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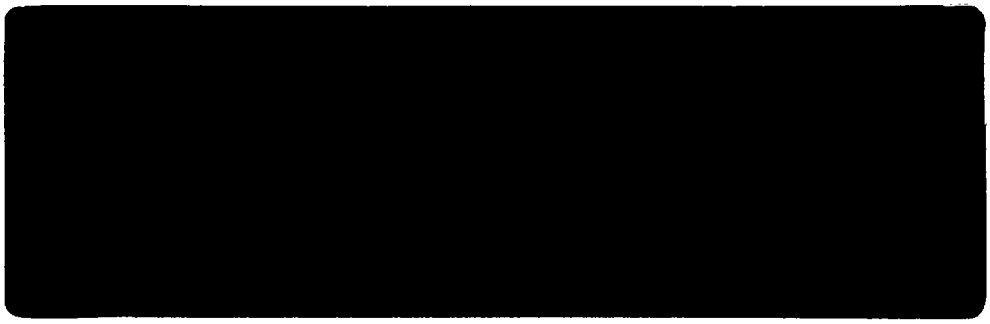

technical report

A DIVISION OF CALSPAN CORPORATION
AN ARVIN COMPANY PO BOX 400 BUFFALO NEW YORK 14225

CALSPAN ADVANCED TECHNOLOGY CENTER

IMPROVED LIGHTWEIGHT SUBCOMPACT SIDE STRUCTURE TEST REPORT

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Calspan Report No. 6225-V-7

Prepared For:

THE BUDD COMPANY
TECHNICAL CENTER
FORT WASHINGTON, PA. 19034

PURCHASE ORDER NO. TC-14436

TEST: TEST NO. 6
TYPE OF TEST: CAR TO CAR FRONT TO SIDE OBLIQUE
TEST DATE: 6-12-78

A DIVISION OF CALSPAN CORPORATION
AN ARVIN COMPANY P.O. BOX 400 BUFFALO, NEW YORK 14225

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TEST OBJECTIVE

The test objective was to obtain performance data on a baseline vehicle (1976 VW Rabbit) when subjected to a front to side oblique impact at 20 MPH with a 1978 Chevrolet Impala as the impacting vehicle. The test program is part of the National Highway Traffic Safety Administration (NHTSA) Contract No. DOT-HS-7-01588 to improve subcompact side structures.

PRESENTATION OF RESULTS

This test report presents all the test results obtained from this car-to-car, front-to-side impact. Included in this document are still photographs, all vehicle and dummy response data in plotted form, vehicle interior and exterior damage sketches, figures of pre- and post-test vehicle side intrusion measurements and instrumentation identification. High-speed motion pictures and color slides of pre- and post-test conditions were obtained and have been submitted to the sponsor. Included in the vehicle response data, in plotted form, are dynamic intrusion measurements which were obtained by a Calspan designed linear displacement transducer.

Calspan Report No. ZP-6144-V-1, Baseline Crash Test No. 1, of the Improved Lightweight Subcompact Side Structure Contract, Appendix A, contains information on the crash test facility and supporting equipment at Calspan.

TABLE 1

CRASH TEST SUMMARY

TEST NO. 6 PROJECT Improved Lightweight Subcompact Subcompact Side Structure

DATE 6/12/78 TIME 11:45 TEMP. 86° F

TEST CONDITION Car-to-Car, 60° Side Oblique

VEHICLE NO. 1 1978 Chevrolet Impala (4-door sedan)

VEHICLE NO. 2 1976 Volkswagen Rabbit

	VEH. NO. 1	VEH. NO. 2
TEST WEIGHT (lbs)	Curb Weight + 2 Dummies	Curb Weight + 2 Dummies
IMPACT ANGLE (deg)*	60	0
IMPACT VELOCITY (mph)**	20.31	0
MAX. CRUSH (in)	See Fig. 11	14.2
MAX. INTRUSION (in)	--	12.0

DUMMIES	VEH. NO. 1	VEH. NO. 2
TYPE	Hybrid II Part 572	Hybrid II Part 572
LOCATION	LF (1), RF2	LF (1), RF (2)
RESTRAINT	Production 3-Point System	Unrestrained Dummies

NUMBER OF DATA CHANNELS 65
NUMBER OF HIGH SPEED CAMERAS 10

*WITH RESPECT TO TOW TRACK CENTERLINE

**SPEED TRAP MEASUREMENT (±0.5% ACCURACY)

OBSERVATIONS (VEHICLE NO. 1) 1978 Chevrolet Impala

GLAZING Undamaged

DOORS Undamaged

SEAT ANCHORAGES Intact

RESTRAINTS Intact

OBSERVATIONS (VEHICLE NO. 2) 1976 Volkswagen Rabbit

GLAZING Driver's Door Window Broken

DOORS Passenger Door Was Operable

SEAT ANCHORAGES Driver's Seat Was Crushed

RESTRAINTS ---

GENERAL COMMENTS

- All cameras operated.
- On Car 2 - Yaw rate signal was lost after 100 msec.
- On Car 2 - Mid-rear of front door accelerometer data was lost due to an open cable.

TABLE 2

VEHICLE TEST WEIGHT

CAR 1 - BULLET VEHICLE - 1978 CHEVROLET IMPALA

Left Front	1010 lbs.	Left Rear	790 lbs.
Right Front	1080 lbs.	Right Rear	810 lbs.
Total Front	2090 lbs.	Total Rear	1600 lbs.

Total Weight = 2090 lbs. + 1600 lbs. = 3690 lbs.

Wheel Base 116.5 in.

$$Cg_{FW} = \frac{1600 \text{ lbs.} \quad 116.5 \text{ in.}}{3690 \text{ lbs.}} = 50.51 \text{ in.}$$

CAR 2 - TARGET VEHICLE - 1976 VOLKSWAGEN RABBIT

Left Front	640 lbs.	Left Rear	430 lbs.
Right Front	700 lbs.	Right Rear	470 lbs.
Total Front	1340 lbs.	Total Rear	900 lbs.

Total Weight = 1340 lbs. + 900 lbs. = 2240 lbs.

Wheel Base 94.5 in.

$$Cg_{FW} = \frac{900 \text{ lbs.} \quad 94.5 \text{ in.}}{2240 \text{ lbs.}} = 37.96 \text{ in.}$$

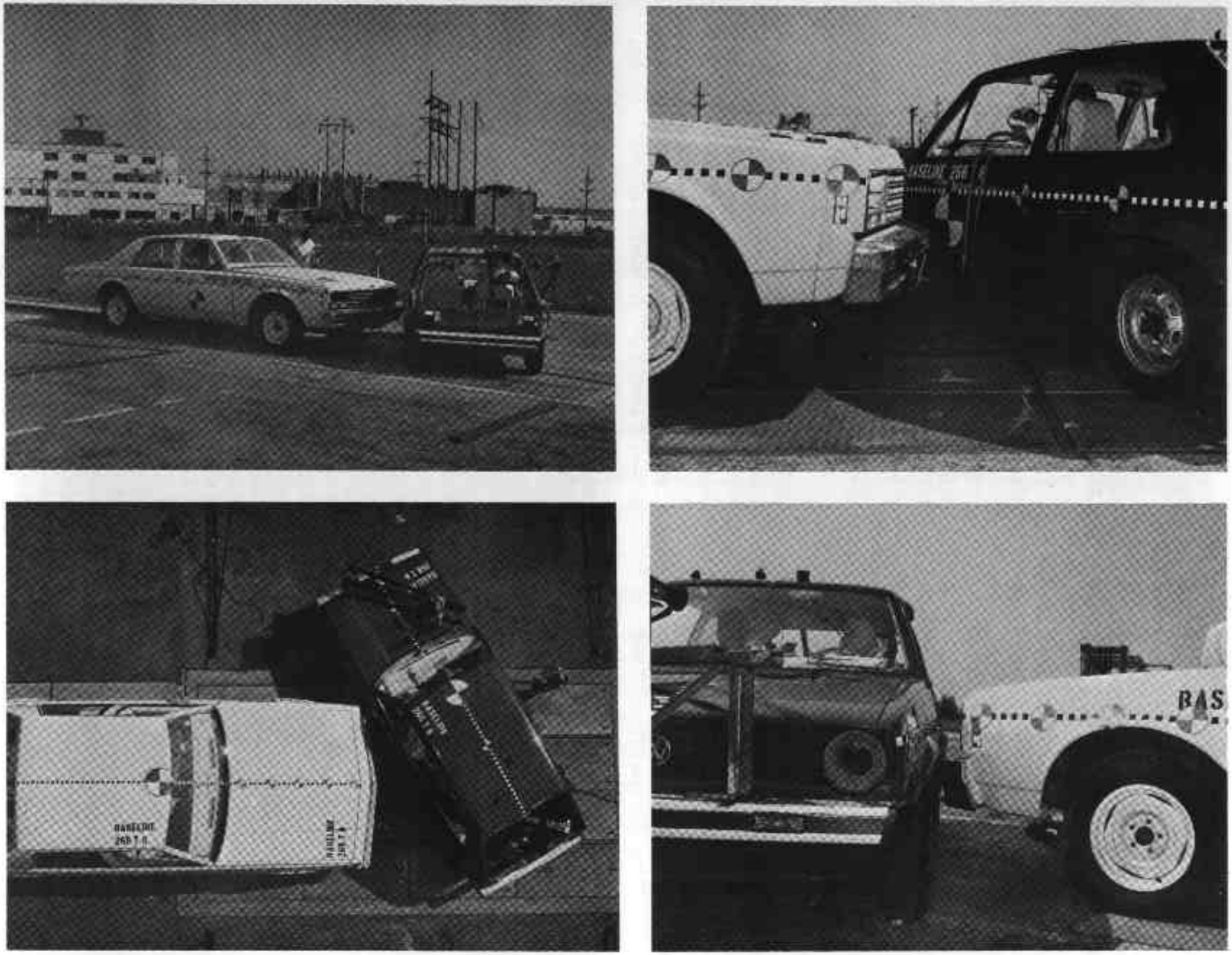


Figure 1 PRE-BASELINE TEST NO. 6 – VEHICLE IMPACT CONFIGURATION

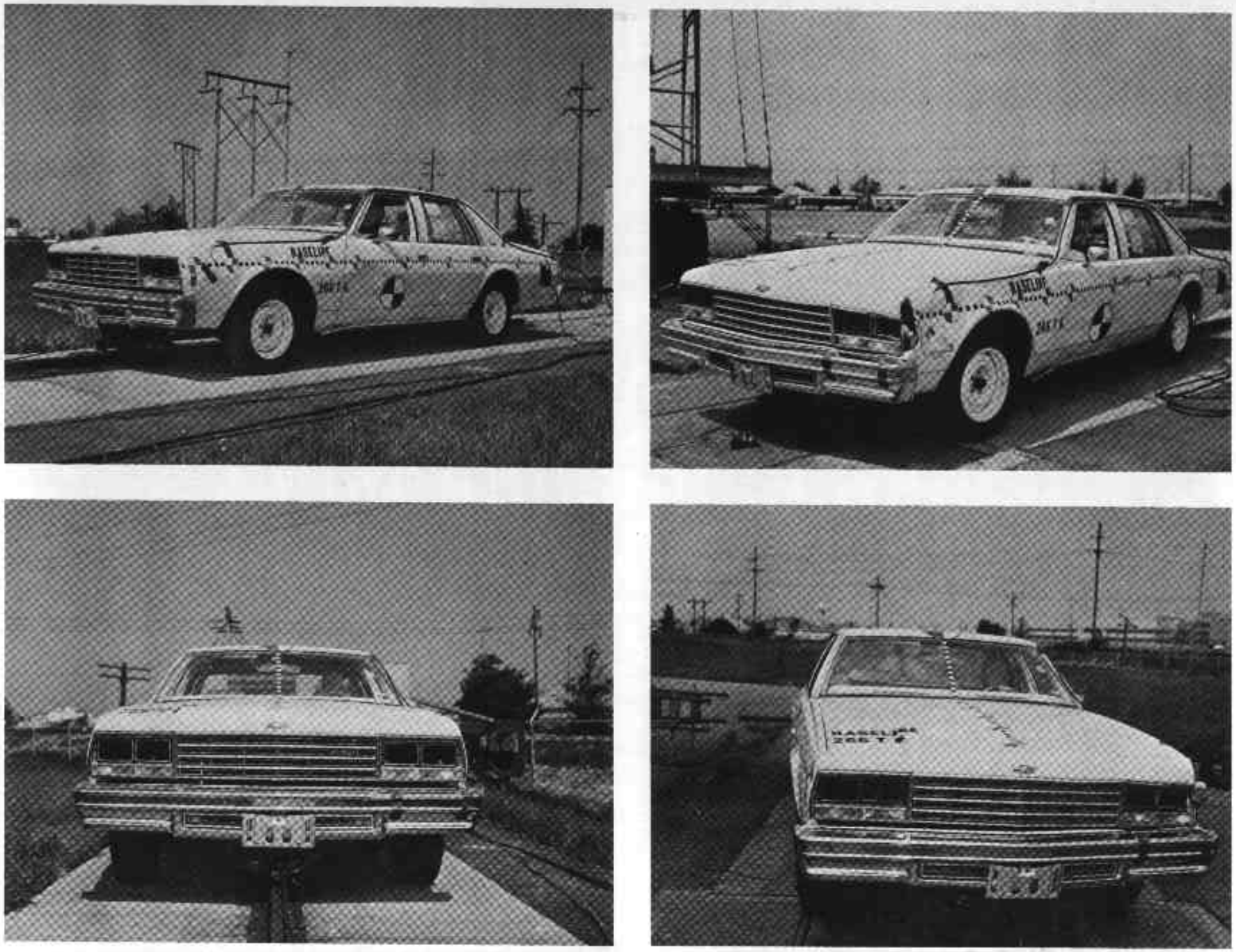


Figure 2 PRE- AND POST-TEST NO. 6 – CAR 1, 1978 CHEVROLET IMPALA EXTERIOR

Figure 3 PRE- AND POST-TEST NO. 6 – CAR 2, 1976 VW RABBIT EXTERIOR

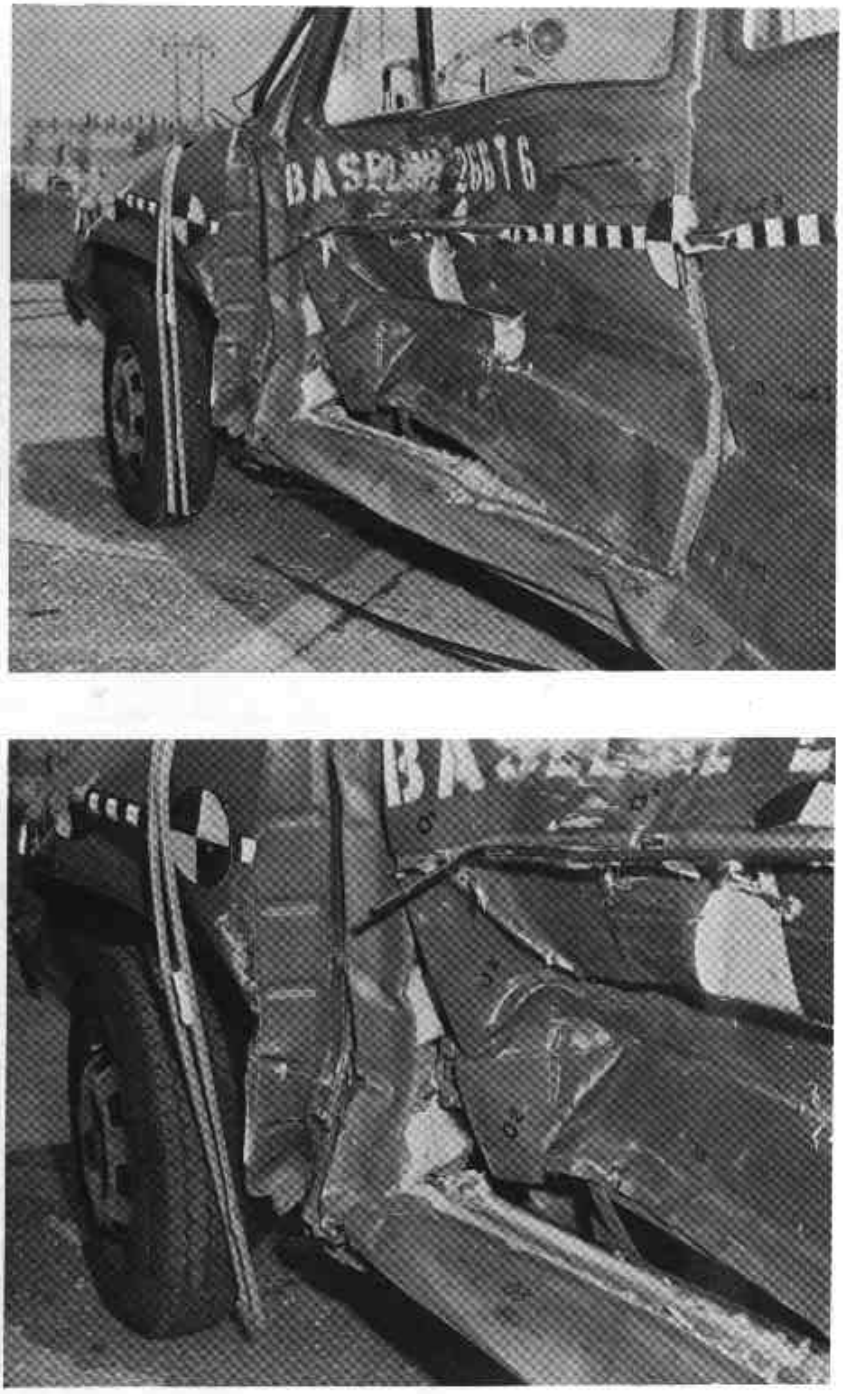


Figure 4 POST TEST NO. 6 – CAR 2, 1976 VW RABBIT – DOOR AREA

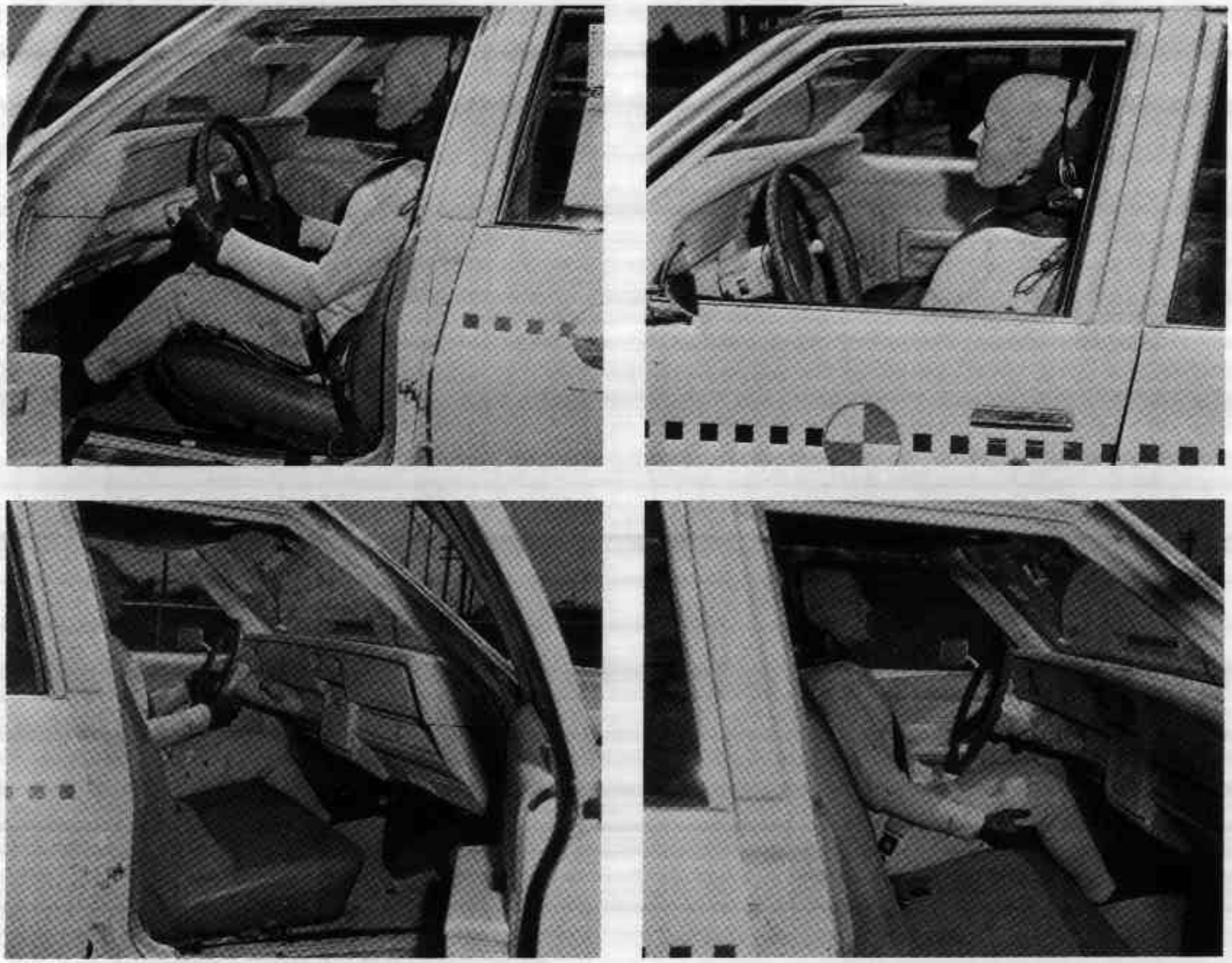


Figure 5 PRE- AND POST-TEST NO. 6 – CAR 1, 1978 CHEVROLET IMPALA INTERIOR

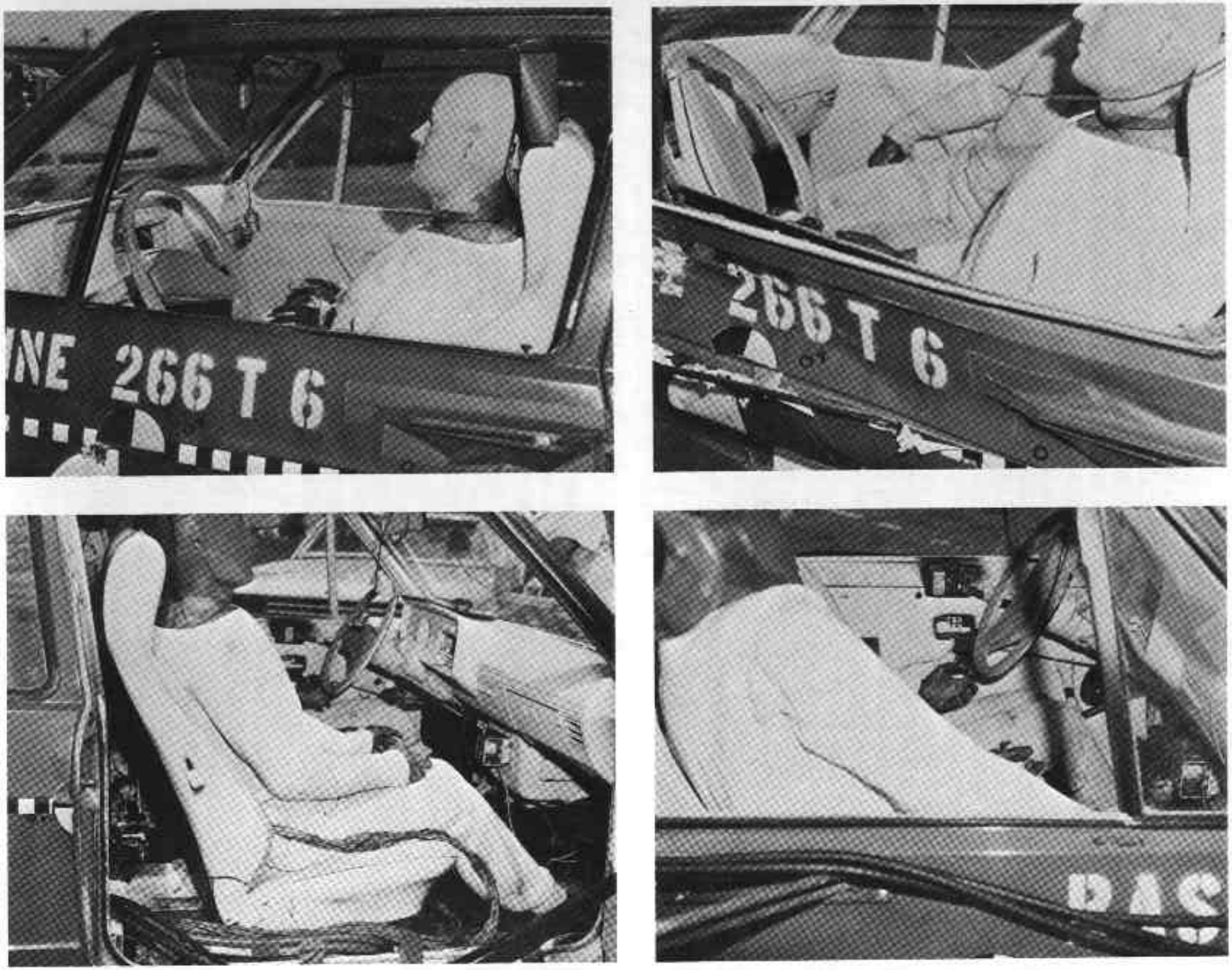


Figure 6 PRE- AND POST-TEST NO. 6 – CAR 2, 1976 VW RABBIT INTERIOR

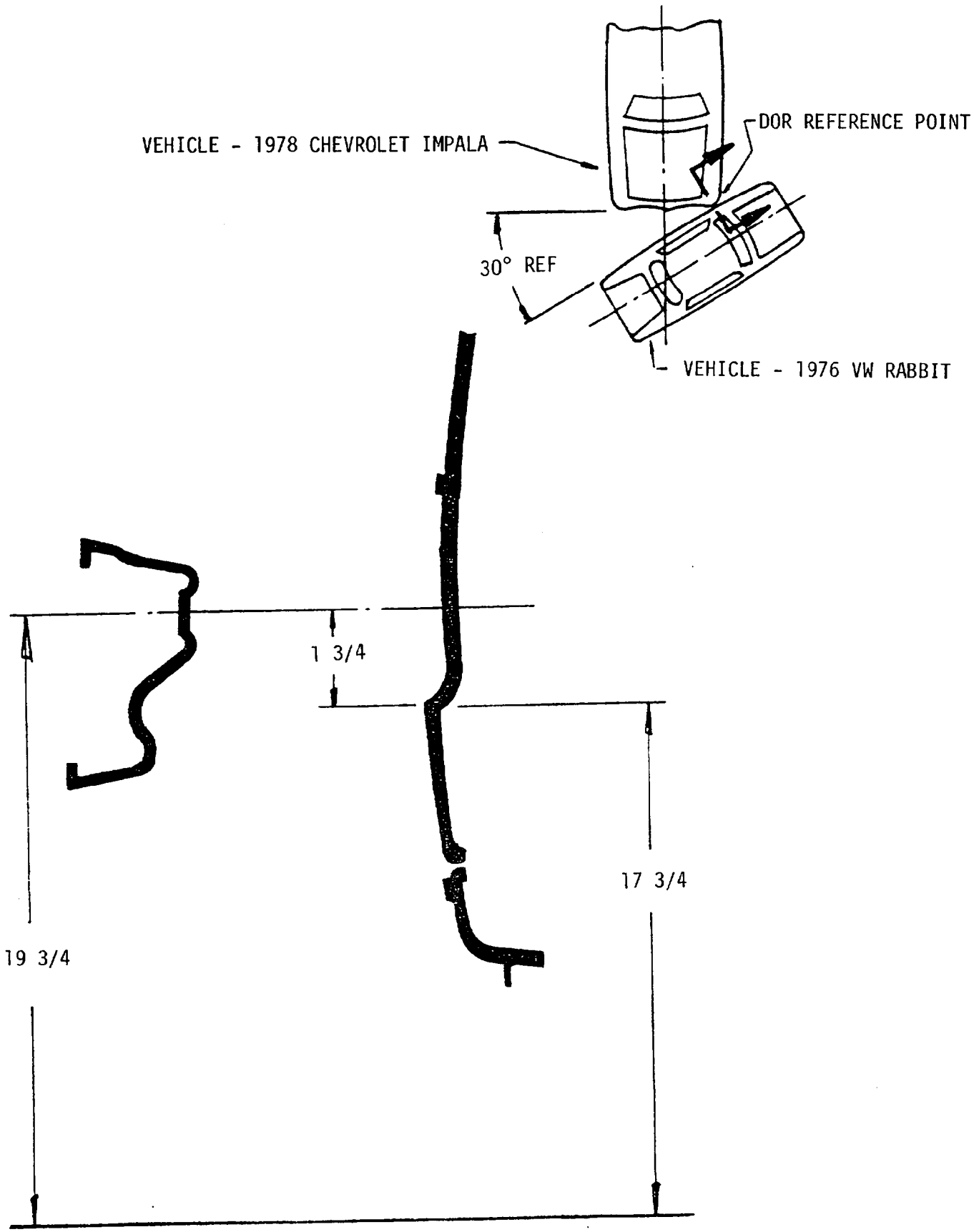
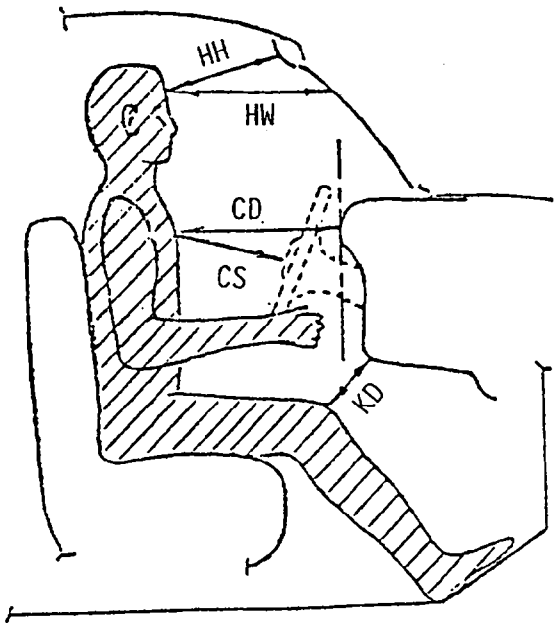
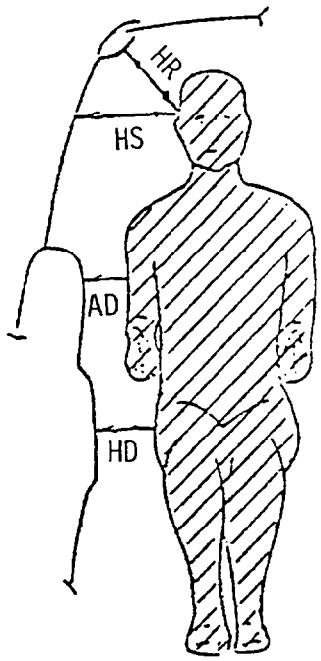


Figure 7 VEHICLE CRASH ATTITUDE

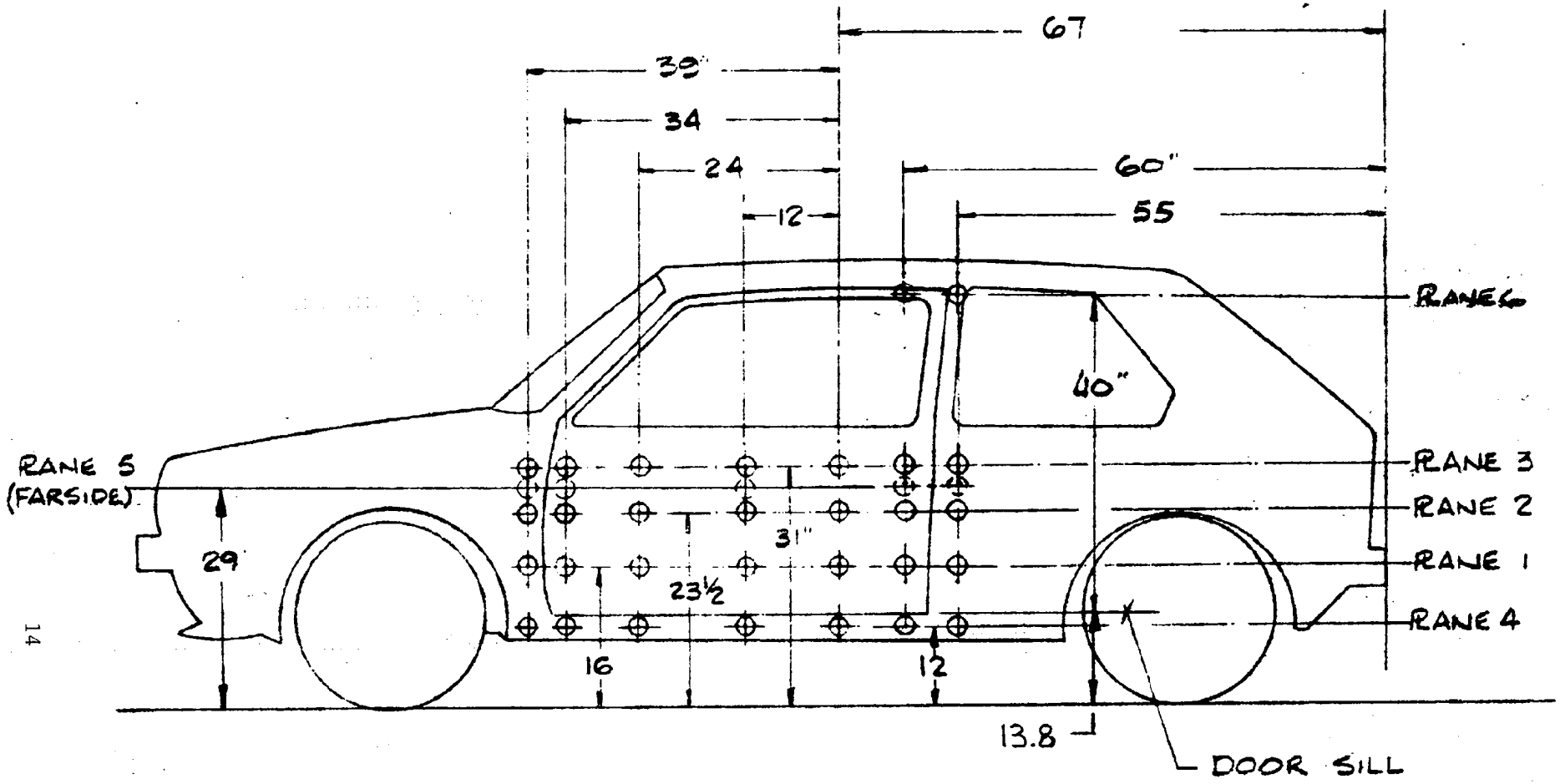


HH	18
HW	22 1/4
CD	21 1/2
CS	19
KD	6 1/2



HR	3 1/2
HS	6 1/2
AD	2 3/4
HD	9 1/4

Figure 8 OCCUPANT CLEARANCE DIMENSIONS



1976 VW RABBIT

PRE-TEST LOCATION MEASUREMENTS
BUDD DYNAMIC TEST NO. 6

Figure 9 SIDE INTRUSION MEASUREMENTS

TABLE 3

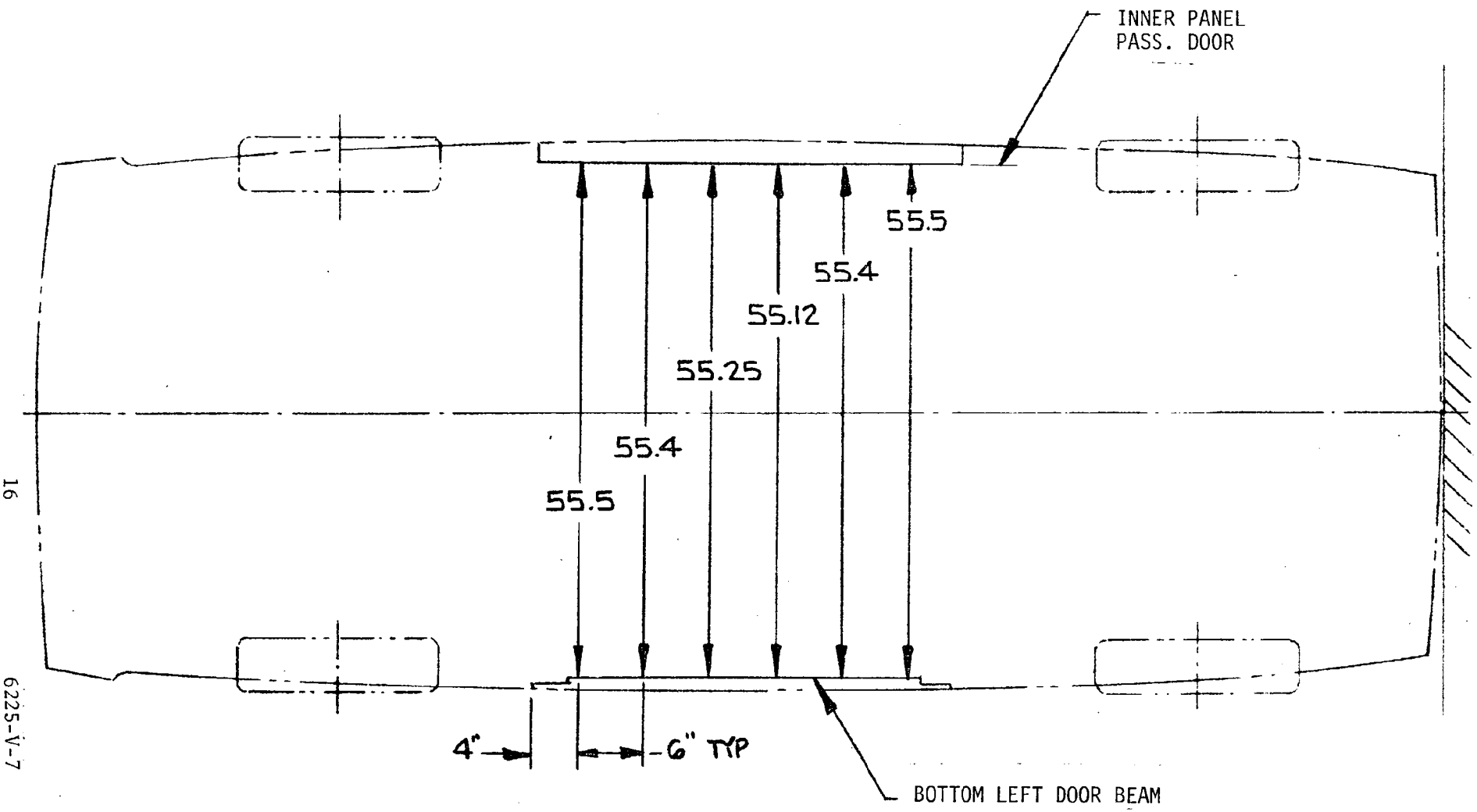
SIDE INTRUSION MEASUREMENTS

DIMENSIONS LISTED BELOW ARE FROM POINTS SHOWN ON FIGURE 9 TO REF. PLANES LOCATED PARALLEL TO AND OUTBOARD FROM ℄ OF VEHICLE (L. SIDE 34; r. side 33.75).

PLANE NO.		DIMENSIONS (INCHES) ROW 1	2	3	4	5	6	7
1	PRE	4.6	4.8	4.7	4.7	4.8	4.8	4.9
	POST	8.8	15.5	18.9	16.1	13.1	11.4	10.1
	DIFF.	4.2	10.7	14.2	11.4	8.3	6.6	5.2
2	PRE	3.7	3.8	3.6	3.6	3.6	3.6	3.6
	POST	6.1	14.4	17.3	15.3	13.3	11.9	10.6
	DIFF.	2.4	10.6	13.7	11.7	9.7	8.3	7.0
3	PRE	4.0	4.0	3.8	3.6	3.6	3.6	3.6
	POST	5.4	11.0	14.9	13.1	10.8	9.8	9.0
	DIFF.	1.4	7.0	11.1	9.5	7.2	6.2	5.4
4	PRE	6.0	6.0	6.0	6.0	6.1	6.1	6.2
	POST	10.0	10.9	10.9	10.3	10.0	9.6	9.0
	DIFF.	4.0	4.9	4.9	4.3	3.9	3.5	2.8
5	PRE	3.2	3.1		3.0		3.1	3.1
	POST	2.6	2.6	___	2.6	___	2.9	3.0
	DIFF.	.6	.5		.4		.2	.1
6	PRE						12.6	11.6
	POST	___	___	___	___	___	13.8	13.3
	DIFF.						1.2	1.7
7	PRE							
	POST	___	___	___	___	___	___	___
	DIFF.							

