V1969

SAFETY COMPLIANCE TEST FOR

FMVSS 301-75R

FUEL SYSTEM INTEGRITY

1993 FORD ESCORT 2 DOOR COUPE

NHTSA No. CP0209

MOBILITY SYSTEMS AND EQUIPMENT COMPANY
9920 LA CIENEGA BOULEVARD, SUITE 708
INGLEWOOD, CALIFORNIA 90301

JULY 30, 1993

FINAL REPORT

Prepared Under Contract No. DTNH22-93-C-01007

For:

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
Office of Vehicle Safety Compliance
400 Seventh Street, S.W.
Washington, DC 20590

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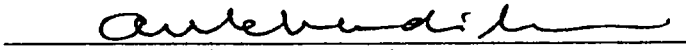
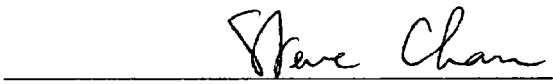
Approved by: 

Dr. Anil V. Khadilkar

Date: 30 July 1993

FINAL REPORT ACCEPTED BY:



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16. Abstract

Tests were conducted on the subject 1993 Ford Escort 2 Door Coupe in accordance with the specifications of the Office of Vehicle Safety Compliance Test Procedure TP-301-00, dated April 26, 1989, for the determination of FMVSS 301-75 Rear compliance.

Test failures identified were: None.

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SECTION 1

INTRODUCTION

This report presents information on tests conducted on a 1993 Ford Escort 2 Door Coupe, NHTSA No. CP0209, to determine compliance with the requirements of FMVSS 301-75 Rear impact testing. All tests were conducted in accordance with the National Highway Traffic Safety Administration (NHTSA) Office of Vehicle Safety Compliance (OVSC) Laboratory Procedure TP-301-00 dated April 26, 1989 and the corresponding Mobility Systems and Equipment Company (MSE) Test Procedure MSE-TP-301-75/R-01 dated March 19, 1993, which is approved by NHTSA officials. The tests were conducted under contract No. DTNH22-93-C-01007.

Section 2 of this report describes the test procedure and presents the summary data. Section 3 of this report presents all the test results. Section 5 presents all the pertinent photographs. Section 6 presents all the time history data plots. Section 7 represents instrumentation and calibration data.

No test failures related to FMVSS 301-75 Rear were identified for the tested 1993 Ford Escort 2 Door Coupe.

SECTION 2

TEST PROCEDURE AND SUMMARY DATA

The 1993 Ford Escort 2 Door Coupe, NHTSA No. CP0209, was subjected to FMVSS 301-75 Rear testing on July 15, 1993. The vehicle is shown in pretest condition in Figures 5-1 to 5-4. The manufacturer's certification label is shown in Figure 5-5 and the tire placard is shown in Figure 5-6.

The vehicle was inspected, measured, weighed, marked, photographed and tested in accordance with the procedure requirements. A partially instrumented part 572E Anthropomorphic Test Device (ATD) was positioned in the vehicle, in the driver position. ATD instrumentation consists of triaxial accelerometer mountings in the head, chest and pelvis and a six-axis neck transducer. Seven additional sensors were installed in the vehicle. The driver lap and shoulder belts were instrumented with load cells. A displacement transducer was installed to measure driver lap belt pullout. Primary and redundant X-axis accelerometers were placed at the approximate vehicle c.g. An angular rate sensor and an accelerometer were placed on the top of the driver seatback. A non-instrumented part 572B ATD was positioned in the front passenger position for ballast.

High speed cameras were set up as required in the test procedure. The camera positions for the FMVSS 301-75 Rear test are as shown in Figure 2-1. Actual locations are presented in Table 2-1. All high speed cameras were set to run at a minimum of 500 frames per second. The onboard camera was set to run at a minimum of 1000 frames per second. Actual camera speeds are also presented in Table 2-1.

The test was conducted with a moving barrier impacting the rear of the stationary test vehicle. The center of the moving barrier was set to impact the longitudinal centerline of the vehicle. The test vehicle was checked for fuel system leaks for a thirty minute period after the initial impact and for successive 7 minute periods afterwards at 90, 180, 270 and 360 degree rollover attitudes.

The velocity of the impact sled was 29.48 mph. The 1993 Ford Escort 2 Door Coupe, NHTSA No. CP0209 had no fuel system leaks. No test failures related to FMVSS 301-75 Rear were identified on the tested 1993 Ford Escort 2 Door Coupe.

TABLE 2-1

SUMMARY OF RESULTS

VEHICLE YEAR/MAKE/MODEL/BODY STYLE: 1993/Ford/Escort/2 Door Coupe

VEHICLE NHTSA No.: CP0209 **TEST MODE:** Rear Moving Barrier

TEST DATE: 07/15/93 **TIME:** 2:15 pm **TEMPERATURE:** 87° F

VEHICLE TEST WEIGHT: 2728 lb **IMPACT VELOCITY:** 29.48 mph

STATIC CRUSH: Left Side = 12.1 in

Right Side = 13.5 in

Centerline = 14.9 in

AVERAGE CRUSH: 13.5 in

VEHICLE REBOUND: N/A in (Frontal impacts only)

TYPE OF FRONT OCCUPANT RESTRAINT INSTALLED IN TEST VEHICLE:

Driver DSP: Automatic Shoulder Belt and Manual Lap Belt

Outboard Front Passenger DSP: Automatic Shoulder and Manual Lap Belts

VISIBLE ATD CONTACT POINTS:

Driver ATD: Top of head contacted rear seat seatback

Passenger ATD: N/A

VEHICLE DOOR OPENING INFORMATION:

Door	Opened	Jammed
Right Front	Yes	No
Left Front	Yes	No
Right Rear	N/A	N/A
Left Rear	N/A	N/A

LOSS OF WINDSHIELD RETENTION: N/A

PENETRATION OF WINDSHIELD ZONE TEMPLATE: N/A

STODDARD SOLVENT SPILLAGE FROM VEHICLE'S FUEL SYSTEM: No spillage

TABLE 2-2

CAMERA DATA

Camera Location	Coordinates (inches)			Angle (degrees)	Lens Size (mm)	Film Speed (fps)
	X	Y	Z			
1. Onboard	109	39	35	0/30	16	1000
2. Overhead	-24	0	236	-90/6	16	610
3. Left Side	30	-660	55	-2/3	28	560
4. Right Side #1	20	475	58	-1/2	13	600
5. Right Side #2	50	1200	125	-5/2	15-70 Zoom	24
6. Underbody #1	77	-2	-65	68/ 0	16	610
7. Underbody #2	122	-1	-66	59/0	16	N/D *
8. Underbody #3	152	-1	-67	75/ 0	16	N/D **

COORDINATE REFERENCE: X - Film plane to barrier face impact plane

Y - Film plane to monorail centerline

Z - Film plane to ground

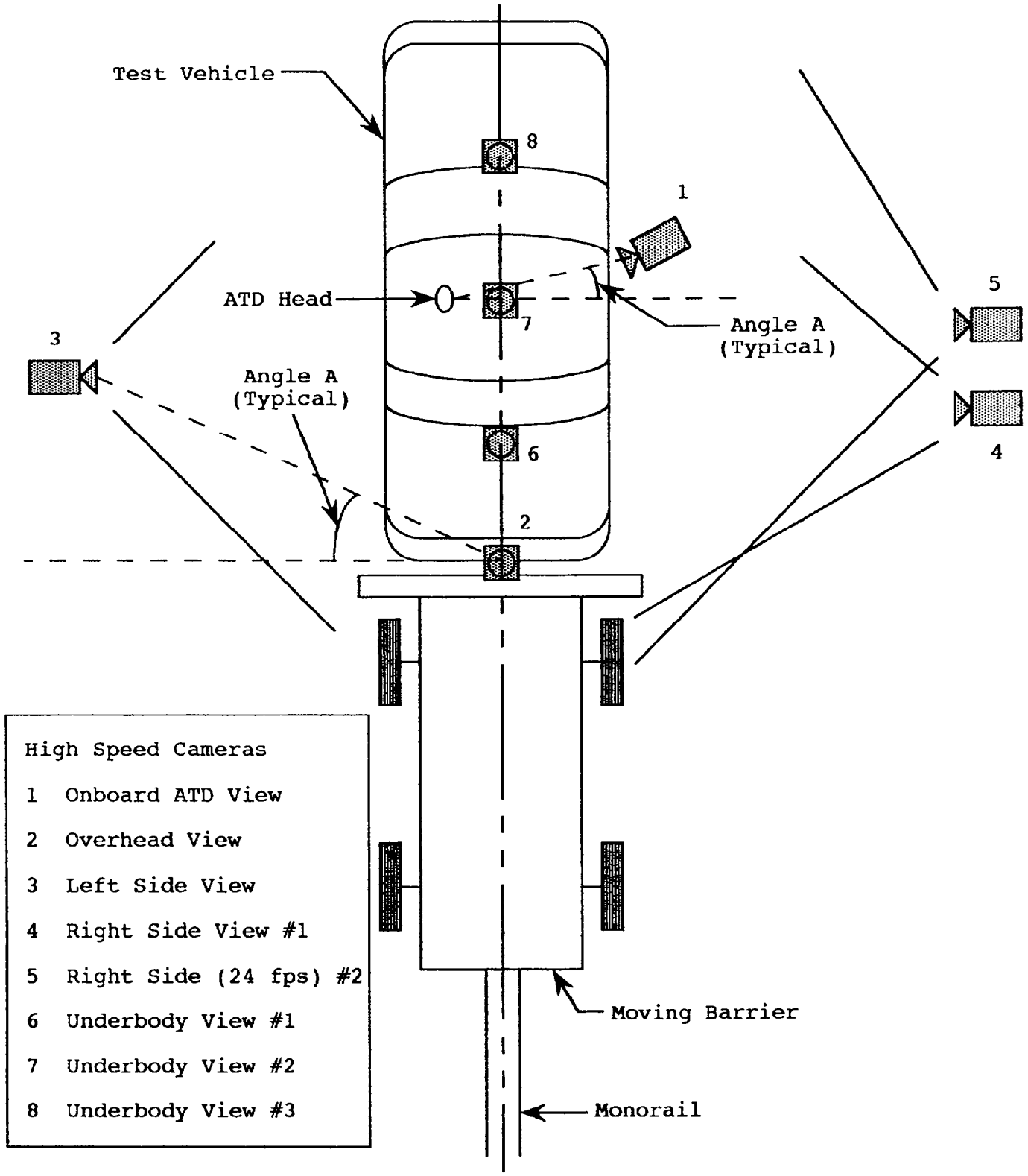
Angle - Degrees from horizontal plane / Angle A as shown in Figure 2-1

* Film speed could not be determined due to lack of timing marks.

** Film was damaged beyond repair during testing.

FIGURE 2-1

CAMERA POSITIONS



SECTION 3

COMPLIANCE TEST RESULTS

The results of the FMVSS 301-75 Rear compliance tests on the tested 1993 Ford Escort 2 Door Coupe, NHTSA No. CP0209, are presented in this section.

The test vehicle was inspected upon receipt. Vehicle pretest information, delivered weights and attitudes, test weights and attitudes, tire information and fuel system capacity were recorded and are presented in Table 3-1.

The velocity of the rear impact sled was 29.48 mph. Test velocity information and posttest crush details are given in Table 3-2. Posttest left side, front, right side and rear views of the test vehicle are given in Figures 5-7 to 5-10.

No solvent leaked from any part of the vehicle's fuel system during impact or for 30 minutes after the impact event. The vehicle was then placed on the static rollover machine and rotated to the 90, 180, 270 and 360 degree positions successively at the required time intervals. No fuel system leaks were detected at any of the rollover positions. The details of the rollover test sequence are presented in Table 3-3. Pretest and posttest views of the vehicle underbody are shown in Figures 5-11 to 5-13.

Upon impact the driver ATD moved rearward as the seatback gave way. The ATD's head contacted the rear seat seatback. The Head Injury Criteria (HIC) for the driver ATD was 67.8. The chest resultant (3 msec clip) was 12.8 g's. All driver ATD instrumentation results are presented in Table 3-4. Pretest measurements are shown in Tables 3-5 and 3-6. Pretest and posttest views of the Driver ATD position are shown in Figures 5-14 and 5-15. Figures 5-16 and 5-17 show the vehicle sensor locations.

No test failures related to FMVSS 301-75 Rear were identified for the tested 1993 Ford Escort 2 Door Coupe.

TABLE 3-1

TEST VEHICLE DATA

VEHICLE YEAR/MAKE/MODEL/BODY STYLE: 1993/Ford/Escort/2 Door Coupe

VEHICLE NHTSA No.: C P 0 2 0 9 ; VIN: 1 F A P P 1 0 J 4 P W 1 1 0 9 4 4

VEHICLE BODY COLOR: White ; MONTH AND YEAR OF MANUFACTURE: 04/92

ENGINE: 4 Cylinders; _____cu in; 1.9 Liters; _____cc
X Gas; ___ Diesel; ___ Turbocharged
PLACEMENT: ___ Longitudinal; X Transverse (Lateral)

TRANSMISSION: 5 Speed; X Manual; ___ Automatic; ___ Overdrive

FINAL DRIVE: X Front Wheel Drive; ___Rear Wheel Drive; ___Four Wheel Drive

DATE VEHICLE AVAILABLE FOR TESTING: 05/26/93

ODOMETER READING: 109 mi; OPTIONS: ___ A/C; X P/S; ___ P/Window;
___ Tilt Whl.; ___ Cruise Control

GVWR: 3430 lb GAWR Front: 1840 lb GAWR Rear: 1664 lb

DATA RECORD FROM VEHICLE'S TIRE PLACARD:

Location of Placard on Vehicle: Passenger Side B-Pillar
Recommended Cold Tire Pressure: 32 psi Front; 32 psi Rear
Tire Pressure (at maximum capacity): 32 psi Front; 32 psi Rear
Recommended Tire Size: 175/70R13 Recommended Load Range: N/A
Tires on Vehicle: 175/70R13 Load Range: 3 Plies
Tire Manufacturer: Michelin Type of Spare Tire: T115/70D14
Number of Occupants: 2 Front; 3 Rear; ___Third Seat; 5 TOTAL
Type of Front Seats: X Bucket; ___ Bench; ___ Split Bench
Type of Front Seat Back: ___ Fixed; X Adj. Lever; ___ Adj. Rotating Knob

Vehicle Maximum Capacity Loading: 830 lb
No. of Occupants x 150 lb: 750 lb
Cargo Capacity (Max - Occupants): 80 lb *

TEST VEHICLE DELIVERED WEIGHT WITH MAXIMUM FLUIDS:

Right Front:	668 lb			
Left Front:	746 lb	Total Front:	1414 lb	(61% of Total)
Right Rear:	487 lb			
Left Rear:	423 lb	Total Rear:	910 lb	(39% of Total)
		Total Weight:	2324 lb	

CALCULATION OF TEST VEHICLE TARGET WEIGHT:

Total Test Vehicle Delivered Weight With Maximum Fluids:	2324 lb
Maximum Cargo Carrying Capacity of Test Vehicle:	80 lb *
Weight of Two Part 572 ATD's (2 * 164 lb):	328 lb
TEST VEHICLE TARGET WEIGHT:	2732 lb

* 300 lb for light trucks and MPV's

TABLE 3-1 (Cont.)

TEST VEHICLE DATA

ACTUAL WEIGHT OF TEST VEHICLE WITH 2 ATD's AND CARGO:

Right Front: 786 lb
Left Front: 830 lb — Total Front: 1616 lb (59% of Total)
Right Rear: 598 lb
Left Rear: 514 lb — Total Rear: 1112 lb (41% of Total)

Total Weight: 2728 lb (includes 0 lb of sandbag ballast secured in the cargo / luggage area)

VEHICLE COMPONENTS REMOVED TO MEET TARGET WEIGHT:

1. N/A

2. N/A

TEST VEHICLE ATTITUDE:

As Delivered -	Right Front:	25.2 in	Ready for Test -	Right Front:	24.1 in
	Left Front:	25.2 in		Left Front:	24.2 in
	Right Rear:	24.7 in		Right Rear:	23.3 in
	Left Rear:	24.7 in		Left Rear:	23.8 in

TEST VEHICLE DIMENSIONS:

Total Vehicle Length: 171.3 in

Wheelbase: 97.5 in

C. G. is 39.7 in rearward of front axle centerline.

FUEL SYSTEM DATA:

Fuel System Capacity Listed in Owner's Manual: 11.9 gallons
Usable Capacity Figure Furnished by COTR: N/A gallons
Test Volume Range (92% to 94% of Usable Capacity)
10.9 gallons to 11.2 gallons
ACTUAL TEST VOLUME: 11.0 gallons (with entire fuel system filled)

Test Fluid Type: Stoddard Solvent
Test Fluid Specific Gravity: 0.764
Test Fluid Kinematic Viscocity: as per ASTM Standard D484-71
Test Fluid Color: Red (Red is preferred)

Type of Vehicle Fuel Pump: Electric
Electric Fuel Pump Operation with Ignition ON and Engine OFF:
Electric fuel pump does not operate with ignition on and engine off

Details of Fuel System: Fuel tank is located forward of the rear axle, symmetric about the vehicle longitudinal centerline. The filler neck is aft of the left rear wheel. The filler hose runs down, then angles inboard and forward to the left rear corner of the fuel tank.

TABLE 3-2

POST IMPACT DATA

VEHICLE YEAR/MAKE/MODEL/BODY STYLE: 1993/Ford/Escort/2 Door Coupe

VEHICLE NHTSA No.: CP0209 TEST MODE: Rear Moving Barrier

TEST DATE: 07/15/93 TIME: 2:15 pm TEMPERATURE: 87° F

REQUIRED IMPACT VELOCITY RANGE: 28.9 to 29.9 mph

ACTUAL IMPACT VELOCITY: (speed traps located within 5 feet of impact plane)

Trap No. 1 = N/D Trap No. 2 = 29.48 mph

Average Impact Speed = 29.48 mph

VEHICLE STATIC CRUSH:

Location	Pretest (in)	Posttest (in)	Crush(in)
Left Side	168.3	156.2	12.1
Right Side	168.4	154.9	13.5
Centerline	171.3	156.4	14.9
29.0" Left of C.L.	168.3	156.2	12.1
17.4" Left of C.L.	170.8	156.3	14.5
5.8" Left of C.L.	171.3	156.2	15.1
5.8" Right of C.L.	171.3	156.1	15.2
17.4" Right of C.L.	170.8	155.9	14.9
29.0" Right of C.L.	168.4	154.9	13.5

Collision Deformation Classification (CDC) Code: B

Midpoint of Damage: Vehicle Longitudinal Centerline

Length of Damaged Area: 58.0 in

Vehicle Wheelbase: 97.5 in

TABLE No. 3-3

FMVSS No. 301-75 STATIC ROLLOVER DATA

VEHICLE YEAR/MAKE/MODEL/BODY STYLE: 1993/Ford/Escort/2 Door Coupe

VEH. NHTSA NO.: CP0209 TEST DATE: 07/15/93

USABLE CAPACITY OF VEHICLE'S FUEL TANK: 11.9 Gallons (furnished by Mfr.)

AMOUNT OF STODDARD SOLVENT ADDED TO THE VEHICLE'S FUEL TANK:

11.0 Gallons, which is 92.4% of the stated usable capacity

SOLVENT SPILLAGE MEASUREMENT AFTER 30 MPH MOVING BARRIER IMPACT TEST:

	Actual	Max. Allowed
From impact until vehicle motion ceases	0 oz.	1 oz.
For 5 min. period after vehicle motion ceases	0 oz.	5 oz.
For next 25 min. at barrier face	0 oz.	1 oz./min.

SOLVENT SPILLAGE DETAILS: None

STATIC ROLLOVER MACHINE ROTATION TIME INFORMATION: (Spec. range = 1 to 3 min)

Time reqd. for machine to rotate 90°	1 minutes,	20 seconds
FMVSS 301-75 position hold time	5 minutes,	00 seconds
Total	6 minutes,	20 seconds
Next whole minute interval	7 minutes	

VEHICLE STATIC ROLLOVER DATA:

	1st 5 Min.	6th min.	7th min.	8th min.
Max allowable solvent spillage	5 oz.	1 oz.	1 oz.	1 oz.
0° to 90° (filler cap down)	0 oz.	0 oz.	0 oz.	N/A
90° to 180°	0 oz.	0 oz.	0 oz.	N/A
180° to 270°	0 oz.	0 oz.	0 oz.	N/A
270° to 360°	0 oz.	0 oz.	0 oz.	N/A

SOLVENT SPILLAGE LOCATIONS: None

TABLE No. 3-3 (Cont.)

FMVSS No. 301-75 STATIC ROLLOVER DATA

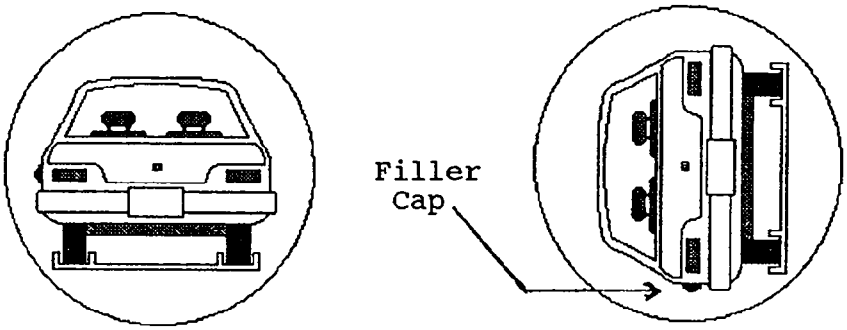
Test Phase A: 0 to 90 degrees

90° Fixture Rotation Time: 1 minute 20 seconds
(Range = 1 to 3 minutes)

Position Hold Time: 5 minutes 0 seconds

Total: 6 minutes 20 seconds

Next Whole Minute Interval: 7 minutes



0 Degrees 90 Degrees

Actual Test Vehicle Fuel Spillage:

First 5 minutes from start of rotation: 0 oz.
(5 oz. allowed)

6th minute: 0 oz.
(1 oz. allowed)

7th minute: 0 oz.
(1 oz. allowed)

Details of Fuel Spillage Locations: No spillage

TABLE No. 3-3 (Cont.)

FMVSS No. 301-75 STATIC ROLLOVER DATA

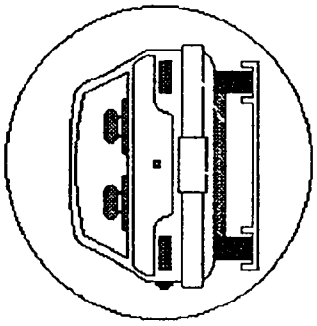
Test Phase B: 90 to 180 degrees

90° Fixture Rotation Time: 1 minute 20 seconds
(Range = 1 to 3 minutes)

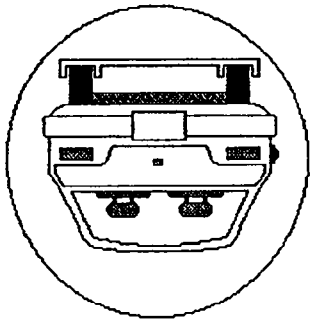
Position Hold Time: 5 minutes 0 seconds

Total: 6 minutes 20 seconds

Next Whole Minute Interval: 7 minutes



90 Degrees



180 Degrees

Actual Test Vehicle Fuel Spillage:

First 5 minutes from start of rotation: 0 oz.
(5 oz. allowed)

6th minute: 0 oz.
(1 oz. allowed)

7th minute: 0 oz.
(1 oz. allowed)

Details of Fuel Spillage Locations: No spillage

TABLE No. 3-3 (Cont.)

FMVSS No. 301-75 STATIC ROLLOVER DATA

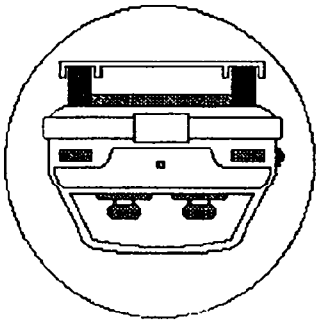
Test Phase C: 180 to 270 degrees

90° Fixture Rotation Time: 1 minute 20 seconds
(Range = 1 to 3 minutes)

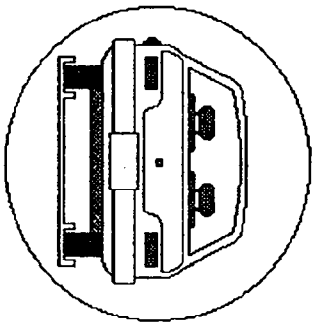
Position Hold Time: 5 minutes 0 seconds

Total: 6 minutes 20 seconds

Next Whole Minute Interval: 7 minutes



180 Degrees



270 Degrees

Actual Test Vehicle Fuel Spillage:

First 5 minutes from start of rotation: 0 oz.
(5 oz. allowed)

6th minute: 0 oz.
(1 oz. allowed)

7th minute: 0 oz.
(1 oz. allowed)

Details of Fuel Spillage Locations: No spillage

TABLE No. 3-3 (Cont.)

