damper Identification:	905		
Damper Setting:	5		

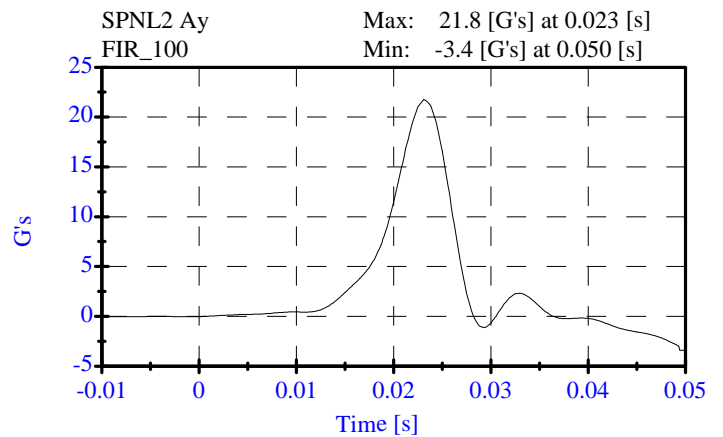
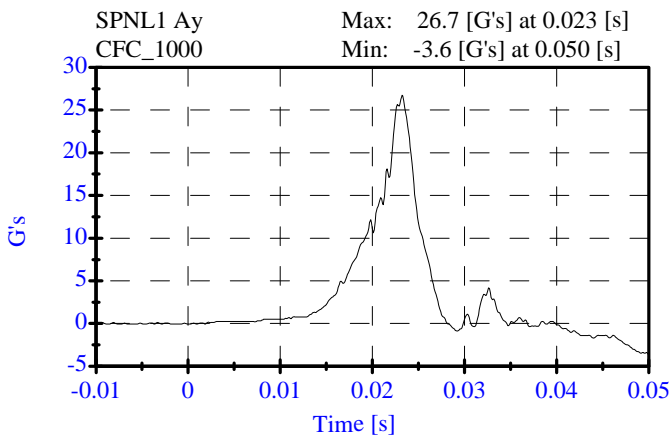
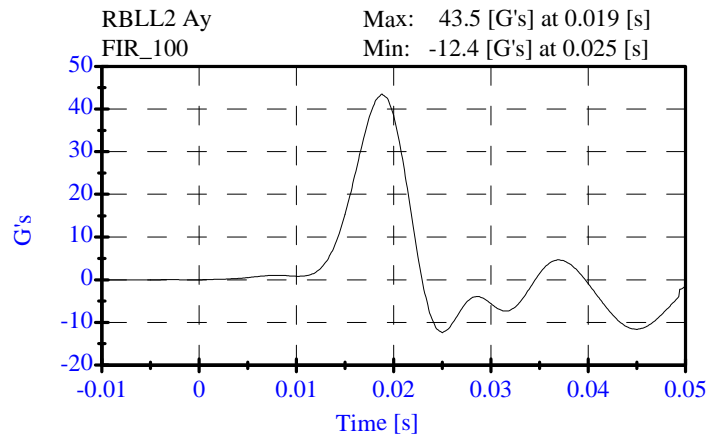
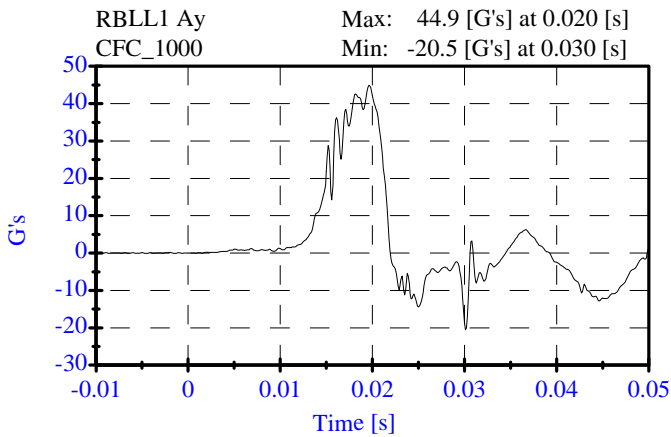
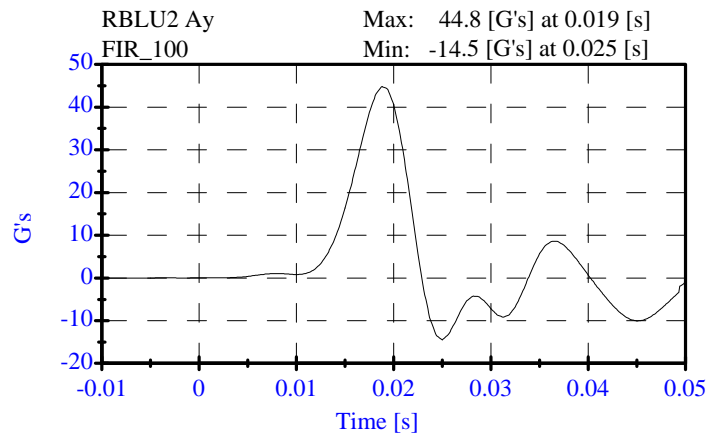
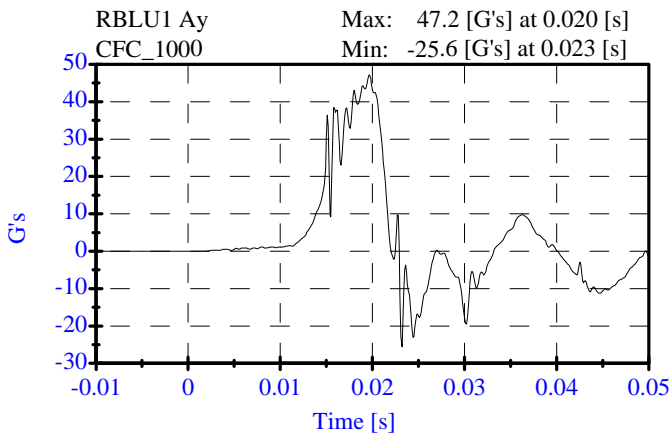