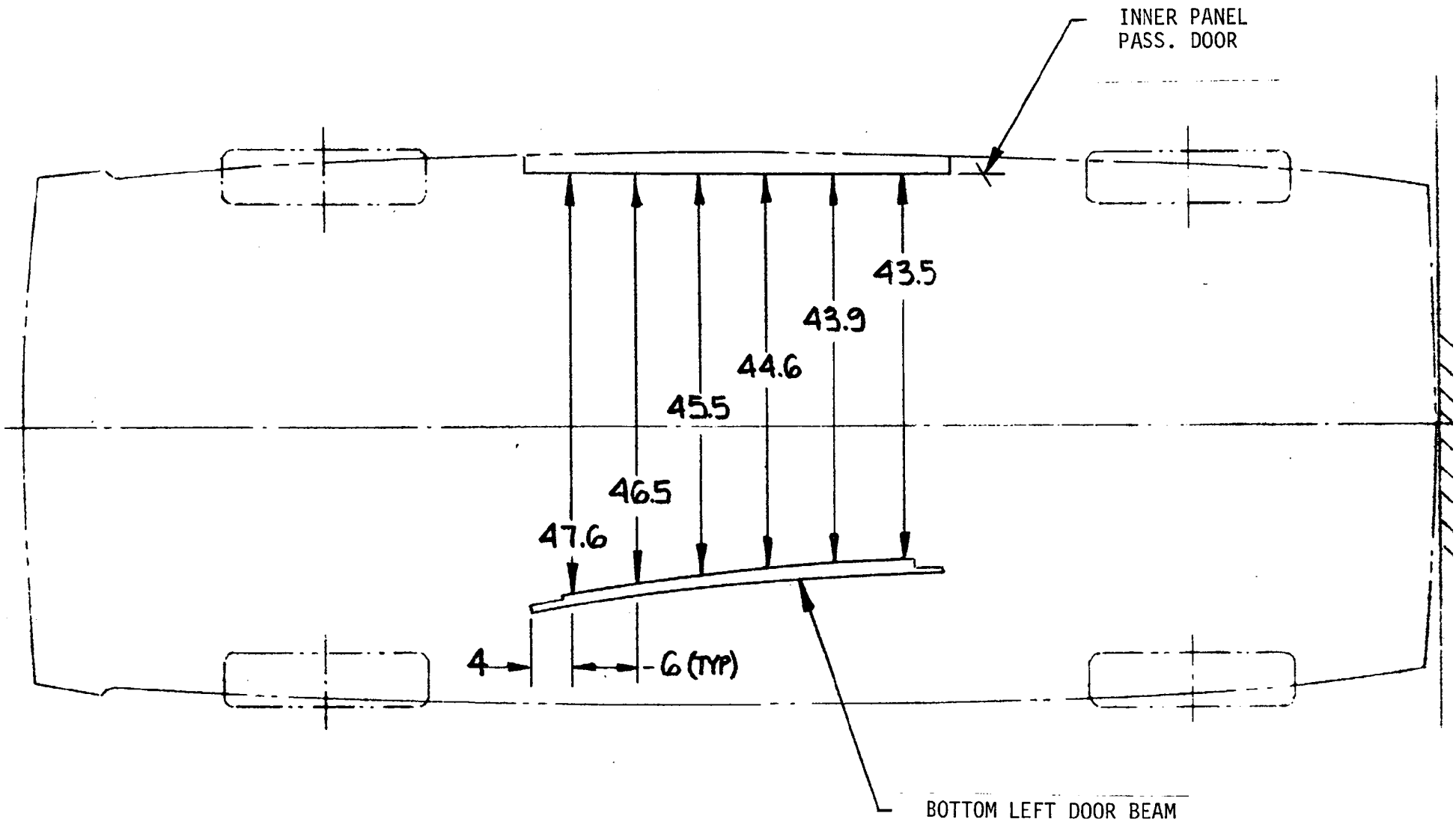
1976 VW RABBIT

BUDD DYNAMIC TEST NO. 6



1976 VW RABBIT
SCALE .06" = 1"

Figure 10-1 PRE-TEST DOOR BEAM INTRUSION MEASUREMENTS



1976 VW RABBIT
SCALE .06" = 1"

Figure 10-2 POST-TEST DOOR BEAM INTRUSION MEASUREMENTS

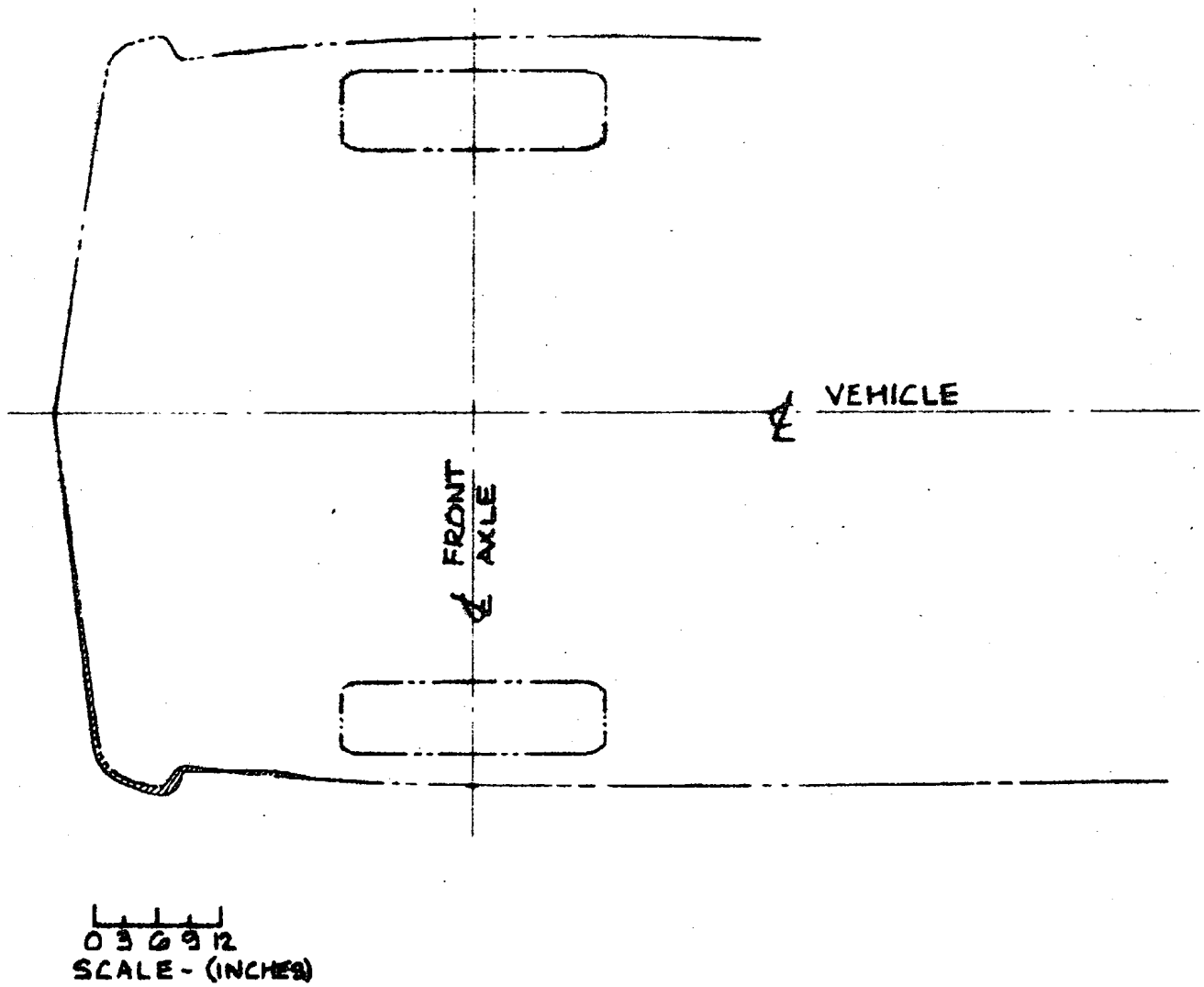


Figure 11 PRE AND POST-TEST DEFORMATION - CAR 1, 1978 CHEVROLET IMPALA

TABLE 4

ELECTRONIC INSTRUMENTATION TEST No. 6

CAR 1 - Bullet Vehicle 1978 Chevrolet Impala

TRANSDUCER DESCRIPTION OR ACCELEROMETER LOCATION *	DIRECTION OF PARAMETER BEING MEASURED	LOCATION ON VEHICLE	DESCRIPTION LISTED ON DATA PLOTS
VEHICLE ACCELEROMETER			
1	X	Left sill next to rear seat	Left compartment
2	X	Right sill next to rear seat	Right compartment
3	X, Y, Z	Deck over rear axle	Rear deck
4	X, Y, Z	Firewall	Firewall
5	X	Rear compartment	Left rear compartment-Angular X
6	X, Y, Z	Top of engine, carburetor	Engine
7	X	Front crossmember	Front crossmember
9	X	Rear compartment	Right rear compartment-Angular X
DUMMY			
LF Head (Dummy (1))	X, Y, Z	Left front seat	Dummy (LF) Head
LF Chest (Dummy (1))	X, Y, Z	Left front seat	Dummy (LF) Chest
LF Femurs (Dummy (1))	R, L**	Left front seat	Dummy (LF) Femurs
LF Belts (Dummy (1))	U, R, L***	Left front seat	Self-explanatory
MISCELLANEOUS			
10	Yaw rate	Centerline behind front seats	Tunnel yaw rate
12	X-Accel.	Bumper (rear face)	Bumper

*SEE ACCELEROMETER LAYOUT DIAGRAM FIGURE 12

**RIGHT & LEFT FEMUR FORCES ***UPPER,LOWER BELT FORCES

TABLE 5

ELECTRONIC INSTRUMENTATION TEST No. 6

Target Vehicle

CAR 2 - 1976 Volkswagen Rabbit

TRANSDUCER DESCRIPTION OR ACCELEROMETER LOCATION *	DIRECTION OF PARAMETER BEING MEASURED	LOCATION ON VEHICLE	DESCRIPTION LISTED ON DATA PLOTS
VEHICLE ACCELEROMETER			
1	X, Y, Z	Right sill next to front seat	Right front compartment
2	X, Y, Z	Right sill next to rear seat	Right rear compartment
3	X, Y, Z	Deck over rear axle	Rear deck
6	Y	Lower left door centerline	Lower door center
7	X	Rear compartment	Left compartment-angular X
8	X	Rear compartment	Right compartment-angular X
9	Y	Mid-rear of left door	Mid-aft of door
10	Y	Upper left door centerline	Upper door center
11	Y	Mid-front of left door	Mid-front of door
17	X, Y	Top of engine	Engine
DUMMY			
LF Head (Dummy (1))	X, Y, Z	Left front seat	Dummy (LF) Head
LF Chest (Dummy (1))	X, Y, Z	Left front seat	Dummy (LF) Chest
LF Pelvis (Dummy (1))	X, Y	Left front seat	Dummy (LF) Pelvis
RF Head (Dummy (2))	X, Y, Z	Right front seat	Dummy (RF) Head
RF Chest (Dummy (2))	X, Y, Z	Right front seat	Dummy (RF) Chest
RF Pelvis (Dummy (2))	X, Y	Right front seat	Dummy (RF) Pelvis
MISCELLANEOUS			
12	Yaw rate	Centerline behind front seats	Tunnel yaw rate
13 - 16**	Side intrusion	Side intrusion (driver side)	Side intrusion

*See Accelerometer Layout Diagram Figure 13. **See Vehicle Potentiometer Locations Figure 14.

CAR 1 - BULLET VEHICLE - 1978 CHEVROLET IMPALA

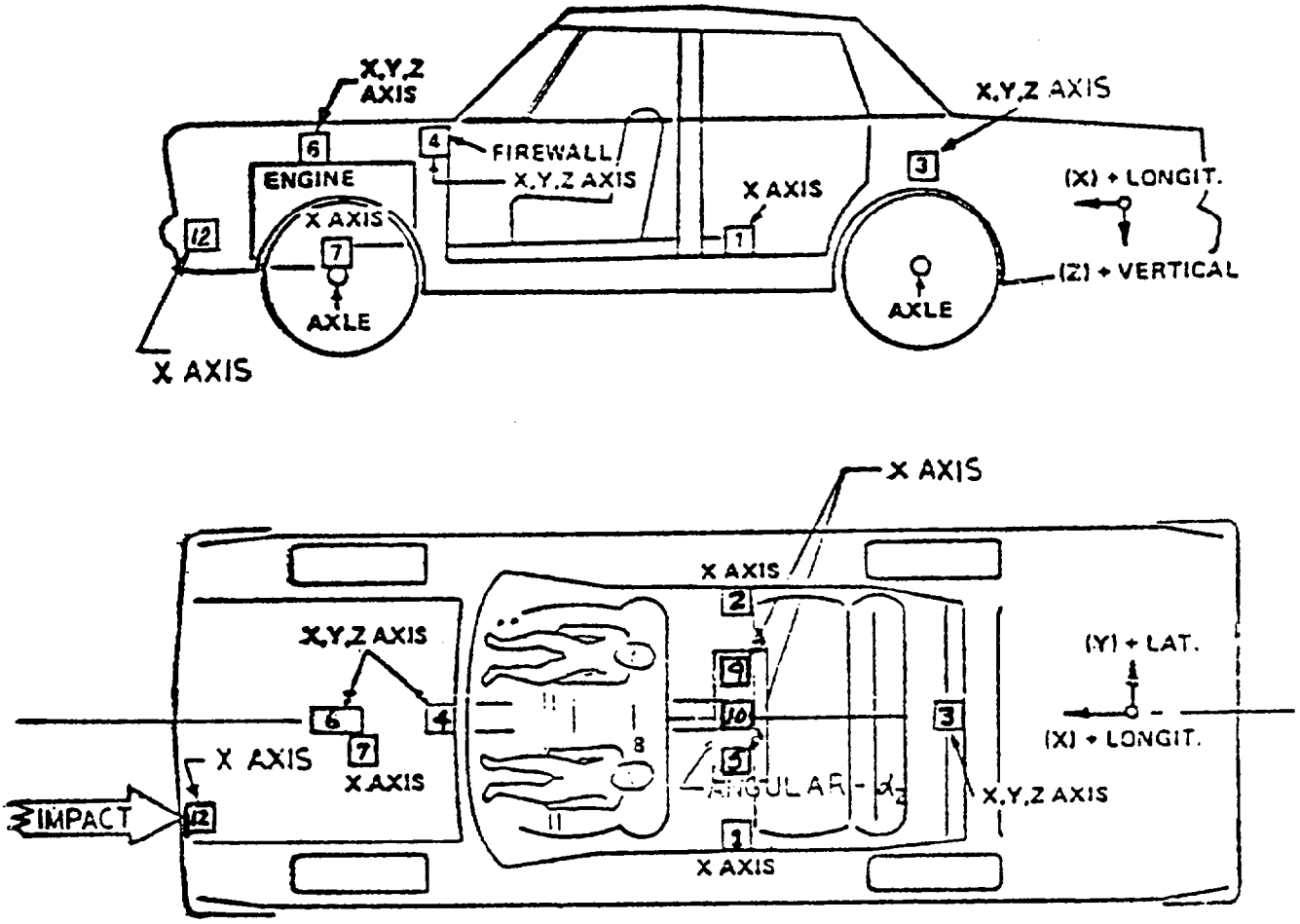
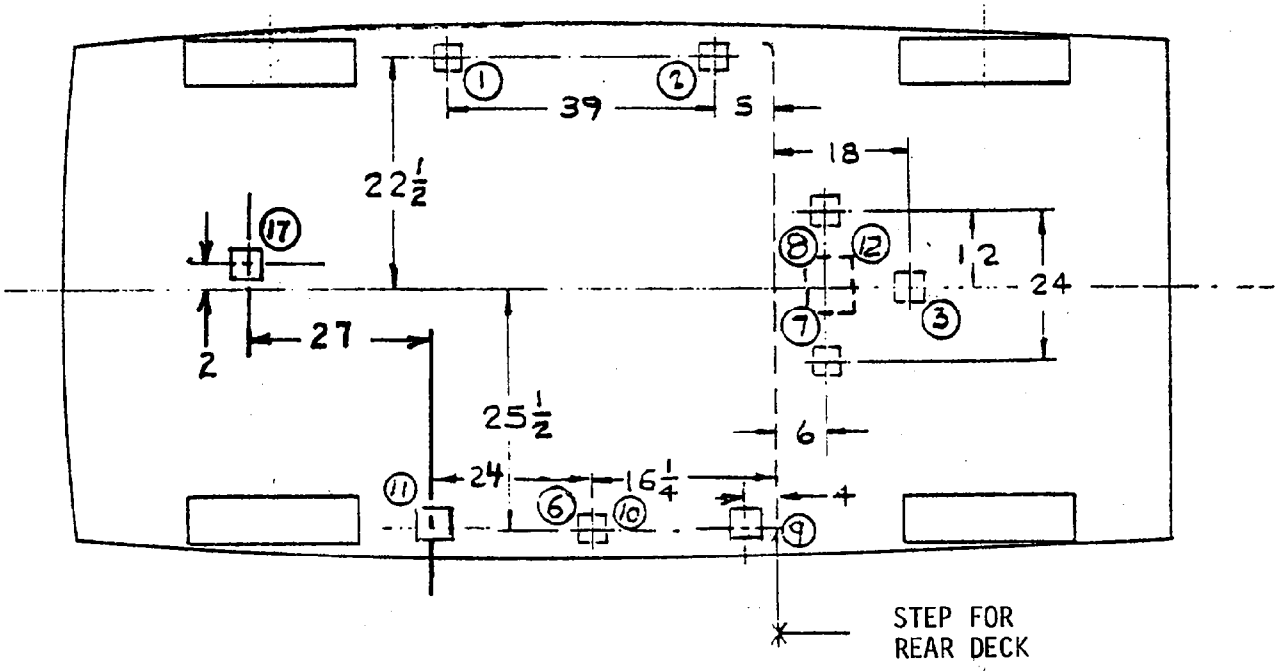


Figure 12 VEHICLE ACCELEROMETER LOCATIONS

CAR 2 - TARGET VEHICLE - 1976 VOLKSWAGEN RABBIT



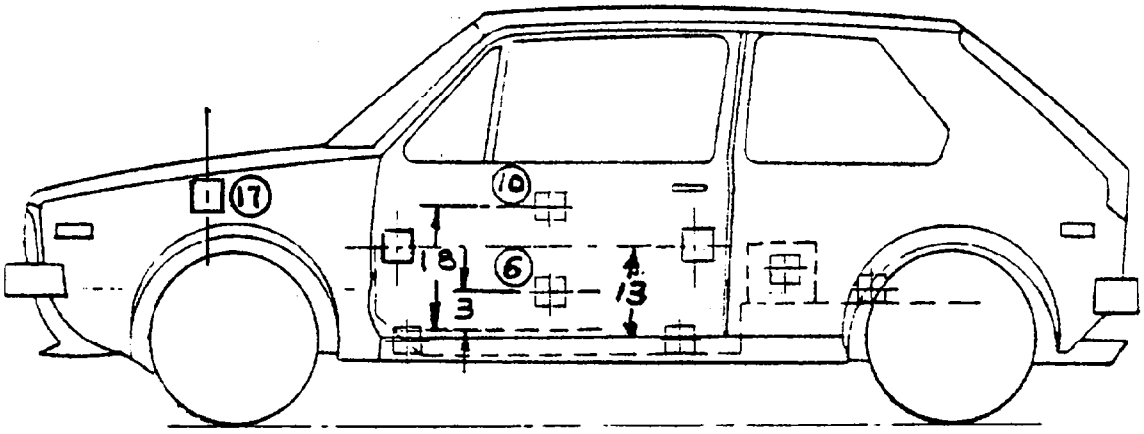
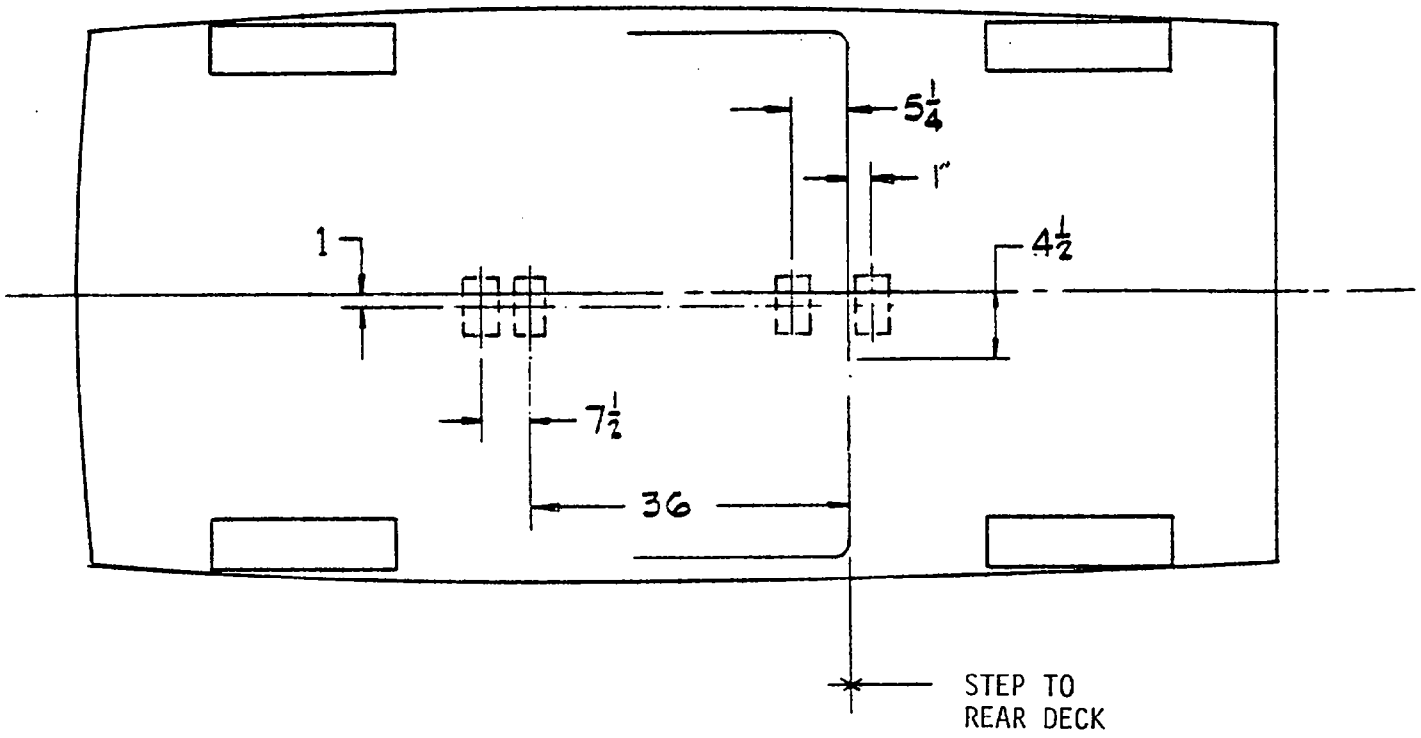


Figure 13 - VEHICLE ACCELEROMETER LOCATIONS

Car 2 - TARGET VEHICLE - 1976 VOLKSWAGEN RABBIT



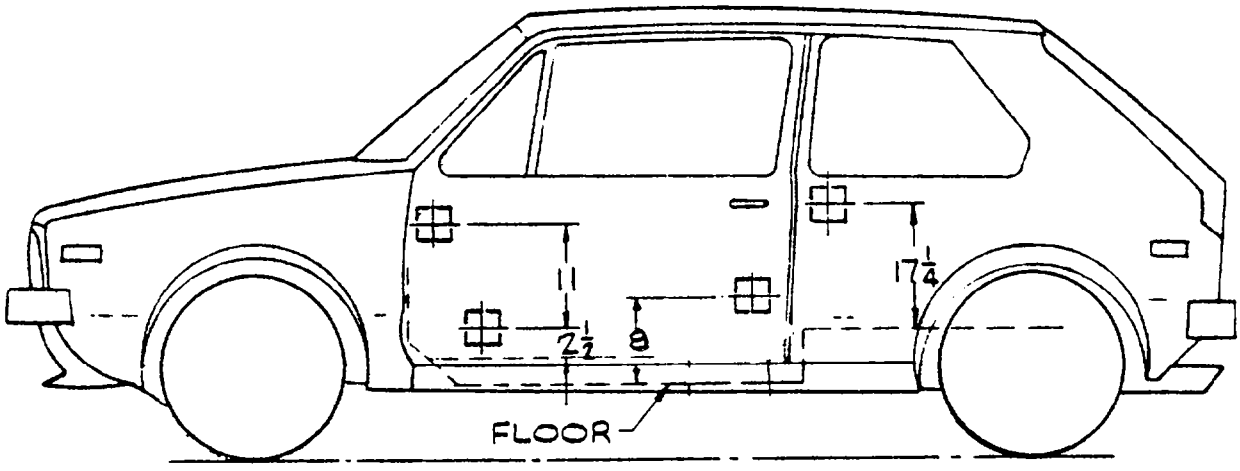


Figure 14 VEHICLE POTENTIOMETER LOCATIONS

Table 6

HIGH SPEED CAMERA INFORMATION (TEST NO. 6)

Camera Number	Location	Type	Lens (mm)	Speed (fps)
1) South Wide	A = 23 ft. B = 2 ft. 10 in.	Photosonics	13	800
2) South Low	L = 24 ft. 6 in. M = 1 ft. 4 in.	Photosonics	50	800
3) South Close	C = 24 ft. 10 in. D = 5 ft.	Photosonics	25	870
4) North Wide	E = 26 ft. F = 14 ft.	Photosonics	13	700
5) North Close	G = 26 ft. 8 in. H = 19 ft.	Photosonics	25	625
6) Tower 45°	J = 21 ft. 7 in. K = 11 ft.	Photosonics	13	825
7) Tower	31 ft. 6 in.	Photosonics	13	700
8) Hood	On board	Stalex	8	970
9) Passenger Door	On board	Stalex	8	900
10) Rear	On board	Stalex	8	900

NOTE: Cameras are numbered according to splicing sequence of film.

(24 fps) Real time movie film coverage of pre-crash, post-crash and crash event spliced at start and end of film.

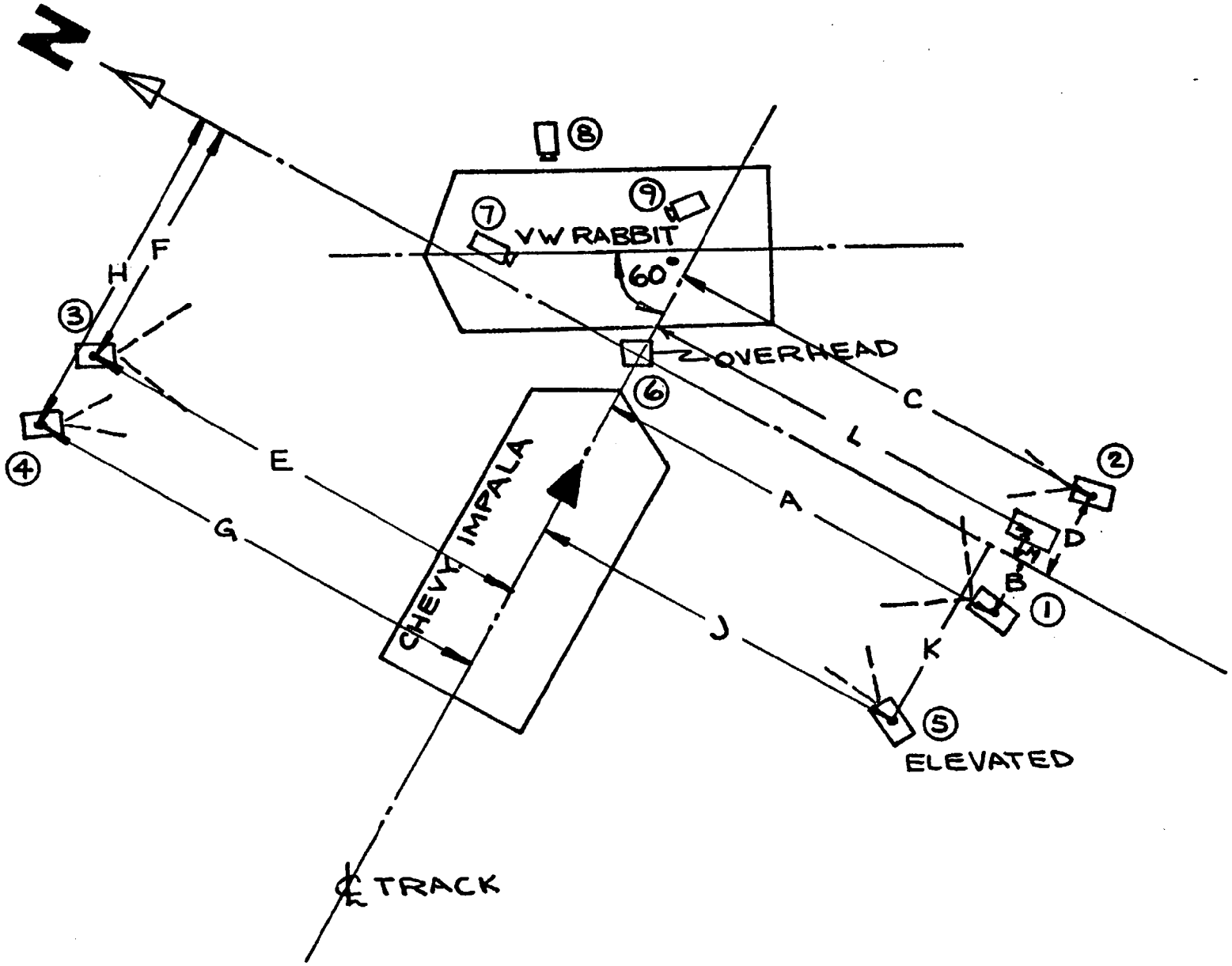


Figure 15 HIGH SPEED CAMERA LOCATIONS

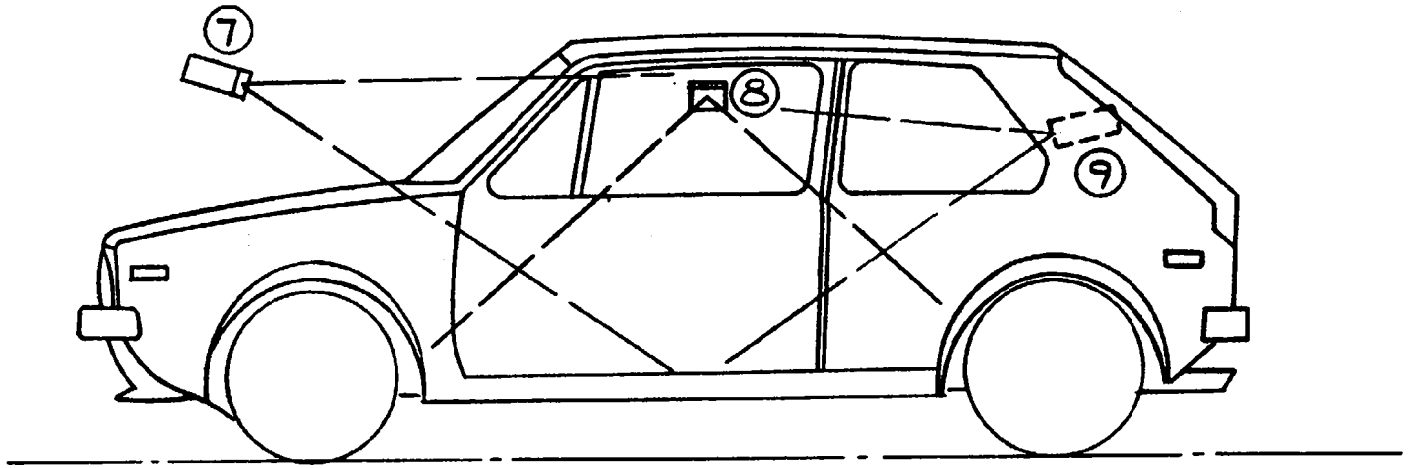


Figure 16 ON-BOARD HIGH SPEED CAMERA LOCATIONS

Table 7

DUMMY INJURY CRITERIA VALUES

CAR 1 - STRIKING VEHICLE

1978 CHEVROLET IMPALA

	MAXIMUM ACCELERATION ("G") *											
	HEAD				CHEST				PELVIS			
	X	Y	Z	R	X	Y	Z	R	X	Y	Z	R
DUMMY (1)	-10	1	6	11	-8	-1	-2	8.2				
DUMMY (2)												
DUMMY (3)												
DUMMY (4)												

	MAXIMUM FORCE-FEMUR LOAD (LBS)	
	RIGHT FEMUR	LEFT FEMUR
DUMMY (1)	30	75
DUMMY (2)		
DUMMY (3)		
DUMMY (4)		

	MAXIMUM FORCE-SEAT BELTS LOADS (LBS)		
	SHOULDER STRAP UPPER BELT LOAD	LAP STRAP RIGHT BELT LOAD	LAP STRAP LEFT BELT LOAD
DUMMY (1)	340	480	100
DUMMY (2)			
DUMMY (3)			
DUMMY (4)			

	HEAD INJURY CRITERIA**				SEVERITY INDEX	
	HIC	t_1 (SEC)	t_2 (SEC)	AVE. ACC. (g) t_1 TO t_2	HEAD	CHEST
DUMMY (1)	15.3	.108	.177	8.7	18.7	7.6
DUMMY (2)						
DUMMY (3)						
DUMMY (4)						

*DEFINED AS EXCEEDING 0.003 SEC. DURATION

**AS DEFINED IN FMVSS NO. 208

Table 8

DUMMY INJURY CRITERIA VALUES

CAR 2 - STRUCK VEHICLE

1976 VW RABBIT

	MAXIMUM ACCELERATION ("G") *											
	HEAD				CHEST				PELVIS			
	X	Y	Z	R	X	Y	Z	R	X	Y	Z	R
DUMMY (1)	-7	15	22	27	12	30	-15	31.5	-16	58		
DUMMY (2)	-8	20	13	24	-8	45	-7	46	-4	24		
DUMMY (3)												
DUMMY (4)												

	MAXIMUM FORCE-FEMUR LOAD (LBS)	
	RIGHT FEMUR	LEFT FEMUR
DUMMY (1)		
DUMMY (2)		
DUMMY (3)		
DUMMY (4)		

Dummy Location

Left front passenger

Right front passenger

	MAXIMUM FORCE-SEAT BELTS LOADS (LBS)		
	SHOULDER STRAP UPPER BELT LOAD	LAP STRAP RIGHT BELT LOAD	LAP STRAP LEFT BELT LOAD
DUMMY (1)			
DUMMY (2)			
DUMMY (3)			
DUMMY (4)			

	HEAD INJURY CRITERIA**				SEVERITY INDEX	
	HIC	t_1 (SEC)	t_2 (SEC)	AVE. ACC. (g) t_1 TO t_2	HEAD	CHEST
DUMMY (1)	64.3	.064	.145	14.5	81.8	95
DUMMY (2)	49.0	.114	.162	15.9	69.0	110
DUMMY (3)						
DUMMY (4)						

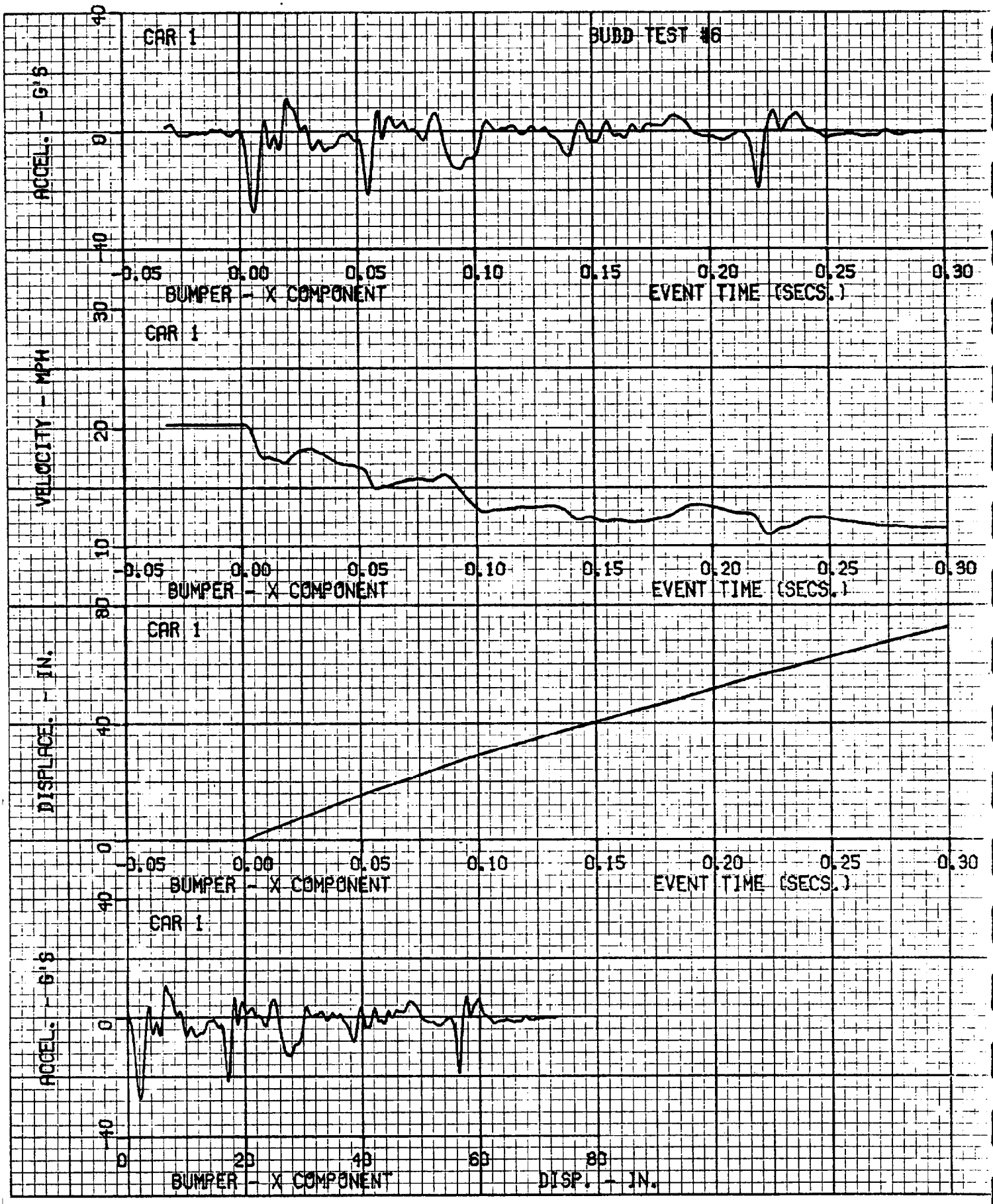
*DEFINED AS EXCEEDING 0.003 SEC. DURATION