FMVSS No. 301-75 STATIC ROLLOVER DATA

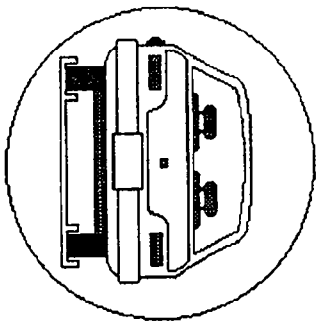
Test Phase D: 270 to 360 degrees

90° Fixture Rotation Time: 1 minute 20 seconds
(Range = 1 to 3 minutes)

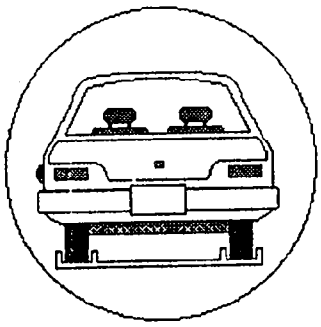
Position Hold Time: 5 minutes 0 seconds

Total: 6 minutes 20 seconds

Next Whole Minute Interval: 7 minutes



270 Degrees



360 Degrees

Actual Test Vehicle Fuel Spillage:

First 5 minutes from start of rotation: 0 oz.
(5 oz. allowed)

6th minute: 0 oz.
(1 oz. allowed)

7th minute: 0 oz.
(1 oz. allowed)

Details of Fuel Spillage Locations: No spillage

Recorded By: Brian O'Keefe Date: 07/16/93

Approved By: [signature] Date: 07-30-93

TABLE No. 3-4
FMVSS No. 208 OCCUPANT CRASH PROTECTION DATA SHEET

VEH. YEAR'MAKE/MODEL/BODY STYLE: 1993/Ford/Escort/2 Door Coupe

VEH. NHTSA NO.: CP0209 TEST DATE: 07/15/93

MAXIMUM ACCELERATION VALUES (g):	DRIVER ATD No. 339	PASSENGER ATD No. N/A
Head X	22.0	N/A
Head Y	-4.3	N/A
Head Z	15.5	N/A
HEAD RESULTANT	25.7	N/A
Chest X	13.1	N/A
Chest Y	4.6	N/A
Chest Z	7.3	N/A
CHEST RESULTANT (3msec clip)	12.8	N/A
TIME INTERVAL (msec)	79.1 to 82.1	N/A
Pelvis X	22.7	N/A
Pelvis Y	4.1	N/A
Pelvis Z	8.2	N/A
PELVIS RESULTANT	23.1	N/A

6 AXIS NECK TRANSDUCER VALUES:

Neck X - Load (lbs)	47.4	N/A
Neck Y - Load (lbs)	37.2	N/A
Neck Z - Load (lbs)	222.5	N/A
NECK LOAD RESULTANT	227.7	N/A
Neck X - Moment (in-lbs)	-74.0	N/A
Neck Y - Moment (in-lbs)	-260.5	N/A
Neck Z - Moment (in-lbs)	74.8	N/A
NECK MOMENT RESULTANT	269.0	N/A

HEAD INJURY CRITERIA (HIC) VALUES:

HIC	67.8	N/A
t^1 (msec)	148.5	N/A
t^2 (msec)	184.5	N/A
Avg. Acceleration t^1 to t^2 (g)	20.4	N/A

MAXIMUM SEAT BELT FORCES:

Lap Belt (lbs)	90.1	N/A
Shoulder Belt (lbs)	28.2	N/A

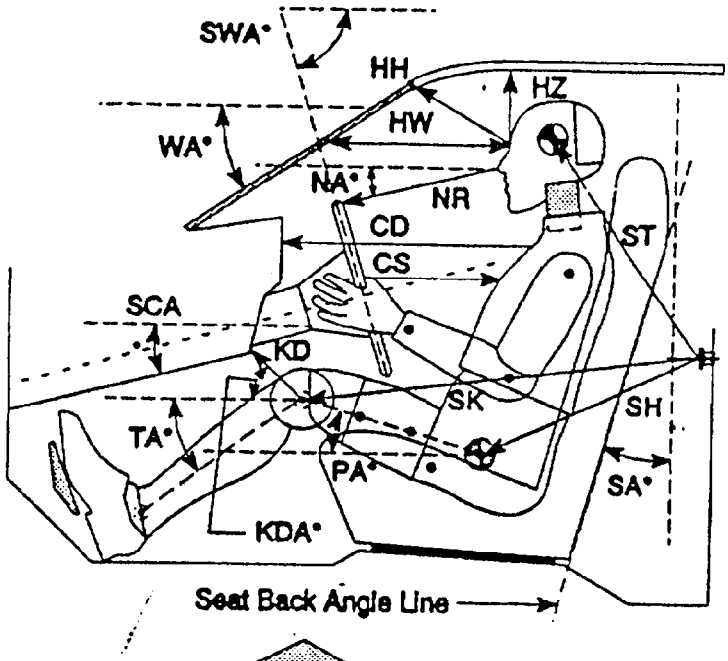
MAXIMUM SEAT BELT WEBBING SPOOLOUT (in):

Lap Belt	2.6	N/A

TABLE No. 3-5
TEST ATD POSITIONING DATA

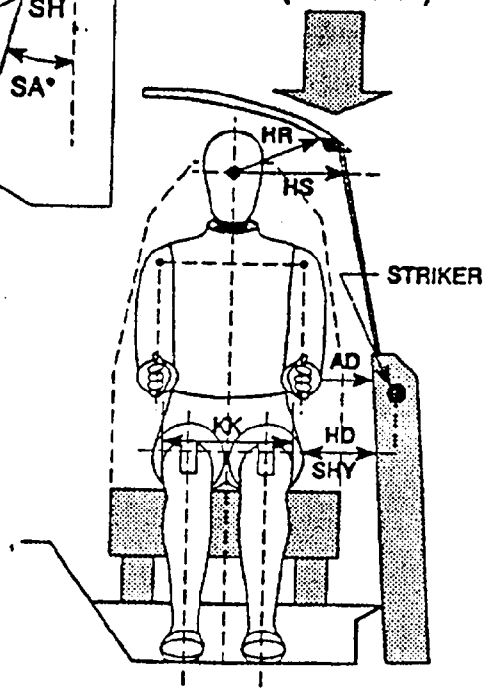
Measurement	Driver (Serial No. 339)		Passenger (Serial No. N/A)	
	Length (in)	Angle (Degrees)	Length (in)	Angle (Degrees)
WA	---	32	---	---
SWA	---	65	---	---
SCA	---	31	---	---
SA	---	16	---	N/A
HZ	7.4	90	N/A	90
HH	12.2	---	N/A	---
HW	20.1	0	N/A	0
HR	7.0	---	N/A	---
NR	13.7	-11	---	---
CD	20.4	---	N/A	---
CS	12.0	0	---	---
RA	6.9	0	---	---
KDL	7.4	31	N/A	---
KDR	7.2	---	N/A	N/A
PA	---	23	---	N/A
TA	---	-43	---	N/A
KK	11.0	---	N/A	---
ST	24.4	54	N/A	N/A
SK	32.5	0	N/A	N/A
SH	17.7	-18	N/A	N/A
SHY	10.1	0	N/A	0
HS	12.4	0	N/A	0
HD	7.2	0	N/A	0
AD	4.0	0	N/A	0

TABLE No. 3-5 (Cont.)
TEST ATD POSITIONING DATA



CD - Chest to Dash
CS - Steering Wheel to Chest
HH - Head to Header
HW - Head to Windshield
HZ - Head to Roof
KDA- Knee to Dash Angle
KDL- Left Knee to Dash
KDR- Right Knee to Dash
NA - Nose to Rim Angle
NR - Nose to Rim
PA - Pelvic Angle
RA - Rim to Abdomen
SA - Seat Back Angle
SCA- Steering Column Angle
SH - Striker to H-Point
SK - Striker to Knee
ST - Striker to Head
SWA- Steering Wheel Angle
TA - Tibial Angle
WA - Windshield Angle

AD - Arm to Door
HD - H-Point to Door
HR - Head to Side Header
HS - Head to Side Window
KK - Knee to Knee
SHY- Striker to H-Point (Y Direction)



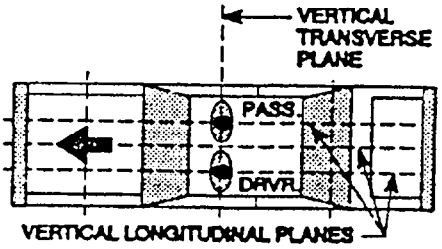
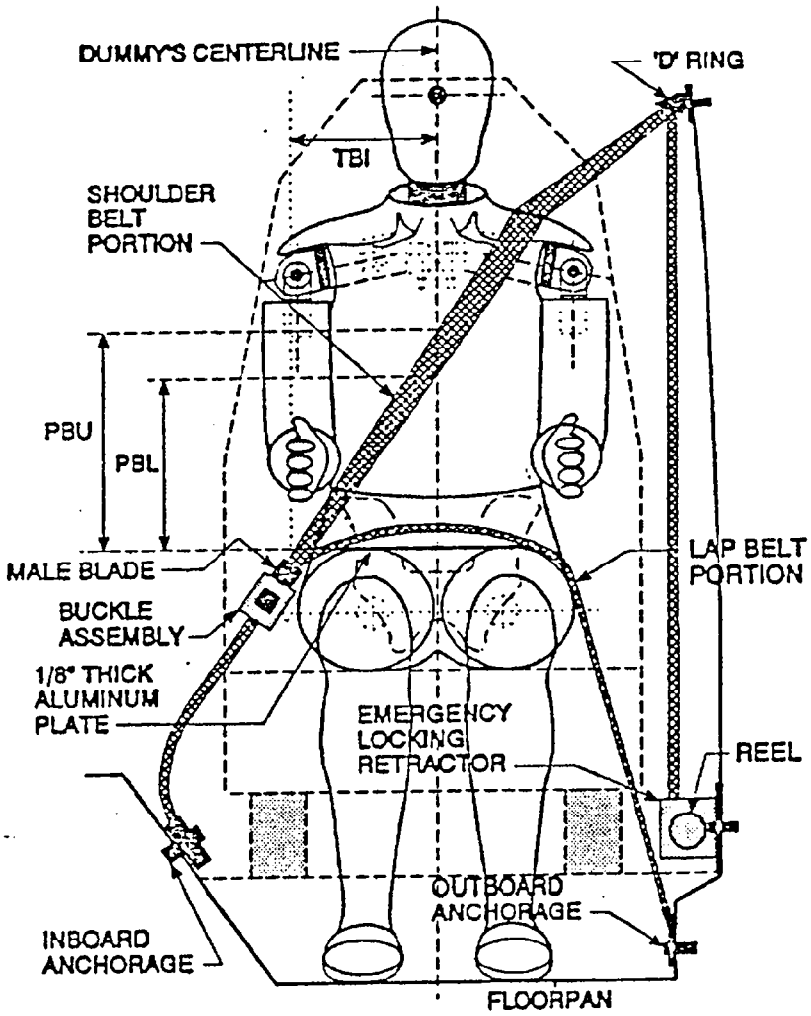


TABLE No. 3-6
SEAT BELT POSITIONING DATA



Measurement	Driver ATD	Passenger ATD
PBU - Top Surface of alum. plate to belt upper edge (in)	14.0	N/A
PBL - Top Surface of alum. plate to belt lower edge (in)	11.0	N/A
TBI - Vertical Centerline of ATD to belt intersection (in)	N/A	N/A
Lap Belt Tension (lbs)	N/D	N/A
Shoulder Belt Tension (lbs)	N/D	N/A

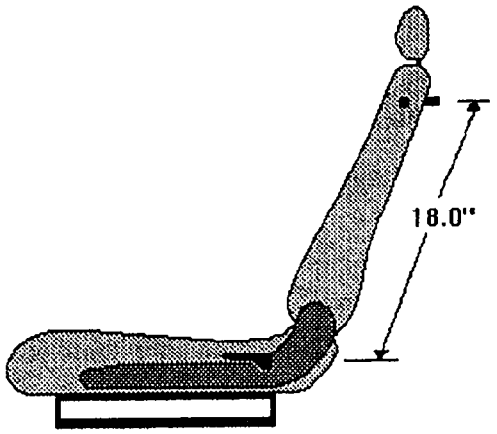
TABLE No. 3-7
VEHICLE TRANSDUCER LOCATION AND DATA SUMMARY

No.	Description	Location			Maximum Value *			
		X	Y	Z	-X	msec	+X	msec
1	Vehicle c.g. Primary	98	0	13	2.2	127.9	18.0	3.8
2	Vehicle c.g. Secondary	98	0	13	2.1	91.9	18.5	3.7
3	Top of driver seat Accelerometer	77	-5	32	48.3	86.5	49.1	66.4
4	Top of driver seat Rate Sensor	77	-5	32	0.7	275.3	13.5	60.4

REFERENCE: X - Rear bumper trailing edge
Y - Vehicle centerline (Right Pos., Left Neg.)
Z - Ground level

All dimensions in inches

* g's for accelerometers, radians per second for rate sensor



Rate sensor mounted 18.0 inches above seatback pivot point, on inboard edge. Seatback accel 18.0 inches above pivot point on inboard edge.

SECTION 4

LABORATORY NOTICE OF TEST FAILURE TO OVSC
(Applies only in case of failure)

FMVSS NO.: 301(R) TEST DATE: _____

LABORATORY: MOBILITY SYSTEMS AND EQUIPMENT CO.

CONTRACT NO.: DTNH22-93-C-01007 DELV. ORDER NO.: _____

LABORATORY PROJECT ENGINEER'S NAME: _____

TEST SPECIMEN DESCRIPTION: _____

VEHICLE NHTSA NO.: _____ VIN: _____

MFR.: _____

TEST FAILURE DESCRIPTION: _____

N/A

FMVSS REQUIREMENT, PARAGRAPH S : _____

NOTIFICATION TO NHTSA (COTR): _____

DATE: _____; BY: _____

REMARKS: No Failure - Data Sheet Not Applicable

SECTION 5

PHOTOGRAPHS

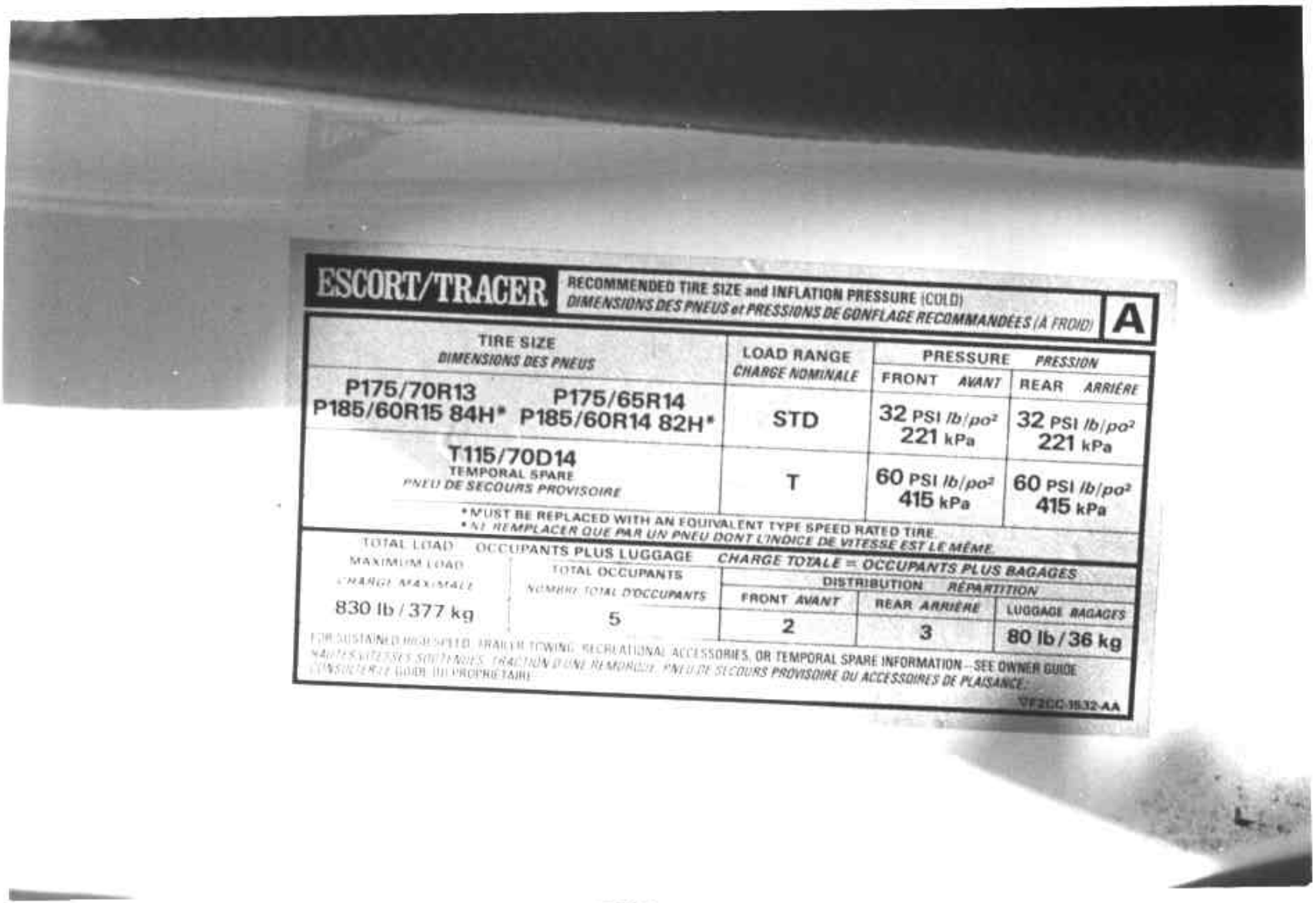
FIGURE 5-1 PRETEST LEFT SIDE VIEW

FIGURE 5-2 PRETEST FRONT VIEW

FIGURE 5-3 PRETEST RIGHT SIDE VIEW

FIGURE 5-4 PRETEST REAR VIEW

FIGURE 5-5 MANUFACTURER'S CERTIFICATION LABEL



ESCORT/TRACER — RECOMMENDED TIRE SIZE and INFLATION PRESSURE (COLD) / *DIMENSIONS DES PNEUS et PRESSIONS DE GONFLAGE RECOMMANDÉES (À FROID)* — **A**

TIRE SIZE / *DIMENSIONS DES PNEUS*	LOAD RANGE / *CHARGE NOMINALE*	PRESSURE / *PRESSION* FRONT *AVANT*	PRESSURE / *PRESSION* REAR *ARRIÈRE*
P175/70R13 P175/65R14 P185/60R15 84H* P185/60R14 82H*	STD	32 PSI *lb/po²* 221 kPa	32 PSI *lb/po²* 221 kPa
T115/70D14 TEMPORAL SPARE / *PNEU DE SECOURS PROVISOIRE*	T	60 PSI *lb/po²* 415 kPa	60 PSI *lb/po²* 415 kPa

* MUST BE REPLACED WITH AN EQUIVALENT TYPE SPEED RATED TIRE.
* *NE REMPLACER QUE PAR UN PNEU DONT L'INDICE DE VITESSE EST LE MÊME.*

TOTAL LOAD OCCUPANTS PLUS LUGGAGE — *CHARGE TOTALE = OCCUPANTS PLUS BAGAGES*

MAXIMUM LOAD / *CHARGE MAXIMALE*	TOTAL OCCUPANTS / *NOMBRE TOTAL D'OCCUPANTS*	DISTRIBUTION / *RÉPARTITION* FRONT *AVANT*	REAR *ARRIÈRE*	LUGGAGE *BAGAGES*
830 lb / 377 kg	5	2	3	80 lb / 36 kg

FOR SUSTAINED HIGH-SPEED TRAILER TOWING, RECREATIONAL ACCESSORIES, OR TEMPORAL SPARE INFORMATION – SEE OWNER GUIDE
HAUTES VITESSES SOUTENUES, TRACTION D'UNE REMORQUE, PNEU DE SECOURS PROVISOIRE OU ACCESSOIRES DE PLAISANCE : CONSULTEZ LE GUIDE DU PROPRIÉTAIRE.