**Thorax Impact
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 905
Date: 09-27-07

Sequential Test Number: 1 File: 905T 09-27-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.32 m/s	Passed
Upper Rib Acceleration:	37.00-46.00 G's	44.81 G's	Passed
Lower Rib Acceleration:	37.00-46.00 G's	43.48 G's	Passed
Lower Spine Acceleration:	15.00-22.00 G's	21.77 G's	Passed



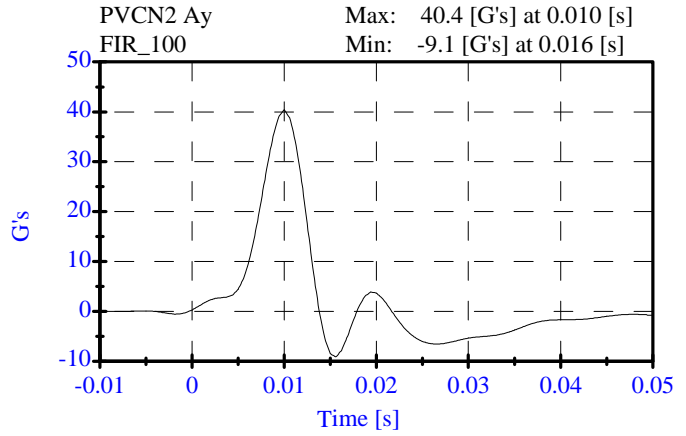
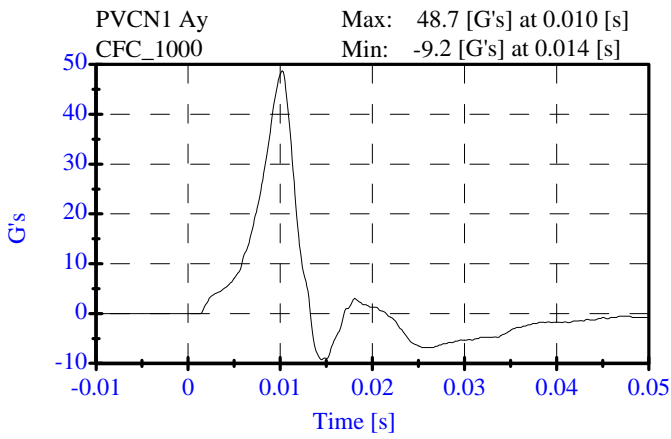
**Pelvic Impact
Pre-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 905
Date: 09-27-07