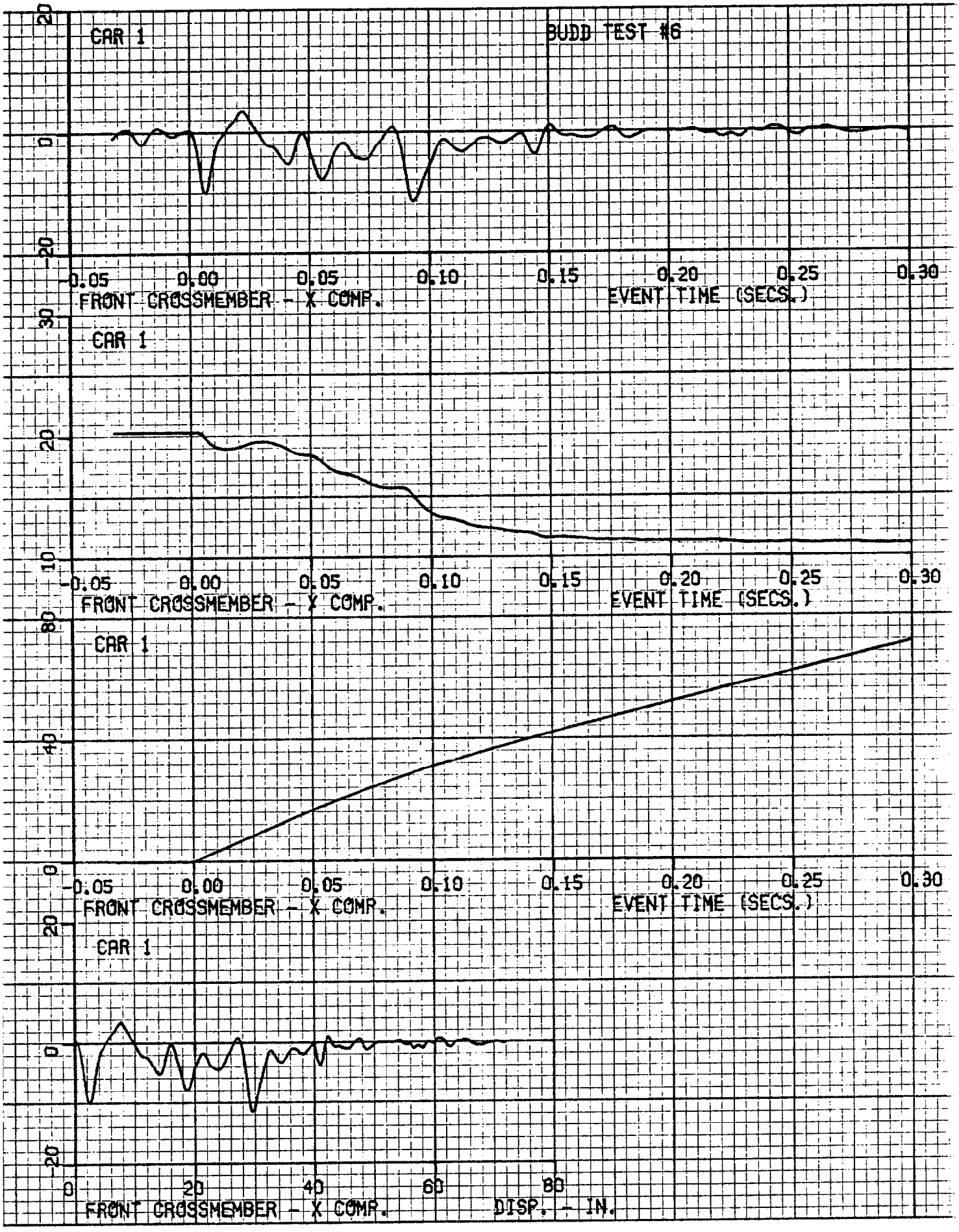
**AS DEFINED IN FMVSS NO. 208

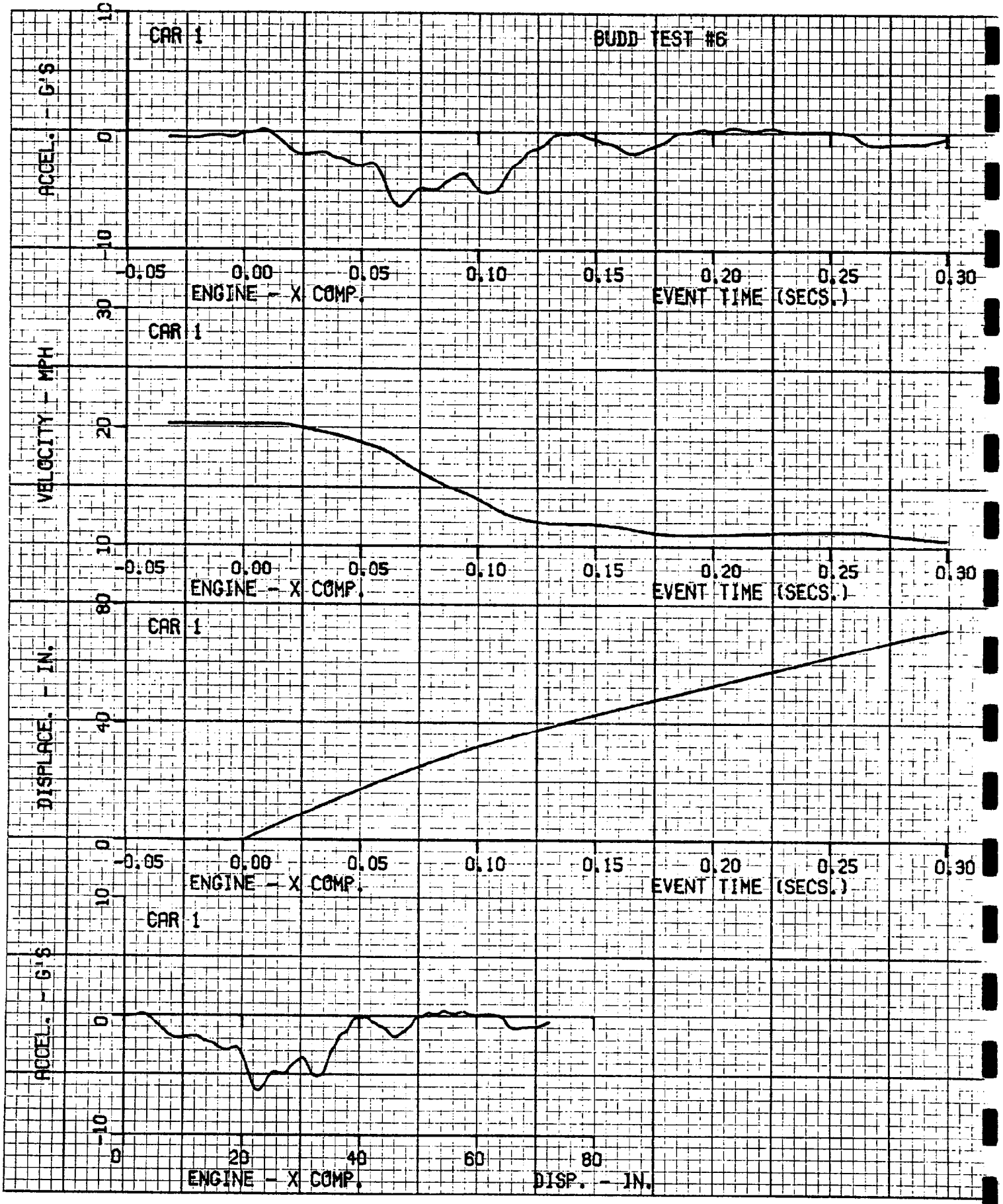
TEST NO. 6

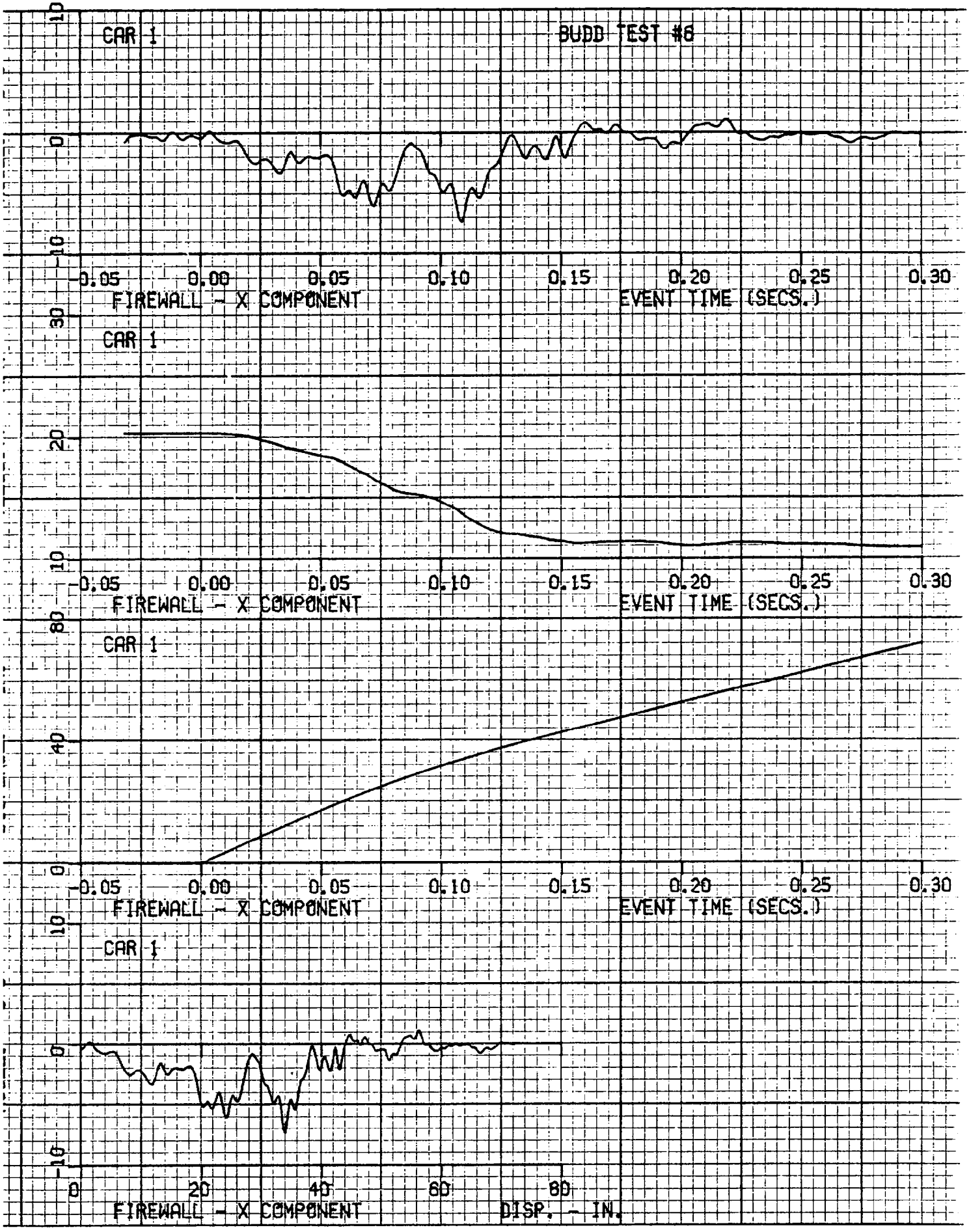
CAR 1 - 1978 CHEVROLET IMPALA

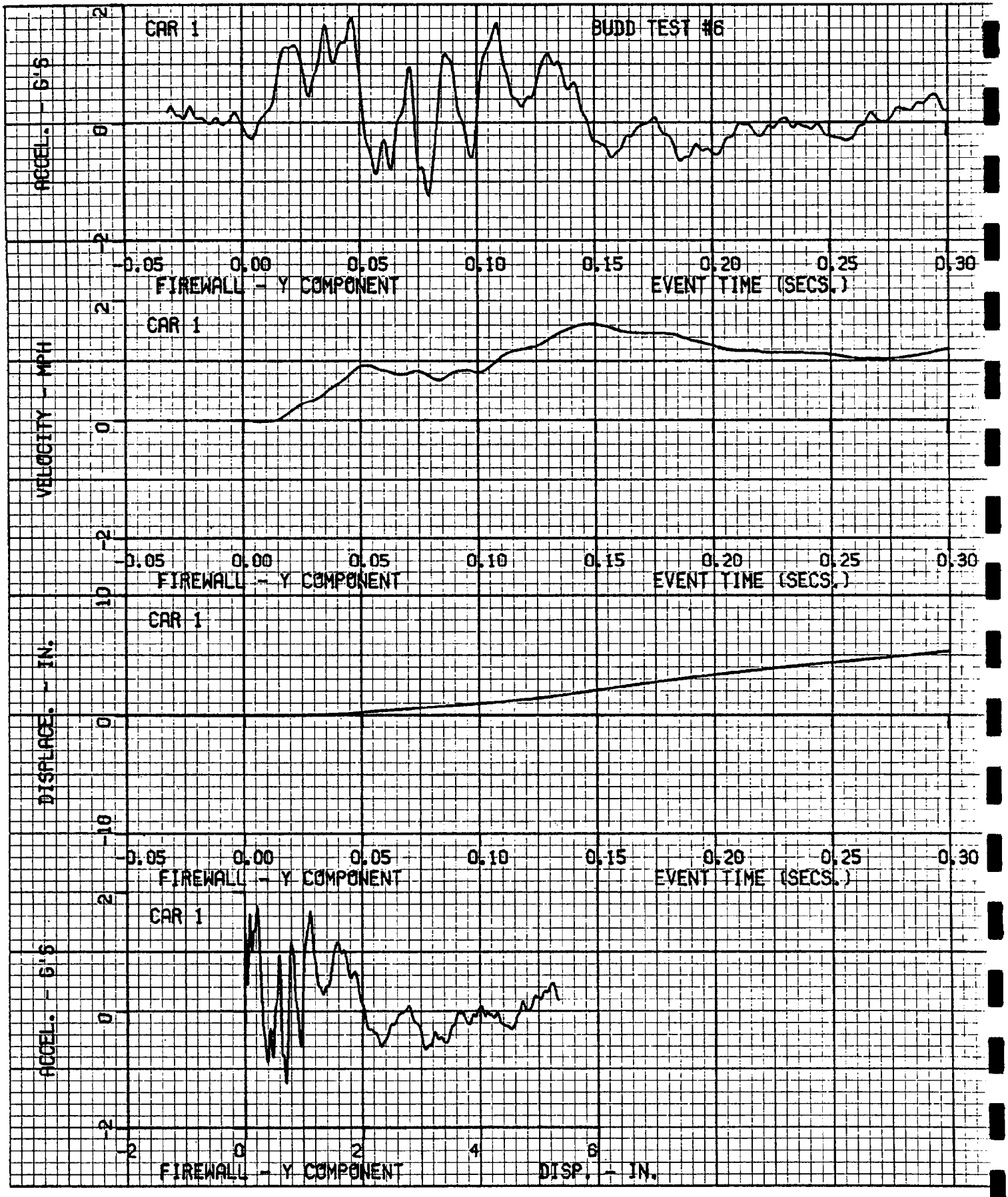
VEHICLE DATA 60 Hz FILTER

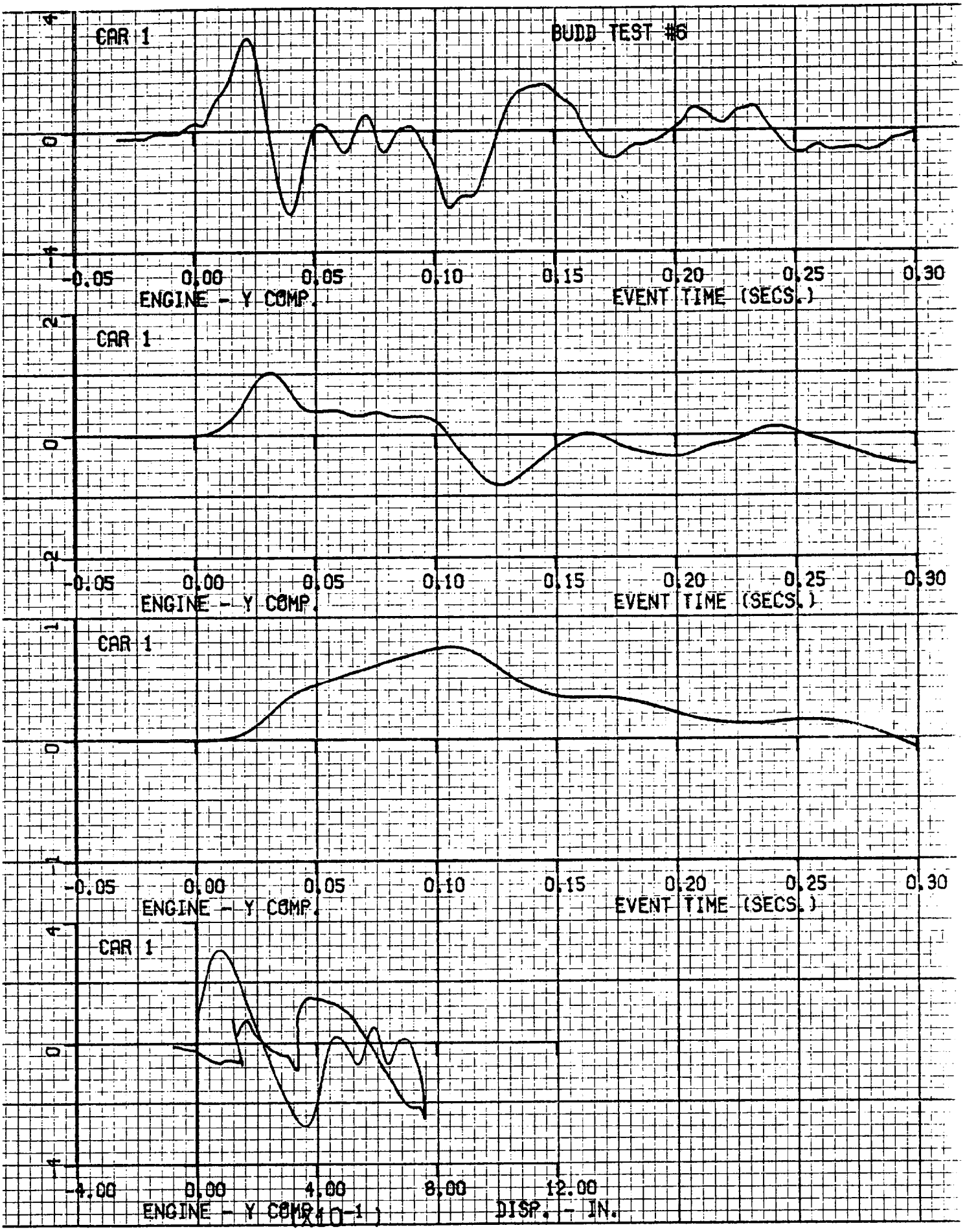

CAR 1
BUDD TEST #6
ACCEL. - G'S
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
BUMPER - X COMPONENT
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
BUMPER - X COMPONENT
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
BUMPER - X COMPONENT
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
40
0
-40
0
20
40
60
80
BUMPER - X COMPONENT
DISP. - IN.

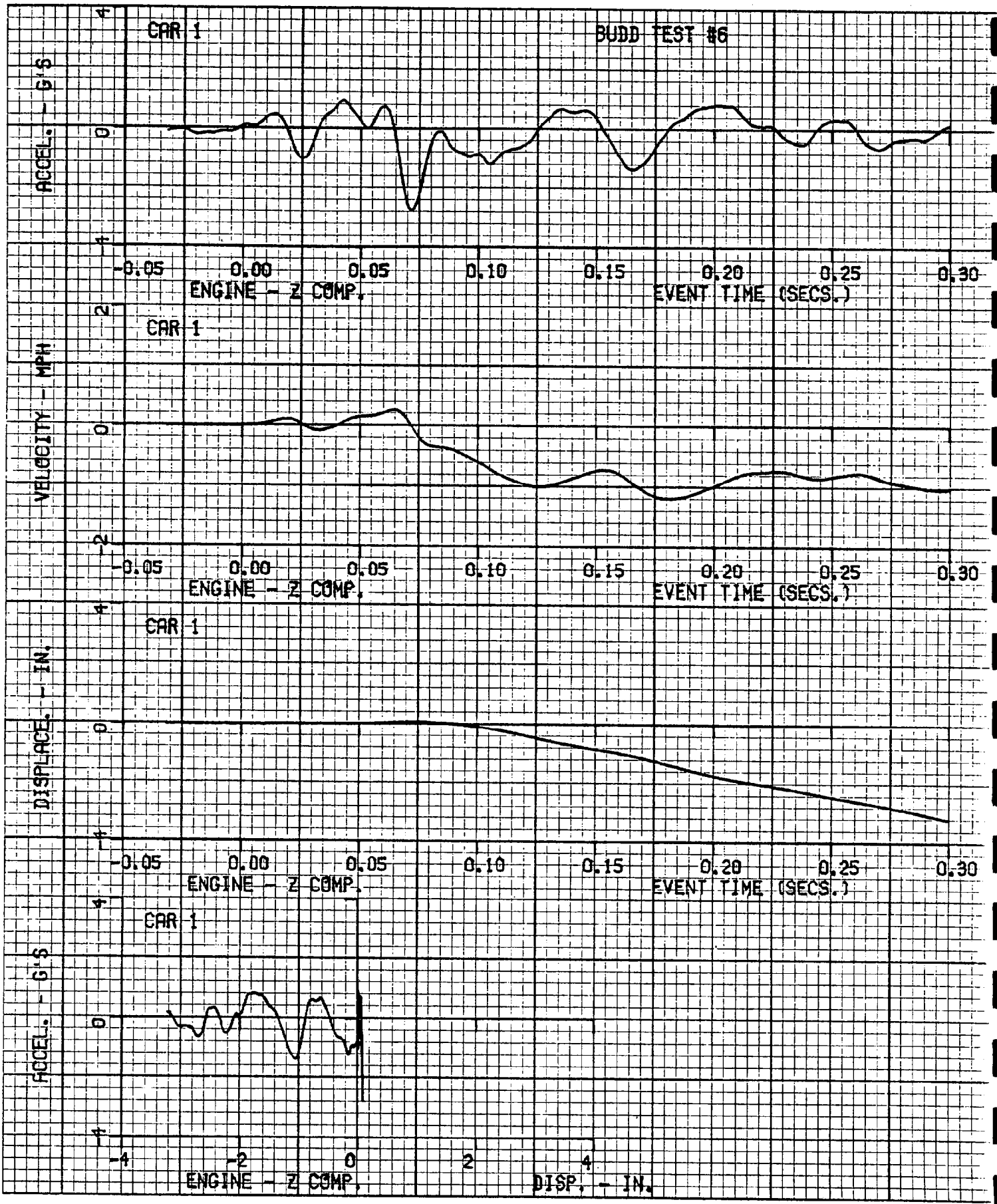

CAR 1
BUDD TEST #6
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FRONT CROSSMEMBER - X COMP.
EVENT TIME (SECS.)
CAR 1
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FRONT CROSSMEMBER - X COMP.
EVENT TIME (SECS.)
CAR 1
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FRONT CROSSMEMBER - X COMP.
EVENT TIME (SECS.)
CAR 1
20
0
-20
0
20
40
60
80
FRONT CROSSMEMBER - X COMP.
DISP. - IN.

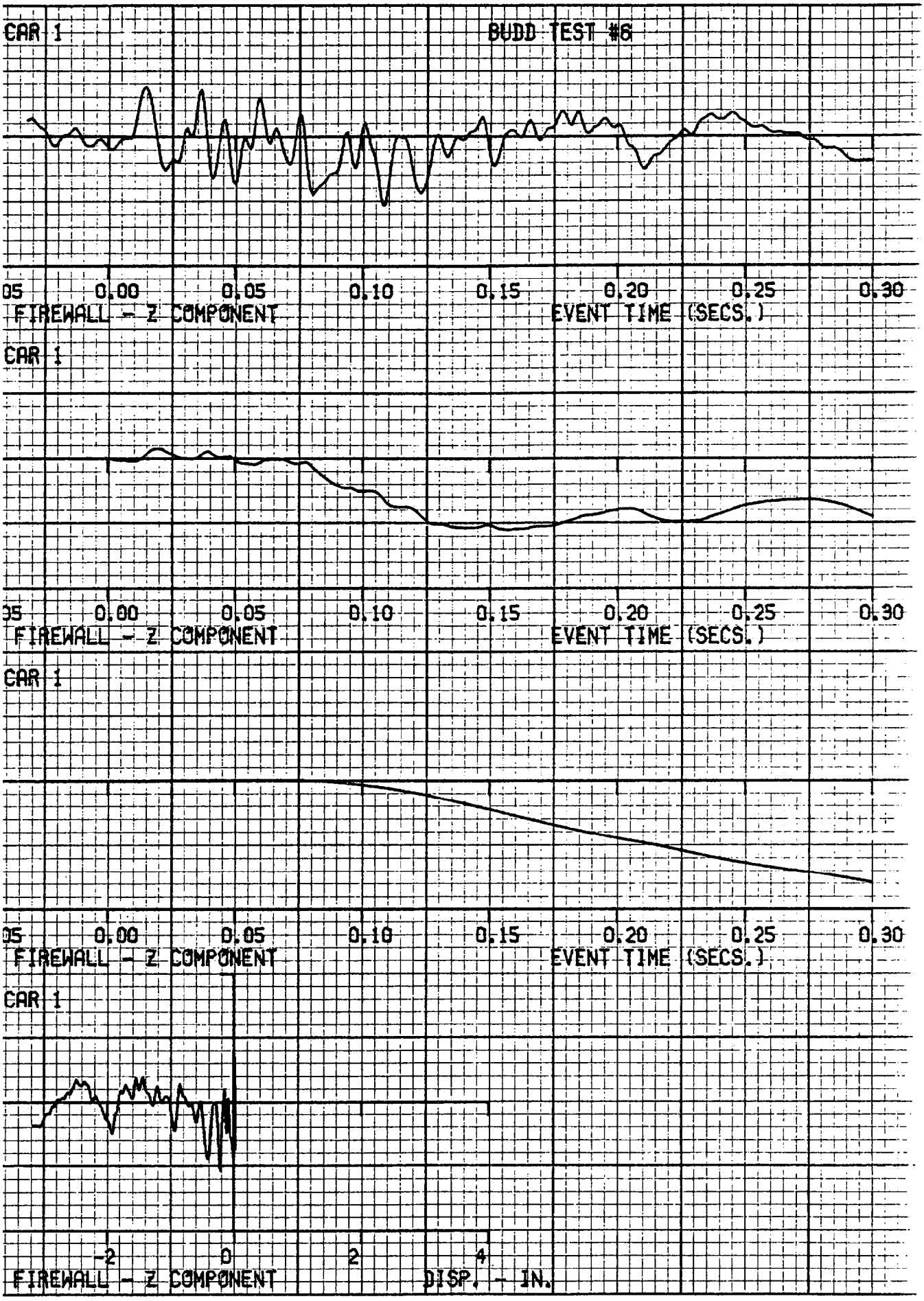

CAR 1
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
ENGINE - X COMP.
DISP. - IN.

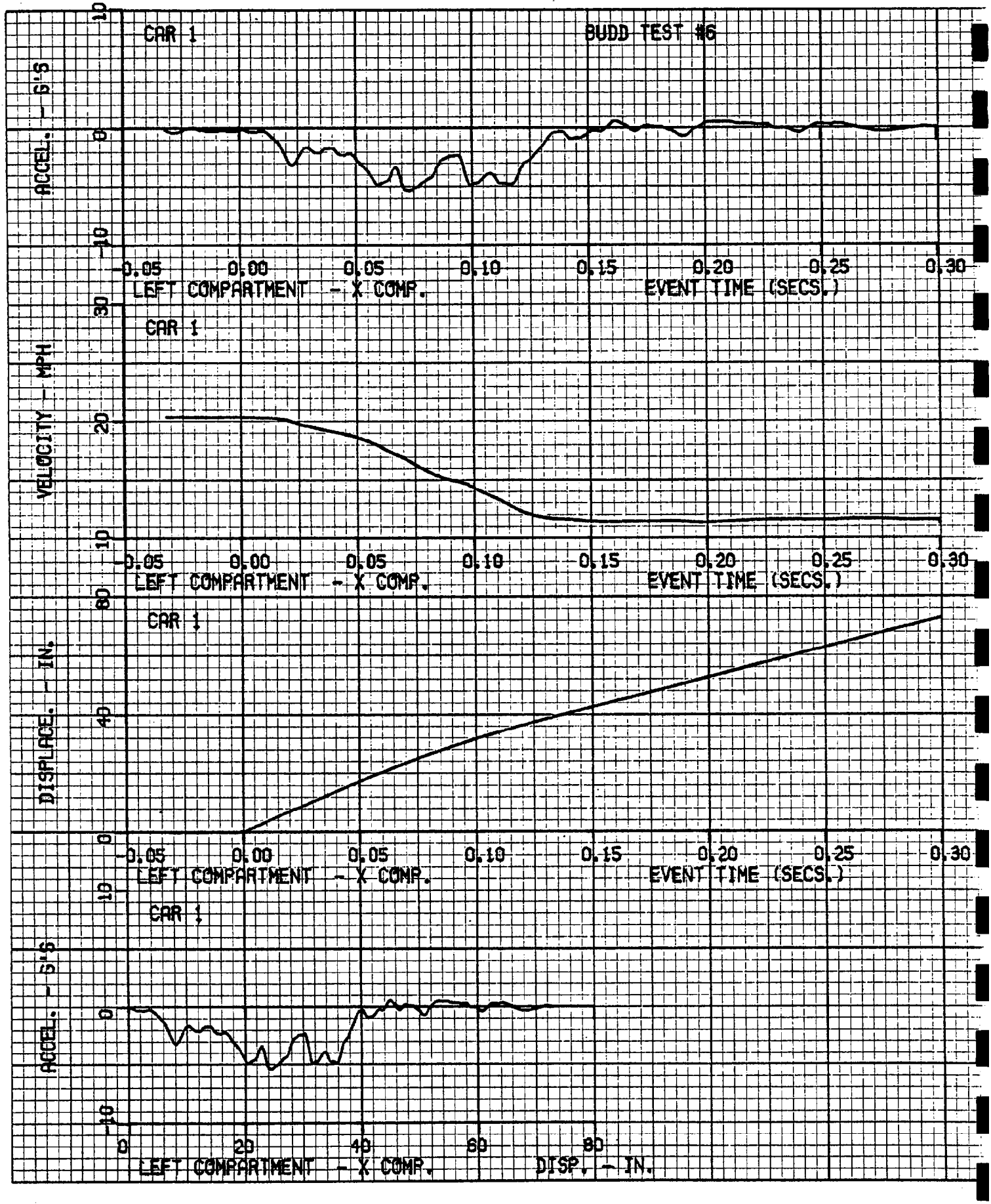

CAR 1
BUDD TEST #6
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - X COMPONENT
EVENT TIME (SECS.)
30
CAR 1
20
10
FIREWALL - X COMPONENT
EVENT TIME (SECS.)
80
CAR 1
40
0
FIREWALL - X COMPONENT
EVENT TIME (SECS.)
10
CAR 1
0
-10
0
20
40
60
80
FIREWALL - X COMPONENT
DISP. - IN.

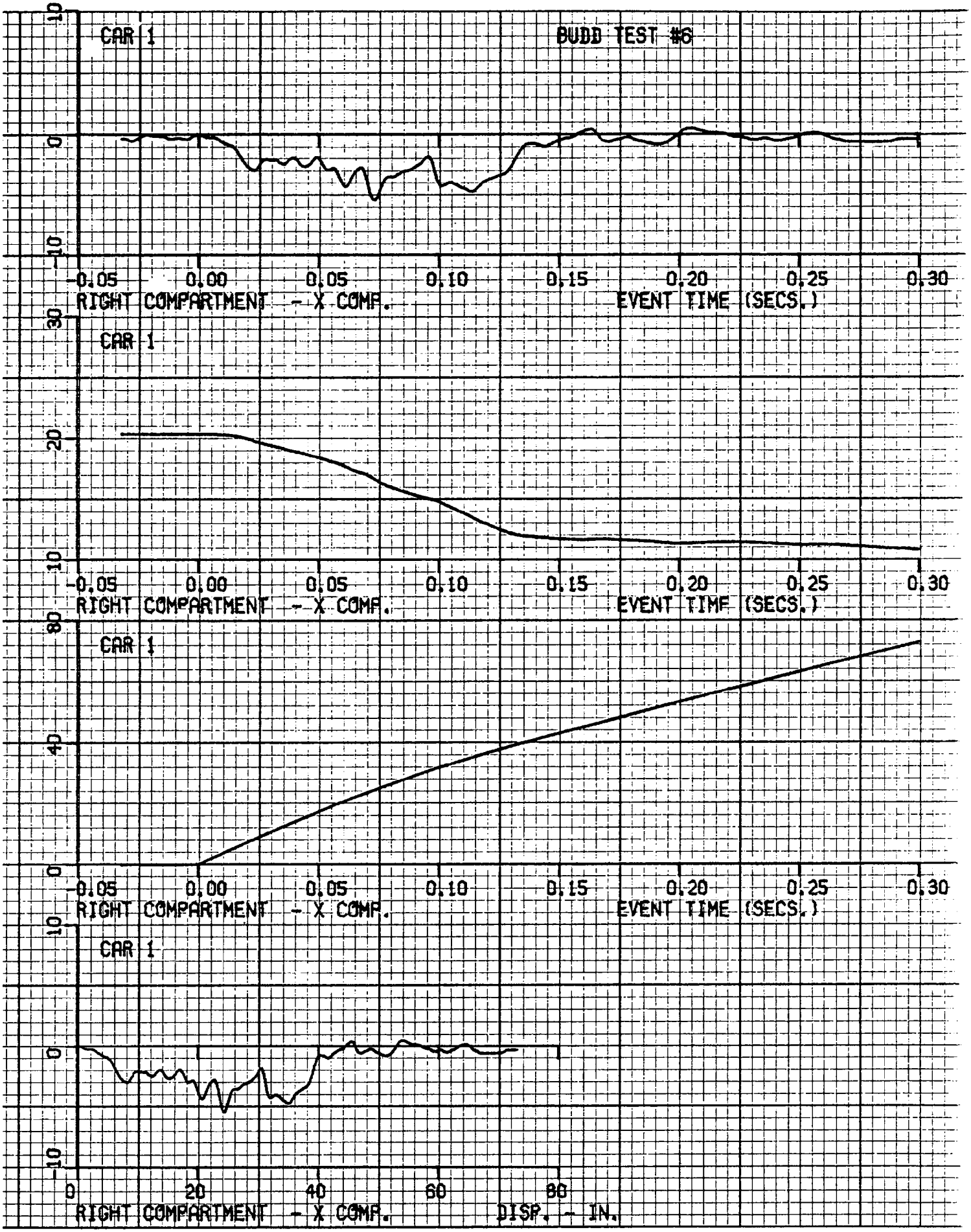

CAR 1
BUDD TEST #6
ACCEL. - G'S
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - Y COMPONENT
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - Y COMPONENT
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
-10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - Y COMPONENT
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
2
0
-2
-2
0
2
4
6
FIREWALL - Y COMPONENT
DISP. - IN.

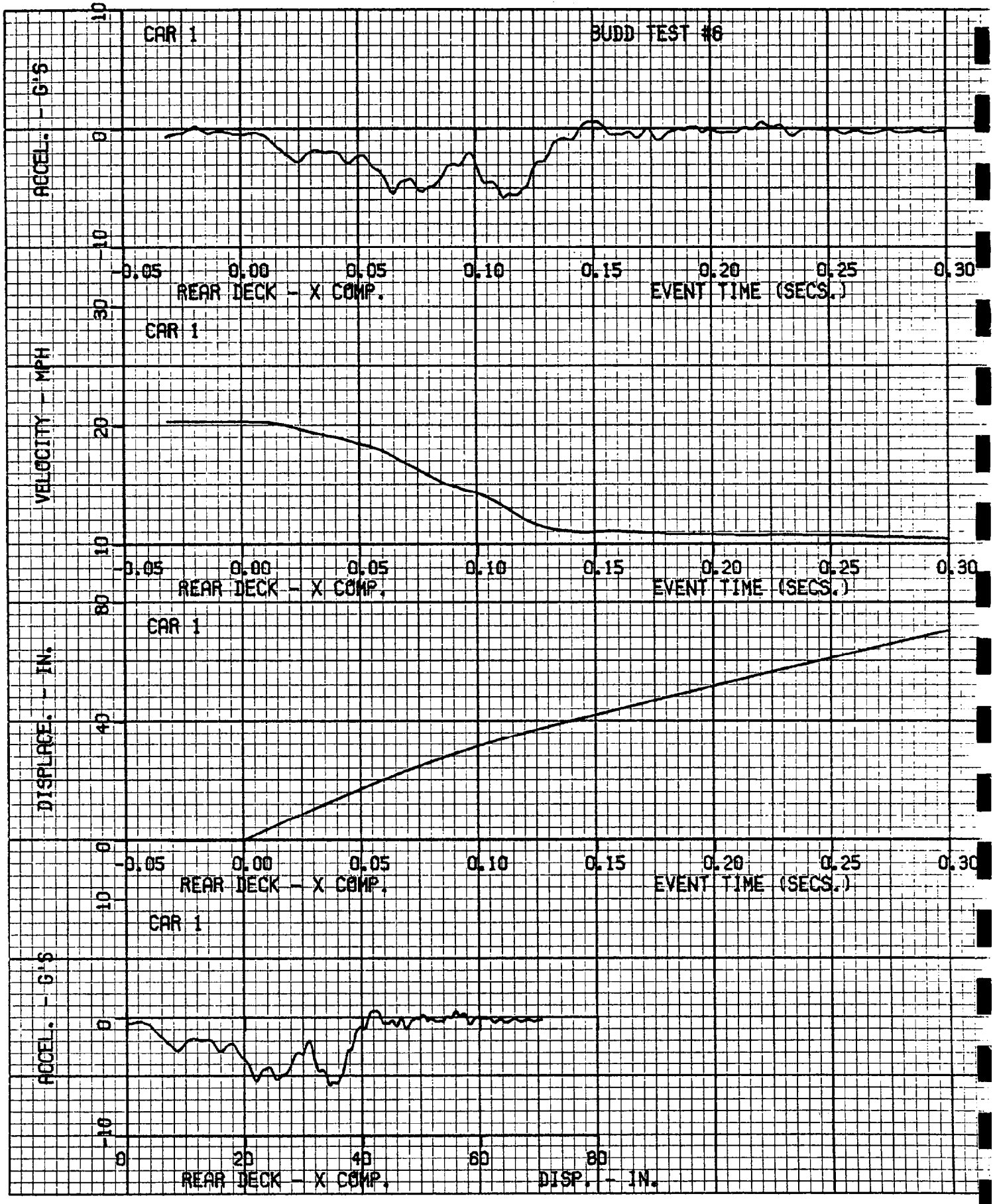

BUDD TEST #6
CAR 1
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 1
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 1
1
0
-1
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 1
4
0
-4
-4.00
0.00
4.00
8.00
12.00
ENGINE - Y COMP.
DISP. - IN.

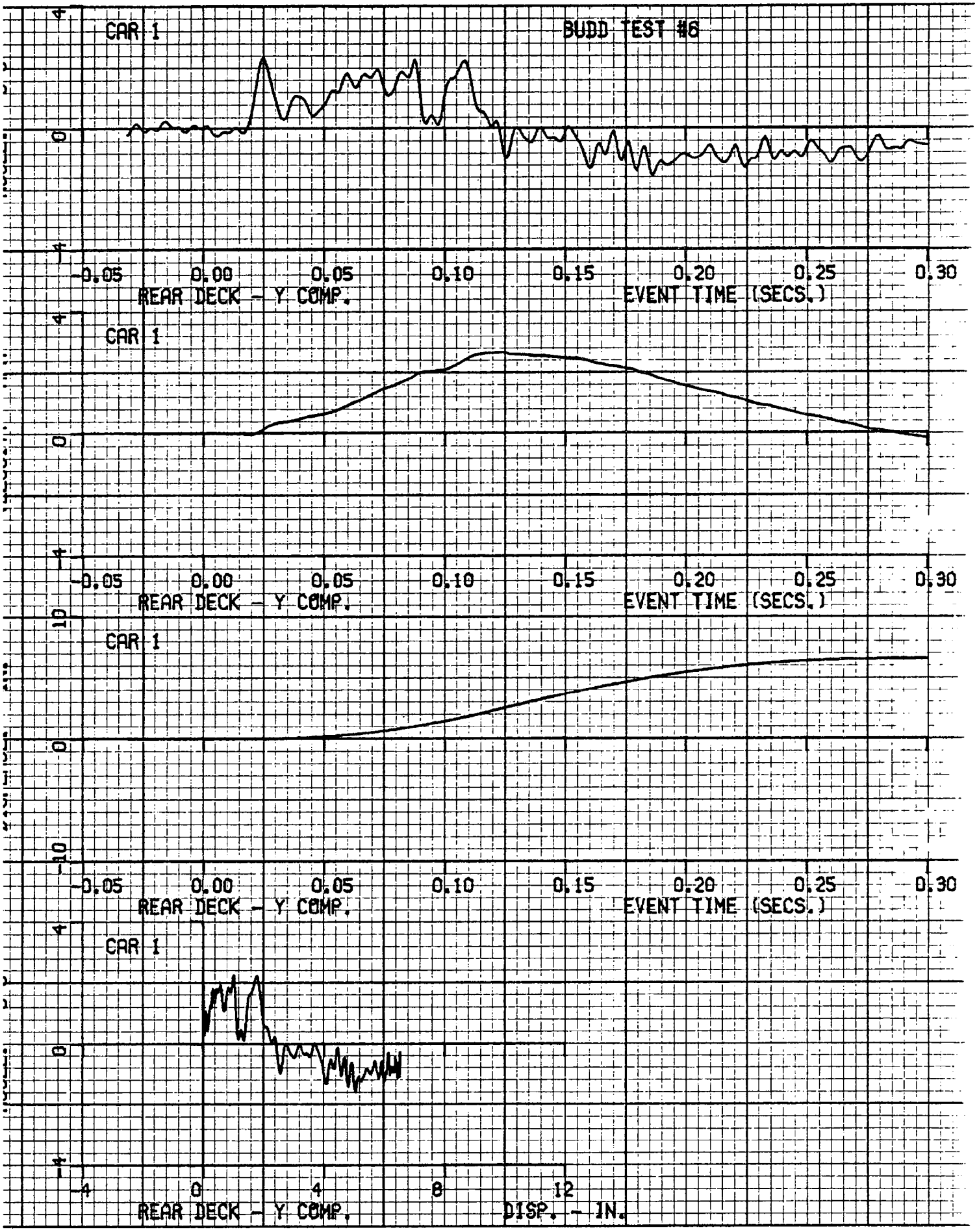

CAR 1
BUDD TEST #6
ACCEL. - G'S
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Z COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Z COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Z COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
4
0
-4
-4
-2
0
2
4
ENGINE - Z COMP.
DISP. - IN.

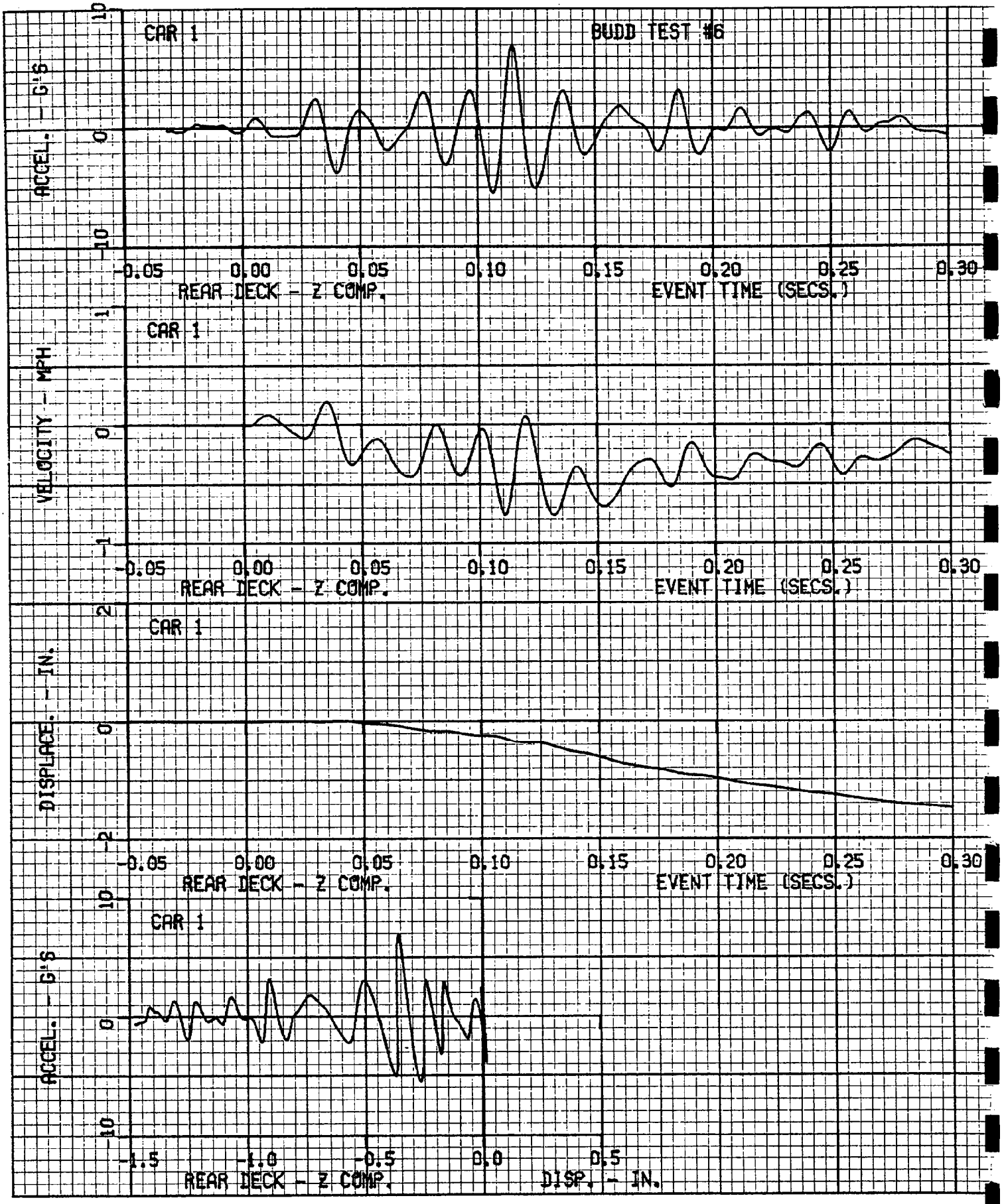

CAR 1
BUDD TEST #6
05 0.00 0.05 0.10 0.15 0.20 0.25 0.30
FIREWALL - Z COMPONENT
EVENT TIME (SECS.)
CAR 1
05 0.00 0.05 0.10 0.15 0.20 0.25 0.30
FIREWALL - Z COMPONENT
EVENT TIME (SECS.)
CAR 1
05 0.00 0.05 0.10 0.15 0.20 0.25 0.30
FIREWALL - Z COMPONENT
EVENT TIME (SECS.)
CAR 1
-2 0 2 4
FIREWALL - Z COMPONENT
DISP. - IN.