'92 2CC-1532-AA

FIGURE 5-6 TIRE PLACARD

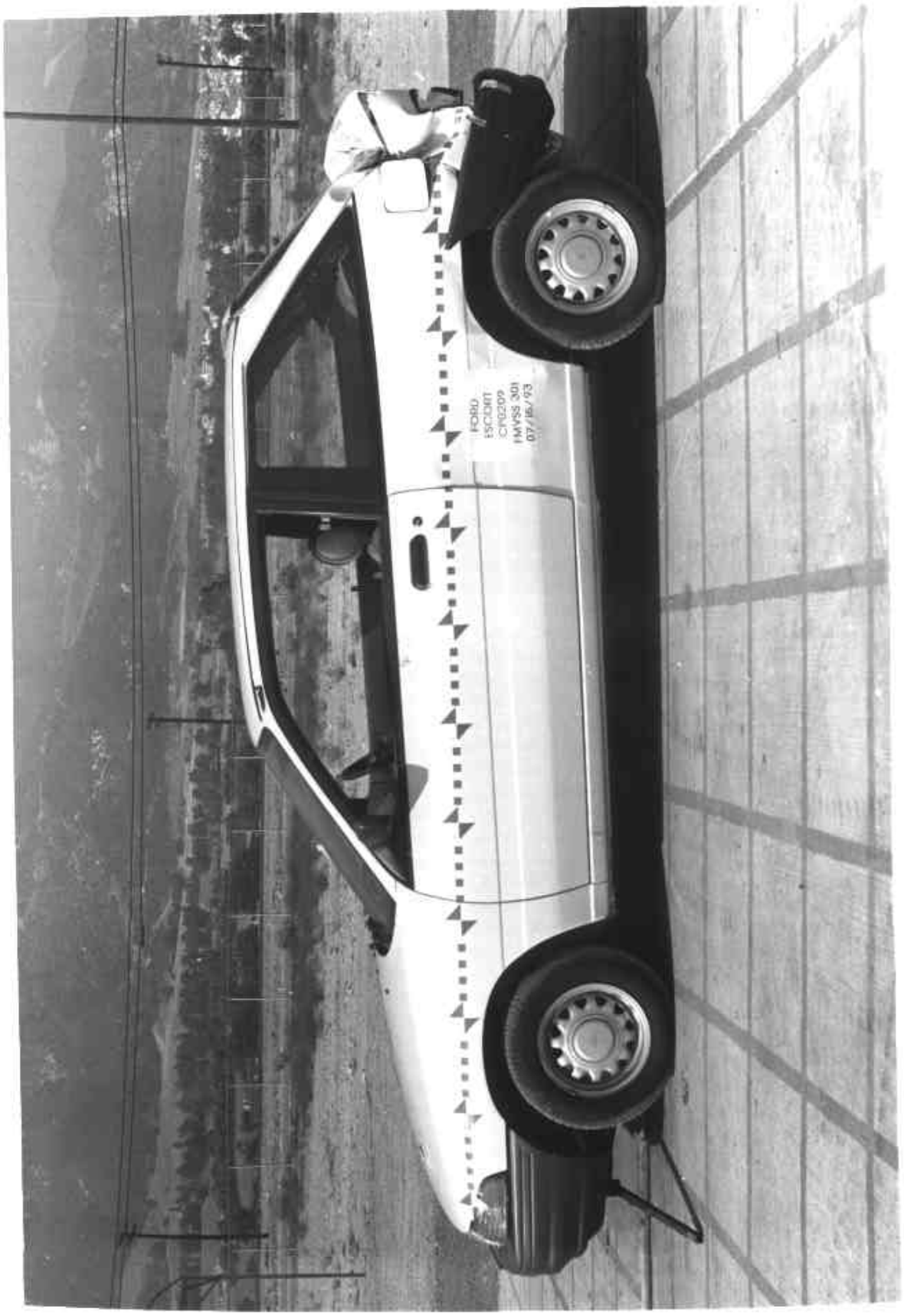


FIGURE 5-7 POSTTEST LEFT SIDE VIEW

FIGURE 5-8 POSTTEST FRONT VIEW

FIGURE 5-9 POSTTEST RIGHT SIDE VIEW

FIGURE 5-10 POSTTEST REAR VIEW

FIGURE 5-11 PRETEST FUEL TANK CLOSEUP VIEW

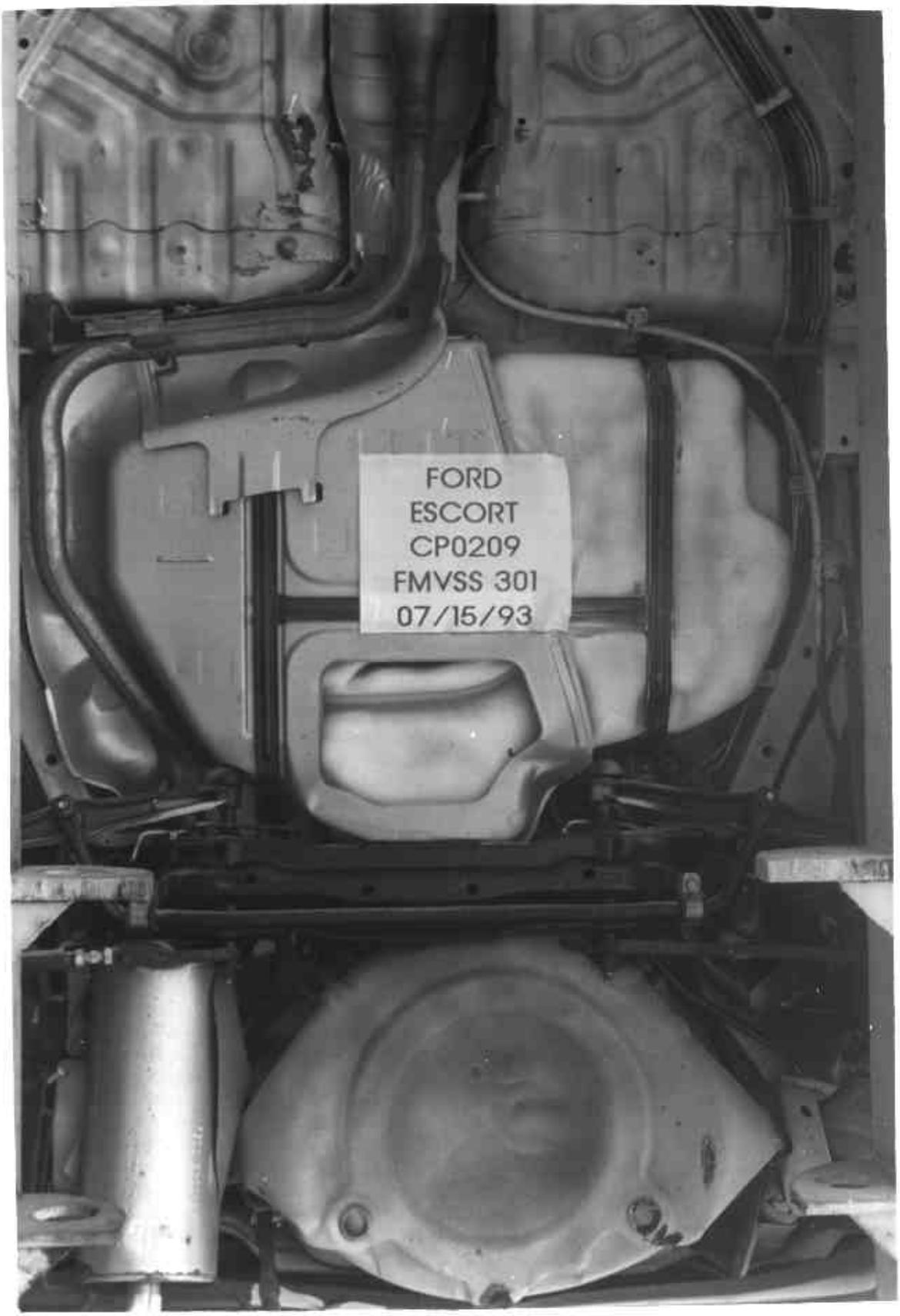


FIGURE 5-12 POSTTEST FUEL TANK CLOSEUP VIEW

FIGURE 5-13 POSTTEST UNDERBODY VIEW

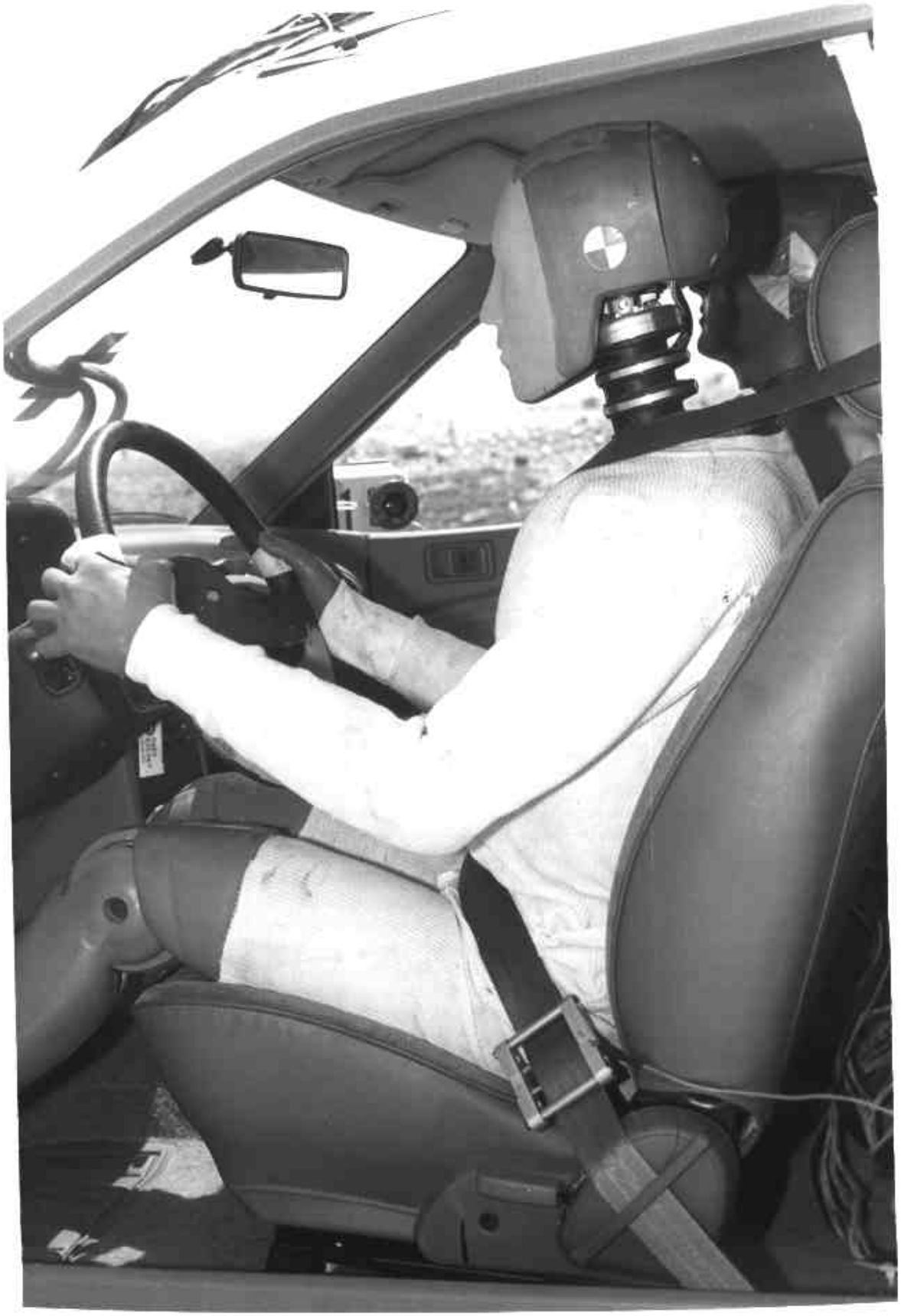


FIGURE 5-14 PRETEST DRIVER ATD POSITION

FIGURE 5-15 POSTTEST DRIVER ATD POSITION

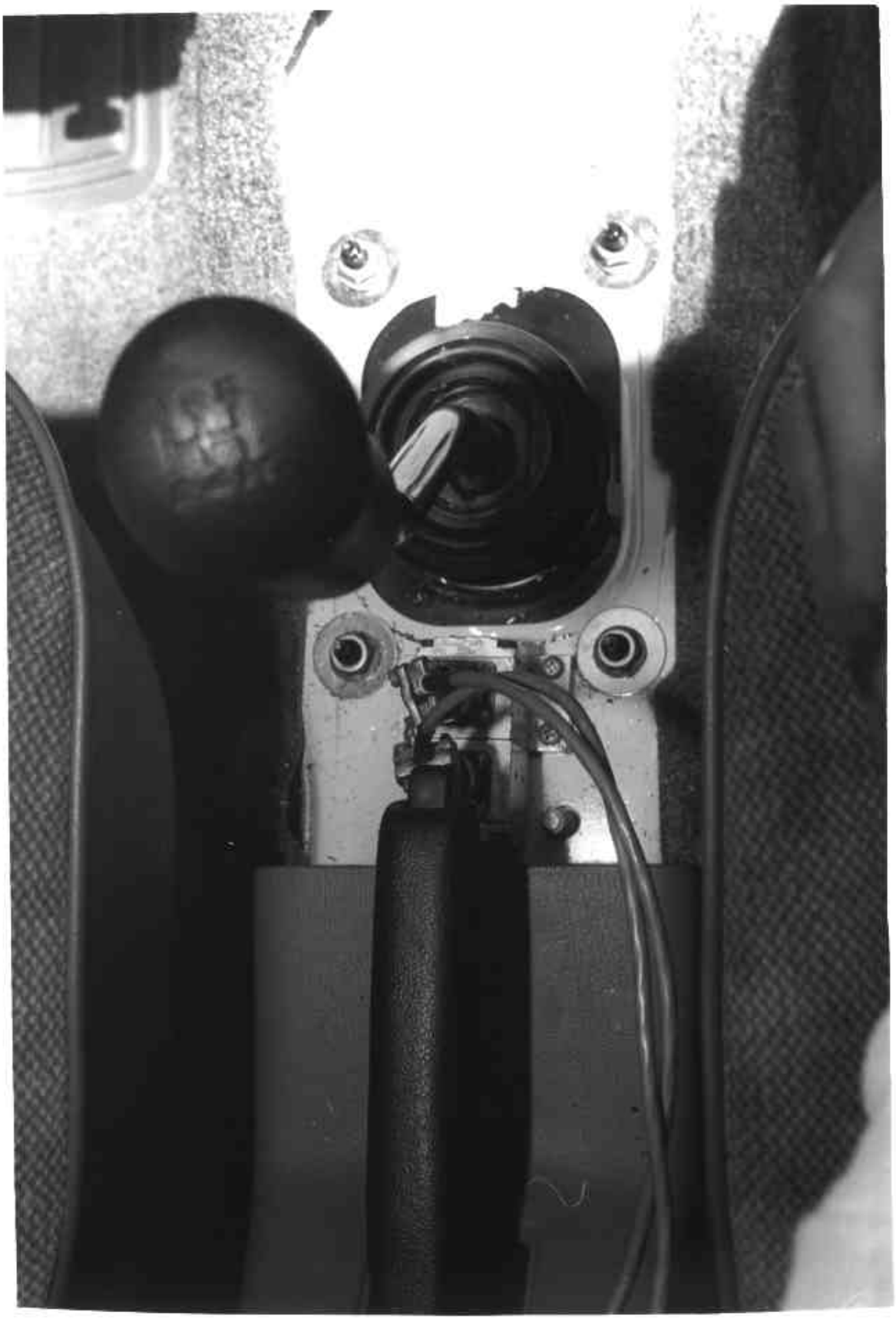
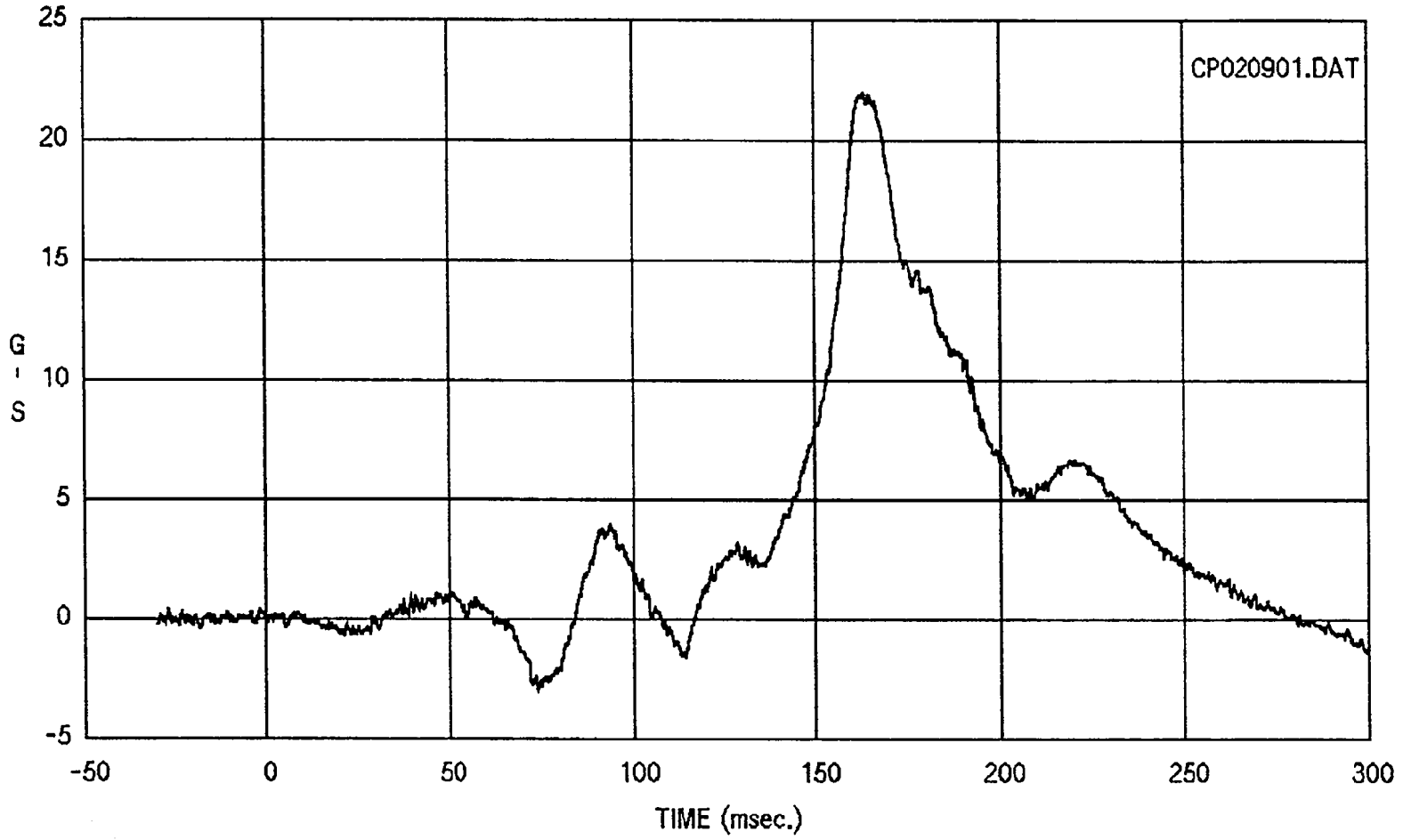


FIGURE 5-16 VEHICLE ACCELEROMETERS

FIGURE 5-17 SEAT MOUNTED ACCELEROMETER AND MHD SENSOR

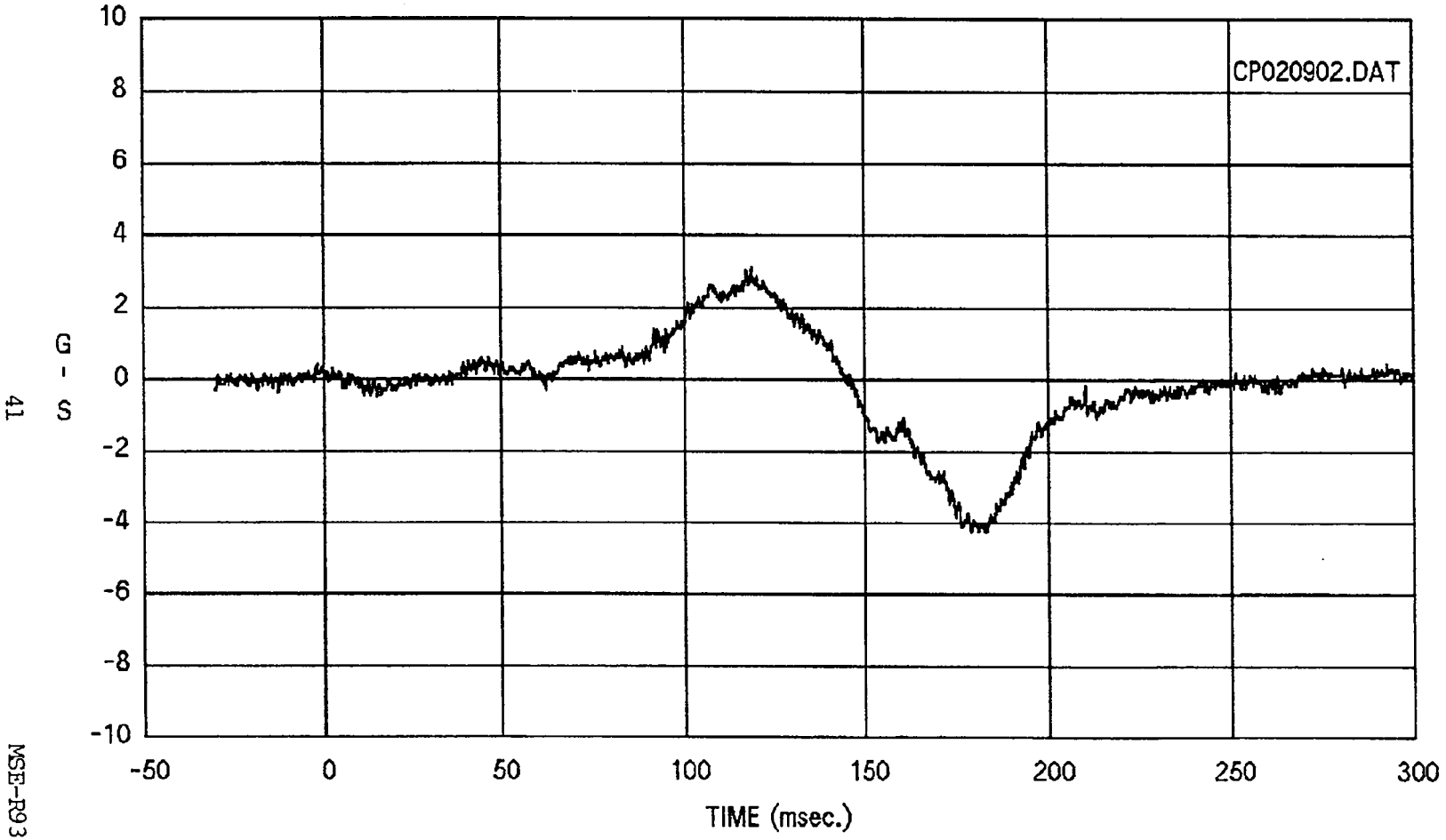
SECTION 6

TIME HISTORY DATA PLOTS



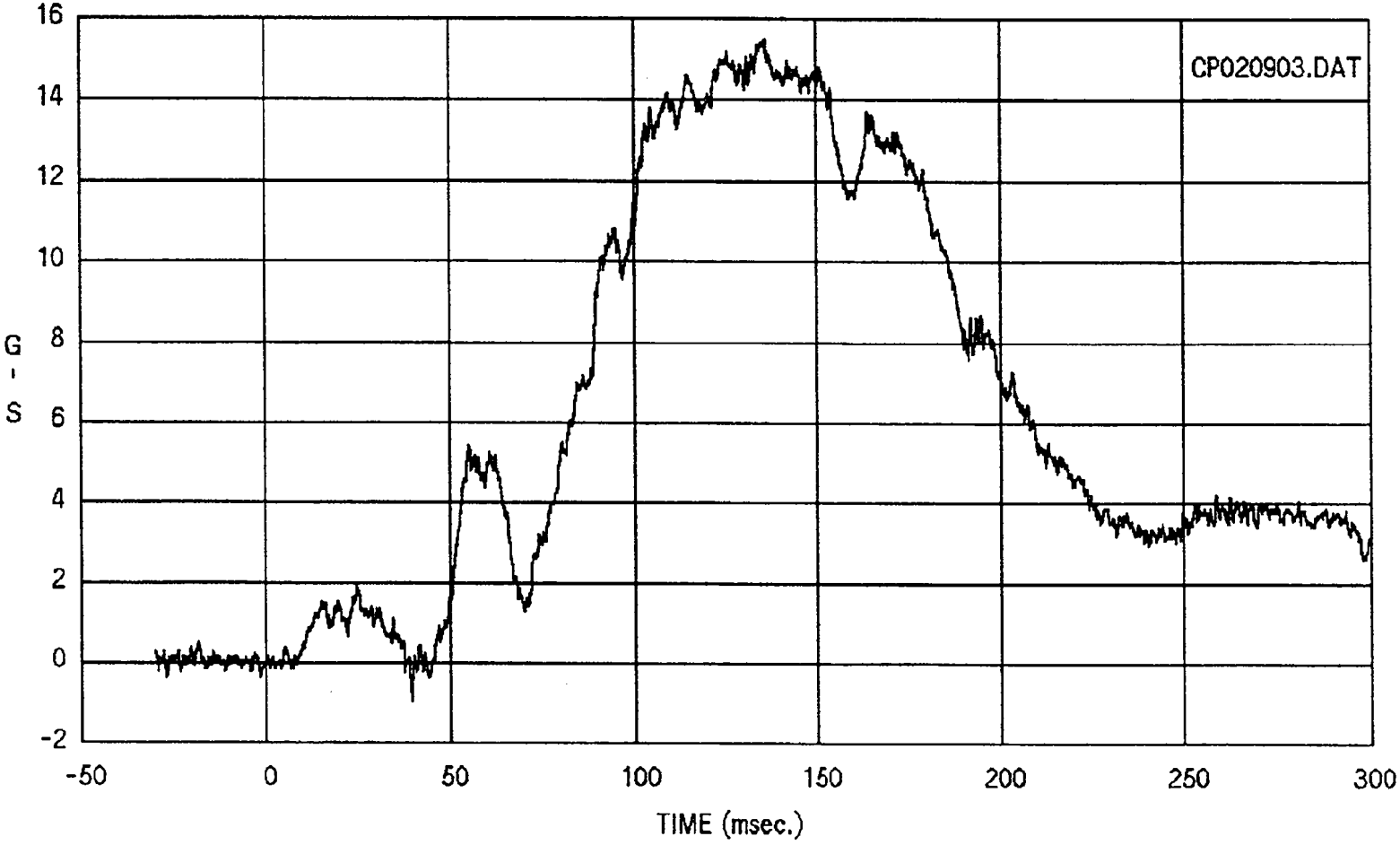
Curve: Driver head acceleration -- X axis Filter: SAE CLASS 1000 Max = 22.022 Min = -2.9891

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



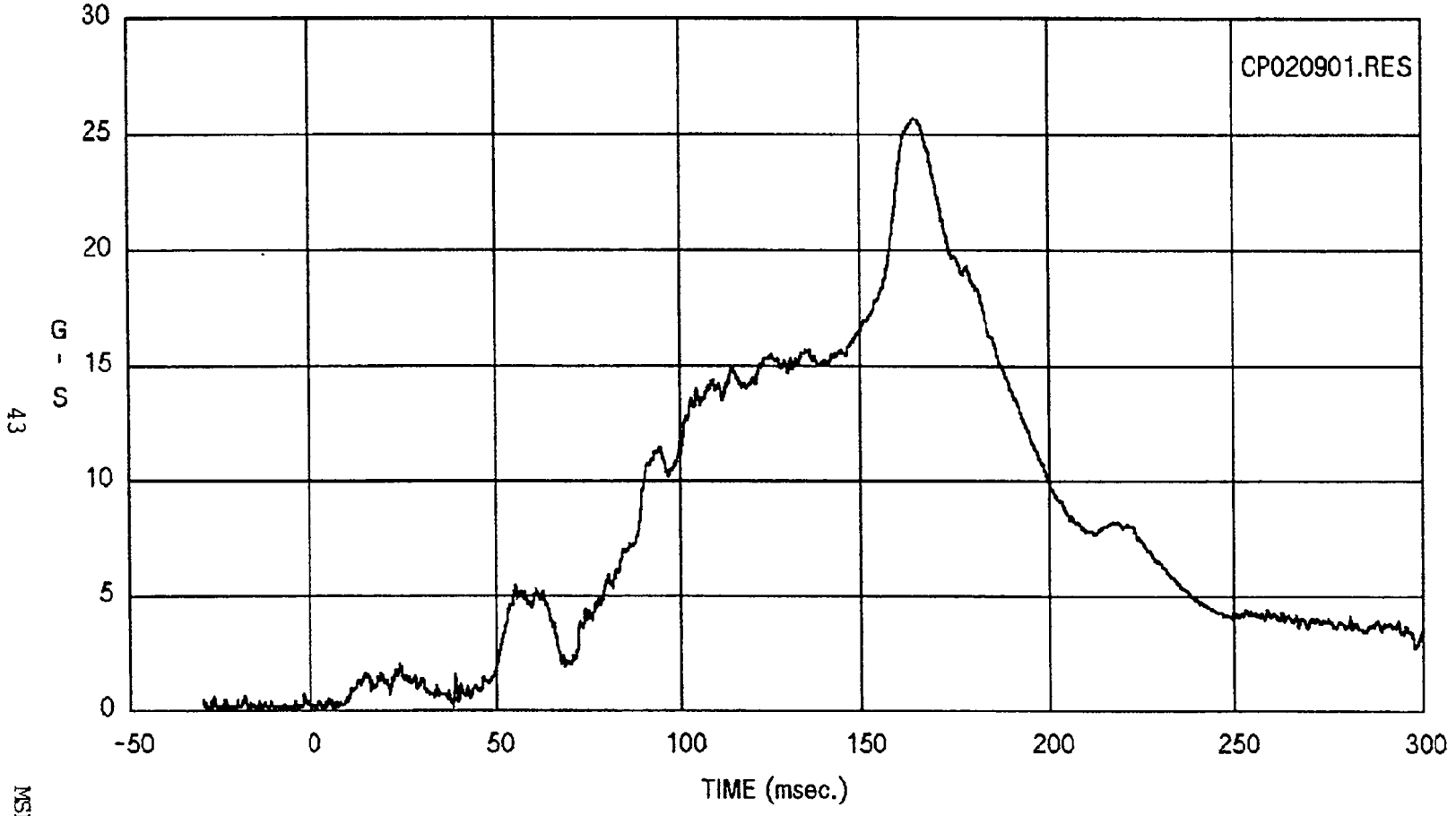
Curve: Driver head acceleration -- Y axis Filter: SAE CLASS 1000 Max = 3.1239 Min = -4.2653

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



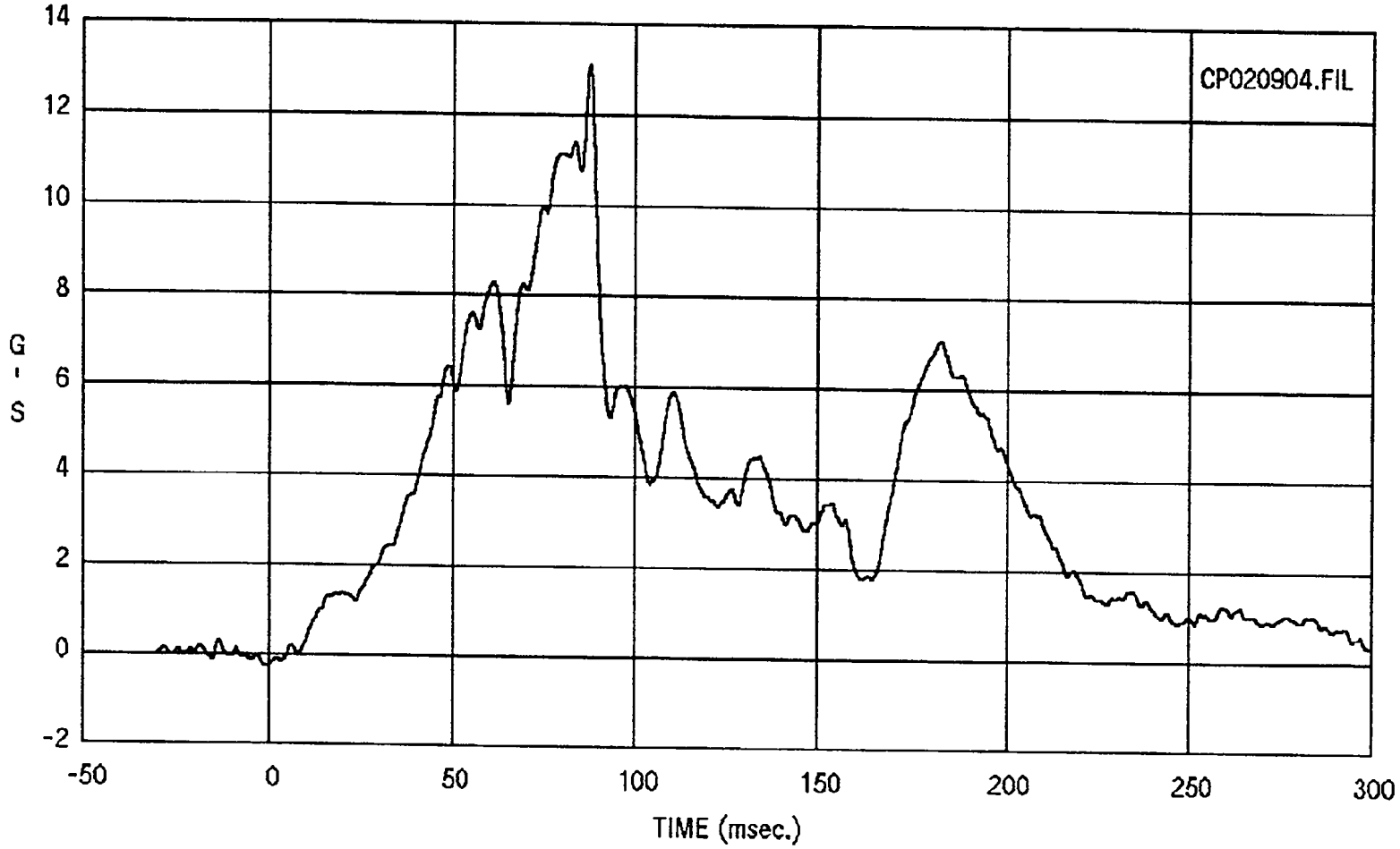
Curve: Driver head acceleration -- Z axis Filter: SAE CLASS 1000 Max = 15.502 Min = -.92641