Sequential Test Number: 1 File: 905P 09-27-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Probe Velocity:	4.27- 4.33 m/s	4.32 m/s	Passed
Pelvis Y Acceleration:	40.00-60.00 G's	40.44 G's	Passed
Time Above 20 Gs	3.0-7.0 ms	5.0 ms	Passed



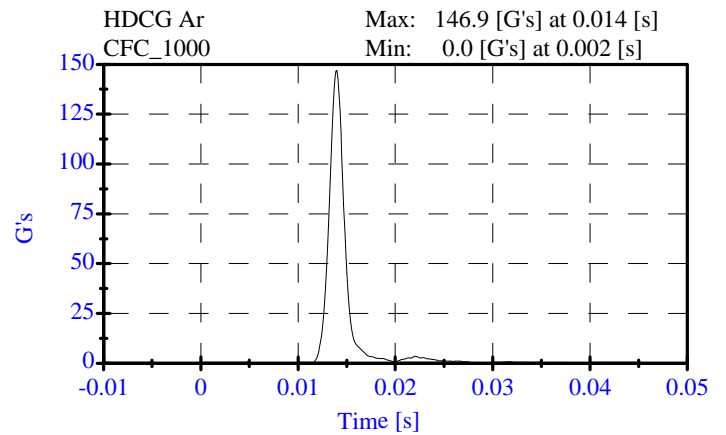
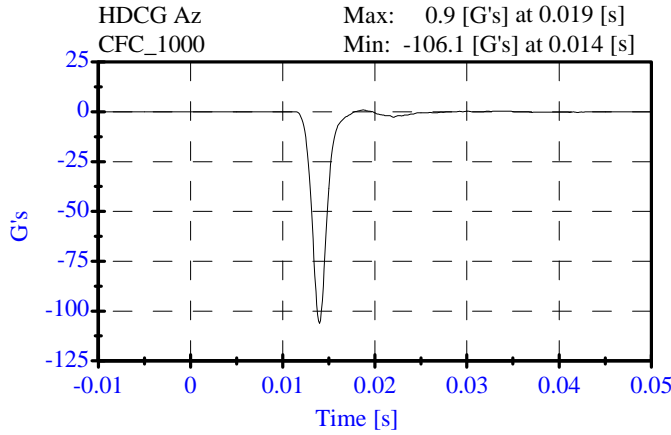
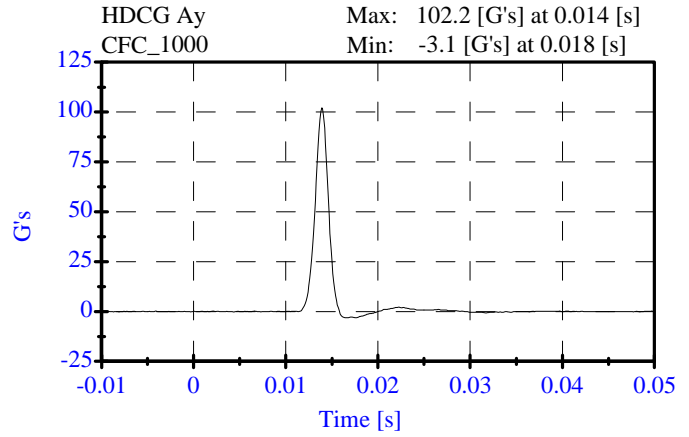
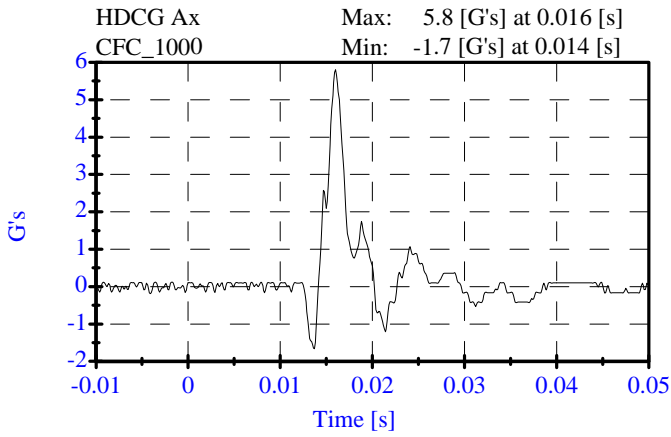
**Head Drop
Pre-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 905
Date: 09-25-07