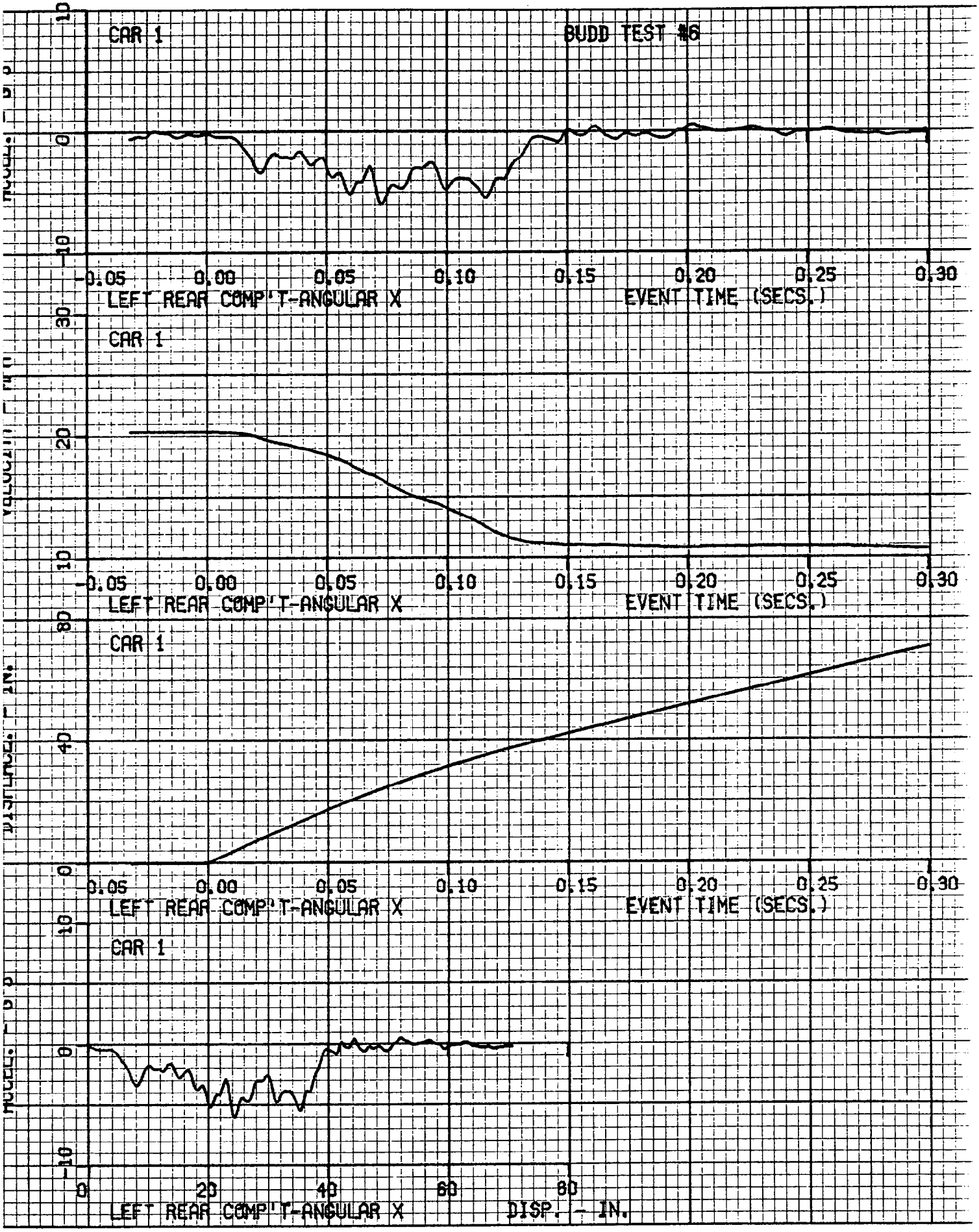

CAR 1
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
LEFT COMPARTMENT - X COMP.
DISP. - IN.

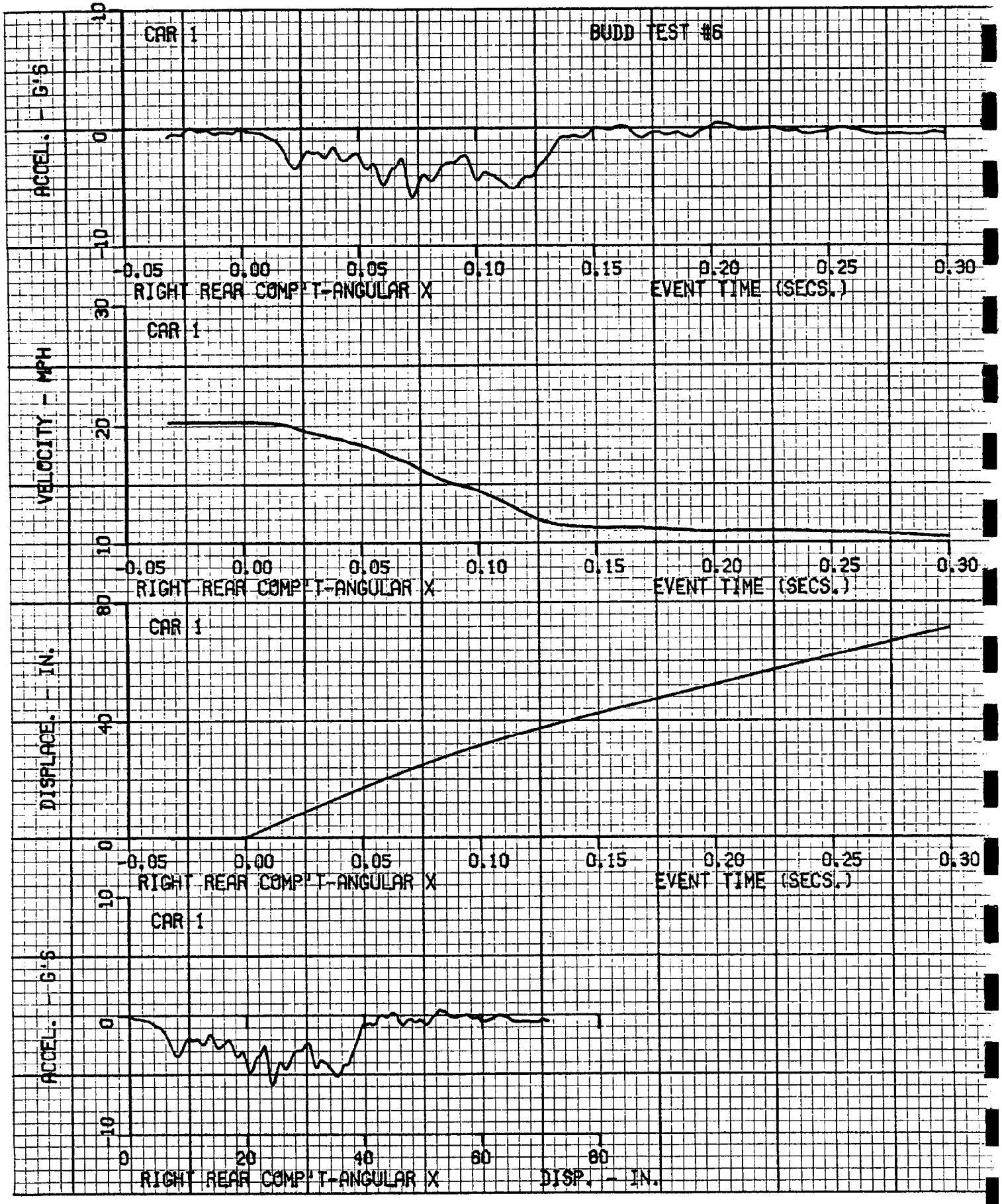

CAR 1
BUDD TEST #6
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
30
20
10
RIGHT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
80
40
0
RIGHT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
10
0
-10
0
20
40
60
80
RIGHT COMPARTMENT - X COMP.
DISP. - IN.

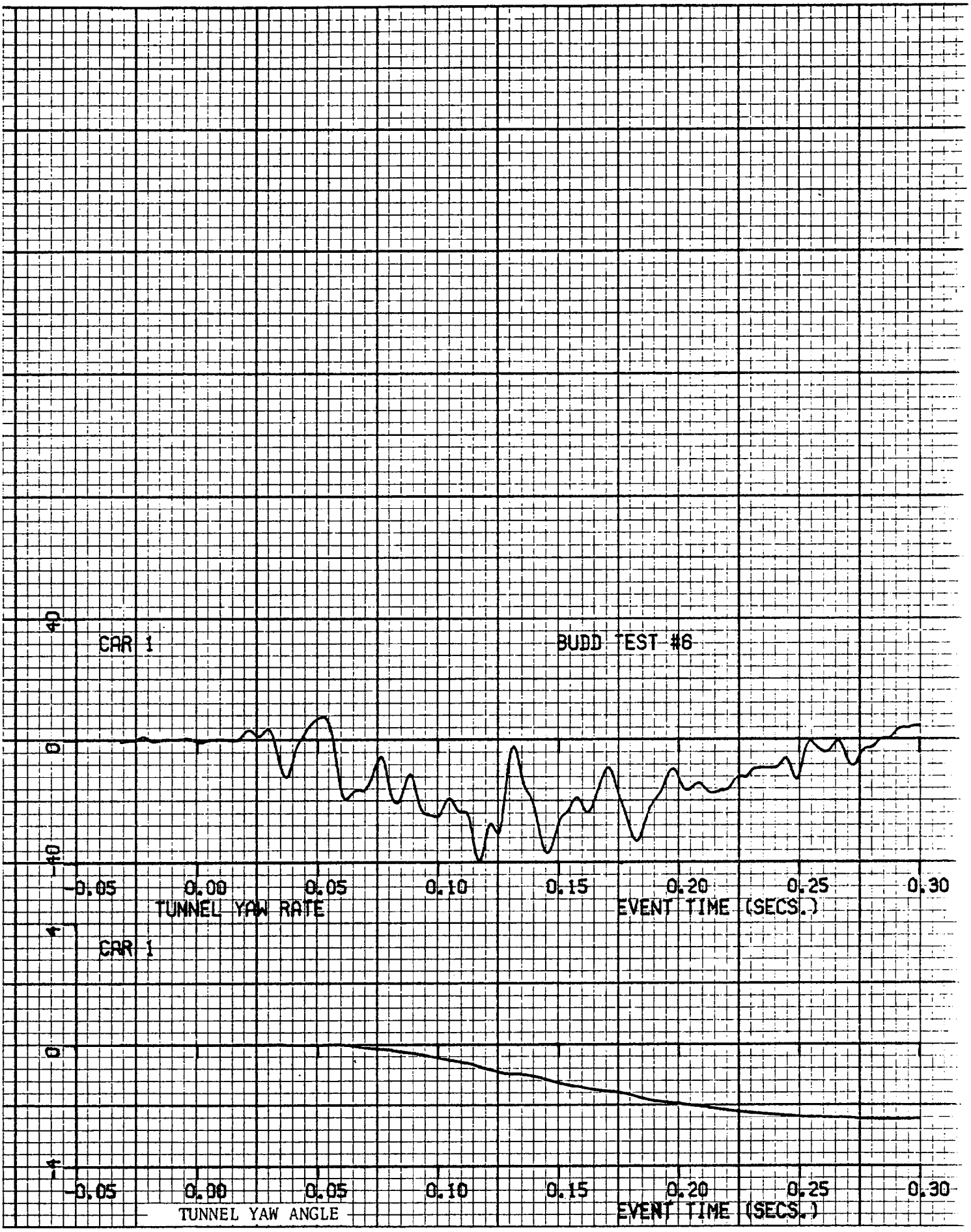

CAR 1
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
0
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
REAR DECK - X COMP.
DISP. - IN.


CAR 1
BUDD TEST #8
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 1
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 1
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 1
4
0
-4
-4
0
4
8
12
REAR DECK - Y COMP.
DISP. - IN.


CAR 1
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
1
0
-1
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
-1.5
-1.0
-0.5
0.0
0.5
REAR DECK - Z COMP.
DISP. - IN.


CAR 1
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
VELOCITY - FPS
30
20
10
0
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
DISTANCE - FT.
80
40
0
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
LEFT REAR COMP'T-ANGULAR X
DISP. - IN.

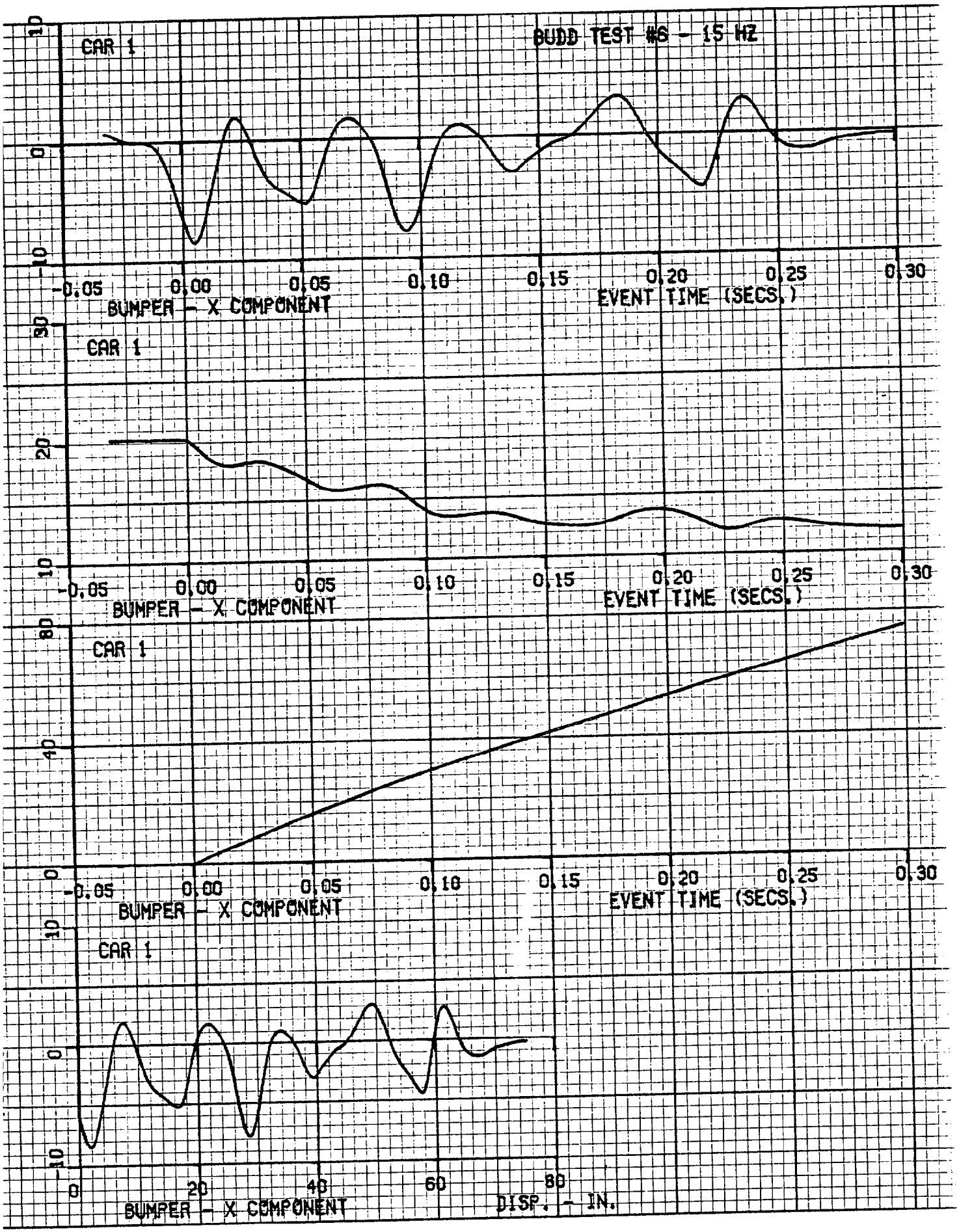

CAR 1
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
RIGHT REAR COMP'T-ANGULAR X
DISP. - IN.

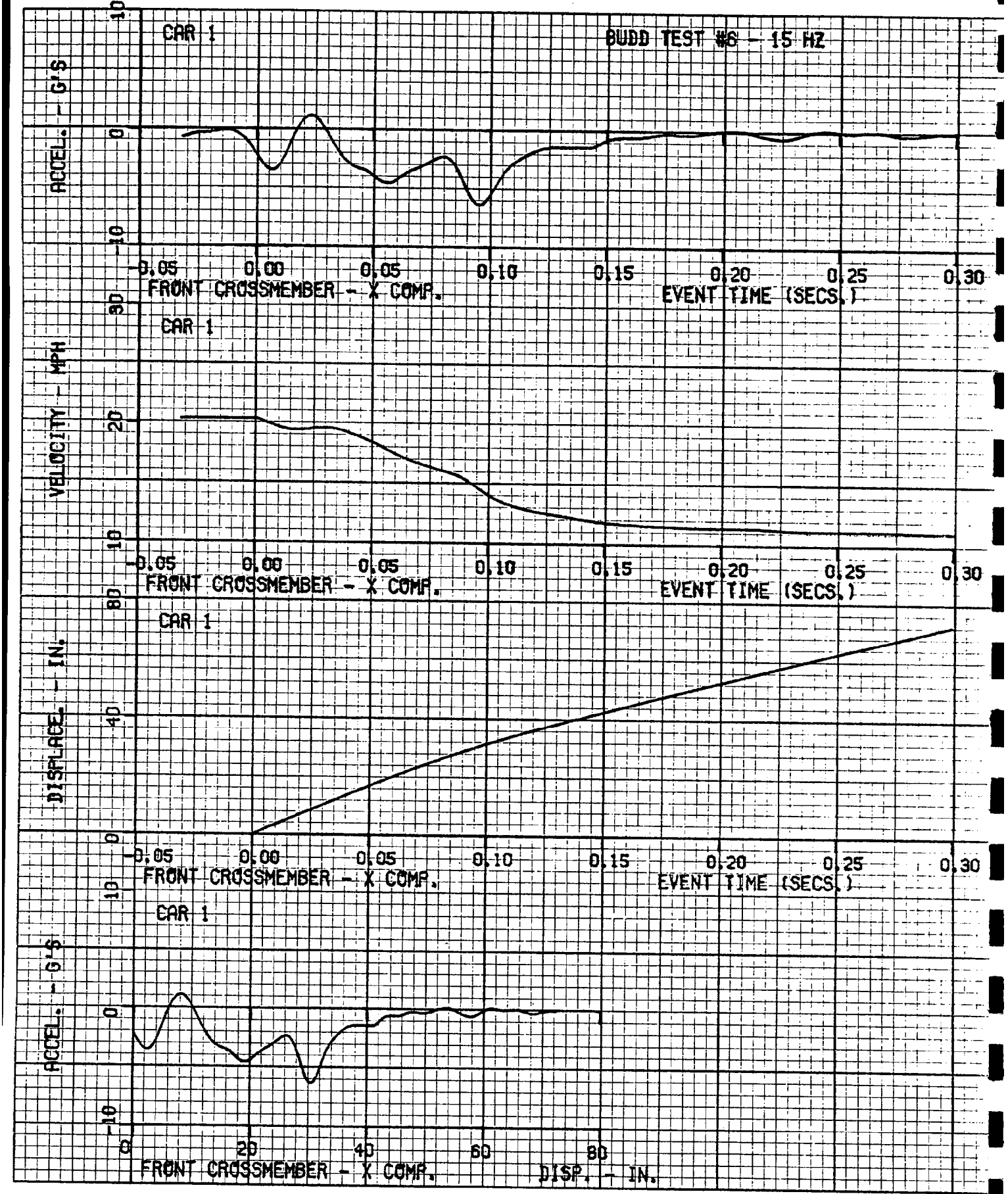

CAR 1
BUDD TEST #6
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW RATE
EVENT TIME (SECS.)
4
CAR 1
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW ANGLE
EVENT TIME (SECS.)

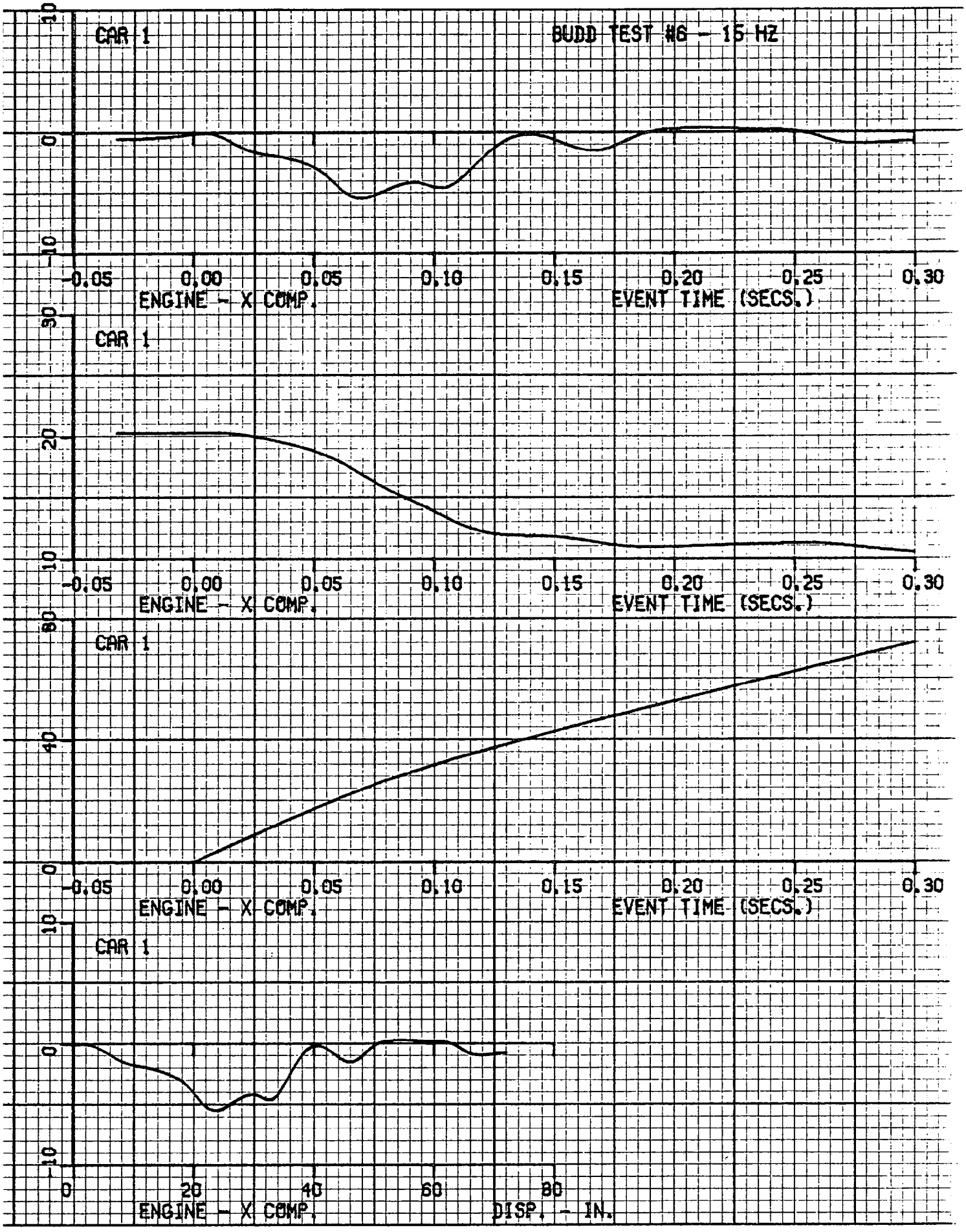
TEST NO. 6

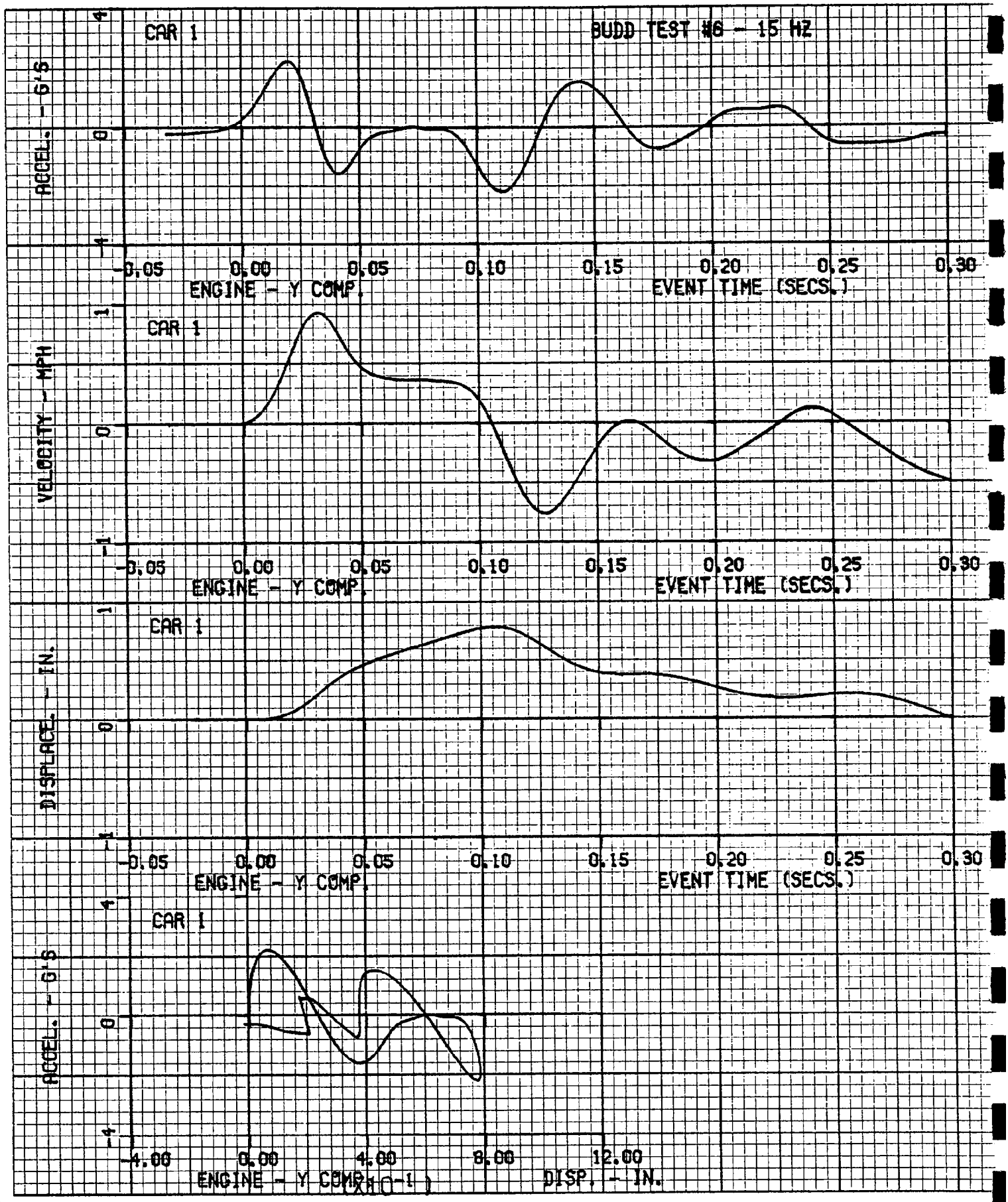
CAR 1 - 1978 CHEVROLET IMPALA

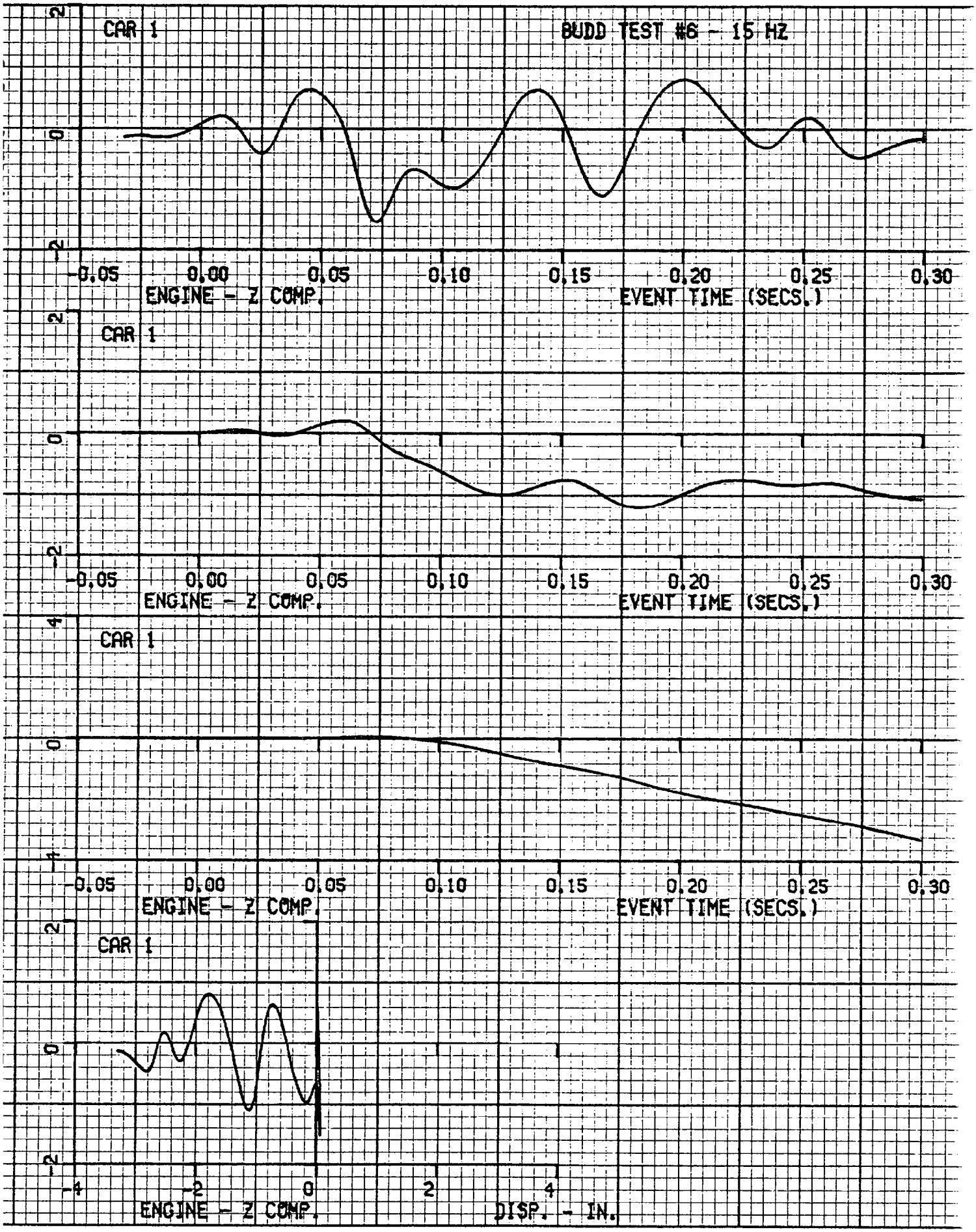
VEHICLE DATA 15 Hz FILTER

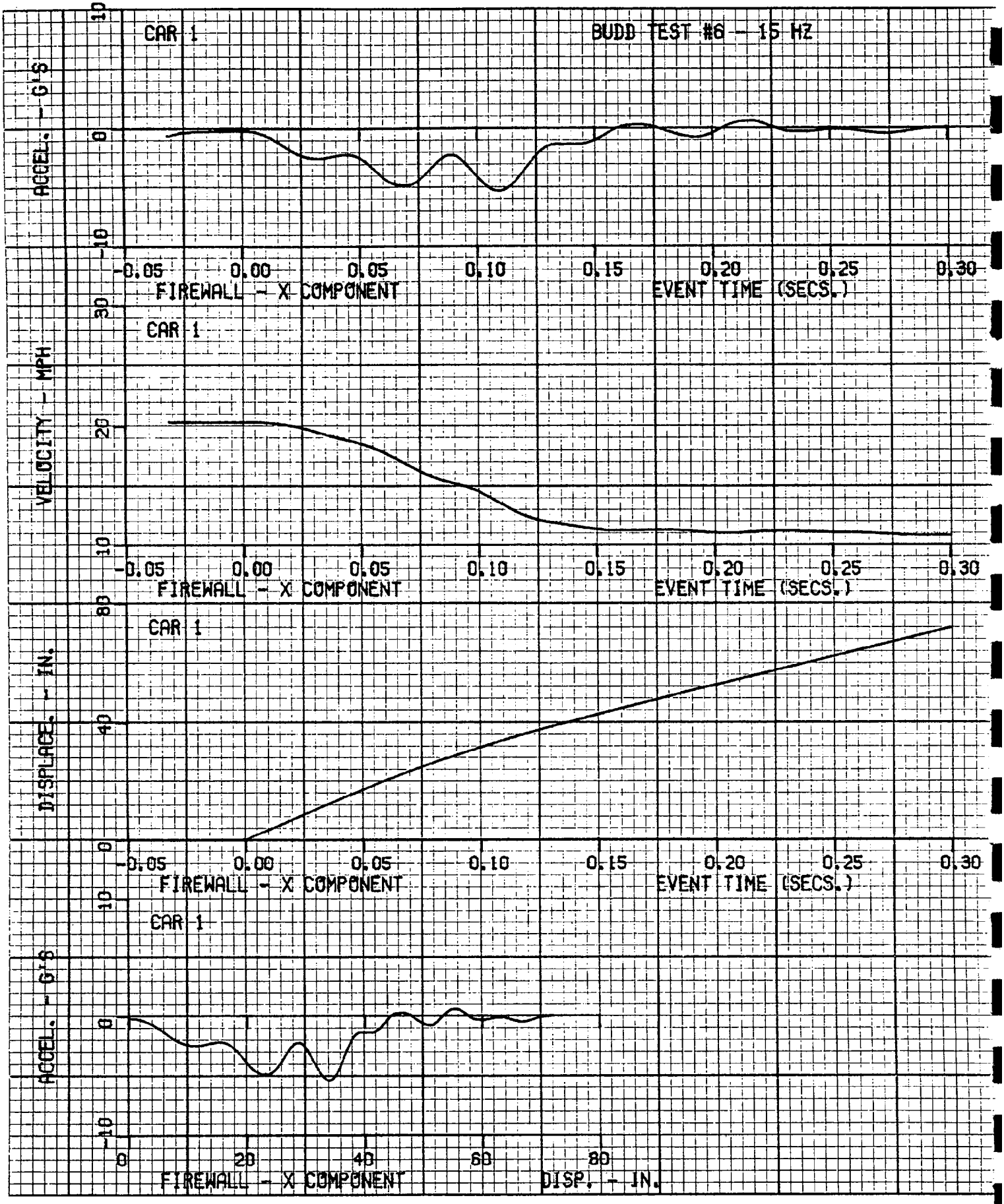

BUDD TEST #6 - 15 HZ
CAR 1
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
BUMPER - X COMPONENT
EVENT TIME (SECS.)
CAR 1
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
BUMPER - X COMPONENT
EVENT TIME (SECS.)
CAR 1
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
BUMPER - X COMPONENT
EVENT TIME (SECS.)
CAR 1
10
0
-10
0
20
40
60
80
BUMPER - X COMPONENT
DISP. - IN.

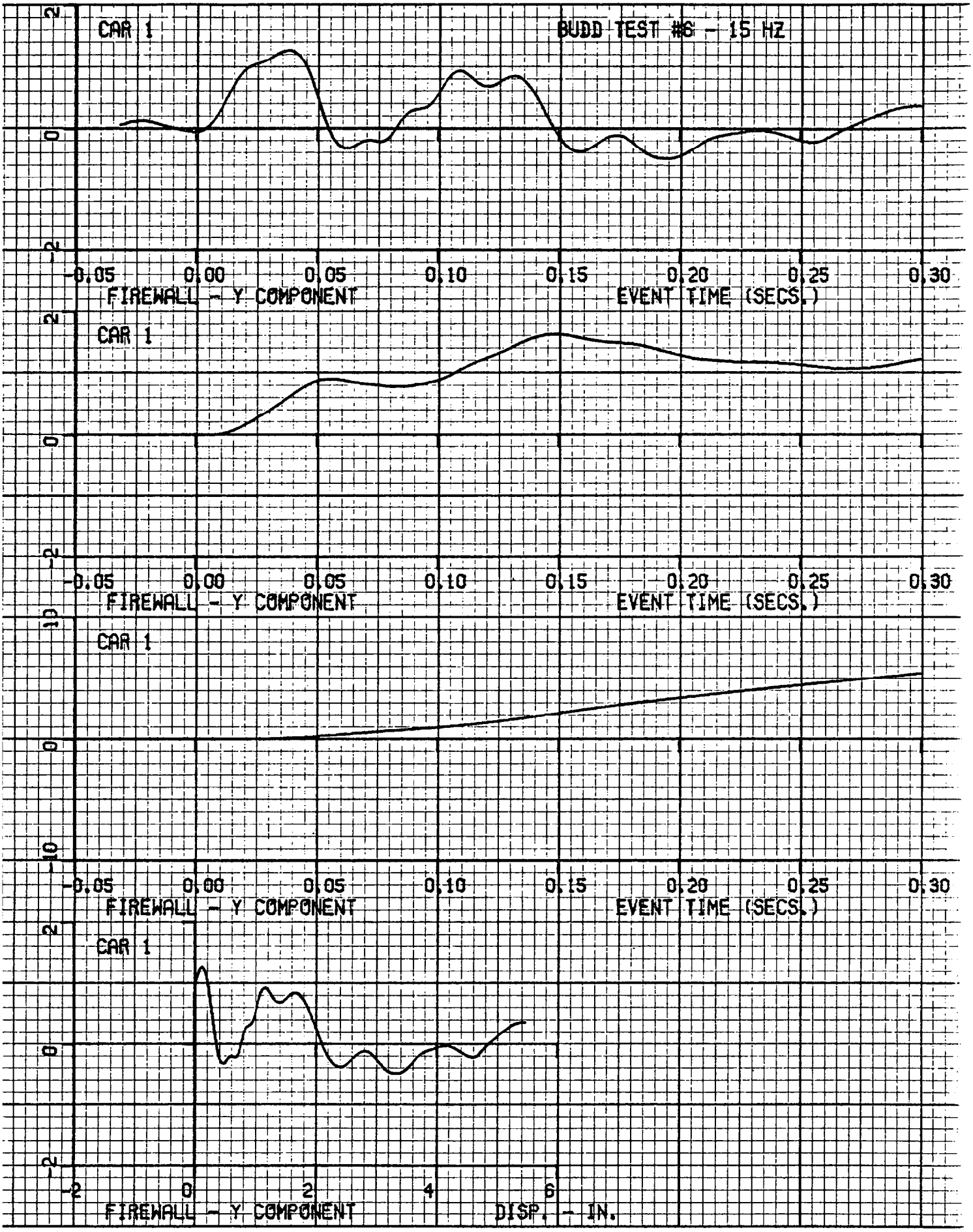

CAR 1
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FRONT CROSSMEMBER - X COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FRONT CROSSMEMBER - X COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FRONT CROSSMEMBER - X COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
FRONT CROSSMEMBER - X COMP.
DISP. - IN.

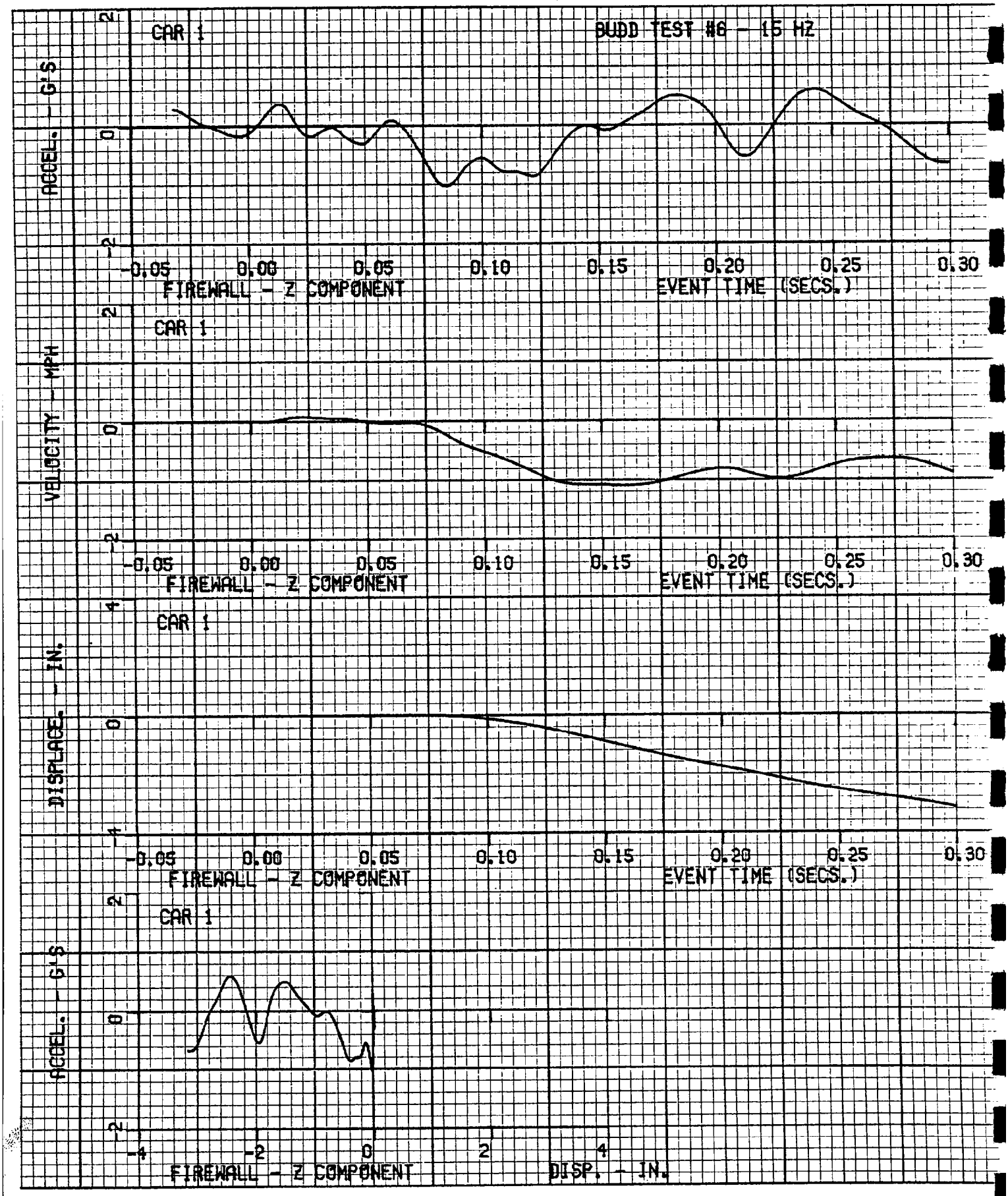

CAR 1
BUDD TEST #6 - 15 HZ
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 1
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 1
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 1
10
0
-10
0
20
40
60
80
ENGINE - X COMP.
DISP. - IN.

