EA12-003

FORD

1-11-2013

APPENDIX F

2006-FMVSS207

	Regulation		Carryover Year	Carryover Vehicle
x	101	Controls and Displays	2005.5	V229
x	102	Transmission Shift	2005.5	V229
x	103	Windshield Defrost & Demist	2005.5	V229
x	104	Windshield Washing & Wiping	2005.5	V229
	105	Brake Systems		
x	106	Brake Hoses	2005.5	V229
x	108	Lamps	2005.5	V229
x	109	New Pneumatic Tires	2005.5	V229
	110	Tire Selection & Rims		
x	111	Rearview Mirrors	2005.5	V229
	112	Concealed Headlamps		
x	113	Hood Latch System	2005.5	V229
x	114	Theft Protection	2005.5	V229
	115	VIN (Canada)		
x	116	Brake Fluid	2005.5	V229
x	118	Power Windows	2005.5	V229
	119	New Truck Tires		
	120	Truck Tire Selection & Rims		
	121	Air Brake Systems		
x	124	Accelerator Control Systems	2005.5	V229
	125	Warning Devices		
x	135	Brake Systems	2005.5	V229
	201	Interior Impact Protection		
x	202	Head Restraints	2005.5	V229
x	203	Steering Control Systems	2005.5	V229
x	204	Steering Rear Displacement	2005.5	V229
x	205	Glazing Materials	2005.5	V229
x	206	Door Locks	2005.5	V229
x	207	Seating Systems	2005.5	V229
	208	Occupant Protection		
x	209	Seatbelt Assemblies	2005.5	V229
x	210	Seatbelt Anchorages	2005.5	V229
x	210.1	Child Seat Tether Anchorages	2005.5	V229
x	210.2	Child Seat Latch Anchorages	2005.5	V229
x	212	Windshield Mounting	2005.5	V229
	213	Child Restraint Systems		
	214	Side Impact Protection		
	215	Bumpers (Canada)		
x	216	Roof Crush Resistance	2005.5	V229
	217	Bus Window Retention		
x	219	Windshield Zone Intrusion	2005.5	V229
	220	School Bus Rollover Protection		
	221	School Bus Body Joint Strength		
	222	School Bus Seating		
x	225	Child Seat Anchorages	2005.5	V229
	301	Fuel System Integrity		
x	302	Flammability of Interior Mat'ls.	2005.5	V229
	303	CNG Fuel System Integrity		
	304	CNG Fuel Container Integrity		
	305	Electric Vehicles		
	401	Internal Trunk Release		
	541	Theft Protection		
x	564	Replacement Light Source	2005.5	V229
	565	Vehicle Identification Number		
	566	Manufacturers Identification		
x	567	Certification Label	2005.5	V229
	568	Vehicles Made in 2 Stages		
x	574	Tire Identification	2005.5	V229
x	575	Consumer Information	2005.5	V229
	581	Bumper Impact		
	CAN	Canadian		
	NHTSA	NHTSA Form		
	NOISE	Exterior Noise		
	OG	Owner's Guide		
	PDG	Public Domain Guideline		
	PPC	Pre-Production Certification		
	RFI	Radio Frequency Interference		
	SDG	Safety Design Guideline		

2006

06-6047

	Vehicle
	500 [D258]
	Crown Victoria - Grand Marquis [EN114]
	Econoline [VN127]
	Escape [U204] - Tribute [J14]
	Escape Hybrid [U293]
	Expedition [U222] - Navigator [U228]
	Explorer - Mountaineer [U251]
	F-150 [P221]
	F-53
	F-650 750 [H215]
	Focus [C170]
x	Freestar - Monterey [V229]
	Freestyle [D219]
	F-SuperDuty [P131]
	Fusion [CD338]
	GT [S361]
	LCF [H339]
	LS [DEW98]
	Mariner [U364]
	Mark LT [P397]
	Milan [CD334]
	Montego [D333]
	Mustang [S197]
	Ranger [PN150] - B-Series [PN151]
	Taurus - Sable [D186]
	Thunderbird [M205]
	Town Car [FN145]
	Zephyr [CD378]

	Document Type
	Interpretation
x	Plan
x	Report

	Organization
	Alternative Fuel
	Automotive Safety Office
	AVT-RVT
	Body
	Car Programs
	Chassis
	Climate Control
	DSO-SVT
	Electric Vehicle
	Electrical & Lighting
	Environmental & Safety
	FCSD
	Ford of Australia
	Ford of Europe
	Fuel Systems
	Interior Systems
	Mazda
	OPEO-EEME
	Plastics & Trim
	Powertrain
	Restraints
	Supplier Provided
	Transmission
	Truck Operations
	Vehicle Crash
x	Vehicle Engineering
	Vehicle Operations
	Vehicle Personalization
	Vehicle Safety

Test Reports

Engineering Drawings

Comments

Control Number: 06-6047

CARRYOVER FOR

Model Year 2006
Vehicle(s) Freestar - Monterey [V229]

CARRYOVER FROM

Standard(s)	Part(s)	Model Year	Vehicle(s)
101		2005.5	V229
102		2005.5	V229
103		2005.5	V229
104		2005.5	V229
106		2005.5	V229
108		2005.5	V229
109		2005.5	V229
111		2005.5	V229
113		2005.5	V229
114		2005.5	V229
116		2005.5	V229
118		2005.5	V229
124		2005.5	V229
135		2005.5	V229
202		2005.5	V229
203		2005.5	V229
204		2005.5	V229
205		2005.5	V229
206		2005.5	V229
207		2005.5	V229
209		2005.5	V229
210		2005.5	V229
210.1		2005.5	V229
210.2		2005.5	V229
212		2005.5	V229
216		2005.5	V229
219		2005.5	V229
225		2005.5	V229
302		2005.5	V229
564		2005.5	V229
567		2005.5	V229
574		2005.5	V229
575		2005.5	V229

Inter Office

Vehicle Engineering Manager
Freestar, LS/T-bird

26 January 2005

To: Stephanie Sweeney
Vehicle Safety Assurance Manager

Cc: Ron Heiser Chief Nameplate Engineer
Steve Daleiden Vehicle Integration Supervisor

Compliance to the following safety standards for 2006 MY V229 (Freestar/Monterey) are carryover from 2005.5 MY. Additionally, conformance to all applicable non-crash safety design and public domain guidelines are carryover from 2005.5 MY. Crash related and IIHS Dynamic Side Impact public domain guideline testing is new and documentation is covered in a separate submission.

FMVSS 101	Controls and displays
FMVSS 102	Transmission shift lever sequence, starter interlock, and trans. braking effort
FMVSS 103	Windshield defrosting and defogging sys.
FMVSS 104	Windshield wiping and washing systems
FMVSS 106	Brake hoses
FMVSS 108	Lamps, reflective devices, and associated equipment
FMVSS 109	New pneumatic tires
FMVSS 111	Rearview mirrors
FMVSS 113	Hood latch system
FMVSS 114	Theft protection
FMVSS 116	Motor vehicle brake fluids
FMVSS 118	Power-operated window, partition, and roof panel systems
FMVSS 124	Accelerator control systems
FMVSS 135	Light vehicle brake systems
FMVSS 202	Head restraints
FMVSS 203	Impact protection for the driver from the steering control system
FMVSS 204	Steering control rearward displacement

FMVSS 205	Glazing materials
FMVSS 206	Door locks and retention components
FMVSS 207	Seating systems
FMVSS 209	Seat belt assemblies
FMVSS 210	Seat belt assembly anchorages
FMVSS 212	Windshield mounting
FMVSS 216	Roof crush resistance
FMVSS 219	Windshield zone intrusion
FMVSS 225 CMVSS 210.1	Child restraint anchorage systems
FMVSS 302	Flammability of interior materials
CMVSS 210.2	Latch anchors for child restraints
Part 564	Replaceable light source information
Part 567	Certification label
Part 574	Tire identification and record keeping
Part 575	Consumer information regulations

There are no changes to the vehicle or the above safety standards that affect compliance to these standards.

Ron Razzano, Manager
V229 Vehicle Engineering

Regulation			Carryover	
			Year	Vehicle
	101	Controls and Displays		
	102	Transmission Shift		
	103	Windshield Defrost & Demist		
	104	Windshield Washing & Wiping		
	105	Brake Systems		
	106	Brake Hoses		
	108	Lamps		
	109	New Pneumatic Tires		
	110	Tire Selection & Rims		
	111	Rearview Mirrors		
	113	Hood Latch System		
	114	Theft Protection		
	115	VIN (Canada)		
	116	Brake Fluid		
	118	Power Windows		
	119	New Truck Tires		
	120	Truck Tire Selection & Rims		
	121	Air Brake Systems		
	124	Accelerator Control Systems		
	125	Warning Devices		
	135	Brake Systems		
	138	Tire Pressure Monitoring System		
	139	New Pneumatic Radial Tires		
x	201	Interior Impact Protection		
x	202	Head Restraints		
	203	Steering Control Systems		
	204	Steering Rear Displacement		
	205	Glazing Materials		
	206	Door Locks		
x	207	Seating Systems		
	208	Occupant Protection		
	209	Seatbelt Assemblies		
x	210	Seatbelt Anchorages		
	210.1	Child Seat Tether Anchorages		
	210.2	Child Seat Latch Anchorages		
	212	Windshield Mounting		
	214	Side Impact Protection		
	215	Bumpers (Canada)		
	216	Roof Crush Resistance		
	219	Windshield Zone Intrusion		
	225	Child Seat Anchorages		
	301	Fuel System Integrity		
x	302	Flammability of Interior Materials		
	303	CNG Fuel System Integrity		
	304	CNG Fuel Container Integrity		
	305	Electric Vehicles		
	401	Internal Trunk Release		
	541	Theft Prevention		
	542	Selecting Lines for Theft Prevention		
	543	Exemption from Theft Prevention		
	564	Replacement Light Source		
	565	Vehicle Identification Number		
	566	Manufacturers Identification		
	567	Certification Label		
	568	Vehicles Made in 2 Stages		
	574	Tire Identification		
	575	Consumer Information		
	581	Bumper Impact		
	BAT	Electric Battery		
	CAN	Canadian		
	MOU	Voluntary Agreement - Mandatory Commitment		
	NHTSA	NHTSA Form		
	NOISE	Exterior Noise		
	OG	Owner's Guide		
	PDG	Public Domain Guideline		
	PPC	Pre-Production Certification		
	RFI	Radio Frequency Interference		
	SDG	Safety Design Guideline		

2006

06-6534

Vehicle	
x	500 [D258]
	Crown Victoria - Grand Marquis [EN114]
	Econoline [VN127]
x	Escape [U204] - Tribute [J14]
x	Escape Hybrid [U293]
x	Expedition [U222] - Navigator [U228]
x	Explorer - Mountaineer [U251]
x	F-150 [P221] - Mark LT [P397]
	F-53
	F-650 750 [H215]
	Focus [C170]
x	Freestar - Monterey [V229]
x	Freestyle [D219]
	F-SuperDuty [P131]
x	Fusion [CD338]
	GT [S361]
	LCF [H339]
x	LS [DEW98]
	Mariner [U364]
x	Milan [CD334]
	Montego [D333]
	Mustang [S197]
	Ranger [PN150] - B-Series [PN151]
	Taurus [D186]
	Town Car [FN145]
x	Zephyr [CD378]

Document Type	
	Interpretation
	Plan
x	Report

Organization	
	Alternative Fuel
	Automotive Safety Office
	AVT-RVT
	Body
	Car Programs
	Chassis
	Climate Control
	DSO-SVT
	Electric Vehicle
	Electrical & Lighting
	Environmental & Safety
	FCSD
	Ford of Australia
	Ford of Europe
	Fuel Systems
	Interior Systems
	Mazda
	OPEO-EEME
	Plastics & Trim
	Powertrain
	Restraints
	Supplier Provided
	Transmission
	Truck Operations
	Vehicle Crash
	Vehicle Engineering
	Vehicle Operations
x	Vehicle Personalization
	Vehicle Safety

Test Reports

Engineering Drawings

Comments

DVD
Rear Seat Entertainment Headrest DVD

M. A. Suchodolski

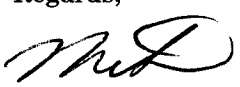
May 22, 2006

Hello Paul:

Enclosed is the original copy of the Letter of Compliance for the INViSiON Rear Seat Entertainment Systems we are in the process of licensing.

This is being provided for your files in ASO.

Regards,



Mike Suchodolski

Cc: K. R. Powell

INVISION
Industries, Inc.

March 3, 2006

Michael Suchodolski
Accessories Strategy Manager
Ford Customer Service Division
Genuine Ford Accessories
16800 Executive Plaza Drive
Dearborn, MI 48126

Mr. Suchodolski,

As requested from Mr. Malek Tawil in a recent meeting regarding the Rear Seat Entertainment, Headrest DVD, we are pleased to confirm to you that we have met and exceeded all of the federal standards listed below:

FMVSS 201
FMVSS 202
FMVSS 302
FMVSS 207*
FMVSS 210*

Detroit Testing Lab Detroit, MI/General Testing Lab Colonial Beach, VA
*Tests were deemed passed as they were considered not applicable by testing facilities

In addition, we are able to confirm meeting and exceeding the following industry standards:

Thermal Shock
Mechanical Shock
High Temp Operation/Low Temp Operation
High Temp Storage/Low Temp Storage
FCC/FDA Certified
Key Life Cycle Testing
Salt Spray
Ultraviolet Testing
Colorfast
Fogging
Durability Testing
Reliability Testing
Vibration
P-PAP and full Validation for General Motors

We are currently involved in several programs with other Automotive Manufacturers, using similar products obtaining excellent results. Some of these programs have already been launched, including the following companies/models:

GM SPO

'06 Cadillac Escalade
'06 Escalade EXT/ESV
'06 Suburban
'06 Tahoe
'06 Yukon/Yukon XL
'06 Denali/Denali XL
'06 Avalanche
'06 Silverado
'06 Sierra

'07 Cadillac Escalade
'07 Escalade EXT/ESV
'07 Suburban
'07 Tahoe
'07 Yukon/Yukon XL
'07 Denali/Denali XL
'07 Avalanche
'07 Silverado
'07 Sierra

'06 Trailblazer/Trailblazer XL
'06 Envoy/Envoy XL

'06 HUMMER H2 SUV
'06 HUMMER H2 SUT
'06 HUMMER H3

P.O.Box 470098 – Celebration – Florida - 34747
Tel: (877) INVISION (468.4746) or (407) 842-7000
www.INViSiONindustries.com

INVISION
Industries, Inc.

HUMMER

Holiday Promotion H2/H2 SUT/H3 (November, December, January, and February)

Southeast Toyota

'06Avalon	'06Camry
'06Highlander	'06Land Cruiser
'06Sequoia	'06Four Runner
'06Tundra	'06Sienna
'06Tacoma	

Gulf States Toyota

'06Avalon	'06Camry
'06Highlander	'06Land Cruiser
'06Sequoia	'06Four Runner
'06Tundra	'06Sienna
'06Tacoma	

Our current availability includes:

F-150	Escape	Mark LT
Explorer	Expedition Limited	Navigator
Freestyle	Freestar	Lincoln LS
500	Milan	Zephyr
Fusion	Mountaineer	

We look forward to working closely with your team in order to provide you with products that would be specifically tailored to your requirements.

Thank you,

Christopher J. Vitito
CEO
INVISION Industries, Inc.
877-INVISION (468-4746)

EA12-003

FORD

1-11-2013

APPENDIX F

2005-FMVSS210

Regulation			Carryover	
			Year	Vehicle
X	101	Controls and Displays	2004	V229
X	102	Transmission Shift	2004	V229
X	103	Windshield Defrost & Demist	2004	V229
X	104	Windshield Washing & Wiping	2004	V229
	105	Brake Systems		
X	106	Brake Hoses	2004	V229
X	108	Lamps	2004	V229
X	109	New Pneumatic Tires	2004	V229
	110	Tire Selection & Rims		
X	111	Rearview Mirrors	2004	V229
	112	Concealed Headlamps		
X	113	Hood Latch System	2004	V229
X	114	Theft Protection	2004	V229
	115	VIN (Canada)		
X	116	Brake Fluid	2004	V229
X	118	Power Windows	2004	V229
	119	New Truck Tires		
	120	Truck Tire Selection & Rims		
	121	Air Brake Systems		
X	124	Accelerator Control Systems	2004	V229
	125	Warning Devices		
X	135	Brake Systems	2004	V229
X	201	Interior Impact Protection	2004	V229
X	202	Head Restraints	2004	V229
X	203	Steering Control Systems	2004	V229
X	204	Steering Rear Displacement	2004	V229
X	205	Glazing Materials	2004	V229
X	206	Door Locks	2004	V229
X	207	Seating Systems	2004	V229
	208	Occupant Protection		
X	209	Seatbelt Assemblies	2004	V229
X	210	Seatbelt Anchorages	2004	V229
	210.1	Child Seat Tether Anchorages		
X	210.2	Child Seat Latch Anchorages	2004	V229
X	212	Windshield Mounting	2004	V229
	213	Child Restraint Systems		
X	214	Side Impact Protection	2004	V229
	215	Bumpers (Canada)		
X	216	Roof Crush Resistance	2004	V229
	217	Bus Window Retention		
X	219	Windshield Zone Intrusion	2004	V229
	220	School Bus Rollover Protection		
	221	School Bus Body Joint Strength		
	222	School Bus Seating		
X	225	Child Seat Anchorages	2004	V229
X	301	Fuel System Integrity	2004	V229
X	302	Flammability of Interior Mat'ls.	2004	V229
	303	CNG Fuel System Integrity		
	304	CNG Fuel Container Integrity		
	305	Electric Vehicles		
	401	Internal Trunk Release		
	541	Theft Protection		
	543	Vehicle Theft Protection Exemption		
X	564	Replacement Light Source	2004	V229
	565	Vehicle Identification Number		
	566	Manufacturers Identification		
X	567	Certification Label	2004	V229
	568	Vehicles Made in 2 Stages		
X	574	Tire Identification	2004	V229
X	575	Consumer Information	2004	V229
	581	Bumper Impact		
	CAN	Canadian		
	NHTSA	NHTSA Form		
	NOISE	Exterior Noise		
	OG	Owner's Guide		
X	PDG	Public Domain Guideline	2004	V229
	PPC	Pre-Production Certification		
	RFI	Radio Frequency Interference		
X	SDG	Safety Design Guideline	2004	V229

2005

05-5258

	Vehicle
	500 [D258]
	Aviator [U231]
	Crown Victoria - Grand Marquis [EN114]
	Econoline [VN127]
	Escape [U204] - Tribute [J14]
	Escape Hybrid [U293]
	Excursion [U137]
	Expedition [U222] - Navigator [U228]
	Explorer - Mountaineer [U152]
	Explorer Sport Trac [P207]
	F-150 [P221] - Mark LT [P397]
	F-53
	F-650 750 [H215]
	F-SuperDuty [P131]
	Focus [C170]
	Focus FCEV [C264]
X	Freestar - Monterey [V229]
	Freestyle [D219]
	GT [S361]
	LS [DEW98]
	Mariner [U364]
	Montego [D333]
	Mustang [S197]
	Ranger [PN150] - B-Series [PN151]
	Taurus - Sable [D186]
	Thunderbird [M205]
	Town Car [FN145]

	Document Type
	Interpretation
	Plan
X	Report

	Organization
	Alternative Fuel
	Automotive Safety Office
	AVT-RVT
	Body
	Car Programs
	Chassis
	Climate Control
	DSO-SVT
	Electric Vehicle
	Electrical & Lighting
	Environmental & Safety
	FCSD
	Ford of Australia
	Ford of Europe
	Fuel Systems
	Interior Systems
	Mazda
	OPEO-EEME
	Plastics & Trim
	Powertrain
	Restraints
	Supplier Provided
	Transmission
	Truck Operations
	Vehicle Crash
X	Vehicle Engineering
	Vehicle Operations
	Vehicle Personalization
	Vehicle Safety

Test Reports

Engineering Drawings

Comments

Control Number: 05-5258

CARRYOVER FOR

Model Year	2005
Vehicle(s)	Freestar - Monterey [V229]

CARRYOVER FROM

Standard(s)	Model Year	Vehicle(s)	Control Number(s)
101	2004	Freestar - Monterey [V229]	
102	2004	Freestar - Monterey [V229]	
103	2004	Freestar - Monterey [V229]	
104	2004	Freestar - Monterey [V229]	
106	2004	Freestar - Monterey [V229]	
108	2004	Freestar - Monterey [V229]	
109	2004	Freestar - Monterey [V229]	
111	2004	Freestar - Monterey [V229]	
113	2004	Freestar - Monterey [V229]	
114	2004	Freestar - Monterey [V229]	
116	2004	Freestar - Monterey [V229]	
118	2004	Freestar - Monterey [V229]	
124	2004	Freestar - Monterey [V229]	
135	2004	Freestar - Monterey [V229]	
201	2004	Freestar - Monterey [V229]	
202	2004	Freestar - Monterey [V229]	
203	2004	Freestar - Monterey [V229]	
204	2004	Freestar - Monterey [V229]	
205	2004	Freestar - Monterey [V229]	
206	2004	Freestar - Monterey [V229]	
207	2004	Freestar - Monterey [V229]	
209	2004	Freestar - Monterey [V229]	
210	2004	Freestar - Monterey [V229]	
210.2	2004	Freestar - Monterey [V229]	
212	2004	Freestar - Monterey [V229]	
214	2004	Freestar - Monterey [V229]	
216	2004	Freestar - Monterey [V229]	
219	2004	Freestar - Monterey [V229]	
225	2004	Freestar - Monterey [V229]	
301	2004	Freestar - Monterey [V229]	
302	2004	Freestar - Monterey [V229]	
564	2004	Freestar - Monterey [V229]	
567	2004	Freestar - Monterey [V229]	
574	2004	Freestar - Monterey [V229]	
575	2004	Freestar - Monterey [V229]	
PDG	2004	Freestar - Monterey [V229]	
SDG	2004	Freestar - Monterey [V229]	

Inter Office

Vehicle Engineering Manager
Freestar, LS/T-bird

April 26, 2004

Compliance to the following safety standards for 2005 MY V229 (Freestar/Monterey) are carryover from 2004 MY. Additionally, conformance to applicable safety and public domain guidelines are carryover from 2004 MY.

FMVSS 101	Controls and displays
FMVSS 102	Transmission shift lever sequence, starter interlock, and trans. braking effort
FMVSS 103	Windshield defrosting and defogging sys.
FMVSS 104	Windshield wiping and washing systems
FMVSS 106	Brake hoses
FMVSS 108	Lamps, reflective devices, and associated equipment
FMVSS 109	New pneumatic tires
FMVSS 111	Rearview mirrors
FMVSS 113	Hood latch system
FMVSS 114	Theft protection
FMVSS 116	Motor vehicle brake fluids
FMVSS 118	Power-operated window, partition, and roof panel systems
FMVSS 124	Accelerator control systems
FMVSS 135	Light vehicle brake systems
FMVSS 201	Occupant protection in interior impact
FMVSS 202	Head restraints
FMVSS 203	Impact protection for the driver from the steering control system
FMVSS 204	Steering control rearward displacement

FMVSS 205	Glazing materials
FMVSS 206	Door locks and retention components
FMVSS 207	Seating systems
FMVSS 209	Seat belt assemblies
FMVSS 210	Seat belt assembly anchorages
FMVSS 212	Windshield mounting
FMVSS 214	Side impact protection
FMVSS 216	Roof crush resistance
FMVSS 219	Windshield zone intrusion
FMVSS 301	Fuel system integrity
FMVSS 302	Flammability of interior materials
FMVSS 225	Child restraint anchorage systems
CMVSS 210.2	Latch anchors for child restraints
Part 564	Replaceable light source information
Part 567	Certification label
Part 574	Tire identification and record keeping
Part 575	Consumer information regulations

There are no changes to the vehicle nor to the above safety standards that affect compliance to these standards.

Gil Portalatin

Regulation			Carryover	
			Year	Vehicle
x	101	Controls and Displays	2004	V229
x	102	Transmission Shift	2004	V229
x	103	Windshield Defrost & Demist	2004	V229
x	104	Windshield Washing & Wiping	2004	V229
	105	Brake Systems		
x	106	Brake Hoses	2004	V229
x	108	Lamps	2004	V229
x	109	New Pneumatic Tires	2004	V229
	110	Tire Selection & Rims		
x	111	Rearview Mirrors	2004	V229
	112	Concealed Headlamps		
x	113	Hood Latch System	2004	V229
x	114	Theft Protection	2004	V229
	115	VIN (Canada)		
x	116	Brake Fluid	2004	V229
x	118	Power Windows	2004	V229
	119	New Truck Tires		
	120	Truck Tire Selection & Rims		
	121	Air Brake Systems		
x	124	Accelerator Control Systems	2004	V229
	125	Warning Devices		
x	135	Brake Systems	2004	V229
x	201	Interior Impact Protection	2004	V229
x	202	Head Restraints	2004	V229
x	203	Steering Control Systems	2004	V229
	204	Steering Rear Displacement		
x	205	Glazing Materials	2004	V229
x	206	Door Locks	2004	V229
x	207	Seating Systems	2004	V229
	208	Occupant Protection		
x	209	Seatbelt Assemblies	2004	V229
x	210	Seatbelt Anchorages	2004	V229
x	210.1	Child Seat Tether Anchorages	2004	V229
x	210.2	Child Seat Latch Anchorages	2004	V229
	212	Windshield Mounting		
	213	Child Restraint Systems		
	214	Side Impact Protection		
	215	Bumpers (Canada)		
x	216	Roof Crush Resistance	2004	V229
	217	Bus Window Retention		
	219	Windshield Zone Intrusion		
	220	School Bus Rollover Protection		
	221	School Bus Body Joint Strength		
	222	School Bus Seating		
x	225	Child Seat Anchorages	2004	V229
	301	Fuel System Integrity		
x	302	Flammability of Interior Mat'ls.	2004	V229
	303	CNG Fuel System Integrity		
	304	CNG Fuel Container Integrity		
	305	Electric Vehicles		
	401	Internal Trunk Release		
	541	Theft Protection		
x	564	Replacement Light Source	2004	V229
	565	Vehicle Identification Number		
	566	Manufacturers Identification		
x	567	Certification Label	2004	V229
	568	Vehicles Made in 2 Stages		
x	574	Tire Identification	2004	V229
x	575	Consumer Information	2004	V229
	581	Bumper Impact		
	CAN	Canadian		
	NHTSA	NHTSA Form		
	NOISE	Exterior Noise		
	OG	Owner's Guide		
x	PDG	Public Domain Guideline	2004	V229
	PPC	Pre-Production Certification		
	RFI	Radio Frequency Interference		
x	SDG	Safety Design Guideline	2004	V229

2005

05-5705

	Vehicle
	500 [D258]
	Aviator [U231]
	Crown Victoria - Grand Marquis [EN114]
	Econoline [VN127]
	Escape [U204] - Tribute [J14]
	Escape Hybrid [U293]
	Excursion [U137]
	Expedition [U222] - Navigator [U228]
	Explorer - Mountaineer [U152]
	Explorer Sport Trac [P207]
	F-150 [P221]
	F-53
	F-SuperDuty [P131]
	Focus [C170]
x	Freestar - Monterey [V229]
	Freestyle [D219]
	GT [S361]
	LS [DEW98]
	Mariner [U364]
	Montego [D333]
	Mustang [S197]
	Ranger [PN150] - B-Series [PN151]
	Taurus - Sable [D186]
	Thunderbird [M205]
	Town Car [FN145]

	Document Type
	Interpretation
	Plan
x	Report

	Organization
	Alternative Fuel
	Automotive Safety Office
	AVT-RVT
	Body
	Car Programs
	Chassis
	Climate Control
	DSO-SVT
	Electric Vehicle
	Electrical & Lighting
	Environmental & Safety
	FCSD
	Ford of Australia
	Ford of Europe
	Fuel Systems
	Interior Systems
	Mazda
	OPEO-EEME
	Plastics & Trim
	Powertrain
	Restraints
	Supplier Provided
	Transmission
	Truck Operations
	Vehicle Crash
x	Vehicle Engineering
	Vehicle Operations
	Vehicle Personalization
	Vehicle Safety

Test Reports

Engineering Drawings

Comments

2005.5

Control No. **05-5705**

THIS IS CARRYOVER FOR THE:

Model Year: 2005.5

Vehicle: Freestar - Monterey [V229]

Standard(s): 101, 102, 103, 104, 106, 108, 109, 111, 113, 114, 116, 118, 124, 135, 201, 202, 203, 205, 206, 207, 209, 210, 210.1, 210.2, 216, 225, 302, 564, 567, 574, 575, PDG, SDG

THIS IS CARRYOVER FROM THE:

Model Year: 2004
Vehicle: V229

Model Year:
Vehicle:

Model Year:
Vehicle:

Model Year:
Vehicle:

Model Year:
Vehicle:

Model Year:
Vehicle:

Model Year:
Vehicle:

Inter Office

Vehicle Engineering Manager
Freestar, LS/T-bird

29 July, 2004

Compliance to the following safety standards for 2005.5 MY V229 (Freestar/Monterey) are carryover from 2004 MY. Additionally, conformance to applicable safety and public domain guidelines are carryover from 2004 MY.

FMVSS 101	Controls and displays
FMVSS 102	Transmission shift lever sequence, starter interlock, and trans. braking effort
FMVSS 103	Windshield defrosting and defogging sys.
FMVSS 104	Windshield wiping and washing systems
FMVSS 106	Brake hoses
FMVSS 108	Lamps, reflective devices, and associated equipment
FMVSS 109	New pneumatic tires
FMVSS 111	Rearview mirrors
FMVSS 113	Hood latch system
FMVSS 114	Theft protection
FMVSS 116	Motor vehicle brake fluids
FMVSS 118	Power-operated window, partition, and roof panel systems
FMVSS 124	Accelerator control systems
FMVSS 135	Light vehicle brake systems
FMVSS 201	Occupant protection in interior impact

FMVSS 202	Head restraints
FMVSS 203	Impact protection for the driver from the steering control system
FMVSS 205	Glazing materials
FMVSS 206	Door locks and retention components
FMVSS 207	Seating systems
FMVSS 209	Seat belt assemblies
FMVSS 210	Seat belt assembly anchorages
FMVSS 216	Roof crush resistance
FMVSS 302	Flammability of interior materials
FMVSS 225 CMVSS 210.1	Child restraint anchorage systems
CMVSS 210.2	Latch anchors for child restraints
Part 564	Replaceable light source information
Part 567	Certification label
Part 574	Tire identification and record keeping
Part 575	Consumer information regulations

There are no changes to the vehicle nor to the above safety standards that affect compliance to these standards.

Gil Portalatin

Regulation			Carryover	
			Year	Vehicle
	101	Controls and Displays		
	102	Transmission Shift		
	103	Windshield Defrost & Demist		
	104	Windshield Washing & Wiping		
	105	Brake Systems		
	106	Brake Hoses		
	108	Lamps		
	109	New Pneumatic Tires		
	110	Tire Selection & Rims		
	111	Rearview Mirrors		
	112	Concealed Headlamps		
	113	Hood Latch System		
	114	Theft Protection		
	115	VIN (Canada)		
	116	Brake Fluid		
	118	Power Windows		
	119	New Truck Tires		
	120	Truck Tire Selection & Rims		
	121	Air Brake Systems		
	124	Accelerator Control Systems		
	125	Warning Devices		
	135	Brake Systems		
	201	Interior Impact Protection		
	202	Head Restraints		
	203	Steering Control Systems		
	204	Steering Rear Displacement		
	205	Glazing Materials		
	206	Door Locks		
	207	Seating Systems		
x	208	Occupant Protection		
x	209	Seatbelt Assemblies		
x	210	Seatbelt Anchorages		
	210.1	Child Seat Tether Anchorages		
	210.2	Child Seat Latch Anchorages		
	212	Windshield Mounting		
	213	Child Restraint Systems		
	214	Side Impact Protection		
	215	Bumpers (Canada)		
	216	Roof Crush Resistance		
	217	Bus Window Retention		
	219	Windshield Zone Intrusion		
	220	School Bus Rollover Protection		
	221	School Bus Body Joint Strength		
	222	School Bus Seating		
	225	Child Seat Anchorages		
	301	Fuel System Integrity		
	302	Flammability of Interior Mat'ls.		
	303	CNG Fuel System Integrity		
	304	CNG Fuel Container Integrity		
	305	Electric Vehicles		
	401	Internal Trunk Release		
	541	Theft Protection		
	543	Vehicle Theft Protection Exemption		
	564	Replacement Light Source		
	565	Vehicle Identification Number		
	566	Manufacturers Identification		
	567	Certification Label		
	568	Vehicles Made in 2 Stages		
	574	Tire Identification		
	575	Consumer Information		
	581	Bumper Impact		
	CAN	Canadian		
	NHTSA	NHTSA Form		
	NOISE	Exterior Noise		
	OG	Owner's Guide		
	PDG	Public Domain Guideline		
	PPC	Pre-Production Certification		
	RFI	Radio Frequency Interference		
	SDG	Safety Design Guideline		

2005

05-6176

Vehicle	
	500 [D258]
	Aviator [U231]
	Crown Victoria - Grand Marquis [EN114]
	Econoline [VN127]
	Escape [U204] - Tribute [J14]
	Escape Hybrid [U293]
	Excursion [U137]
	Expedition [U222] - Navigator [U228]
	Explorer - Mountaineer [U152]
	Explorer Sport Trac [P207]
	F-150 [P221]
	F-53
	F-650 750 [H215]
	F-SuperDuty [P131]
	Focus [C170]
	Focus FCEV [C264]
x	Freestar - Monterey [V229]
	Freestyle [D219]
	GT [S361]
	LS [DEW98]
	Mariner [U364]
	Mark LT [P397]
	Montego [D333]
	Mustang [S197]
	Ranger [PN150] - B-Series [PN151]
	Taurus - Sable [D186]
	Thunderbird [M205]
	Town Car [FN145]

Document Type	
	Interpretation
	Plan
x	Report

Organization	
	Alternative Fuel
	Automotive Safety Office
	AVT-RVT
	Body
	Car Programs
	Chassis
	Climate Control
	DSO-SVT
	Electric Vehicle
	Electrical & Lighting
	Environmental & Safety
	FCSD
	Ford of Australia
	Ford of Europe
	Fuel Systems
	Interior Systems
	Mazda
	OPEO-EEME
	Plastics & Trim
	Powertrain
x	Restraints
	Supplier Provided
	Transmission
	Truck Operations
	Vehicle Crash
	Vehicle Engineering
	Vehicle Operations
	Vehicle Personalization
	Vehicle Safety

Test Reports

Engineering Drawings

Comments

2005.5
Amendment

Inter Office

Car Restraints Engineering
North American Engineering - Safety

Date: May 19, 2005

To: Stephanie Sweeney

cc: Paul Witkowski

Subject: 2005.5MY Ford Freestar / Mercury Monterey F/CMVSS 208, F/CMVSS 209, F/CMVSS 210 Compliance Documentation – Amendment / Supplement

The 2005.5MY Ford Freestar / Mercury Monterey seat belt webbing for all belt & retractor assemblies has been revised from 7433 to 1107. The purpose of this letter is to show continued compliance of the 2005.5MY Ford Freestar / Mercury Monterey to F/CMVSS 208, F/CMVSS 209 and F/CMVSS 210.

Component level testing shows equivalence in strength between the 7433 and 1107 webbing types per stiffness curve data from Test Number SLD00899. These results have been concurred by core safety engineering.

Run# M014940 – M014943, baseline webbing (7433)
Run# M014944 – M014947, new webbing (1107)

The 2005.5MY Ford Freestar / Mercury Monterey meet the requirements of F/CMVSS 209 per third-party certification results conducted on behalf of Autoliv. See Attachment 1 for the list of test report numbers compiled by Autoliv.

Since the dynamic performance of the webbing materials are equivalent and the anchor joints in all seating positions are not affected, the 2005.5MY Ford Freestar / Mercury Monterey meet the requirements of F/CMVSS 208 and F/CMVSS 210, and system-level testing is not required.