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



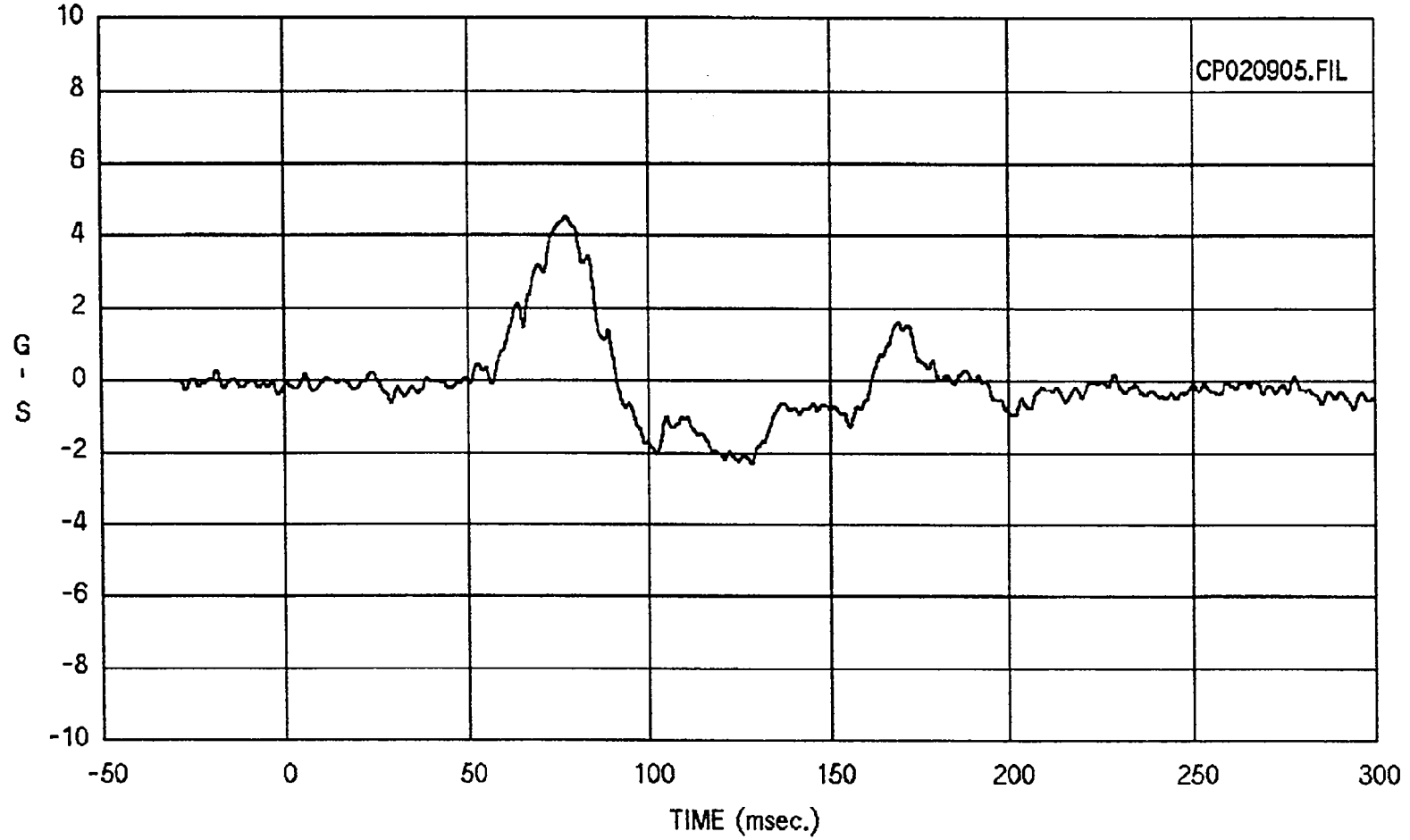
Curve: Driver head acceleration -- Resultant Filter: SAE CLASS 1000 01 Max = 25.695 Min = .61002E

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



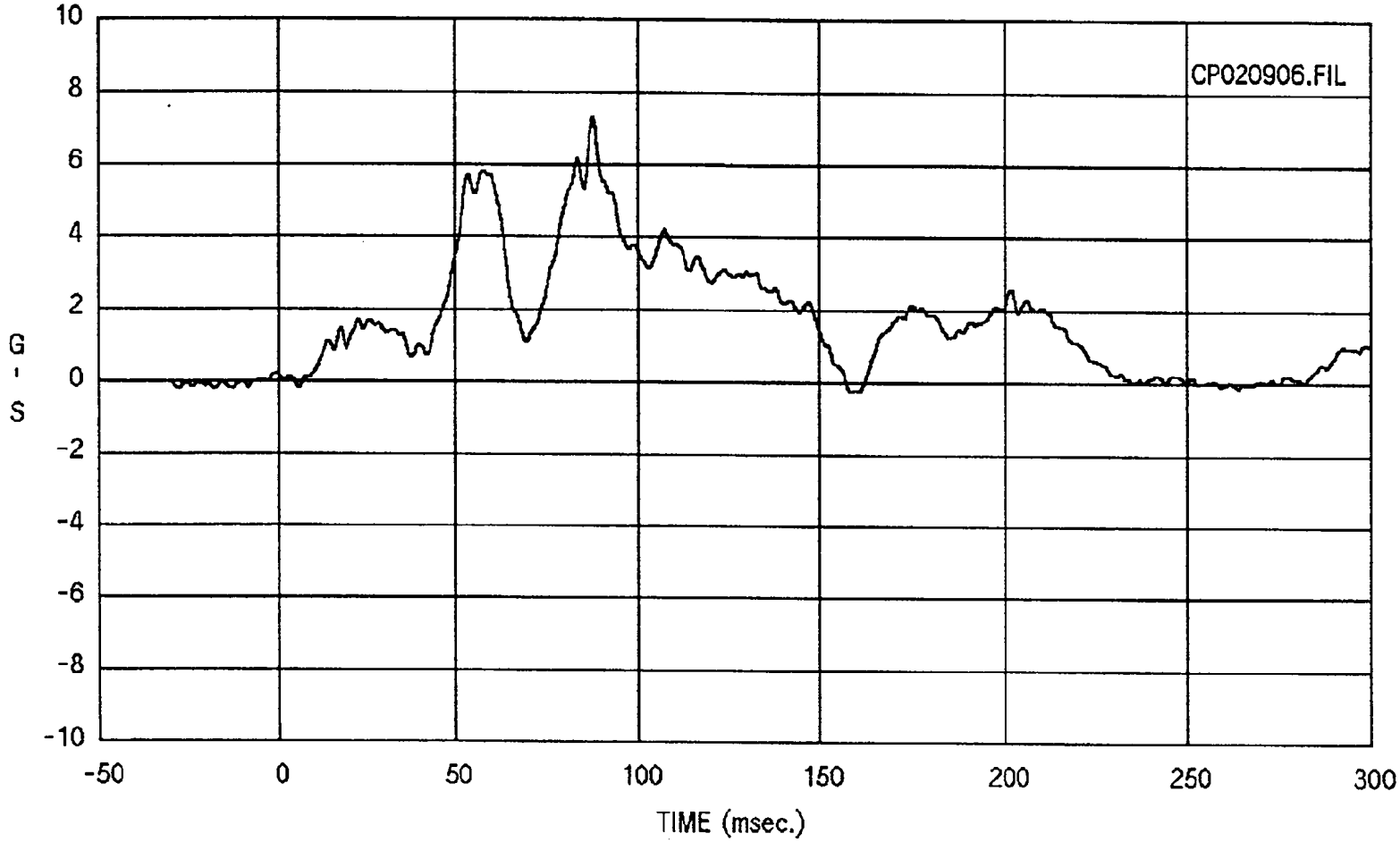
Curve: Driver chest acceleration -- X axis Filter: SAE CLASS 180 Max = 13.129 Min = -.16646

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



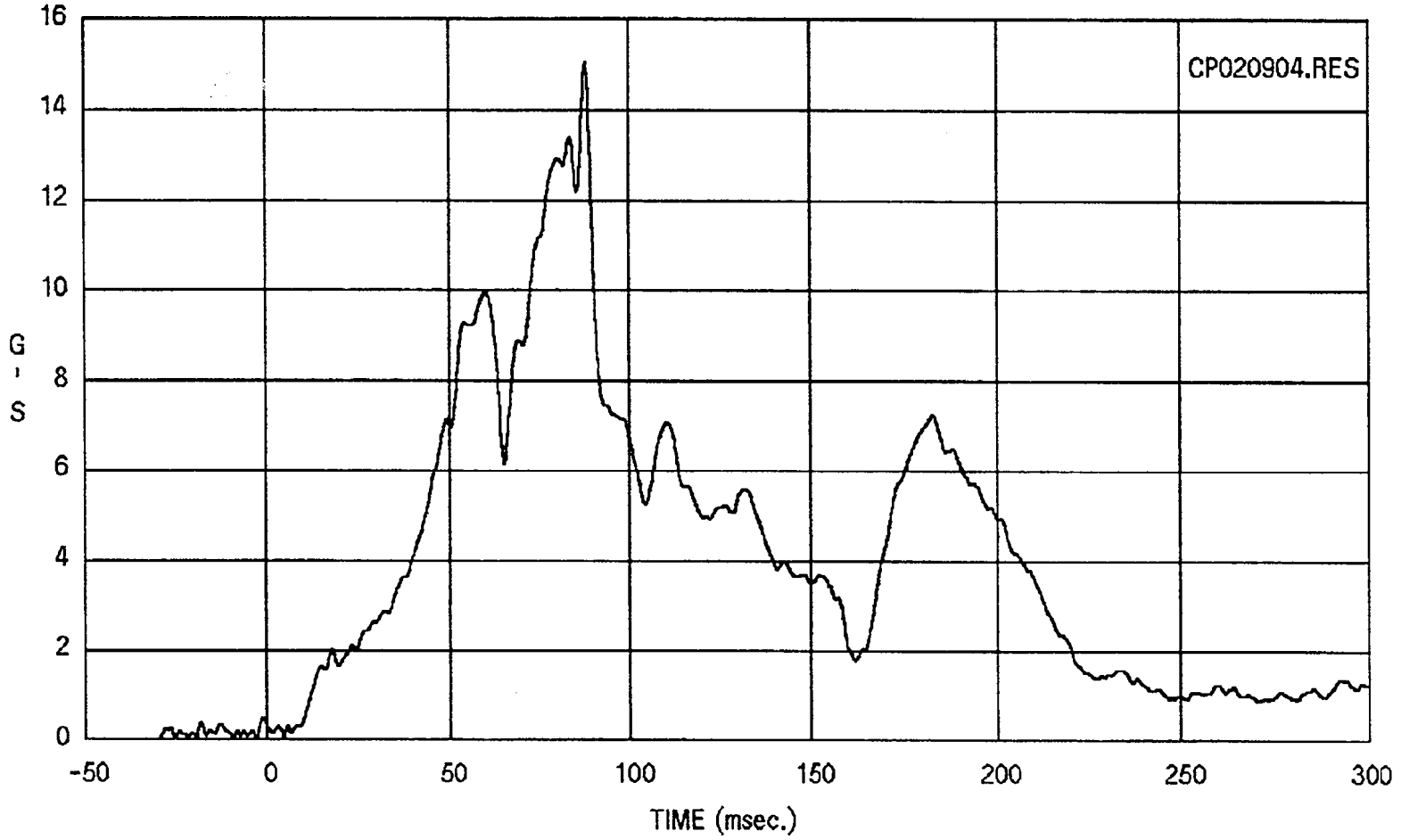
Curve: Driver chest acceleration -- Y axis Filter: SAE CLASS 180 Max = 4.5620 Min = -2.3097

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



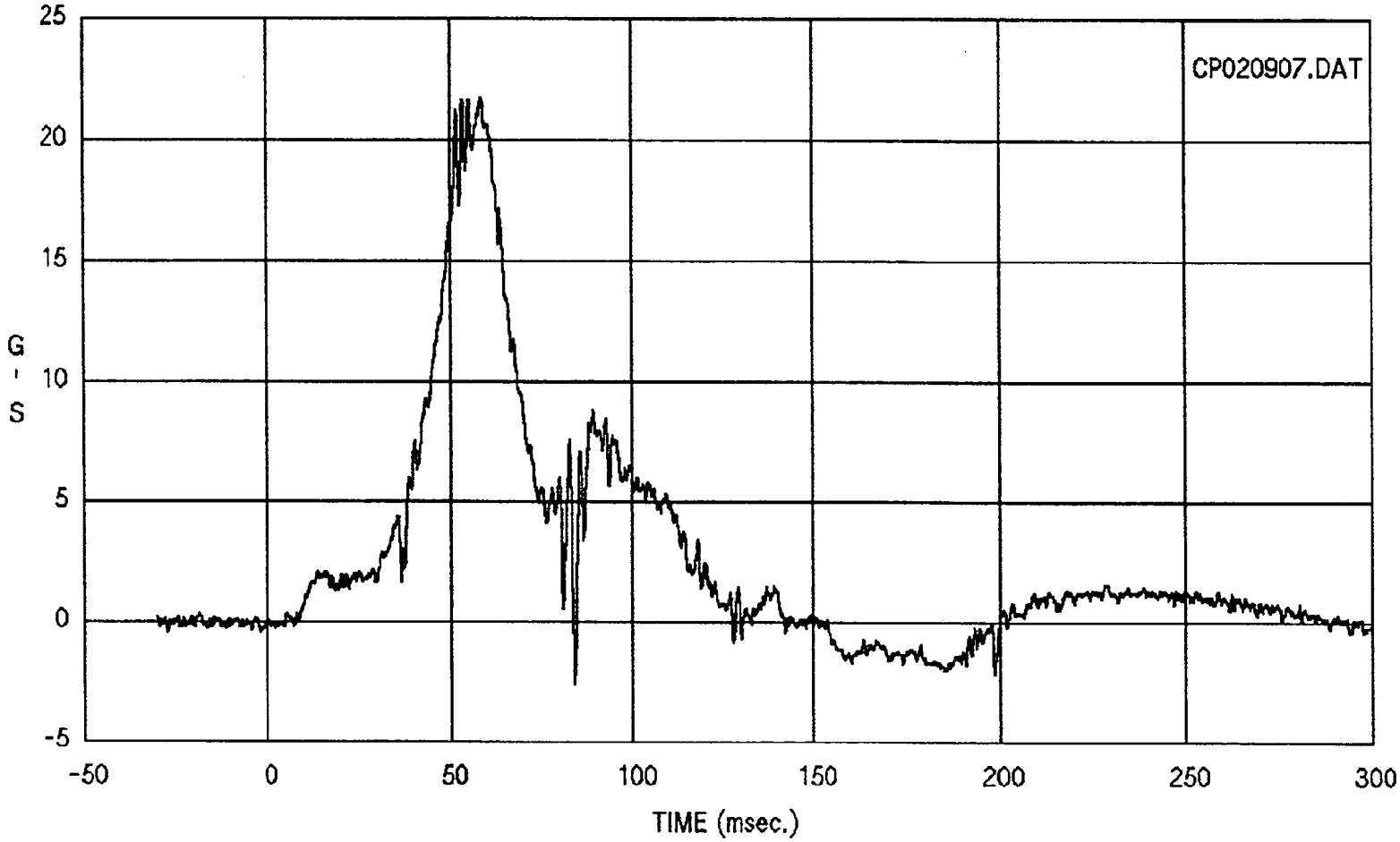
Curve: Driver chest acceleration -- Z axis Filter: SAE CLASS 180 Max = 7.3085 Min = -.25328

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



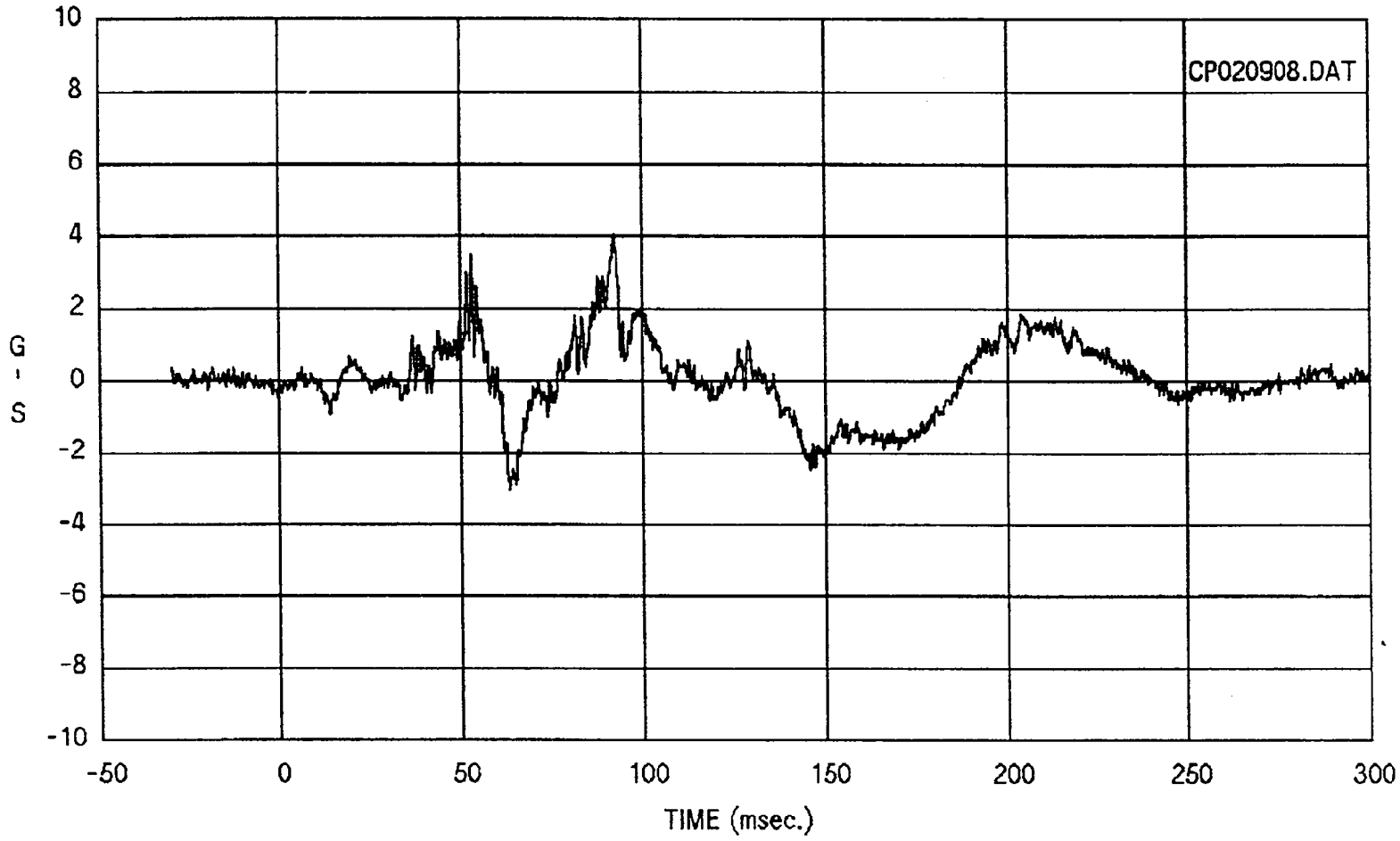
Curve: Driver chest acceleration -- Resultant Filter: SAE CLASS 180 02 Max = 15.069 Min = .51753E

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



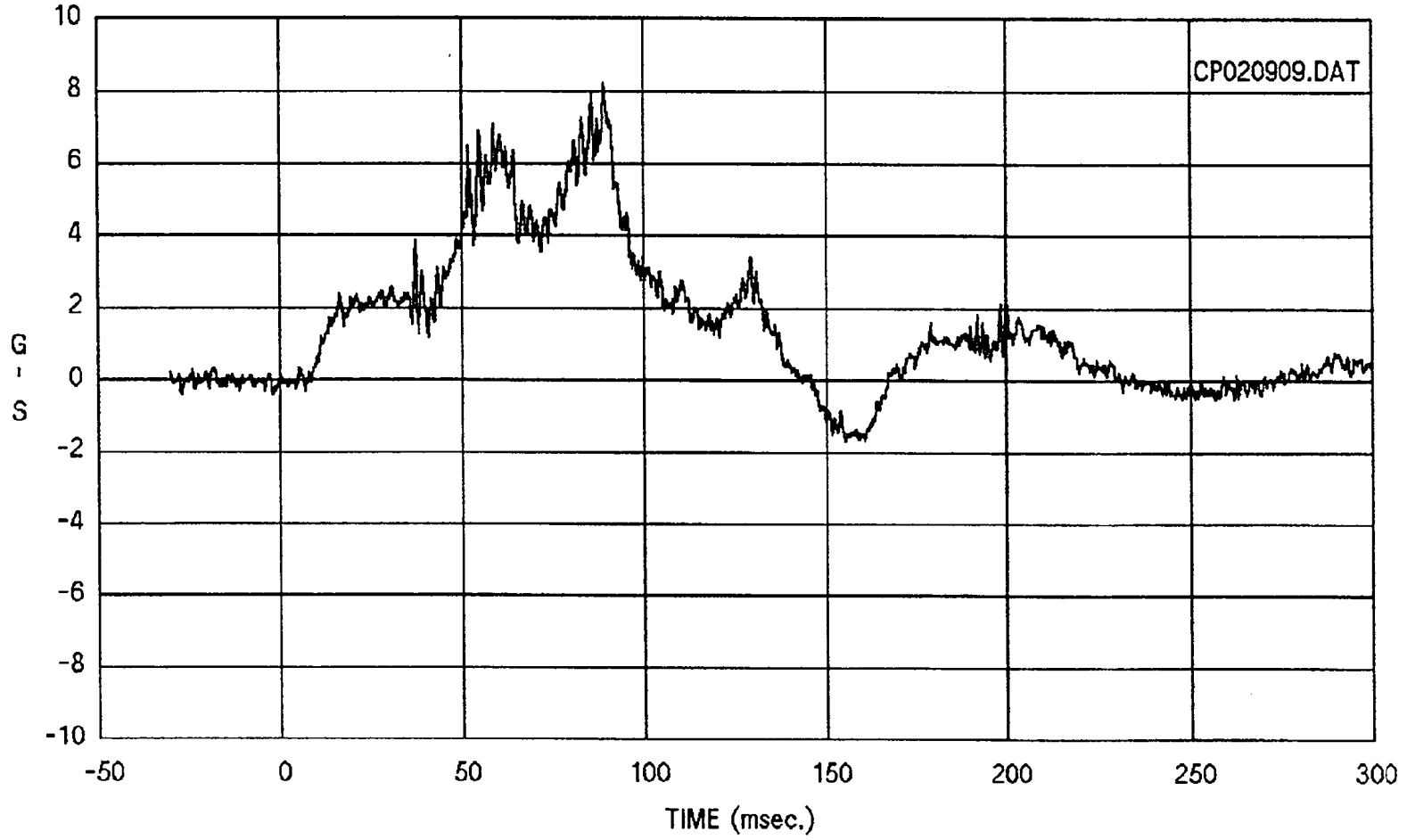
Curve: Driver pelvis acceleration -- X axis Filter: SAE CLASS 1000 Max = 22.737 Min = -2.5404

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



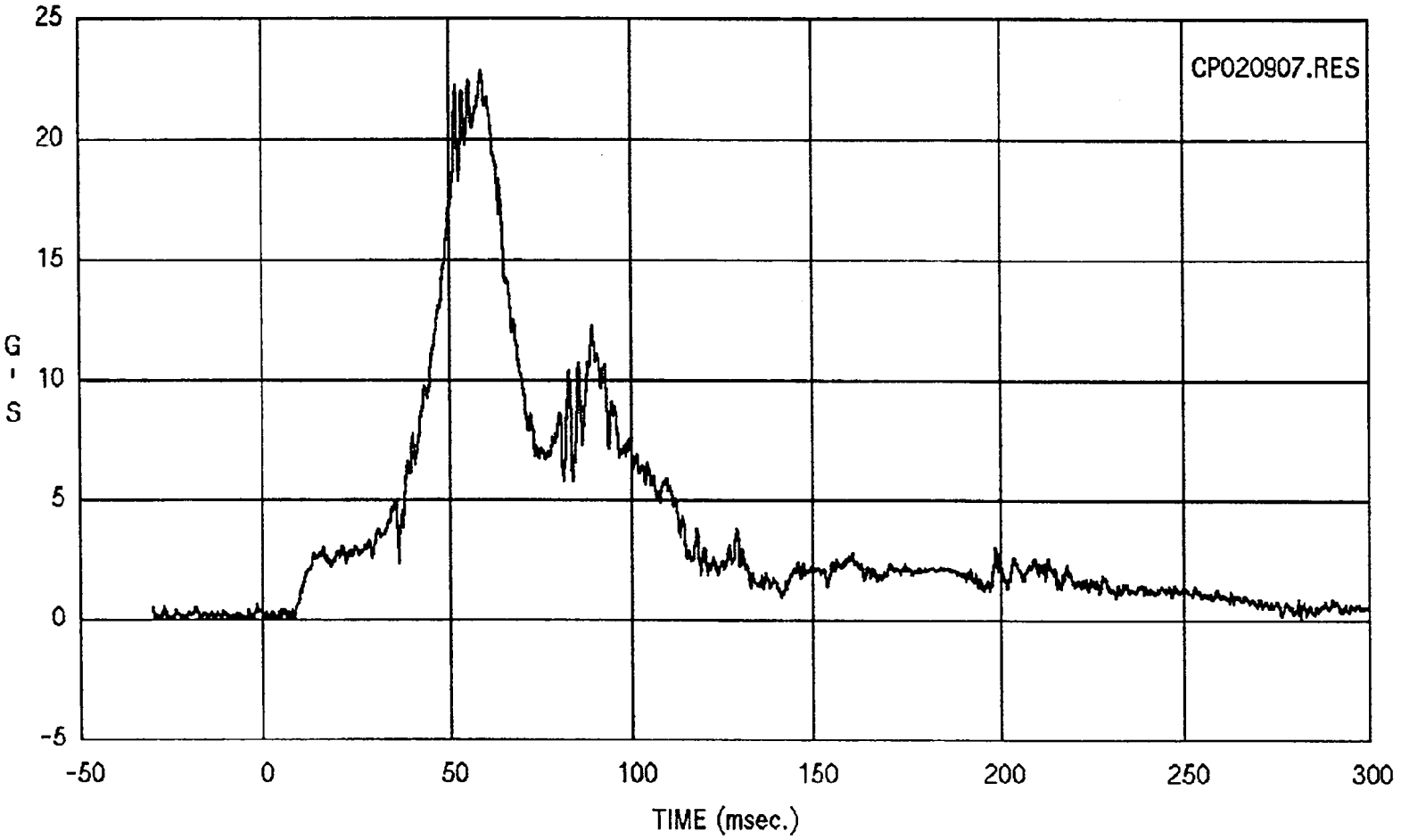
Curve: Driver pelvis acceleration -- Y axis Filter: SAE CLASS 1000 Max = 4.0719 Min = -3.6334