Sequential Test Number: 1 File: 905H 09-25-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.6 C	21.1 C	Passed
Lab Humidity:	10-70 %	36.00 %	Passed
Peak Resultant Accel.:	120-150 Gs	146.86 Gs	Passed
Peak Lateral Accel.:	15 Gs Max	5.80 Gs	Passed
Curve PerCent NonModal:	< 15%	2.40 %	Passed



**Neck Test
Pre-Test**

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 905
Date: 09-25-07

Sequential Test Number: 1 File: 905N 09-25-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	20.6-22.2 C	21.1 C	Passed
Lab Humidity:	10-70 %	37.00 %	Passed
Impact Velocity:	6.89- 7.13 m/s	6.99 m/s	Passed
PENDULUM DELTA V			
Delta V at 10 ms:	1.96- 2.55 m/s	1.96 m/s	Passed
Delta V at 20 ms:	4.12- 5.10 m/s	4.14 m/s	Passed
Delta V at 30 ms:	5.73- 7.01 m/s	6.10 m/s	Passed
Delta V between 40-70 ms:	6.27- 7.64 m/s	6.97 m/s	Passed
D PLANE ROTATION			
Maximum Rotation:	66.0-82.0 Deg	71.31 Deg	Passed
Rotation Angle Decay:	58.0-67.0 ms	60.00 ms	Passed
MOMENT ABOUT THE OCCIPITAL CONDYLE			
Max Occipital Moment:	73.00- 88.00 N-m	84.98 N-m	Passed
Occipital Moment Decay:	49.0-64.0 ms	57.70 ms	Passed
HEAD ROTATION TIME WITH RESPECT TO THE OCCIPITAL CONDYLE MOMENT			
Moment to Rotation Peak:	2.0-16.0 ms	10.00 ms	Passed

**Neck Test
Pre-Test**

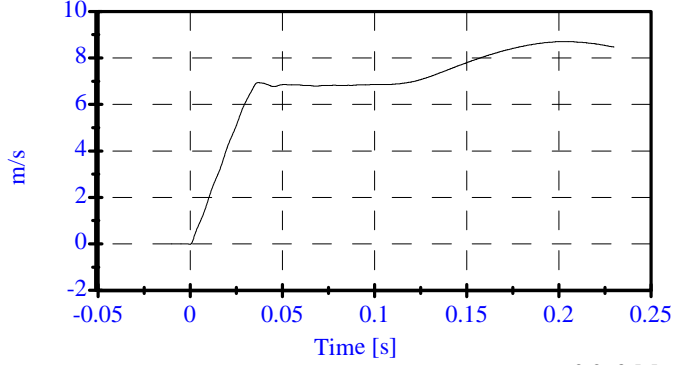
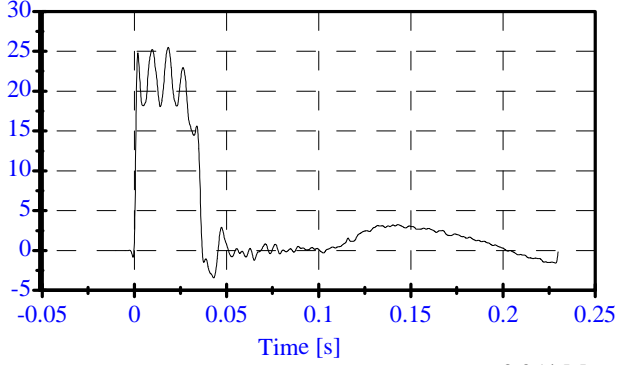
CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 905
Date: 09-25-07