Edwin Chiu
NAE Safety Restraints – Engineer

Martin Voelker
NAE Safety Restraints – Supervisor

Attachment 1

F/CMVSS 209 Certification Test Reports

Test Description	Test Report No.	Test Type
ROW 1 LH POWER SEAT	162445-04	FMVSS
ROW 1 LH POWER SEAT	162445-1-04	CMVSS
ROW 1 RH POWER SEAT	162447-04	FMVSS
ROW 1 RH POWER SEAT	162447-1-04	CMVSS
ROW 1 LH MANUAL SEAT	162446-04	FMVSS
ROW 1 LH MANUAL SEAT	162446-1-04	CMVSS
ROW 1 RH MANUAL SEAT	162448-04	FMVSS
ROW 1 RH MANUAL SEAT	162448-1-04	CMVSS
ROW 2 LH BENCH	162449-04	FMVSS
ROW 2 LH BENCH	162449-1-04	CMVSS
ROW 2 RH BENCH	162451-04	FMVSS
ROW 2 RH BENCH	162451-1-04	CMVSS
ROW 2 LH QUAD	162450-04	FMVSS
ROW 2 LH QUAD	162450-1-04	CMVSS
ROW 2 RH QUAD	162452-04	FMVSS
ROW 2 RH QUAD	162452-1-04	CMVSS
ROW 3 LH	162453-04	FMVSS
ROW 3 LH	162453-1-04	CMVSS
ROW 3 RH	162454-04	FMVSS
ROW 3 RH	162454-1-04	CMVSS
ROW 3 CENTER	162455-04	FMVSS
ROW 3 CENTER	162455-1-04	CMVSS

EA12-003

FORD

1-11-2013

APPENDIX F

2004-FMVSS210

	Regulation		Carryover	
			Year	Vehicle
	101	Controls and Displays		
	102	Transmission Shift		
	103	Windshield Defrost & Demist		
	104	Windshield Washing & Wiping		
	105	Brake Systems		
	106	Brake Hoses		
	108	Lamps		
	109	New Pneumatic Tires		
	110	Tire Selection & Rims		
	111	Rearview Mirrors		
	112	Concealed Headlamps		
	113	Hood Latch System		
	114	Theft Protection		
	115	VIN (Canada)		
	116	Brake Fluid		
	118	Power Windows		
	119	New Truck Tires		
	120	Truck Tire Selection & Rims		
	121	Air Brake Systems		
	124	Accelerator Control Systems		
	125	Warning Devices		
	135	Brake Systems		
	201	Interior Impact Protection		
	202	Head Restraints		
	203	Steering Control Systems		
	204	Steering Rear Displacement		
	205	Glazing Materials		
	206	Door Locks		
	207	Seating Systems		
	208	Occupant Protection		
	209	Seatbelt Assemblies		
X	210	Seatbelt Anchorages		
	210.1	Child Seat Tether Anchorages		
	210.2	Child Seat Latch Anchorages		
	212	Windshield Mounting		
	213	Child Restraint Systems		
	214	Side Impact Protection		
	215	Bumpers (Canada)		
	216	Roof Crush Resistance		
	217	Bus Window Retention		
	219	Windshield Zone Intrusion		
	220	School Bus Rollover Protection		
	221	School Bus Body Joint Strength		
	222	School Bus Seating		
	225	Child Seat Anchorages		
	301	Fuel System Integrity		
	302	Flammability of Interior Mat'ls.		
	303	CNG Fuel System Integrity		
	304	CNG Fuel Container Integrity		
	305	Electric Vehicles		
	401	Internal Trunk Release		
	541	Theft Protection		
	564	Replacement Light Source		
	565	Vehicle Identification Number		
	566	Manufacturers Identification		
	567	Certification Label		
	568	Vehicles Made in 2 Stages		
	574	Tire Identification		
	575	Consumer Information		
	581	Bumper Impact		
	CAN	Canadian		
	NHTSA	NHTSA Form		
	NOISE	Exterior Noise		
	OG	Owner's Guide		
	PDG	Public Domain Guideline		
	PPC	Pre-Production Certification		
	RFI	Radio Frequency Interference		
	SDG	Safety Design Guideline		

2004

04-2365

	Vehicle
	Aviator [U231]
	Crown Victoria - Grand Marquis - Marauder [EN114]
	Econoline [VN127]
	Escape [U204] - Tribute [J14]
	Excursion [U137]
	Expedition [U222] - Navigator [U228]
	Explorer - Mountaineer [U152]
	Explorer Sport Trac [P207]
	F-150 [P221]
	F-150 Heritage [PN96]
	F-53
	F-650 750 [H215]
	F-SuperDuty [P131]
	Focus [C170]
X	Freestar - Monterey [V229]
	LS [DEW98]
	Mustang [SN95]
	Ranger [PN150] - B-series [PN151]
	Taurus - Sable [D186]
	Thunderbird [M205]
	Town Car [FN145]

	Document Type
	Interpretation
X	Plan
	Report

	Organization
	Alternative Fuel
	Automotive Safety Office
	AVT-RVT
	Body
	Car Programs
	Chassis
	Climate Control
	DSO-SVT
	Electric Vehicle
	Electrical & Lighting
	Environmental & Safety
	FCSD
	Ford of Australia
	Ford of Europe
	Fuel Systems
	Interior Systems
	Mazda
	OPEO-EEME
	Plastics & Trim
	Powertrain
X	Restraints
	Supplier Provided
	Transmission
	Truck Operations
	Vehicle Crash
	Vehicle Engineering
	Vehicle Operations
	Vehicle Personalization
	Vehicle Safety

Test Reports

Engineering Drawings

Comments

MY: 2004
VEHICLE LINE: WINDSTAR (V229)

COMPLIANCE DEMONSTRATION PLAN AND REPORT
F/CMVSS: 210
TITLE: Seat Belt Assembly Anchorages

Date: 3/30/2001

	PLAN Answer Plan Questions below		REPORT of Compliance Demonstrated		
ORGANIZATION	Plan Prepared By: Print Name Sign / Date	Supervisor Print Name Sign / Date	Report Prepared By: Print Name Sign / Date	Supervisor Print Name Sign / Date	Manager Print Name Sign / Date
1 OCCUPANT SAFETY SYSTEMS	R.P. Sullivan 3/30/01	L. A. Landis	J. Eum	L. A. Landis	S. Kozak
2					
3					
4					
5					
6					

04-23165

PLAN QUESTIONS:				
Does this Standard/Regulation apply to this vehicle?	Yes X No ___			
Are your components on this vehicle carryover with respect to complying with this standard/regulation? If Yes, complete Base MY & Vehicle information and submit just this page to ASES	1 No X	Yes ___	Base MY ___ & Vehicle ___	
	2 No ___	Yes ___	Base MY ___ & Vehicle ___	
	3 No ___	Yes ___	Base MY ___ & Vehicle ___	
	4 No ___	Yes ___	Base MY ___ & Vehicle ___	
	5 No ___	Yes ___	Base MY ___ & Vehicle ___	
	6 No ___	Yes ___	Base MY ___ & Vehicle ___	

ASES CONCURRENCE FOR THE PLAN :

NAME: _____ SIGNATURE: _____ DATE: _____

Prepared By: P. Ducharme
form210.xls
rsulliva\fmvss210.sb\cdpr210WINDSTAR2004

Document # _____

Form Date: 9/19/96
Date: 01/04/97

COMPLIANCE DEMONSTRATION PLAN AND REPORT
F/CMVSS: 210
TITLE: Seat Belt Assembly Anchorages

		Component	Base MY & Vehicle
NOTES:	If some, but not all, of your components are carry-over with respect to this standard/regulation, note those components here with their corresponding Base MY & Vehicles. Also, note "c/o" in the "method" column for those paragraphs in the pro-forma for which the carryovef components apply.	New - Front Advanced Restraint Systems, new side airbag, new rollover curtain, new child seat anchors See data summary for layouts & test data.	
	If engineering judgment (EJ) is being applied to demonstrate compliance, include engineering rationale in the "Evidence/Comn for those paragraphs to which EJ is being applied and/or attach separate sheets with this information to the CDP.		

Applicable Reference documents:

Federal Standard - 49 CFR 571.210 (FMVSS/CMVSS 210).

Regulatory Engineering Design Standard (RDS) - DD 1.20-136.

Approved Engineering Test Procedure (ETP) - SM-15, and SM-19.

Worldwide Customer Requirements (WCR) - 01.00-D07.

F/CMVSS Section No.	
S1	Purpose and Scope - Specifies requirements for seat belt assembly anchorages to insure their proper location for effective occupant restraint and to reduce the likelihood of their failure.
S2	Application - All vehicles.
S3	Definitions - "Seat belt anchorage" See FMVSS 210.

F/CMVSS ection N	Regulatory Requirements/ **(Ford Acceptance Criteria)**	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
S4	Requirements.				
S4.1	Type.				
S4.1.1	Seat belt anchorages for a Type 1 or Type 2 seat belt assembly shall be installed for each designated seating position for which a Type 1 or a Type 2 seat belt assembly is required by FMVSS 208. Seat belt anchorages for a Type 2 seat belt shall be installed for each designated seating for which a Type 2 seat belt assembly is required FMVSS 208.	Drawing: Seat Belt Anchorage Layout.	New	Attached Data Summary - TBD	AVT Restraints
S4.1.2 (a)	Vehicles having an automatic restraint at the right outboard position must have provisions for a child restraint system either by adjusting the automatic restraint or other means, such as providing Type 1 Type 2 belts or anchorages.	N/A		N/A	
(b)	The requirements fo 4.1.1, that seat belt for a Type 1 or a Type 2 seat belt assembly shall be installed for certain designated seating positions, not apply to seating positions that are equipped seat belt assemblies that meet the frontal crash protection requirements of FMVSS 208 S5.1.				
S4.2.1	Lap belt anchorage strength requirements. Except provided in S4.2.5 and for side-facing seats, the following anchorage, attaching hardware, and attaching bolts must resist 5000 lb. seat belt loop loads:	SM-19 Test Report	Test	Attached Data Summary - TBD Reports TBD	AVT Restraints

F/CMVSS ection N	Regulatory Requirements/ **(Ford Acceptance Criteria)**	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
(a)	Type 1 seat belt assembly.	SM-19 Test Report	Test	Attached Data Summary - TBD Reports TBD	AVT Restraints
(b)	Lap portion of Type 2 and automatic belt if installed.				
(c)	Lap portion of any system with detachable upper belt. **1. Bolts and Anchorages: 7000 lb. lap loop load (40% over FMVSS requirements per procedure SM-19, A test).** **1(alternate). Bolts and Anchorages for systems where the anchorages are on the seat or an anchorage with the seat, resist 5750 lb. over FMVSS requirements per procedure A or B test).** **2. Attaching hardware, resist 5750 lb. (15% FMVSS requirements per procedure SM-19, SM-19, B test).**				
S4.2.2	Type 2, Lap and shoulder belt systems strength requirements: Except as provided in S4.2.5 and for side-facing seats, the anchorage, attaching hardware and attaching bolts must resist 3000 lb. seat belt loads. **1. Bolts and Anchorages: 4200 lb. lap loop load (40% over FMVSS requirements per procedure SM-19, A test).** **1. (alternate) Bolts and Anchorages for where the anchorages are on the seat or an anchorage with the seat, resist 3450 lb. over FMVSS requirements per procedure SM-19, A or B test).** **2. Attaching hardware, resist 3450 lb. (15% B test).**	SM-19 Test Report	Test	Attached Data Summary - TBD Reports TBD	AVT Restraints
S4.2.5	The attachment hardware of a seat belt assembly, which is subject to the requirements of S5.1 of FMVSS 208 by virtue of any provision of FMVSS 208 other than S4.1.2.1(c)(2) of FMVSS 208, does not to meet the requirements of S4.2.2 of FMVSS 210.				

F/CMVSS ection N	Regulatory Requirements/ **(Ford Acceptance Criteria)**	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
S4.3.1	Seat belt anchorages for Type 1 seat belt and the pelvic portion of Type 2 seat belt assembly.	Drawing: Seat Belt anchorage layout showing applicable seat belt	New	Drawings TBD Attached Data Summary - TBD	AVT Restraints
S4.3.1.1	In an installation in which the seat belt does not upon the seat frame:	angles and lateral spacing of seat belt anchorages.			
(a)	For non-adjustable seats the lap belt angle must be between 30 degrees and 75 degrees when **(angle range is 35 deg. to 70 deg.)**				
(b)	For adjustable seats the lap belt angle must be between 30 degrees and 75 degrees when **(angle range is 35 deg. to 70 deg.)**				
S4.3.1.2	In an installation in which the seat belt bears upon seat frame but the anchorage is not attached to seat structure the lap belt angle must be between 30 degrees and 75 degrees when measured as specified. **(angle range is 35 deg. to 70 deg.)**		New	Drawings TBD Attached Data Summary - TBD	AVT Restraints
S4.3.1.3	In an installation in which the seat belt attaches to seat structure the lap belt angle must be between 30 degrees and 75 degrees when measured as specified. **(angle range is 35 deg. to 70 deg.)**				
S4.3.1.4	Anchorage of an individual seat belt assembly shall located at least 6.5 inches apart laterally when measured as specified. **(minimum 7.0 in. lateral spacing.)**				
S4.3.2	Seat belt anchorages for the upper torso portion Type 2 seat belt assemblies: The anchorages must inside the specified zone shown on figure 1 when seats are adjusted as specified. **(the anchorage must be located within the area bounded by a line parallel to and 1.0 inch inside of the FMVSS zone shown in figure 1)**				
S6	Owner's Manual Information for vehicles with a GVWR of 10,000 lb. or less shall include:	Copy of Owner Guide			FCSD

F/CMVSS ection N	Regulatory Requirements/ **(Ford Acceptance Criteria)**	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
(a)	A statement explaining that all child restraint are designed to be secured in the vehicle by a lap or the lap belt portion of a lap-shoulder belt. This section will also explain that children could be endangered in a crash if their child restraints are properly secured in the vehicle.				
(b)	In vehicles with rear designated seating positions, statement alerting the vehicle owners that accident statistics, children are safer when secured in the rear seating positions than in the seating positions.				
S7	Owner Guide Content. Installation Instructions: For vehicles with automatic restraints at the front outboard designated seating position, that cannot used by themselves to secure a child restraint when the automatic restraint is adjusted to meet performance requirements of FMVSS 208 S5.1, the Owner Guide shall contain a statement:	Copy of Owner Guide			FCSD
S7 (a	The automatic restraint at the front right position in this vehicle cannot be used to secure a child restraint. A further statement is also required describe the equipment provided at that location may be used to secure a child restraint system, and full instructions on its proper use must also be provided. Options include: (1) Statement indicating that the automatic system can be adjusted to secure a child restraint system using attachment hardware installed as original equipment by the vehicle manufacturer. (Owner Guide must include diagram showing location of attaching hardware), or (2) Statement indicating that anchorages for a lap to secure a child restraint system have been at the front right outboard seating position, or				

F/CMVSS ection N	Regulatory Requirements/ **(Ford Acceptance Criteria)**	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
	(3) Statement indicating that a lap or lap/shoulder has been installed by the vehicle manufacturer at front right outboard seating position to secure a restraint.				
(b)	In vehicles which a lap or lap/shoulder belt is not installed at the front right outboard seating but the automatic restraint at that position can be adjusted by the vehicle owner to secure a child restraint system using an item or items of original equipment, the owner's guide shall have: (1) Diagram showing the location of the attaching hardware provided by the vehicle manufacturer, (2) A step-by-step procedure with the diagram or diagrams showing how to modify the automatic restraint system to secure a child restraint system. The instructions shall explain the proper routing of the attaching hardware.	Copy of Owner Guide			FCSD
(c)	In vehicles which the automatic restraint at the right outboard position cannot be modified to a child restraint system using attaching hardware installed as original equipment by the vehicle manufacturer and a manual lap or lap/shoulder is not installed by the original manufacturer, the owner's guide shall have: (1) A diagram or diagrams showing the location of the lap belt anchorages for the front right seating position, and				

F/CMVSS ection N	Regulatory Requirements/ **(Ford Acceptance Criteria)**	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
	(2) A step-by-step procedure with the diagram or diagrams for installing the proper lap belt hardware and a Type 1 lap belt at the front right outboardseating position. The instructions shall explain the properrouting of the seat belt and the attachment of the seat belt assembly to lap belt anchorages.				
	Unique Canadian Requirements:				
CMVSS 10 (1)	The lap belt portion of all Type 2 seat belt systems must meet Type 1 load requirements.			Reports TBD	AVT Restraints
(2)	All anchorages must meet zone requirements.				
(3)	Upper anchorage zones are defined using the SGRP and the design seat back angle with the seat in the rearmost and down position. Whereas, FMVSS uses the rearmost and down H-point and the most seat back angle.				

Regulation			Carryover	
			Year	Vehicle
	101	Controls and Displays		
	102	Transmission Shift		
	103	Windshield Defrost & Demist		
	104	Windshield Washing & Wiping		
	105	Brake Systems		
	106	Brake Hoses		
	108	Lamps		
	109	New Pneumatic Tires		
	110	Tire Selection & Rims		
	111	Rearview Mirrors		
	112	Concealed Headlamps		
	113	Hood Latch System		
	114	Theft Protection		
	115	VIN (Canada)		
	116	Brake Fluid		
	118	Power Windows		
	119	New Truck Tires		
	120	Truck Tire Selection & Rims		
	121	Air Brake Systems		
	124	Accelerator Control Systems		
	125	Warning Devices		
	135	Brake Systems		
	201	Interior Impact Protection		
	202	Head Restraints		
	203	Steering Control Systems		
	204	Steering Rear Displacement		
	205	Glazing Materials		
	206	Door Locks		
	207	Seating Systems		
	208	Occupant Protection		
	209	Seatbelt Assemblies		
X	210	Seatbelt Anchorages		
	210.1	Child Seat Tether Anchorages		
	210.2	Child Seat Latch Anchorages		
	212	Windshield Mounting		
	213	Child Restraint Systems		
	214	Side Impact Protection		
	215	Bumpers (Canada)		
	216	Roof Crush Resistance		
	217	Bus Window Retention		
	219	Windshield Zone Intrusion		
	220	School Bus Rollover Protection		
	221	School Bus Body Joint Strength		
	222	School Bus Seating		
	225	Child Seat Anchorages		
	301	Fuel System Integrity		
	302	Flammability of Interior Mat'ls.		
	303	CNG Fuel System Integrity		
	304	CNG Fuel Container Integrity		
	305	Electric Vehicles		
	401	Internal Trunk Release		
	541	Theft Protection		
	564	Replacement Light Source		
	565	Vehicle Identification Number		
	566	Manufacturers Identification		
	567	Certification Label		
	568	Vehicles Made in 2 Stages		
	574	Tire Identification		
	575	Consumer Information		
	581	Bumper Impact		
	CAN	Canadian		
	NHTSA	NHTSA Form		
	NOISE	Exterior Noise		
	OG	Owner's Guide		
	PDG	Public Domain Guideline		
	PPC	Pre-Production Certification		
	RFI	Radio Frequency Interference		
	SDG	Safety Design Guideline		

2004

04-5221

	Vehicle
	Aviator [U231]
	Crown Victoria - Grand Marquis - Marauder [EN114]
	Econoline [VN127]
	Escape [U204] - Tribute [J14]
	Excursion [U137]
	Expedition [U222] - Navigator [U228]
	Explorer - Mountaineer [U152]
	Explorer Sport Trac [P207]
	F-150 [P221]
	F-150 Heritage [PN96]
	F-53
	F-650 750 [H215]
	F-SuperDuty [P131]
	Focus [C170]
X	Freestar - Monterey [V229]
	LS [DEW98]
	Mustang [SN95]
	Ranger [PN150] - B-series [PN151]
	Taurus - Sable [D186]
	Thunderbird [M205]
	Town Car [FN145]

	Document Type
	Interpretation
X	Plan
X	Report

	Organization
	Alternative Fuel
	Automotive Safety Office
	AVT-RVT
	Body
	Car Programs
	Chassis
	Climate Control
	DSO-SVT
	Electric Vehicle
	Electrical & Lighting
	Environmental & Safety
	FCSD
	Ford of Australia
	Ford of Europe
	Fuel Systems
	Interior Systems
	Mazda
	OPEO-EEME
	Plastics & Trim
	Powertrain
X	Restraints
	Supplier Provided
	Transmission
	Truck Operations
	Vehicle Crash
	Vehicle Engineering
	Vehicle Operations
	Vehicle Personalization
	Vehicle Safety

Test Reports

KC0924, KC1072, KC0193, KC1483, KC1598

Engineering Drawings

Comments

COMPLIANCE DEMONSTRATION PLAN AND REPORT
F/CMVSS: 210
TITLE: Seat Belt Assembly Anchorages

	PLAN Answer Plan Questions below		REPORT of Compliance Demonstrated		
ORGANIZATION	Plan Prepared By: Print Name Sign / Date	Supervisor Print Name Sign / Date	Report Prepared By: Print Name Sign / Date	Supervisor Print Name Sign / Date	Manager Print Name Sign / Date
1 Lifestyle Restraints	D.R. Taylor 1/21/03	L. Landis	E. Chiu 1/22/03	L. Landis 1/24/03	P. Kim 2/14/03
2					
3					
4					
5					
6					

PLAN QUESTIONS:			
Does this Standard/Regulation apply to this vehicle?	Yes __X__ No ____		
Are your components on this vehicle carryover with respect to complying with this standard/regulation?	1 No __X__	Yes ____	Base MY ____ & Vehicle ____
	2 No ____	Yes ____	Base MY ____ & Vehicle ____
	3 No ____	Yes ____	Base MY ____ & Vehicle ____
If Yes, complete Base MY & Vehicle information and submit just this page to ASO	4 No ____	Yes ____	Base MY ____ & Vehicle ____
	5 No ____	Yes ____	Base MY ____ & Vehicle ____
	6 No ____	Yes ____	Base MY ____ & Vehicle ____

ASO CONCURRENCE FOR THE PLAN :

NAME: _____ SIGNATURE: _____ DATE: _____

Prepared By: P. Ducharme
Form: form210.xls
dtaylo13\fmvss210\windstar2004

Document #_____

Form Date: 9/19/96
Revised Form Date: 01/26/01

COMPLIANCE DEMONSTRATION PLAN AND REPORT
F/CMVSS: 210
TITLE: Seat Belt Assembly Anchorages

NOTES:	Component	Base MY & Vehicle
If some, but not all, of your components are carry-over with respect to this standard/regulation, note those components here with their corresponding Base MY & Vehicles. Also, note "c/o" in the "method" column for those paragraphs in the pro-forma for which the carryover components apply.	See Data summary Attachment for Layout numbers	
	Test Reoort Data	
If engineering judgment (EJ) is being applied to demonstrate compliance, include engineering rationale in the "Evidence/Comments" column for those paragraphs to which EJ is being applied and/or attach separate sheets with this information to the CDP.		

Applicable Reference documents:

Federal Standard - 49 CFR 571.210 (FMVSS/CMVSS 210).

Ford Acceptance Criteria - CPSC 01.00 - Body Systems

Approved Engineering Test Procedure CETP 01.10-L-801-US & CETP 01.20-L-809-US

F/CMVSS Section No.	
S1	Purpose and Scope - Specifies requirements for seat belt assembly anchorages to insure their proper location for effective occupant restraint and to reduce the likelihood of their failure.
S2	Application - All vehicles.
S3	Definitions - "Seat belt anchorage" See FMVSS 210.

F/CMVSS Section No	Regulatory Requirements/ (Ford Acceptance Criteria)	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
S4	Requirements.	Fill in NHTSA Forms 4B1, 4B2 and 6 with appropriate data. (Forms are attached to this workbook)			Lifestyle Seats
S4.1	Type.				
S4.1.1	Seat belt anchorages for a Type 1 or Type 2 seat belt assembly shall be installed for each designated seating position for which a Type 1 or a Type 2 seat belt assembly is required by FMVSS 208. Seat belt anchorages for a Type 2 seat belt assembly shall be installed for each designated seating position for which a Type 2 seat belt assembly is required by FMVSS 208.	Drawing: Seat Belt Anchorage Layout. Matrix showing Seat System complexity and Engineering Judgement used in developing the Compliance Demonstration Plan and Report.	New	MP-3F23-012001-RGTRY1	Lifestyle Restraints
S4.1.2 (a)	Vehicles having an automatic restraint at the right front outboard position must have provisions for securing a child restraint system either by adjusting the automatic restraint or other means, such as providing Type 1 or Type 2 belts or anchorages.	N/A			
(b)	The requirements fo 4.1.1, that seat belt anchorages for a Type 1 or a Type 2 seat belt assembly shall be installed for certain designated seating positions, do not apply to seating positions that are equipped with seat belt assemblies that meet the frontal crash protection requirements of FMVSS 208 S5.1.				
S4.2.1	Lap belt anchorage strength requirements. Except as provided in S4.2.5 and for side-facing seats, the following anchorage, attaching hardware, and attaching bolts must resist a 22,241 N force when tested as specified:	Test Report: Sm-19 CETP 01.20-L-809-US	Test	KC0924- 1st row pwr KC1072- 1st row man KC1183- 2nd row bench EJ 2nd row QUAD based on previous testing -additional belt webbing added only to provide excess webbing over 95th percentile adult male	

F/CMVSS Section No	Regulatory Requirements/ (Ford Acceptance Criteria)	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
	(a) Type 1 seat belt assembly. (b) Lap portion of Type 2 and automatic belt if voluntarily installed. (c) Lap portion of any system with detachable upper torso belt. **(a, b, & c) Bolts and Anchorages: 25,577 N lap loop load (115% of FMVSS requirement)**				
S4.2.2	Type 2, Lap and shoulder belt systems strength requirements: Except as provided in S4.2.5 and for side-facing seats, the anchorage, attaching hardware and attaching bolts must resist 13,345 N belt loop loads. **Bolts and Anchorages: 15,347 N belt loop load (15% over FMVSS requirement)**	Test Report: SM19 CETP 01.20-L-809-US		Test report's KC0924, KC1072, KC0193 KC1483,KC5938,KC1598	Lifestyles Restraints
S4.2.3	Permanent deformation or rupture of a seat belt anchorage or its surrounding area is allowed if the required force is sustained for 10 seconds.				
S4.2.4	Seats in the same row shall be tested simultaneously.				
S4.2.5	The attachment hardware of a seat belt assembly, which is subject to the requirements of S5.1 of FMVSS 208 by virtue of any provision of FMVSS 208 other than S4.1.2.1(c)(2) of FMVSS 208, does not have to meet the requirements of S4.2.2 of FMVSS 210.				

F/CMVSS Section No	Regulatory Requirements/ (Ford Acceptance Criteria)	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
S4.3	Location: As used in this section, "forward" means the direction in which the seat faces, and other directional references are to be interpreted accordinly.				
S4.3.1	Seat belt anchorages for Type 1 seat belt and the pelvicportion of Type 2 seat belt assembly.	Drawing: Seat Belt anchorage layout showing applicable seat belt angles and lateral spacing of seat belt anchorages.		MP-3F23-012001-RGTRY1	Lifestyles Restraints
S4.3.1.1	In an installation in which the seat belt does not bear upon the seat frame:				
(a)	For non-adjustable seats the lap belt angle must be between 30 degrees and 75 degrees when measured as specified. **(angle range is 35 deg. to 70 deg.)**				
(b)	For adjustable seats the lap belt angle must be between 30 degrees and 75 degrees when measured as specified. **(angle range is 35 deg. to 70 deg.)**				
S4.3.1.2	In an installation in which the seat belt bears upon the seat frame but the anchorage is not attached to the seat structure the lap belt angle must be between 30 degrees and 75 degrees when measured as specified. **(angle range is 35 deg. to 70 deg.)**				

F/CMVSS Section No	Regulatory Requirements/ (Ford Acceptance Criteria)	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
S4.3.1.3	In an installation in which the seat belt attaches to the seat structure the lap belt angle must be between 30 degrees and 75 degrees when measured as specified. **(angle range is 35 deg. to 70 deg.)**				
S4.3.1.4	Anchorage of an individual seat belt assembly shall be located at least 6.5 inches apart laterally when measured as specified. **(minimum 7.0 in. lateral spacing.)**				
S4.3.2	Seat belt anchorages for the upper torso portion of Type 2 seat belt assemblies: The anchorages must be inside the specified zone shown on figure 1 when the seats are adjusted as specified. **(the anchorage must be located within the area bounded by a line parallel to and 1.0 inch inside of the FMVSS zone shown in figure 1)**				
S6	**Owner's Manual Information for vehicles with a GVWR of 10,000 lb. or less shall include:**	**Copy of Owner Guide Statement certifying that the owner's guide contains the information required by S6.**			FCSD
	(a) A statement explaining that all child restraint systems are designed to be secured in the vehicle by a lap belt or the lap belt portion of a lap-shoulder belt. This section will also explain that children could be endangered in a crash if their child restraints are not properly secured in the vehicle.				
	(b) In vehicles with rear designated seating positions, a statement alerting the vehicle owners that according to accident statistics, children are safer when properly secured in the rear seating positions than in the front seating positions.				

F/CMVSS Section No	Regulatory Requirements/ (Ford Acceptance Criteria)	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #, ...)	Responsibility
S7	Owner Guide Content. Installation Instructions: For vehicles with automatic restraints at the front right outboard designated seating position, that cannot be used by themselves to secure a child restraint system when the automatic restraint is adjusted to meet the performance requirements of FMVSS 208 S5.1, the Owner Guide shall contain a statement:	Copy of Owner Guide Statement certifying that the owner's guide contains the information required by S7.			FCSD
S7 (a)	The automatic restraint at the front right outboard position in this vehicle cannot be used to secure a child restraint. A further statement is also required to describe the equipment provided at that location which may be used to secure a child restraint system, and full instructions on its proper use must also be provided. Options include: (1) Statement indicating that the automatic restraint system can be adjusted to secure a child restraint system using attachment hardware installed as original equipment by the vehicle manufacturer. (Owner Guide must include diagram showing location of attaching hardware), or (2) Statement indicating that anchorages for a lap belt to secure a child restraint system have been provided at the front right outboard seating position, or (3) Statement indicating that a lap or lap/shoulder belt has been installed by the vehicle manufacturer at the front right outboard seating position to secure a child restraint.				

F/CMVSS Section No	Regulatory Requirements/ (Ford Acceptance Criteria)	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
					FCSD
(b)	In vehicles which a lap or lap/shoulder belt is not installed at the front right outboard seating position but the automatic restraint at that position can be adjusted by the vehicle owner to secure a child restraint system using an item or items of original equipment, the owner's guide shall have: (1) Diagram showing the location of the attaching hardware provided by the vehicle manufacturer, and (2) A step-by-step procedure with the diagram or diagrams showing how to modify the automatic restraint system to secure a child restraint system. The instructions shall explain the proper routing of the attaching hardware.	Copy of Owner Guide Statement certifying that the owner's guide contains the information required by S7.			
(c)	In vehicles which the automatic restraint at the front right outboard position cannot be modified to secure a child restraint system using attaching hardware installed as original equipment by the vehicle manufacturer and a manual lap or lap/shoulder belt is not installed by the original manufacturer, the owner's guide shall have: (1) A diagram or diagrams showing the location of the lap belt anchorages for the front right outboard seating position, and				

F/CMVSS Section No	Regulatory Requirements/ (Ford Acceptance Criteria)	Compliance Demonstration Requirements	Method	Evidence/Comments (Test #, E/J Rationale, Part #,...)	Responsibility
	(2) A step-by-step procedure with the diagram or diagrams for installing the proper lap belt anchorage hardware and a Type 1 lap belt at the front right outboardseating position. The instructions shall explain the properrouting of the seat belt assembly and the attachment of the seat belt assembly to the lap belt anchorages.				FCSD
	Unique Canadian Requirements: The owner's guide shall have both a French and English version.				FCSD

V229 CERTIFICATION TESTING STATUS

FMVSS	DESCRIPTION OF TEST	POSITION		TEST SITE	TA #	DATE COMPLETE	TEST REPORT	BUCK #	CURRENT LOCATION	COMMENTS
		ROW	TYPE							
225	SFAD1 TETHER ONLY	1ST	PASS	BLDG #4	KB 9602	**8/22/02**	X	A4360008	DST	Replaced power seat with manual.
225	FULL SYSTEM	2ND	QUAD	BLDG #4	KB 9603	**8/20/02**	X	A4360008	DST	
225	LOWER ANCHORS ONLY - FORWARD	2ND	QUAD	BLDG #4	KC 0075	**10/15/02**	X	A4360019	BLDG #4	Use seats from A4330044
225	LOWER ANCHORS ONLY - LATERAL	2ND	QUAD	MGA	KC 0923	**12/11/02**	X	A4360007	INTIER	
225	FULL SYSTEM	2ND	BENCH	BLDG #4	KB 9739	**9/11/02**	X	A4360011	DST	
225	LOWER ANCHORS ONLY - FORWARD	2ND	BENCH	BLDG #4	KB 9954	**9/20/02**	X	A4360009	DST	
225	LOWER ANCHORS ONLY - LATERAL	2ND	BENCH	MGA	KB 9925	**9/19/02**	X	A4360010	DST	
225	FULL SYSTEM	2ND	CTR BENCH	BLDG #4	KC 0077	**10/7/02**	X	A4360014	DST	
225	LOWER ANCHORS ONLY - FORWARD	2ND	CTR BENCH	BLDG #4	KB 9926	**9/23/02**	X	A4360012	DST	
225	LOWER ANCHORS ONLY - LATERAL	2ND	CTR BENCH	MGA	KC 0076	**10/8/02**	X	A4360013	DST	
225	FULL SYSTEM	3RD	BENCH	BLDG #4	KB 9605	**8/20/02**	X	A4360008	DST	
225	LOWER ANCHORS ONLY - FORWARD	3RD	BENCH	BLDG #4	KB 9955	**9/21/02**	X	A4360009	DST	
225	LOWER ANCHORS ONLY - LATERAL	3RD	BENCH	MGA	KB 9929	**9/19/02**	X	A4360017	REDISTRIBUTED	Buck used for other component tests.
208	COMFORT AND CONVENIENCE	1ST	PWR. DRVR	BARRIER	JB 8591	**11/22/02**	X	A4360015	INTIER	
208	COMFORT AND CONVENIENCE	1ST	PWR. PASS	BARRIER	JB 8591	**11/6/02**	X	A4360015	INTIER	Use seat from A4370013
208	COMFORT AND CONVENIENCE	1ST	MAN. DRVR	BARRIER	JB 7560	**11/4/02**	X	A4360007	INTIER	Use seat from kit #AM0ZUC
208	COMFORT AND CONVENIENCE	1ST	MAN. PASS	BARRIER	JB 7560	**10/7/02**	X	A4360007	INTIER	
208	COMFORT AND CONVENIENCE	2ND	ADJ. QUAD	BARRIER	JB 7560	**11/21/02**	X	A4360007	INTIER	
208	COMFORT AND CONVENIENCE	2ND	FIXED QUAD	BARRIER	JB 7560	**11/21/02**	X	A4360007	INTIER	
208	COMFORT AND CONVENIENCE	2ND	ADJ. BENCH	BARRIER	JB 8591	**11/21/02**	X	A4360015	INTIER	
208	COMFORT AND CONVENIENCE	2ND	FIXED BENCH	BARRIER	JB 8591	**11/21/02**	X	A4360015	INTIER	
208	COMFORT AND CONVENIENCE	2ND	ADJ. QUAD	BARRIER	JC 0260			A4430007	LIVERNOIS	**Re-Test - New Retractor**
208	COMFORT AND CONVENIENCE	2ND	FIXED QUAD	BARRIER	JC 0260			A4430007	LIVERNOIS	**Re-Test - New Retractor**
208	COMFORT AND CONVENIENCE	2ND	ADJ. BENCH	BARRIER	JC 0261			A4430007	LIVERNOIS	**Re-Test - New Retractor**
208	COMFORT AND CONVENIENCE	2ND	FIXED BENCH	BARRIER	JC 0261			A4430007	LIVERNOIS	**Re-Test - New Retractor**
208	COMFORT AND CONVENIENCE	3RD	BENCH	BARRIER	JB 8591	**11/20/02**	X	A4360015	INTIER	Use seat from kit #AM0ZUC
207/210B	RESTRAINT SYSTEM TEST	1ST	PWR. DRVR	BLDG #4	KC 0924	**12/18/02**	X	A4360007	INTIER	
207/210B	RESTRAINT SYSTEM TEST	1ST	PWR. PASS	BLDG #4	KC 0924	**12/18/02**	X	A4360007	INTIER	
207/210B	RESTRAINT SYSTEM TEST	1ST	MAN. DRVR	BLDG #4	KC 1072	**12/27/02**	X	A4360015	INTIER	
207/210B	RESTRAINT SYSTEM TEST	1ST	MAN. PASS	BLDG #4	KC 1072	**12/27/02**	X	A4360015	INTIER	
207/210B	RESTRAINT SYSTEM TEST	2ND	QUAD	BLDG #4	KC 0193	**10/23/02**	X	A4360018	BLDG #4	Use seats from A4330041
207/210B	RESTRAINT SYSTEM TEST	2ND	BENCH	BLDG #4	KC 1483	**2/12/03**		A4370028	BLDG #4	**New Retractor**
207/210B	RESTRAINT SYSTEM TEST	3RD	BENCH	BLDG #4	KC 0206	**10/17/02**	X	A4360019	BLDG #4	Used seat from kit #AM0ZUC
207/210B	RESTRAINT SYSTEM TEST	3RD	BENCH	BLDG #4	KC 1598	**2/14/03**		A4370025	BLDG #4	**Re-Test - New Seat Strikers**

TO: Edwin Chiu (original + 1 copy)

Test Order	KC 0924
Date of Order	12/4/2002
Work Task	G13
Test Date	12/18/2002
Date Reported	12/26/2002

SUBJECT: FMVSS 207-210B Certification

TEST LOCATION: Ford Motor Company AVT-4, Dearborn, Michigan

REQUESTED BY: Dept - 5100Y246 Edwin Chiu

OBJECTIVE: To certify compliance of the test sample with the requirements of FMVSS 207/210

TEST SAMPLE INFORMATION:

Year & Model:	2004 V229
Seat Type:	1st Row Captain Seats
Seat Part #:	3F23-1760004-AMOZUC
	3F23-1760005-TTOZUC
Body #:	A4360007
Engineering Drawing #:	**SK-3F23-011000-BA**

CERTIFICATION STATEMENT:

I certify that to the best of my knowledge and ability this test was conducted with parts and related systems signed-off by the requesting department as representative of a design level that is adequate for a certification test. Furthermore, that the test was conducted in accordance with the requested company test procedures utilizing test equipment and fixtures as described or referenced herein and that the test results represent the recorded performance of the tested sample. Any exceptions are described in this report.