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



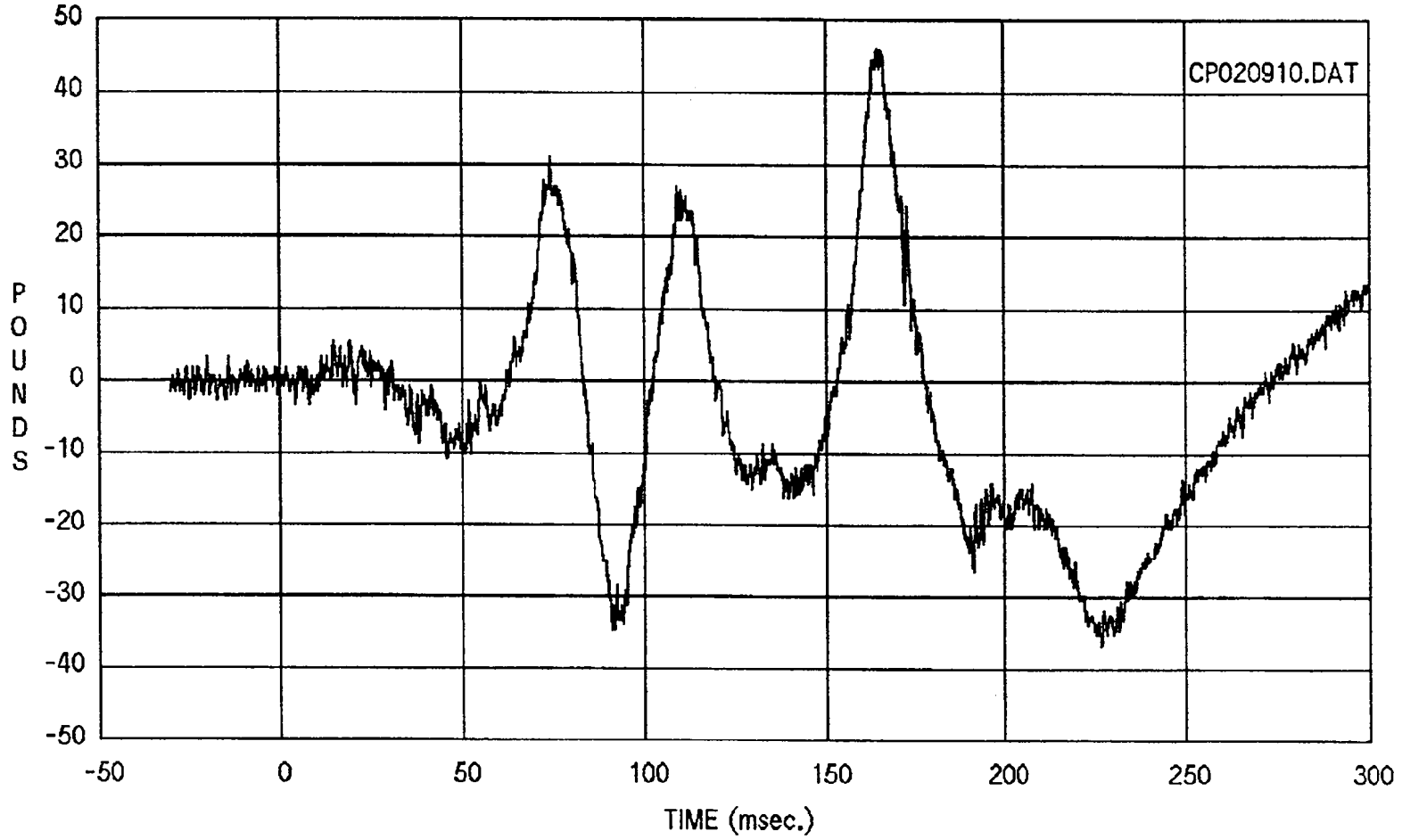
Curve: Driver pelvis acceleration -- Z axis Filter: SAE CLASS 1000 Max = 8.1951 Min = -1.7314

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



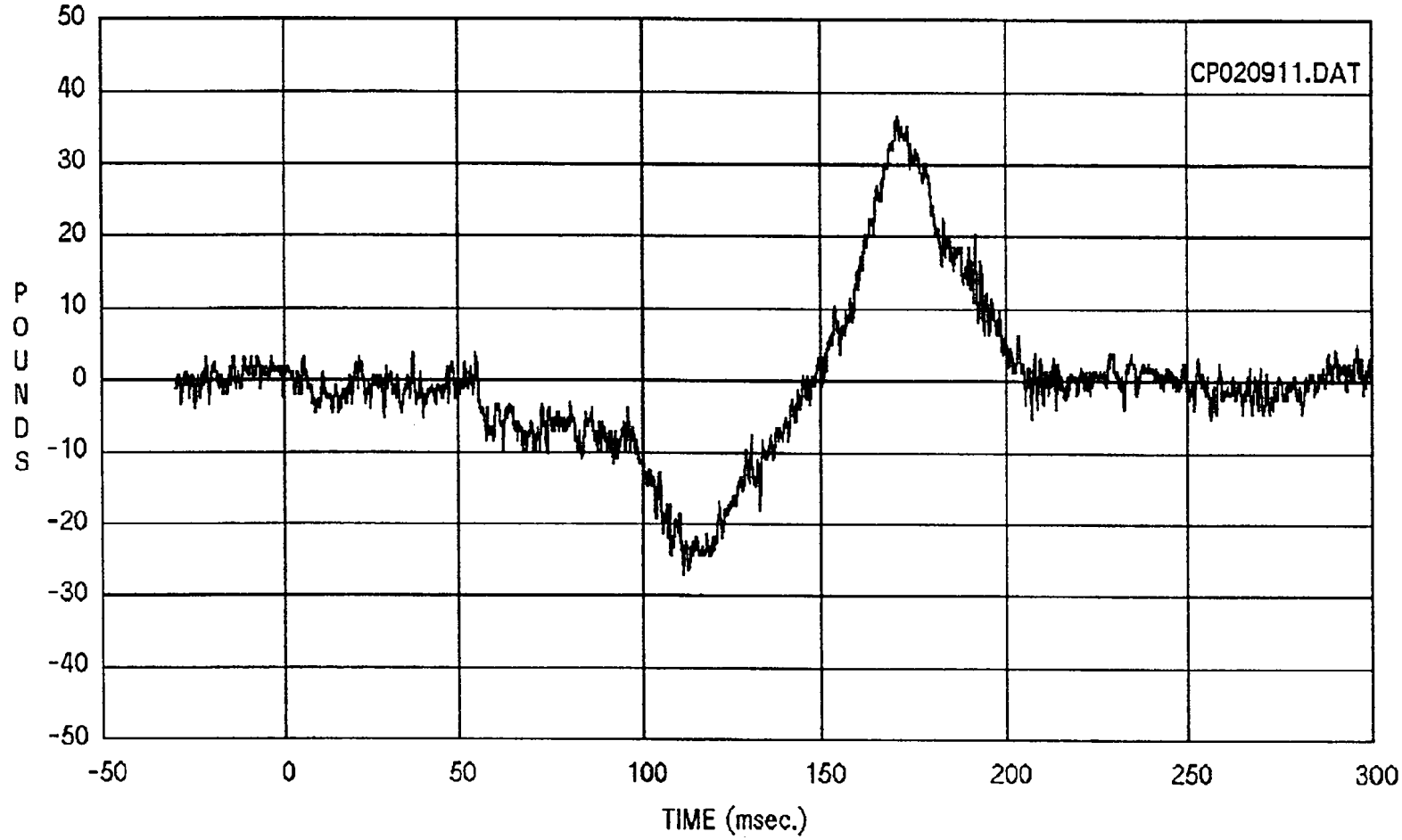
Curve: Driver pelvis acceleration -- Resultant Filter: SAE CLASS 1000 Max = 23.107 Min = .00000

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



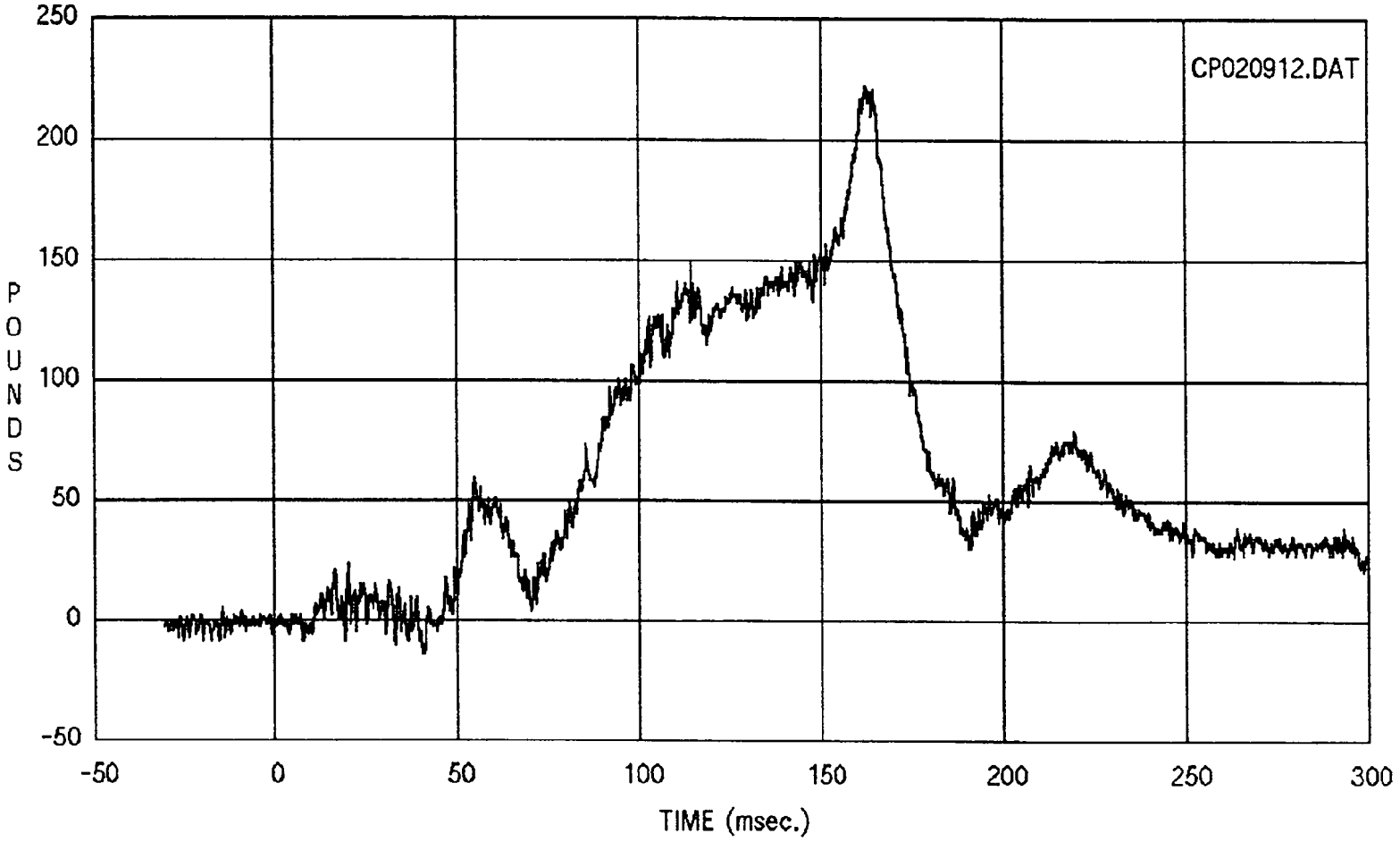
Curve: Driver neck force -- X axis Filter: SAE CLASS 1000 Max = 47.379 Min = -37.226

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



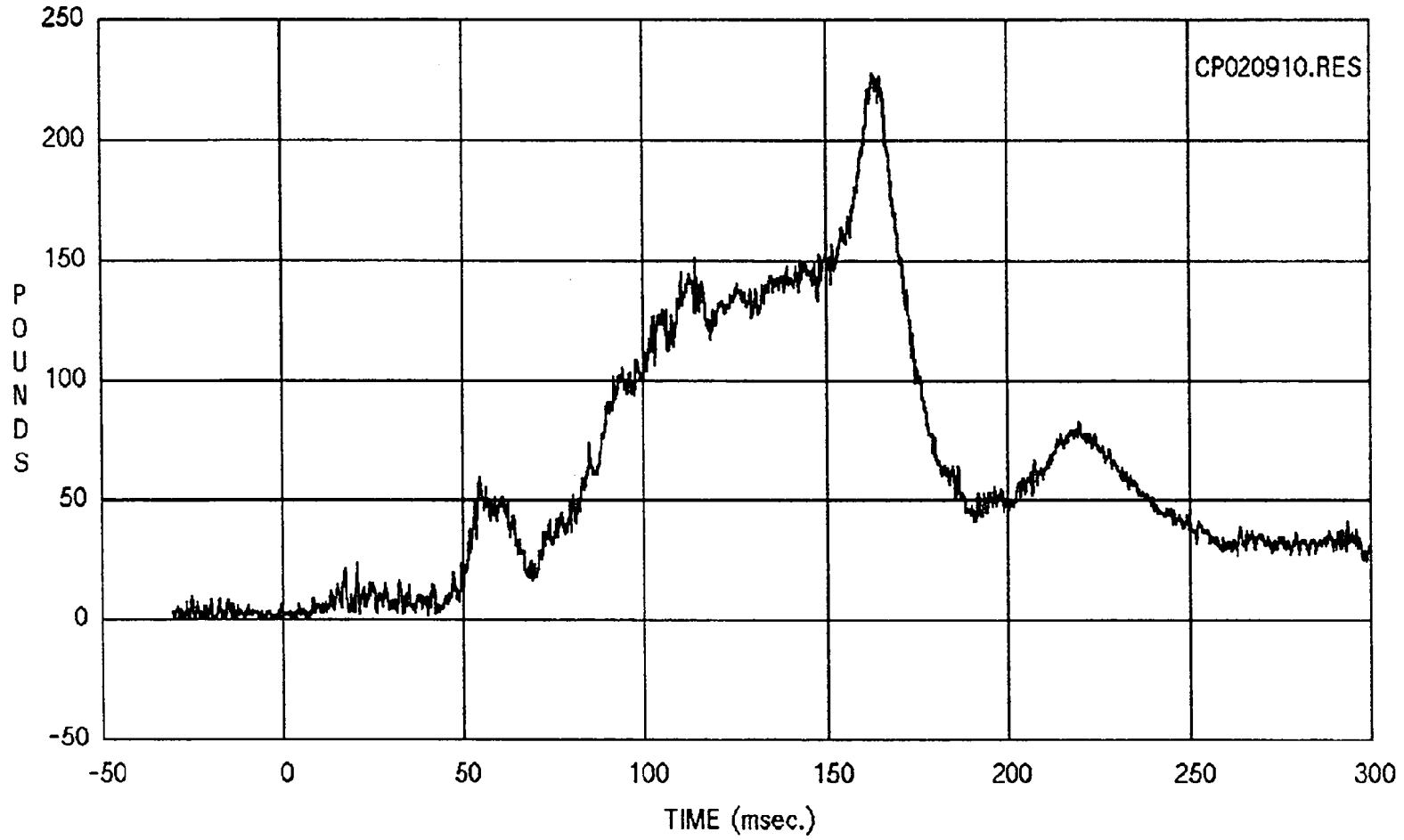
Curve: Driver neck force -- Y axis Filter: SAE CLASS 1000 Max = 37.235 Min = -26.963

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



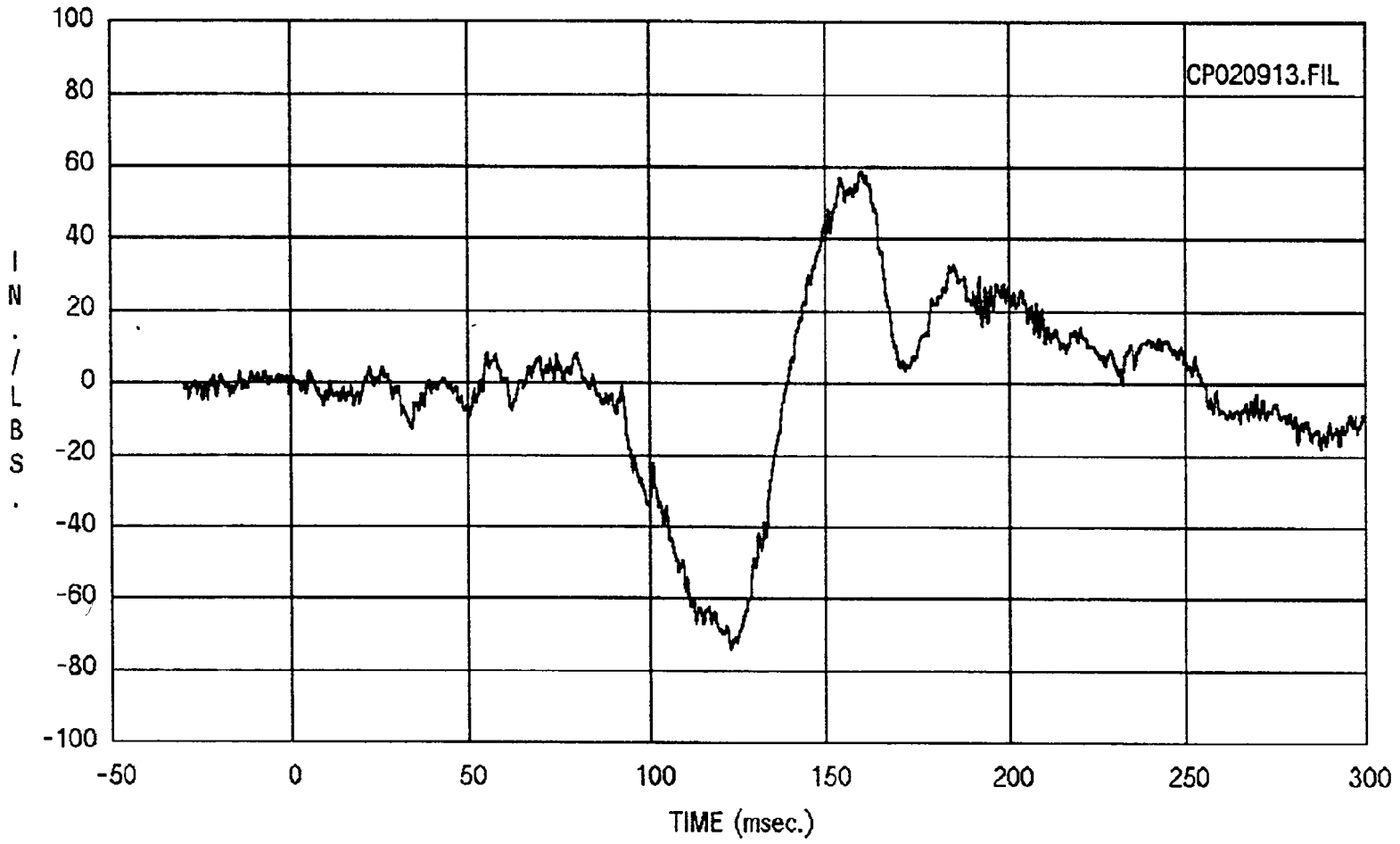
Curve: Driver neck force -- Z axis Filter: SAE CLASS 1000 Max = 222.48 Min = -13.905

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



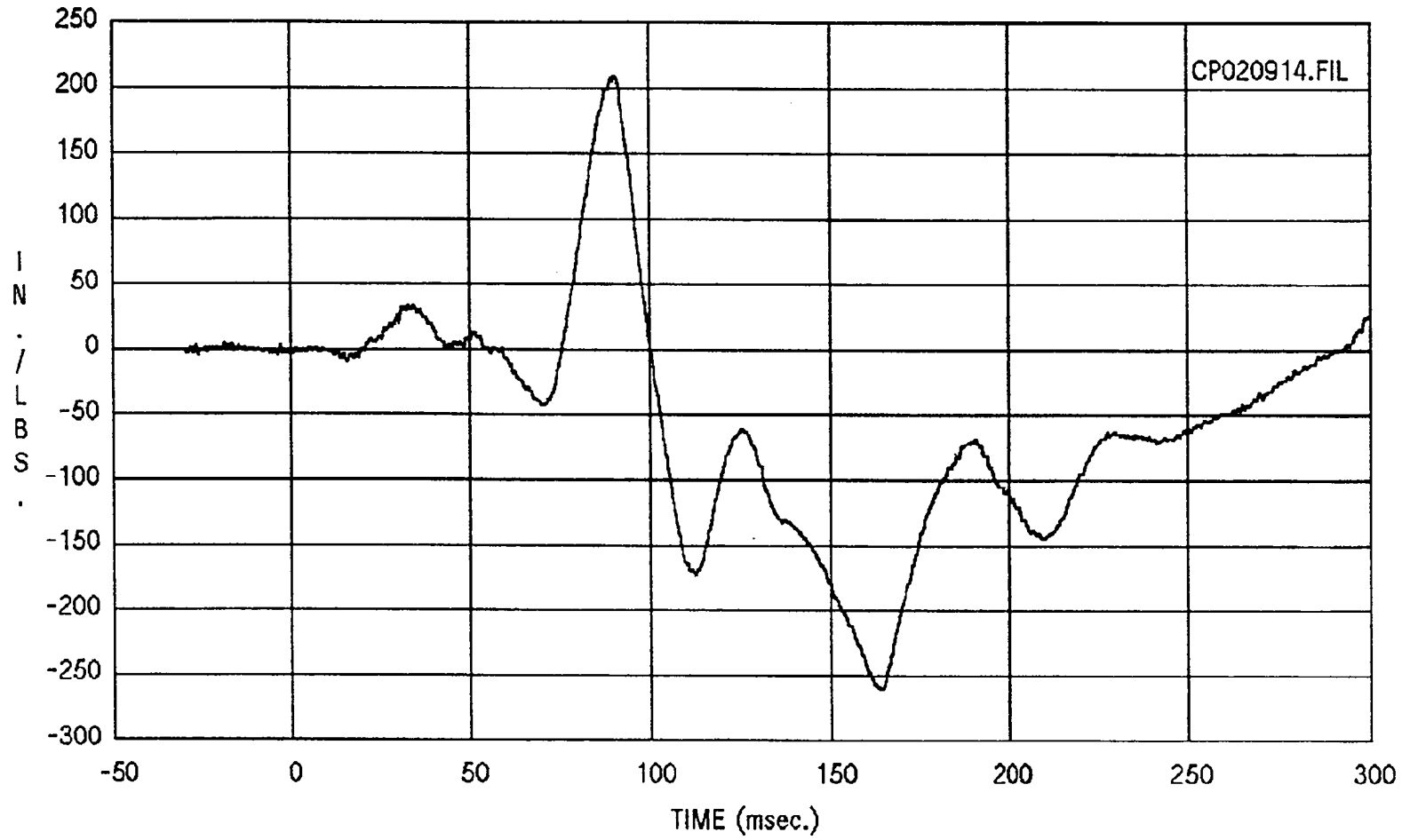
Curve: Driver neck force -- Resultant Filter: SAE CLASS 1000 Max = 227.68 Min = .64198

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



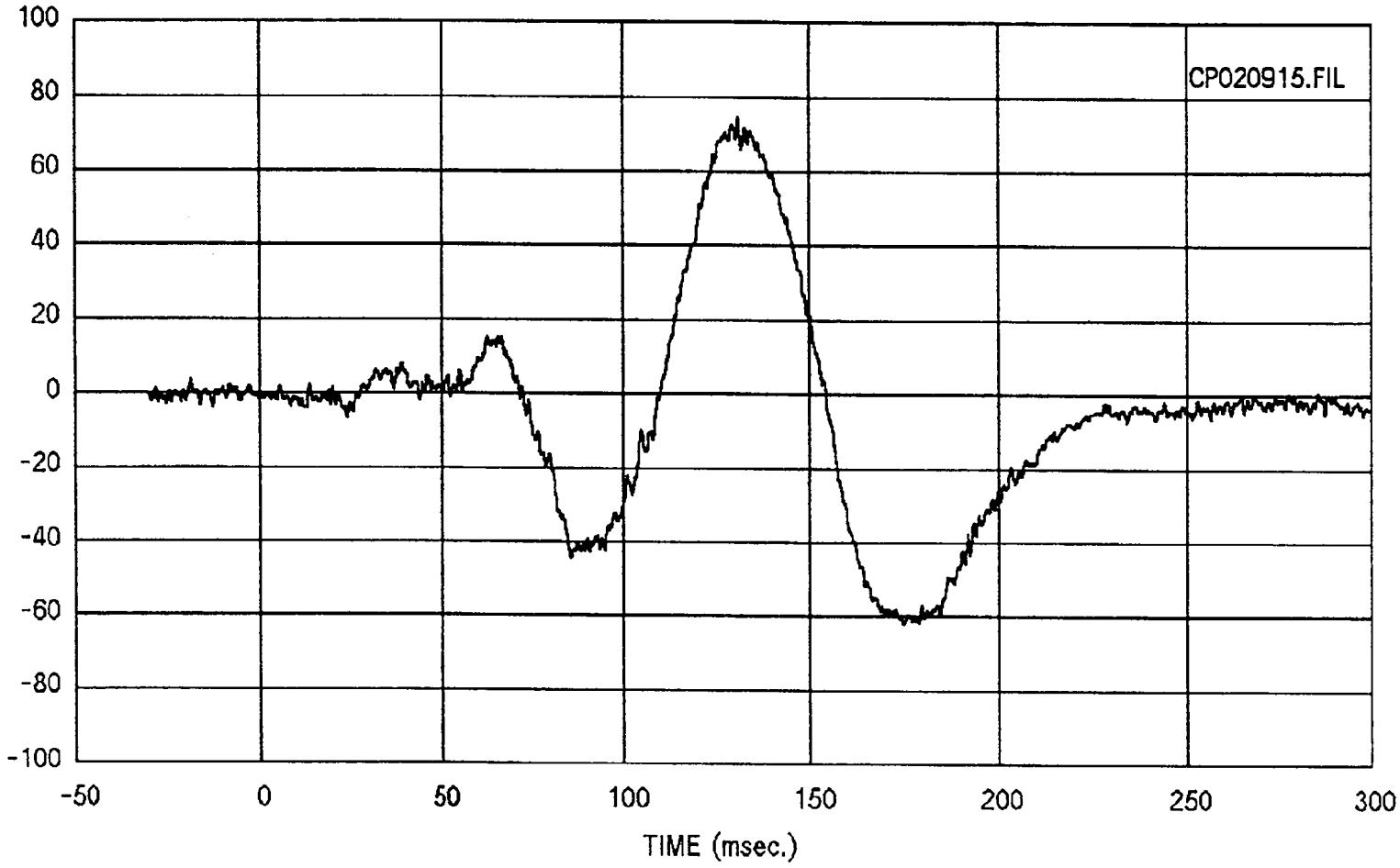
Curve: Driver neck moment -- X axis Filter: SAE CLASS 600 Max = 58.940 Min = -73.961