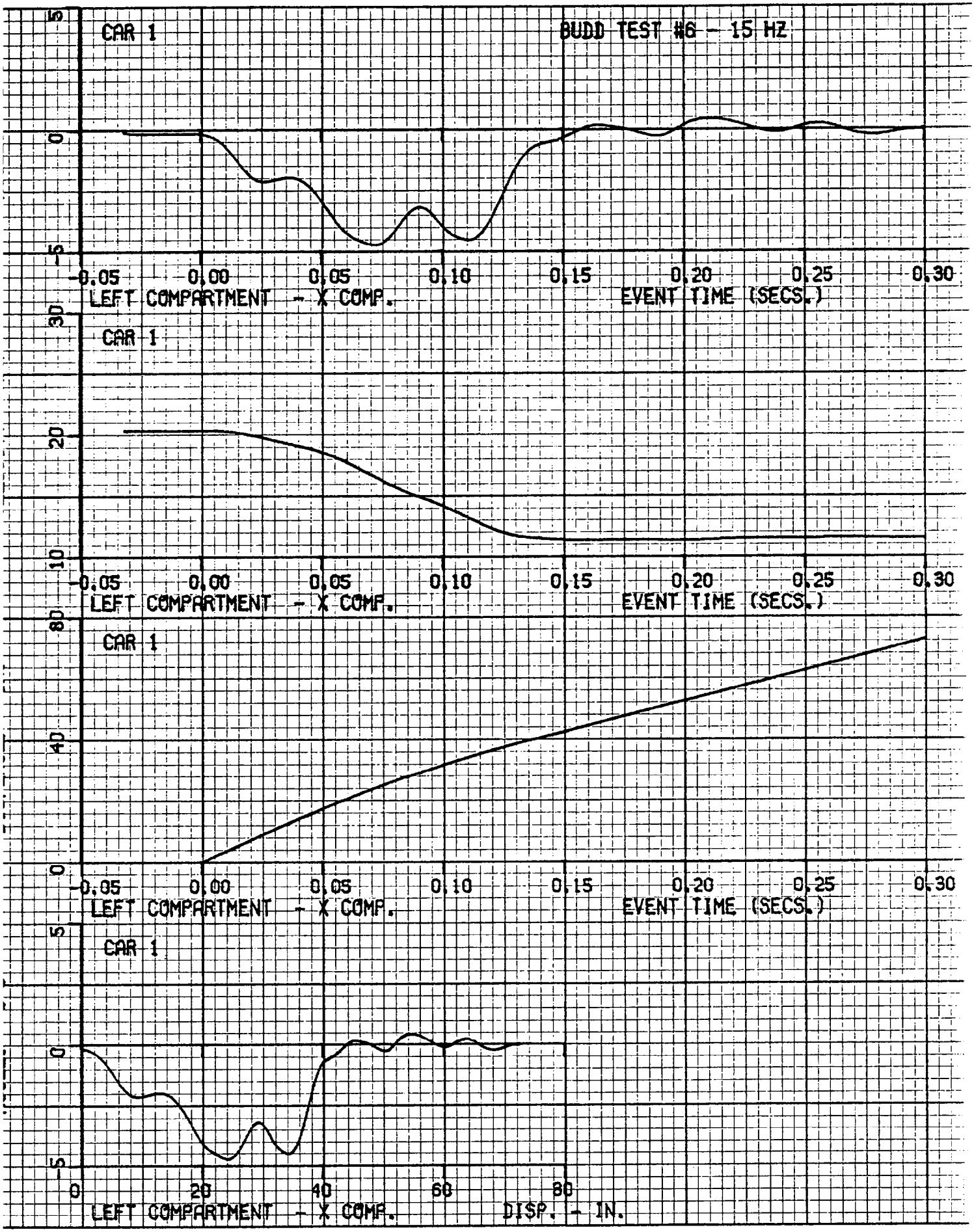

CAR 1
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
1
0
-1
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
1
0
-1
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
4
0
-4
-4.00
0.00
4.00
8.00
12.00
ENGINE - Y COMP. (X10-1)
DISP. - IN.

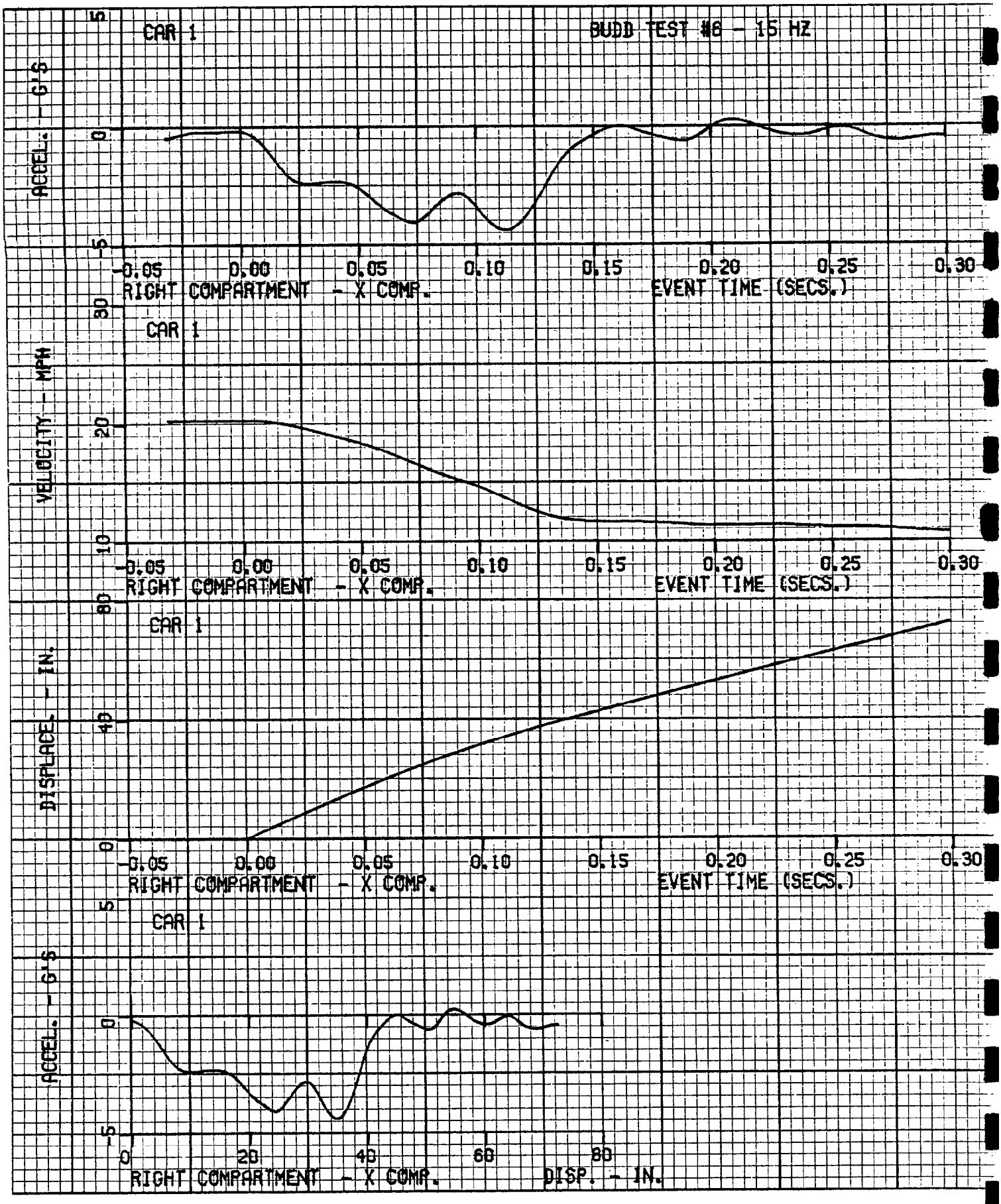

CAR 1
BUDD TEST #6 - 15 HZ
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Z COMP.
EVENT TIME (SECS.)
CAR 1
4
-4
DISP. - IN.

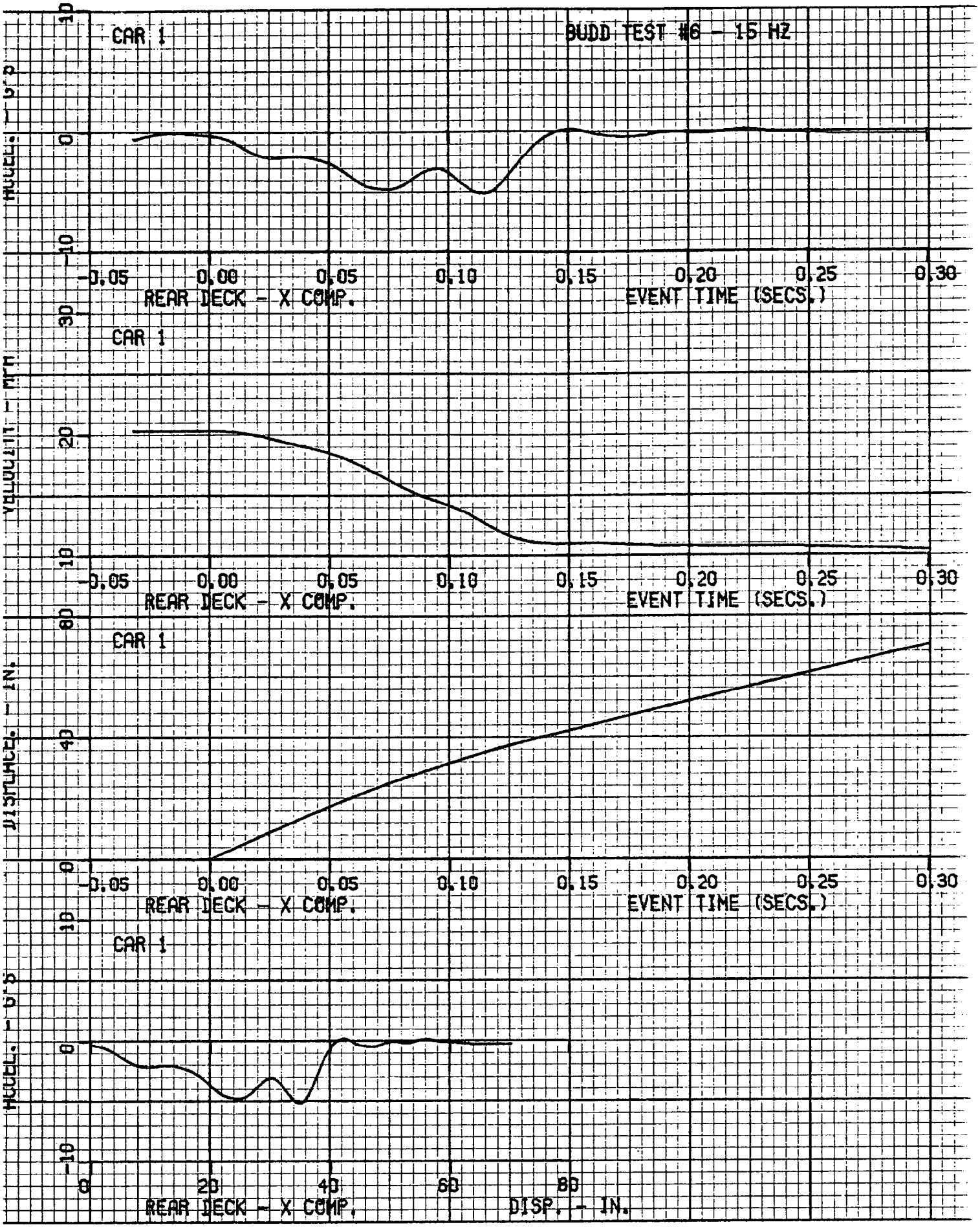

CAR 1
BUDD TEST #6 -- 15 HZ
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - X COMPONENT
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
0
FIREWALL - X COMPONENT
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
FIREWALL - X COMPONENT
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
FIREWALL - X COMPONENT
DISP. - IN.

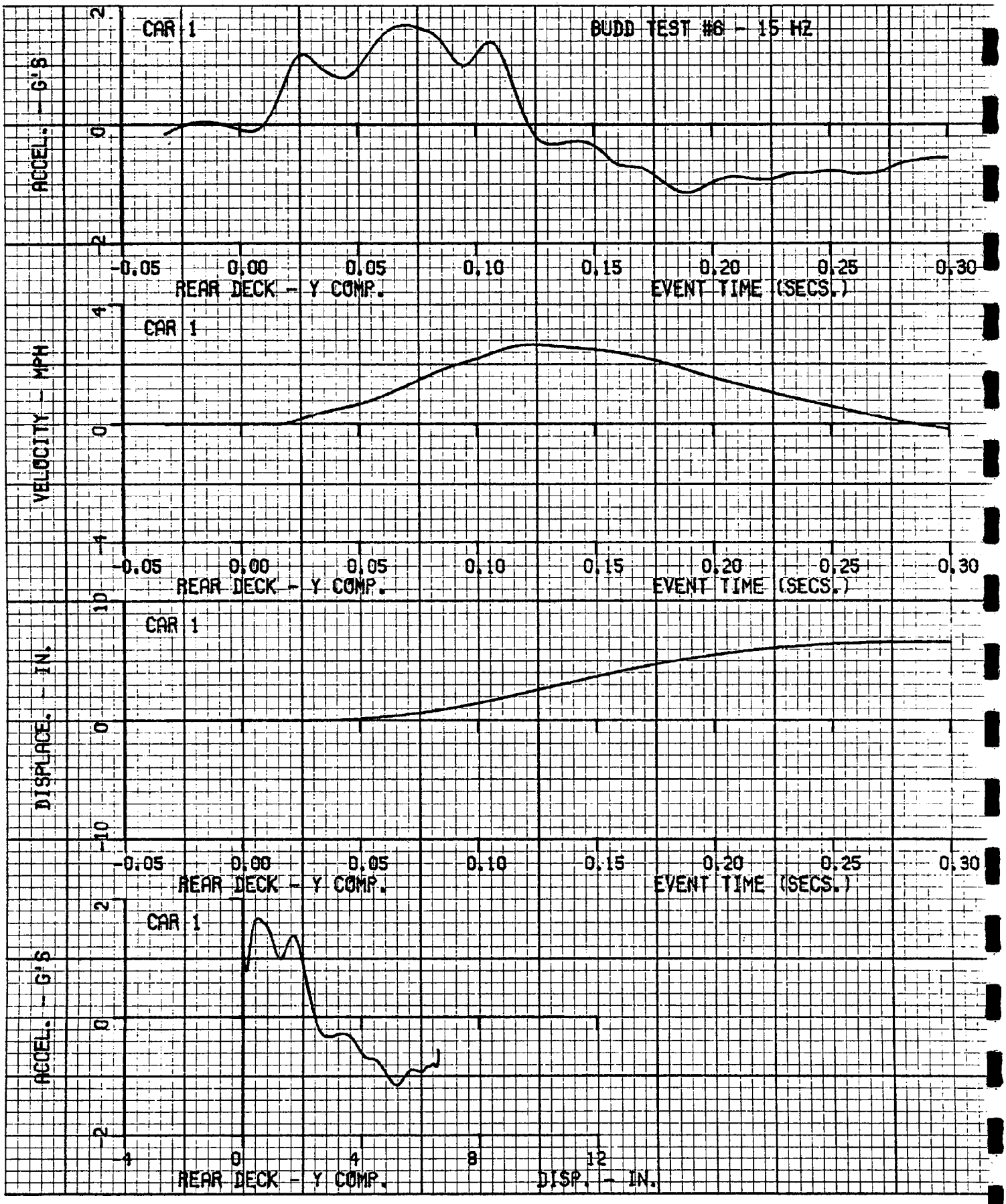

CAR 1
BUDD TEST #6 - 15 HZ
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - Y COMPONENT
EVENT TIME (SECS.)
CAR 1
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - Y COMPONENT
EVENT TIME (SECS.)
CAR 1
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - Y COMPONENT
EVENT TIME (SECS.)
CAR 1
2
0
-2
-2
0
2
4
6
FIREWALL - Y COMPONENT
DISP. - IN.

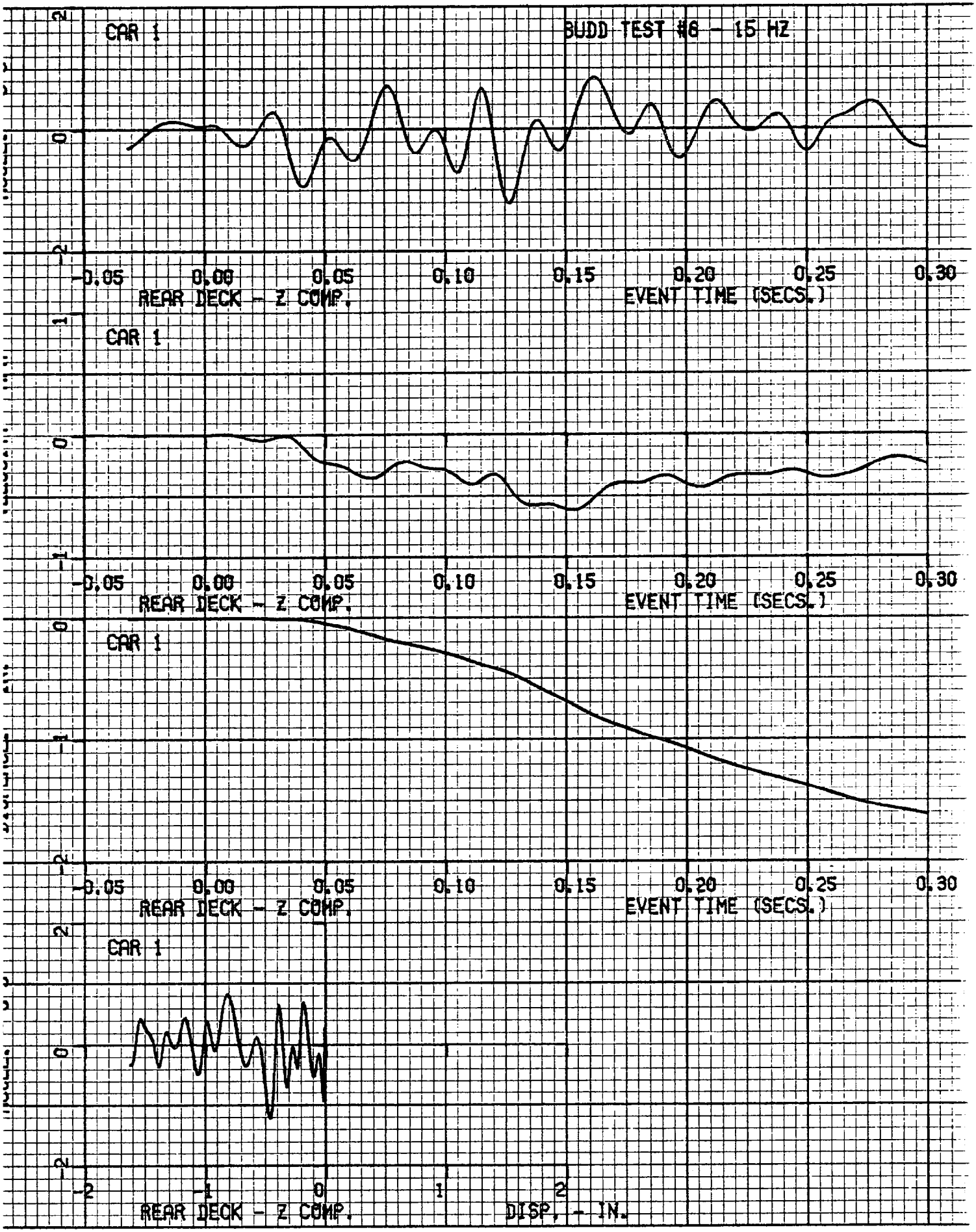

BUDD TEST #6 - 15 MZ
CAR 1
ACCEL. - G'S
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
FIREWALL - Z COMPONENT
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
2
0
-2
FIREWALL - Z COMPONENT
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
4
0
-4
FIREWALL - Z COMPONENT
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
2
0
-2
-4
-2
0
2
4
FIREWALL - Z COMPONENT
DISP. - IN.

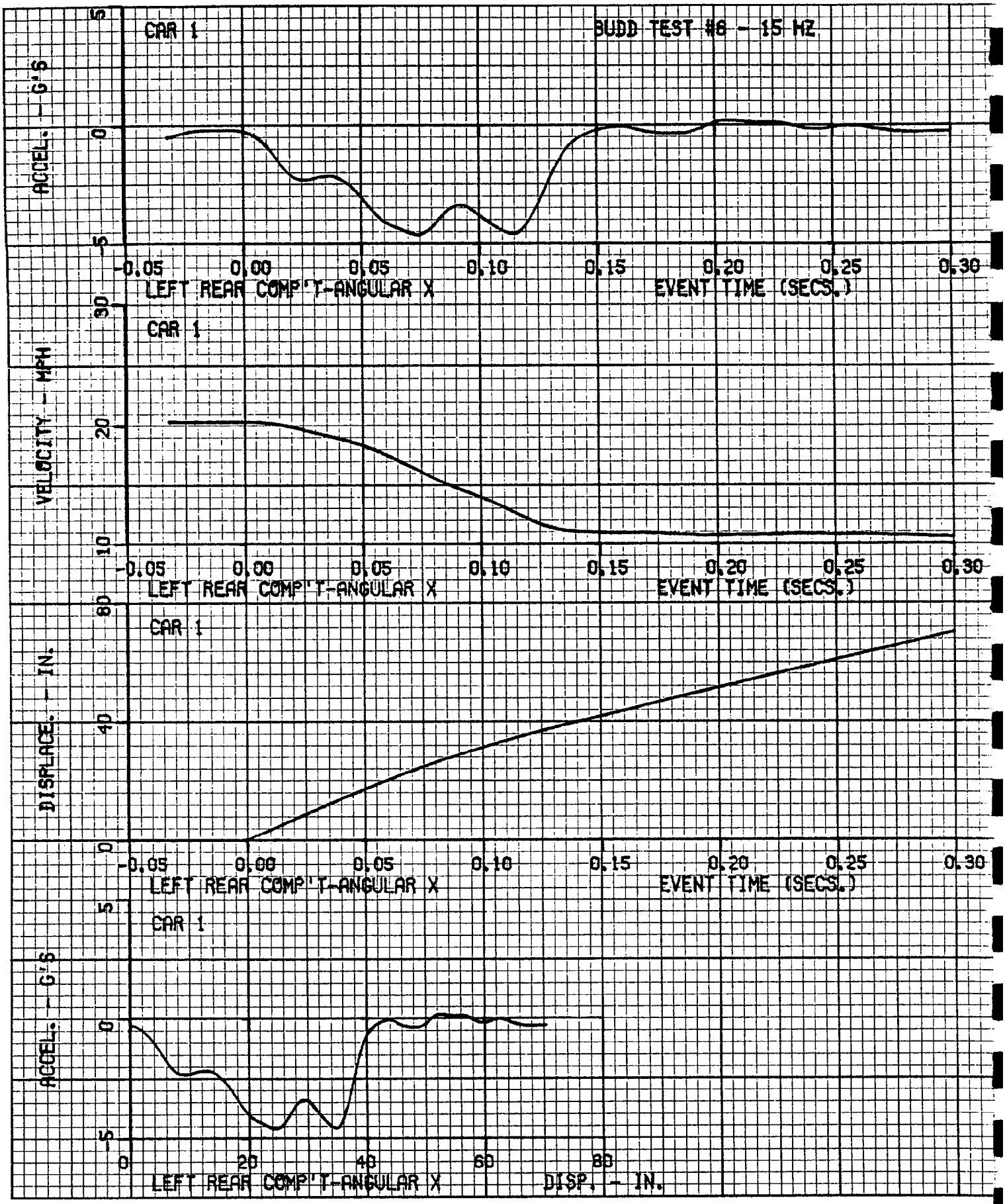

CAR 1
BUDD TEST #6 - 15 HZ
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
30
CAR 1
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
80
CAR 1
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
5
CAR 1
0
-5
0
20
40
60
80
LEFT COMPARTMENT - X COMP.
DISP. - IN.

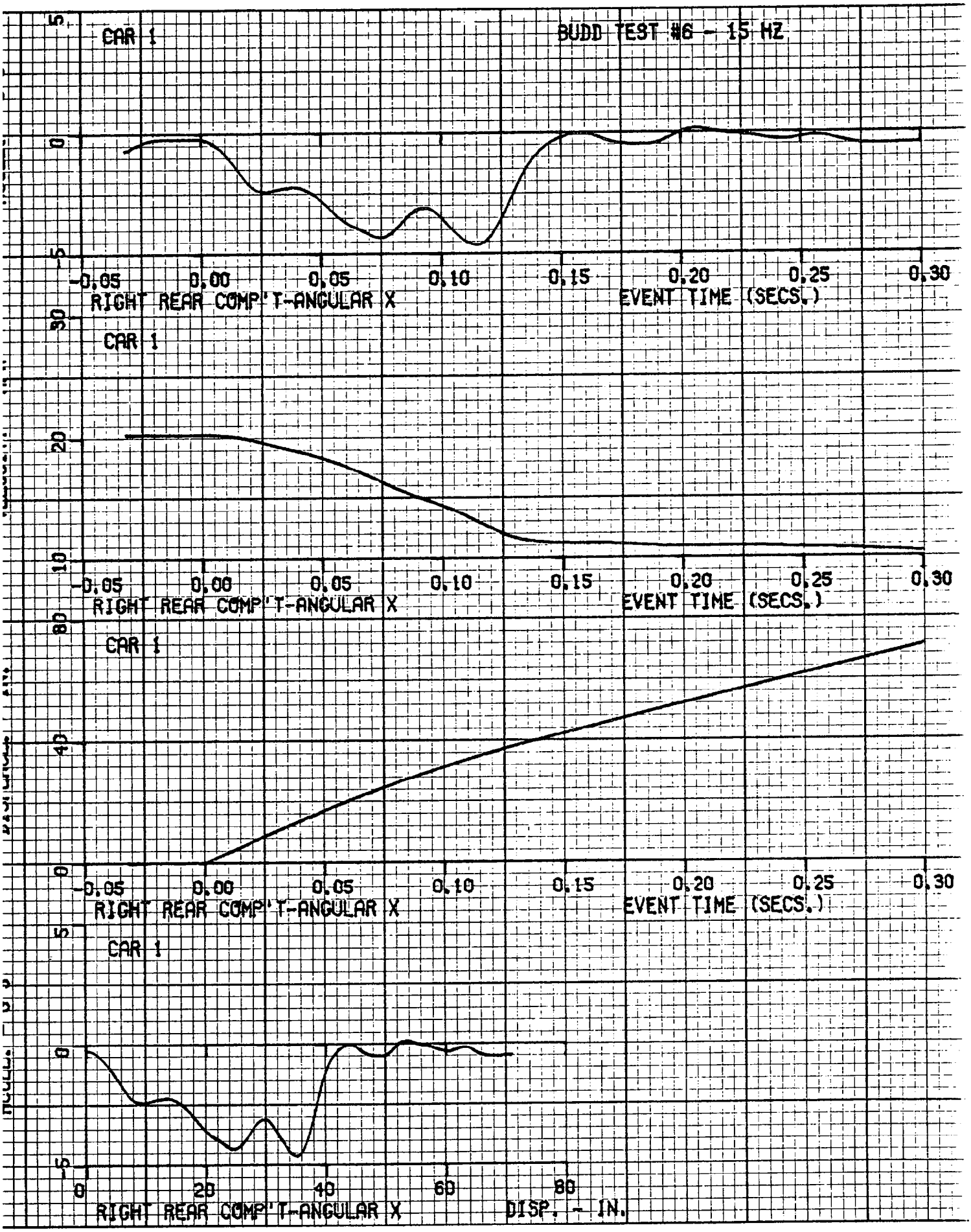

CAR 1
BUDD TEST #8 - 15 HZ
ACCEL. - G'S
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT COMPARTMENT - X COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
5
0
-5
0
20
40
60
80
RIGHT COMPARTMENT - X COMP.
DISP. - IN.

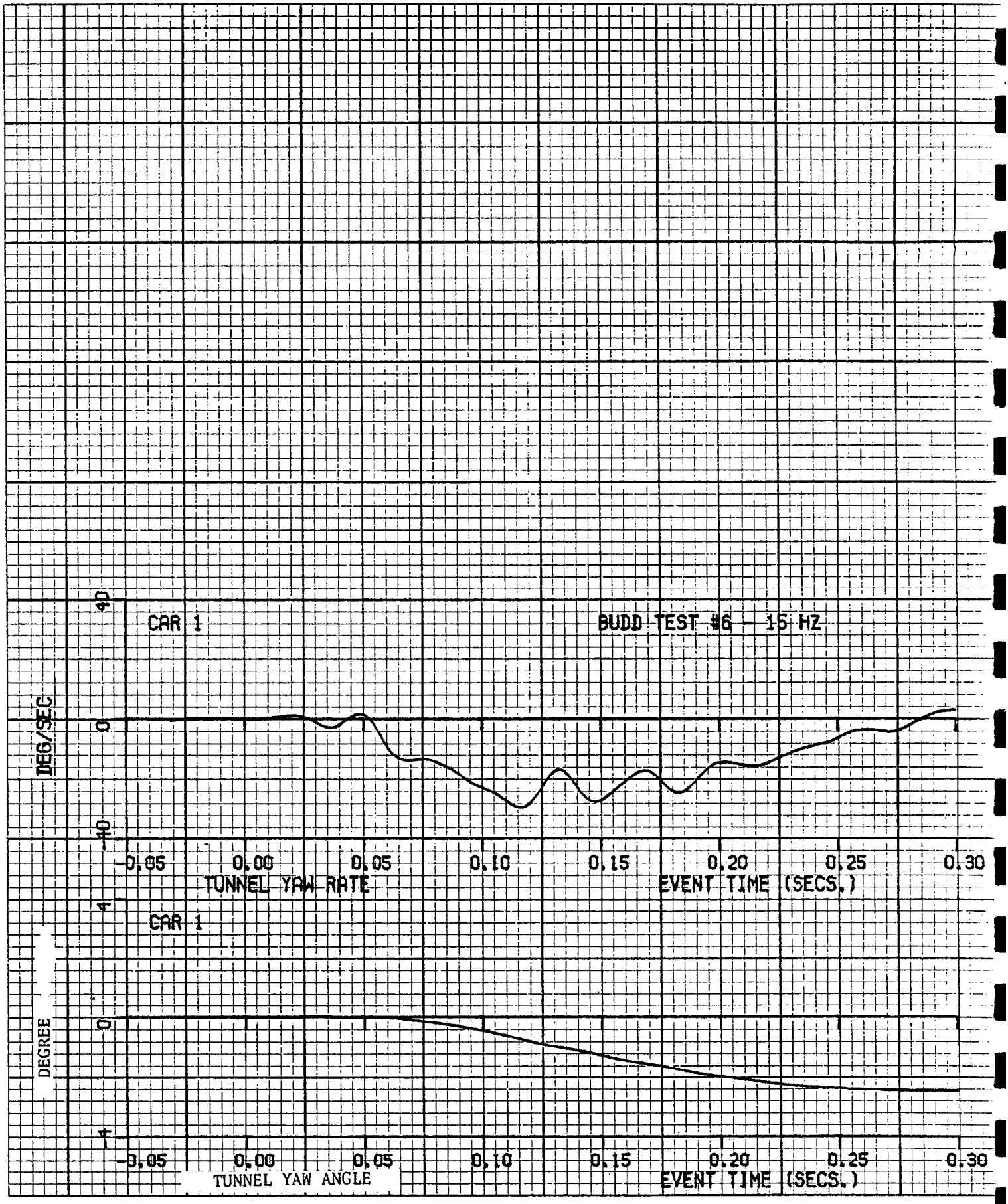

CAR 1
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 1
DISTANCE - IN.
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
10
0
-10
0
20
40
60
80
REAR DECK - X COMP.
DISP. - IN.


CAR 1
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
2
0
-2
-4
0
4
8
12
REAR DECK - Y COMP.
DISP. - IN.


CAR 1
BUDD TEST #6 - 15 HZ
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 1
1
0
-1
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 1
0
-1
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 1
2
0
-2
-2
-1
0
1
2
REAR DECK - Z COMP.
DISP. - IN.


CAR 1
BUDD TEST #8 - 15 HZ
ACCEL. - G'S
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
30
20
10
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
40
0
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
5
0
-5
0
20
40
60
80
LEFT REAR COMP'T-ANGULAR X
DISP. - IN.


CAR 1
BUDD TEST #6 - 15 HZ
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
30
20
10
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
80
40
0
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 1
5
0
-5
0
20
40
60
80
RIGHT REAR COMP'T-ANGULAR X
DISP. - IN.

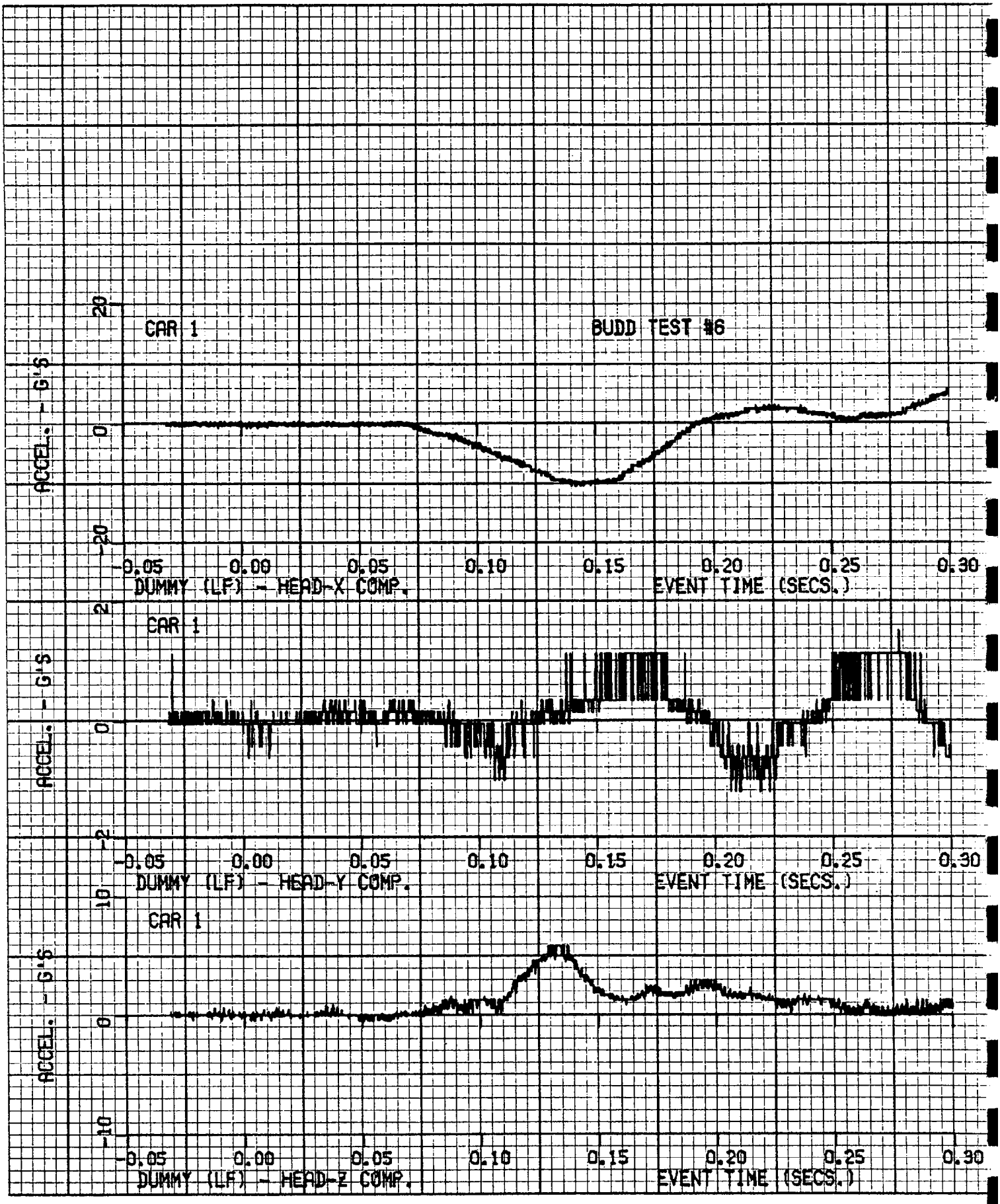

CAR 1
BUDD TEST #6 – 15 HZ
DEG/SEC
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW RATE
EVENT TIME (SECS.)
CAR 1
DEGREE
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW ANGLE
EVENT TIME (SECS.)