Jeffrey Bias
Product Test Engineer
Body & Chassis Test Department

CONCURRENCE:

Larry E. Brown
Section Supervisor - Body & Chassis Test Department

FMVSS COMPLIANCE TESTING AFFIDAVIT (CERTIFICATION)

I certify that to the best of my knowledge and ability, this test was conducted in accordance with the requested company test procedure(s), utilizing test equipment and/or fixtures as described or referenced herein and that the test results represent the recorded performance of the tested samples. Any exceptions are referenced or described, initialed and dated below.

Jeffrey Bias
Test Engineer

DESIGN / DEVELOPMENT ENGINEER'S STATEMENT

I certify that to the best of my knowledge and ability, this test was conducted with parts and related systems representative of a design level that is adequate for certification testing. Furthermore, this test was conducted in accordance with the requested company test procedure(s), utilizing test equipment and/or fixtures as described or referenced herein and that the test results represent the recorded performance of the tested samples. I am familiar with and concur in the components tested, the type of fixtures used, the procedures stated in the report, and based on the reported test results, the conclusion arrived at with respect to the Regulation compliances.

Edwin Chiu
Design / Development Engineer
Ford Motor Company

TEST RESULTS SUMMARY:

Left Side Seating Position (Driver Side) - Longitudinal Force Application

The maximum simultaneous loads measured were 31% above the requirements.
The test was discontinued after the requirements were met.

Right Side Seating Position (Pass. Side) - Longitudinal Force Application

The maximum simultaneous loads measured were 31% above the requirements.
The test was discontinued after the requirements were met.

TABLE OF CONTENTS:

PROCEDURE:

This test was conducted in accordance with Corporate Engineering Test Procedure
01.20-L809 US

Left Side Seat Weight	67.85 lbs lbs
Center Seat Weight	69.17 lbs lbs
Right Side Seat Weight	67.85 lbs lbs

The dimensions for the center of gravity (C.G.) were taken from drawing:
SK-3F23-011000-BA

KC0924

2004 V229 A4360007

FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST

Peak Loads

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	LH C.G.	NONE	RH C.G.
Time (sec)	48.80	0.00	48.43	48.40	0.00	48.42	48.61	0.00	48.43
Load	6031	0	4270	5265	0	4226	2167	0	2016
N	26826	0	18993	23419	0	18797	9639	0	8967
% Overload	101.03 %	0.00 %	42.33 %	75.50 %	0.00 %	40.87 %	59.69 %	0.00 %	45.77 %

Simultaneous Overloads

Maximum Simultaneous Overload Occurred at 47.95 seconds

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	LH C.G.	NONE	RH C.G.
Load	3926	0	3945	3937	0	3944	1777	0	1811
N	17464	0	17549	17512	0	17542	7906	2	8054
% Overload	30.87 %	0.00 %	31.51 %	31.23 %	0.00 %	31.46 %	30.98 %	0.00 %	30.92 %

* Based on LH Seat weight of 67.85 lbs

** Based on RH Seat weight of 69.15 lbs

% Overload is relative to the required hold load

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:02 PM

Test File: KC0924 - 01

KC0924

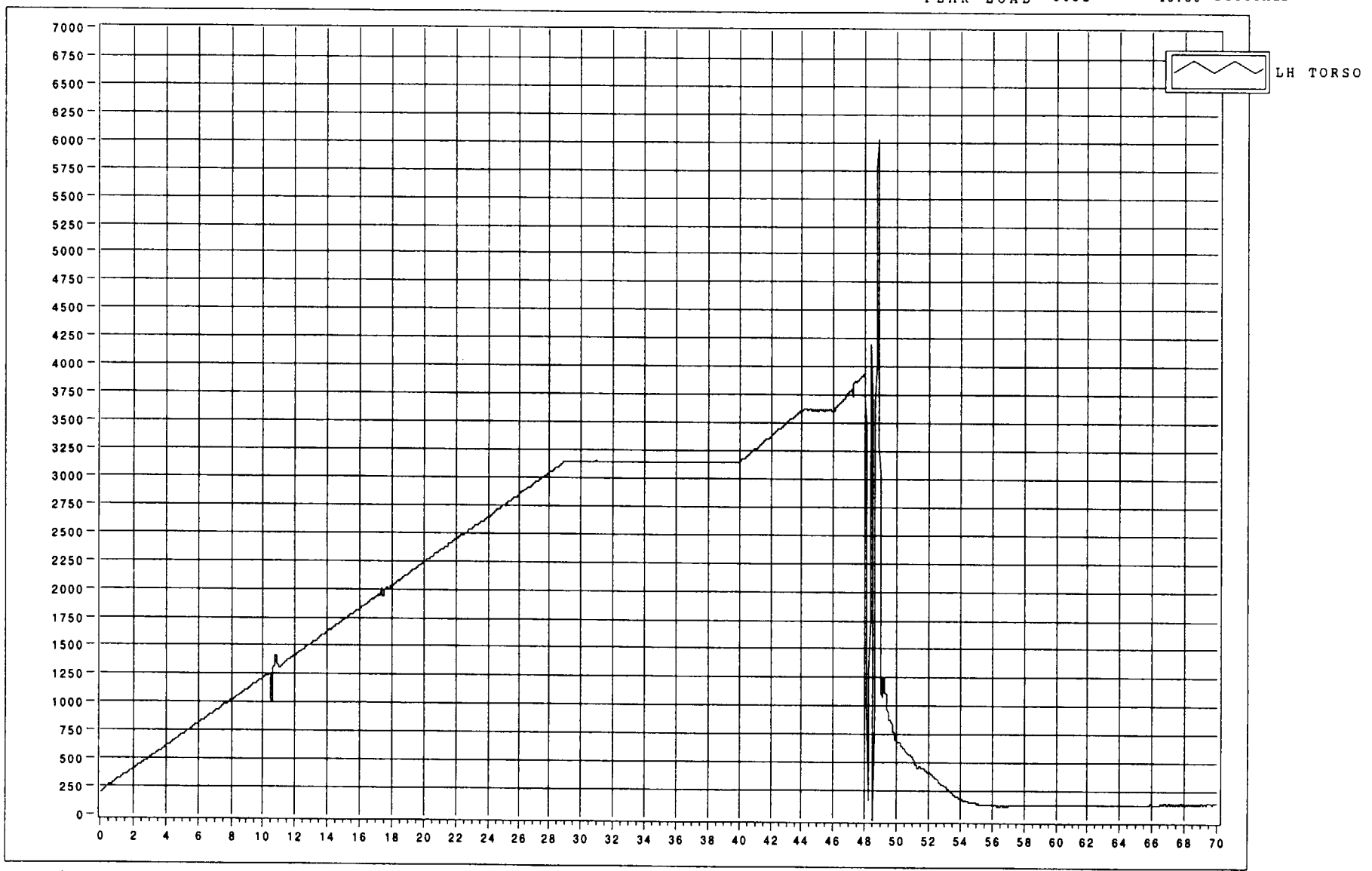
2004 V229 A4360007

FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST

PEAK LOAD 6031 @ 48.80 secconds



Test File: KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:01 PM

KC0924

2004 V229 A4360007

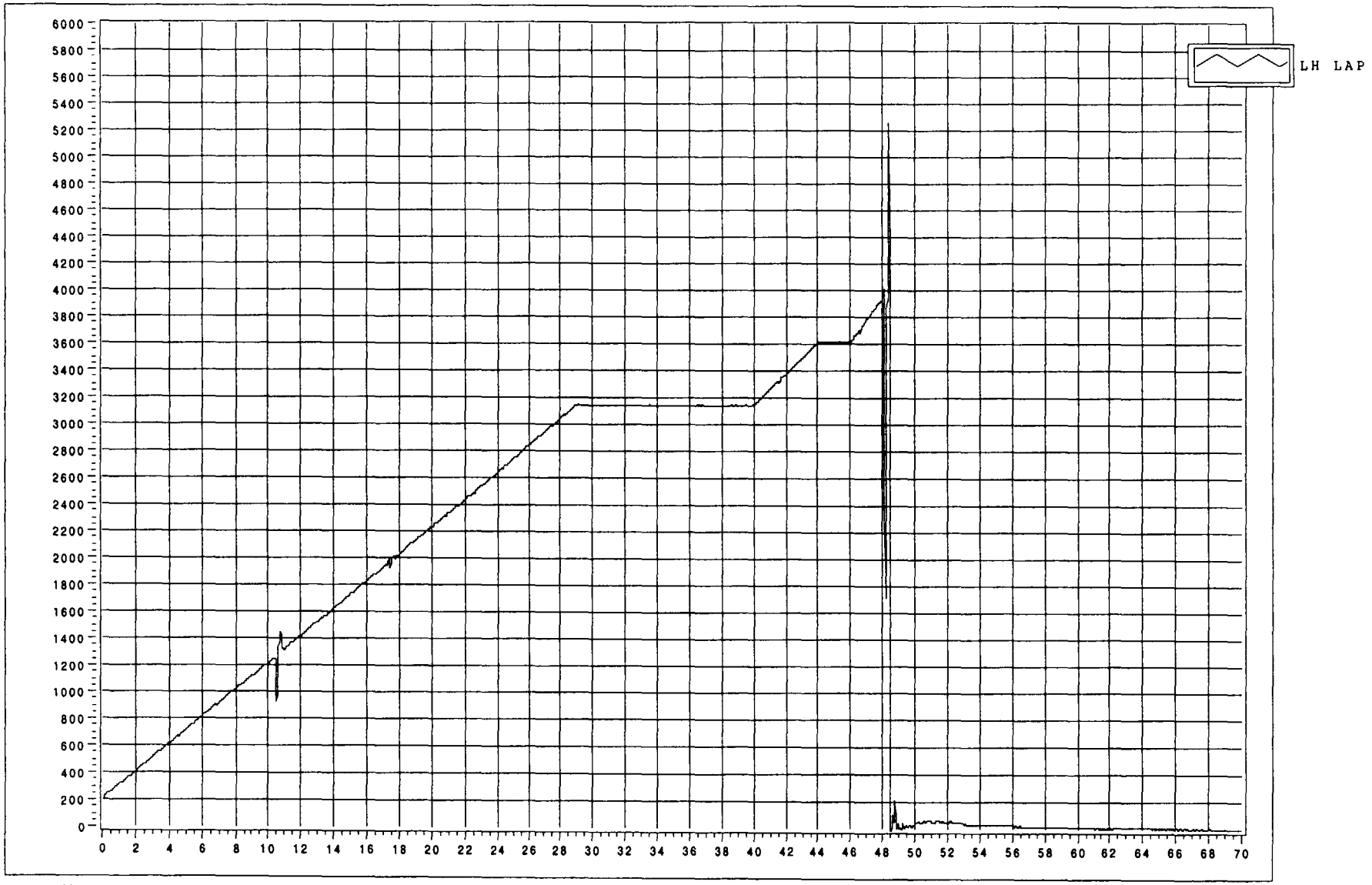
FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST

Sheet 6

PEAK LOAD 5265 @ 48.40 secconds



Test File: KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:02 PM

KC0924

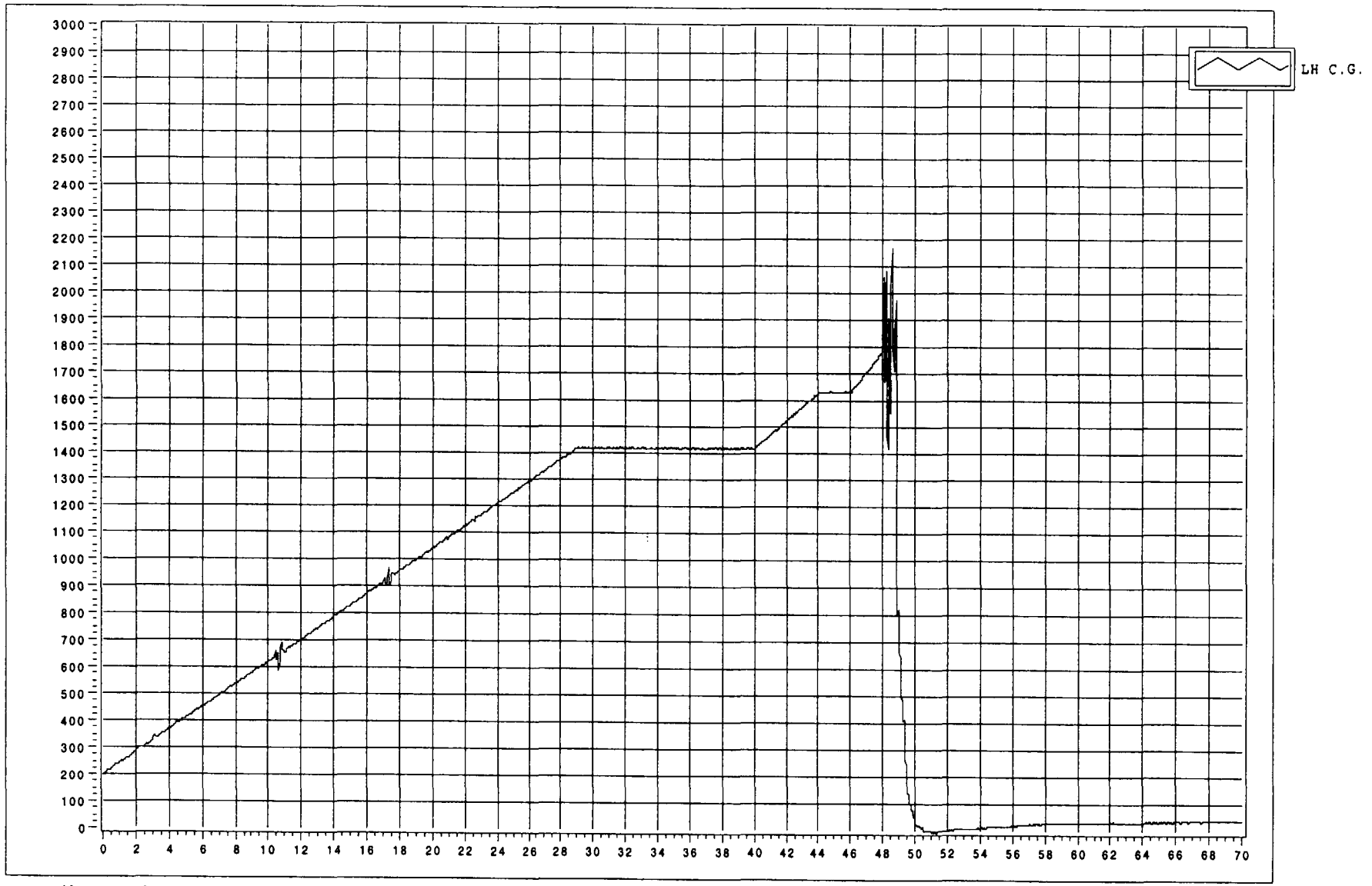
2004 V229 A4360007

FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST

PEAK LOAD 2167 @ 48.61 secconds



Test File: KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:02 PM

KC0924

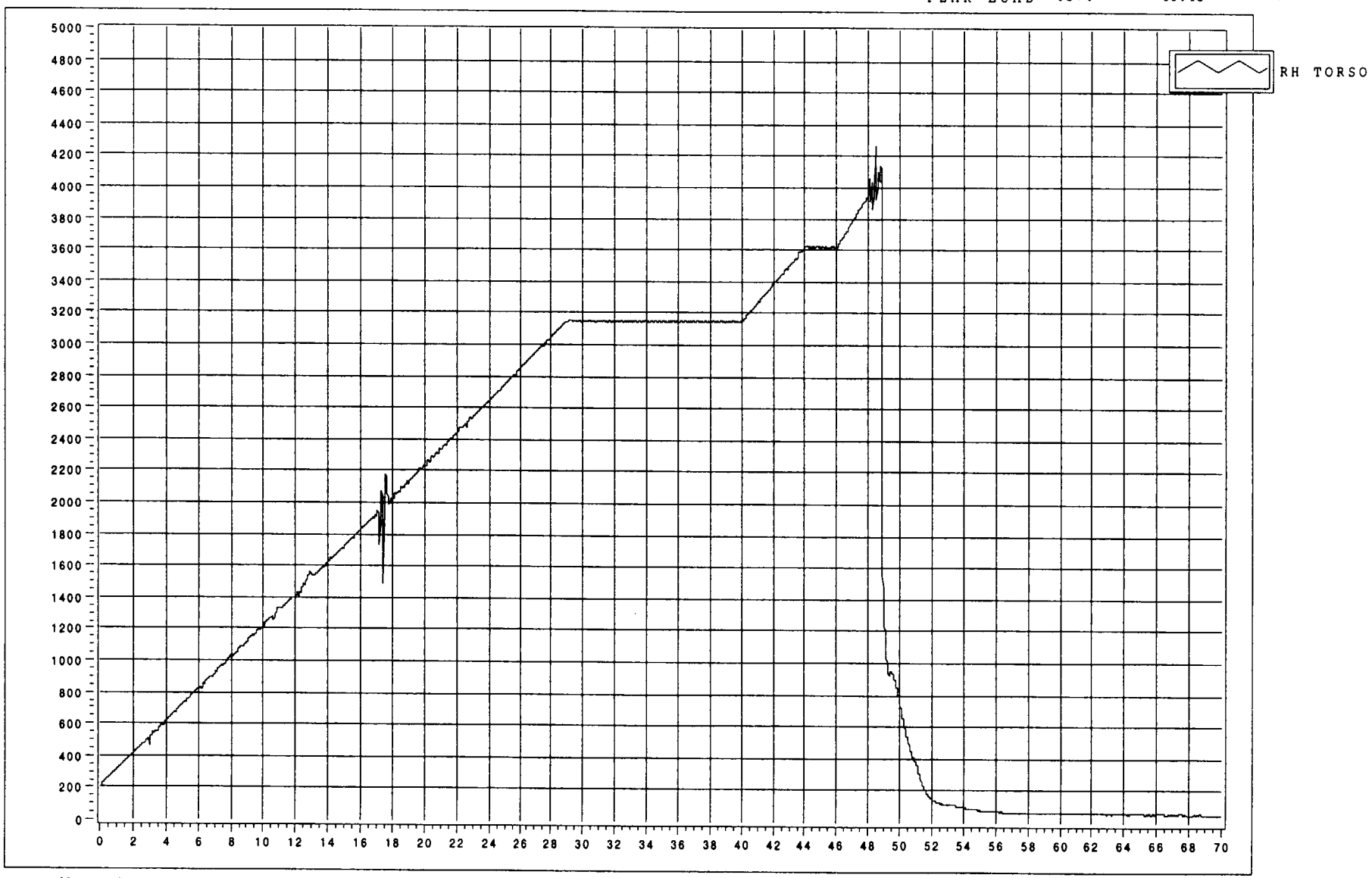
2004 V229 A4360007

FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST

PEAK LOAD 4270 @ 48.43 secconds



Test File: KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:02 PM

Sheet 9

KC0924

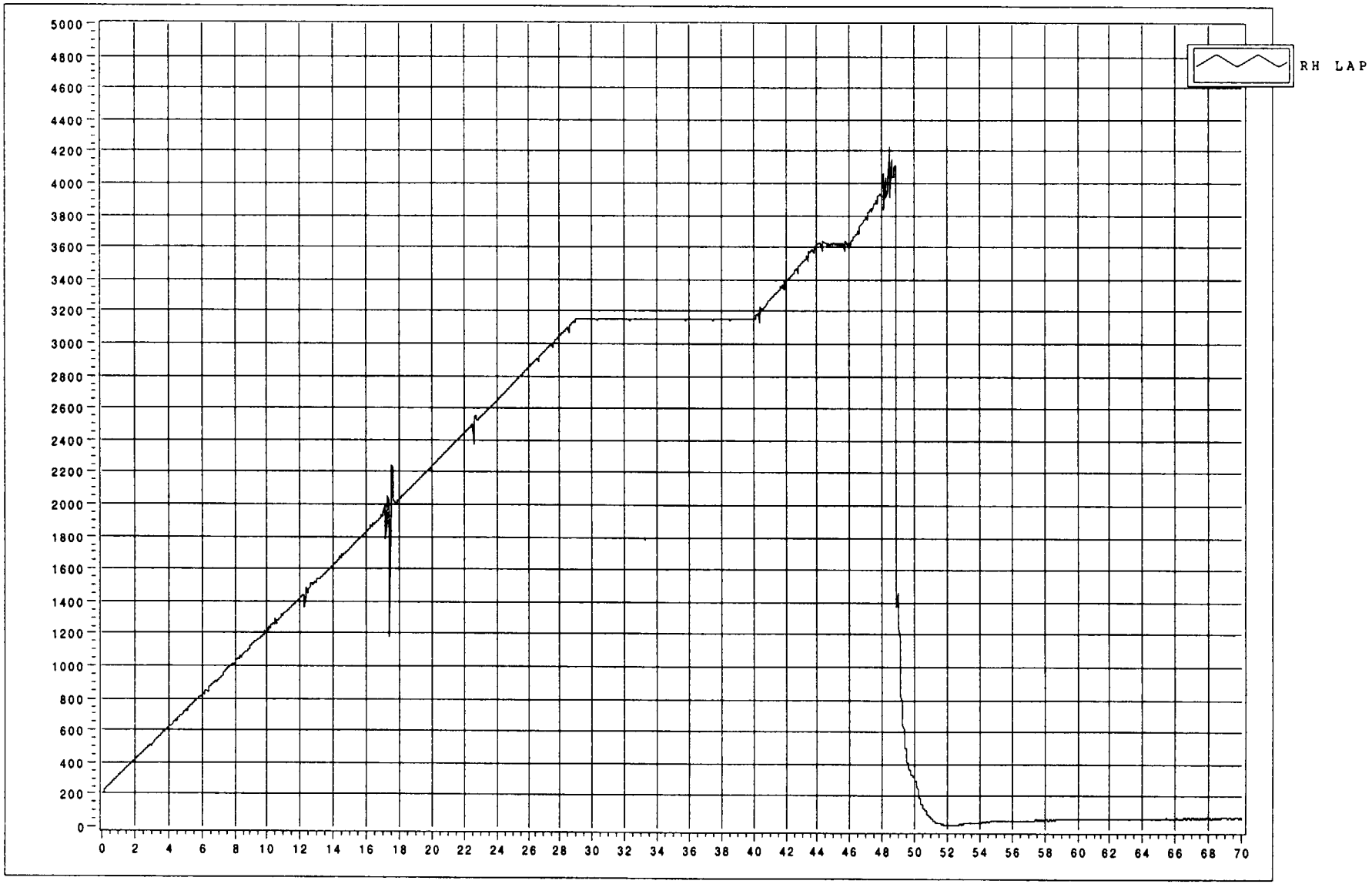
2004 V229 A4360007

FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST

PEAK LOAD 4226 @ 48.42 secconds



Test File: KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:02 PM

Sheet 10

KC0924

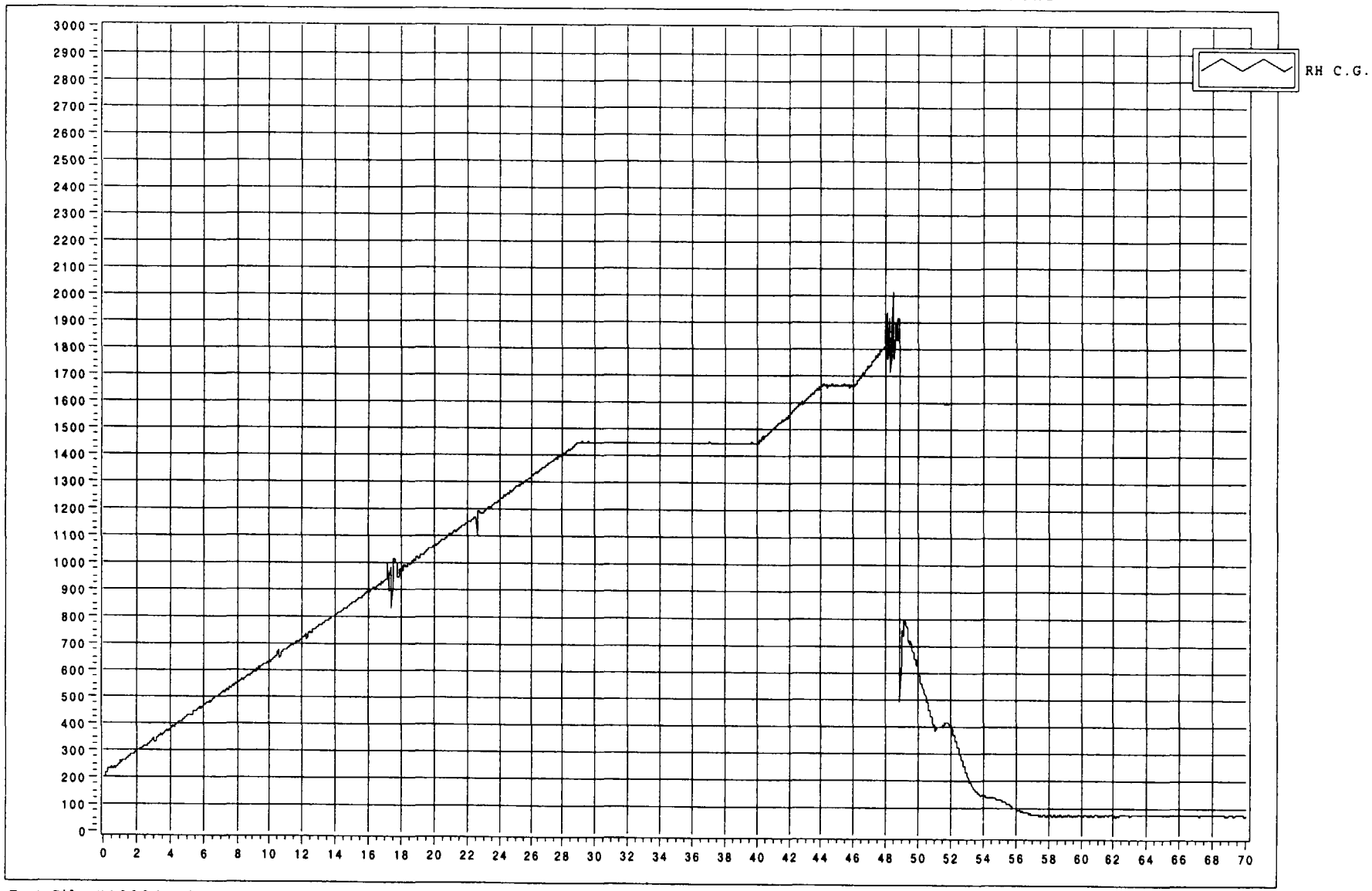
2004 V229 A4360007

FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST

PEAK LOAD 2016 @ 48.43 secconds



Test File: KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:02 PM

Sheet 11

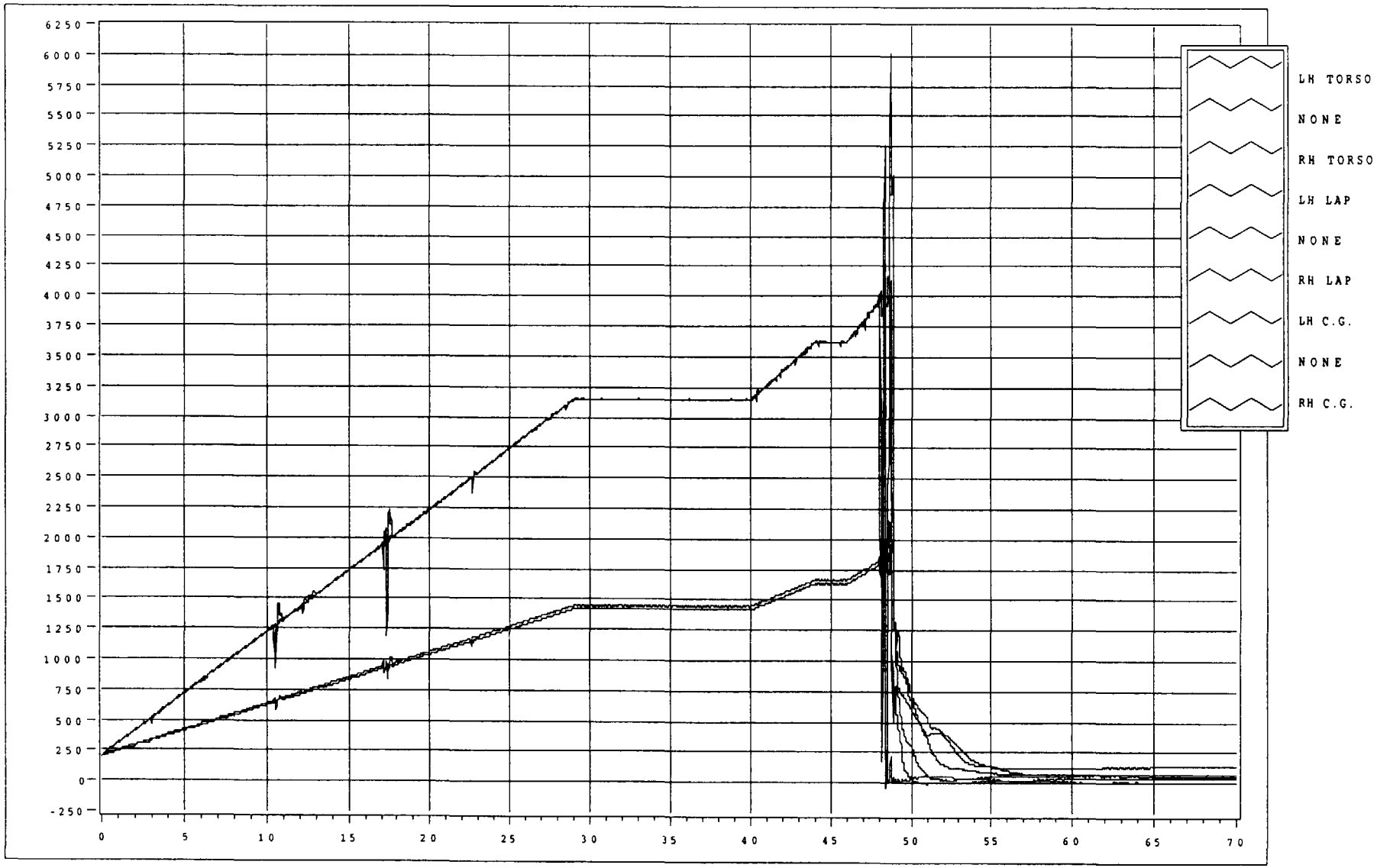
KC0924

2004 V229 A4360007

FMVSS 207/210

1ST ROW CAPTAINS

PRODUCTION, B TEST



Test File: KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:01 PM

Simultaneous Minimum % Overload

Test File:KC0924 - 01

Software Revision: 3.20 - 03/21/2002

Maximum Simultaneous Overload of 30.87 at 47.95 seconds

Test Date: 12/18/02

Date Plotted: 12/18/02

Time Plotted: 1:02 PM

FMVSS/CMVSS 210 OR 207/210B TYPE TEST
REQUESTOR INFORMATION SHEET

Test Request # KC0924 Model Yr: 2004

Test Buck # A4360007 Vehicle Line: VZ29

RH D-Ring Adj. Height: ___NA ✓Full Up ___Mid ___Full Down ___Other

LH D-Ring Adj. Height: ___NA ✓Full Up ___Mid ___Full Down ___Other

Type of Retractor: LH_____ Ctr_____ RH_____

Seating Positions: Front: ✓L.H. ___Ctr ✓R.H.

Seating Positions: 2nd Row: ___L.H. ___Ctr ___R.H.

SEAT (S)	Left Hand	Center	Right Hand	Bench
Weight				
C.G. Position				
C.G. Position Ref. Point				
Design Seat Back Angle	°	°	°	°
Manual/Power	POWER		POWER	

Manual Seat Position for Testing: ___Full Rearward
Power Seat Position for Testing: ✓Full Rearward ✓Full Down

Doors ✓Yes ___NA Hatches ___Yes ✓NA Strikers & Latches ✓Yes ___NA

Door Glass ___Yes ✓NA Fixed Glass ___Yes ✓NA

Frame ___Yes ✓NA Gas Tank ___Yes ✓NA Pucks ___Yes ✓NA

Shoulder Guides ..... Left Side ✓Yes ___NA Right Side ✓Yes ___NA

All bolts have been torqued to the minimum torque value. ✓Yes: Seats (Nm); Retractors (Nm)

All components have been installed and the test buck is ready for FMVSS 210 or 207/210 testing.

Signature Ron Bergman Date: 12-3-02

All entries must be Yes (the component has been installed) or NA (it is not required). For a FMVSS 207/210 test the seat weight, c.g. location and c.g. reference point must be provided.

BUCK SIGN-OFF SHEET

VEH LINE/MOD:	V229	MY.	2004
VEH.#	A4360007	TR#	KC0924
TEST MODE:	FMVSS 207/210B COMPLIANCE FOR CERTIFICATION TEST POSITION: 1ST. ROW BUCKETS		

The following systems and attached part list are production representative with respect to this test (Test Procedure CETP 01.10-L-809-US) as signed off by the release respnsible representatives listed below, or a person appointed by the release responsible representative for the above listed buck number.