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



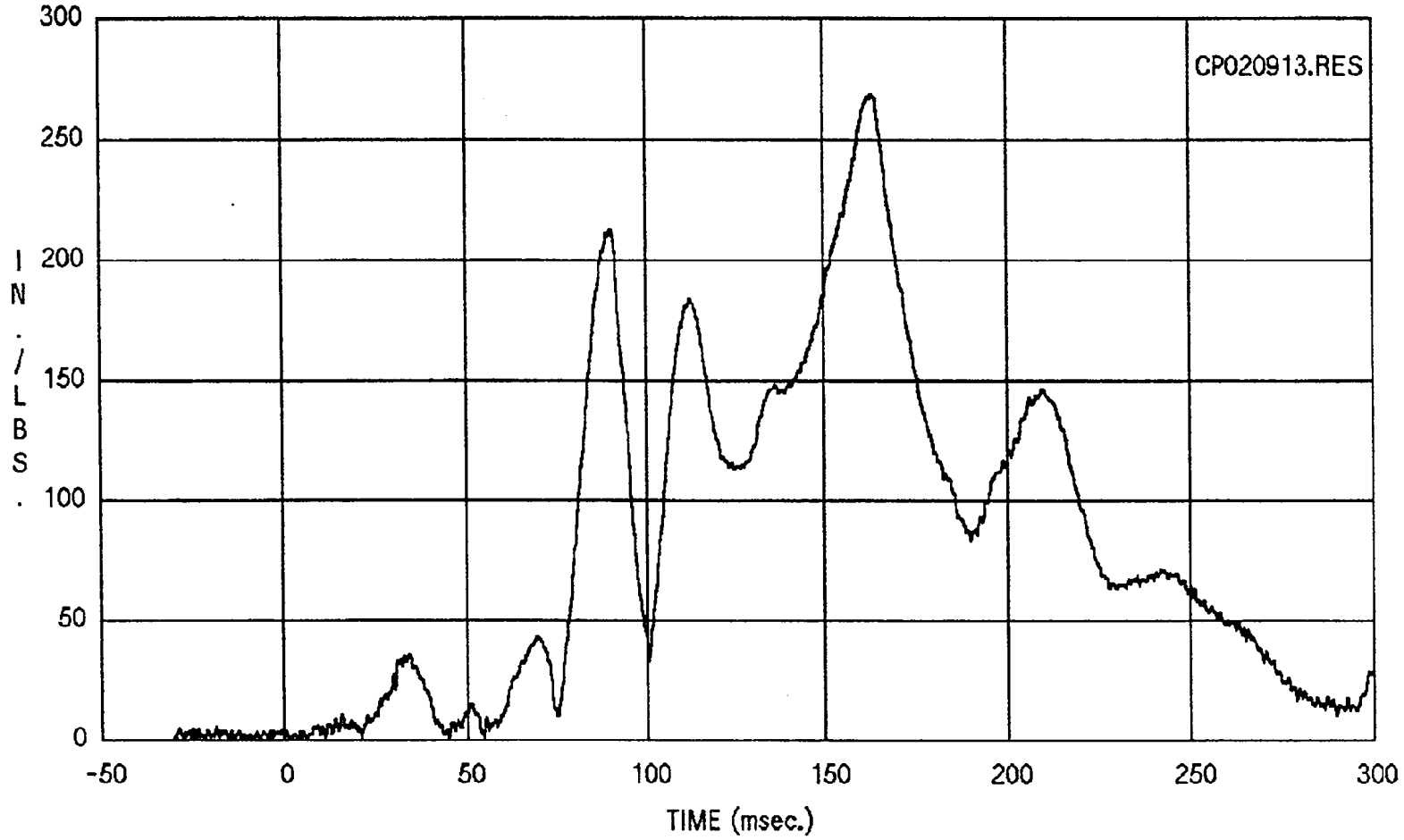
Curve: Driver neck moment -- Y axis Filter: SAE CLASS 600 Max = 209.55 Min = -260.51

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



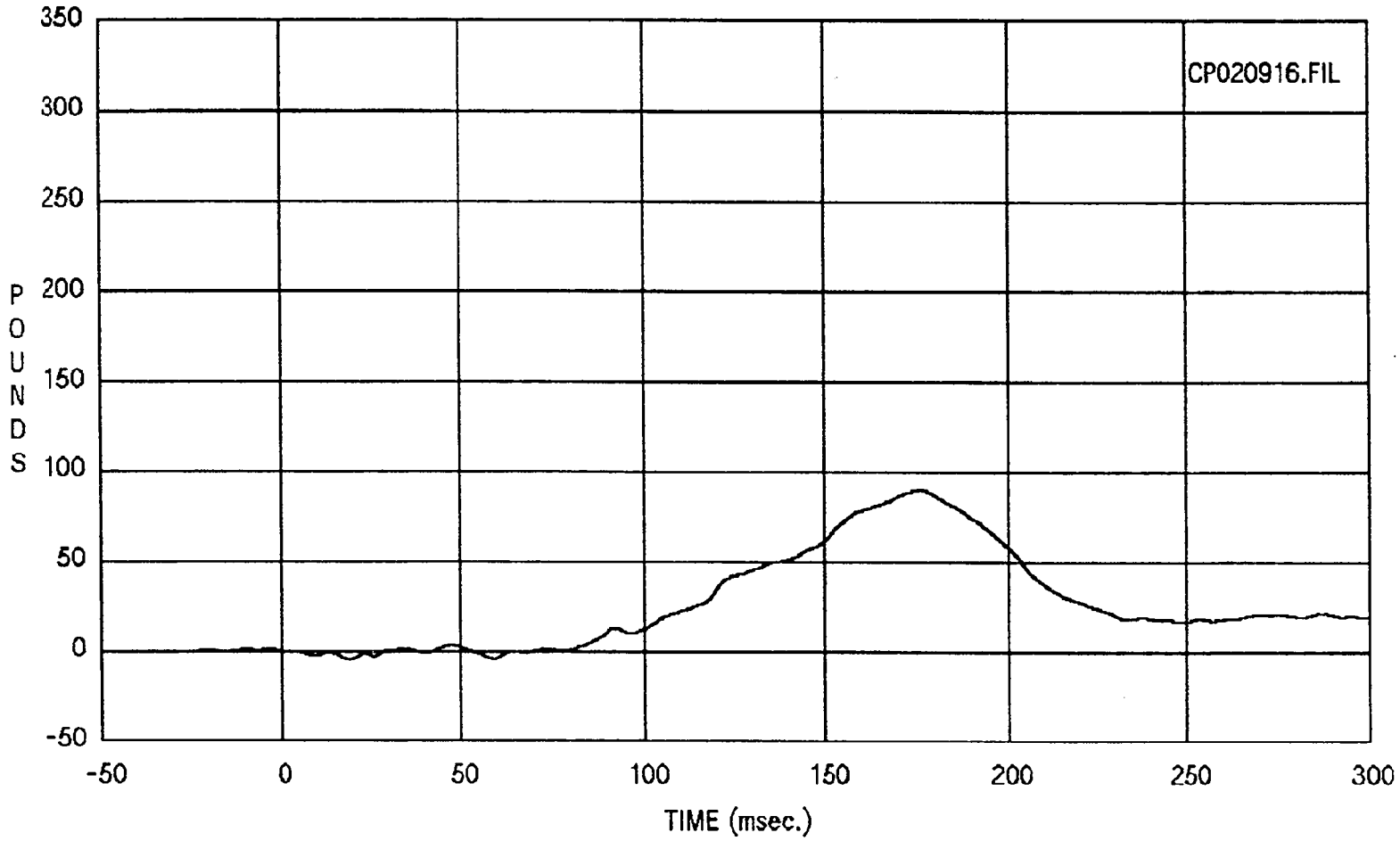
Curve: Driver neck moment -- Z axis Filter: SAE CLASS 600 Max = 74.815 Min = -61.985

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



Curve: Driver neck moment -- Resultant Filter: SAE CLASS 600 Max = 268.98 Min = .54925

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort

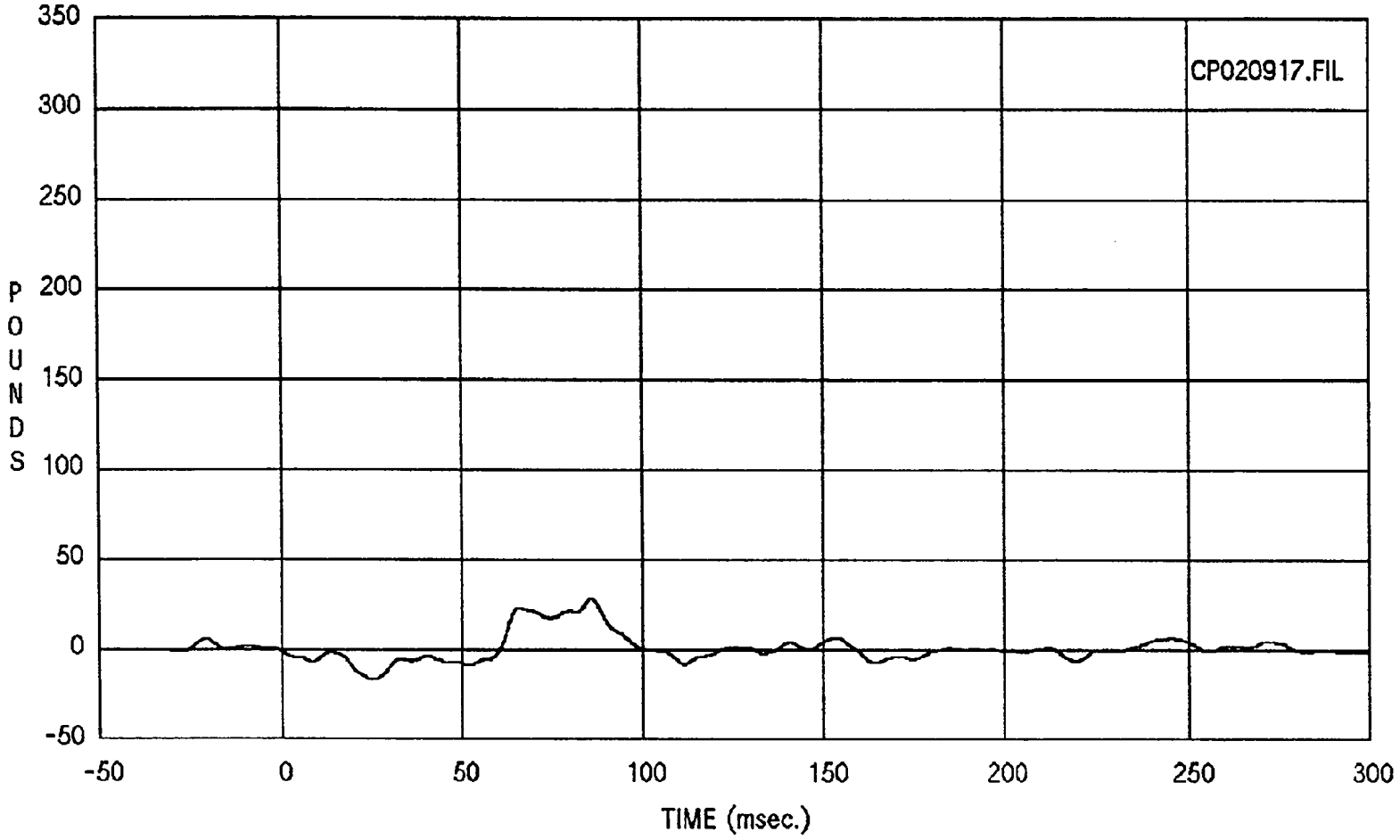


Curve: Driver lap belt load Filter: SAE CLASS 60 Max = 90.132 Min = -4.6938

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort

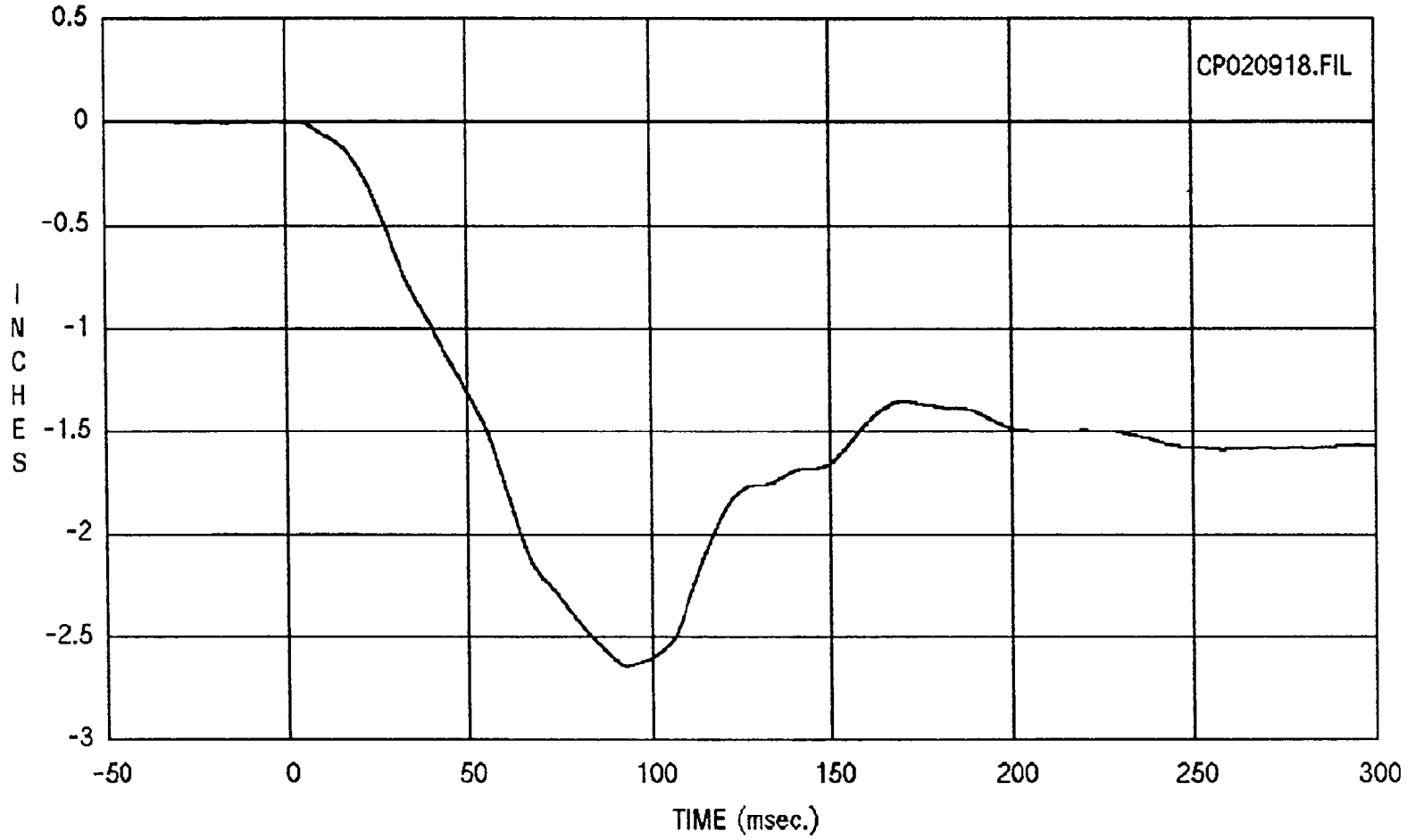
60

MSE-R93003-11



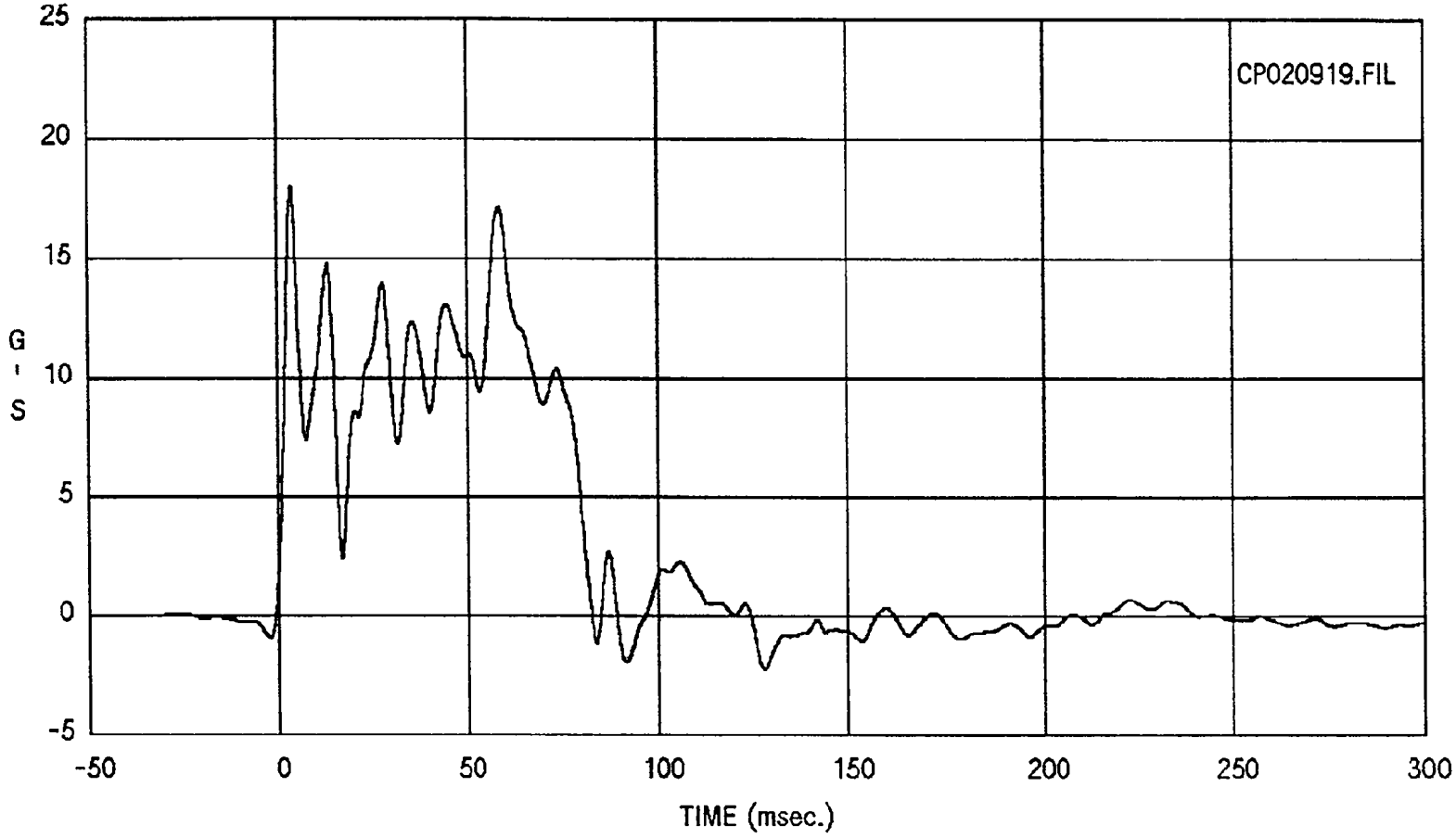
Curve: Driver shoulder belt load Filter: SAE CLASS 60 Max = 28.214 Min = -17.038

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



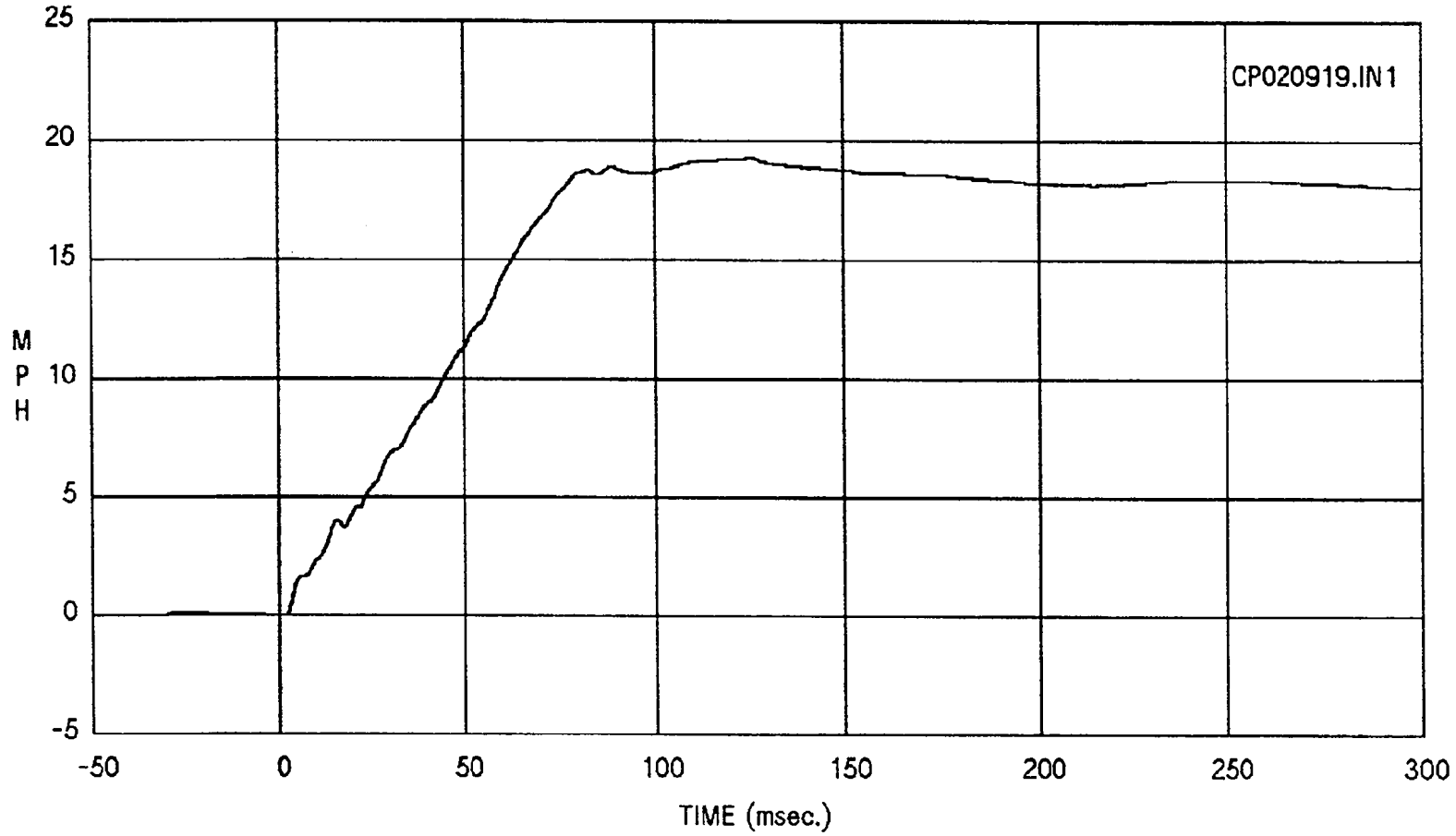
Curve: Driver lap belt pullout Filter: SAE CLASS 60 Max = -.25412E-03 Min = -2.6401

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



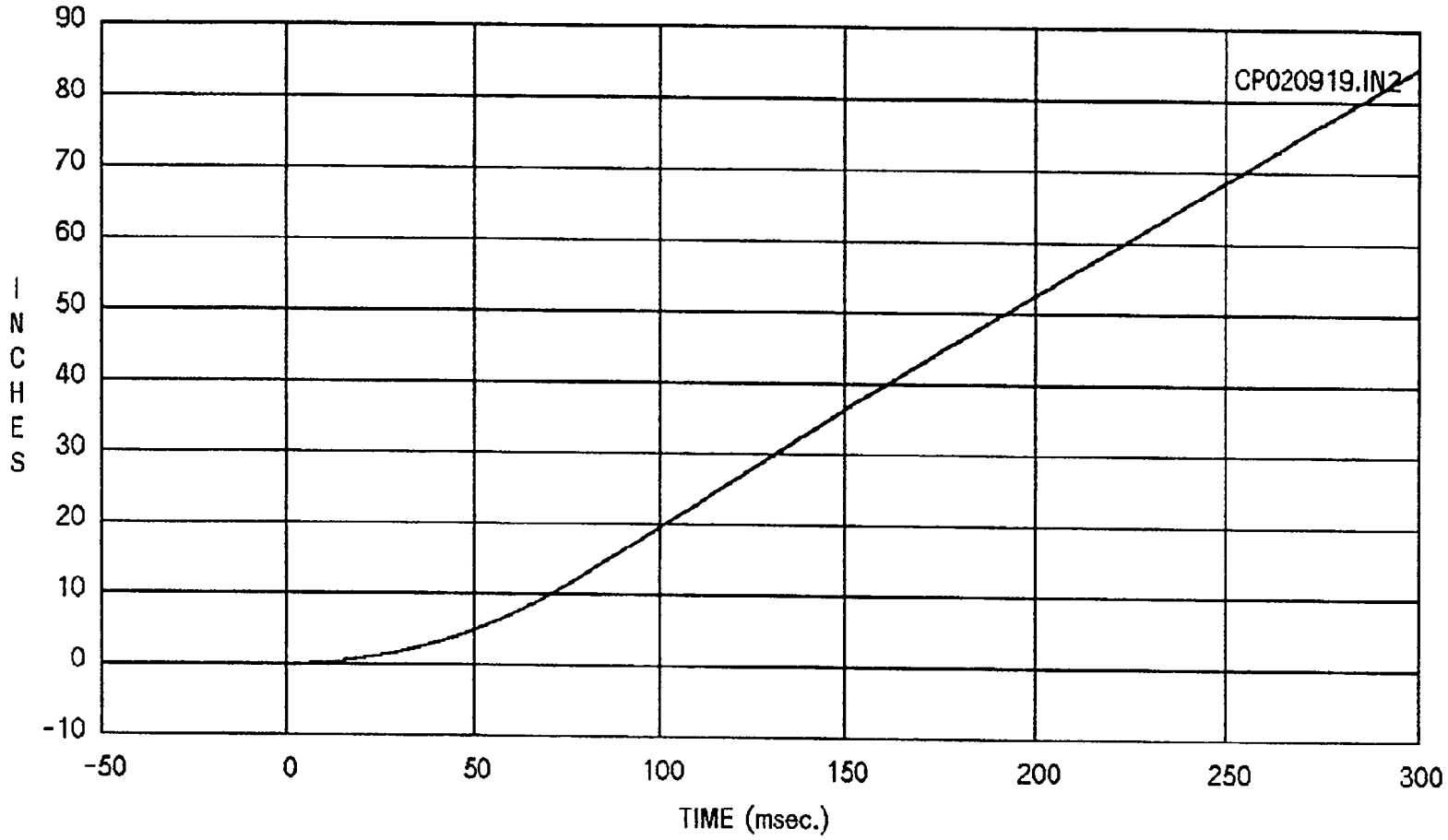
Curve: Vehicle C.G. acceleration -- X axis (Primary) Filter: SAE CLASS 60 Max = 18.010 Min = -2.2300