Sequential Test Number: 1 File: 905N 09-25-07
Laboratory Technician: B. Swiecicki

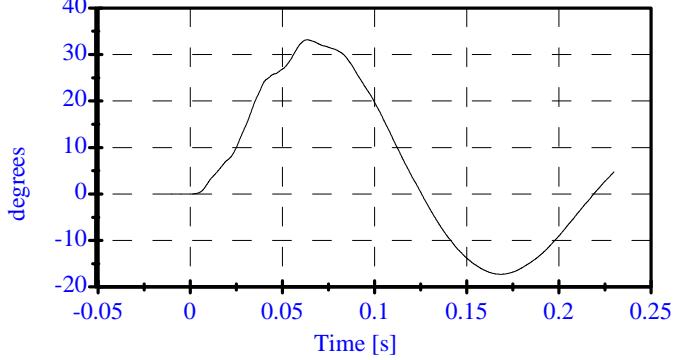
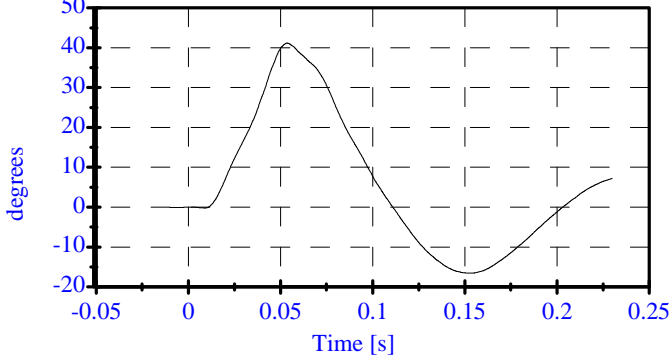
Pend Ax CFC_180 Max: 25.5 [] at 0.018 [s]
Min: -3.4 [] at 0.043 [s]

Pend Vx CFC_180 Max: 8.7 [m/s] at 0.202 [s]
Min: -0.0 [m/s] at -0.000 [s]



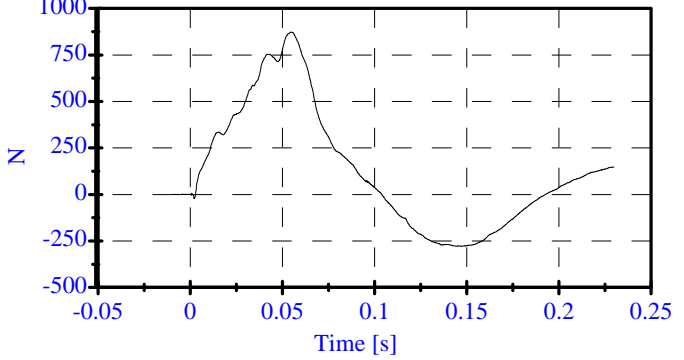
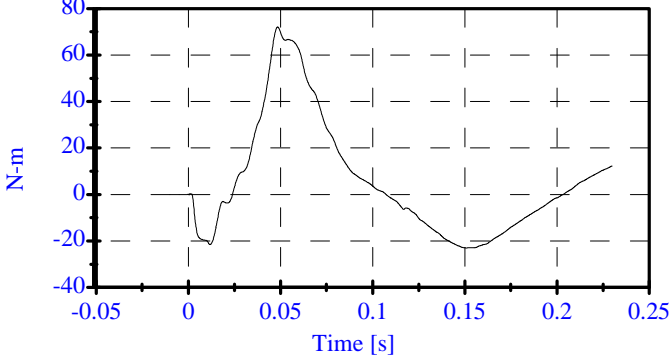
Head Rot CFC_180 Max: 41.2 [degrees] at 0.054 [s]
Min: -16.5 [degrees] at 0.154 [s]

Arm Rot CFC_180 Max: 33.2 [degrees] at 0.063 [s]
Min: -17.3 [degrees] at 0.168 [s]