SYSTEM	Check	NAME, PHONE# & ID	SIGNATURE & DATE	COMMENTS
Body Shell	ok to test ✓ latest level parts	Justin Gillespie, X-38594, JGILLES7		Trim on interior
Underbody	ok to test ✓ latest level parts	Tom Joseph, X-89660, TJOSEPH1	J. Doyle for T.J. Joseph 12/4/02	
		~~Robert Vanslyke, X-10890, RVANSLYK~~ John Doyle X-09120 JDOYLE10	J. Doyle FRONT STRUC. # EXT #3 XMBR	
Interior Trim	ok to test ✓ latest level parts	Mark Nedelman, X-09187, MNEDELMA	12/6/02	ALL LVL PARTS OK FOR TEST.
		John Mardeusz, X-63265, JMARDEU1		
Seats	ok to test ✓ latest level parts	Rick Cendrowski, X-21708, RCENDROW		
		Joanna Gillespie, X-79967, JGILLES2		
		Ernie Minder, EMINDER		
	(Intier)	Peter Mueller, X-24582, PMUELL15	Ken Coatsworth 12-04-02	
Restraints	ok to test ✗ latest level parts	Edwin Chiu, X-77369, ECHIU	E. Chiu 12/18/02	
		Andrik Cardenas, X-71763, ACARDEN1		

Equipment Used To Support TESTnet Request **KC 0924**

CHILD TETHER ANCHORAGE TEST SYSTEM

	MTS CONTROL-LERS	MTS CONTROL-LERS	INTERFACE LOAD CELLS	INTERFACE LOAD CELLS
CYLINDER #	MODEL 407	MODEL 407	MODEL 1210ZD	MODEL 1210ZD
	SERIAL #	ASSET #	SERIAL #	ASSET #
1	0257669F	14332	96568	18726
2	0257672F	14337	85982	12169
3	0257674F	14333	82465	9643
4	0257677F	14338	96545	18732
5	0257678F	14334	82436	9649
6	0257675F	14339	96529	18730
7	0257670F	14335	82446	9646
8	0257671F	14340	82414	9647
9	0257676F	14336	82458	9650

Item	Model No.	S/N	Asset Number
Kinetic System Corp. 16 Bit A/D Card	V207	82	14472
Kinetic System Corp. Signal Conditioner Ch 1-8	V246	55	14475
Kinetic System Corp. Signal Conditioner Ch 9-16	V246	76	10402
Kinetic System Corp. Signal Conditioner Ch 17-24	V246	71	14164
Kinetic System Corp. Waveform Generator	V285	41	14476
Teac PCM Data Recorder	RD200T	32418500009785	

Load Cells Cal Date 8-29-2002, Cal Due Date 8-29-2003
System Cal Date 8-31-2002, Cal Due Date 8-31-2003

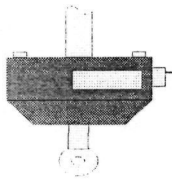
Other Equipment used for this test

Description	Model No.	Asset Number	Calib. Date	Calib. Due Date
MD SMARTTOOL	n/a	20155	9/14/2001	9/14/2002
Celesco Potentiometer	PT101-0050-111-51X0-8351C	19190	1/16/2002	1/16/2003
Celesco Potentiometer	PT101-0050-111-51X0-8351C	19194	1/16/2002	1/16/2003
Celesco Potentiometer	PT101-0050-111-51X0-8351C	18865	1/14/2002	1/14/2003

BODY and CHASSIS TEST DEPARTMENT
MEASUREMENT UNCERTAINTY

B & C Test Section: Body Test
Test Facility: Seat belt / Child Restraint
Channel Name: Load Cell Measurements

Eng./Tech. Name: Jeffrey Bias
Test Auth. No.: KC 0924
Test Description: FMVSS 207, 210 & 225
Test Type: Certification



TRANSDUCER: Interface 1210ZD Load Cells
Full Scale Range: 10,000 lb
Component Uncertainty: 8.20 lb

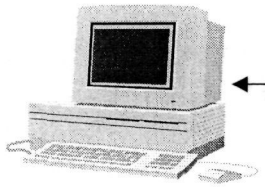
SIGNAL CONDITIONER 1: MTS 407.12 DC Transducer Conditioner
Component Uncertainty: 13.31 lb

SIGNAL CONDITIONER 2:
Component Uncertainty:

SIGNAL CONDITIONER 3:
Component Uncertainty:

SIGNAL CONDITIONER 4: Sampling Uncertainty
Component Uncertainty: 1.43 lb

DIGITIZER: Kinetic Systems V207 A/D Converter
Component Uncertainty: .49 lb

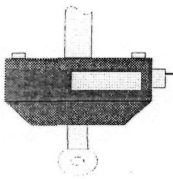


Display Device
Component Uncertainty:

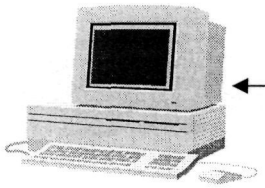
System Standard Uncertainty (+/-): 17.07 lb
System Expanded Uncertainty, 95% Confidence Interval (+/-): 34.14 lb

BODY and CHASSIS TEST DEPARTMENT
MEASUREMENT UNCERTAINTY

B & C Test Section:	Body Test
Test Facility:	Seat belt / Child Restraint
Channel Name:	Displacement Measurements
Eng./Tech. Name:	Jeffrey Bias
Test Auth. No.:	KC 0924
Test Description:	FMVSS 207, 210 & 225
Test Type:	Certification



TRANSDUCER:	Celesco 8437A Displacement Potentiometers
Full Scale Range:	50 inch
Component Uncertainty:	.054 inch
SIGNAL CONDITIONER 1:	MTS 407.12 DC Transducer Conditioner
Component Uncertainty:	.0399 inch
SIGNAL CONDITIONER 2:	
Component Uncertainty:	
SIGNAL CONDITIONER 3:	
Component Uncertainty:	
SIGNAL CONDITIONER 4:	Sampling Uncertainty
Component Uncertainty:	.004 inch
DIGITIZER:	Kinetic Systems V207 A/D Converter
Component Uncertainty:	.001 inch



Display Device	
Component Uncertainty:	

System Standard Uncertainty (+/-):	.067 inch
System Expanded Uncertainty, 95% Confidence Interval (+/-):	.134 inch

VEV Test Request - KC0924

Requester / Coordinator (CDS Id):
ECHIU

Edwin Chiu

Performing Activity:	Date Submitted:	Requested Completion Date:	Requester Reference Number:
Body / Chassis Durability		04-DEC-2002	

TESTnet Test Procedure: SBA_US
CETP: 01.20-L-809-US
CETP Title: Seat Belt Assembly Anchorage Test

Request Title and / or Subject of Request:
2004 FMVSS 207/210B CERT. 1ST. ROW

Billable Requester's Dept No.: 5100Y246 UNKNOWN
Billable Requester's CDS Id: ECHIU
Billable Requester's Name: Edwin Chiu

Work Task / Work Order: G13
Program: V229
Description: 2004 1/4 V229 NEW WINDSTAR & MERC MINIV

Request conducted to certify control item compliance with Government Regulations:

Yes: [X] No: [ ]

Complete the following two questions as indicated

1 - Rationale for not replacing this test by CAE Analysis:

(Check appropriate boxes)

2 - What is the expected Test Outcome:

(Check appropriate boxes)

Request Purpose / Request Procedure or Description of Request:

Seat Belt Assembly Anchorage Test

Test Objects:

Reference Object	Reference Description
N/A	N/A

Sample #	Object ID	Object Description
1	A4360007	BODY IN WHITE
2	3F23-1760004-AM0ZUC	1ST. ROW PASSENGER BUCKET
3	3F23-1760005-TT0ZUC	1ST. ROW DRIVER BUCKET
4	3F23-17611B09-ACW	1ST. ROW RETRACTOR L/H
5	3F23-17611B08-ADW	1ST. ROW RETRACTOR R/H
6	~~3F23-1761202-BCW~~	~~1ST. ROW PYRO BUCKLE POWER R/H~~

Signature Approvals (As Required for Control Purposes)

Requesting Engineer	Edwin Chiu	Assigned Coordinator	
Request Authorized by	Not Required	Assigned Supervisor	

Test Objects:	Reference Object	Reference Description
	N/A	N/A

Sample #	Object ID	Object Description
7	3F23-1761203-BCW	1ST. ROW PYRO BUCKLE POWER L/H

Test Definition Worksheet

Request No:	KC0924	2004 FMVSS 207/210B CERT. 1ST. ROW	
Service/Procedure:	SBA_US	Seat Belt Assembly Anchorage Test	
Test Object:		Request Date:	
Requester:	Edwin Chiu (ECHIU)	Requester Phone:	1-313-3177369

Sample	Object ID	Object Description	Date	Runs	Dispos.
1	A4360007	BODY IN WHITE	04-DEC-02	1	RETURN
2	3F23-1760004-AM0ZUC	1ST. ROW PASSENGER BUCKET	04-DEC-02	1	RETURN
3	3F23-1760005-TT0ZUC	1ST. ROW DRIVER BUCKET	04-DEC-02	1	RETURN
4	3F23-17611B09-ACW	1ST. ROW RETRACTOR L/H	04-DEC-02	1	RETURN
5	3F23-17611B08-ADW	1ST. ROW RETRACTOR R/H	04-DEC-02	1	RETURN
6	3F23-1761202-BCW	1ST. ROW PYRO BUCKLE POWER R/H	04-DEC-02	1	RETURN
7	3F23-1761203-BCW	1ST. ROW PYRO BUCKLE POWER L/H	04-DEC-02	1	RETURN

Parameter:	Value:	Units:
Vehicle Programs	V229	
Vehicle Year	2004	
Requesters Phone Number	31-77369	
Mail Report to:	11B038	Room Number/Mail Drop
Building Name	BUILDING #1	
SEAT BELT Anchorage CETP 01.20 - L - 809 US	Y	
Test Type:	Y	
FMVSS 210, 207/210	Y	
Test:	Y	
Production B- Test	Y	
Note: 207/210 Tests require seat weight and cg information.		
Test Row: Check One	Y	
1st Row	Y	
CFR (Load Limiter) ?	Y	
Yes	Y	

Active Request Notes

KC0924

Created By: RONALD BERGMAN ***Date/Time:*** 02-DEC-2002 10:22:36

Reactivated By: N/A

Comments: N/A

Subject: TEST REQUIREMENTS

Contents:

CONTACT: ED CHIU 31-77369 & ANDRIK CARDENAS 33-71763

TEST PROCEDURE: CETP 01.20-L-809 US

TEST POSITION: 1ST. ROW BUCKETS DRIVER & PASSENGER

BUCK NUMBER: A4360007

Bill Of Materials Report

Test Request: KC0924

22

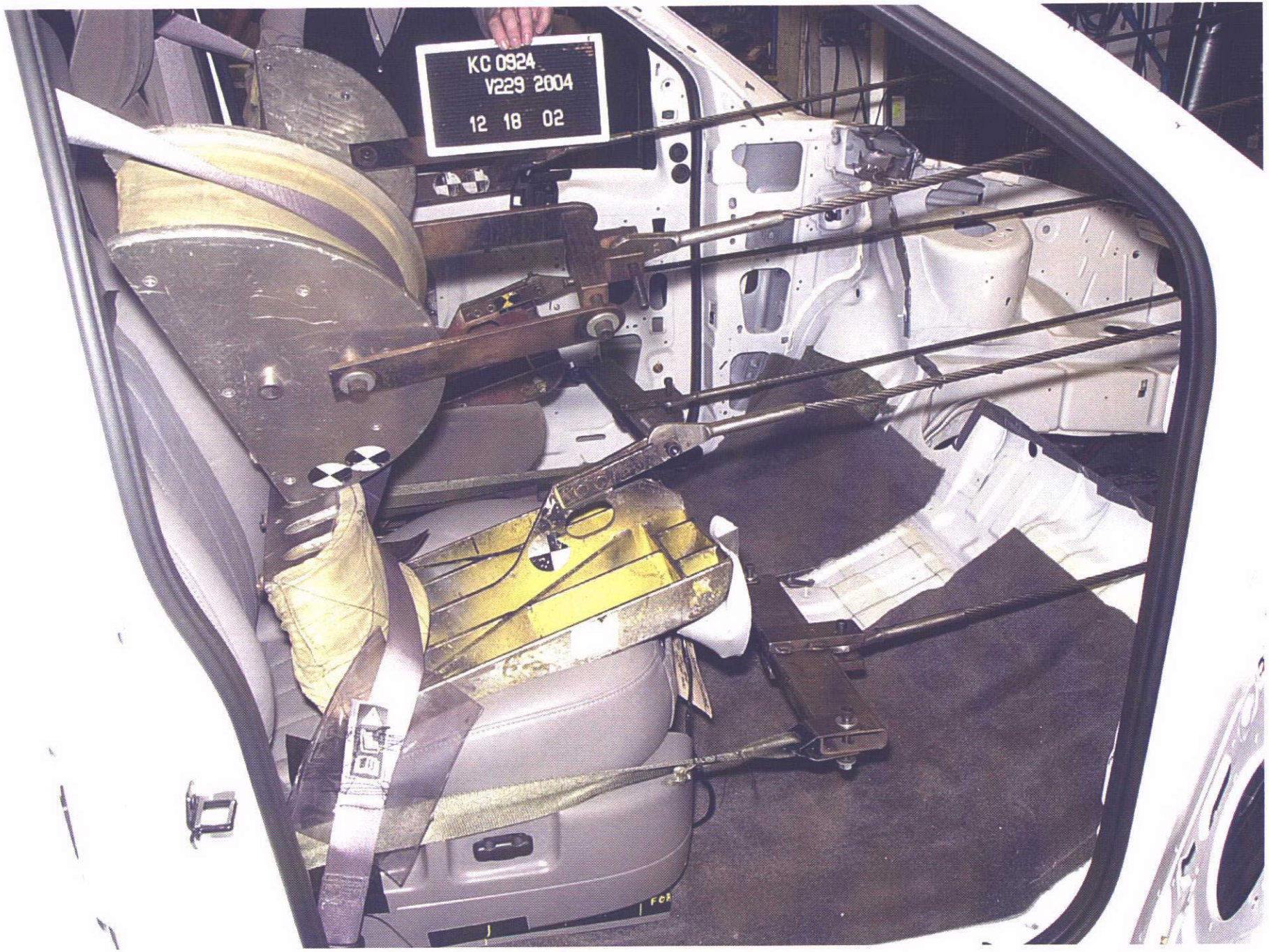
Test Title: 2004 FMVSS 207/210B CERT. 1ST. ROW

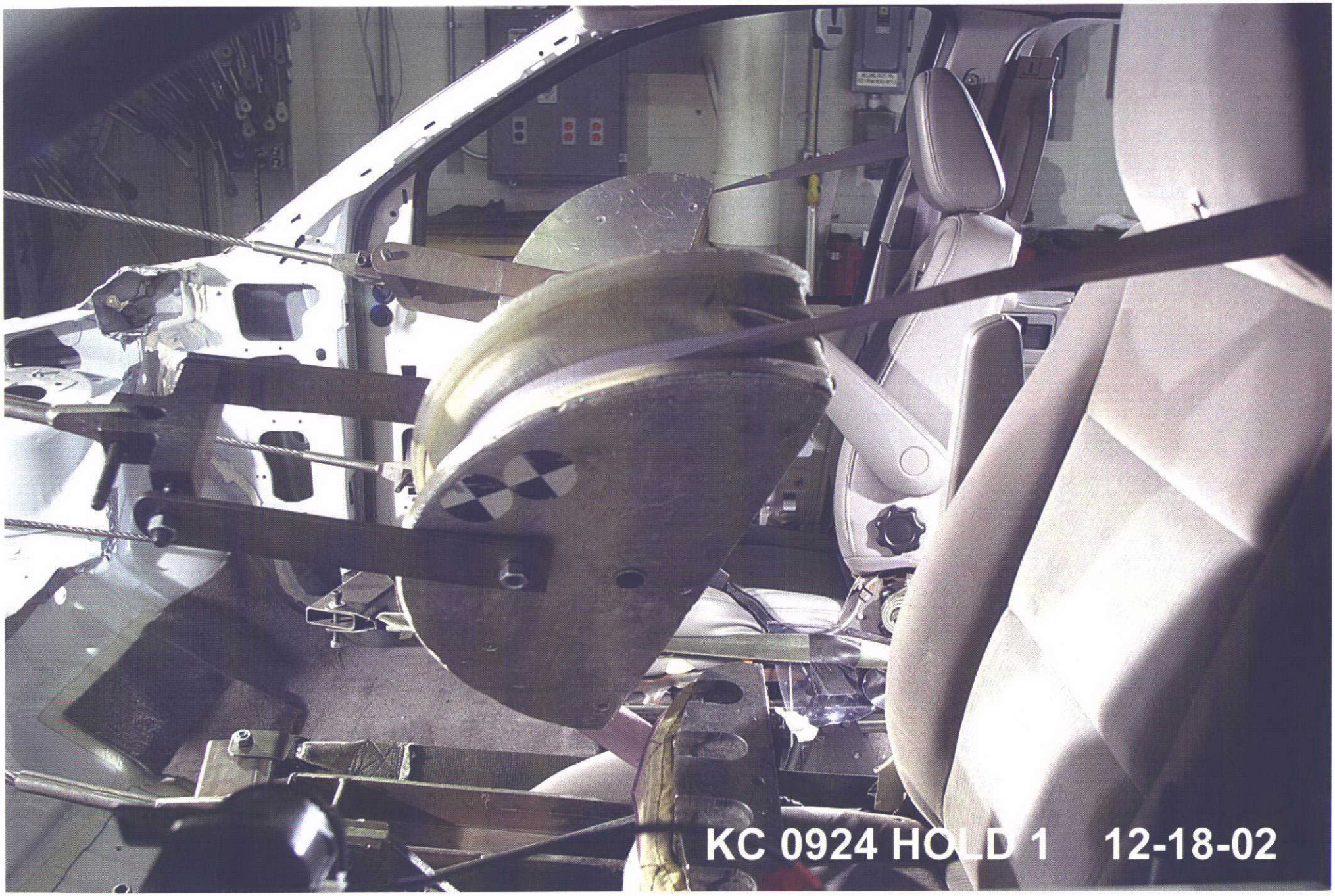
Object ID (Sample)	*Part Number*	*Description*	*Qty*	*Receipt Date*
A4360007				
3F23-1760004-AM0ZUC				
3F23-1760005-TT0ZUC				
3F23-17611B09-ACW				
3F23-17611B08-ADW				
3F23-1761202-BCW				
3F23-1761203-BCW				

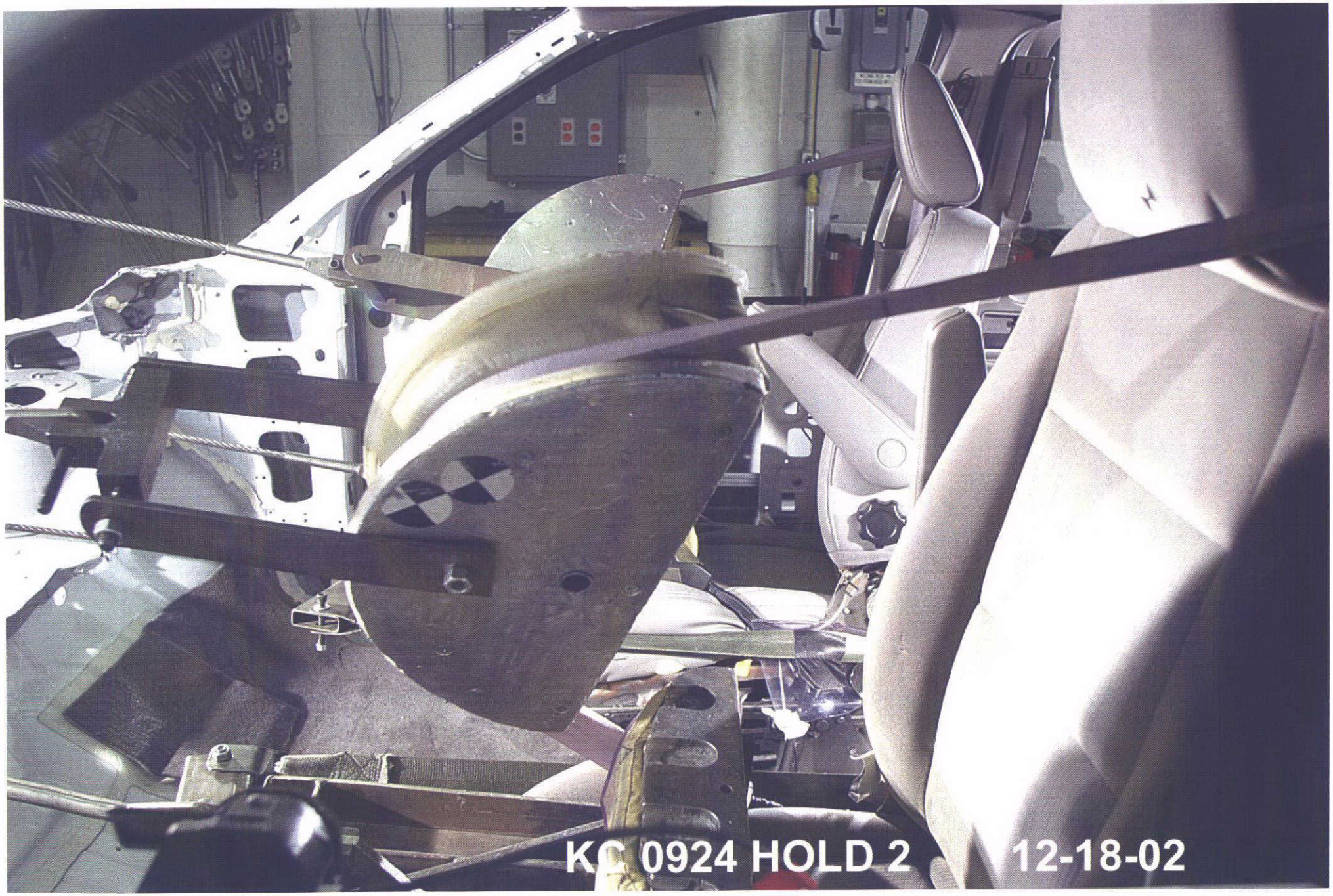

KC 0924
V229 2004
12 18 02

KC 0924
V229 2004
12 18 02


KC 0924
V229 2004
12 18 02


KC 0924
V229 2004
12 18 02


KC 0924 HOLD 1 12-18-02


KC 0924 HOLD 2
12-18-02


KC 0924 AFT
V229 2004
12 18 02

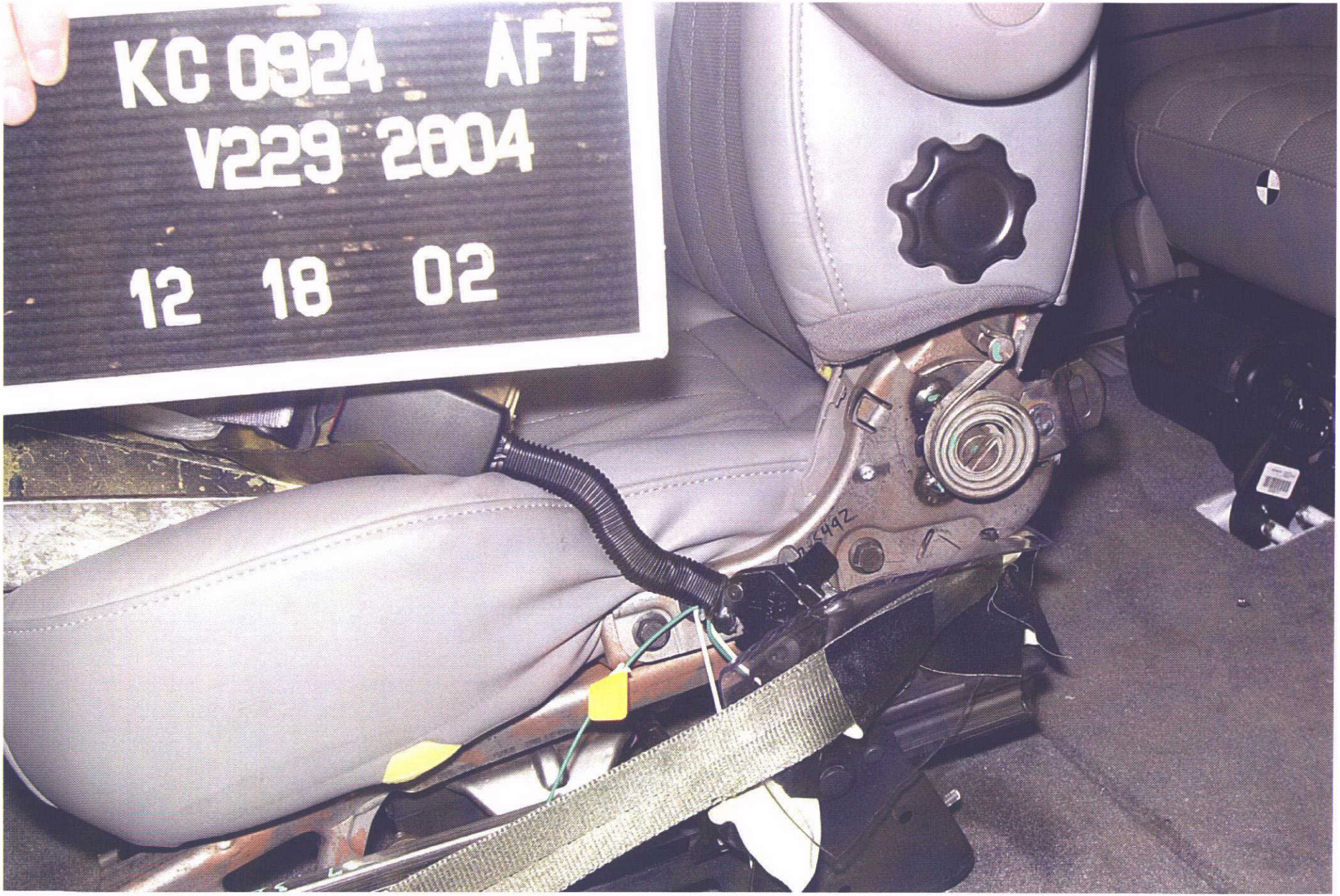

KC 0924 AFT
V229 2004
12 18 02


KC 0924 AFT
V229 2004
12 18 02


KC 0924 AFT
V229 2004
12 18 02


KC 0924 AFT
V229 2004
12 18 02


KC 0924 AFT
V229 2004
12 18 02


KC 0924 AFT
V229 2004
12 18 02


KC 0924 AFT
V229 2004
12 18 02


KC 0924
V229 2004
12 18 02

TO: Edwin Chiu (original + 1 copy)

Test Order	KC 1072
Date of Order	12/16/2002
Work Task	G13
Test Date	
Date Reported	12/29/2002

SUBJECT: FMVSS 207-210B Certification

TEST LOCATION: Ford Motor Company AVT-4, Dearborn, Michigan

REQUESTED BY: Dept - 5100Y246 Edwin Chiu

OBJECTIVE: To certify compliance of the test sample with the requirements of FMVSS 207/210

TEST SAMPLE INFORMATION:

Year & Model:	2004 V229
Seat Type:	1st Row Bucket Seats
Seat Part #:	3F23-1760005-AMOZUC
	3F23-1760004-AMOZUC
Body #:	A4360015
Engineering Drawing #:	**SK-011000-BA**

CERTIFICATION STATEMENT:

I certify that to the best of my knowledge and ability this test was conducted with parts and related systems signed-off by the requesting department as representative of a design level that is adequate for a certification test. Furthermore, that the test was conducted in accordance with the requested company test procedures utilizing test equipment and fixtures as described or referenced herein and that the test results represent the recorded performance of the tested sample. Any exceptions are described in this report.

Jeffrey Bias

Jeffrey Bias
Product Test Engineer
Body & Chassis Test Department

CONCURRENCE:

L. E. Brown

Larry E. Brown
Section Supervisor - Body & Chassis Test Department

FMVSS COMPLIANCE TESTING AFFIDAVIT (CERTIFICATION)

I certify that to the best of my knowledge and ability, this test was conducted in accordance with the requested company test procedure(s), utilizing test equipment and/or fixtures as described or referenced herein and that the test results represent the recorded performance of the tested samples. Any exceptions are referenced or described, initialed and dated below.

Jeffrey Bias
Test Engineer

DESIGN / DEVELOPMENT ENGINEER'S STATEMENT

I certify that to the best of my knowledge and ability, this test was conducted with parts and related systems representative of a design level that is adequate for certification testing. Furthermore, this test was conducted in accordance with the requested company test procedure(s), utilizing test equipment and/or fixtures as described or referenced herein and that the test results represent the recorded performance of the tested samples. I am familiar with and concur in the components tested, the type of fixtures used, the procedures stated in the report, and based on the reported test results, the conclusion arrived at with respect to the Regulation compliances.

Edwin Chiu
Design / Development Engineer
Ford Motor Company

TEST RESULTS SUMMARY:

Left Side Seating Position (Driver Side) - Longitudinal Force Application

The maximum simultaneous loads measured were 38% above the requirements.
The test was discontinued after the overload criteria was met.

Right Side Seating Position (Pass. Side) - Longitudinal Force Application

The maximum simultaneous loads measured were 39% above the requirements.
The test was discontinued after the overload criteria was met.

TABLE OF CONTENTS:

PROCEDURE:

This test was conducted in accordance with Corporate Engineering Test Procedure
01.20-L809 US

Left Side Seat Weight	68.56 lbs
Right Side Seat Weight	68.56 lbs

The dimensions for the center of gravity (C.G.) were taken from drawing:
SK-011000-BA

KC1072

2004 V229 A43600015

FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST

Peak Loads

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	LH C.G.	NONE	RH C.G.
Time (sec)	49.36	0.00	49.32	49.35	0.00	49.32	49.59	0.00	49.35
Load	4394	0	4174	4387	0	4178	2038	0	2355
N	19545	0	18566	19513	0	18584	9065	0	10475
% Overload	46.47 %	0.00 %	39.13 %	46.23 %	0.00 %	39.27 %	48.65 %	0.00 %	71.77 %

Simultaneous Overloads

Maximum Simultaneous Overload Occurred at 49.32 seconds

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	LH C.G.	NONE	RH C.G.
Load	4171	2	4174	4167	3	4178	1902	1	1905
N	18554	8	18568	18534	11	18583	8462	5	8472
% Overload	39.04 %	0.00 %	39.15 %	38.89 %	0.00 %	39.26 %	38.76 %	0.00 %	38.92 %

* Based on LH Seat weight of 68.55 lbs

** Based on RH Seat weight of 68.55 lbs

% Overload is relative to the required hold load

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

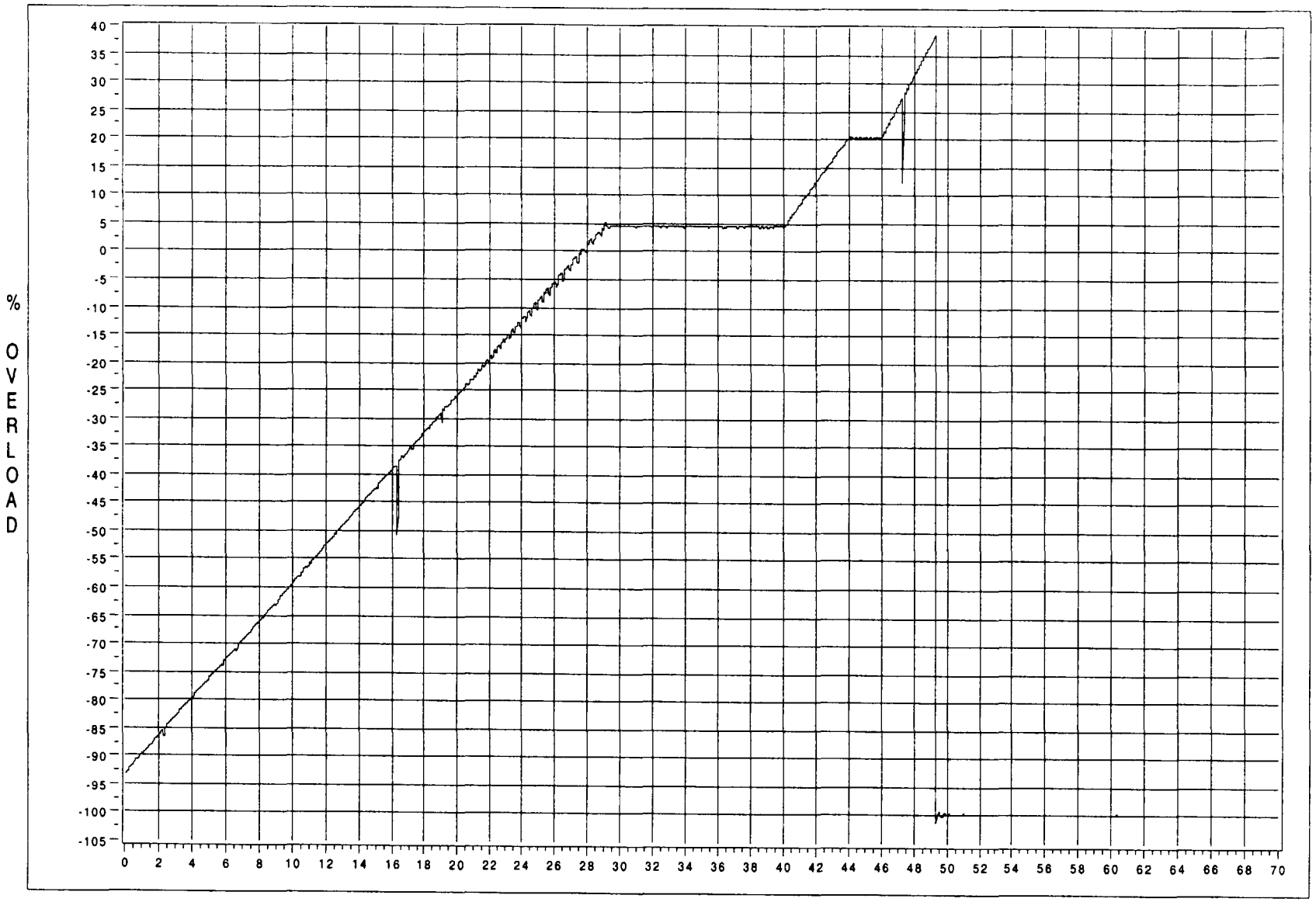
Time Plotted: 10:06 AM

Test File: KC1072 - 01

KC1072

Sheet 5

Simultaneous Minimum % Overload



Test File:KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Maximum Simultaneous Overload of 38.76 at 49.32 seconds