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



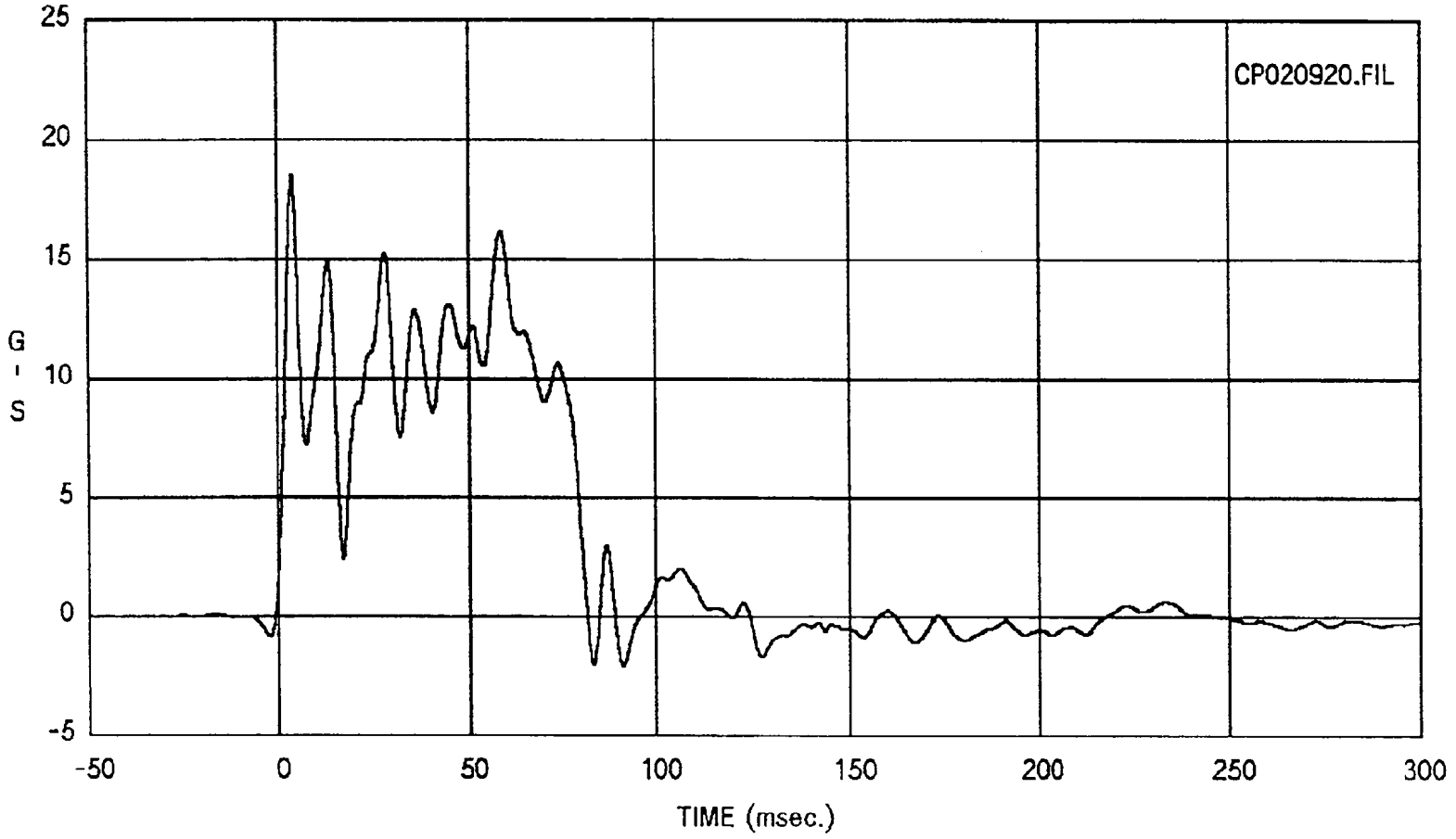
Curve: Vehicle C.G. delta V -- X axis (Primary) Filter: SAE CLASS 180 01 Max = 19.270 Min = -.15744E

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



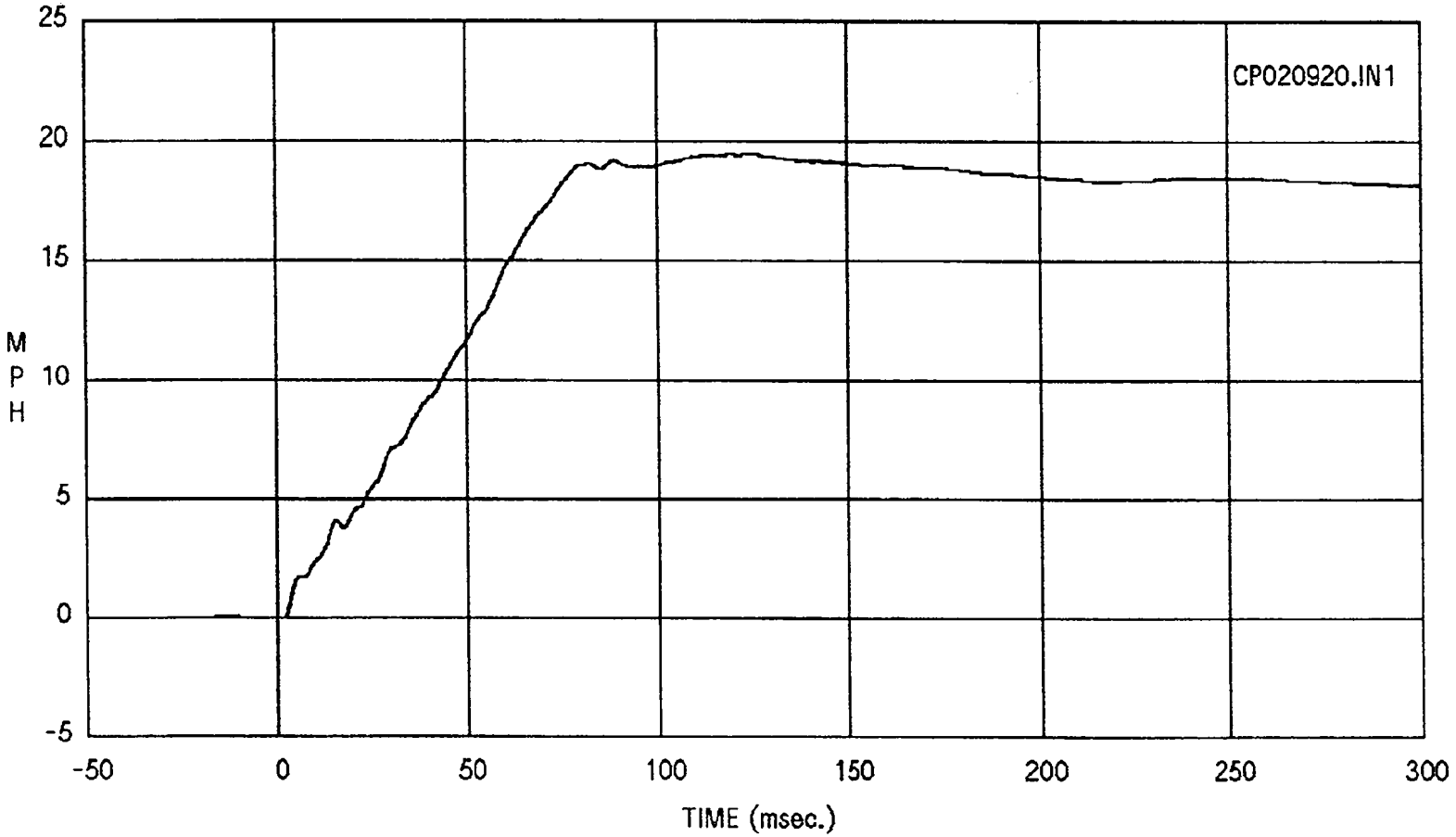
Curve: Vehicle C.G. displacement -- X axis (Primary) Filter: SAE CLASS 180 Max = 84.032 Min = -.27211E-03

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



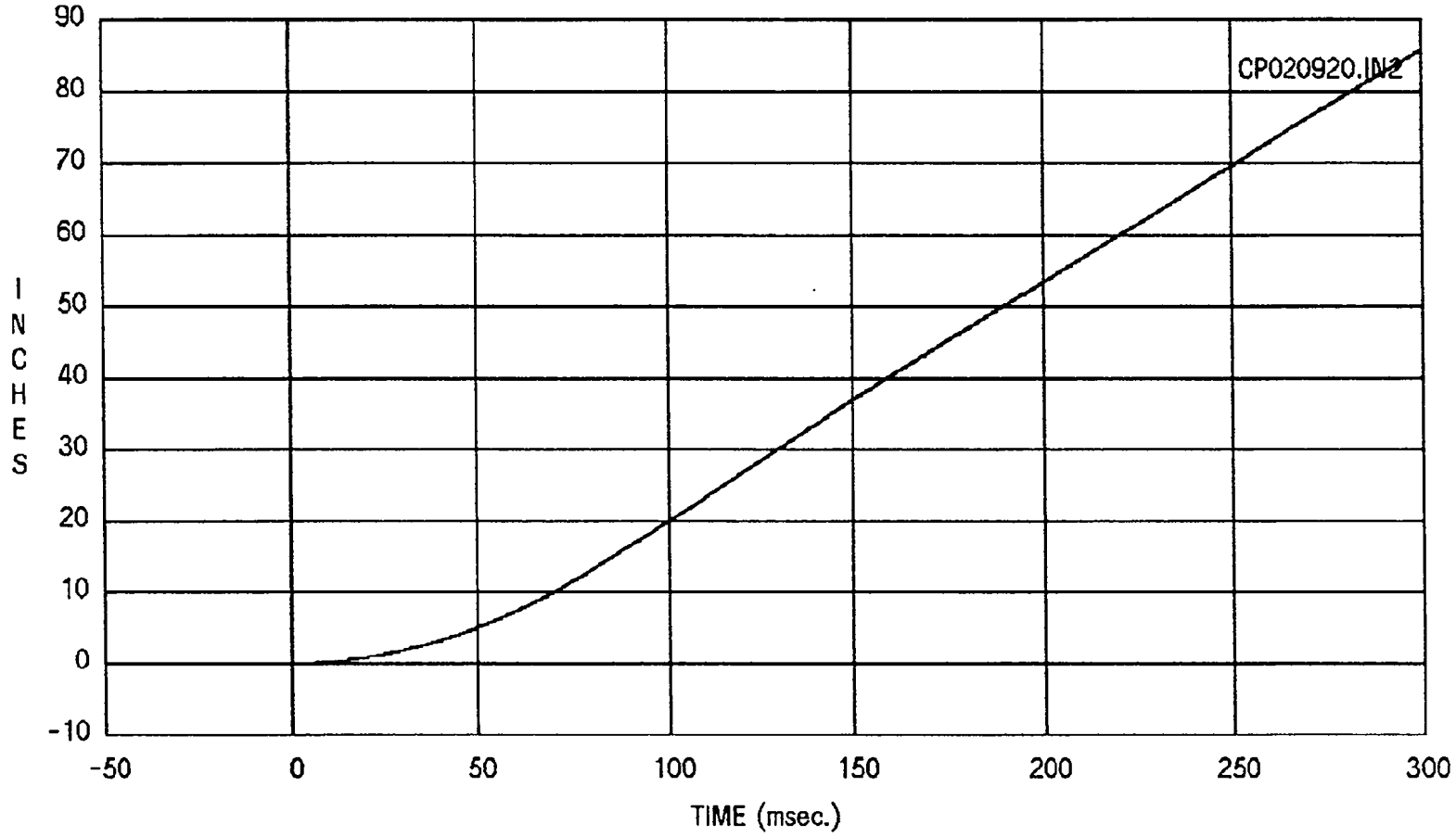
Curve: Vehicle C.G. acceleration -- X axis (Secondary) Filter: SAE CLASS 60 Max = 18.514 Min = -2.050

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



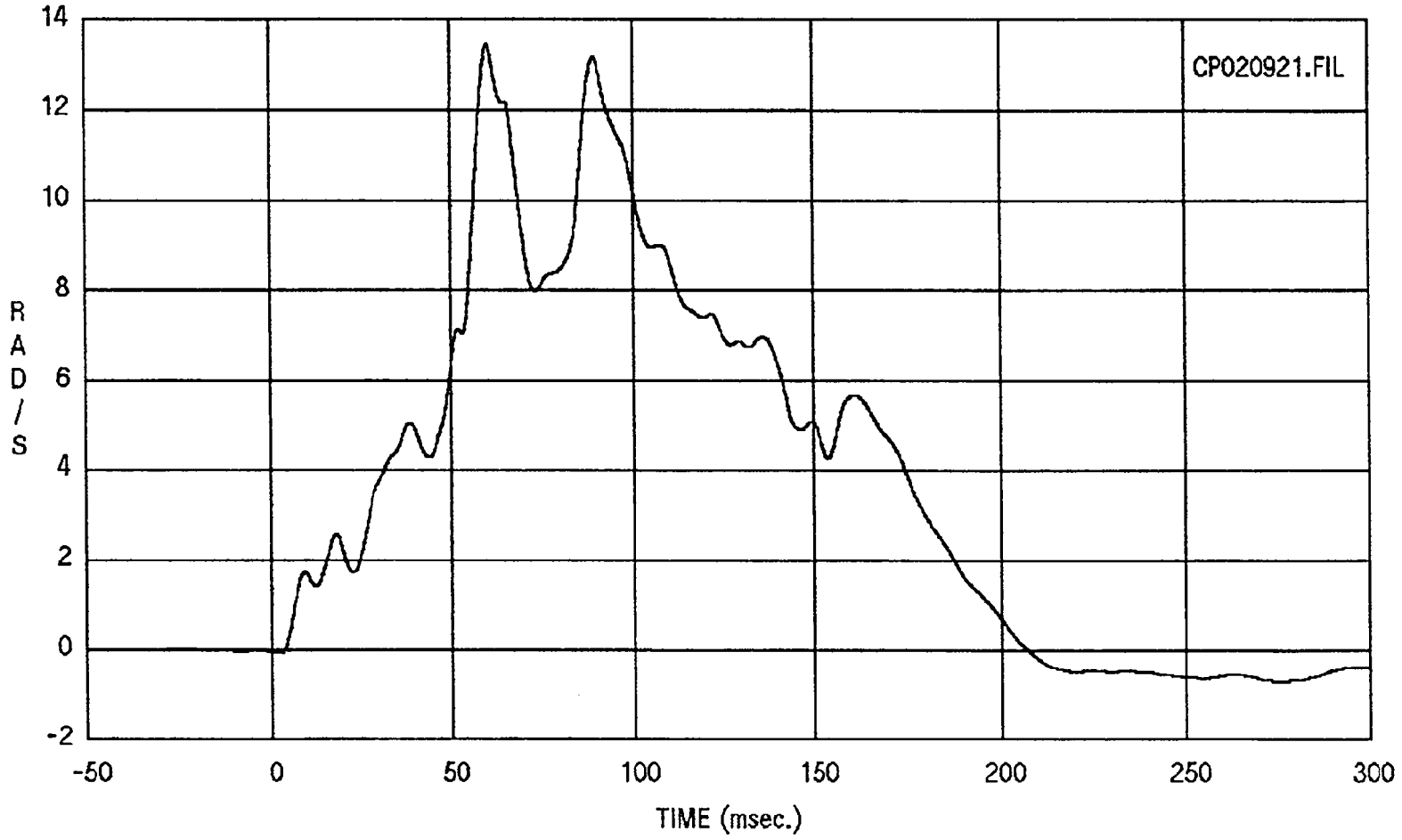
Curve: Vehicle C.G. delta V -- X axis (Secondary) Filter: SAE CLASS 180 Max = 19.480 Min = -.12442E-01

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



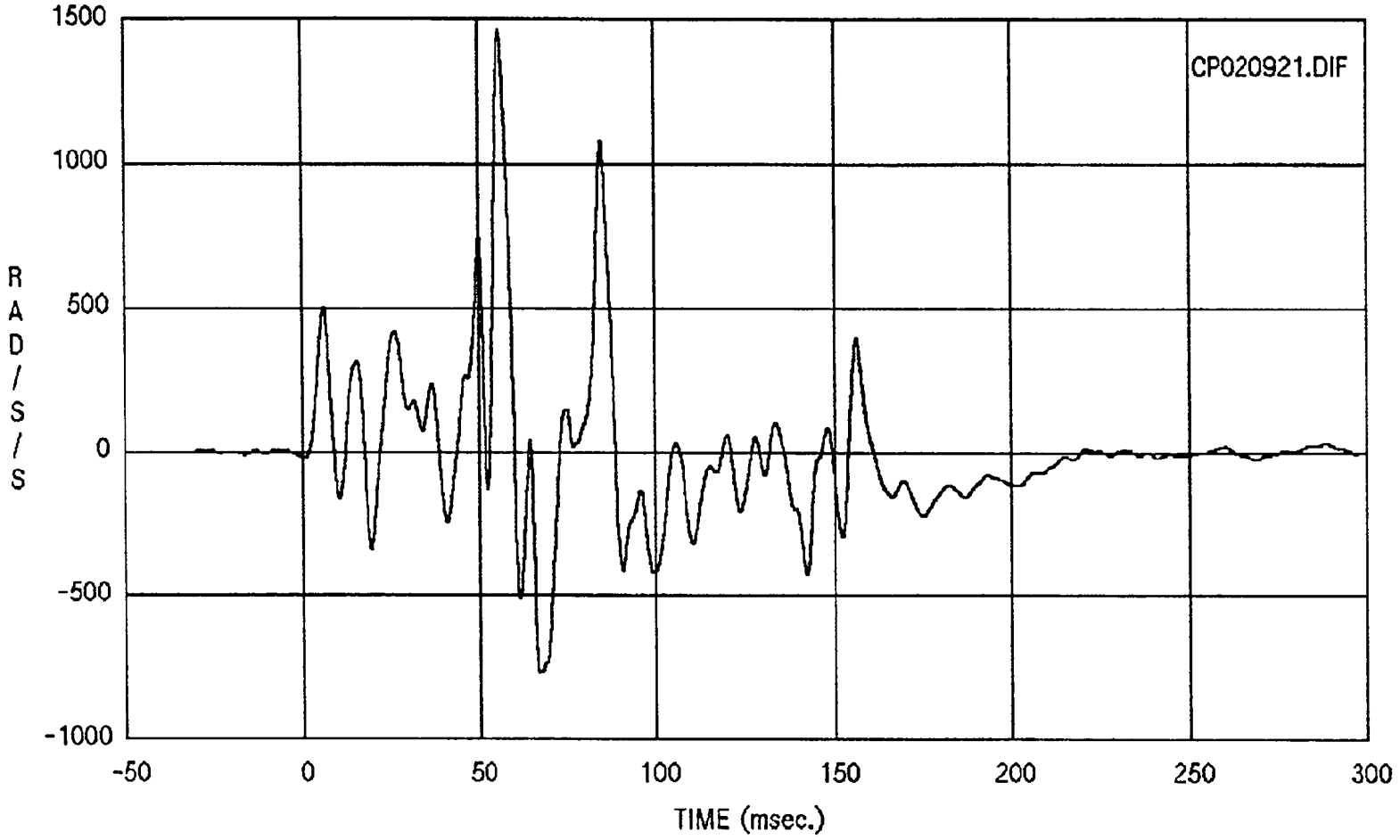
Curve: Vehicle C.G. displacement -- X axis(Secondary) Filter: SAE CLASS 180 Max = 85.768 Min = -.19912E-03

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



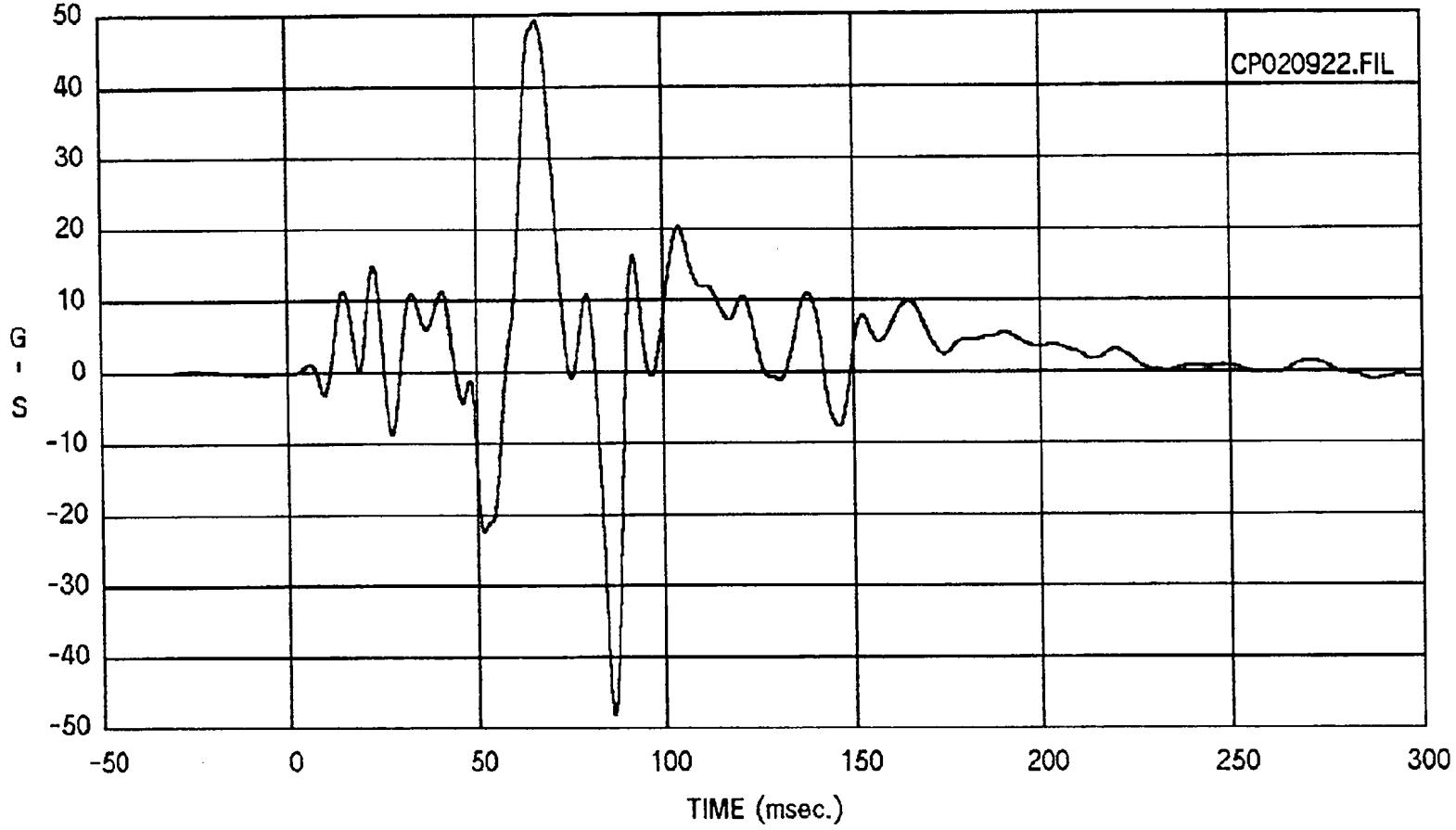
Curve: Driver seatback angular rate -- X axis Filter: SAE CLASS 60 Max = 13.459 Min = -.68954