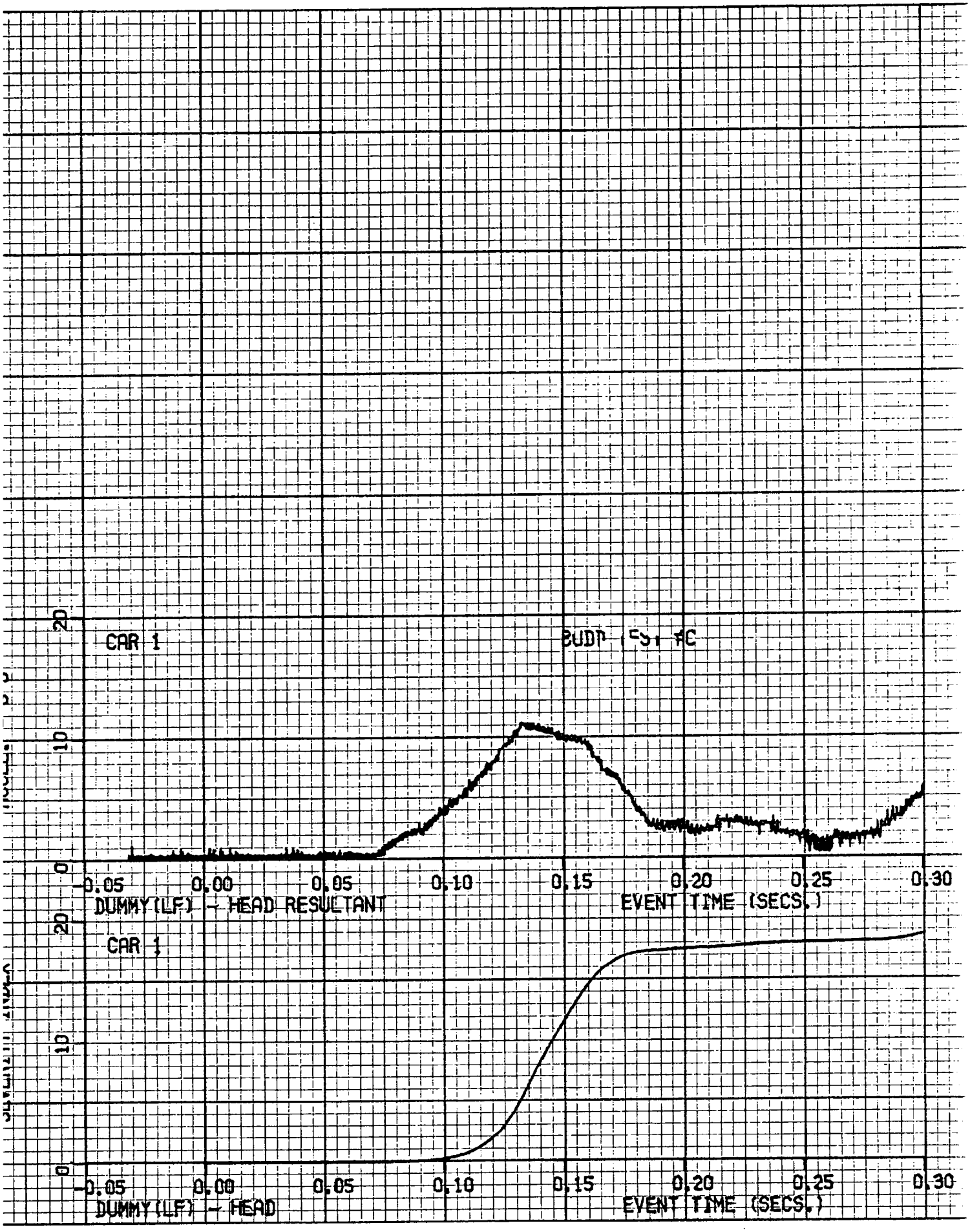
TEST NO. 6

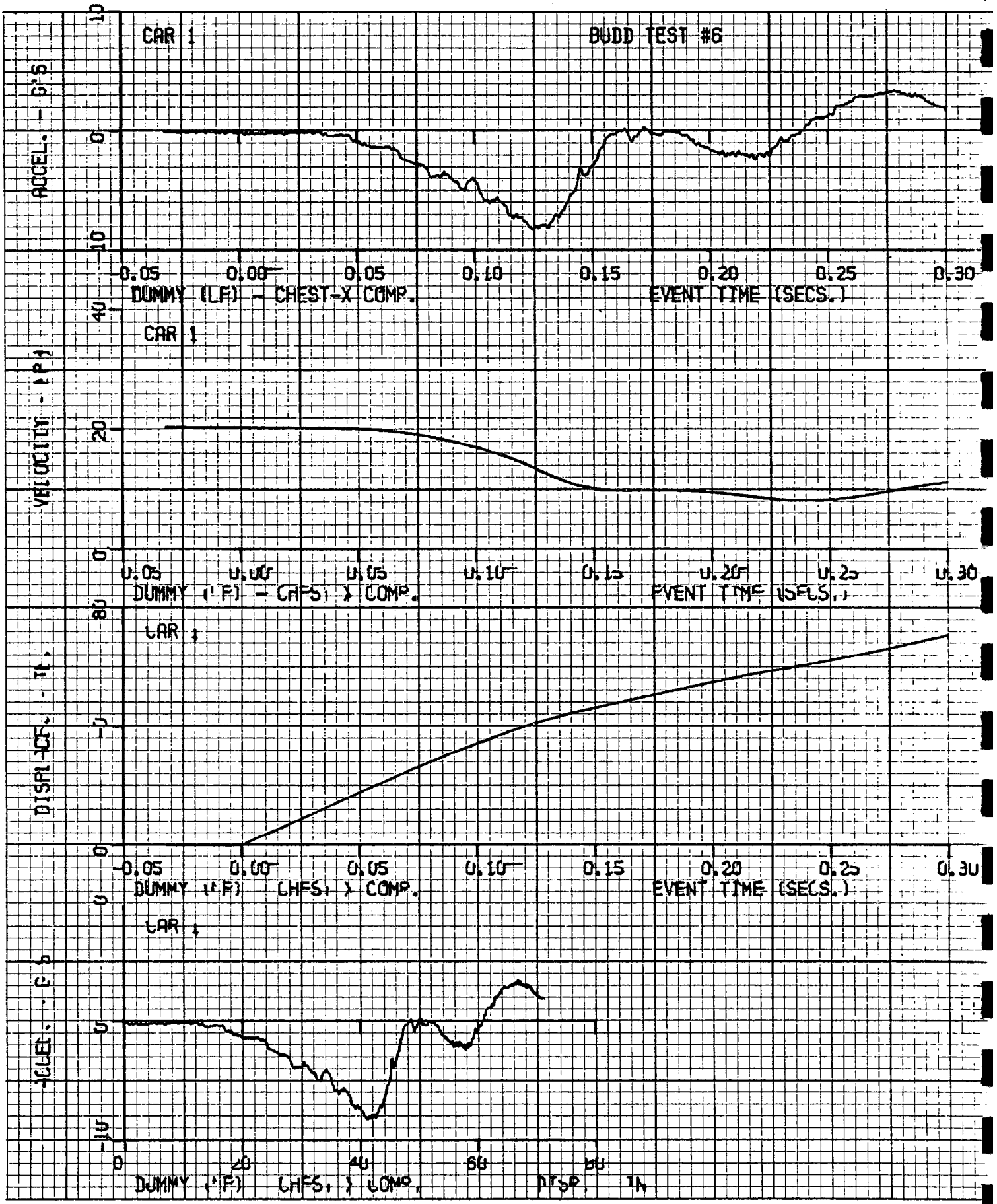
CAR 1 - 1978 CHEVROLET IMPALA

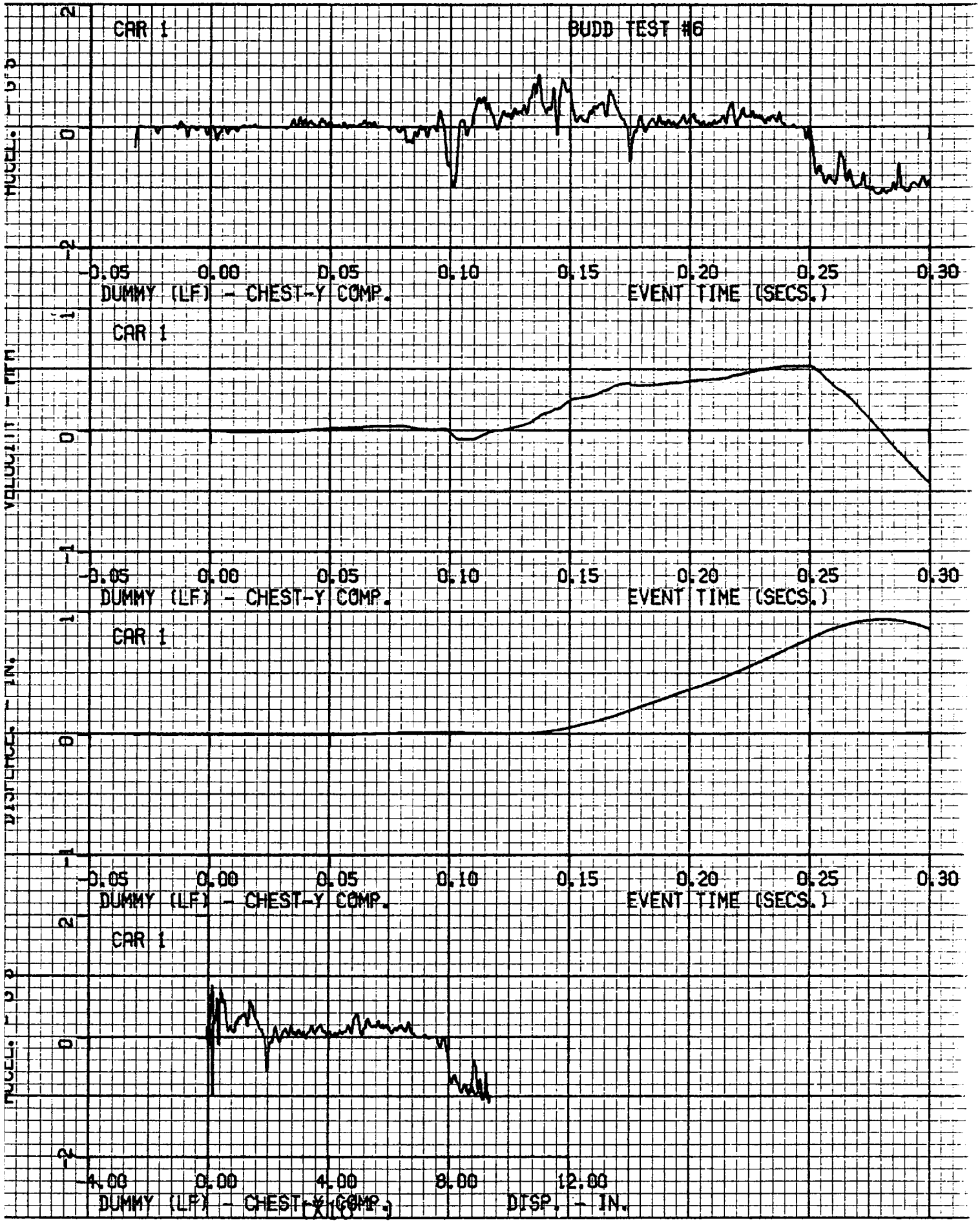
DUMMY DATA

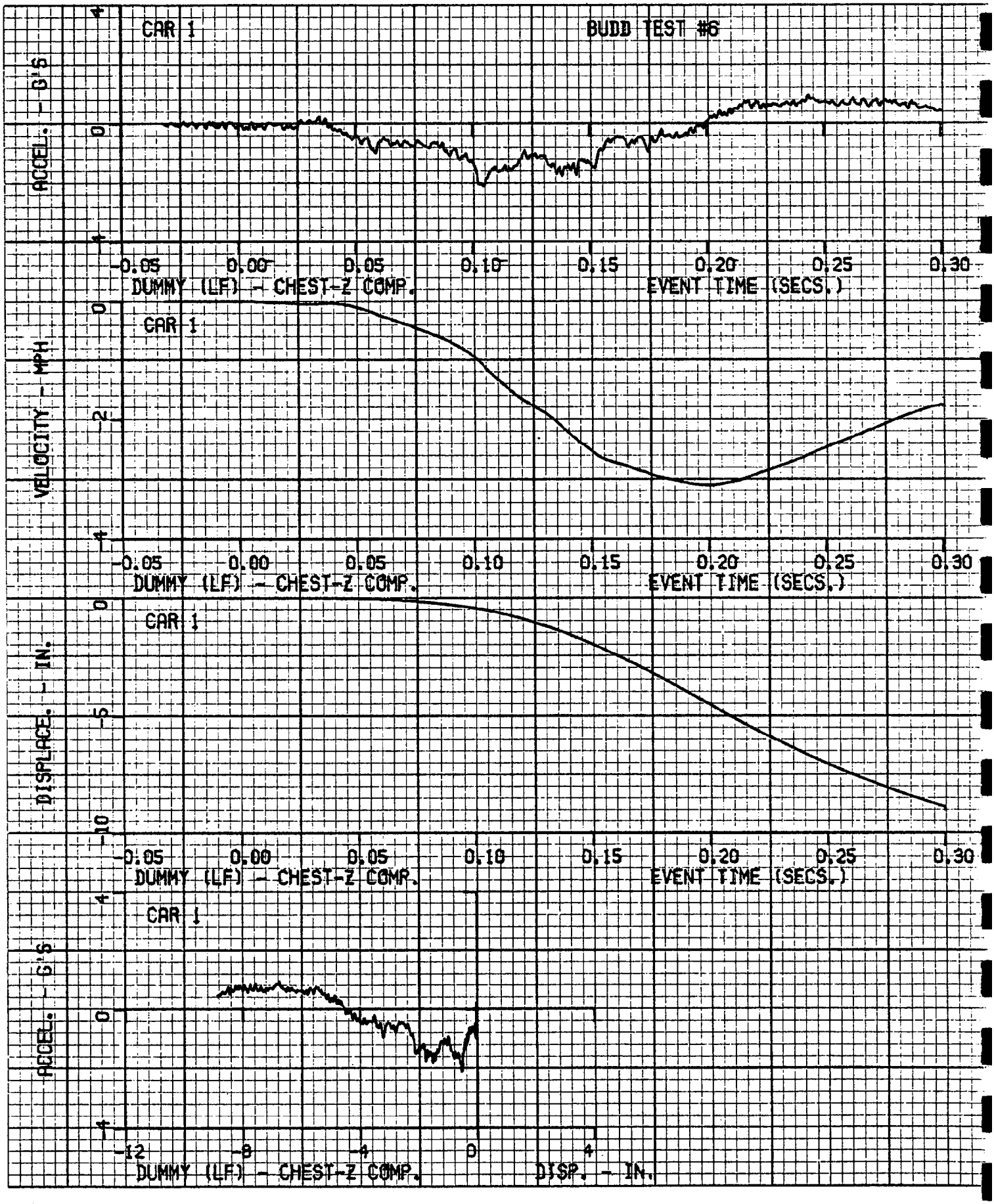
	FILTER CHANNEL CLASS
HEAD ACCELERATION	1000
CHEST ACCELERATION	180
FEMUR FORCES	600
BELT LOADS	60

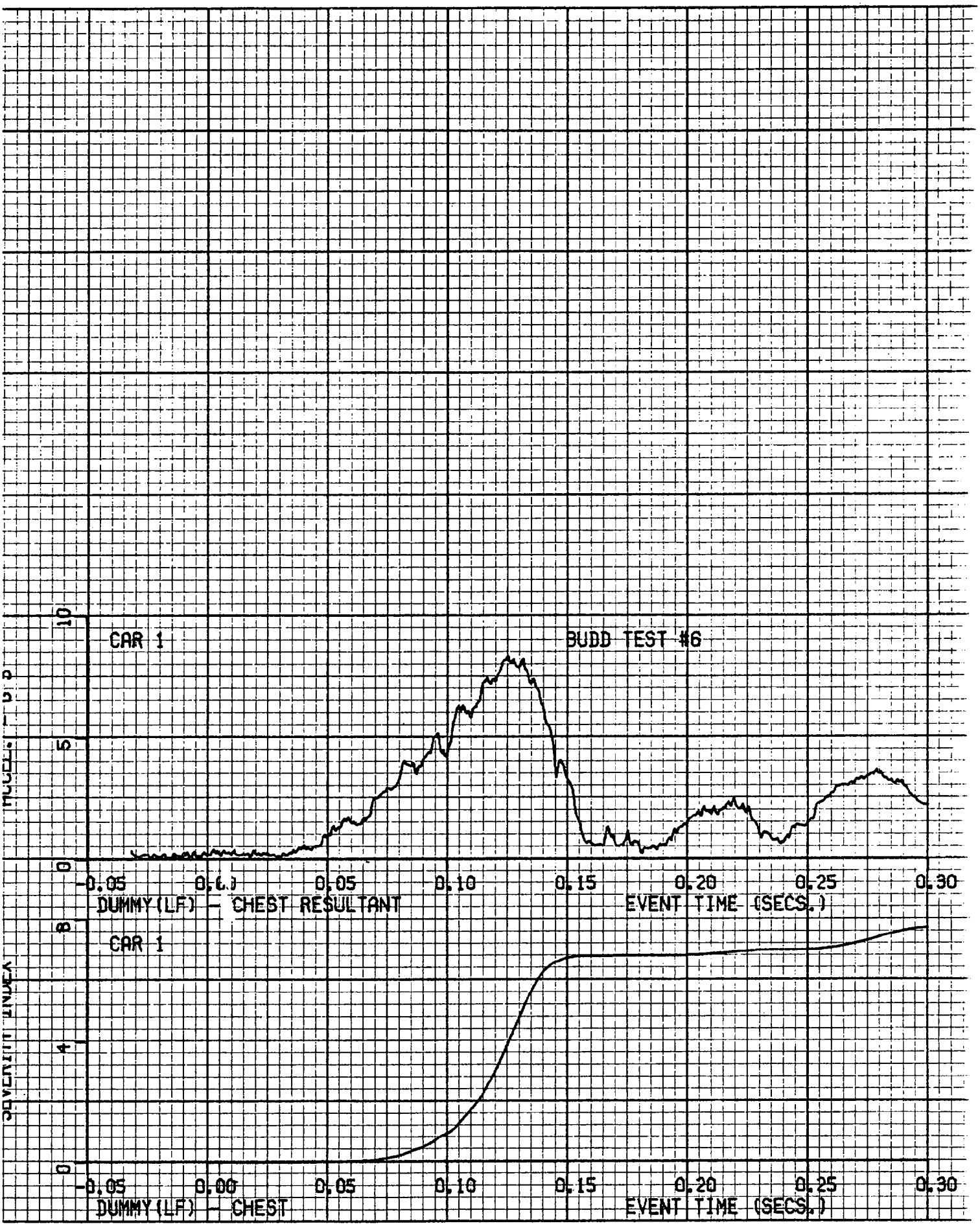

CAR 1
BUDD TEST #6
20
0
-20
ACCEL. - G'S
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - HEAD-X COMP.
EVENT TIME (SECS.)
CAR 1
2
0
-2
ACCEL. - G'S
DUMMY (LF) - HEAD-Y COMP.
EVENT TIME (SECS.)
CAR 1
10
0
-10
ACCEL. - G'S
DUMMY (LF) - HEAD-Z COMP.
EVENT TIME (SECS.)

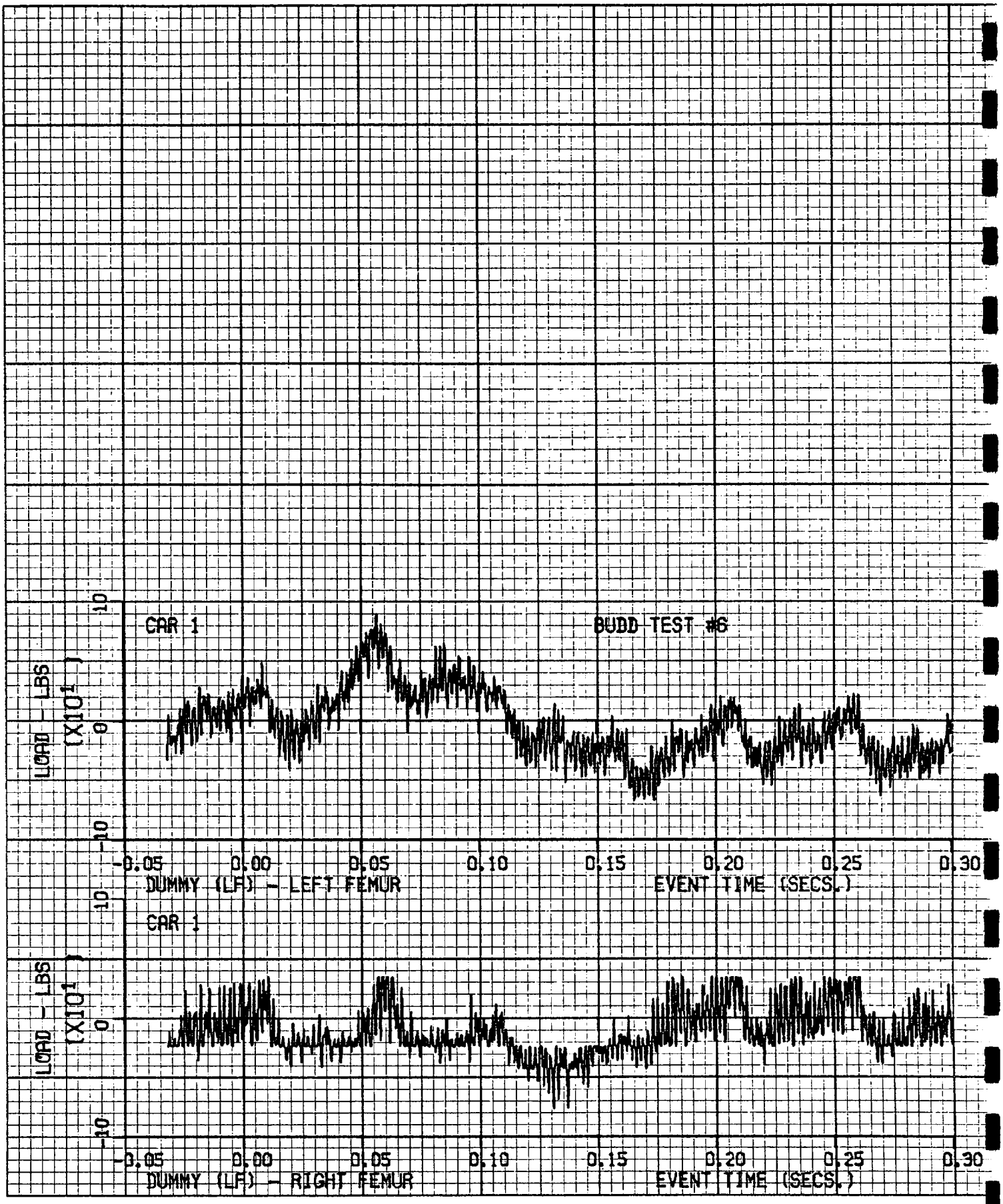

CAR 1
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY(LF) - HEAD RESULTANT
EVENT TIME (SECS.)
CAR 1
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY(LF) - HEAD
EVENT TIME (SECS.)

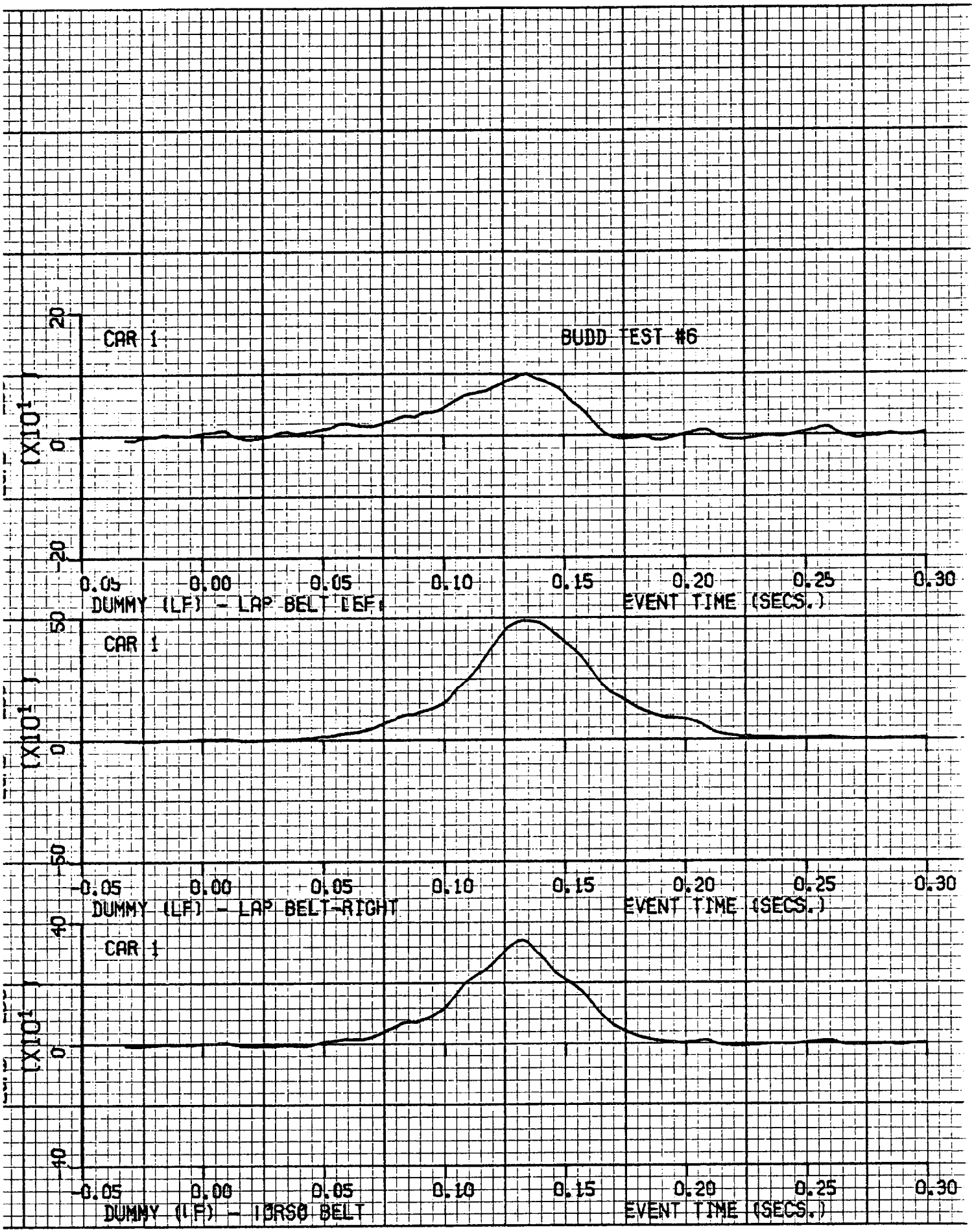

CAR 1
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-X COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - (FPS)
40
20
0
DUMMY (LF) - CHEST X COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
80
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) CHEST X COMP.
EVENT TIME (SECS.)
CAR 1
0
-10
0
20
40
60
80
DUMMY (LF) CHEST X COMP.
DISP. IN


CAR 1
BUDD TEST #6
ACCEL. - G's
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - FPS
1
0
-1
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 1
DISTANCE - IN.
1
0
-1
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G's
2
0
-2
-4.00
0.00
4.00
8.00
12.00
DUMMY (LF) - CHEST-Y COMP.
DISP. - IN.


CAR 1
BUDD TEST #6
ACCEL. - G'S
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Z COMP.
EVENT TIME (SECS.)
CAR 1
VELOCITY - MPH
0
-2
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Z COMP.
EVENT TIME (SECS.)
CAR 1
DISPLACE. - IN.
0
-5
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Z COMP.
EVENT TIME (SECS.)
CAR 1
ACCEL. - G'S
4
0
-4
-12
-8
-4
0
4
DUMMY (LF) - CHEST-Z COMP.
DISP. - IN.


CAR 1
BUDD TEST #6
10
5
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST RESULTANT
EVENT TIME (SECS.)
CAR 1
8
4
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST
EVENT TIME (SECS.)

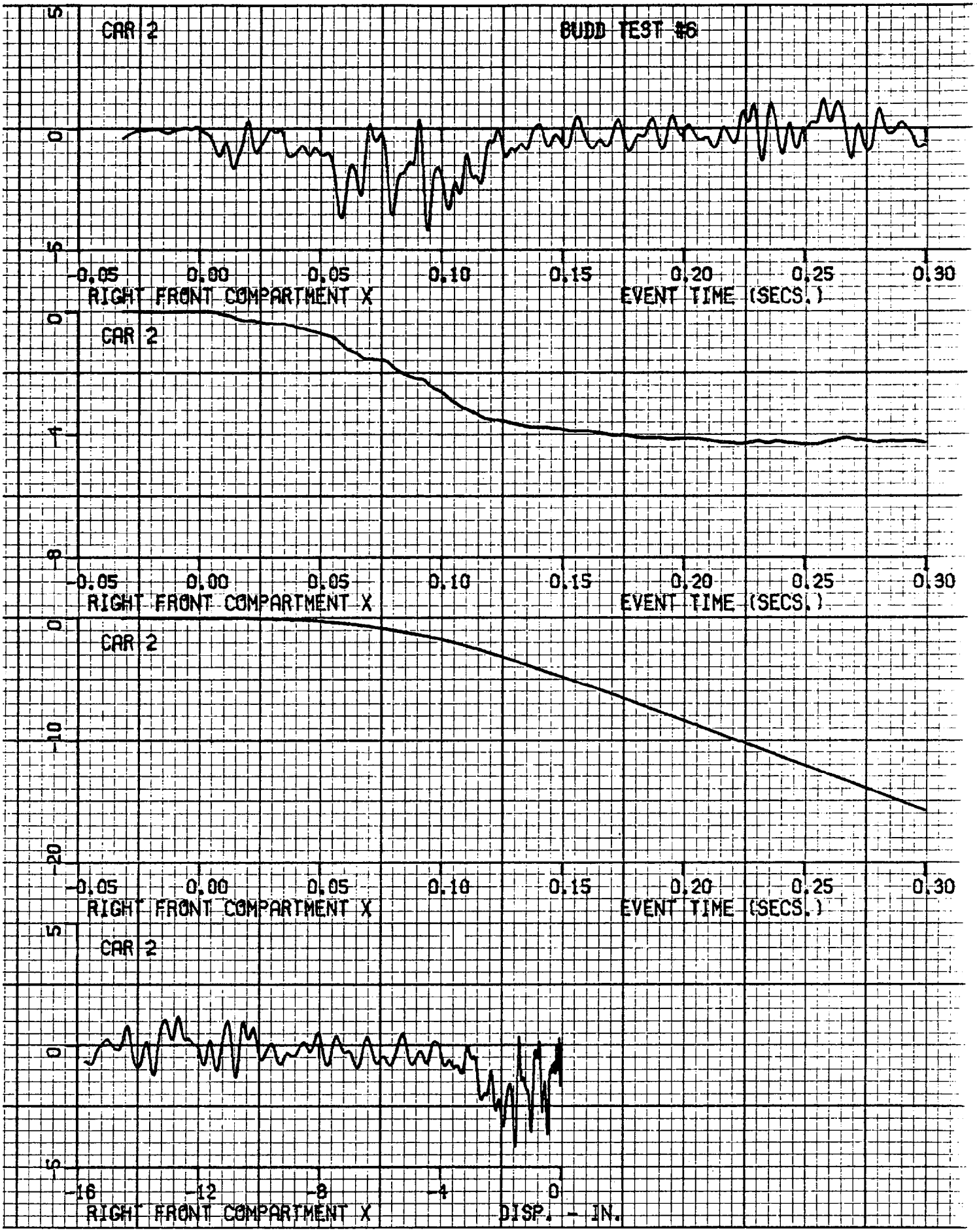

CAR 1
BUDD TEST #6
LOAD - LBS (X10¹)
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - LEFT FEMUR
EVENT TIME (SECS.)
CAR 1
LOAD - LBS (X10¹)
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - RIGHT FEMUR
EVENT TIME (SECS.)

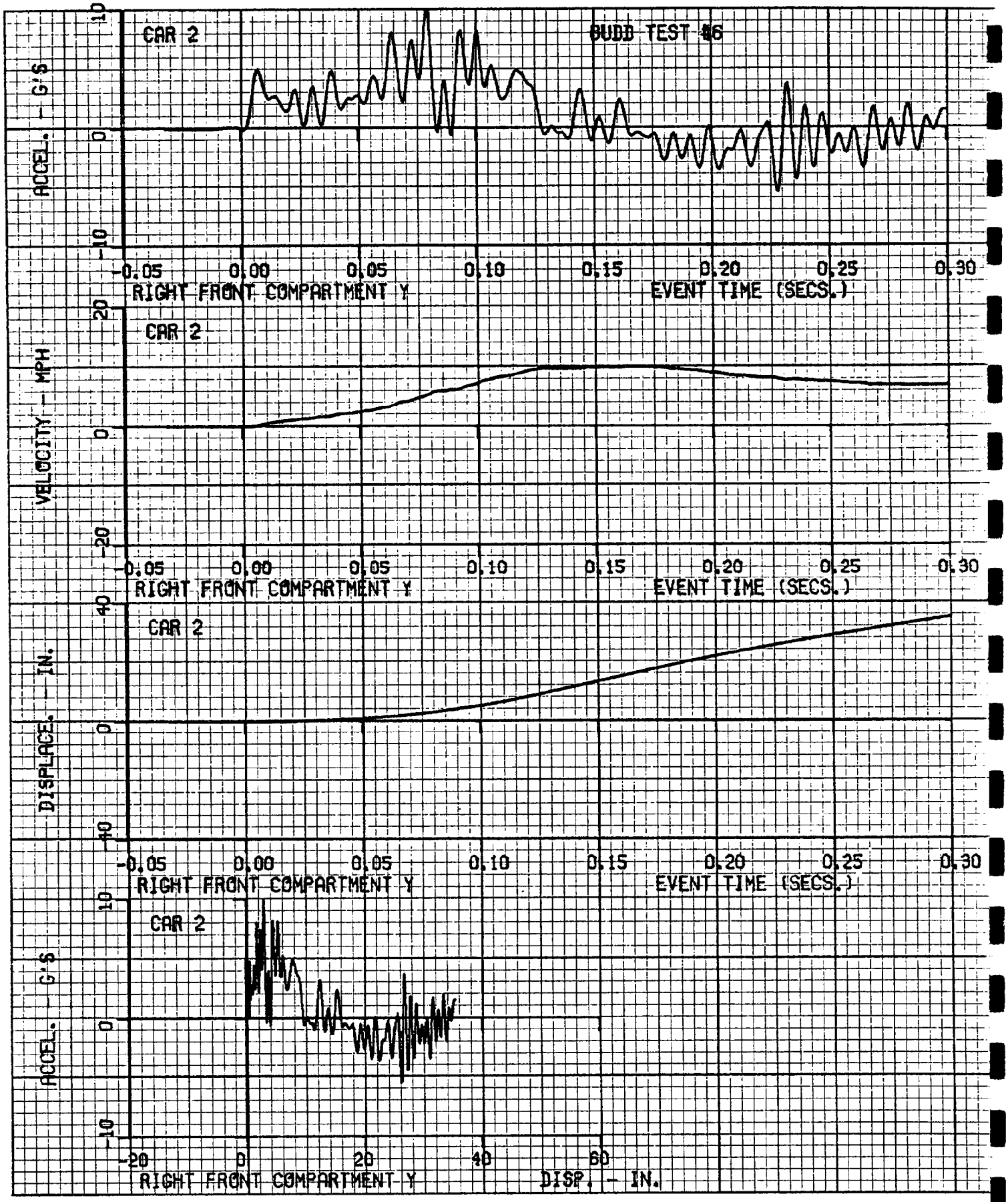

CAR 1
BUDD TEST #6
20
0
-20
(X10¹)
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - LAP BELT (LEFT)
EVENT TIME (SECS.)
CAR 1
50
0
-50
(X10¹)
DUMMY (LF) - LAP BELT-RIGHT
EVENT TIME (SECS.)
CAR 1
40
0
-40
(X10¹)
DUMMY (LF) - TORSO BELT
EVENT TIME (SECS.)

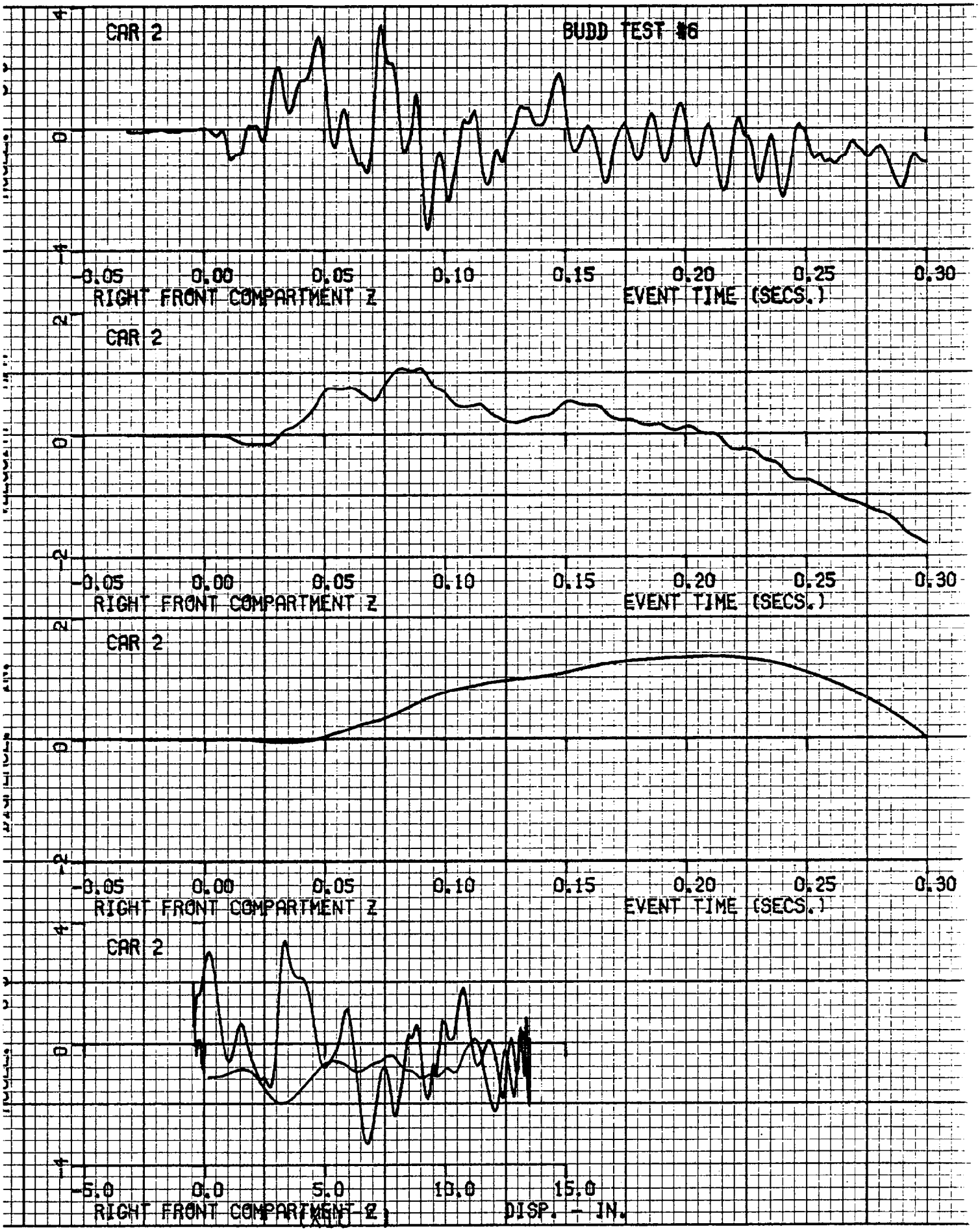
TEST NO. 6

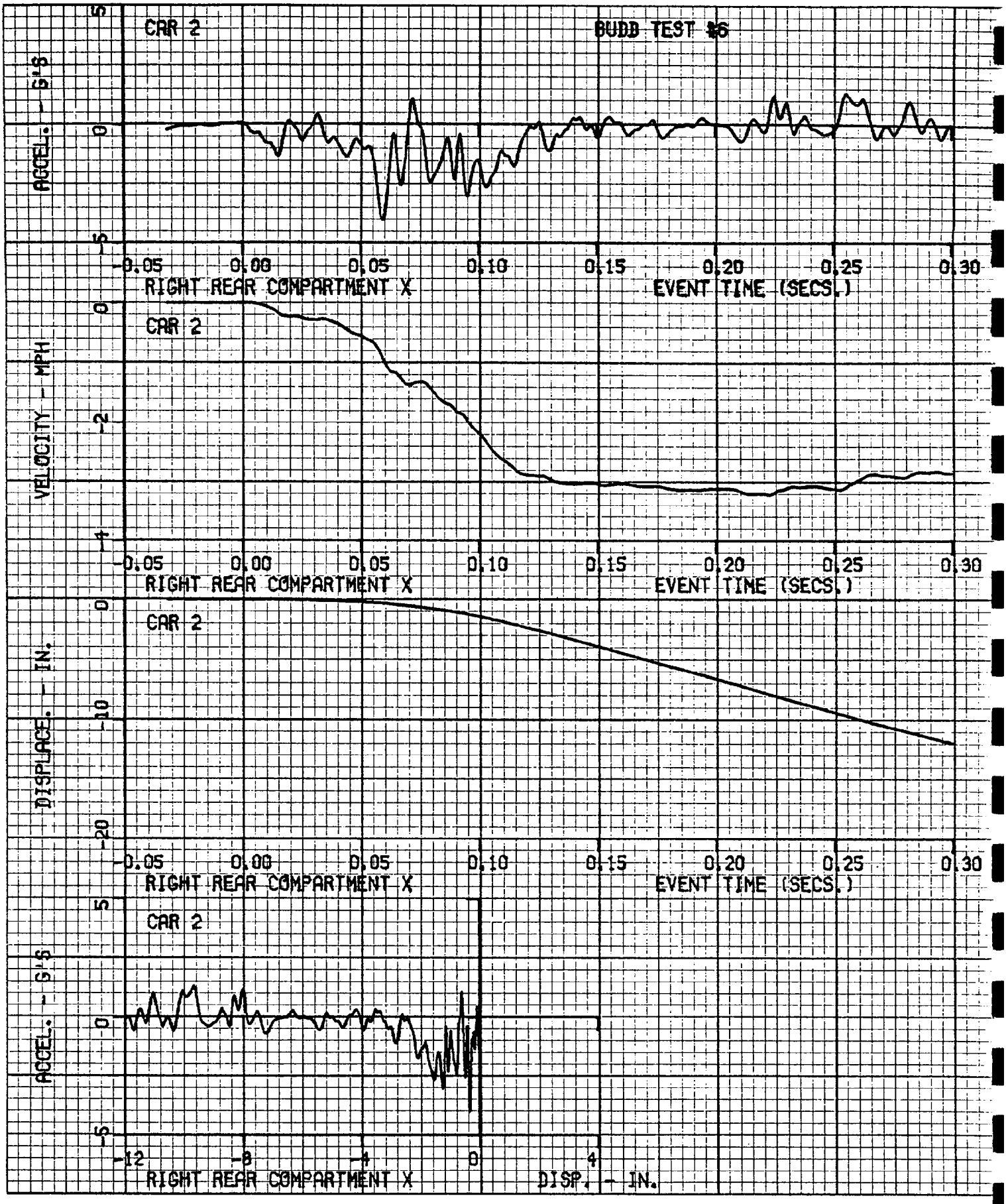
CAR 2 - 1976 VOLKSWAGEN RABBIT

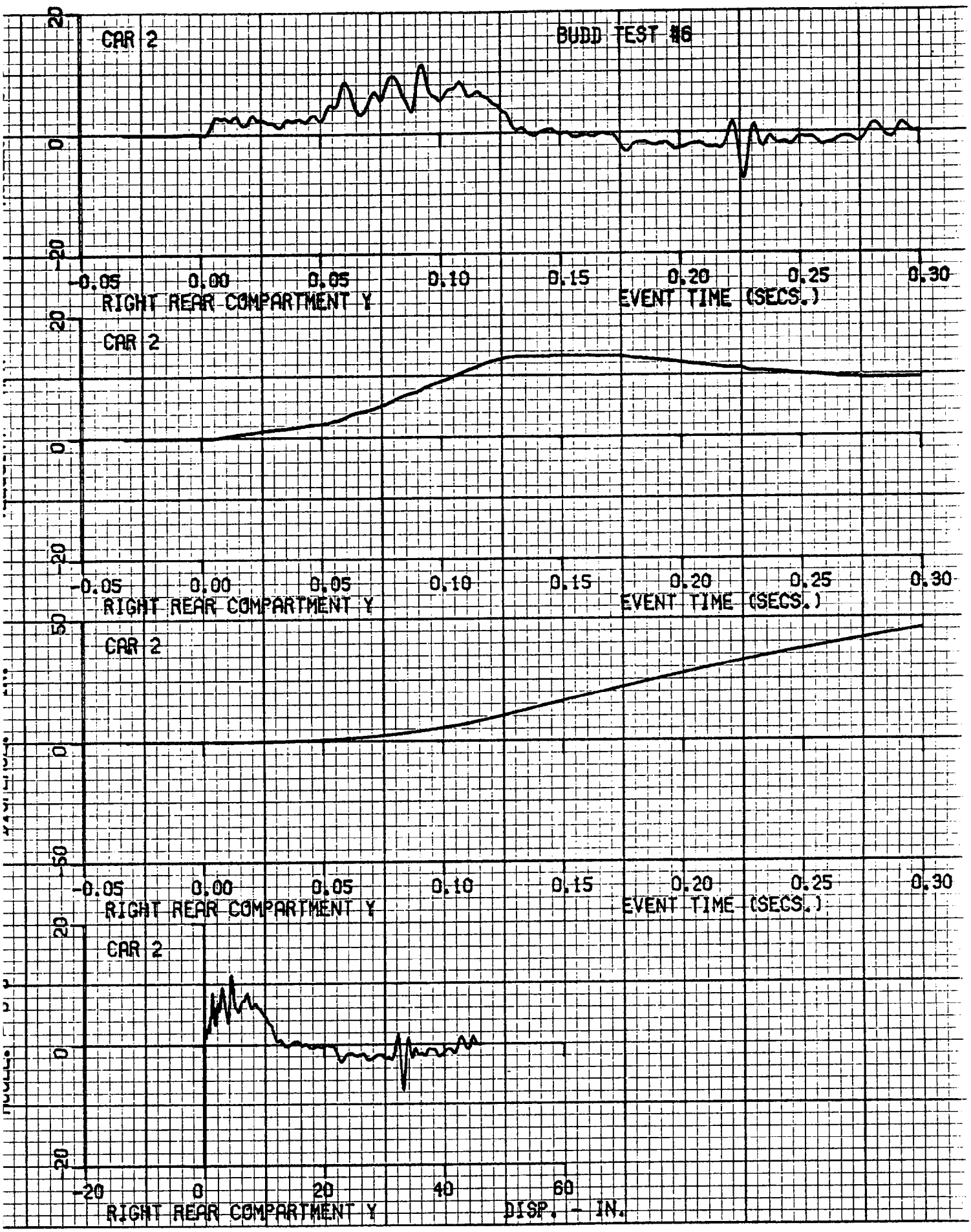
VEHICLE DATA	60 Hz FILTER
SIDE INTRUSION DATA	60 Hz FILTER

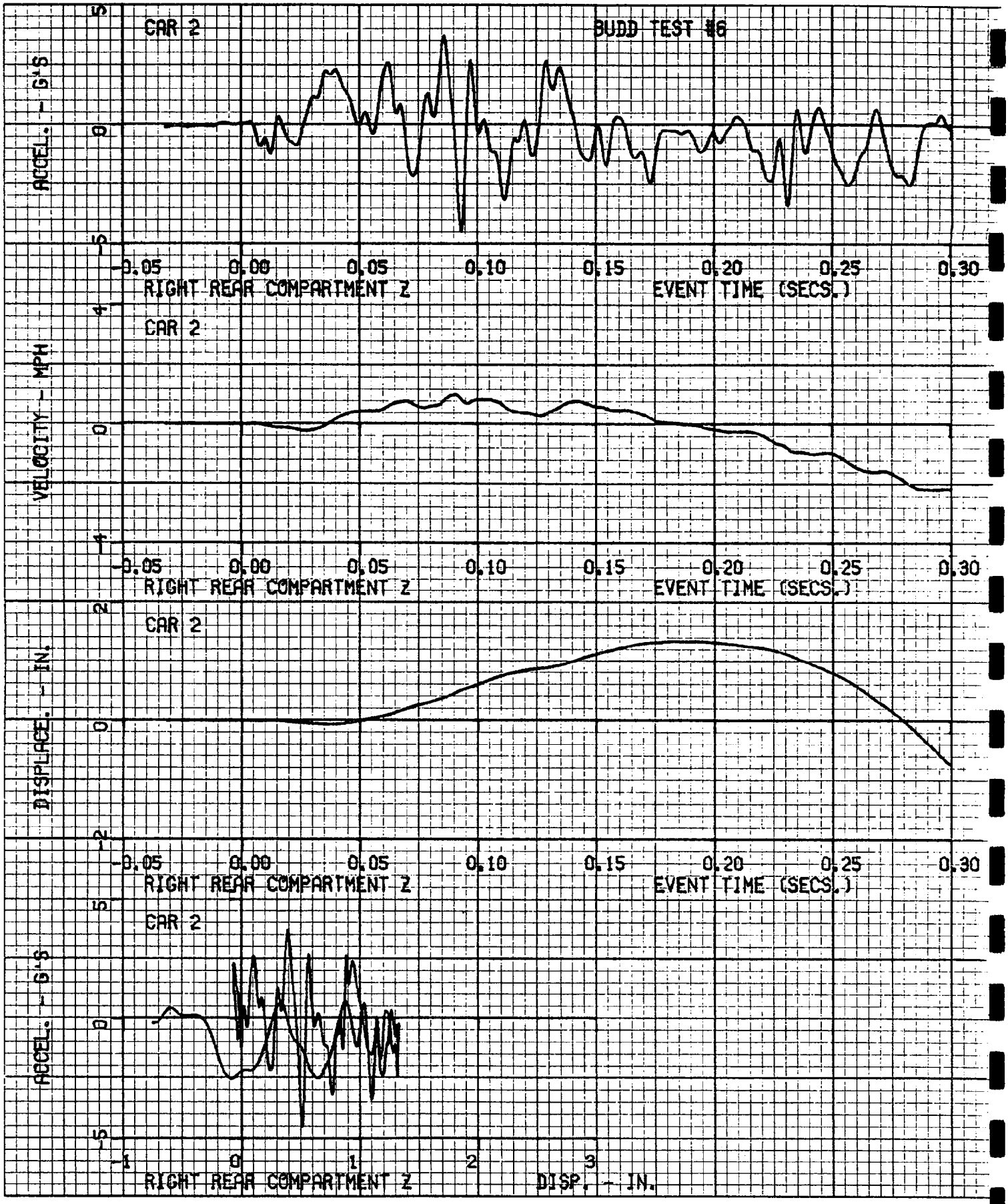

CAR 2
BUDD TEST #6
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
0
-4
-8
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
5
0
-5
-16
-12
-8
-4
0
RIGHT FRONT COMPARTMENT X
DISP. - IN.