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:06 AM

KC1072

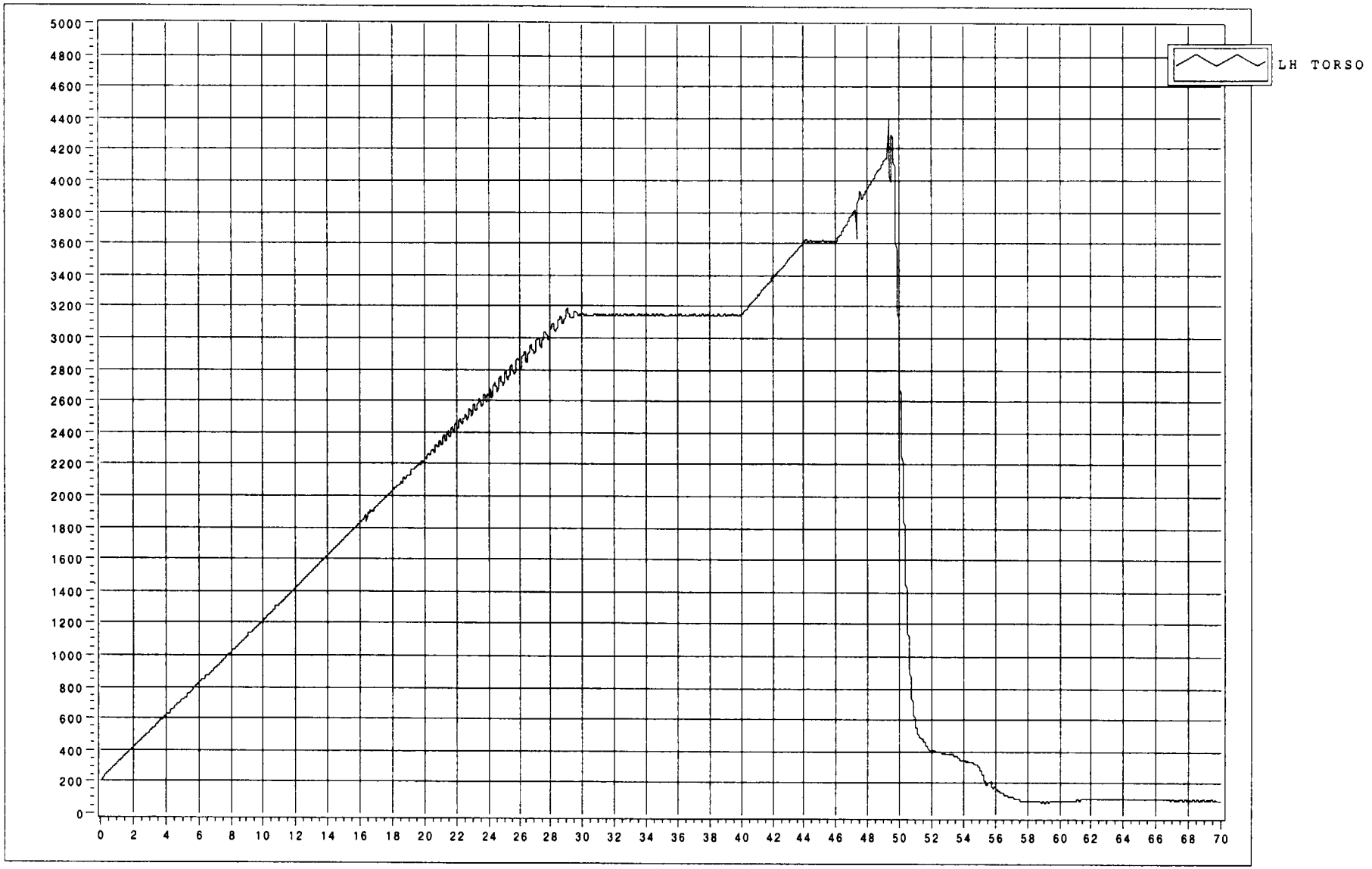
2004 V229 A43600015

FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST

PEAK LOAD 4394 @ 49.36 secconds



Test File: KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:05 AM

KC1072

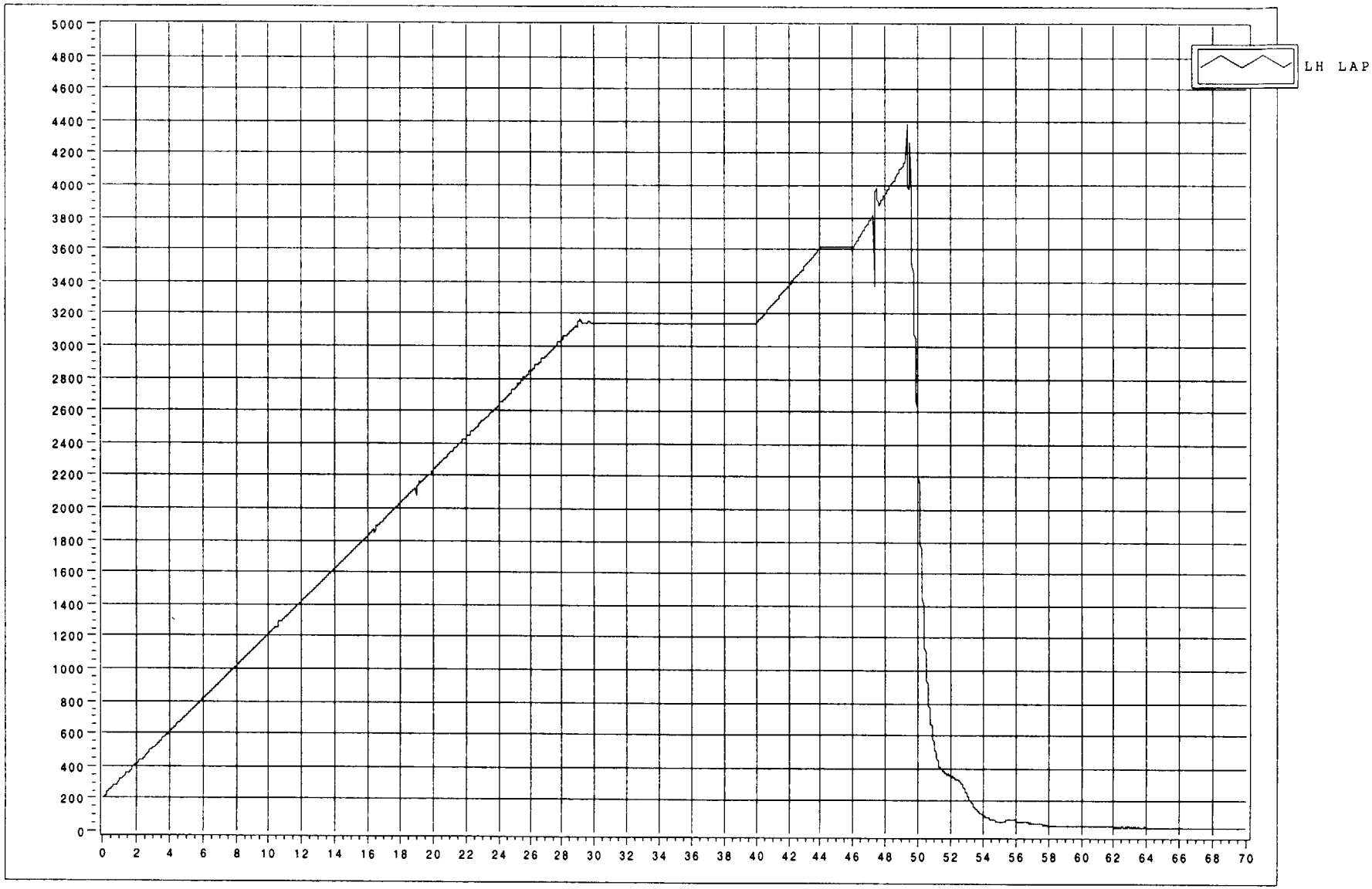
2004 V229 A43600015

FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST

PEAK LOAD 4387 @ 49.35 secconds



Test File: KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:06 AM

Sheet 8

KC1072

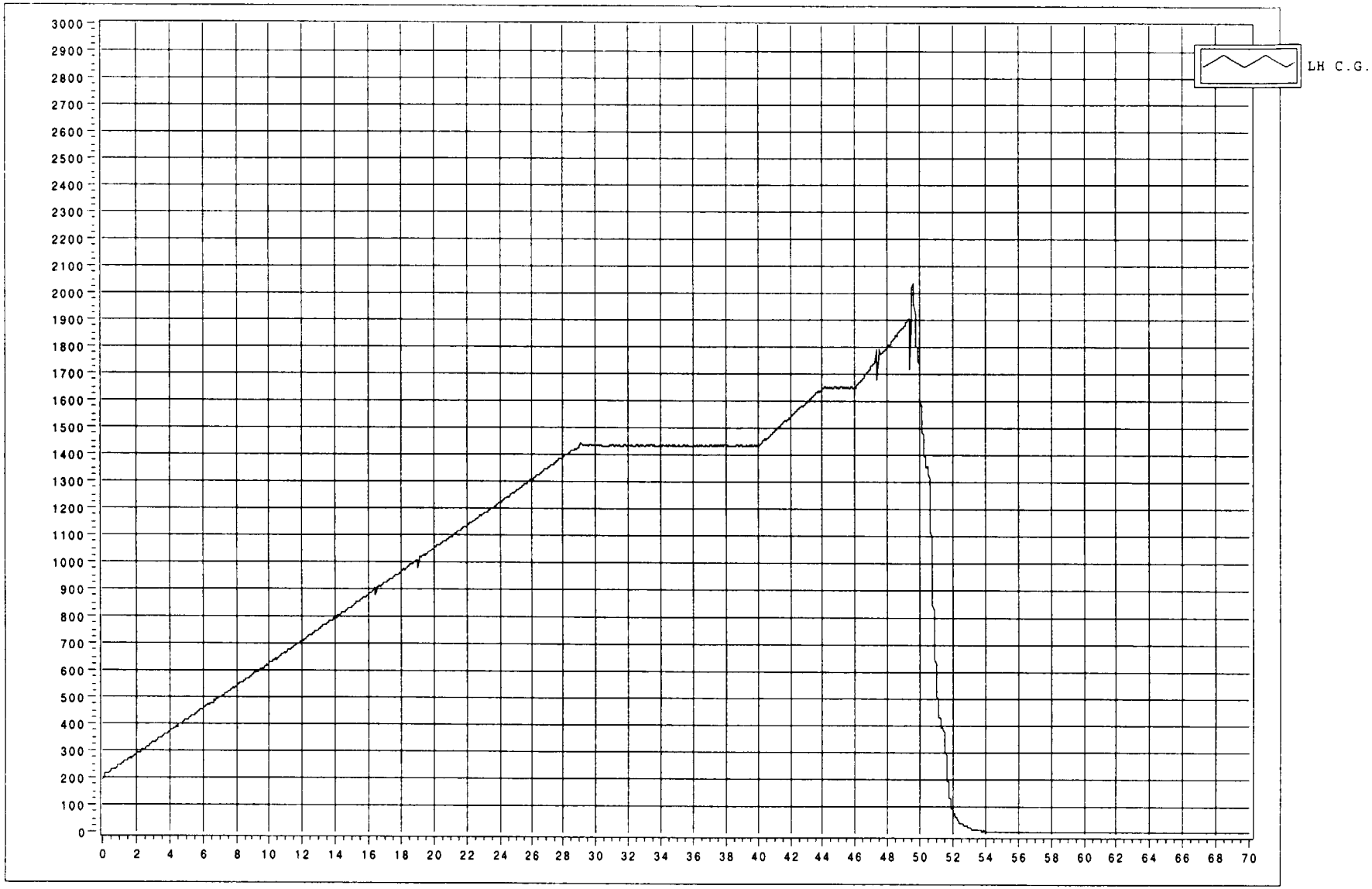
2004 V229 A43600015

FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST

PEAK LOAD 2038 @ 49.59 secconds



Test File: KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:06 AM

KC1072

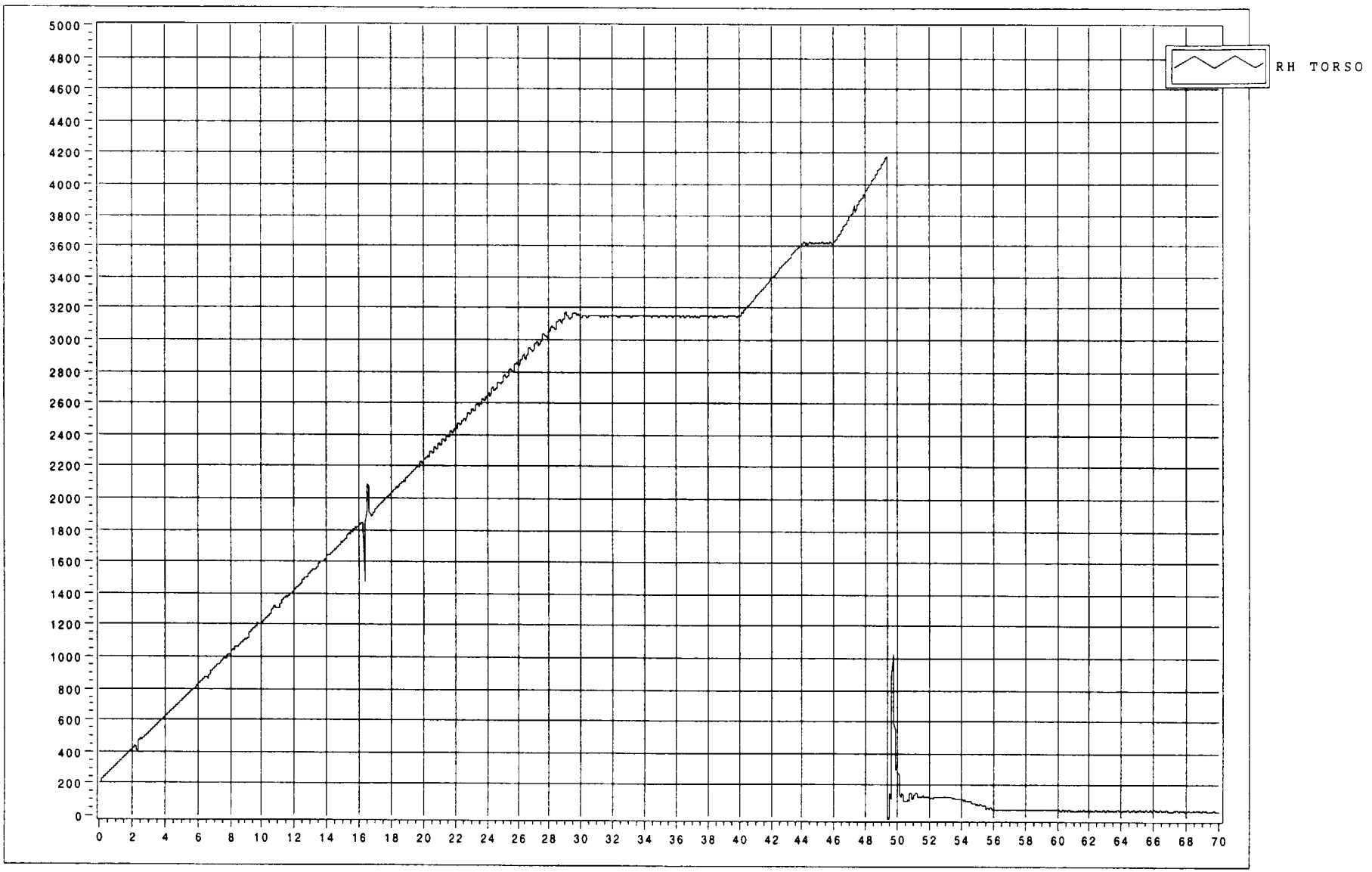
2004 V229 A43600015

FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST

PEAK LOAD 4174 @ 49.32 secconds



Test File: KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:05 AM

Sheet 10

KC1072

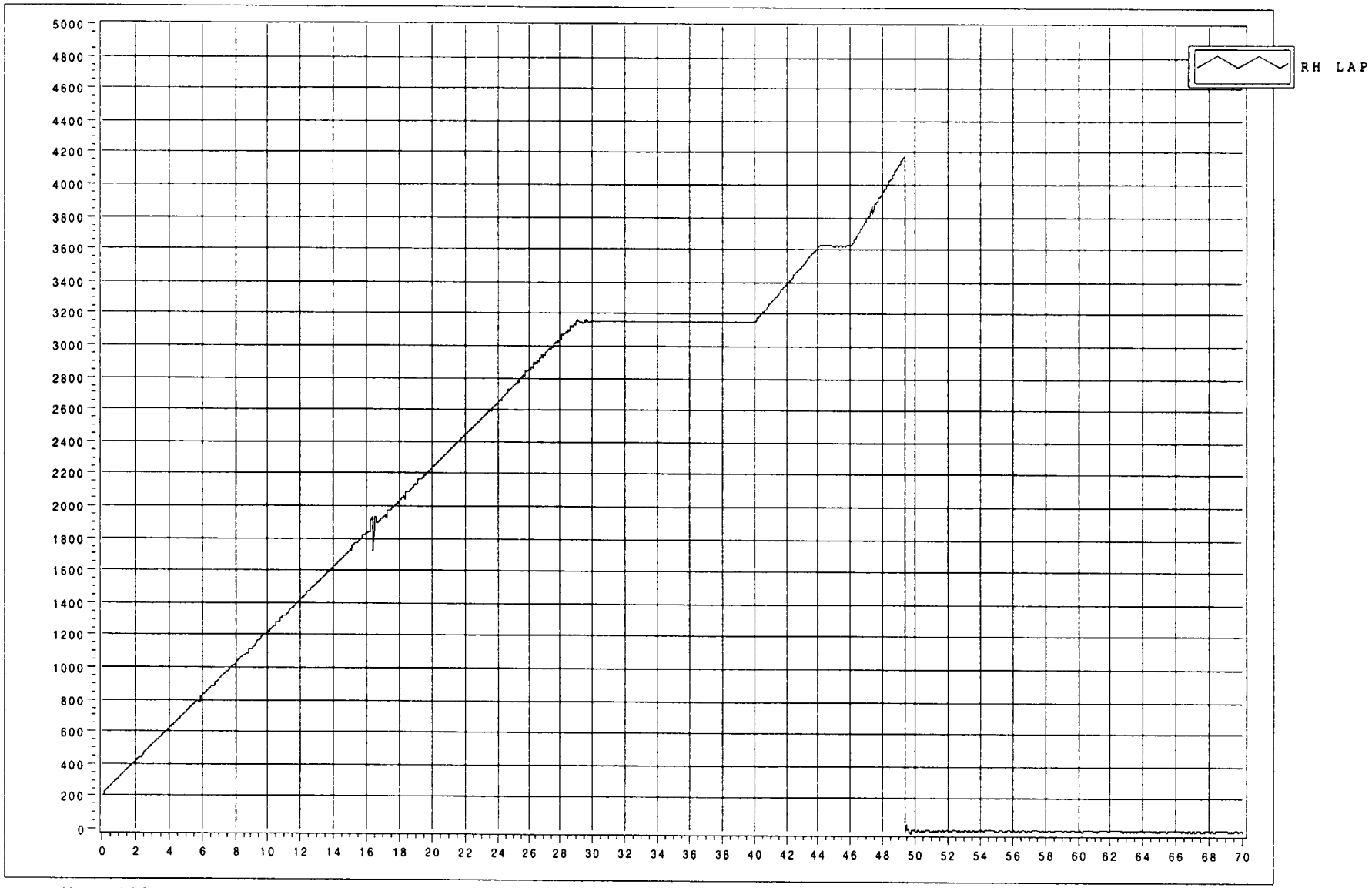
2004 V229 A43600015

FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST

PEAK LOAD 4178 @ 49.32 secconds



Test File: KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:06 AM

KC1072

2004 V229 A43600015

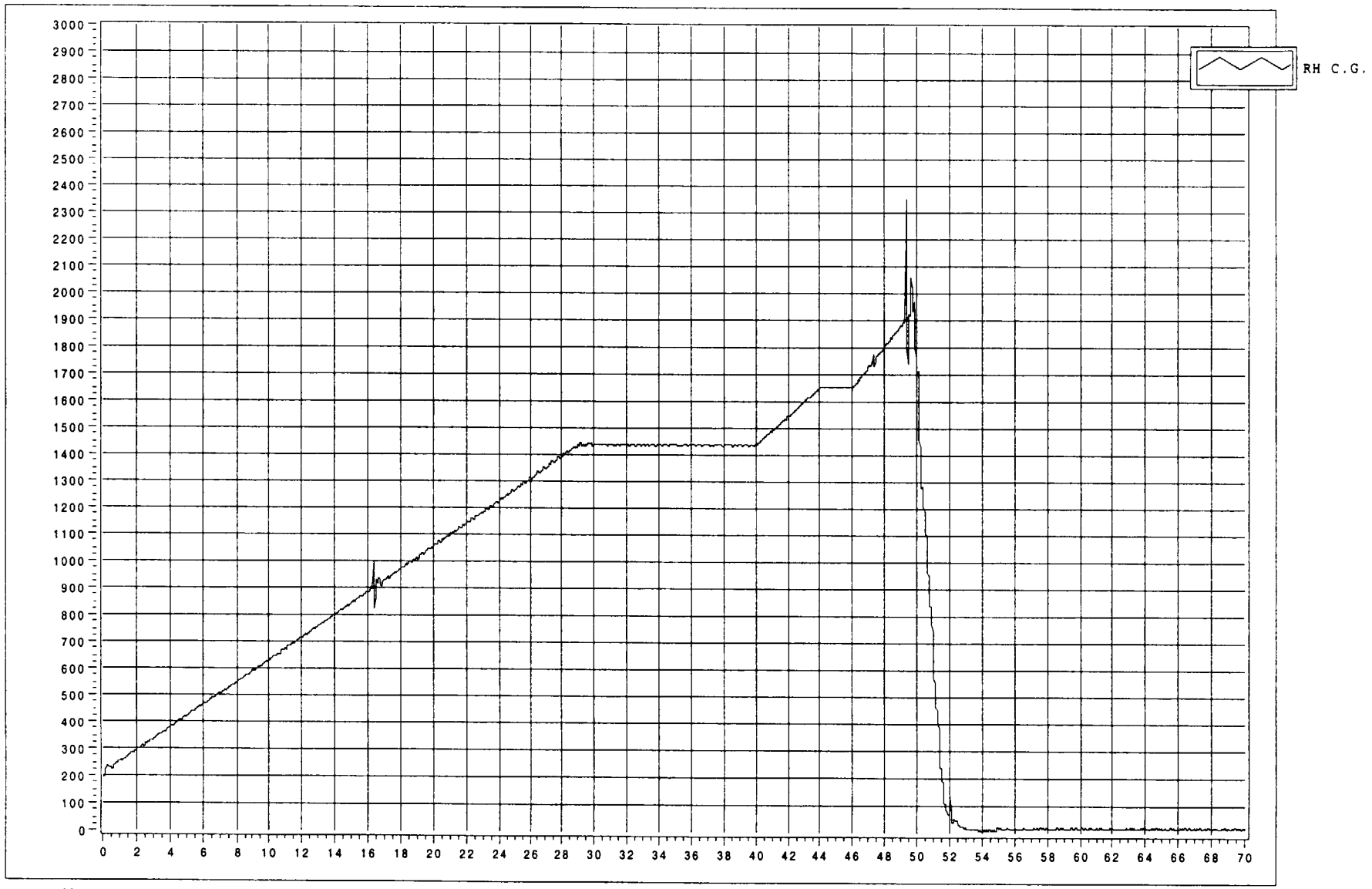
FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST

Sheet 11

PEAK LOAD 2355 @ 49.35 secconds



Test File: KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:06 AM

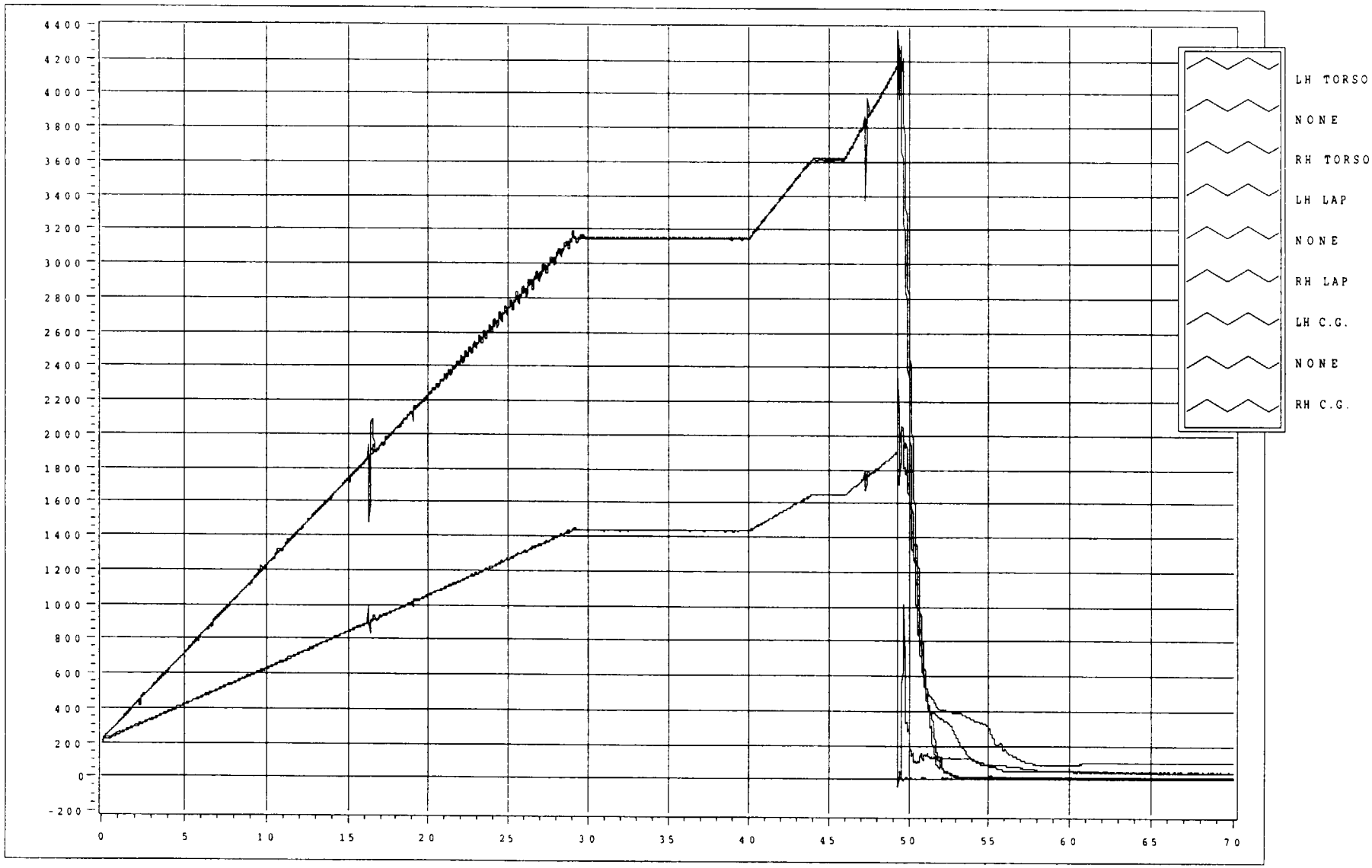
KC1072

2004 V229 A43600015

FMVSS 207/210

1ST ROW BUCKETS

PRODUCTION, B TEST



Test File: KC1072 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 12/27/02

Date Plotted: 12/27/02

Time Plotted: 10:05 AM

BUCK SIGN-OFF SHEET

VEH LINE/MOD:	V229	MY.	2004
VEH.#	A4360015	TR#	KC1072
TEST MODE:	FMVSS 207/210B COMPLIANCE FOR CERTIFICATION TEST POSITION: 1ST. ROW BUCKETS		

The following systems and attached part list are production representative with respect to this test (Test Procedure CETP 01.10-L-809-US) as signed off by the release respnsible representatives listed below, or a person appointed by the release responsible representative for the above listed buck number.

SYSTEM	Check	NAME, PHONE# & ID	SIGNATURE & DATE	COMMENTS
Body Shell	ok to test X latest level parts	Justin Gillespie, X-38594, JGILLES7	12/20/02	2nd row bench tested befor to 1500 lbs. Visiable deflection in Cpillar on this buck.
Underbody	ok to test X latest level parts	Tom Joseph, X-89660, TJOSEPH1 John Doyle X-07920, JDOYLE10	12/20/02 OK TO Test Ed Ucci FOR TOM JOSEPH 12/20/02	2nd Row Bench previously tested to 1500 lbs on this buck.
Interior Trim	ok to test X latest level parts	Mark Nedelman, X-09187, MNEDELMA John Mardeusz, X-63265, JMARDEU1	Ed Ucci FOR MARC NEDELMAN 12/20/02	
Seats	ok to test X latest level parts	Rick Cendrowski, X-21708, RCENDROW Joanna Gillespie, X-79967, JGILLES2 (Intier) Peter Mueller, X-24582, PMUELL15	12/20/2002	IB shields removed for visibility Rmv. OB shields as necessary To restrain C.G.
Restraints	ok to test X latest level parts	Edwin Chiu, X-77369, ECHIU Andrik Cardenas, X-71763, ACARDEN1	Ed Ucci 12/19/02	

Equipment Used To Support TESTnet Request **KC 1072**

CHILD TETHER ANCHORAGE TEST SYSTEM

	MTS CONTROL-LERS	MTS CONTROL-LERS	INTERFACE LOAD CELLS	INTERFACE LOAD CELLS
CYLINDER #	MODEL 407	MODEL 407	MODEL 1210ZD	MODEL 1210ZD
	SERIAL #	ASSET #	SERIAL #	ASSET #
1	0257669F	14332	96568	18726
2	0257672F	14337	85982	12169
3	0257674F	14333	82465	9643
4	0257677F	14338	96545	18732
5	0257678F	14334	82436	9649
6	0257675F	14339	96529	18730
7	0257670F	14335	82446	9646
8	0257671F	14340	82414	9647
9	0257676F	14336	82458	9650

Item	Model No.	S/N	Asset Number
Kinetic System Corp. 16 Bit A/D Card	V207	82	14472
Kinetic System Corp. Signal Conditioner Ch 1-8	V246	55	14475
Kinetic System Corp. Signal Conditioner Ch 9-16	V246	76	10402
Kinetic System Corp. Signal Conditioner Ch 17-24	V246	71	14164
Kinetic System Corp. Waveform Generator	V285	41	14476
Teac PCM Data Recorder	RD200T	32418500009785	

Load Cells Cal Date 8-29-2002, Cal Due Date 8-29-2003
System Cal Date 8-31-2002, Cal Due Date 8-31-2003

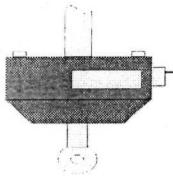
Other Equipment used for this test:

Description	Model No.	Asset Number	Calib. Date	Calib. Due Date
MD SMARTTOOL	n/a	20155	9/14/2001	9/14/2002
Celesco Potentiometer	PT101-0050-111-51X0-8351C	19190	1/16/2002	1/16/2003
Celesco Potentiometer	PT101-0050-111-51X0-8351C	19194	1/16/2002	1/16/2003
Celesco Potentiometer	PT101-0050-111-51X0-8351C	18865	1/14/2002	1/14/2003
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

BODY and CHASSIS TEST DEPARTMENT
MEASUREMENT UNCERTAINTY

B & C Test Section: Body Test
Test Facility: Seat belt / Child Restraint
Channel Name: Displacement Measurements

Eng./Tech. Name: Jeffrey Bias
Test Auth. No.: KC 1072
Test Description: FMVSS 207, 210 & 225
Test Type: Certification



TRANSDUCER: Celesco 8437A Displacement Potentiometers
Full Scale Range: 50 inch
Component Uncertainty: .054 inch

↓

SIGNAL CONDITIONER 1: MTS 407.12 DC Transducer Conditioner
Component Uncertainty: .0399 inch

↓

SIGNAL CONDITIONER 2:
Component Uncertainty:

↓

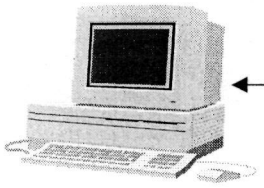
SIGNAL CONDITIONER 3:
Component Uncertainty:

↓

SIGNAL CONDITIONER 4: Sampling Uncertainty
Component Uncertainty: .004 inch

↓

DIGITIZER: Kinetic Systems V207 A/D Converter
Component Uncertainty: .001 inch

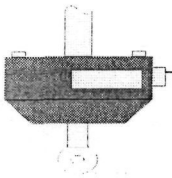


Display Device
Component Uncertainty:

System Standard Uncertainty (+/-): .067 inch
System Expanded Uncertainty, 95% Confidence Interval (+/-): .134 inch

BODY and CHASSIS TEST DEPARTMENT
MEASUREMENT UNCERTAINTY

B & C Test Section:	Body Test
Test Facility:	Seat belt / Child Restraint
Channel Name:	Load Cell Measurements
Eng./Tech. Name:	Jeffrey Bias
Test Auth. No.:	KC 1072
Test Description:	FMVSS 207, 210 & 225
Test Type:	Certification



TRANSDUCER: Interface 1210ZD Load Cells
Full Scale Range: 10,000 lb
Component Uncertainty: 8.20 lb

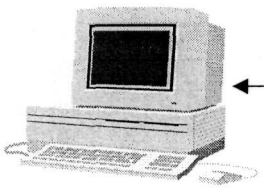
SIGNAL CONDITIONER 1: MTS 407.12 DC Transducer Conditioner
Component Uncertainty: 13.31 lb

SIGNAL CONDITIONER 2:
Component Uncertainty:

SIGNAL CONDITIONER 3:
Component Uncertainty:

SIGNAL CONDITIONER 4: Sampling Uncertainty
Component Uncertainty: 1.43 lb

DIGITIZER: Kinetic Systems V207 A/D Converter
Component Uncertainty: .49 lb



Display Device
Component Uncertainty:

System Standard Uncertainty (+/-):	17.07 lb
System Expanded Uncertainty, 95% Confidence Interval (+/-):	34.14 lb

VEV Test Request - KC1072

Requester / Coordinator (CDS Id):
ECHIU

Edwin Chiu

Performing Activity:	Date Submitted:	Requested Completion Date:	Requester Reference Number:
Body / Chassis Durability		16-DEC-2002	

TESTnet Test Procedure: SBA_US
CETP: 01.20-L-809-US
CETP Title: Seat Belt Assembly Anchorage Test

Request Title and / or Subject of Request:
2004 V229 207/210B CERT. 1ST. ROW

Billable Requester's Dept No.:
5100Y246 UNKNOWN
Billable Requester's CDS Id:
ECHIU
Billable Requester's Name:
Edwin Chiu

Work Task / Work Order: G13
Program: V229
Description:
2004 1/4 V229 NEW WINDSTAR & MERC MINIV

Request conducted to certify control item compliance with Government Regulations:

Yes: [X] No: [ ]

Complete the following two questions as indicated

1 - Rationale for not replacing this test by CAE Analysis:

(Check appropriate boxes)

2 - What is the expected Test Outcome:

(Check appropriate boxes)

Request Purpose / Request Procedure or Description of Request:

Seat Belt Assembly Anchorage Test

Test Objects:

Reference Object	Reference Description
N/A	N/A

Sample #	Object ID	Object Description
1	A4360015	BODY IN WHITE
2	3F23-1760005-AMOZUC	1ST. ROW DRIVER BUCKET
3	3F23-1760004-AM0ZUC	1ST. ROW PASSENGER BUCKET
4	3F23-17611B09-ACW	1ST. ROW RETRACTOR L/H
5	3F23-17611B08-ADW	1ST. ROW RETRACTOR R/H
~~6~~	~~3F23-17602B62-ABW~~	~~HEIGHT ADJUSTERS L/H & R/H~~

Signature Approvals (As Required for Control Purposes)

Requesting Engineer: Edwin Chiu
Assigned Coordinator: _____
Request Authorized by: Not Required
Assigned Supervisor: _____

Test Objects:	Reference Object	Reference Description
	N/A	N/A

Sample #	Object ID	Object Description
7	3F23-17612C36-AAW	D-RING COVERS L/H & R/H

Test Definition Worksheet

Request No:	KC1072	2004 V229 207/210B CERT. 1ST. ROW	
Service/Procedure:	SBA_US	Seat Belt Assembly Anchorage Test	
Test Object:		Request Date:	
Requester:	Edwin Chiu (ECHIU)	Requester Phone:	1-313-3177369

Sample	Object ID	Object Description	Date	Runs	Dispos.
1	A4360015	BODY IN WHITE	16-DEC-02	1	RETURN
2	3F23-1760005-AMOZUC	1ST. ROW DRIVER BUCKET	16-DEC-02	1	RETURN
3	3F23-1760004-AM0ZUC	1ST. ROW PASSENGER BUCKET	16-DEC-02	1	RETURN
4	3F23-17611B09-ACW	1ST. ROW RETRACTOR L/H	16-DEC-02	1	RETURN
5	3F23-17611B08-ADW	1ST. ROW RETRACTOR R/H	16-DEC-02	1	RETURN
6	3F23-17602B82-ABW	HEIGHT ADJUSTERS L/H & R/H	16-DEC-02	1	RETURN
7	3F23-17612C36-AAW	D-RING COVERS L/H & R/H	16-DEC-02	1	RETURN

Parameter:	Value:	Units:
Vehicle Programs	V229	
Vehicle Year	2004	
Requesters Phone Number	31-77369	
Mail Report to:	11B038	Room Number/Mail Drop
Building Name	BUILDING #1	
SEAT BELT Anchorage CETP 01.20 - L - 809 US	Y	
Test Type:	Y	
FMVSS 210, 207/210	Y	
Test:	Y	
Production B- Test	Y	
Note: 207/210 Tests require seat weight and cg information.		
Test Row: Check One	Y	
1st Row	Y	

Active Request Notes

KC1072

Created By: RONALD BERGMAN ***Date/Time:*** 16-DEC-2002 17:00:38

Reactivated By: N/A

Comments: N/A

Subject: TEST REQUIREMENTS

Contents:

CONTACT: ED CHIU 31-77369

TEST PROCEDURE: CETP 01.20-L-809 US

TEST POSITION: 1ST. ROW BUCKETS

BUCK NUMBER: A4360015

Bill Of Materials Report

Test Request: KC1072

21

Test Title: 2004 V229 207/210B CERT. 1ST. ROW

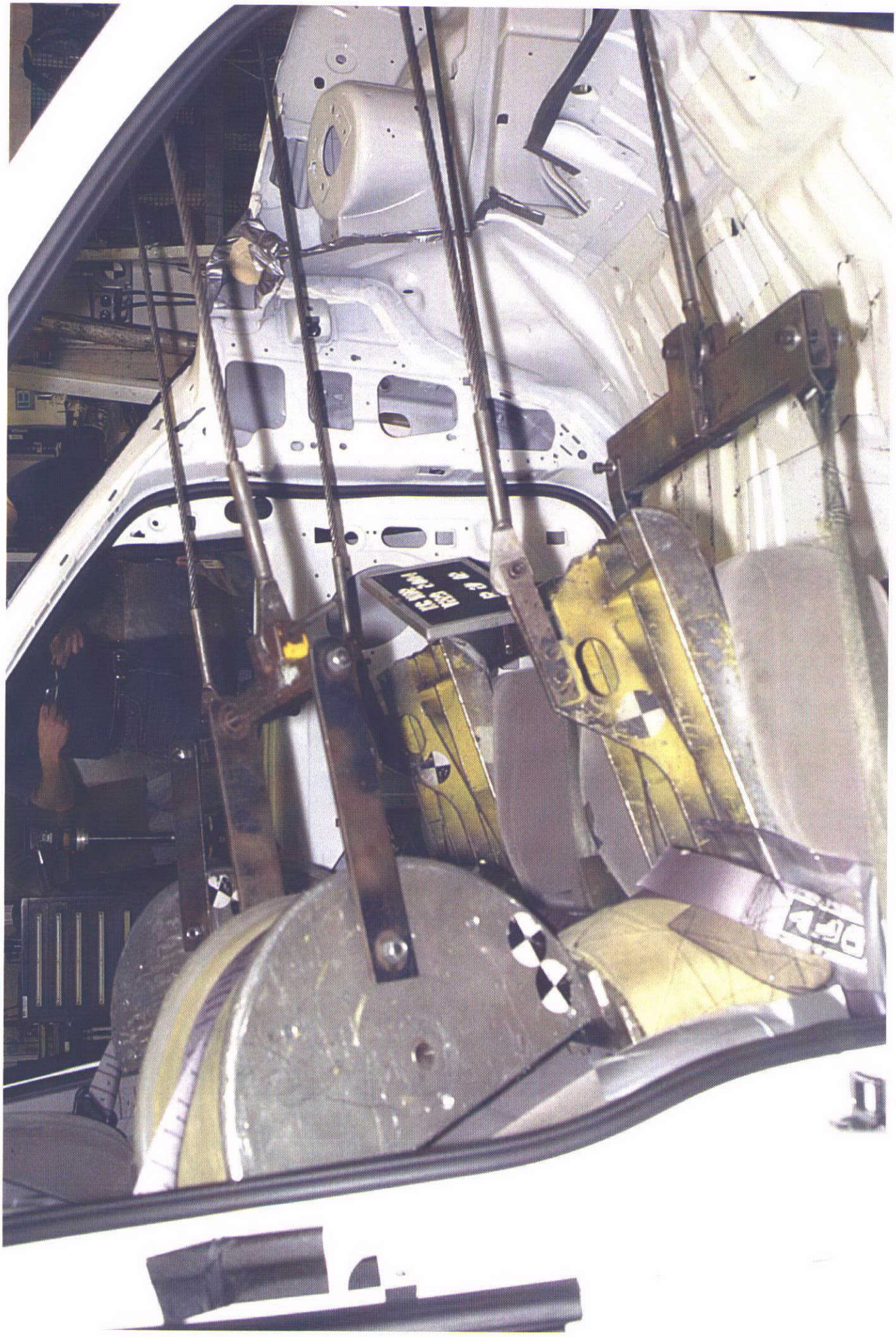
Object ID (Sample)	*Part Number*	*Description*	*Qty*	*Receipt Date*
A4360015				
3F23-1760005-AMOZUC				
3F23-1760004-AM0ZUC				
3F23-17611B09-ACW				
3F23-17611B08-ADW				
3F23-17602B82-ABW				
3F23-17612C36-AAW				