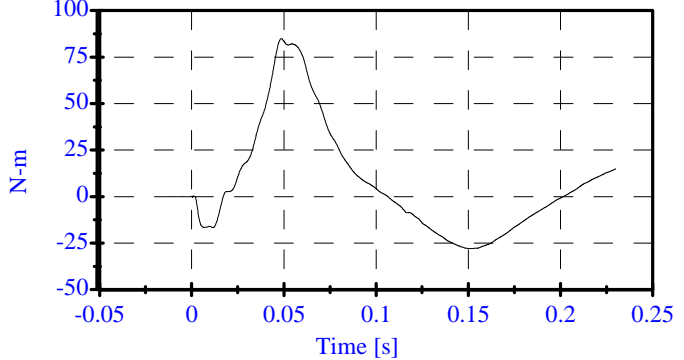
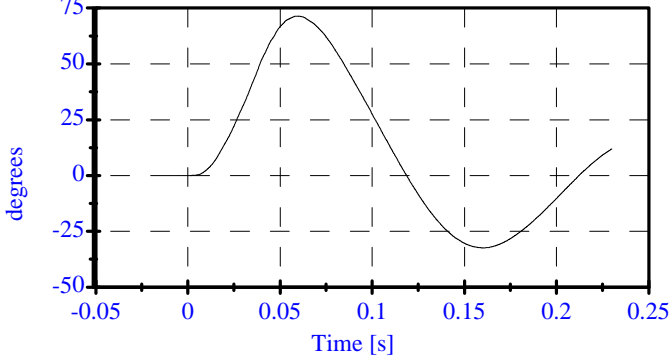
Neck Mx CFC_600 Max: 72.1 [N-m] at 0.049 [s]
Min: -23.1 [N-m] at 0.151 [s]

Neck Fy CFC_1000 Max: 872.9 [N] at 0.054 [s]
Min: -279.6 [N] at 0.147 [s]



Tot Rot CFC_180 Max: 71.3 [degrees] at 0.059 [s]
Min: -32.4 [degrees] at 0.160 [s]

MOCX Max: 85.0 [N-m] at 0.049 [s]
Min: -28.0 [N-m] at 0.151 [s]