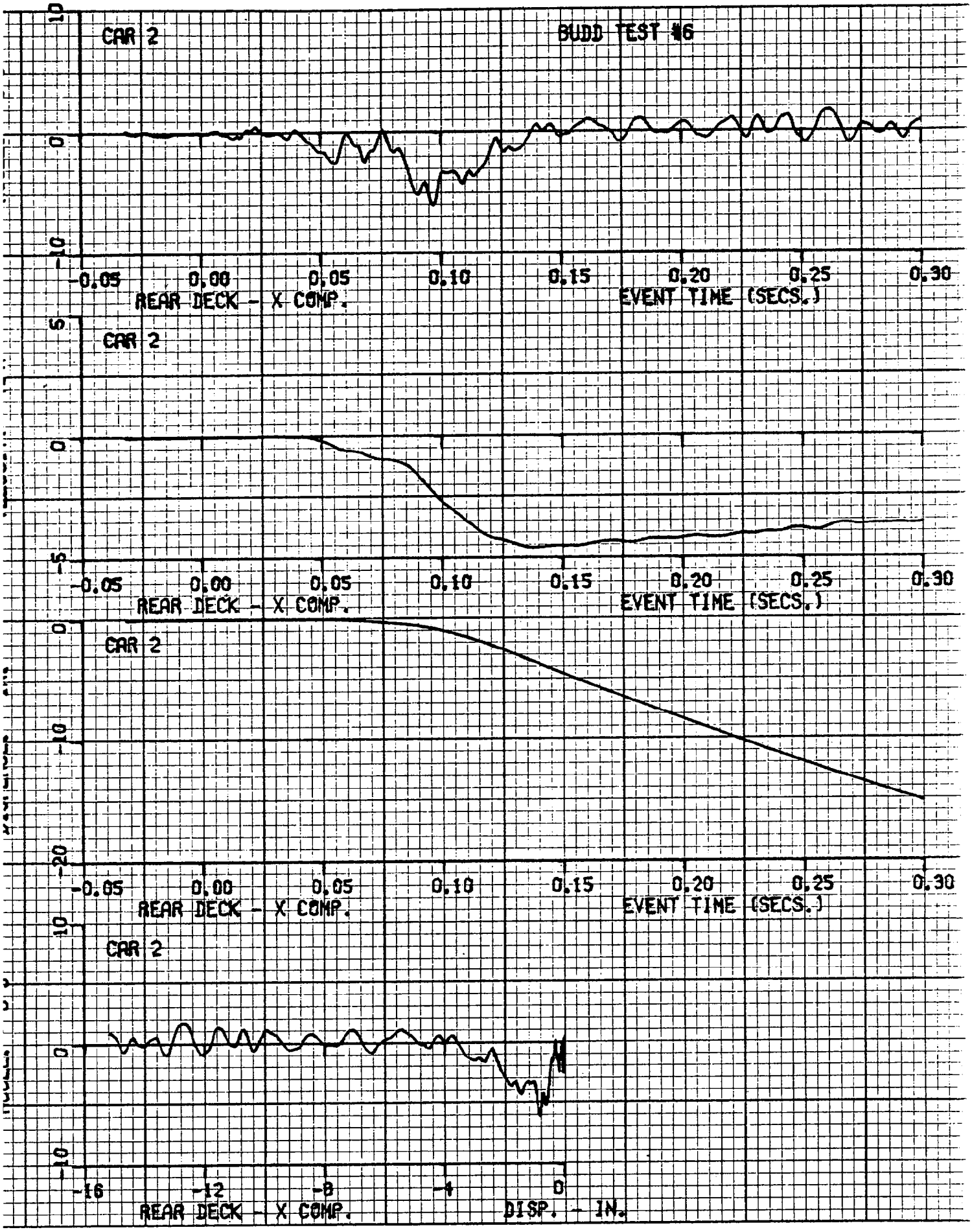

CAR 2
BUDD TEST 46
ACCEL. — G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
VELOCITY — MPH
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
DISPLACE. — IN.
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
ACCEL. — G'S
10
0
-10
-20
0
20
40
60
RIGHT FRONT COMPARTMENT Y
DISP. — IN.

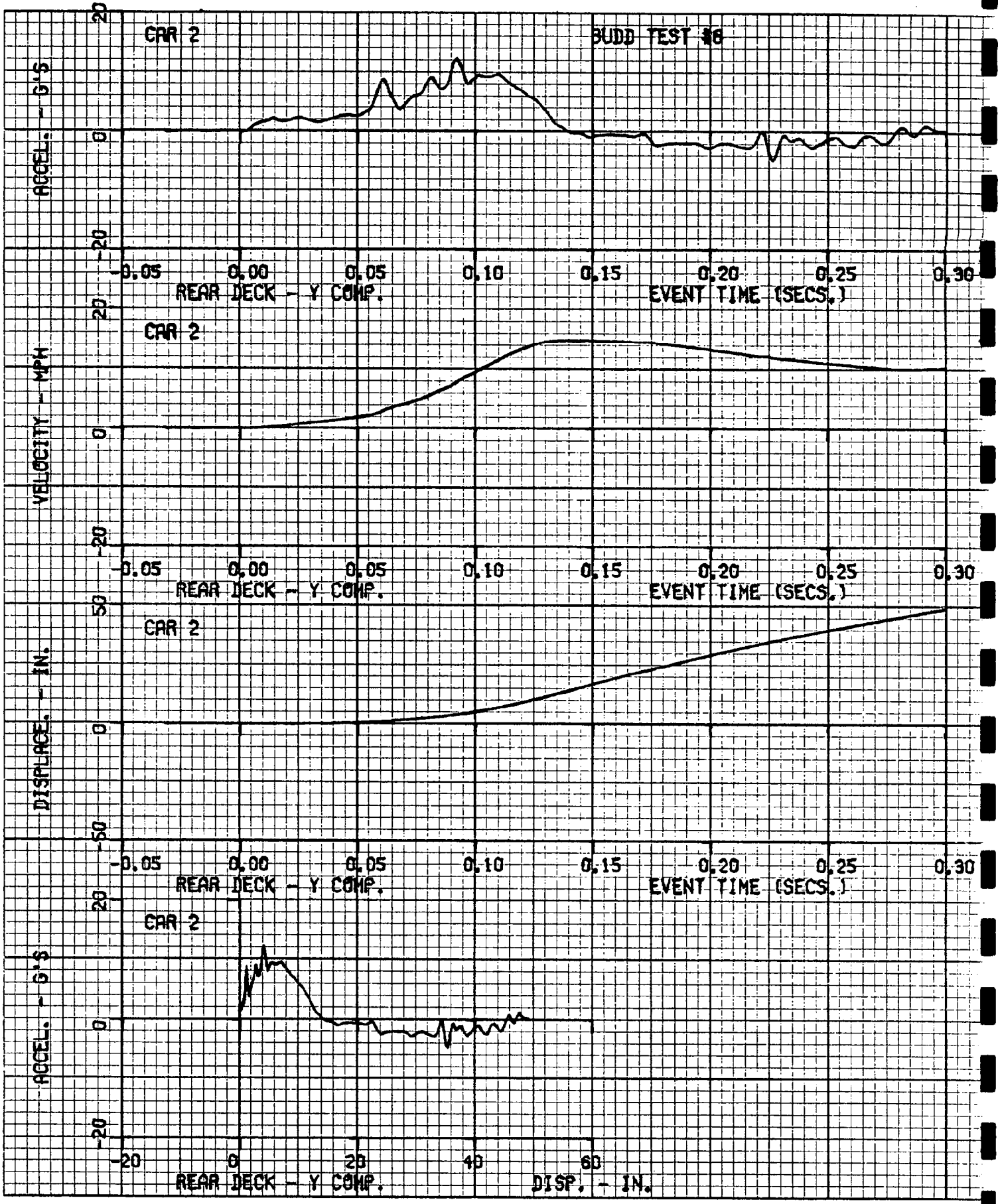

CAR 2
BUDD TEST #6
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
4
0
-4
-5.0
0.0
5.0
10.0
15.0
RIGHT FRONT COMPARTMENT Z
DISP. - IN.

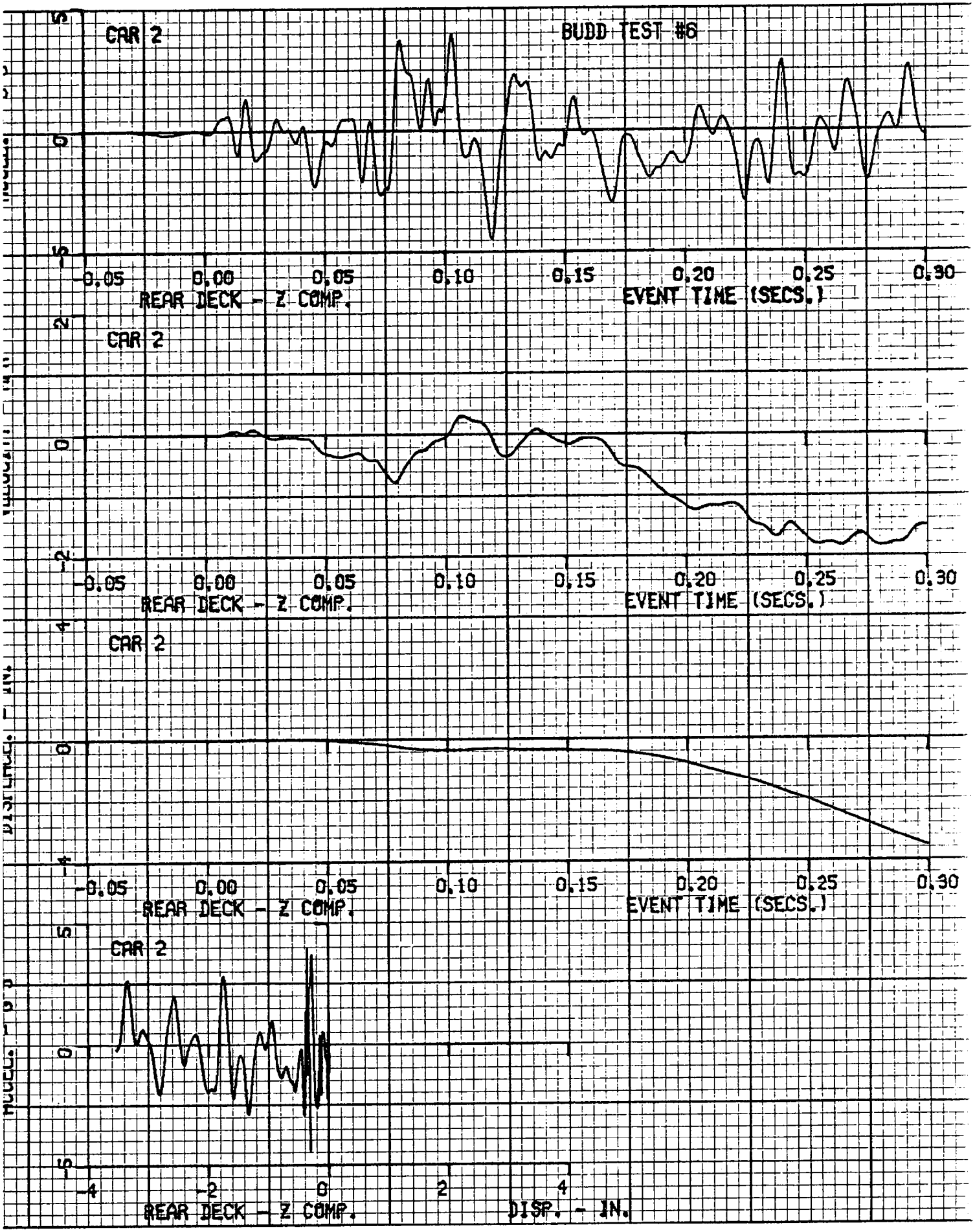

CAR 2
BUDD TEST #6
ACCEL. - G'S
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
0
-2
-4
RIGHT REAR COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
0
-10
-20
RIGHT REAR COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
5
0
-5
-12
-8
-4
0
4
RIGHT REAR COMPARTMENT X
DISP. - IN.

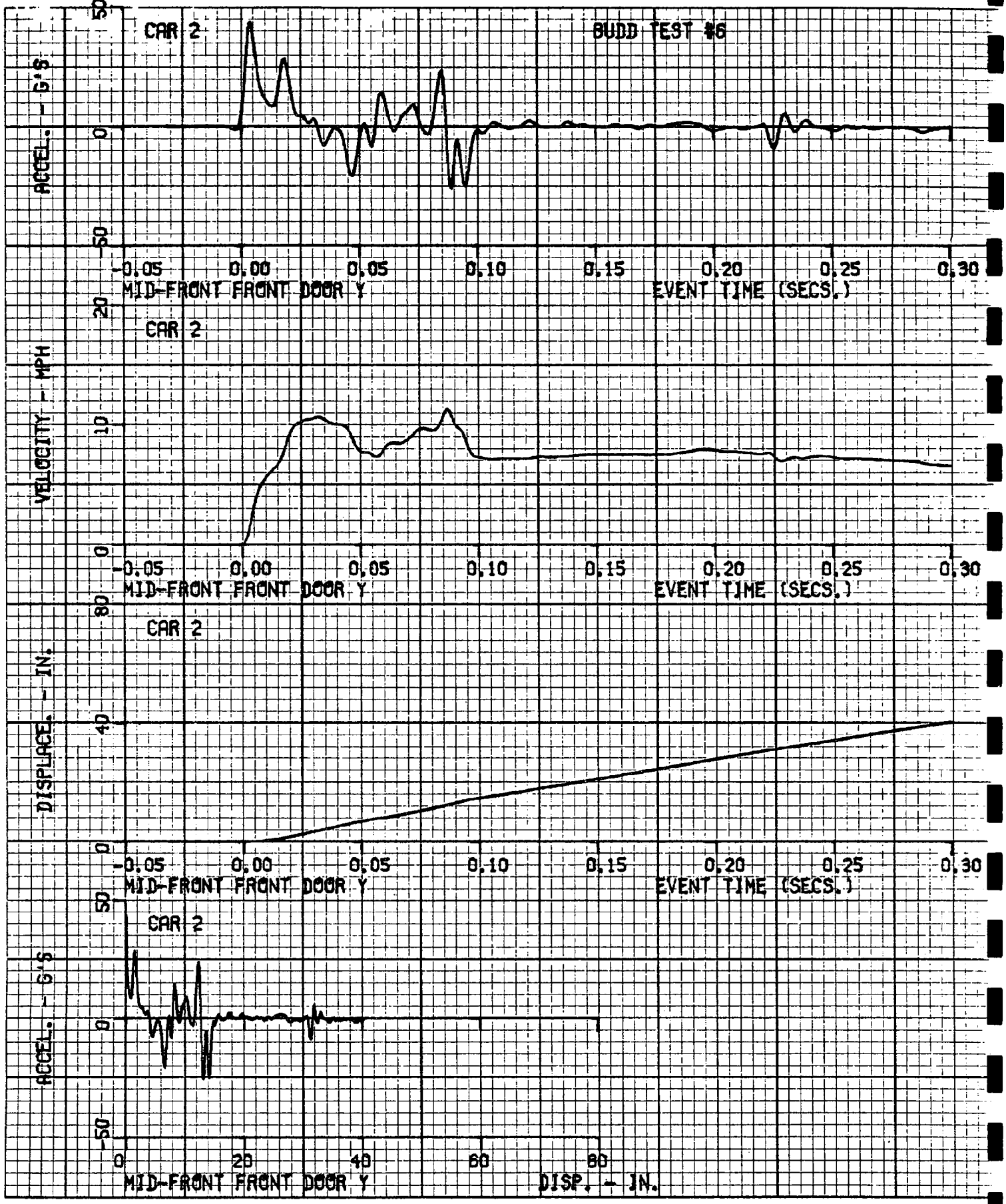

CAR 2
BUDD TEST #6
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
50
0
-50
CAR 2
20
0
-20
-20
0
20
40
60
RIGHT REAR COMPARTMENT Y
DISP. - IN.

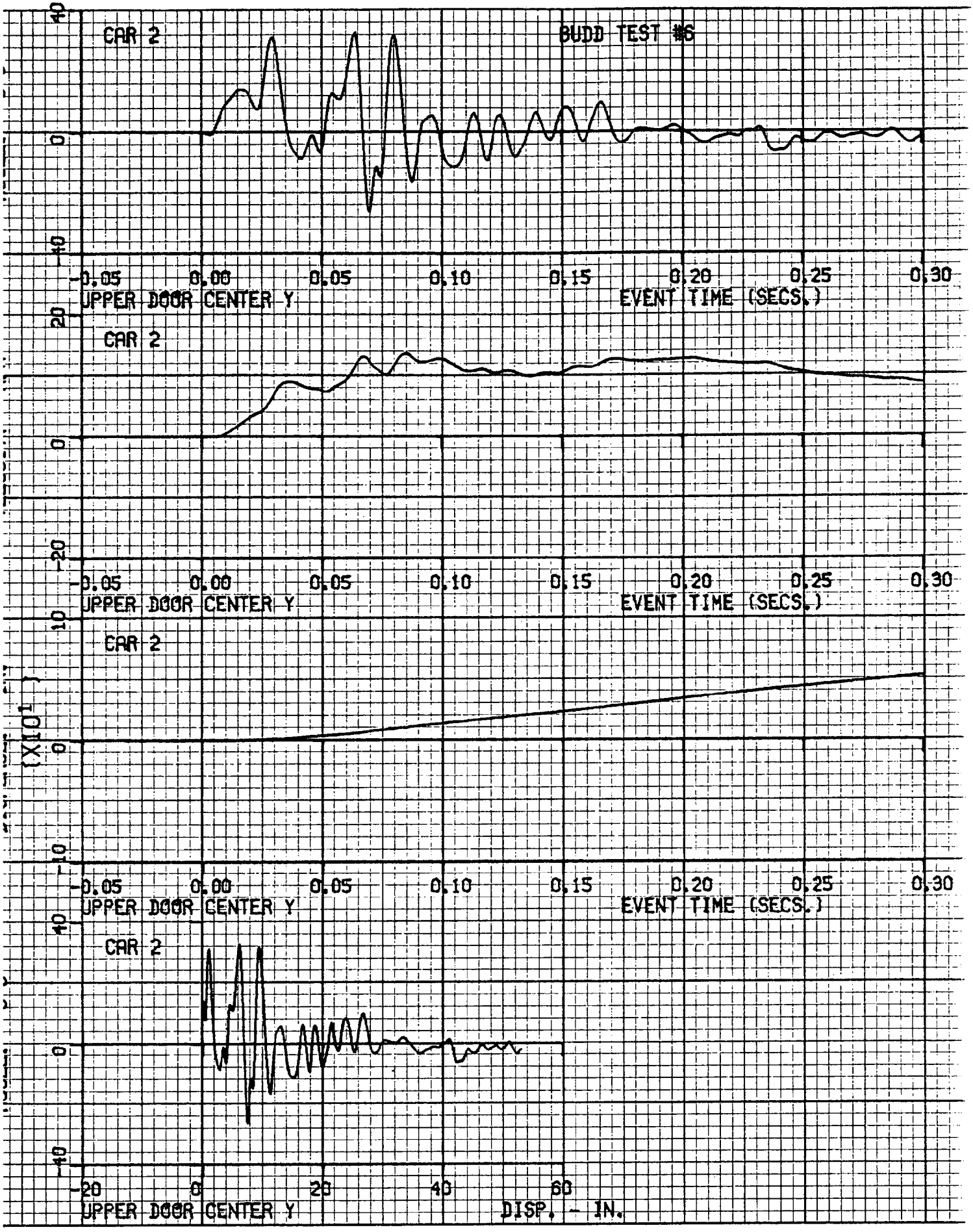

CAR 2
BUDD TEST #6
ACCEL. - G'S
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
4
0
-4
RIGHT REAR COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
2
0
-2
RIGHT REAR COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
5
0
-5
-1
0
1
2
3
RIGHT REAR COMPARTMENT Z
DISP. - IN.

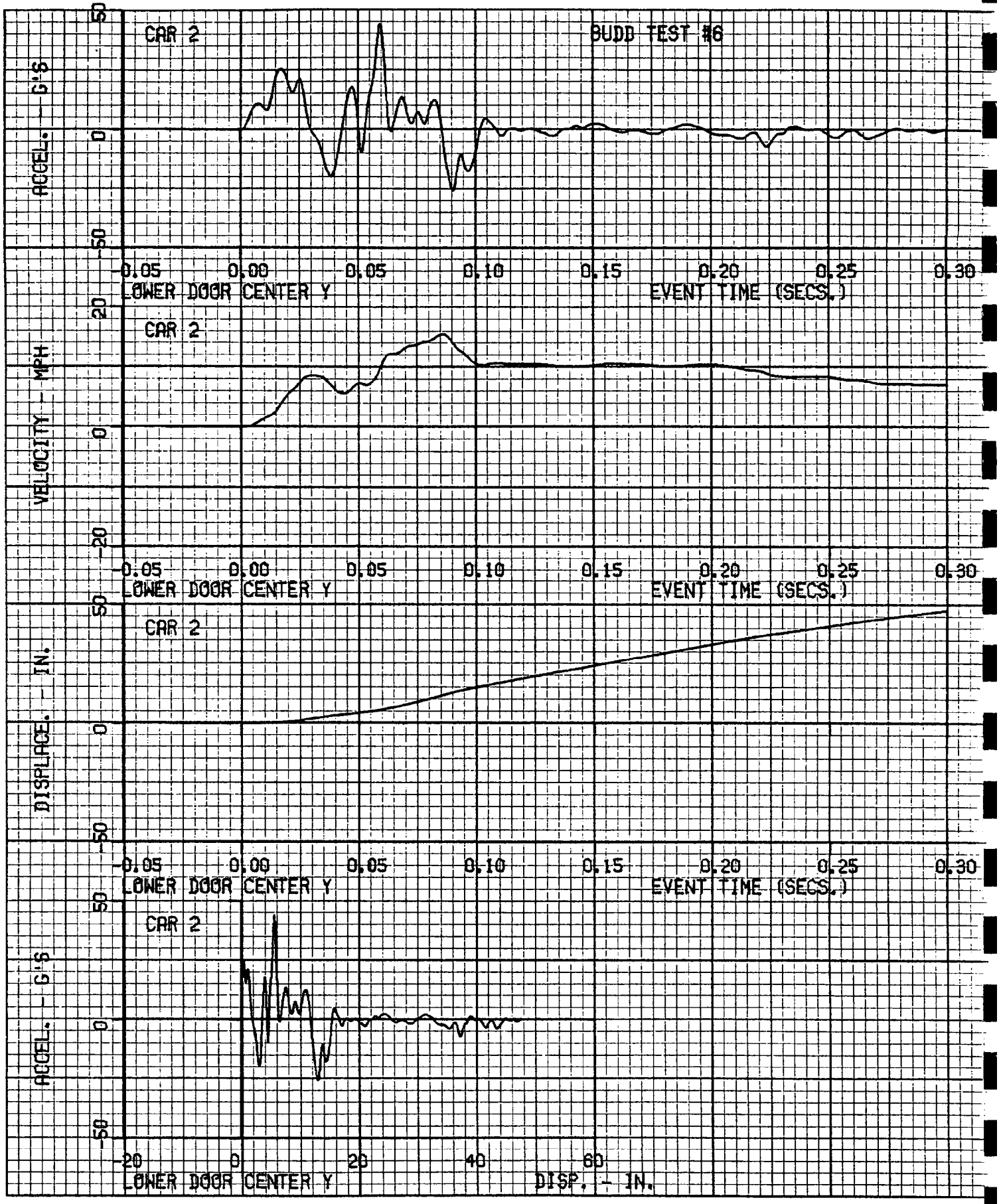

CAR 2
BUDD TEST #6
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 2
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 2
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 2
0
-10
-16
-12
-8
-4
0
REAR DECK - X COMP.
DISP. - IN.

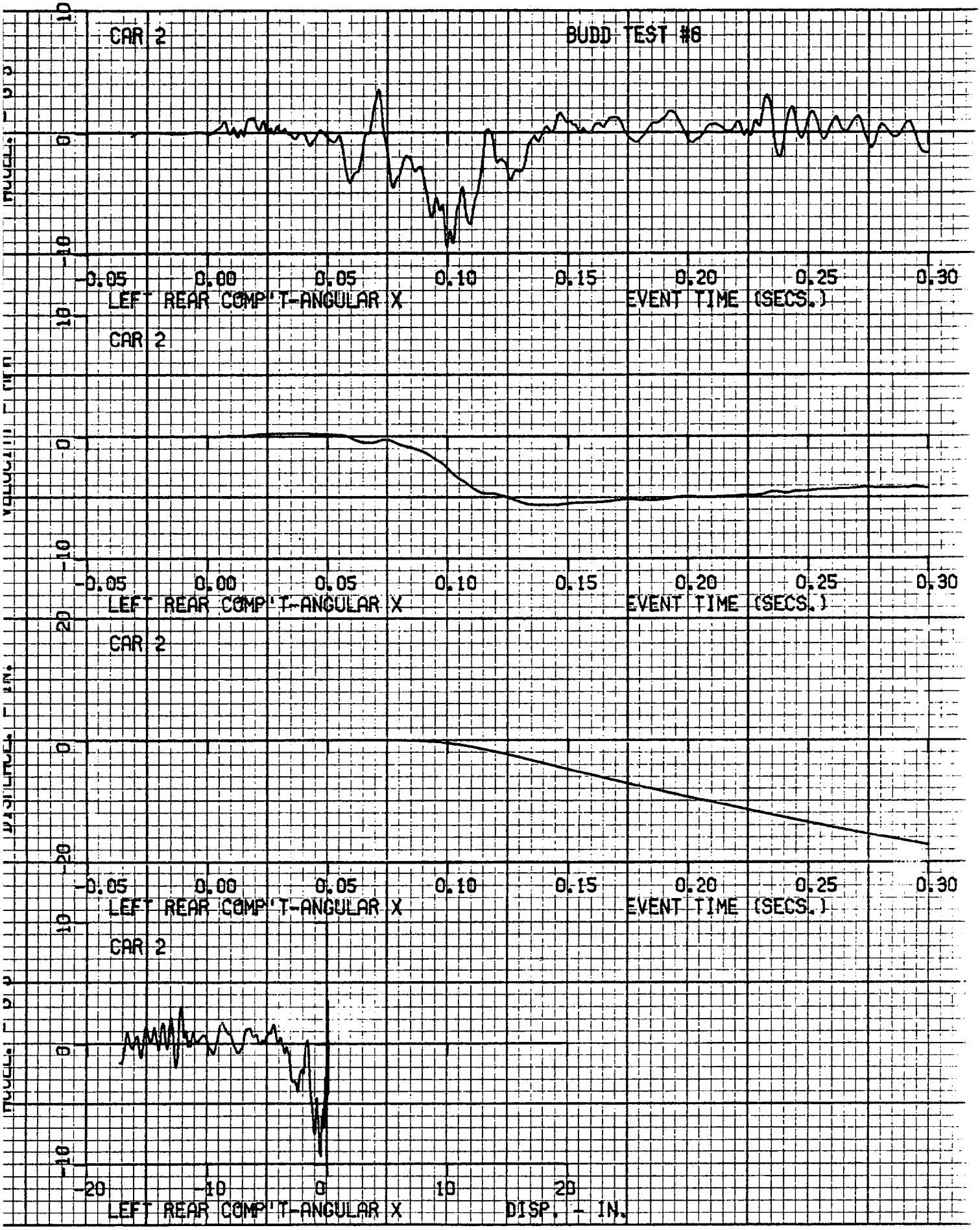

CAR 2
BUDD TEST #8
ACCEL. - G'S
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
50
0
-50
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
20
0
-20
-20
0
20
40
60
REAR DECK - Y COMP.
DISP. - IN.

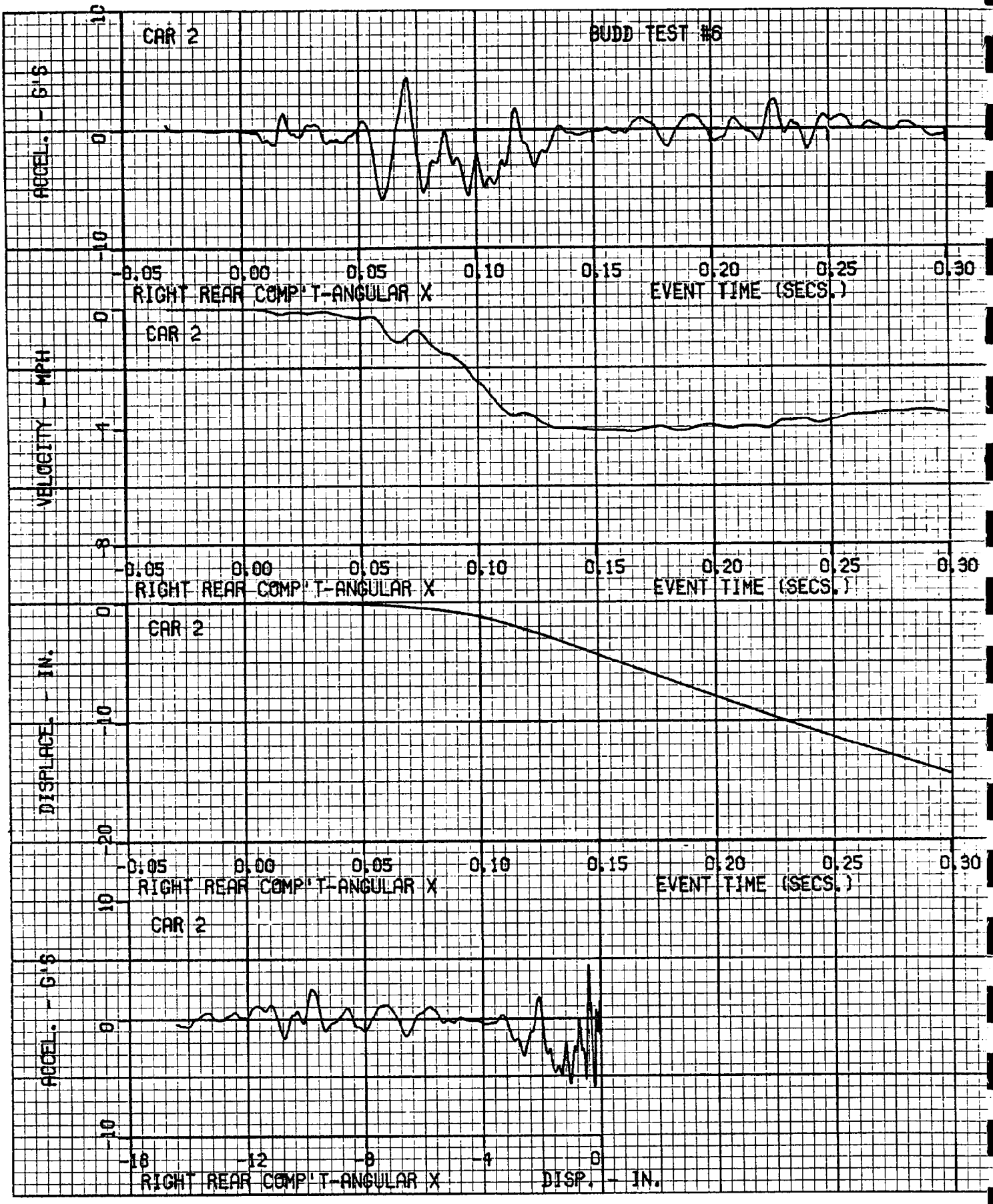

CAR 2
BUDD TEST #6
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 2
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 2
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 2
REAR DECK - Z COMP.
DISP. - IN.

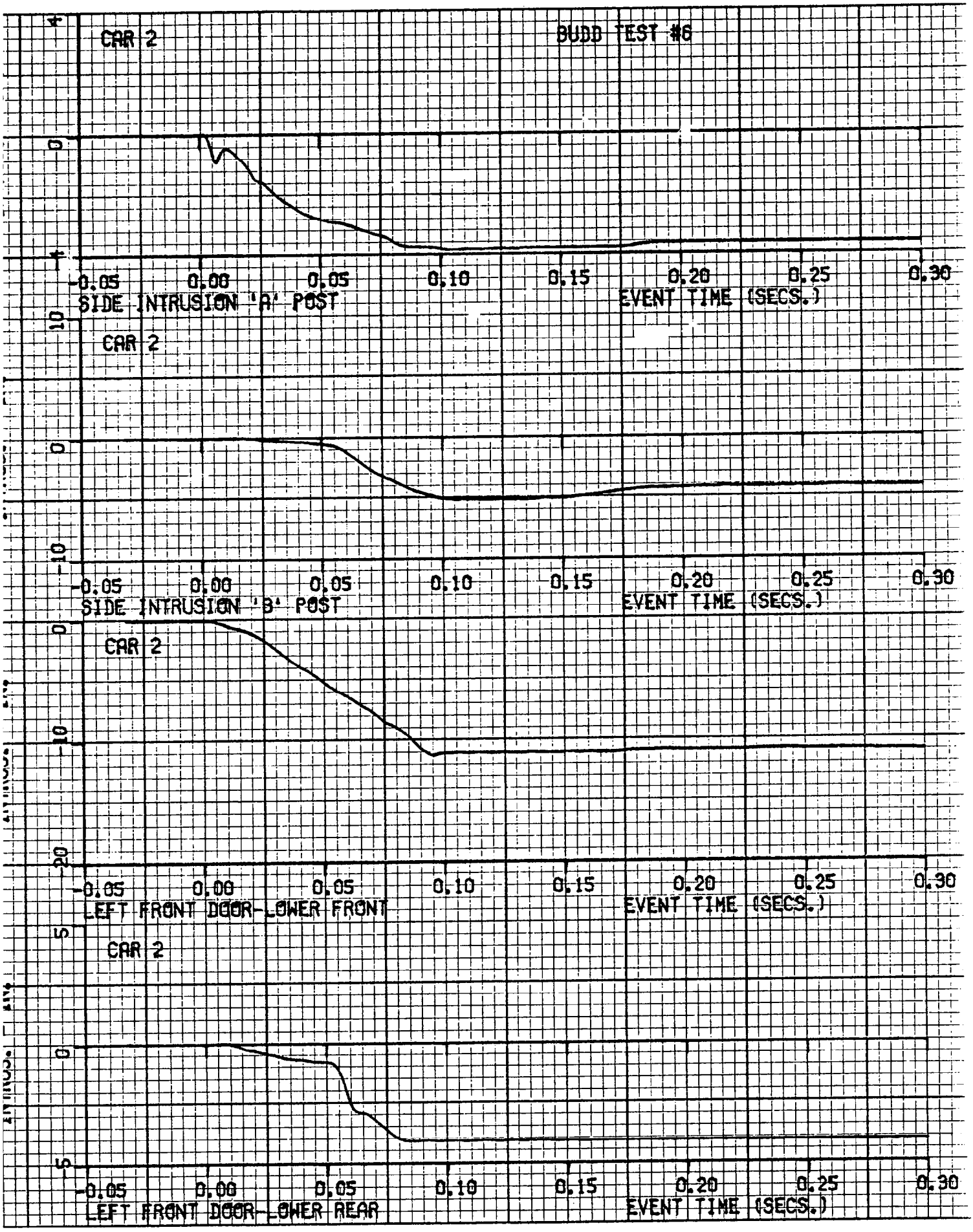

CAR 2
BUDD TEST #6
ACCEL. - G'S
50
0
-50
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
MID-FRONT FRONT DOOR Y
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
10
0
MID-FRONT FRONT DOOR Y
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
80
40
0
MID-FRONT FRONT DOOR Y
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
50
0
-50
0
20
40
60
80
MID-FRONT FRONT DOOR Y
DISP. - IN.

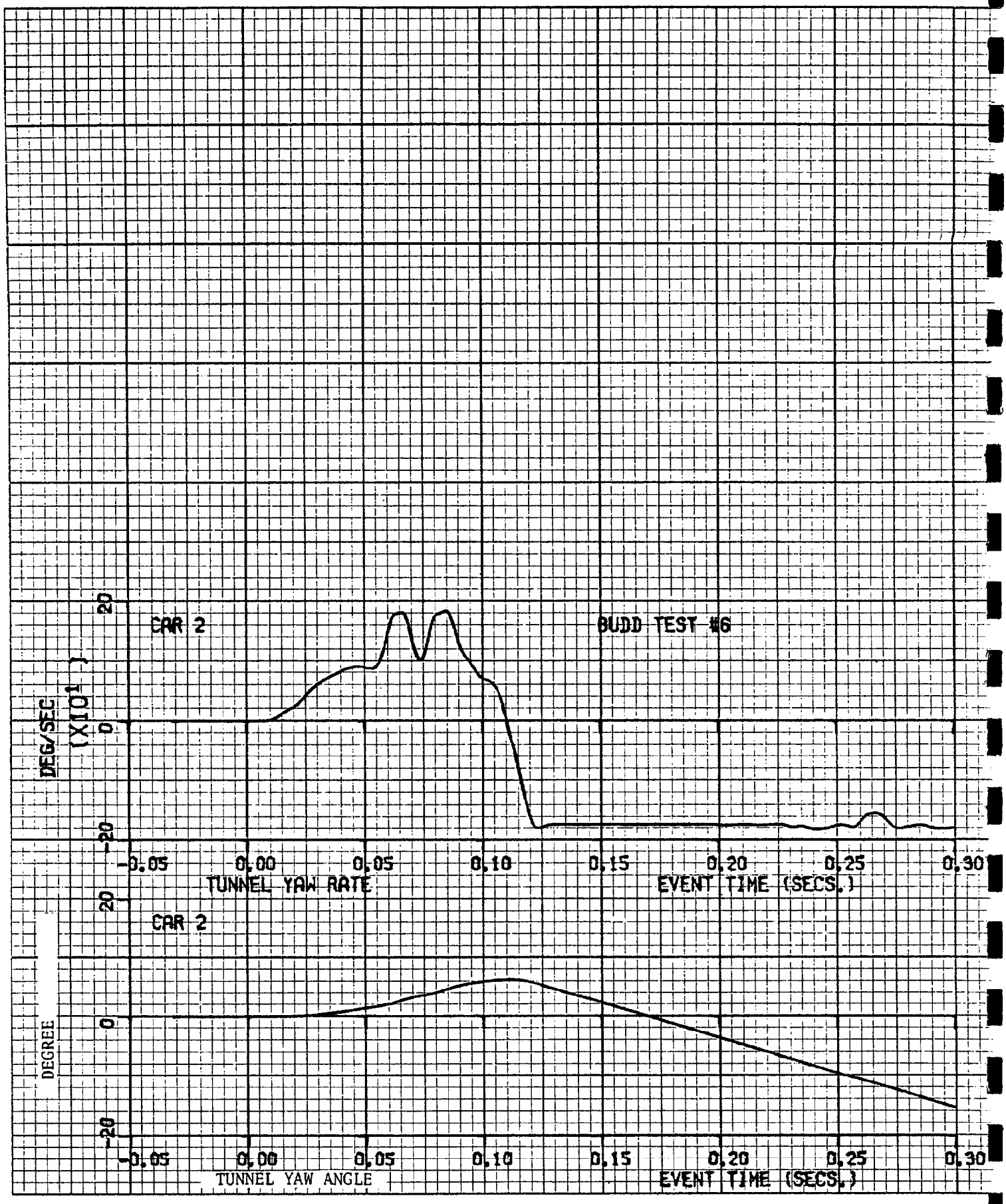

CAR 2
BUDD TEST #6
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
UPPER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
UPPER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
10
0
-10
(X10¹)
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
UPPER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
10
0
-10
-20
0
20
40
60
UPPER DOOR CENTER Y
DISP. - IN.