FOR REFERENCE ONLY


PYRO
KC 1072
V229 2004
12 27 02


PYRO
INERT
KC 1072
V229 2004
12 27 02


KC 1072
W229 2004
12 27 02



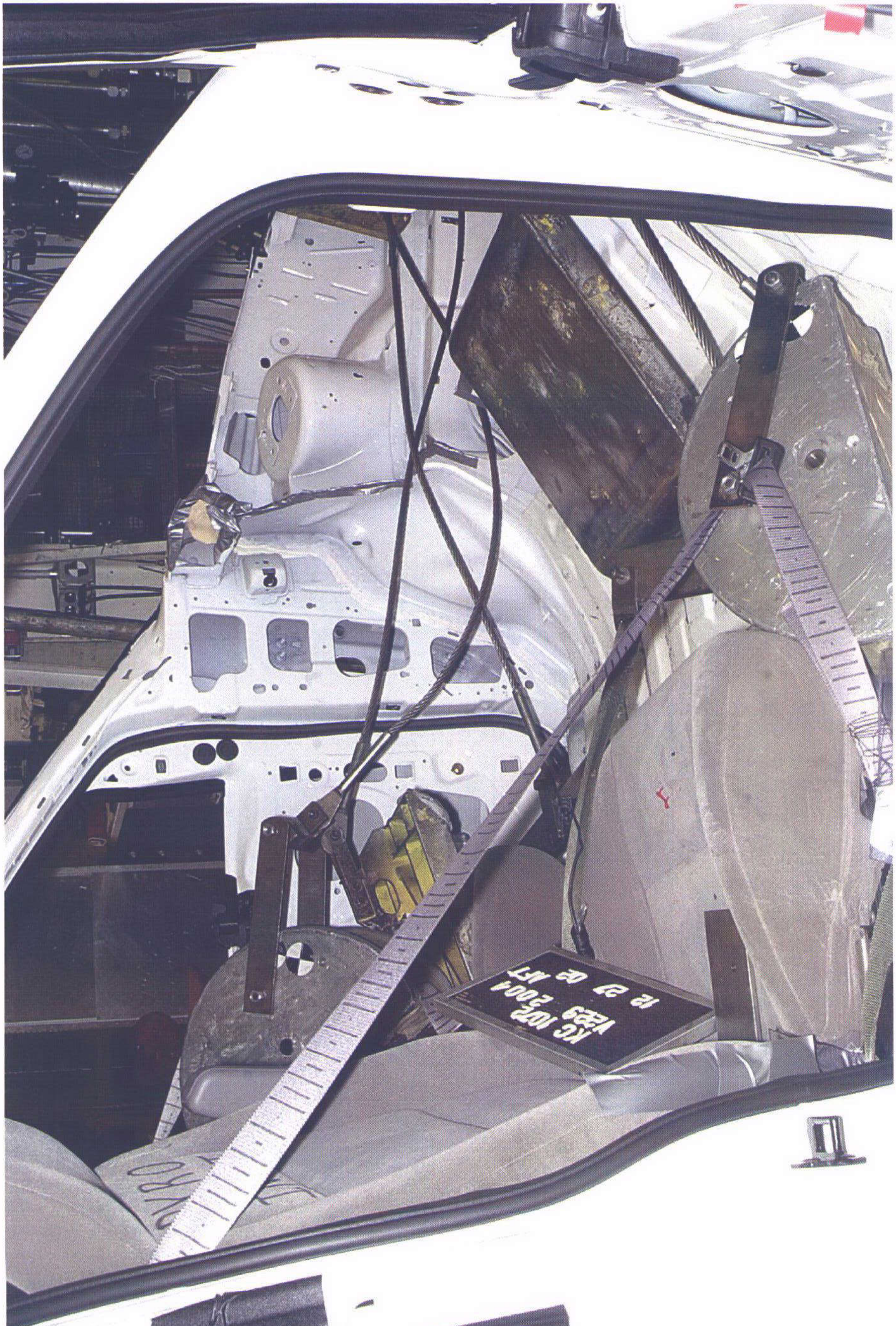

KC 1072
V229 2004
12 27 02


PYRO
NERT
KC 1072 12/27/02 HOLD 2


PYRO
INERT
PYRO
INERT
KC 1072
V229 2004
12 27 02 AFT


PYRO
INERT
PYRO
INERT
KC 1072
V229 2004
12 27 02 AFT


KC 1072
V229 2004
AFT
02


KC 10P2
V229 2004


KC 1072
V229 2004
12 27 02 AFT

TO: Edwin Chiu (original + 2 copies)

Test Order	KC 0193
Date of Order	10/11/2002
Work Task	G13
Test Date	10/22/2002
Date Reported	10/23/2002

SUBJECT: FMVSS 207-210B Certification

TEST LOCATION: Ford Motor Company AVT-4, Dearborn, Michigan

REQUESTED BY: Dept - 5100Y246 Edwin Chiu

OBJECTIVE: To certify compliance of the test sample with the requirements of FMVSS 207/210

TEST SAMPLE INFORMATION:

Year & Model:	2004.25 V229
Seat Type:	2nd Row Quads
Seat Part #:	3F23-176002
	3F23-17611B6
Body #:	A4360018
Engineering Drawing #:	**SK-3F23-011000-AA**

CERTIFICATION STATEMENT:

I certify that to the best of my knowledge and ability this test was conducted with parts and related systems signed-off by the requester as representative of a design level that is adequate for a certification test. Furthermore, that the test was conducted in accordance with the requested company test procedure-s utili-zing test equipment and fixtures as described or referenced herein and that the test results represent the recorded performance of the tested sample. Any exceptions are described in this report.

Jeffrey Bias
Product Test Engineer
Body & Chassis Test Department

CONCURRENCE:

Larry E. Brown
Section Supervisor - Body & Chassis Test Department

FMVSS COMPLIANCE TESTING AFFIDAVIT (CERTIFICATION)

I certify that to the best of my knowledge and ability, this test was conducted in accordance with the requested company test procedure(s), utilizing test equipment and/or fixtures as described or referenced herein and that the test results represent the recorded performance of the tested samples. Any exceptions are referenced or described, initialed and dated below.

Jeffrey Bias

Jeffrey Bias
Test Engineer

DESIGN / DEVELOPMENT ENGINEER'S STATEMENT

I certify that to the best of my knowledge and ability, this test was conducted with parts and related systems representative of a design level that is adequate for certification testing. Furthermore, this test was conducted in accordance with the requested company test procedure(s), utilizing test equipment and/or fixtures as described or referenced herein and that the test results represent the recorded performance of the tested samples. The undersigned is familiar with and concurs in the components tested, the type of fixtures used, the procedures stated in the report, and based on the reported test results, the conclusion arrived at with respect to the Regulation compliances.

Edwin Chiu
Design / Development Engineer
Ford Motor Company

TEST RESULTS SUMMARY:

Left Side Seating Position (Driver Side) - Longitudinal Force Application

The maximum simultaneous loads measured were 38% above the requirements.
The test was discontinued after the overload criteria was met.

Right Side Seating Position (Pass. Side) - Longitudinal Force Application

The maximum simultaneous loads measured were 38% above the requirements.
The test was discontinued after the overload criteria was met.

TABLE OF CONTENTS:

PROCEDURE:

This test was conducted in accordance with Corporate Engineering Test Procedure
01.20-L809 US

Left Side Seat Weight	66.15 lbs lbs
Center Seat Weight	66.15 lbs lbs
Right Side Seat Weight	66.15 lbs lbs

The dimensions for the center of gravity (C.G.) were taken from drawing:
SK-3F23-011000-AA

KC0193

2004.25 V229 A4360018

FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

Sheet _____

Peak Loads

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	LH C.G.	NONE	RH C.G.
Time (sec)	47.40	0.00	47.39	47.40	0.00	47.34	47.67	0.00	47.44
Load	4148	0	4151	4144	0	4152	2990	0	2612
N	18450	0	18464	18433	0	18468	13300	0	11618
% Overload	38.27 %	0.00 %	38.37 %	38.13 %	0.00 %	38.40 %	126.00 %	0.00 %	97.43 %

Simultaneous Overloads

Maximum Simultaneous Overload Occurred at 47.40 seconds

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	LH C.G.	NONE	RH C.G.
Load	4148	0	4144	4144	0	4141	1831	1	1828
N	18451	2	18433	18430	0	18419	8146	5	8133
% Overload	38.28 %	0.00 %	38.14 %	38.12 %	0.00 %	38.03 %	38.42 %	0.00 %	38.21 %

* Based on LH Seat weight of 66.15 lbs

** Based on RH Seat weight of 66.15 lbs

% Overload is relative to the required hold load

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:03 PM

Test File: KC0193 - 01

KC0193

Sheet 5

Simultaneous Minimum % Overload

Test File:KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Maximum Simultaneous Overload of 38.03 at 47.40 seconds

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:03 PM

KC0193

2004.25 V229 A4360018

FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

Sheet 6

PEAK LOAD 4148 @ 47.40 secconds

Test File: KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:02 PM

KC0193

2004.25 V229 A4360018

FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

PEAK LOAD 4144 @ 47.40 secconds

Test File: KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:02 PM

Sheet 8

KC0193

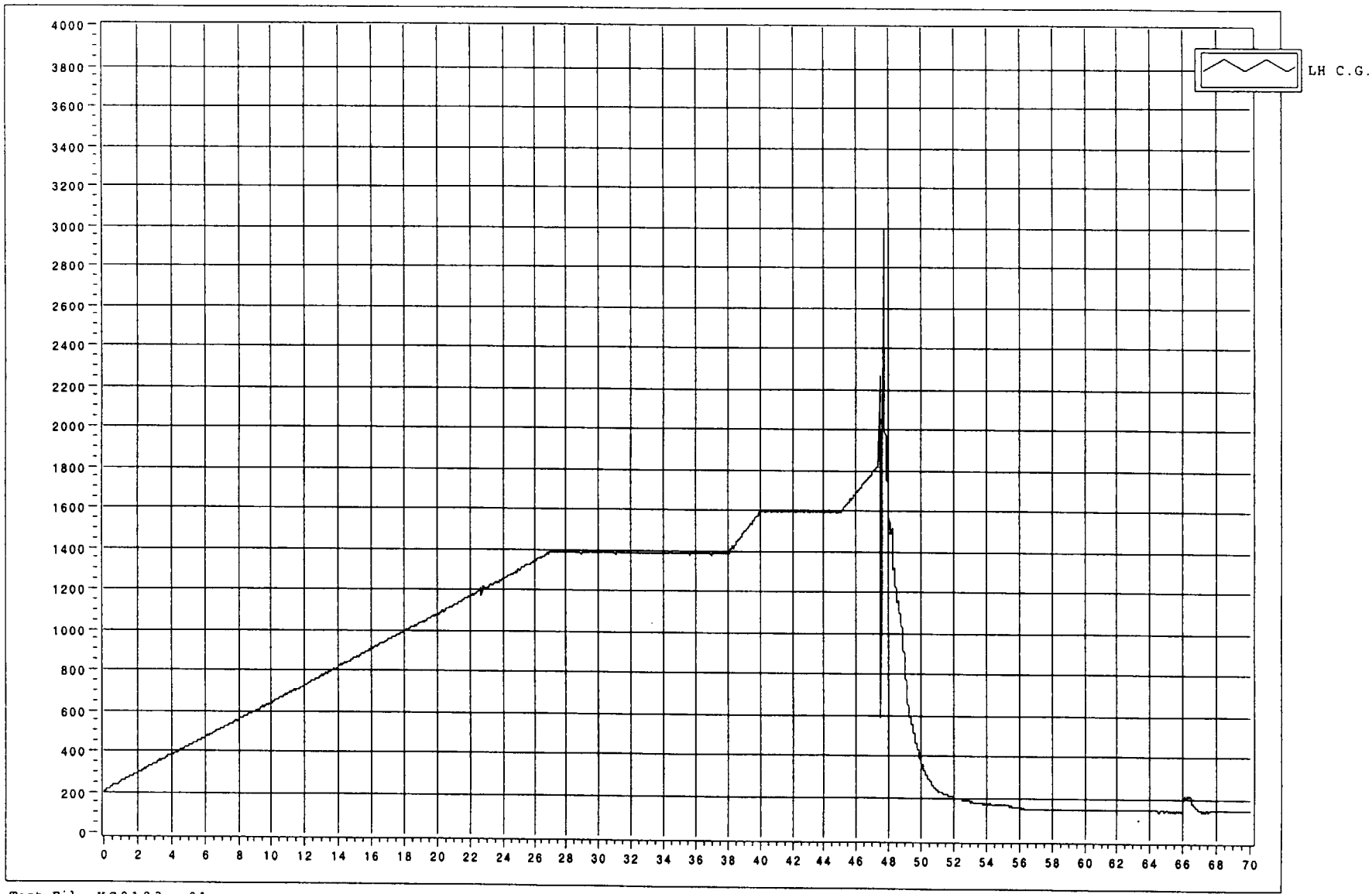
2004.25 V229 A4360018

FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

PEAK LOAD 2990 @ 47.67 secconds



Test File: KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:03 PM

Sheet 9

KC0193

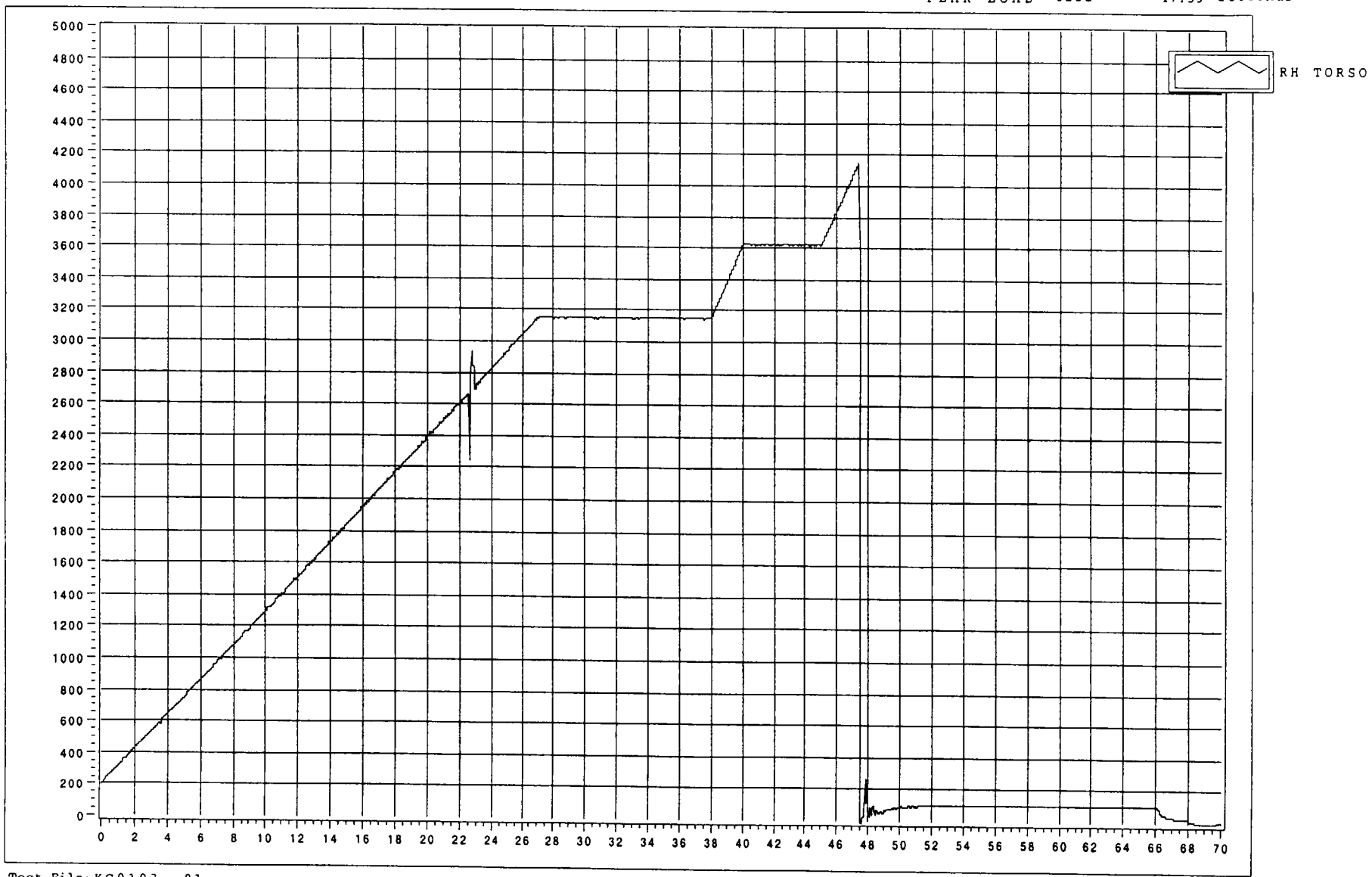
2004.25 V229 A4360018

FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

PEAK LOAD 4151 @ 47.39 secconds



Test File: KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:02 PM

KC0193

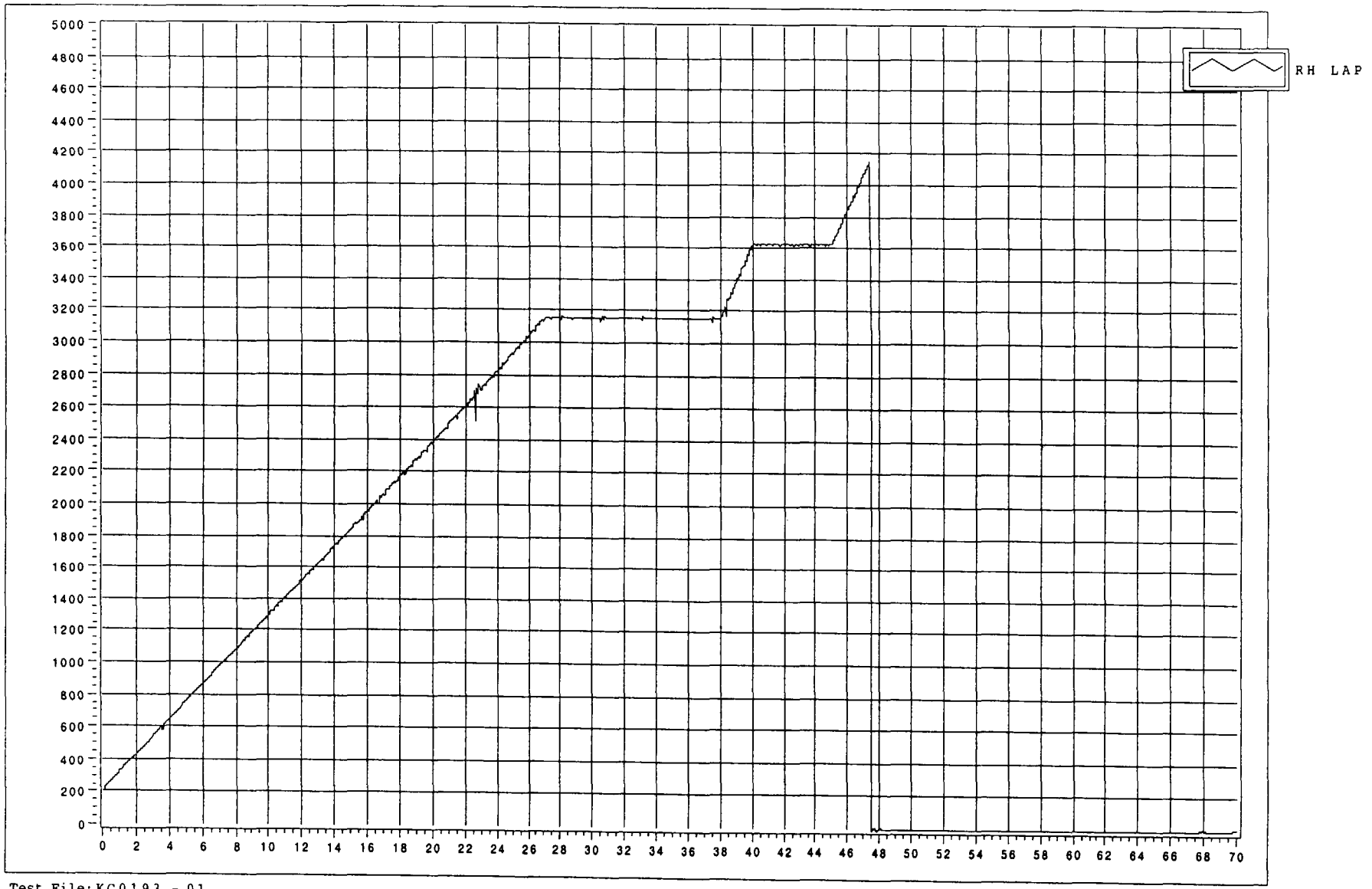
2004.25 V229 A4360018

FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

PEAK LOAD 4152 @ 47.34 secconds



Test File: KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:02 PM

KC0193

2004.25 V229 A4360018

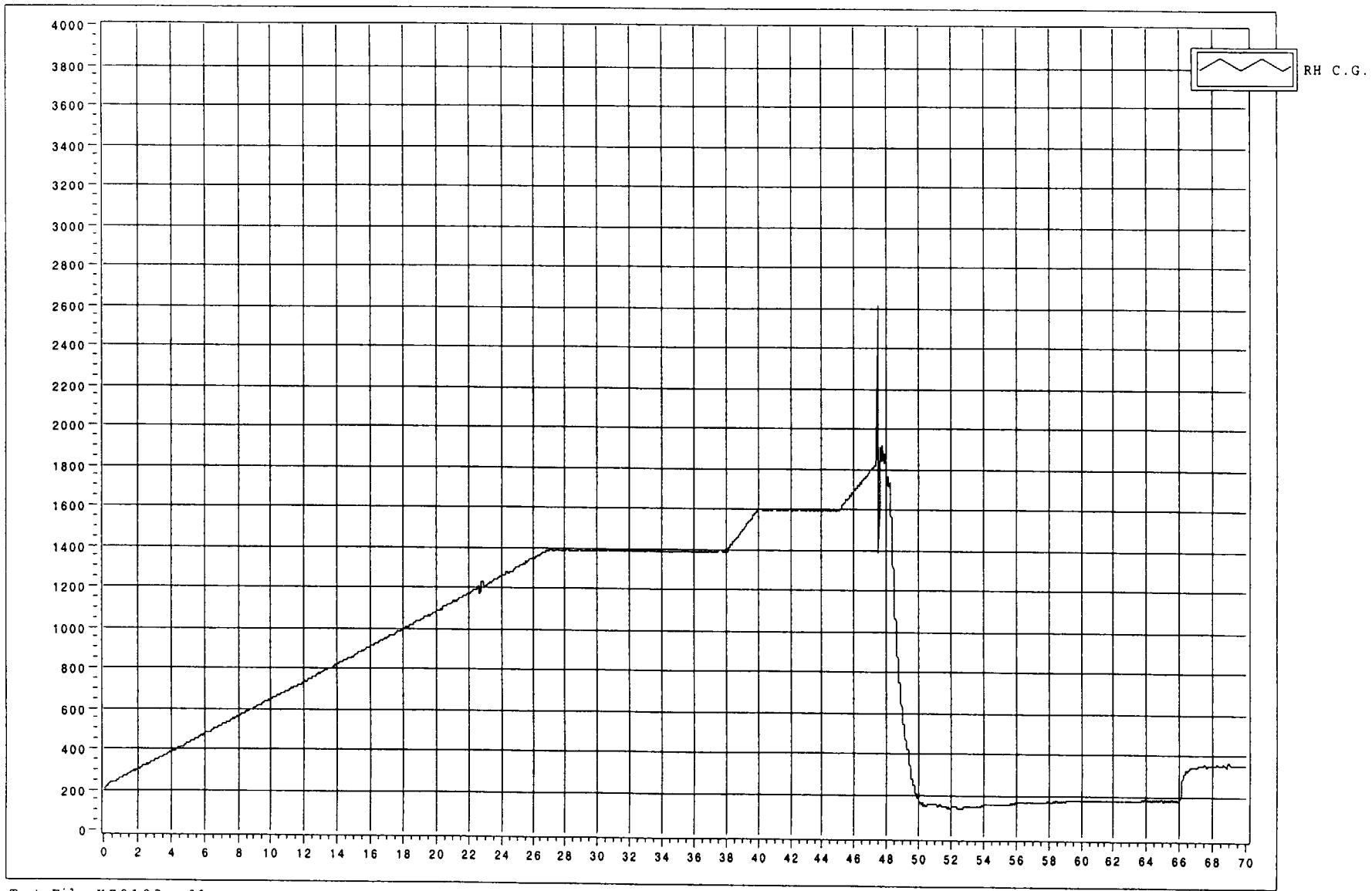
FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

Sheet 1

PEAK LOAD 2612 @ 47.44 secconds



Test File: KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:03 PM

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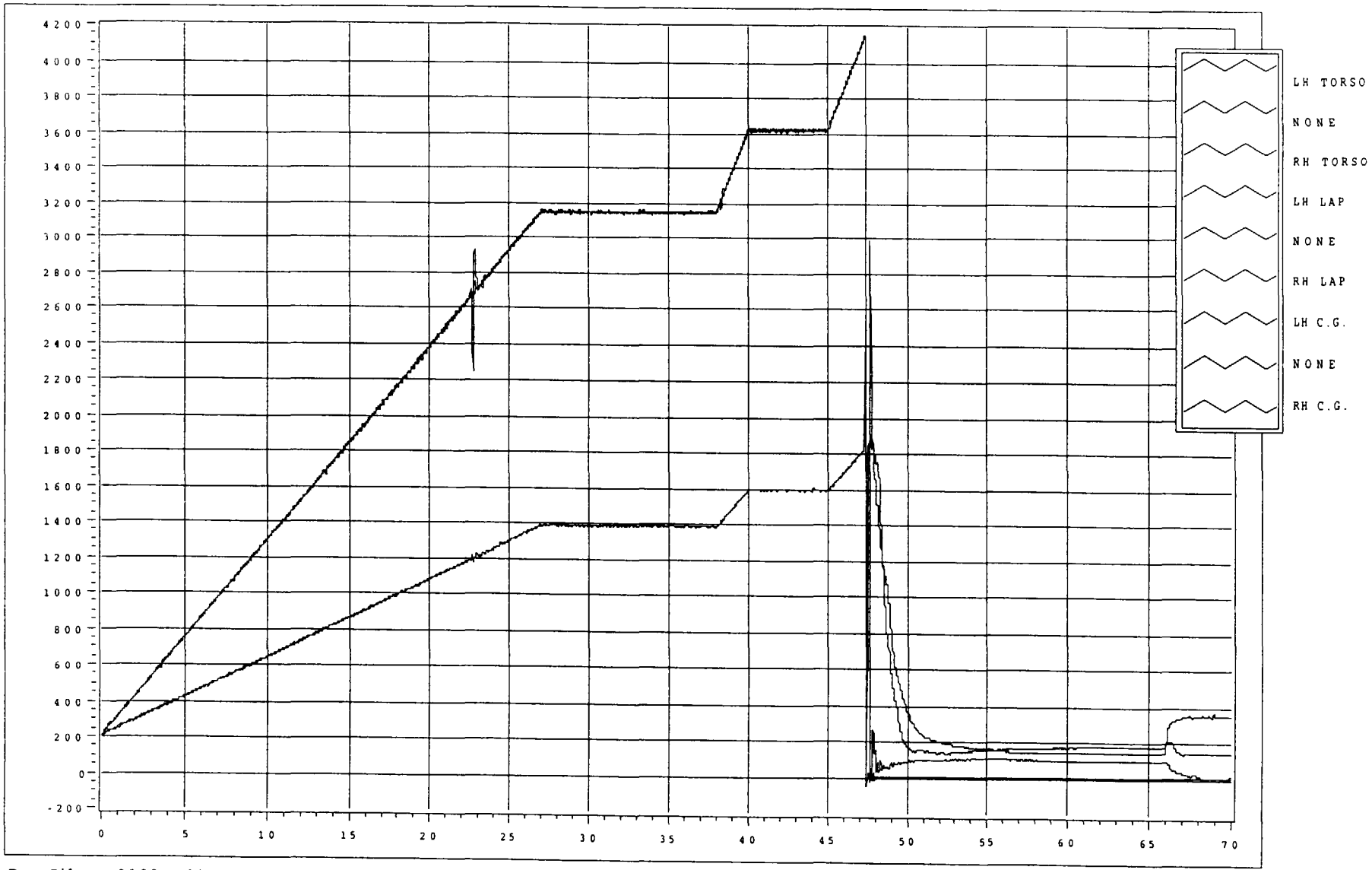
FMVSS 207/210

2ND ROW QUADS

PRODUCTION, B TEST

Sheet 12



Test File: KC0193 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 9/23/02

Date Plotted: 9/23/02

Time Plotted: 1:02 PM

13

BUCK SIGN-OFF SHEET

VEH LINE/MOD:	V229	MY.	2004
VEH.#	A4360018	TR#	KC0193
TEST MODE:	FMVSS 207/210B COMPLIANCE FOR CERTIFICATION TEST POSITION: 2ND. ROW QUADS		

The following systems and attached part list are production representative with respect to this test (Test Procedure CETP 01.10-L-809-US) as signed off by the release respnsible representatives listed below, or a person appointed by the release responsible representative for the above listed buck number.

SYSTEM	Check	NAME, PHONE# & ID	SIGNATURE & DATE	COMMENTS
	ok to test latest level parts			Trim on vehicle Fixed window glass not in
Underbody	ok to test latest level parts	Tom Joseph, X-89660, TJOSEPH1 Robert Vanslyke, X-10890, RVANSLYK	10/2/02	
INTERIOR TRIM	ok to test latest level parts	MARC NEDELMAN X-09187 MNEDELMA	10/15/02	RH D-PLR ~~REWORKED~~ REWORKED W/ CIRETHAN COORD. FEATURE - SHOULD NOT IMPACT TESTING
Seats	ok to test latest level parts	Rick Cendrowski, X-21708, RCENDROW Joanna Gillespie, X-79967, JGILLES2 Ernie Minder, EMINDER (Intier) Peter Mueller, X-24582, PMUELL15	10/17/02	RH SPKR GRILLE CRACKED PLEASE REPLACE B-PLR LWR PUDDLE LAMPS MISSING ON R/L SIDES OF VEHICLE. ~~NEED~~ REPLACE RH QTR PNL W/ UPDATED COORD. FEATURE @ RH
Restraints	ok to test latest level parts	Edwin Chiu, X-77369, ECHIU Andrik Cardenas, X-71763, ACARDEN1	Andrik R. Cardenas	D-PLR (WRONG PNL) B PILLAR QTR PNL NOW INSTALLED & OK to test 10/17/02

FMVSS/CMVSS 210 OR 207/210B TYPE TEST
REQUESTOR INFORMATION SHEET

Test Request # KC0193 Model Yr: 2004

Test Buck # A4360018 Vehicle Line: V229

RH D-Ring Adj. Height: ___NA ✓Full Up ___Mid ___Full Down ___Other

LH D-Ring Adj. Height: ___NA ✓Full Up ___Mid ___Full Down ___Other

Type of Retractor: LH NO LOAD LIMITER Ctr _____ RH NO LOAD LIMITER

Seating Positions: Front: ___L.H. ___Ctr ___R.H.

Seating Positions: 2nd Row: ✓L.H. ___Ctr ✓R.H.

SEAT (S)	Left Hand	Center	Right Hand	Bench
Weight				
C.G. Position				
C.G. Position Ref. Point				
Design Seat Back Angle	°	°	°	°
Manual/Power				

Manual Seat Position for Testing: ___ Full Rearward

Power Seat Position for Testing: ___ Full Rearward ___ Full Down

Doors ✓ Yes ___ NA Hatches ✓ Yes ___NA Strikers & Latches ✓Yes ___NA

Door Glass ___Yes ✓NA Fixed Glass ✓Yes ___NA

Frame ___ Yes ✓NA Gas Tank ___Yes ✓NA Pucks ___ Yes ✓NA

Shoulder Guides ..... Left Side ✓Yes ___NA Right Side ✓Yes ___NA

All bolts have been torqued to the minimum torque value. ✓Yes: Seats (Nm); Retractors (Nm)

All components have been installed and the test buck is ready for FMVSS 210 or 207/210 testing.

Signature Ron Bergman Date: 10-11-02

All entries must be Yes (the component has been installed) or NA (it is not required). For a FMVSS 207/210 test the seat weight, c.g. location and c.g. reference point must be provided.