Abdomen Test

Pre-Test

CONFIGURED FOR LEFT SIDE IMPACT

ATD Serial No: 905

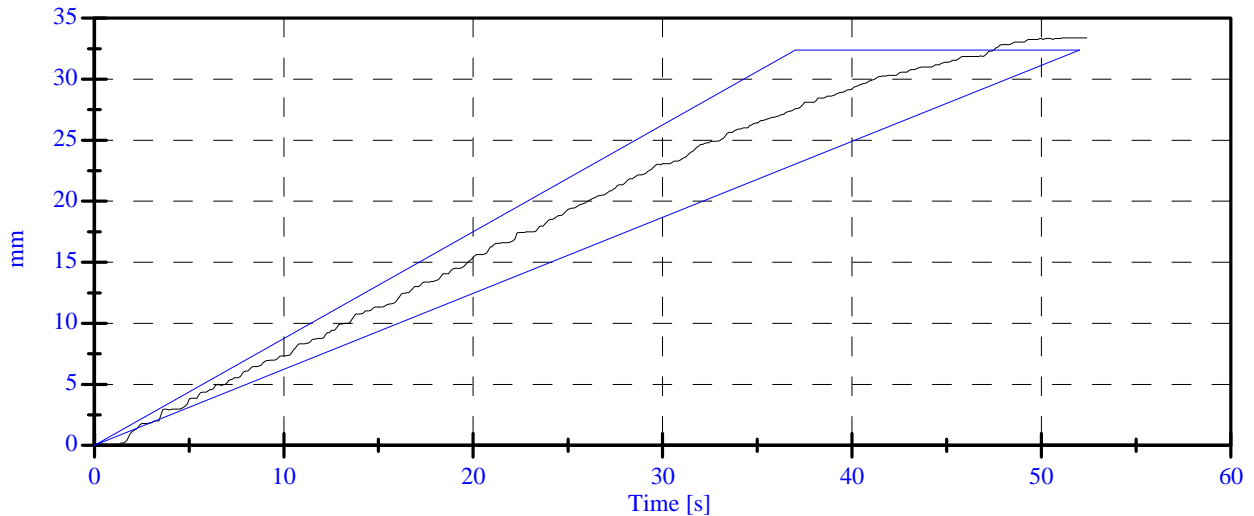
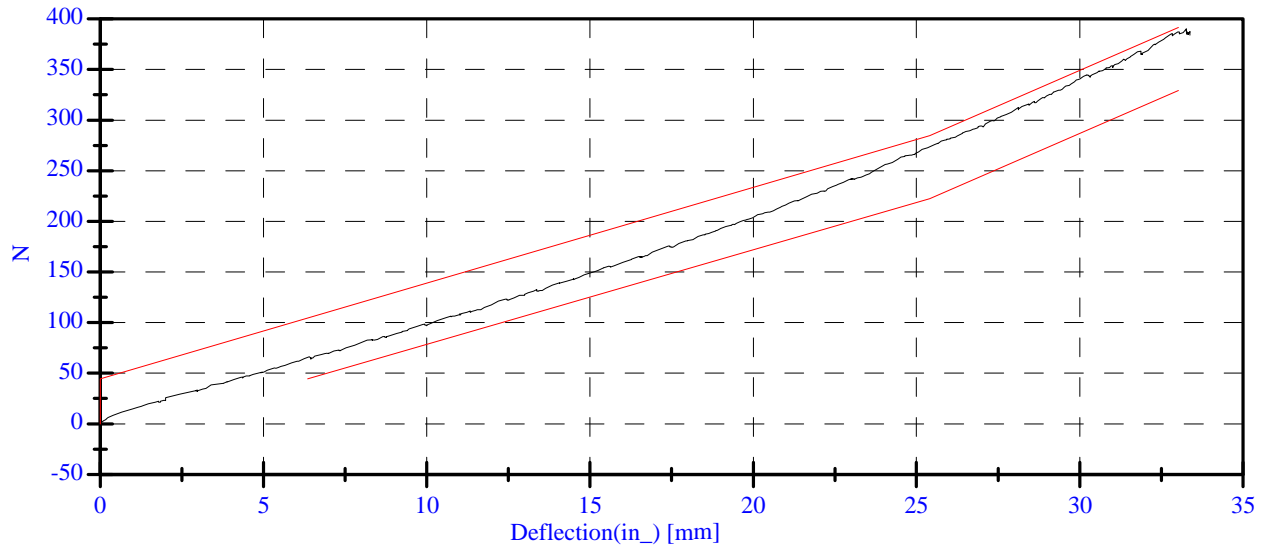
Date: 09-28-07

Sequential Test Number: 1 File: 905AB 09-28-07

Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	44.00 %	Passed
Force at 12.95 mm :	104.00-162.00 N	127.03 N	Passed
Force at 19.05 mm :	162.98-220.99 N	193.01 N	Passed
Force at 25.40 mm :	221.97-280.02 N	272.75 N	Passed
Force at 33.02 mm :	324.99-391.00 N	386.93 N	Passed

ABDOMINAL COMPRESSION TEST



**Lumbar Spine
Pre-Test
CONFIGURED FOR LEFT SIDE IMPACT**

ATD Serial No: 905
Date: 09-27-07

Sequential Test Number: 1 File: 905sp 09-27-07
Laboratory Technician: B. Swiecicki

<u>TEST PARAMETER</u>	<u>SPECIFICATION</u>	<u>TEST RESULTS</u>	<u>STATUS</u>
Lab Temperature:	18.9-25.5 C	21.1 C	Passed
Lab Humidity:	10-70 %	33.00 %	Passed
Force at 0 Deg:	0.00-26.69 N	20.63 N	Passed
Force at 20 Deg:	97.86-151.24 N	138.93 N	Passed
Force at 30 Deg:	151.24-204.62 N	173.40 N	Passed
Force at 40 Deg:	204.62-258.00 N	232.95 N	Passed
Return Angle	12 Deg Max	9.11 deg	Passed

LUMBAR SPINE FLEXION TEST