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



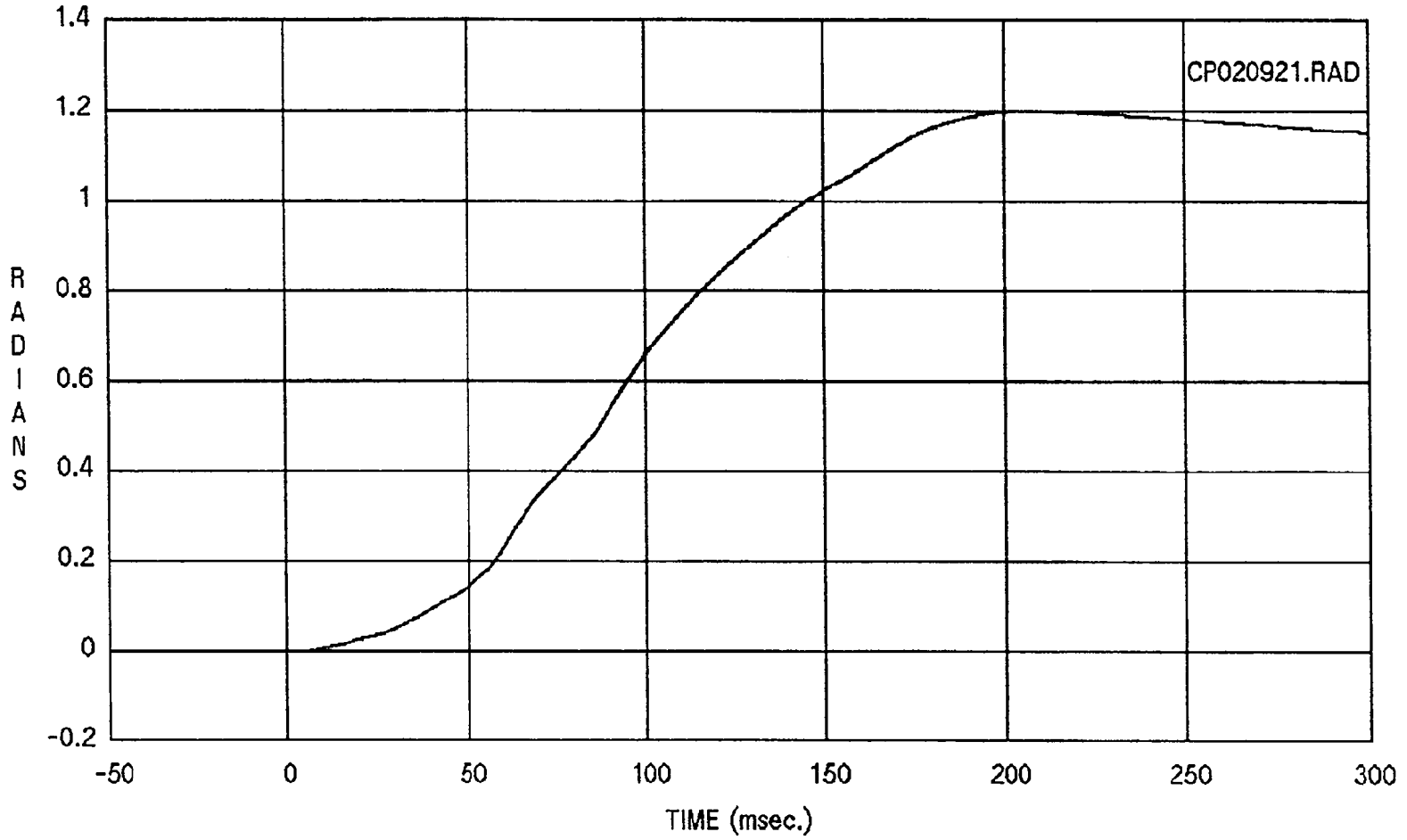
Curve: Driver seatback angular acceleration Filter: SAE CLASS 60 Max = 1464.0 Min = -768.89

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



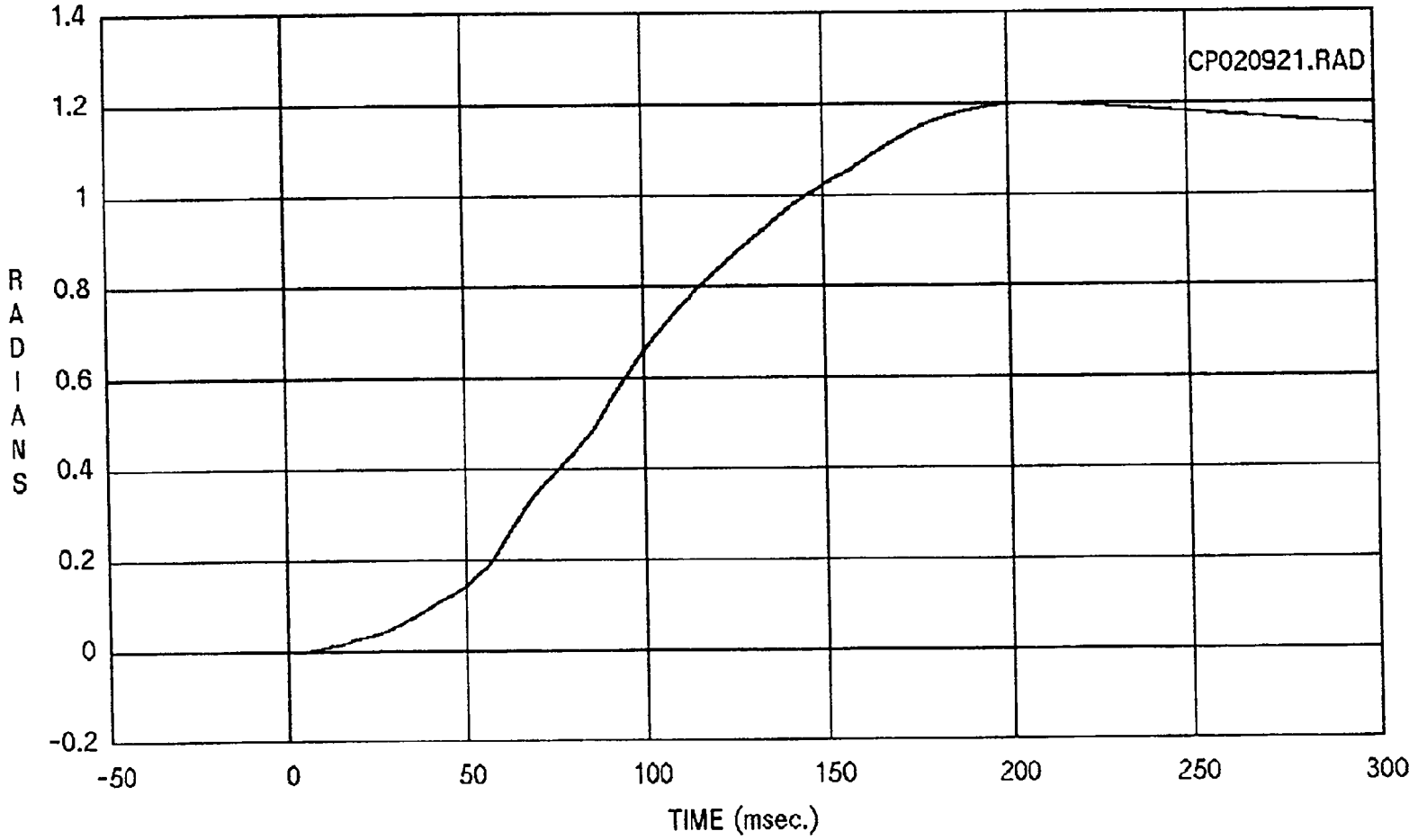
Curve: Driver seatback acceleration -- X axis Filter: SAE CLASS 60 Max = 49.120 Min = -48.299

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



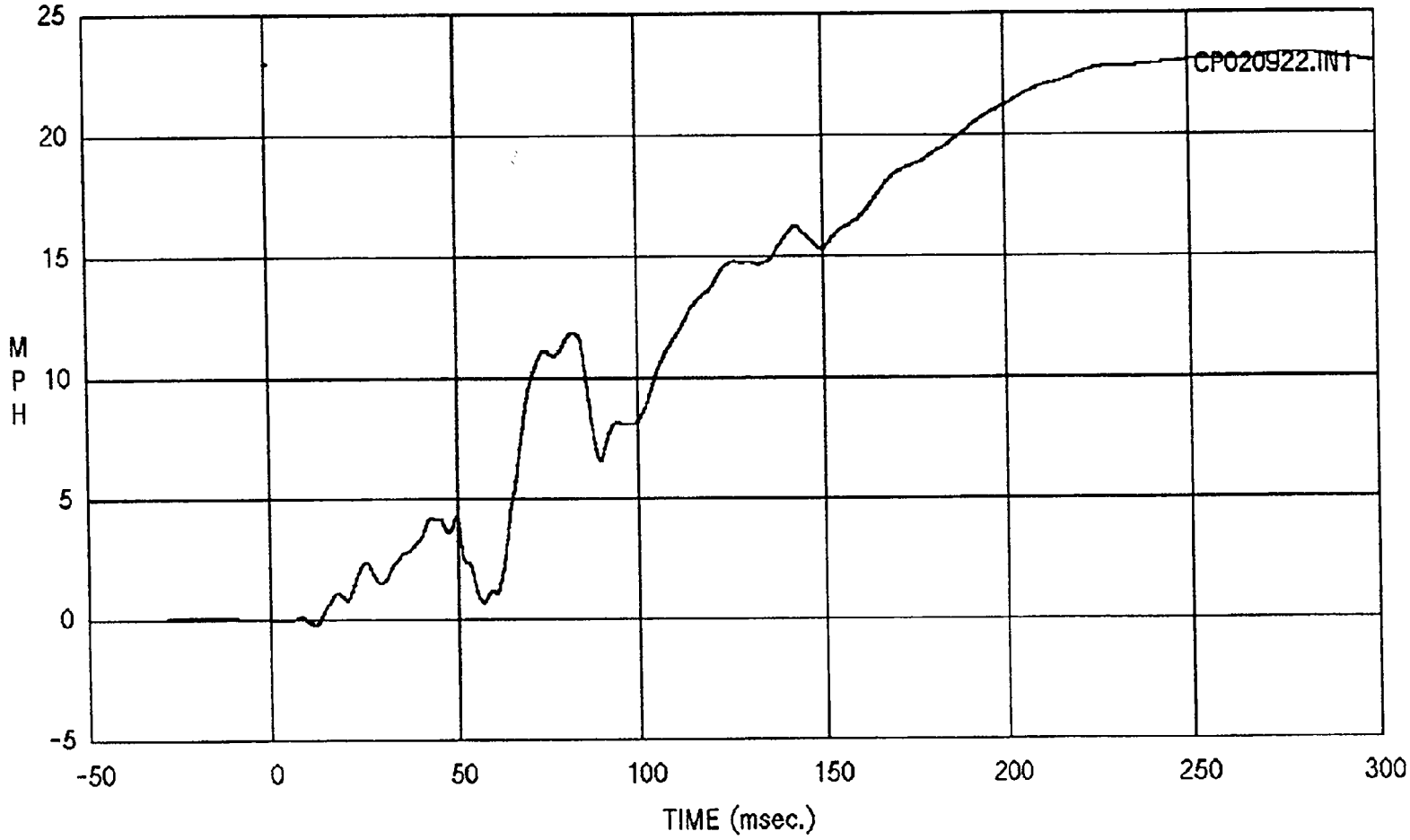
Curve: Driver seatback angular rotation Filter: SAE CLASS 180 Max = 1.2003 Min = -.10423E-

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



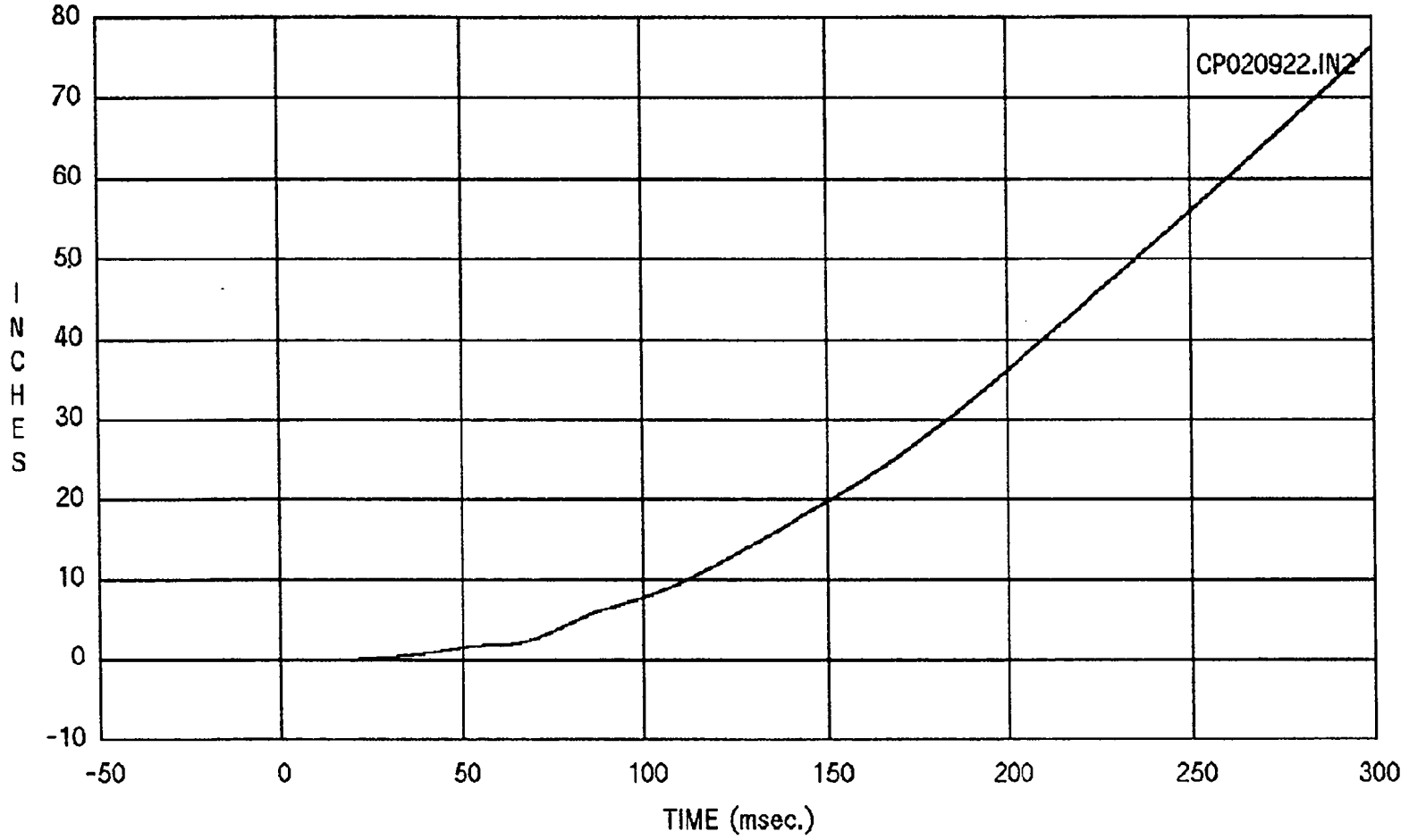
Curve: Driver seatback angular rotation Filter: SAE CLASS 180 Max = 1.2003 Min = -.10423E-

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



Curve: Driver seatback delta V -- X axis Filter: SAE CLASS 180 Max = 23.353 Min = -.20830

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort



Curve: Driver seatback displacement Filter: SAE CLASS 180 Max = 76.368 Min = -.42052E-

MSE Date: 07/15/93 Program: 1993 FMVSS 301 Rear Vehicle: 1993 Ford Escort

SECTION 7

INSTRUMENTATION AND CALIBRATION DATA

General Test Information

VERSNO: V2 TGID: 1
TITLE: 1993 FMVSS 301-75 REAR COMPLIANCE
TSTOBJ: DETERMINE COMPLIANCE TO 301-75 REAR/ACQUIRE DRIVER DUMMY DATA
TSTDAT: 15/JUL/93 TSTPRF: MSE CONNO: DTNH22-93-C-01007
TSTREF: CP0209 TSTTYP: COM TSTCFN: ITV
TKSURF: CON TKCOND: DRY TEMP: 87 RECTYP: FMT
LINK: UMB CLSSPD: 29.5 IMPANG: 180 OFFSET: 0.0
IMPPNT: 9999.9 MEASUR: ENG TOTCRV: 22
TSTCOM: NO COMMENTS

Vehicle Information

VGID: 2 VEHNO: 1 MAKE: 32 MODEL: 06 YEAR: 99 BODY: NA
VIN: 99999999999999999999 ENGINE: NAPP ENGDSP: 999999999999 TRANSM: NA
VEHTWT: 3986 WHLBAS: 102.0 VEHLEN: 139.0 VEHWID: 72.5
VEHCG: 51.0 STRSEP: NA COLMEC: NAP MODIND: R
MODDSC: FLAT IMPACTOR, MOVING
BX
1:9999.9
2:9999.9
3:9999.9
4:9999.9
5:9999.9
6:9999.9
7:9999.9
8:9999.9
9:9999.9
10:9999.9
11:9999.9
12:9999.9
13:9999.9
14:9999.9
15:9999.9
16:9999.9
17:9999.9
18:9999.9
19:9999.9
20:9999.9
21:9999.9
VEHSPD: 29.5 CRBANG: 0 PDOF: 0 BMPENG: NA
SILENG: NA APLENG: NA
DPD
1: 0.0
2: 0.0
3: 0.0
4: 0.0
5: 0.0
6: 0.0
VDI: 9999999 LENCNT: 9999.9 DAMDST: 999.9 CRHDST: 999.9
AX
1:9999.9
2:9999.9
3:9999.9
4:9999.9
5:9999.9
6:9999.9
7:9999.9
8:9999.9
9:9999.9
10:9999.9
11:9999.9
12:9999.9
13:9999.9
14:9999.9
15:9999.9
16:9999.9
17:9999.9
18:9999.9
19:9999.9
20:9999.9
21:9999.9
CARANG: 999 VEHOR: 999
VEHCOM: NO COMMENTS

Vehicle Information

VGID: 2 VEHNO: 2 MAKE: 02 MODEL: 27 YEAR: 93 BODY: 2C
VIN: 1FAPP10J4PW110944 ENGINE: 4CTF ENGDSP: 1.9 LITERS TRANSM: MF
VEHIWT: 2728 WHLBAS: 97.5 VEHLEN: 171.3 VEHWID: 66.5
VEHCG: 39.7 STRSEP: NA COLMEC: NAP MODIND: P
MODDSC: UNMODIFIED
BX
1:9999.9
2:9999.9
3:9999.9
4:9999.9
5:9999.9
6:9999.9
7:9999.9
8:9999.9
9:9999.9
10:9999.9
11:9999.9
12:9999.9
13:9999.9
14:9999.9
15:9999.9
16:9999.9
17:9999.9
18:9999.9
19:9999.9
20:9999.9
21:9999.9
VEHSPD: 0.0 CRBANG: 0 PDOF: 180 BMPENG: DE
SILENG: NA APLENG: NA
DPD
1: 12.1
2: 14.5
3: 15.1
4: 15.2
5: 14.9
6: 13.5
VDI: 06BDEW9 LENCNT: 58.0 DAMDST: 0.0 CRHDST: 15.2
AX
1:9999.9
2:9999.9
3:9999.9
4:9999.9
5:9999.9
6:9999.9
7:9999.9
8:9999.9
9:9999.9
10:9999.9
11:9999.9
12:9999.9
13:9999.9
14:9999.9
15:9999.9
16:9999.9
17:9999.9
18:9999.9
19:9999.9
20:9999.9
21:9999.9
CARANG: 999 VEHOR: 999
VEHCOM: NO COMMENTS

Occupant Information

Occupant Group ID: 4 VEHNO: 2
OCCLOC: 01 OCCTYP: H3 OCCAGE: 99 OCCSEX: M OCCHT: 999 OCCWT: 999
MTHCAL: H3 DUMSIZ: 50
DUMMAN: MFG: FIRST TECHNOLOGY SAFETY SYSTEMS, S/N: 339
DUMMOD: UNMODIFIED
DUMDSC: NO COMMENT
HH: 12.2 HW: 20.1 HR: 7.0 HS: 12.4 CD: 20.4 CS: 12.0 AD: 4.0 HD: 7.2
KD: 7.2 HB:999.9 NB:999.9 CB:999.9 KB:999.9
RESTR1: PS2 RESTR2: LAP
RESTXT: NO COMMENTS
SEPOSN: CN AIRDEP: NA
CNTRH1: OT CNTRH2: NO CNTRC1: NO CNTRC2: NO CNTRL1: NO CNTRL2: NO
HIC: 68. T1: 148.500 T2: 184.500
CLIP3M: 12.8 LFEM: 9999. RFEM: 9999. CSI: 25. LBELT: 90. SBELT: 28.
OCCCOM: CNTRH1: HEAD CONTACTED HEADREST

Instrumentation Information

Inst. Group ID: 5	VEHNO: 2	CURNO: 001	
SENTYP: AC	SENLOC: 01	SENATT: HDCG	
AXIS: XL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO,	MODEL: 7264-200,	S/N: BF83H	
CALDAT: 01/APR/93	INSRAT: 200	CHLMAX: 11	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM: NO COMMENT			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 2	CURNO: 002	
SENTYP: AC	SENLOC: 01	SENATT: HDCG	
AXIS: YL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO,	MODEL: 7264-200,	S/N: BJ15H	
CALDAT: 01/APR/93	INSRAT: 200	CHLMAX: 2	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM: NO COMMENT			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 2	CURNO: 003	
SENTYP: AC	SENLOC: 01	SENATT: HDCG	
AXIS: ZL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO,	MODEL: 7264-200,	S/N: BG29H	
CALDAT: 01/APR/93	INSRAT: 200	CHLMAX: 8	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM: NO COMMENT			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 2	CURNO: 004	
SENTYP: AC	SENLOC: 01	SENATT: CHST	
AXIS: XL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO,	MODEL: 7264-200,	S/N: BJ61H	
CALDAT: 01/APR/93	INSRAT: 200	CHLMAX: 7	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM: NO COMMENT			

Instrumentation Information

Inst. Group ID: 5	VEHNO: 2	CURNO: 005	
SENTYP: AC	SENLOC: 01	SENATT: CHST	
AXIS: YL	UNITS: G'S	PREFIL: 1650	
INSMAN: MFG: ENDEVCO,	MODEL: 7264-200,	S/N: BG95H	
CALDAT: 01/APR/93	INSRAT: 200	CHLMAX: 2	INIVEL: 0.0
NFP: -300	NLP: 2999	DELT: 100	DASTAT: AM
INSCOM: NO COMMENT			

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 006
SENTYP: AC SENLOC: 01 SENATT: CHST
AXIS: ZL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: BJ54H
CALDAT: 01/APR/93 INSRAT: 200 CHLMAX: 4 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 007
SENTYP: LC SENLOC: 01 SENATT: PVCN
AXIS: XL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: AE09
CALDAT: 01/APR/93 INSRAT: 200 CHLMAX: 11 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 008
SENTYP: LC SENLOC: 01 SENATT: PVCN
AXIS: YL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: AD61
CALDAT: 01/APR/93 INSRAT: 200 CHLMAX: 2 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 009
SENTYP: AC SENLOC: 01 SENATT: PVCN
AXIS: ZL UNITS: G'S PREFIL: 1650
INSMAN: MFG: ENDEVCO, MODEL: 7264-200, S/N: AD98
CALDAT: 01/APR/93 INSRAT: 200 CHLMAX: 4 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 010
SENTYP: LC SENLOC: 01 SENATT: NECU
AXIS: XL UNITS: LBS PREFIL: 1650
INSMAN: MFG: R. A. DENTON, MODEL: 1716A, S/N: 0441 FX
CALDAT: 02/NOV/92 INSRAT: 2000 CHLMAX: 2 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 011
SENTYP: LC SENLOC: 01 SENATT: NECU
AXIS: YL UNITS: LBS PREFIL: 1650
INSMAN: MFG: R. A. DENTON, MODEL: 1716A, S/N: 0441 FY
CALDAT: 02/NOV/92 INSRAT: 2000 CHLMAX: 2 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 012
SENTYP: LC SENLOC: 01 SENATT: NECU
AXIS: ZL UNITS: LBS PREFIL: 1650
INSMAN: MFG: R. A. DENTON, MODEL: 1716A, S/N: 0441 FZ
CALDAT: 02/NOV/92 INSRAT: 3000 CHLMAX: 7 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 013
SENTYP: LC SENLOC: 01 SENATT: NECU
AXIS: XL UNITS: OTH PREFIL: 1650
INSMAN: MFG: R. A. DENTON, MODEL: 1716A, S/N: 0441 MX
CALDAT: 02/NOV/92 INSRAT: 2500 CHLMAX: 3 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: UNITS: IN.-LBS.

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 014
SENTYP: LC SENLOC: 01 SENATT: NECU
AXIS: YL UNITS: OTH PREFIL: 1650
INSMAN: MFG: R. A. DENTON, MODEL: 1716A, S/N: 0441 MY
CALDAT: 02/NOV/92 INSRAT: 2500 CHLMAX: 10 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: UNITS: IN.-LBS.

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 015
SENTYP: LC SENLOC: 01 SENATT: NECU
AXIS: ZL UNITS: OTH PREFIL: 1650
INSMAN: MFG: R. A. DENTON, MODEL: 1716A, S/N: 0441 MZ
CALDAT: 02/NOV/92 INSRAT: 2500 CHLMAX: 3 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: UNITS: IN.-LBS.

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 016
SENTYP: LC SENLOC: NA SENATT: LBPO
AXIS: NA UNITS: LBS PREFIL: 1650
INSMAN: MFG: LEBOW, MODEL: 3371, S/N: 330
CALDAT: 05/APR/93 INSRAT: 3500 CHLMAX: 3 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 017
SENTYP: LC SENLOC: NA SENATT: SHBT
AXIS: NA UNITS: LBS PREFIL: 1650
INSMAN: MFG: LEBOW, MODEL: 3371, S/N: 308
CALDAT: 05/APR/93 INSRAT: 3500 CHLMAX: 1 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 018
SENTYP: DS SENLOC: NA SENATT: LBPO
AXIS: NA UNITS: INS PREFIL: 1650
INSMAN: MFG: MSE, MODEL: 101-24, S/N: 001
CALDAT: 30/APR/93 INSRAT: 24 CHLMAX: 11 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 019
SENTYP: AC SENLOC: NA SENATT: VECG
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSOR, MODEL: 3031-200, S/N: 23-200
CALDAT: 30/MAR/93 INSRAT: 200 CHLMAX: 21 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 020
SENTYP: AC SENLOC: NA SENATT: VECG
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSOR, MODEL: 3031-200, S/N: 26-200
CALDAT: 30/MAR/93 INSRAT: 200 CHLMAX: 22 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 021
SENTYP: AV SENLOC: NA SENATT: SELF
AXIS: XG UNITS: RPS PREFIL: 1650
INSMAN: MFG: ATA, MODEL: ARS-01, S/N: 185
CALDAT: 26/APR/93 INSRAT: 200 CHLMAX: 9 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT

Instrumentation Information

Inst. Group ID: 5 VEHNO: 2 CURNO: 022
SENTYP: AC SENLOC: NA SENATT: SELF
AXIS: XG UNITS: G'S PREFIL: 1650
INSMAN: MFG: I.C. SENSOR, MODEL: 3031-200, S/N: HDIMP
CALDAT: 30/MAR/93 INSRAT: 200 CHLMAX: 117 INIVEL: 0.0
NFP: -300 NLP: 2999 DELT: 100 DASTAT: AM
INSCOM: NO COMMENT