Equipment Used To Support TESTnet Request: **KC 0193**

SEAT BELT ANCHORAGE TEST SYSTEM

CYLINDER #	MTS CONTROL-LERS MODEL 407 SERIAL #	MTS CONTROL-LERS MODEL 407 ASSET #	INTERFACE LOAD CELLS MODEL 1210ZD SERIAL #	INTERFACE LOAD CELLS MODEL 1210ZD ASSET #
1	0257669F	14332	96568	18726
2	0257672F	14337	85982	12169
3	0257674F	14333	82465	9643
4	0257677F	14338	96545	18732
5	0257678F	14334	82436	9649
6	0257675F	14339	96529	18730
7	0257670F	14335	82446	9646
8	0257671F	14340	82414	9647
9	0257676F	14336	82458	9650

Item	Model No.	S/N	Asset Number
Kinetic System Corp. 16 Bit A/D Card	V207	82	14472
Kinetic System Corp. Signal Conditioner Ch 1-8	V246	55	14475
Kinetic System Corp. Signal Conditioner Ch 9-16	V246	76	10402
Kinetic System Corp. Signal Conditioner Ch 17-24	V246	71	14164
Kinetic System Corp. Waveform Generator	V285	41	14476
Teac PCM Data Recorder	RD200T	32418500009785	

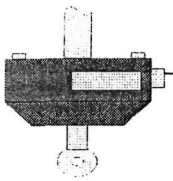
Load Cells Cal Date 10-30-2001, Cal Due Date 10-30-2002
System Cal Date 10-30-2001, Cal Due Date 10-30-2002

Other Equipment used for this test

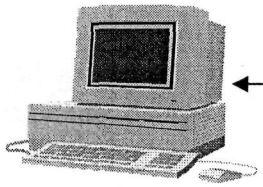
Description	Model No.	Asset Number	Calib. Date	Calib. Due Date
MD SMARTTOOL	n/a	20155	9/14/2001	9/14/2002
Celesco Potentiometer	PT101-0050-111-51X0-8351C	19190	1/16/2002	1/16/2003
Celesco Potentiometer	PT101-0050-111-51X0-8351C	19194	1/16/2002	1/16/2003
Celesco Potentiometer	PT101-0050-111-51X0-8351C	18865	1/14/2002	1/14/2003

BODY and CHASSIS TEST DEPARTMENT
MEASUREMENT UNCERTAINTY

B & C Test Section:	Body Test
Test Facility:	Seat belt / Child Restraint
Channel Name:	Displacement Measurements
Eng./Tech. Name:	Jeffrey Bias
Test Auth. No.:	KC 0193
Test Description:	FMVSS 207, 210 & 225
Test Type:	Certification



TRANSDUCER:	Celesco 8437A Displacement Potentiometers
Full Scale Range:	50 inch
Component Uncertainty:	.054 inch
SIGNAL CONDITIONER 1:	MTS 407.12 DC Transducer Conditioner
Component Uncertainty:	.0399 inch
SIGNAL CONDITIONER 2:	
Component Uncertainty:	
SIGNAL CONDITIONER 3:	
Component Uncertainty:	
SIGNAL CONDITIONER 4:	Sampling Uncertainty
Component Uncertainty:	.004 inch
DIGITIZER:	Kinetic Systems V207 A/D Converter
Component Uncertainty:	.001 inch

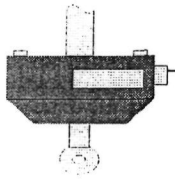


Display Device	
Component Uncertainty:	

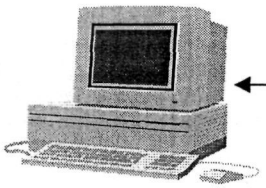
System Standard Uncertainty (+/-):	.067 inch
System Expanded Uncertainty, 95% Confidence Interval (+/-):	.134 inch

BODY and CHASSIS TEST DEPARTMENT
MEASUREMENT UNCERTAINTY

B & C Test Section:	Body Test
Test Facility:	Seat belt / Child Restraint
Channel Name:	Load Cell Measurements
Eng./Tech. Name:	Jeffrey Bias
Test Auth. No.:	KC 0193
Test Description:	FMVSS 207, 210 & 225
Test Type:	Certification



TRANSDUCER:	Interface 1210ZD Load Cells
Full Scale Range:	10,000 lb
Component Uncertainty:	8.20 lb
SIGNAL CONDITIONER 1:	MTS 407.12 DC Transducer Conditioner
Component Uncertainty:	13.31 lb
SIGNAL CONDITIONER 2:	
Component Uncertainty:	
SIGNAL CONDITIONER 3:	
Component Uncertainty:	
SIGNAL CONDITIONER 4:	Sampling Uncertainty
Component Uncertainty:	1.43 lb
DIGITIZER:	Kinetic Systems V207 A/D Converter
Component Uncertainty:	.49 lb



Display Device	
Component Uncertainty:	

System Standard Uncertainty (+/-):	17.07 lb
System Expanded Uncertainty, 95% Confidence Interval (+/-):	34.14 lb

VEV Test Request - KC0193

Requester / Coordinator (CDS Id):
ECHIU

Edwin Chiu

Performing Activity:	Date Submitted:	Requested Completion Date:	Requester Reference Number:
Body / Chassis Durability		07-OCT-2002	

TESTnet Test Procedure: SBA_US
CETP: 01.20-L-809-US
CETP Title: Seat Belt Assembly Anchorage Test

Request Title and / or Subject of Request:
2004 V229 FMVSS 207/210B CERT. 2ND. ROW QUADS

Billable Requester's Dept No.:
5100Y246 UNKNOWN
Billable Requester's CDS Id:
ECHIU
Billable Requester's Name:
Edwin Chiu

Work Task / Work Order: G13
Program: V229
Description:
2004 1/4 V229 NEW WINDSTAR & MERC MINIV

Request conducted to certify control item compliance with Government Regulations:

Yes: [X] No: [ ]

Complete the following two questions as indicated

1 - Rationale for not replacing this test by CAE Analysis:

(Check appropriate boxes)

2 - What is the expected Test Outcome:

(Check appropriate boxes)

Request Purpose / Request Procedure or Description of Request:

Seat Belt Assembly Anchorage Test

Test Objects:	Reference Object	Reference Description
	N/A	N/A

Sample #	Object ID	Object Description
1	A4360018	BODY IN WHITE
2	3F23-1760026-BAW	2ND. ROW QUAD L/H SEAT
3	3F23-1760027-BAW	2ND. ROW QUAD R/H SEAT
4	3F23-17611B69-CEW	2ND. ROW RETRACTOR L/H
5	3F23-17611B68-CDW	2ND. ROW RETRACTOR R/H
6	~~3F23-1760045-ACW~~	~~2ND. ROW BUCKLE L/H~~

Signature Approvals (As Required for Control Purposes)

Requesting Engineer	Edwin Chiu	Assigned Coordinator	
Request Authorized by	Not Required	Assigned Supervisor	

Test Objects:	Reference Object	Reference Description
	N/A	N/A

Sample #	Object ID	Object Description
7	3F23-1760044-ACW	2ND. ROW BUCKLE R/H
8	3F23-17602B82-ABW	HEIGHT ADJUSTERS L/H & R/H
9	3F23-17612C36-AAW	D-RING COVERS L/H & R/H

Test Definition Worksheet

Request No: KC0193 2004 V229 FMVSS 207/210B CERT. 2ND. ROW QUADS

Service/Procedure: SBA_US Seat Belt Assembly Anchorage Test

Test Object: Request Date:

Requester: Edwin Chiu (ECHIU) Requester Phone: 1-313-3177369

Sample	Object ID	Object Description	Date	Runs	Dispos.
1	A4360018	BODY IN WHITE	07-OCT-02	1	RETURN
2	3F23-1760026-BAW	2ND. ROW QUAD L/H SEAT	07-OCT-02	1	RETURN
3	3F23-1760027-BAW	2ND. ROW QUAD R/H SEAT	07-OCT-02	1	RETURN
4	3F23-17611B69-CEW	2ND. ROW RETRACTOR L/H	07-OCT-02	1	RETURN
5	3F23-17611B68-CDW	2ND. ROW RETRACTOR R/H	07-OCT-02	1	RETURN
6	3F23-1760045-ACW	2ND. ROW BUCKLE L/H	07-OCT-02	1	RETURN
7	3F23-1760044-ACW	2ND. ROW BUCKLE R/H	07-OCT-02	1	RETURN
8	3F23-17602B82-ABW	HEIGHT ADJUSTERS L/H & R/H	07-OCT-02	1	RETURN
9	3F23-17612C36-AAW	D-RING COVERS L/H & R/H	07-OCT-02	1	RETURN

Parameter:	Value:	Units:
Vehicle Programs	V229	
Vehicle Year	2004	
Requesters Phone Number	31-77369	
Mail Report to:	11B038	Room Number/Mail Drop
Building Name	BUILDING #1	
SEAT BELT Anchorage CETP 01.20 - L - 809 US	Y	
Test Type:	Y	
FMVSS 210, 207/210	Y	
Test:	Y	
Production B- Test	Y	
Note: 207/210 Tests require seat weight and cg information.		
Test Row: Check One	Y	
2nd Row	Y	
CFR (Load Limiter) ?	Y	
No	Y	

Active Request Notes

KC0193

Created By: RONALD BERGMAN ***Date/Time:*** 01-OCT-2002 11:30:11

Reactivated By: N/A

Comments: N/A

Subject: TEST REQUIREMENTS

Contents:

CONTACT:	ANDRIK CARDENAS 33-71763 & ED CHIU 31-77369
TEST PROCEDURE:	CETP 01.20-L-809 US
TEST POSITION:	2ND. ROW QUADS
RESTRAINT TYPE:	NO LOAD LIMITERS
BUCK NUMBER:	A4360018

Bill Of Materials Report

Test Request: KC0193

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Test Title: 2004 V229 FMVSS 207/210B CERT. 2ND. ROW QUADS

Object ID (Sample)	*Part Number*	*Description*	*Qty*	*Receipt Date*
A4360018				
3F23-1760026-BAW				
3F23-1760027-BAW				
3F23-17611B69-CEW				
3F23-17611B68-CDW				
3F23-1760045-ACW				
3F23-1760044-ACW				
3F23-17602B82-ABW				
3F23-17612C36-AAW				


KC 0193
P229 2004
10 23 02


KC-0193
P229 2004
10 23 02


HOLD#1


KC 0193 AFT
P229 2004
10 23 02


K9 5183 AFT
P228 2004
10 23 08

KC1483

2004 V229 A4370028

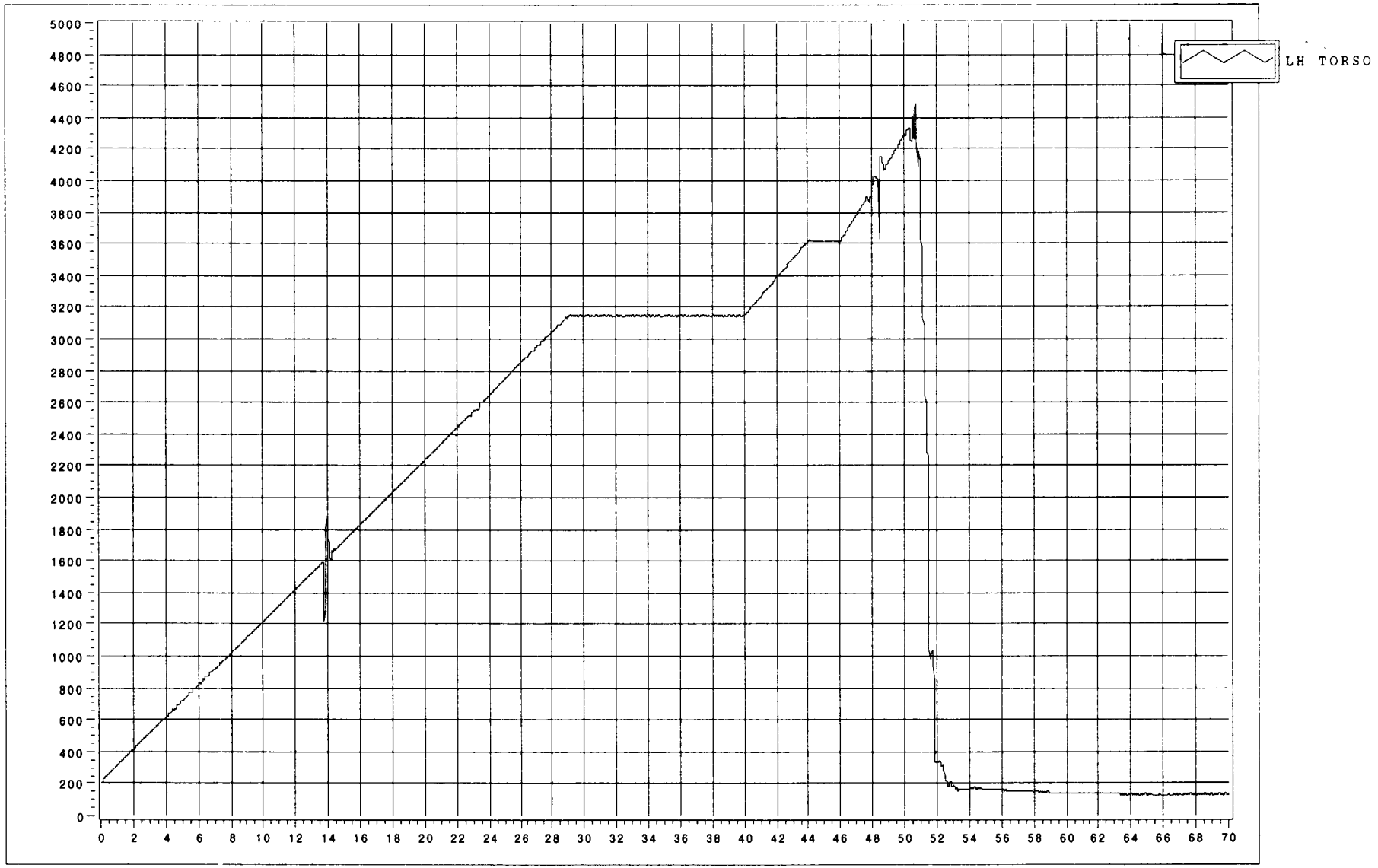
FMVSS 207/210

2ND ROW BENCH MANUAL

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4489 @ 50.69 seconds



Test File: KC1483 - 02

Software Revision: 3.20 - 03/21/2002

Test Date: 2/12/03

Date Plotted: 2/14/03

Time Plotted: 2:42 PM

KC1483

2004 V229 A4370028

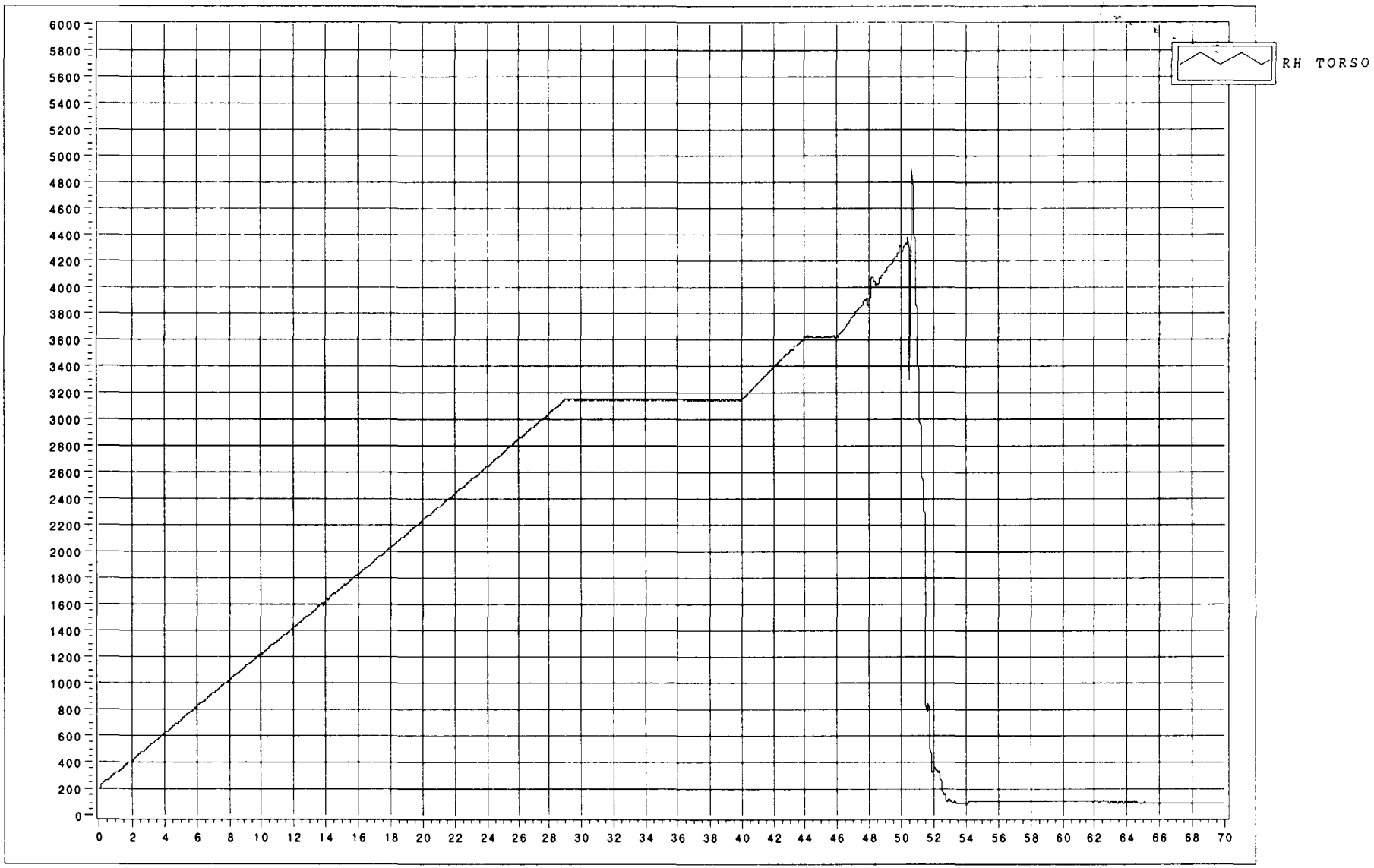
FMVSS 207/210

2ND ROW BENCH MANUAL

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4900 @ 50.63 secconds



Test File: KC1483 - 02

Software Revision: 3.20 - 03/21/2002

Test Date: 2/12/03

Date Plotted: 2/14/03

Time Plotted: 2:42 PM

KC1483

2004 V229 A4370028

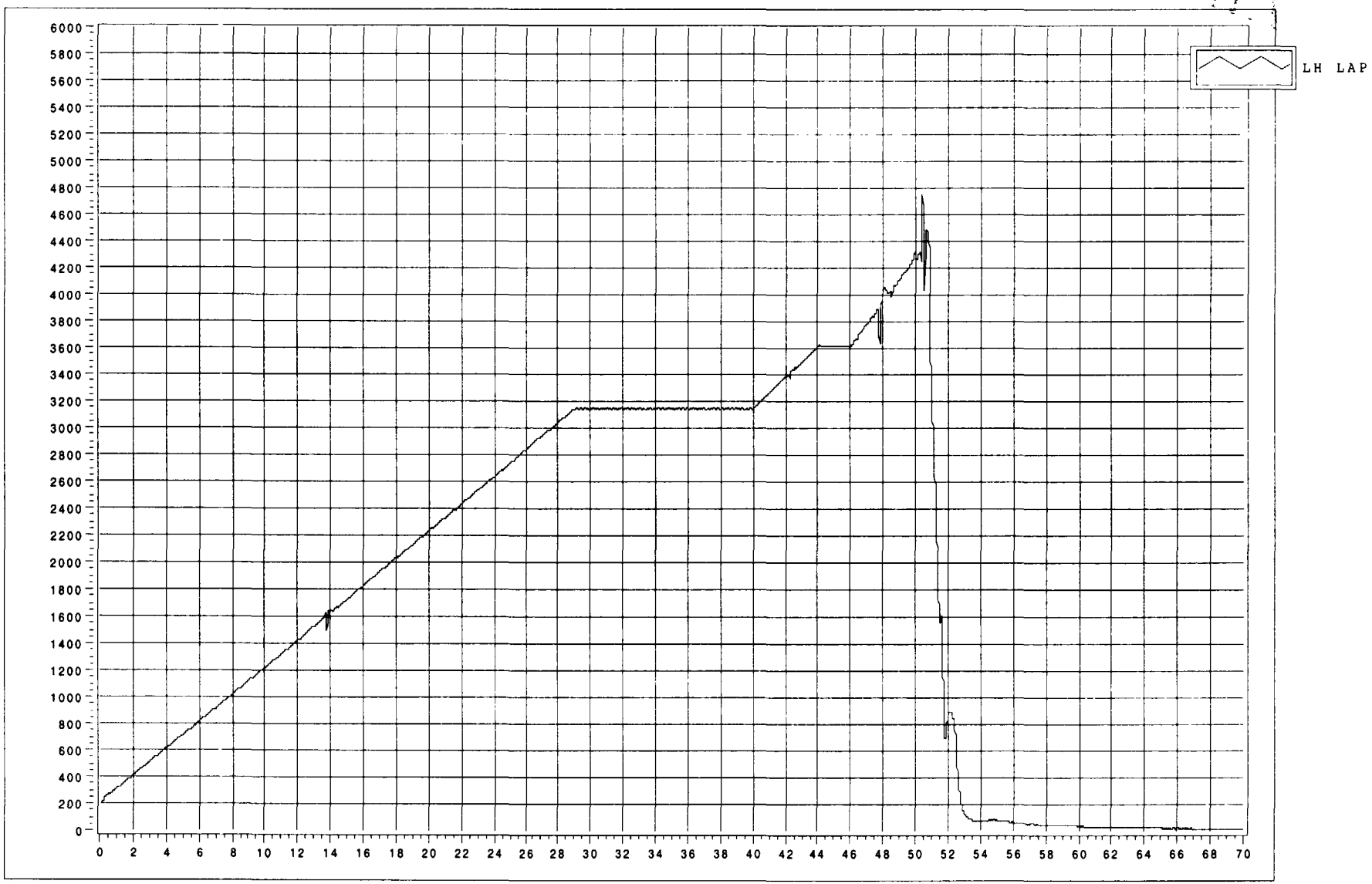
FMVSS 207/210

2ND ROW BENCH MANUAL

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4755 @ 50.41 secconds



Test File: KC1483 - 02

Software Revision: 3.20 - 03/21/2002

Test Date: 2/12/03

Date Plotted: 2/14/03

Time Plotted: 2:42 PM

KC1483

2004 V229 A4370028

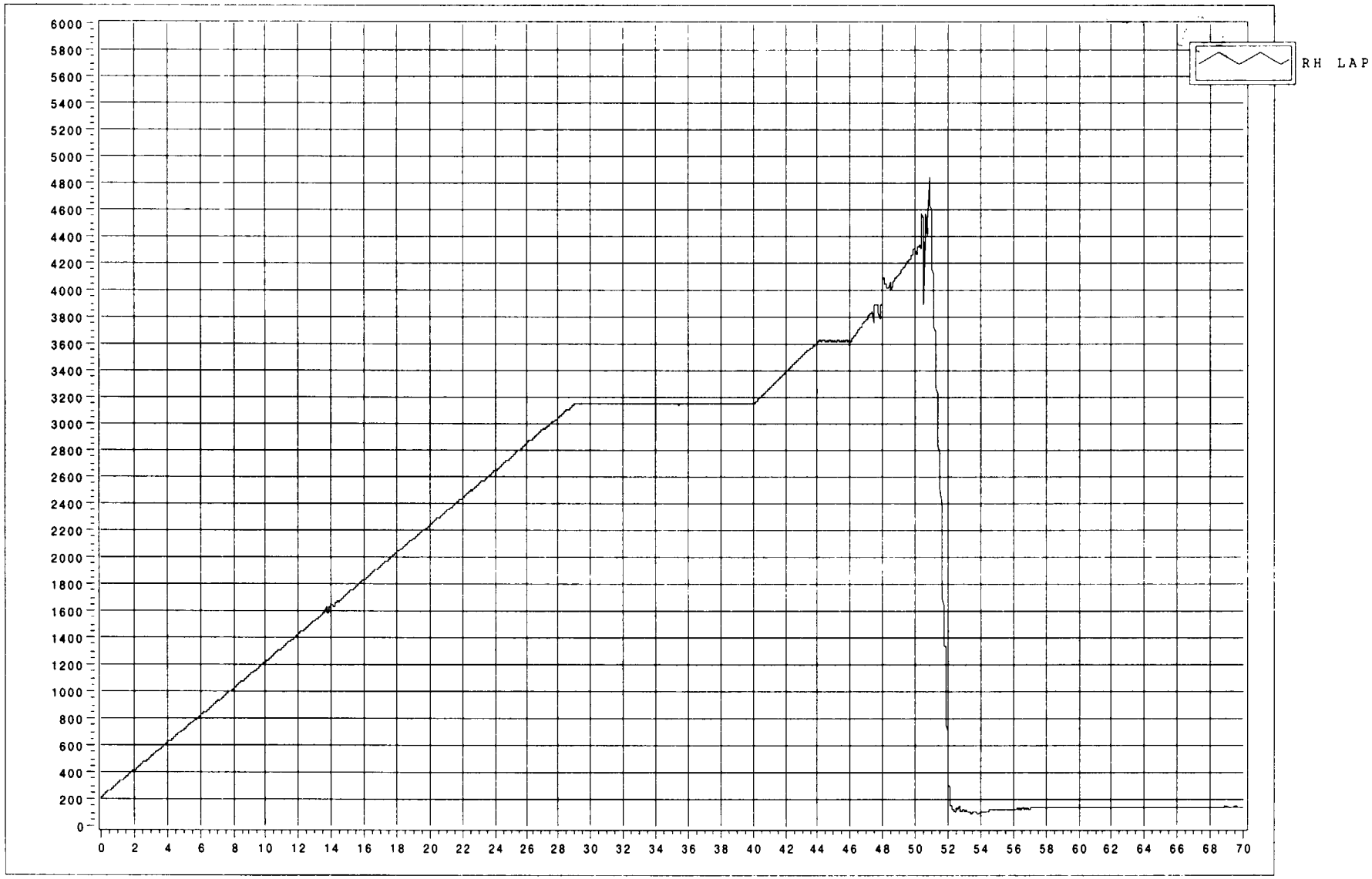
FMVSS 207/210

2ND ROW BENCH MANUAL

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4847 @ 50.86 secconds



Test File: KC1483 - 02

Software Revision: 3.20 - 03/21/2002

Test Date: 2/12/03

Date Plotted: 2/14/03

Time Plotted: 2:42 PM

KC1483

2004 V229 A4370028

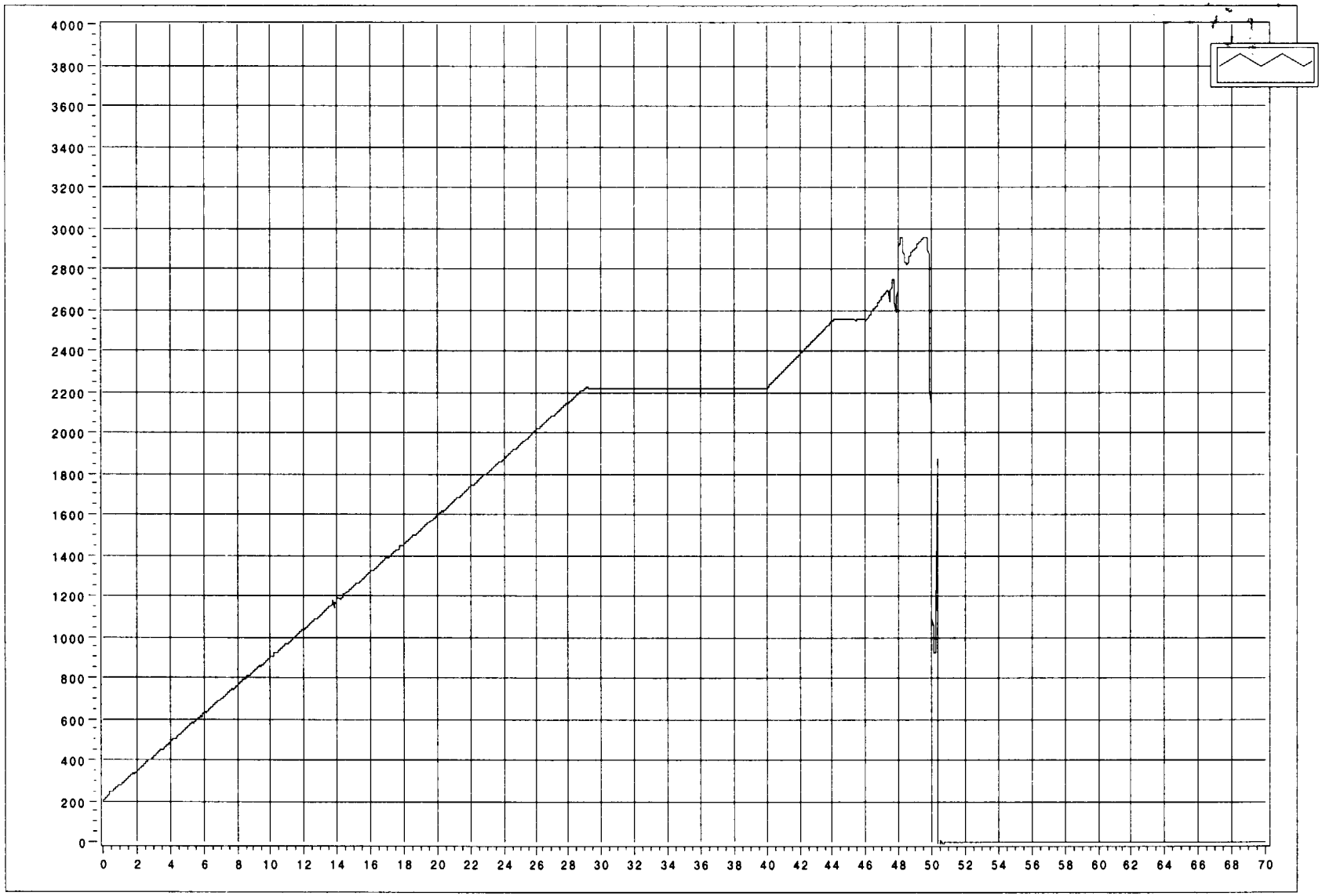
FMVSS 207/210

2ND ROW BENCH MANUAL

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 2955 @ 49.63 secconds



Test File: KC1483 - 02

Software Revision: 3.20 - 03/21/2002

Test Date: 2/12/03

Date Plotted: 2/14/03

Time Plotted: 2:42 PM

KC1483

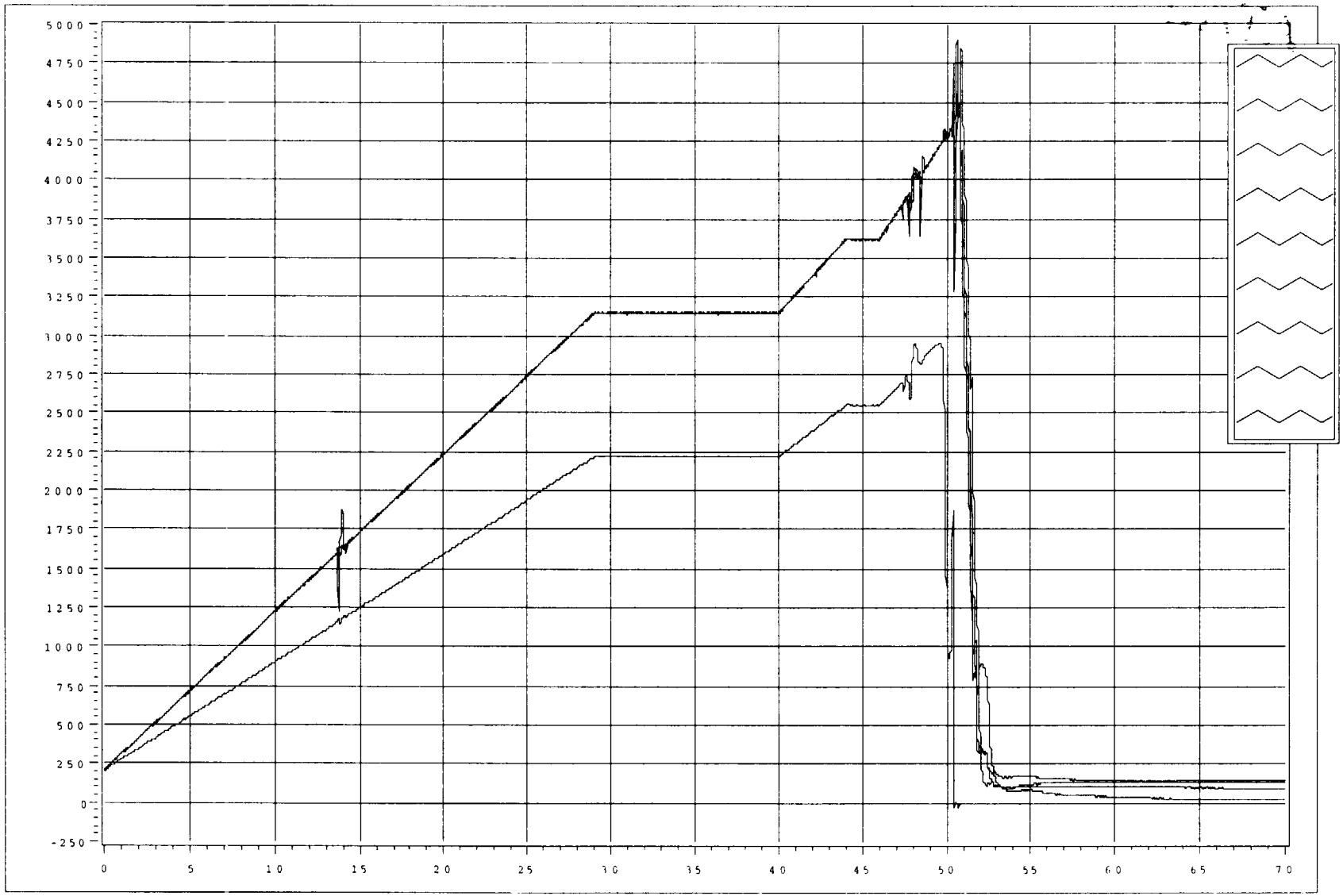
2004 V229 A4370028

FMVSS 207/210

2ND ROW BENCH MANUAL

PRODUCTION, B TEST

Sheet _____



Test File: KC1483 - 02

Software Revision: 3.20 - 03/21/2002

Test Date: 2/12/03

Date Plotted: 2/14/03

Time Plotted: 2:42 PM

KC1483

2004 V229 A4370028

FMVSS 207/210

2ND ROW BENCH MANUAL

PRODUCTION, B TEST

Sheet _____

Peak Loads

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	NONE	BENCH C.G.	NONE
Time (sec)	50.69	0.00	50.63	50.41	0.00	50.86	0.00	49.63	0.00
Load	4489	0	4900	4755	0	4847	0	2955	0
N	19967	0	21795	21150	0	21559	0	13144	0
% Overload	49.63 %	0.00 %	63.33 %	58.50 %	0.00 %	61.57 %	0.00 %	39.91 %	0.00 %

Simultaneous Overloads

Maximum Simultaneous Overload Occurred at 49.63 seconds

	LH TORSO	NONE	RH TORSO	LH LAP	NONE	RH LAP	NONE	BENCH C.G.	NONE
Load	4222	1	4228	4225	1	4226	1	2955	1
N	18781	7	18807	18792	7	18798	3	13142	5
% Overload	40.74 %	0.00 %	40.94 %	40.83 %	0.00 %	40.87 %	0.00 %	39.90 %	0.00 %

*** Based on BENCH Seat weight of 105.60 lbs

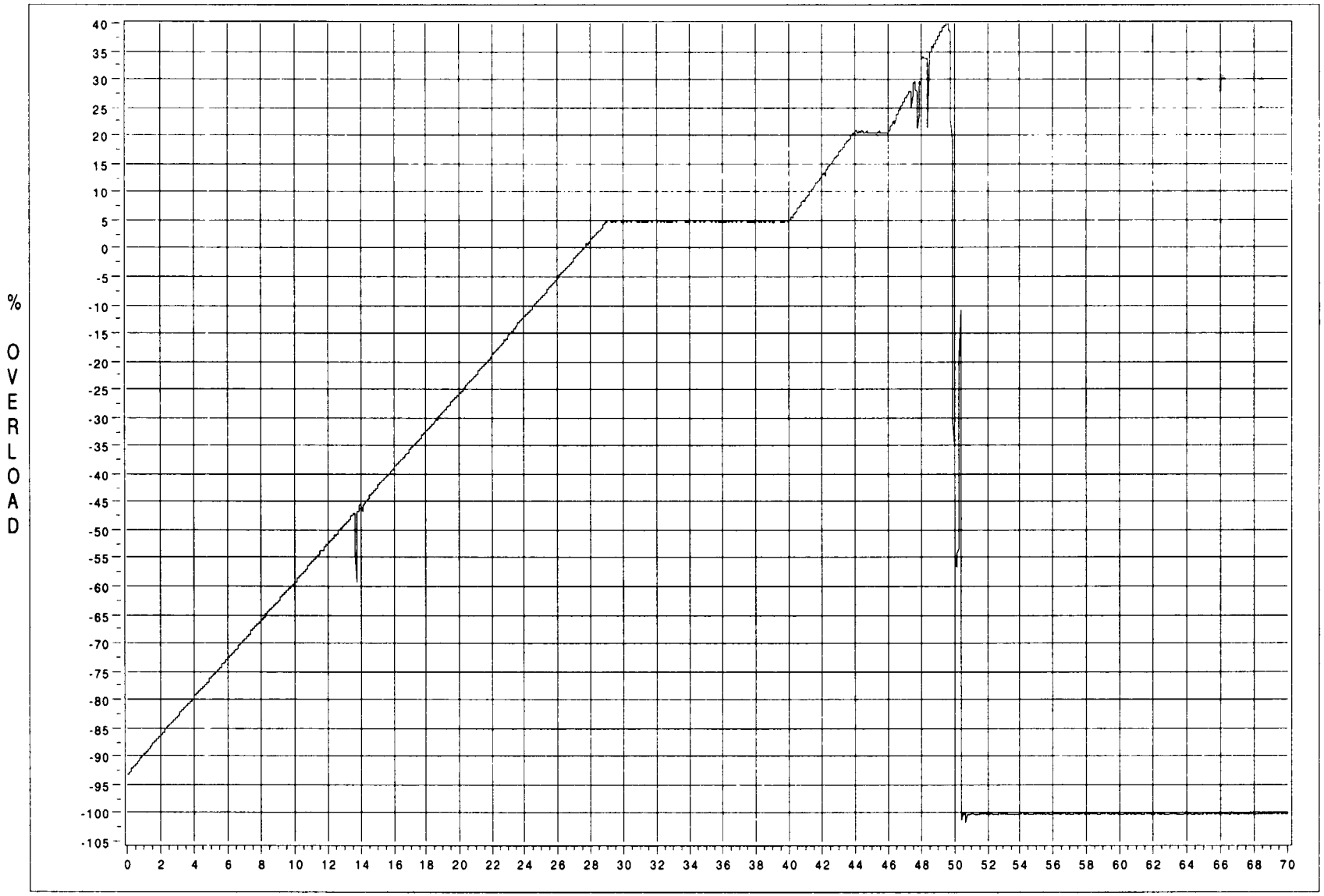
% Overload is relative to the required hold load

Software Revision: 3.20 - 03/21/2002
Test Date: 2/12/03
Date Plotted: 2/14/03
Time Plotted: 2:42 PM
Test File: KC1483 - 02

KC1483

Sheet _____

Simultaneous Minimum % Overload



Test File:KC1483 - 02

Software Revision: 3.20 - 03/21/2002

Maximum Simultaneous Overload of 39.90 at 49.63 seconds

Test Date: 2/12/03

Date Plotted: 2/14/03

Time Plotted: 2:43 PM

KC1598

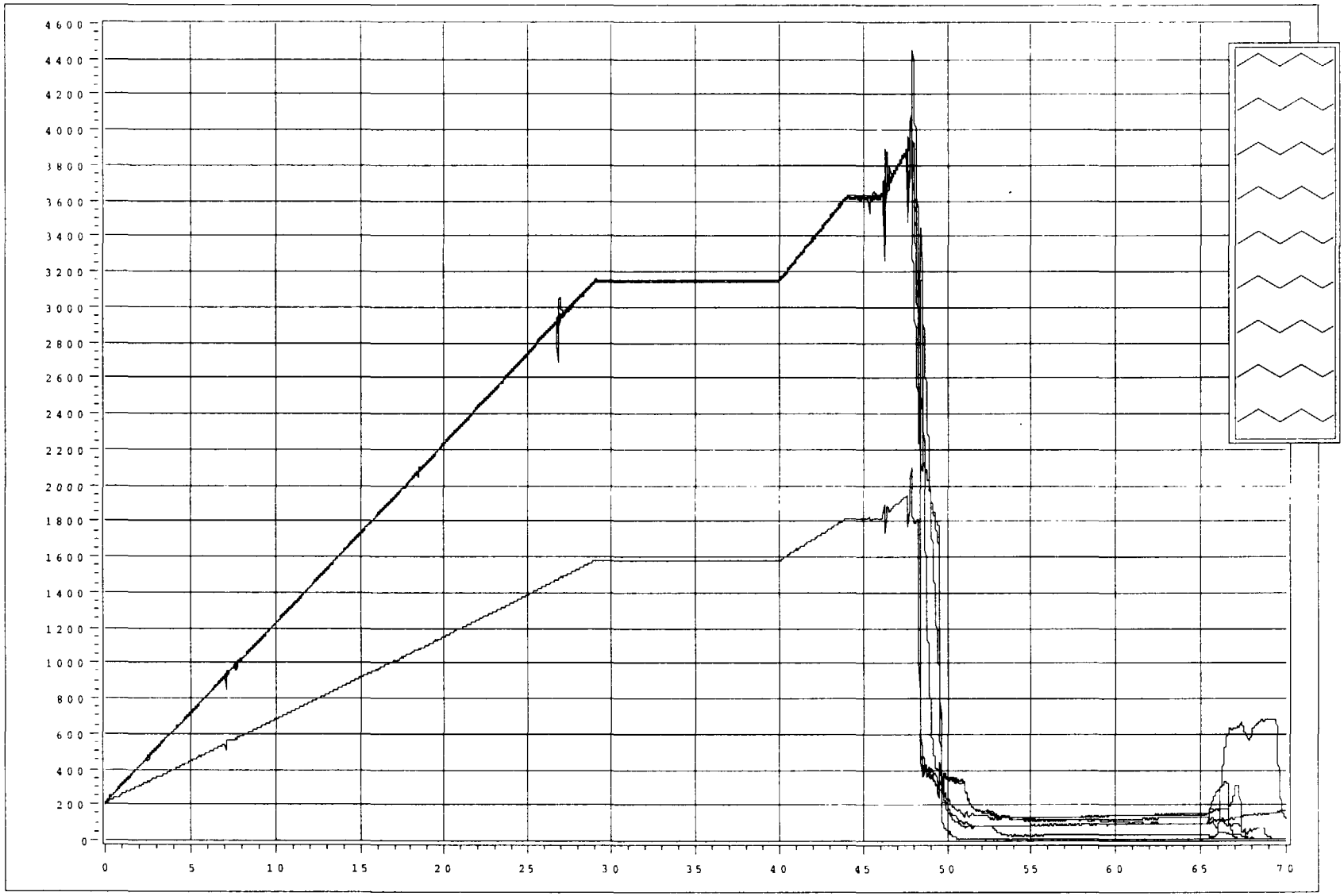
2004 V229 A4370025

FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:37 PM

KC1598

2004 V229 A4370025

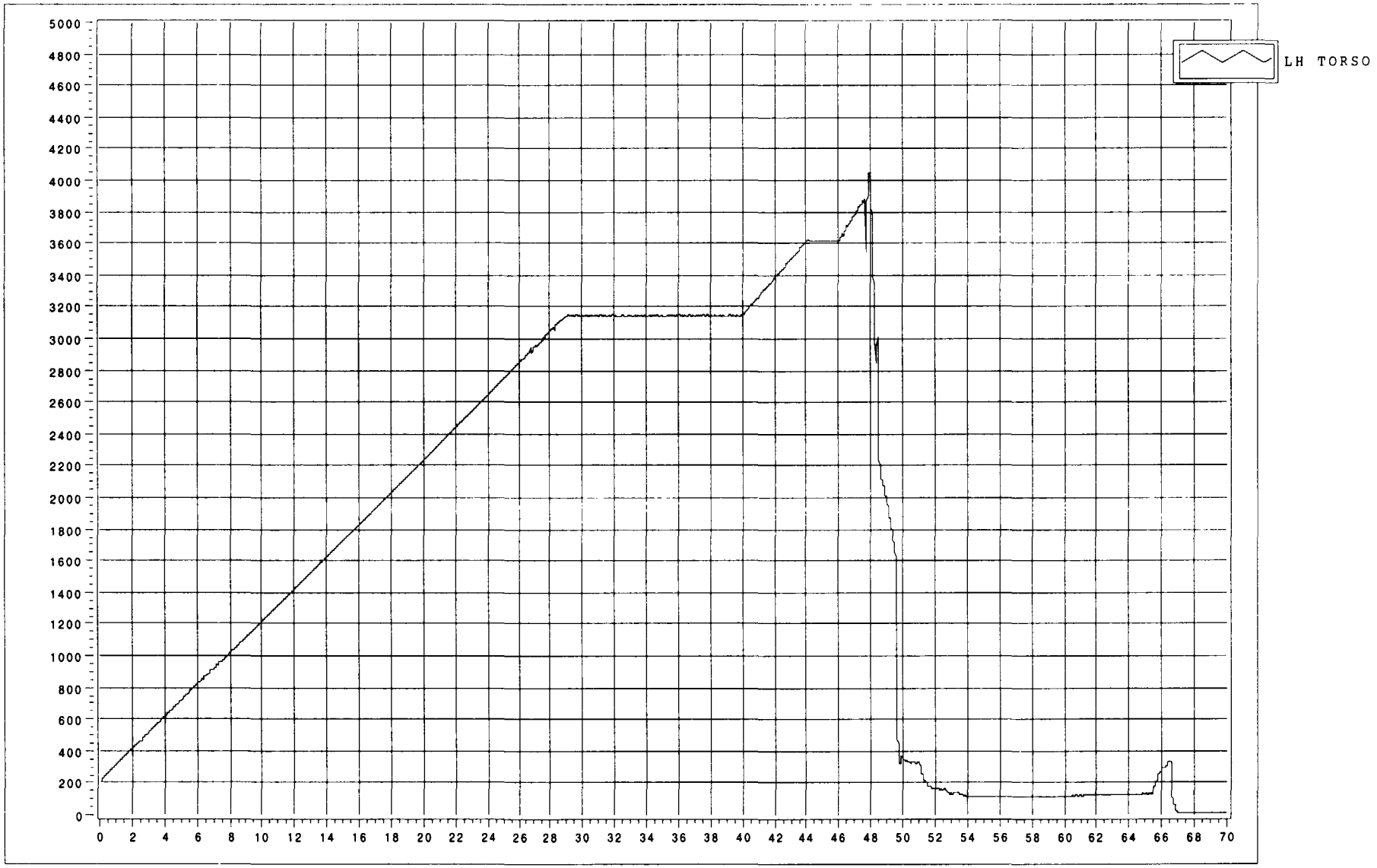
FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4046 @ 47.87 secconds



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:37 PM

KC1598

2004 V229 A4370025

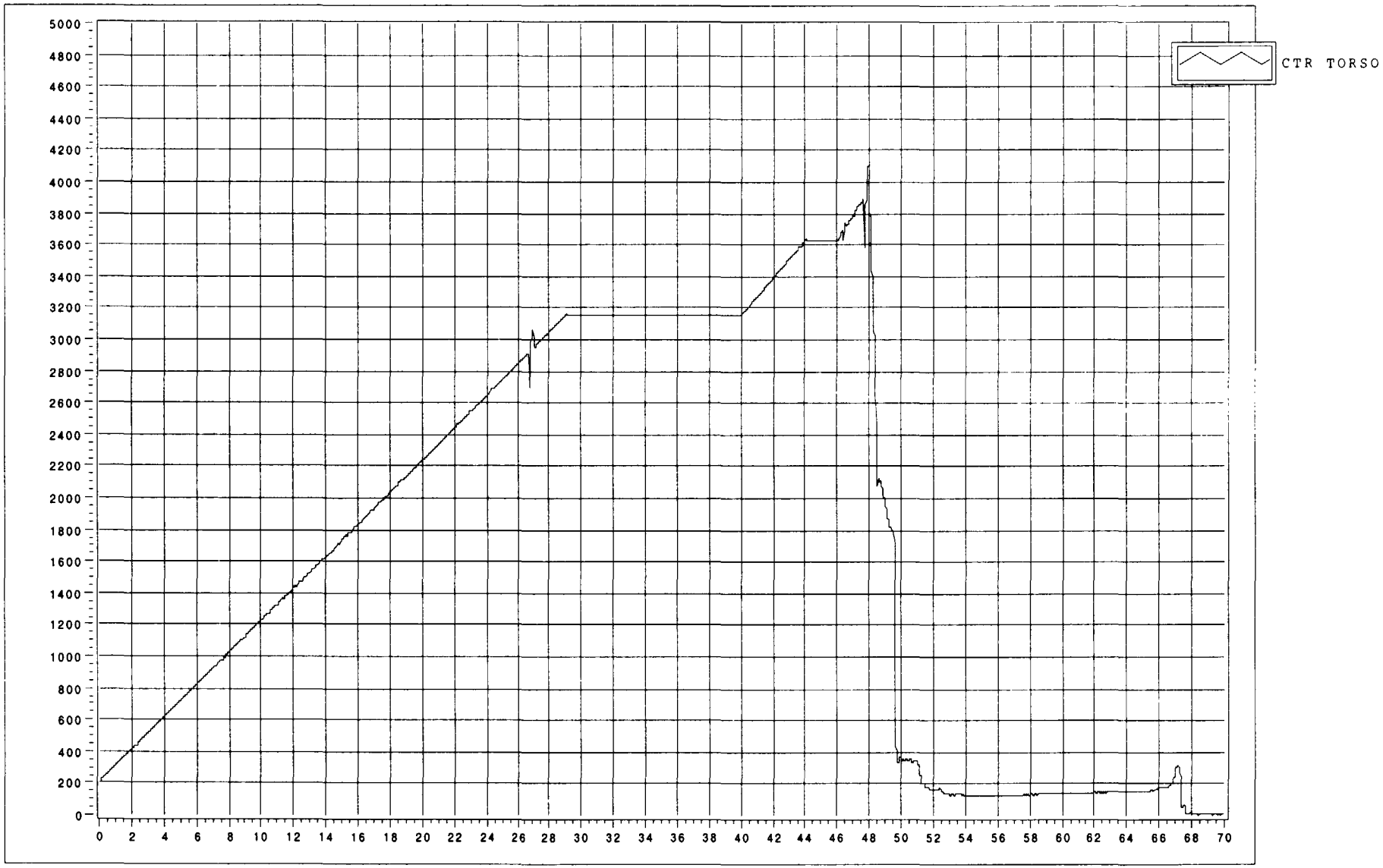
FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4098 @ 47.90 secconds



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:37 PM

KC1598

2004 V229 A4370025

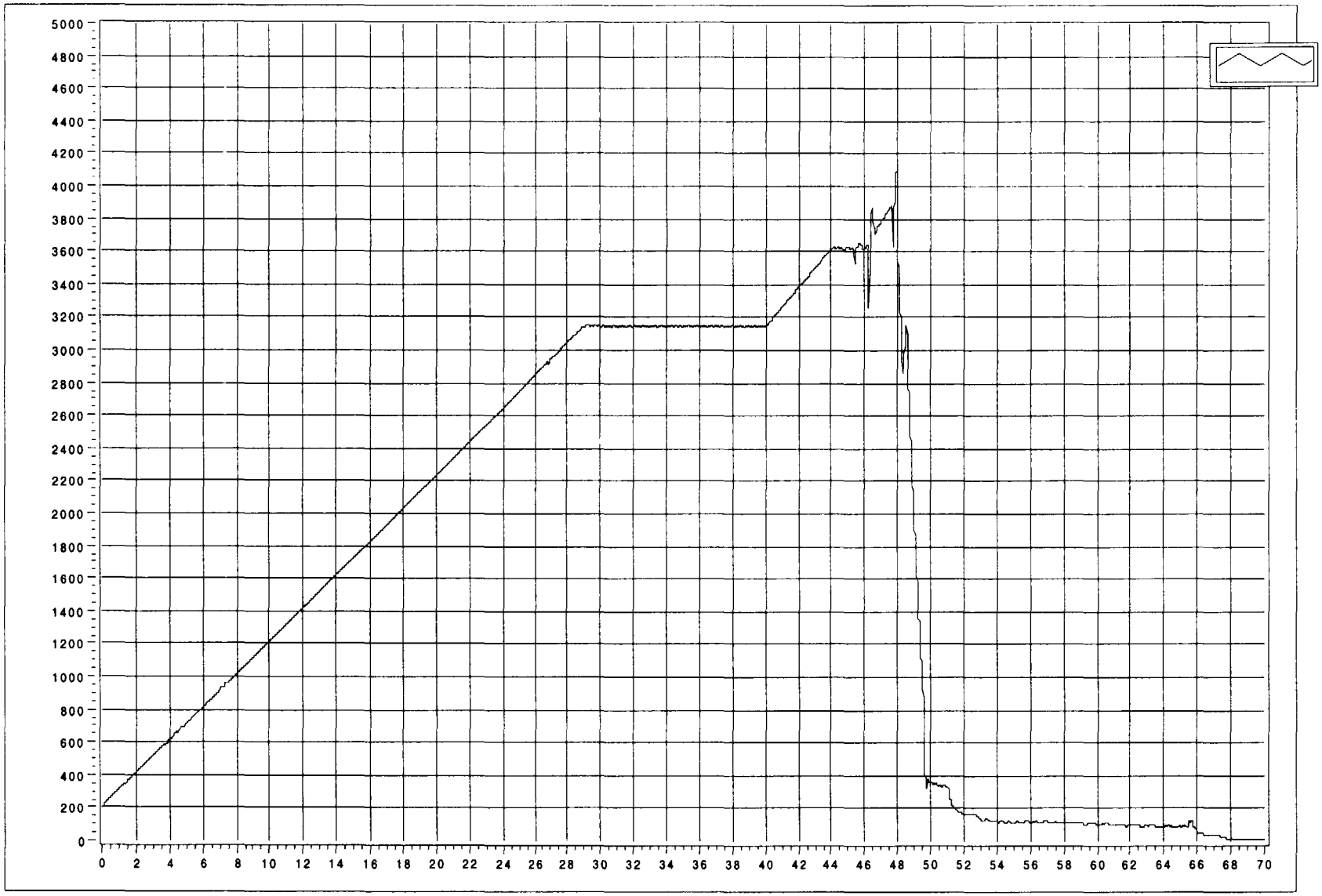
FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4093 @ 47.91 secconds



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:37 PM

KC1598

2004 V229 A4370025

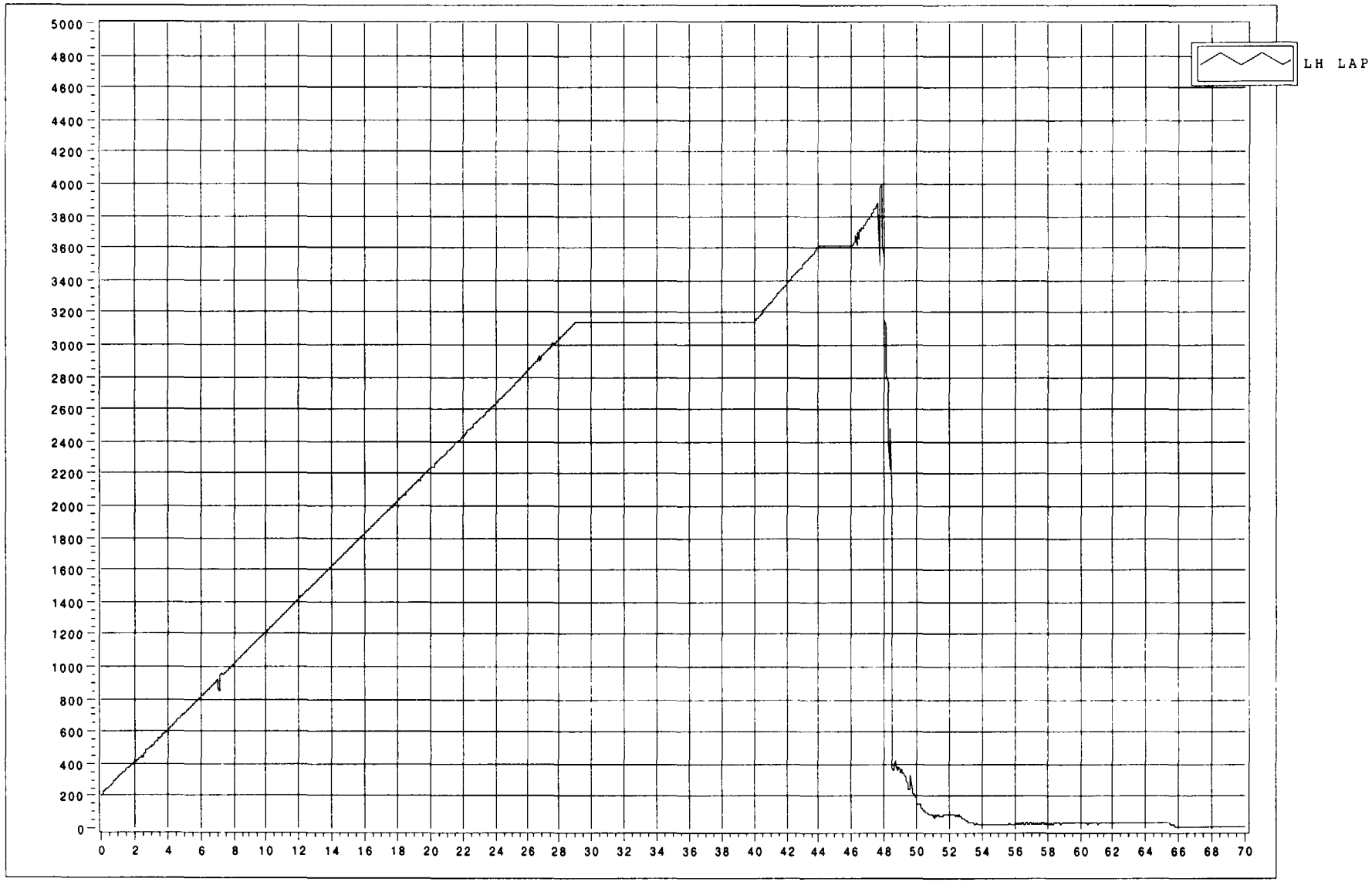
FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4005 @ 47.86 secconds



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:38 PM

KC1598

2004 V229 A4370025

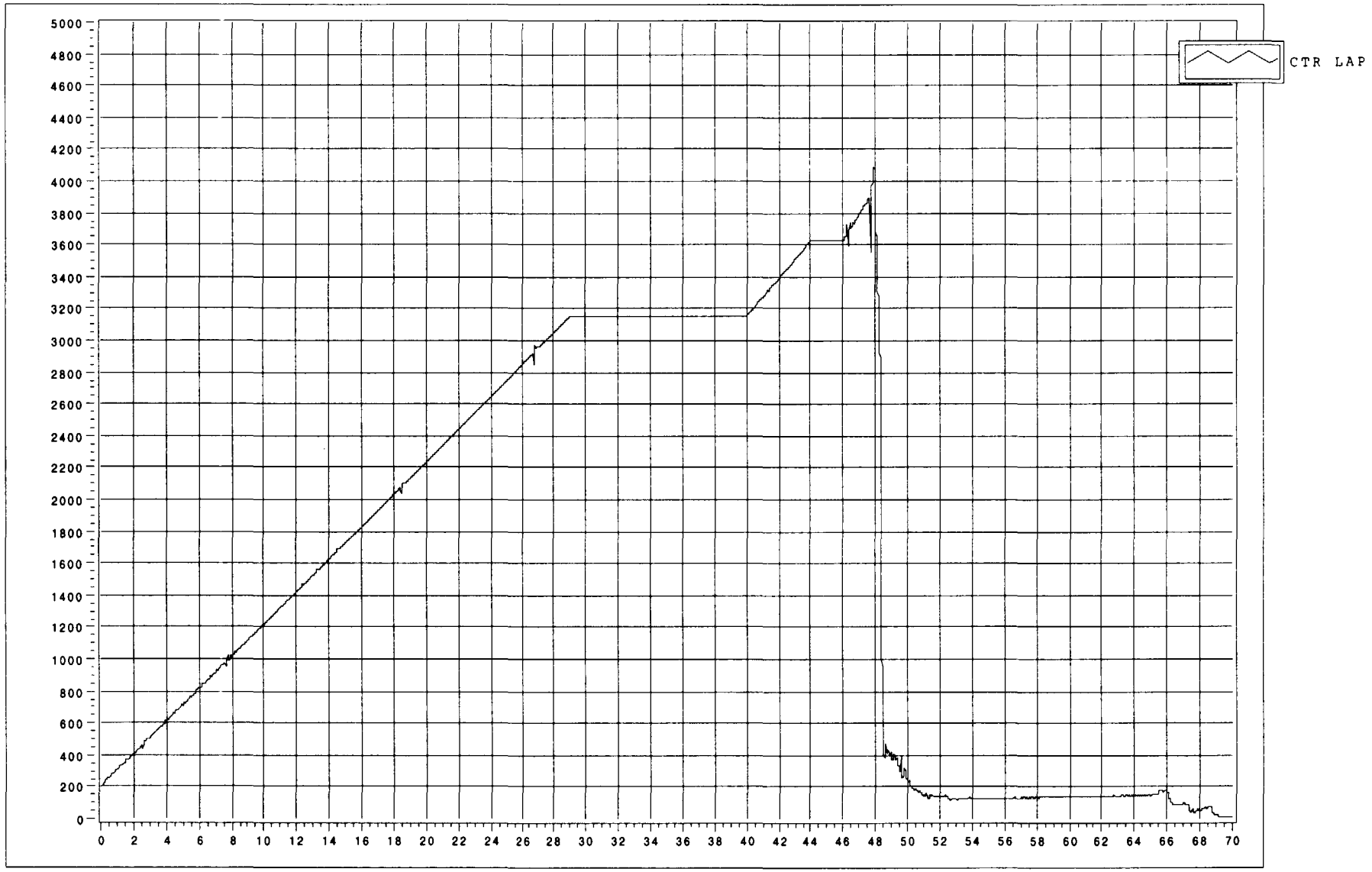
FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4093 @ 47.90 secconds



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:38 PM

KC1598

2004 V229 A4370025

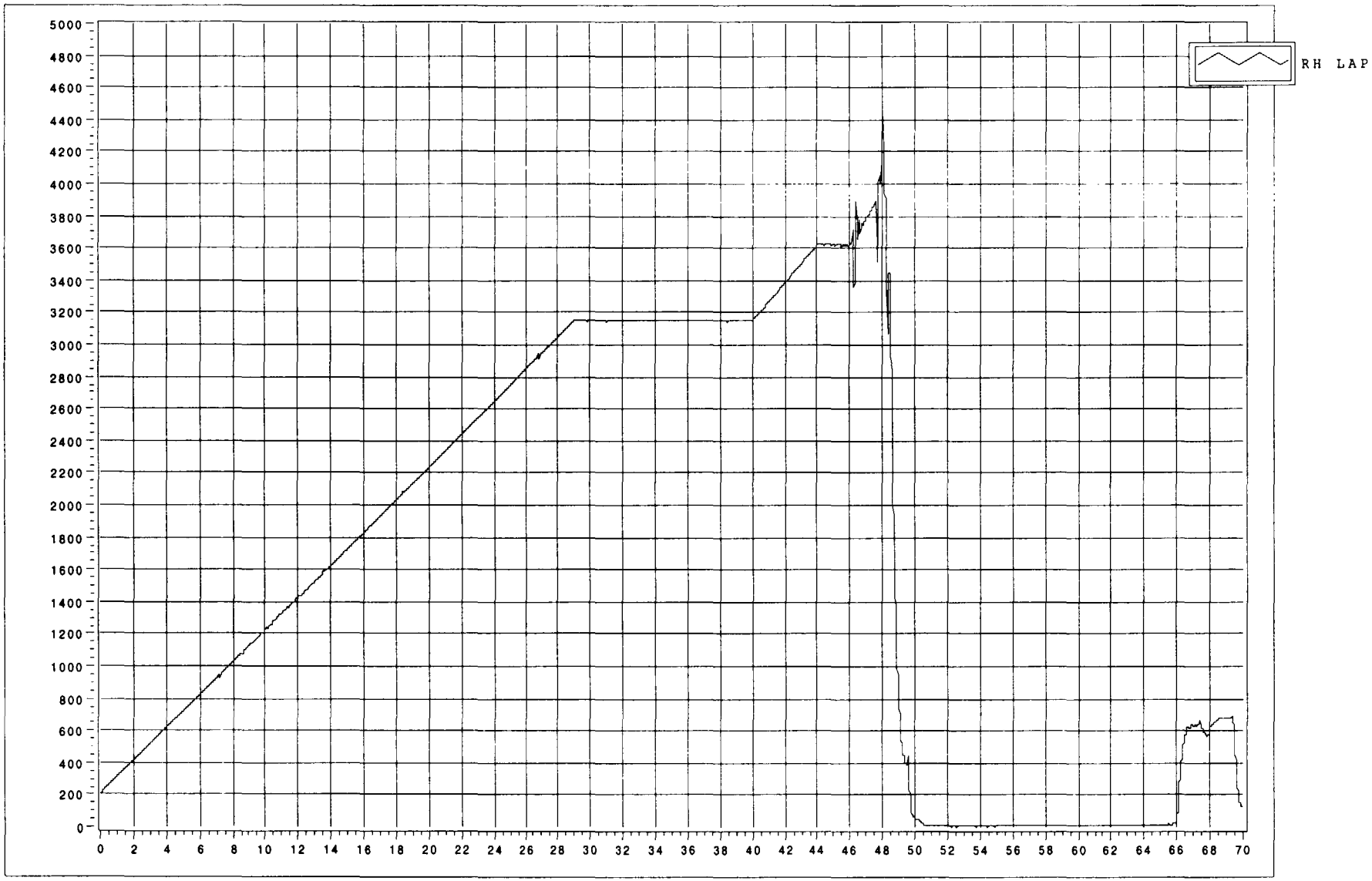
FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 4457 @ 47.96 secconds



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:38 PM

KC1598

2004 V229 A4370025

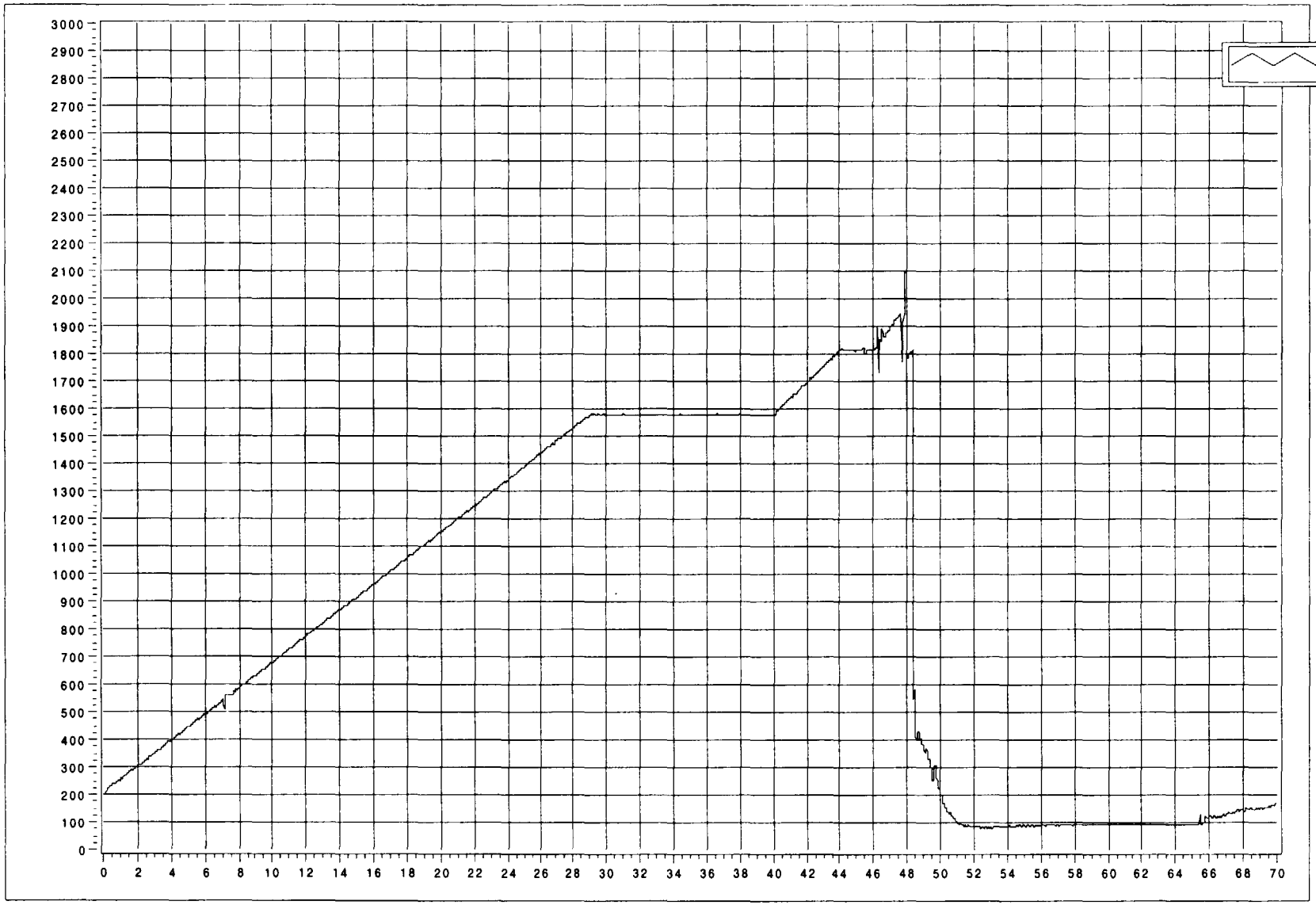
FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

PEAK LOAD 2099 @ 47.90 secconds



Test File: KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:38 PM

KC1598

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FMVSS 207/210

3RD ROW BENCH SEAT

PRODUCTION, B TEST

Sheet _____

Peak Loads

	LH TORSO	CTR TORSO	RH TORSO	LH LAP	CTR LAP	RH LAP	NONE	BENCH C.G.	NONE
Time (sec)	47.87	47.90	47.91	47.86	47.90	47.96	0.00	47.90	0.00
Load	4046	4098	4093	4005	4093	4457	0	2099	0
N	17997	18228	18206	17814	18206	19825	0	9336	0
% Overload	34.87 %	36.60 %	36.43 %	33.50 %	36.43 %	48.57 %	0.00 %	39.65 %	0.00 %

Simultaneous Overloads

Maximum Simultaneous Overload Occurred at 47.85 seconds

	LH TORSO	CTR TORSO	RH TORSO	LH LAP	CTR LAP	RH LAP	NONE	BENCH C.G.	NONE
Load	4033	4049	4057	4004	4033	4009	2	2049	2
N	17941	18009	18044	17811	17940	17830	10	9115	10
% Overload	34.45 %	34.96 %	35.22 %	33.47 %	34.44 %	33.62 %	0.00 %	36.34 %	0.00 %

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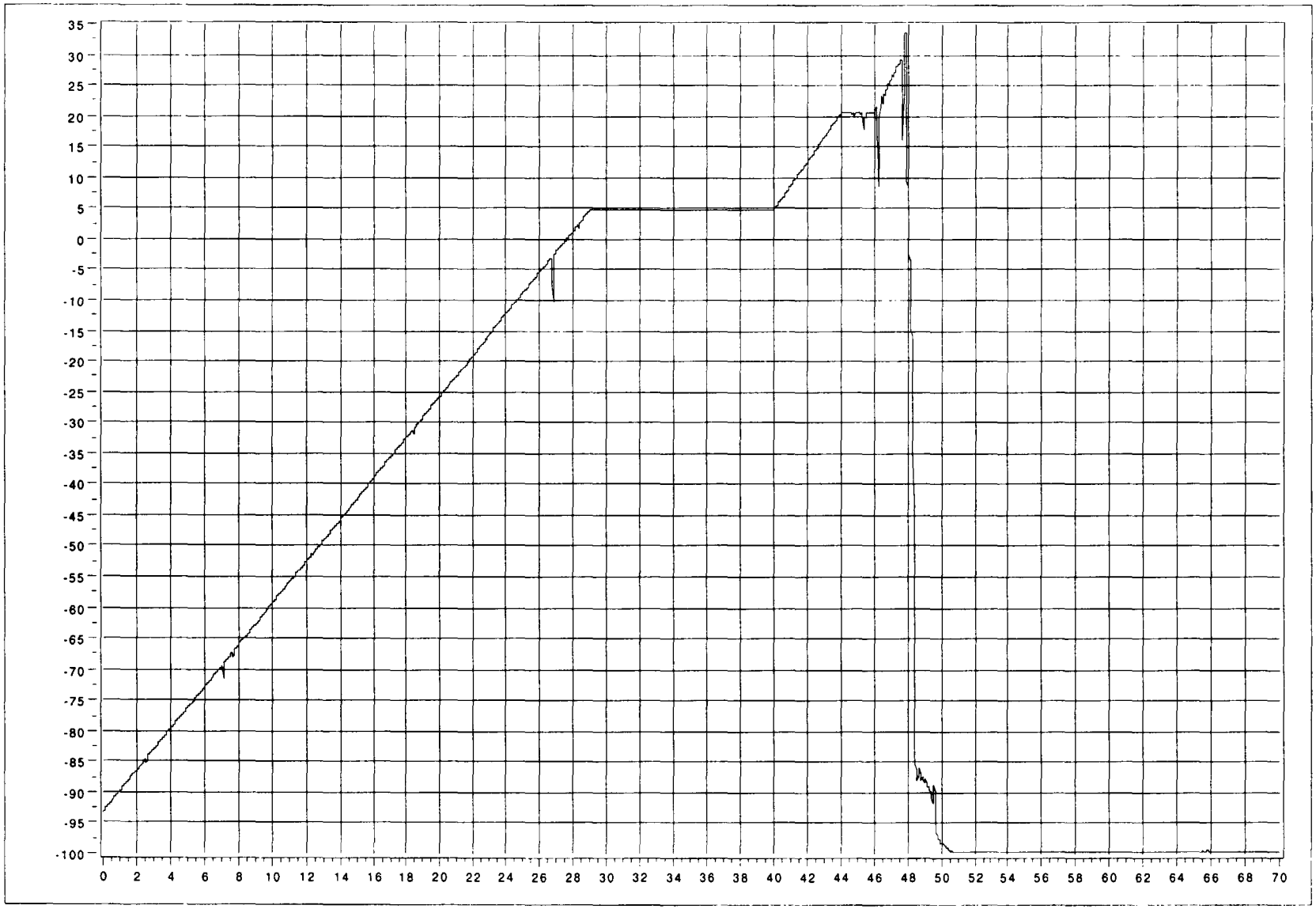
*** Based on BENCH Seat weight of 75.15 lbs

% Overload is relative to the required hold load

KC1598

Sheet _____

Simultaneous Minimum % Overload



Test File:KC1598 - 01

Software Revision: 3.20 - 03/21/2002

Maximum Simultaneous Overload of 33.47 at 47.85 seconds

Test Date: 2/14/03

Date Plotted: 2/14/03

Time Plotted: 2:38 PM