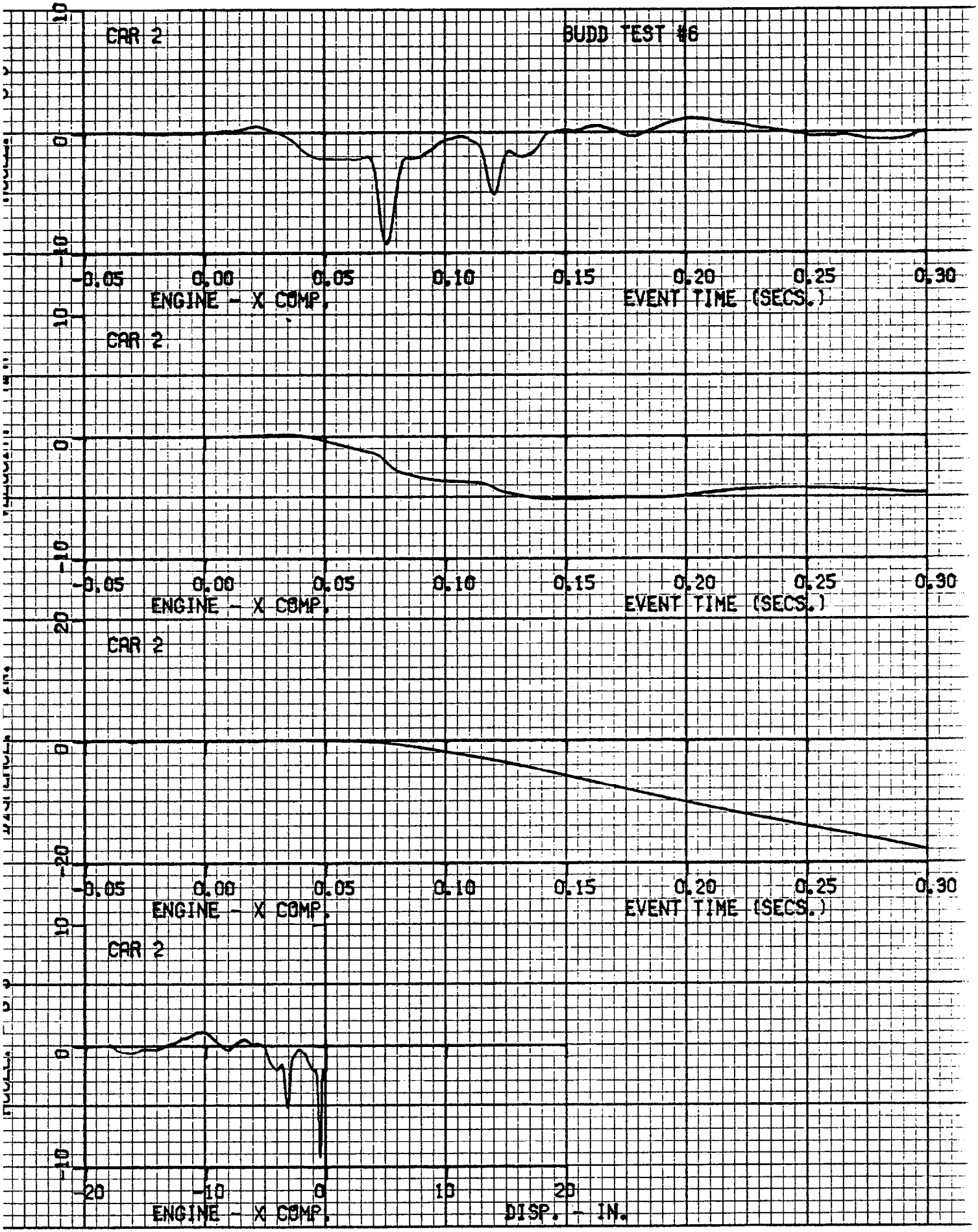

BUDD TEST #6
CAR 2
ACCEL. - G'S
50
0
-50
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LOWER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LOWER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
50
0
-50
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LOWER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
50
0
-50
-20
0
20
40
60
LOWER DOOR CENTER Y
DISP. - IN.

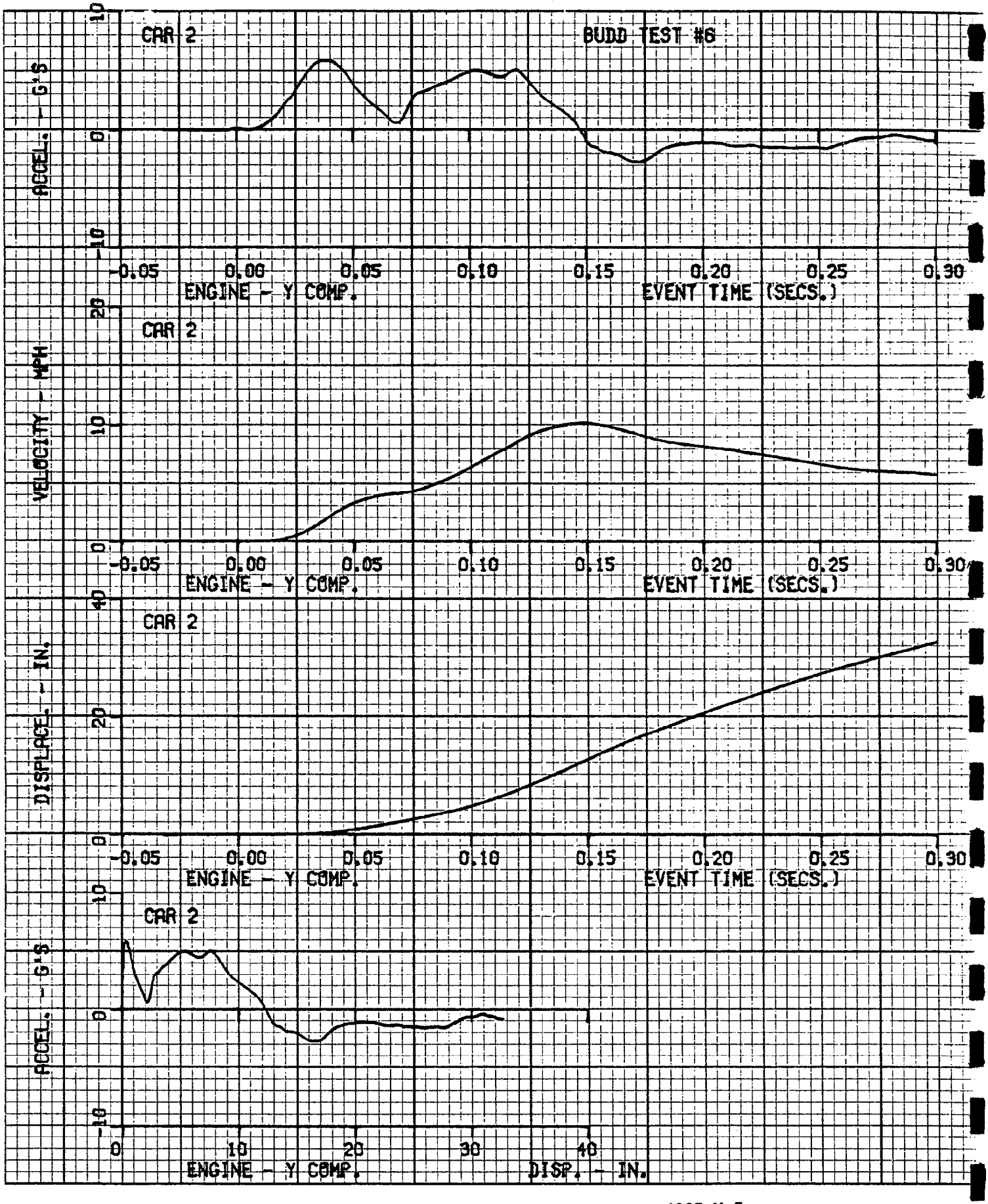

CAR 2
BUDD TEST #6
ACCEL. - G's
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
VELOCITY - FT./SEC.
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
DISP. - IN.
10
0
-10
-20
-10
0
10
20
LEFT REAR COMP'T-ANGULAR X
DISP. - IN.


CAR 2
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
0
-4
-8
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
10
0
-10
-18
-12
-8
-4
0
RIGHT REAR COMP'T-ANGULAR X
DISP. - IN.


CAR 2
BUDD TEST #6
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
SIDE INTRUSION 'A' POST
EVENT TIME (SECS.)
CAR 2
SIDE INTRUSION 'B' POST
EVENT TIME (SECS.)
CAR 2
-20
LEFT FRONT DOOR-LOWER FRONT
EVENT TIME (SECS.)
CAR 2
5
-5
LEFT FRONT DOOR-LOWER REAR
EVENT TIME (SECS.)


CAR 2
BUDD TEST #6
DEG/SEC (X10)
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW RATE
EVENT TIME (SECS.)
CAR 2
DEGREE
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW ANGLE
EVENT TIME (SECS.)

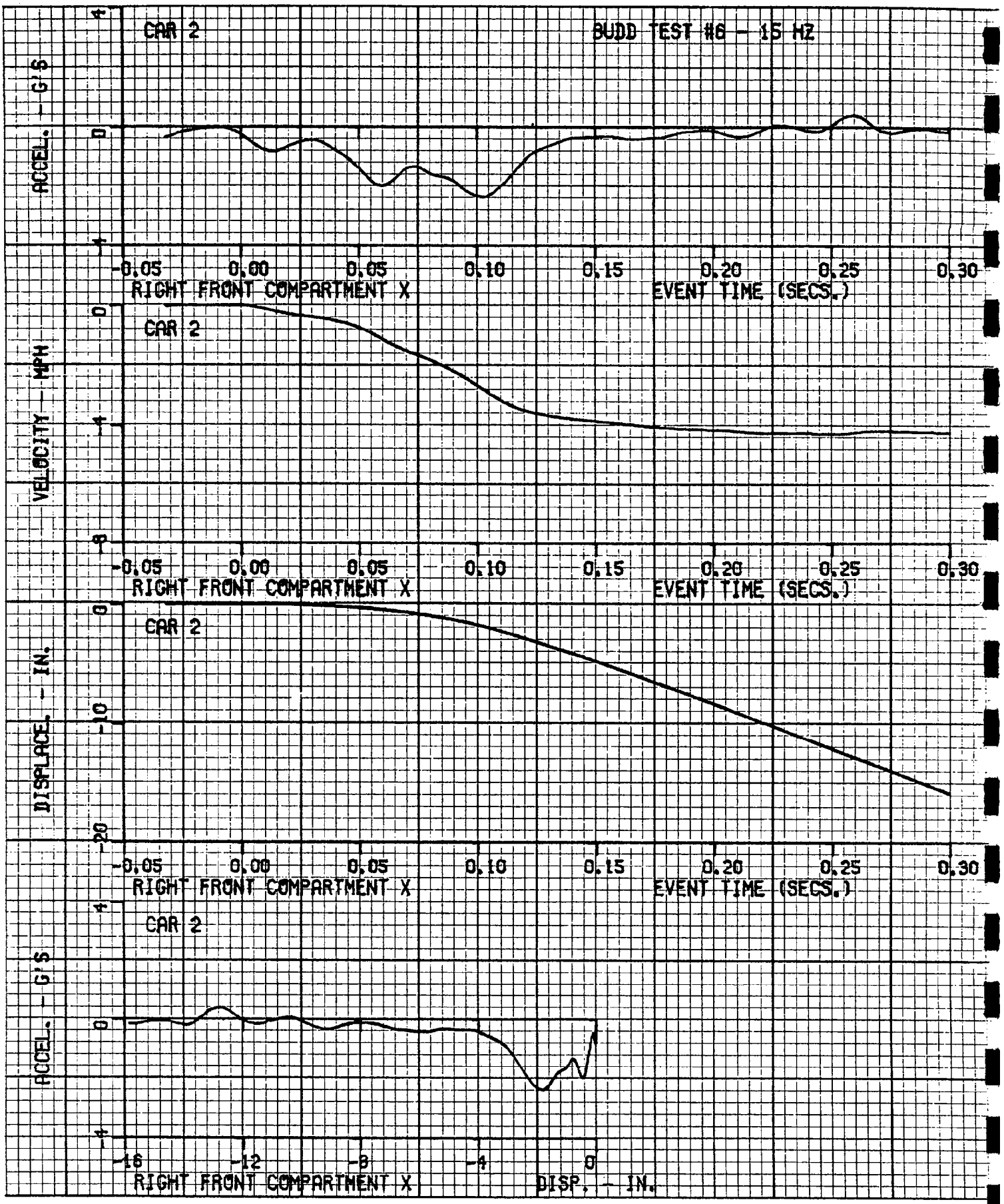

CAR 2
BUDD TEST #6
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 2
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 2
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 2
10
0
-10
-20
-10
0
10
20
ENGINE - X COMP.
DISP. - IN.

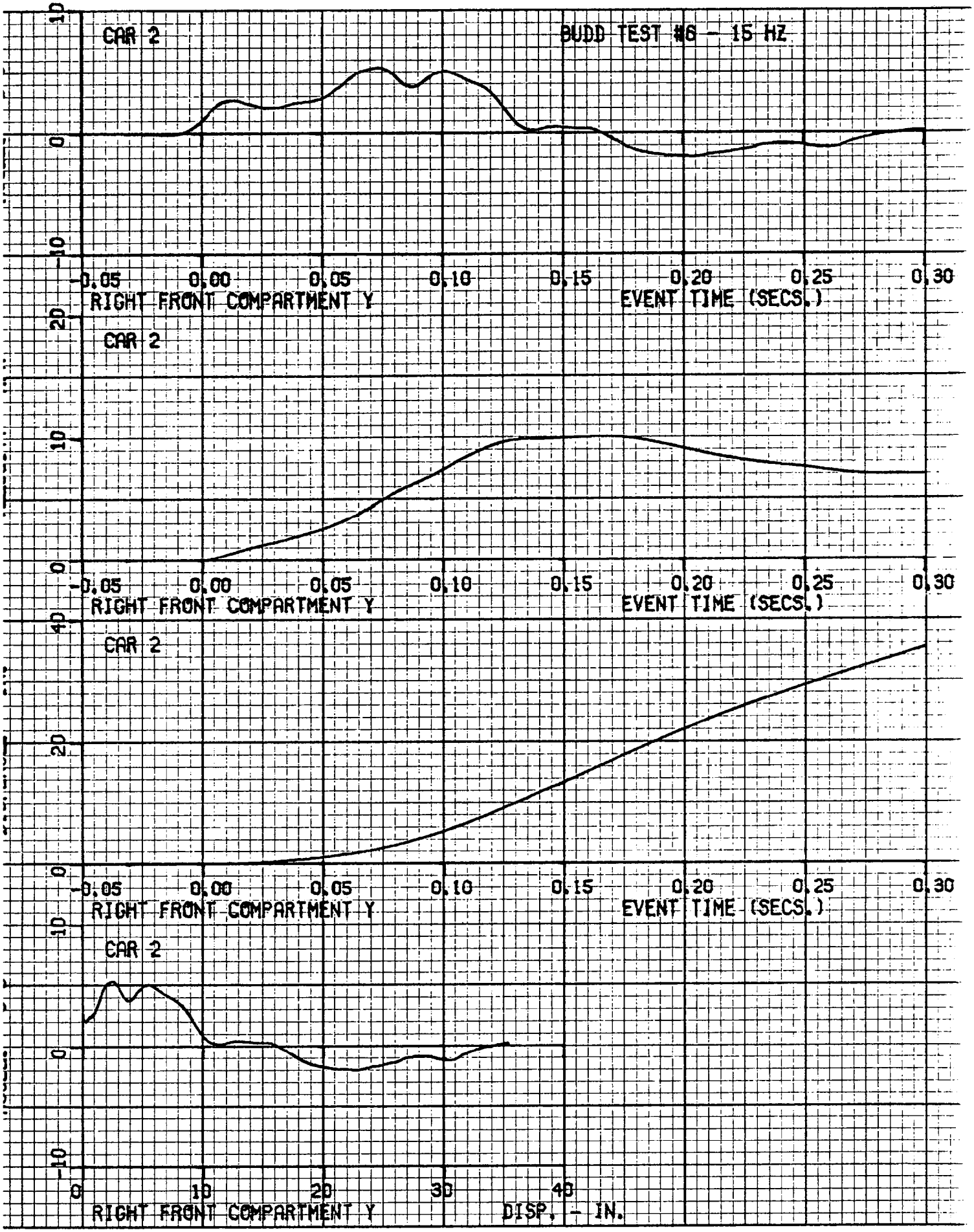

CAR 2
BUDD TEST #6
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
40
20
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
10
0
-10
0
10
20
30
40
ENGINE - Y COMP.
DISP. - IN.

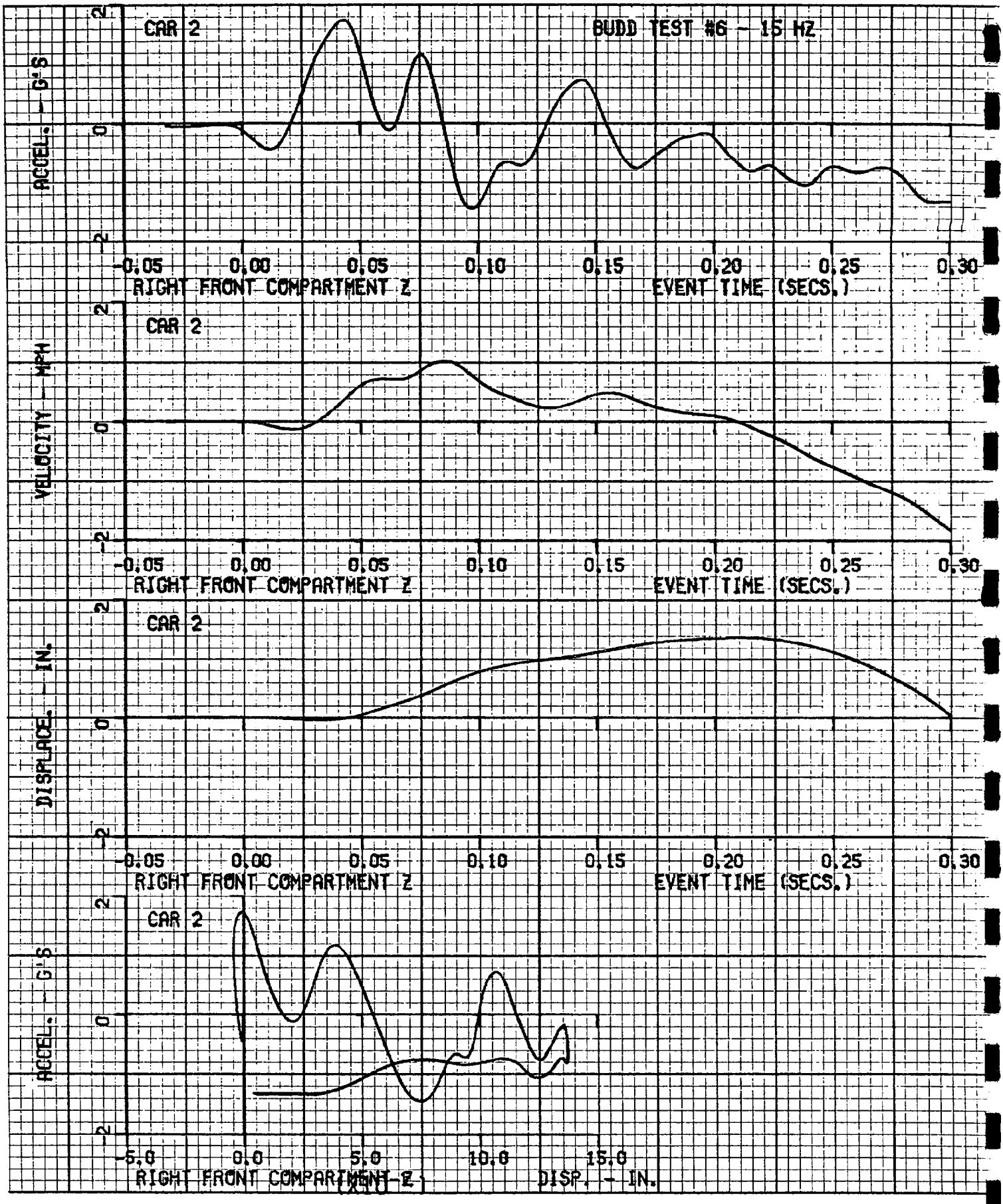
TEST NO. 6

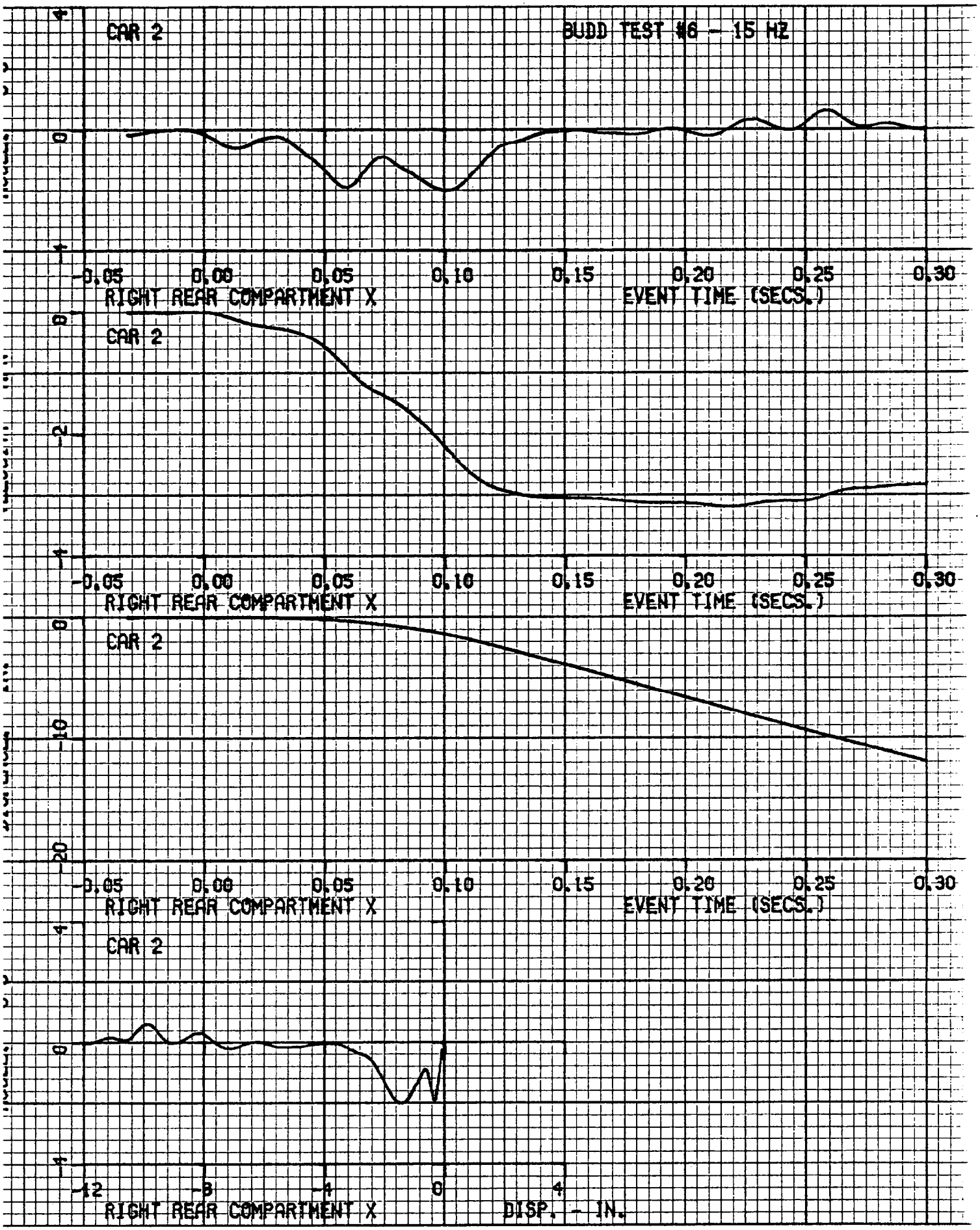
CAR 2 - 1976 VOLKSWAGEN RABBIT

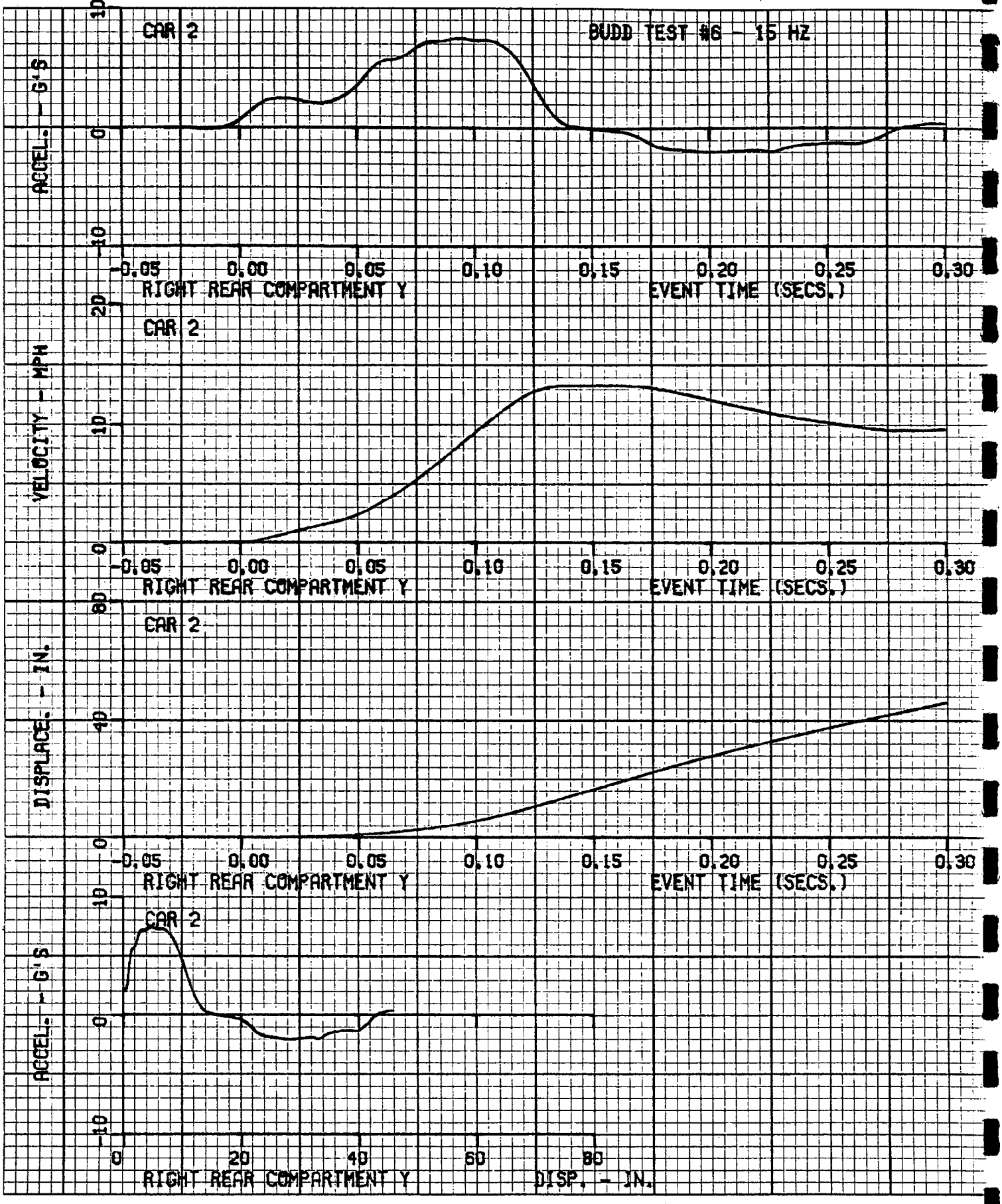
VEHICLE DATA	15 Hz FILTER
SIDE INTRUSION	15 Hz FILTER

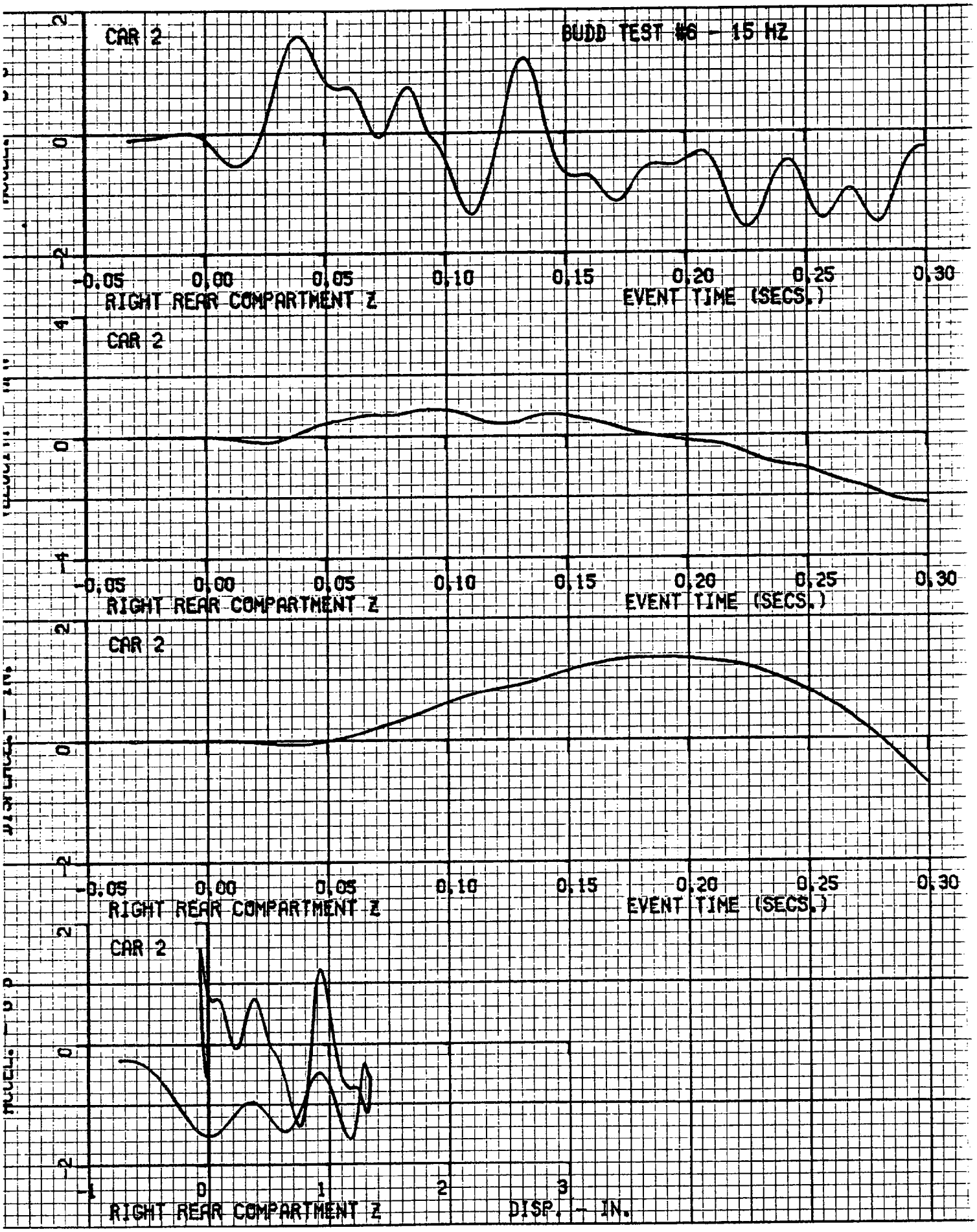

CAR 2
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
0
-4
-8
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
4
0
-4
-16
-12
-8
-4
0
RIGHT FRONT COMPARTMENT X
DISP. - IN.

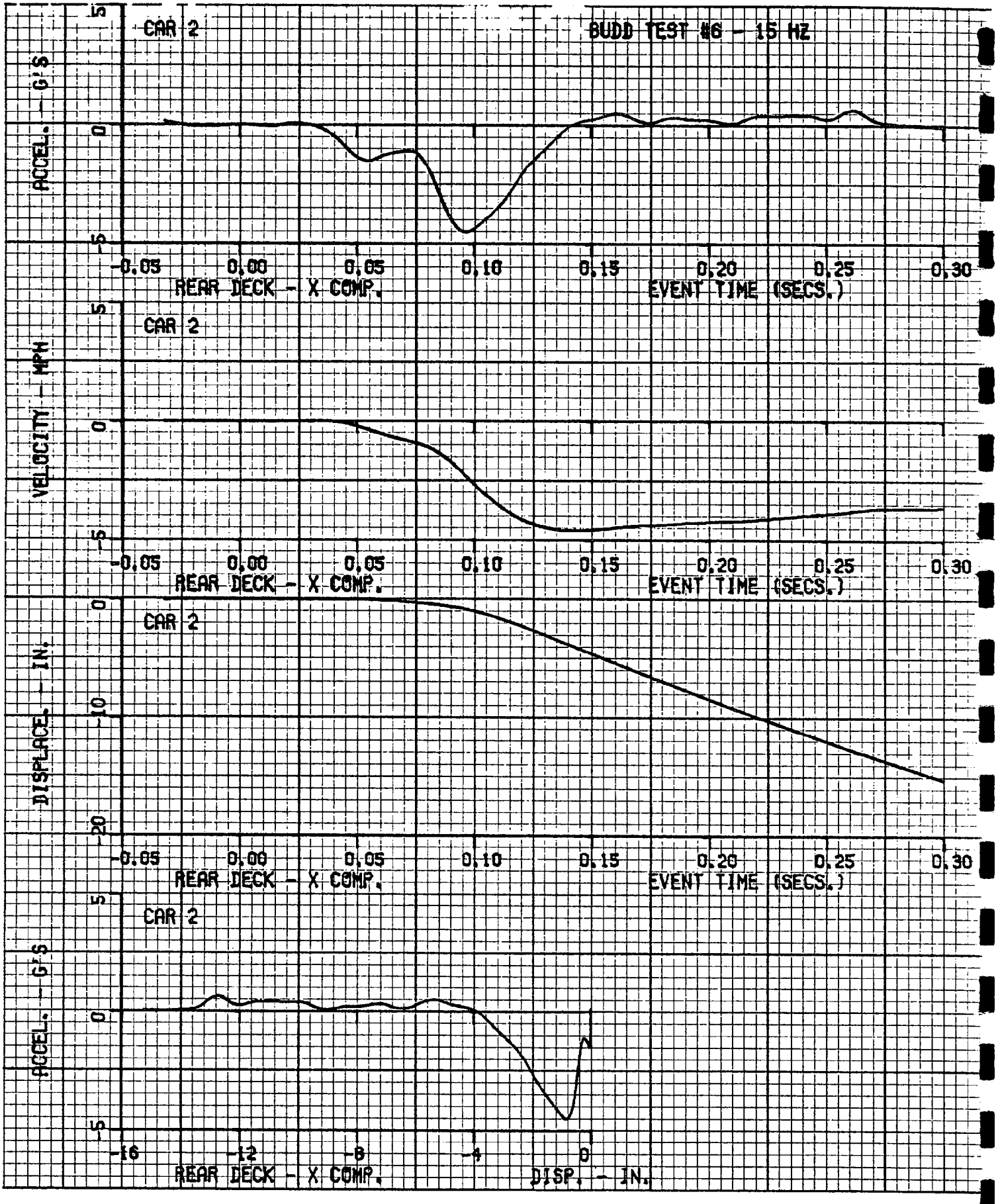

CAR 2
BUDD TEST #6 - 15 HZ
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
20
10
0
RIGHT FRONT COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
40
20
0
RIGHT FRONT COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
10
0
-10
0
10
20
30
40
RIGHT FRONT COMPARTMENT Y
DISP. - IN.

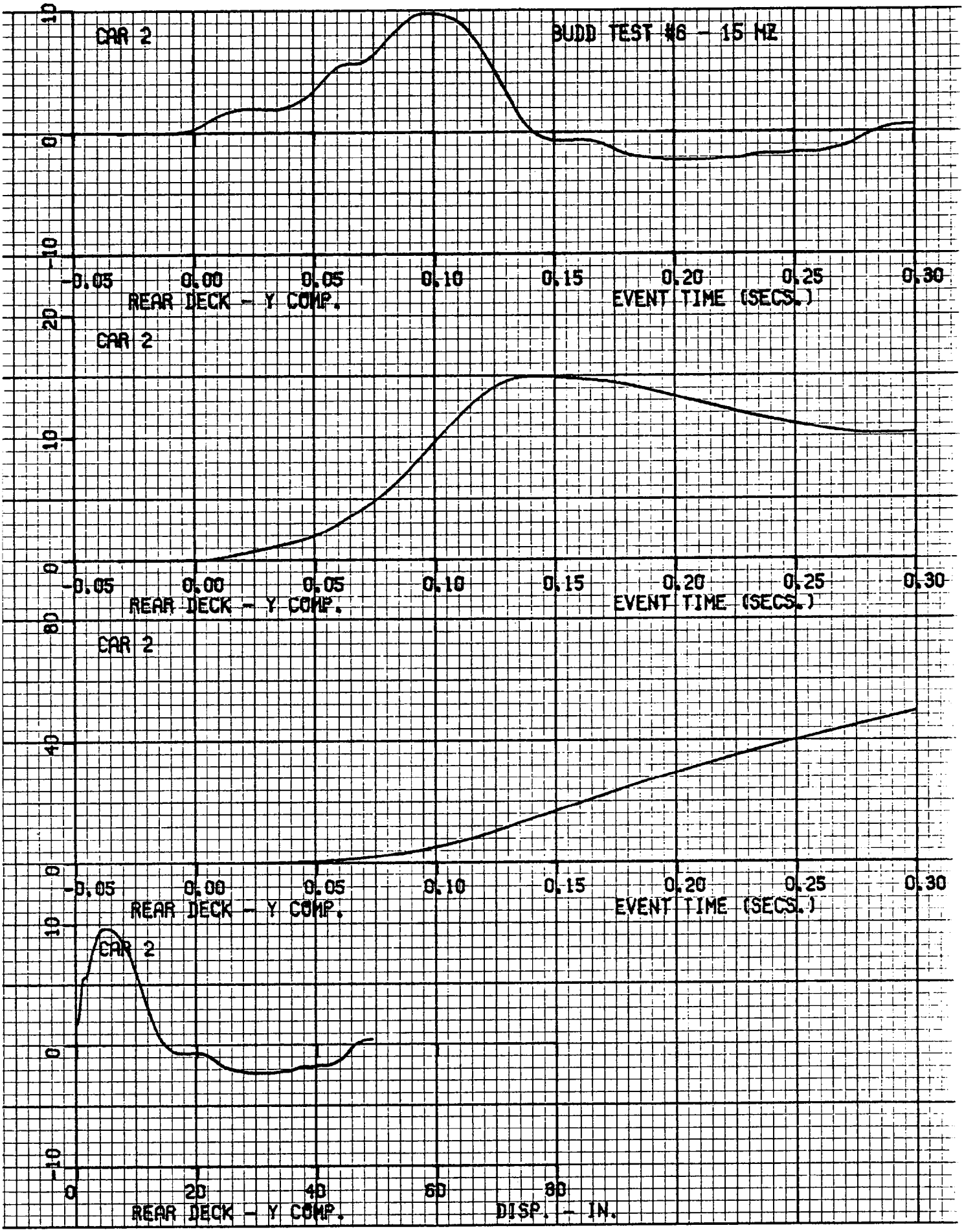

CAR 2
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT FRONT COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
2
0
-2
-5.0
0.0
5.0
10.0
15.0
RIGHT FRONT COMPARTMENT Z
DISP. - IN.

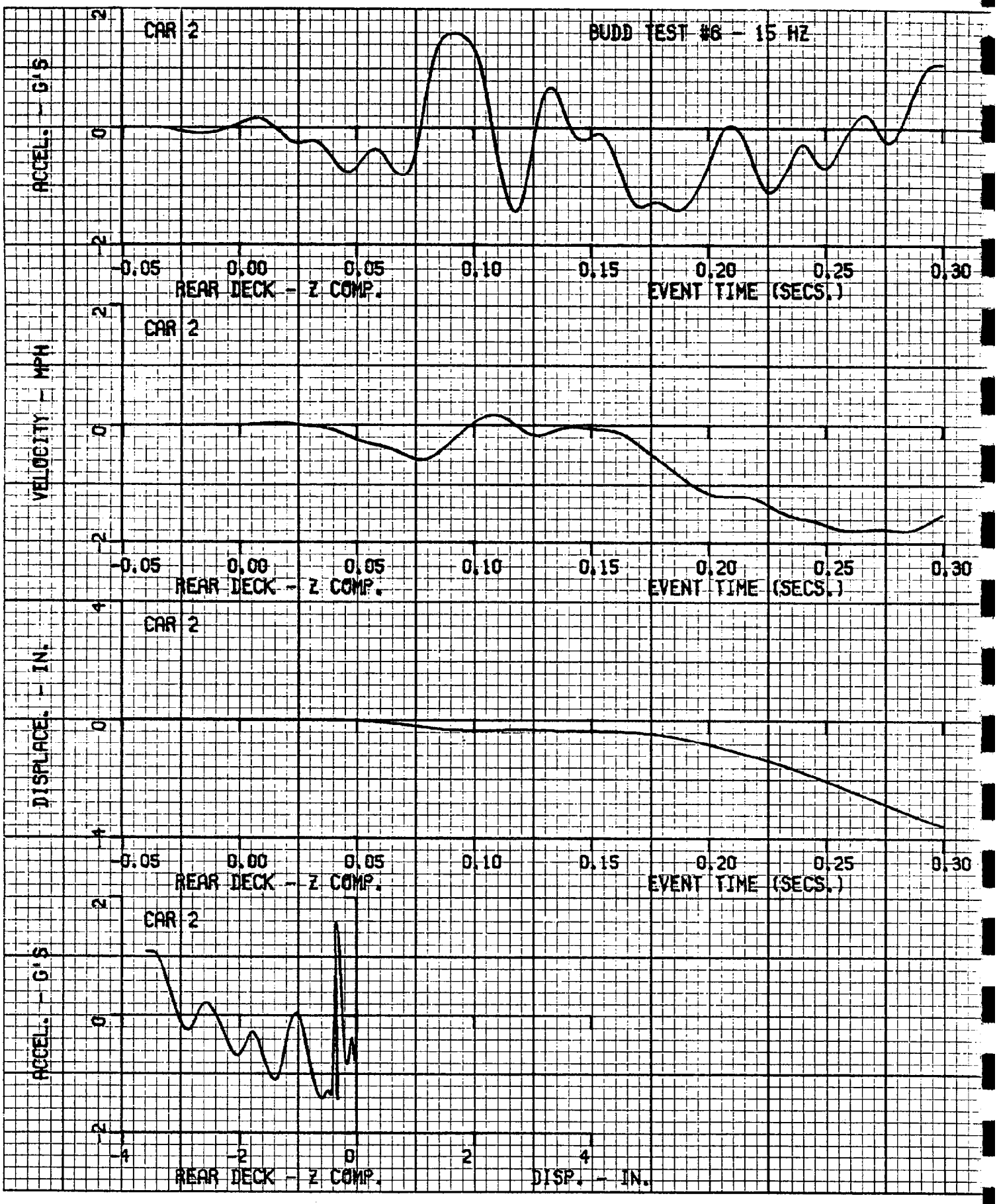

CAR 2
BUDD TEST #6 - 15 HZ
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
0
-2
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT X
EVENT TIME (SECS.)
CAR 2
4
0
-4
-12
-8
-4
0
4
RIGHT REAR COMPARTMENT X
DISP. - IN.

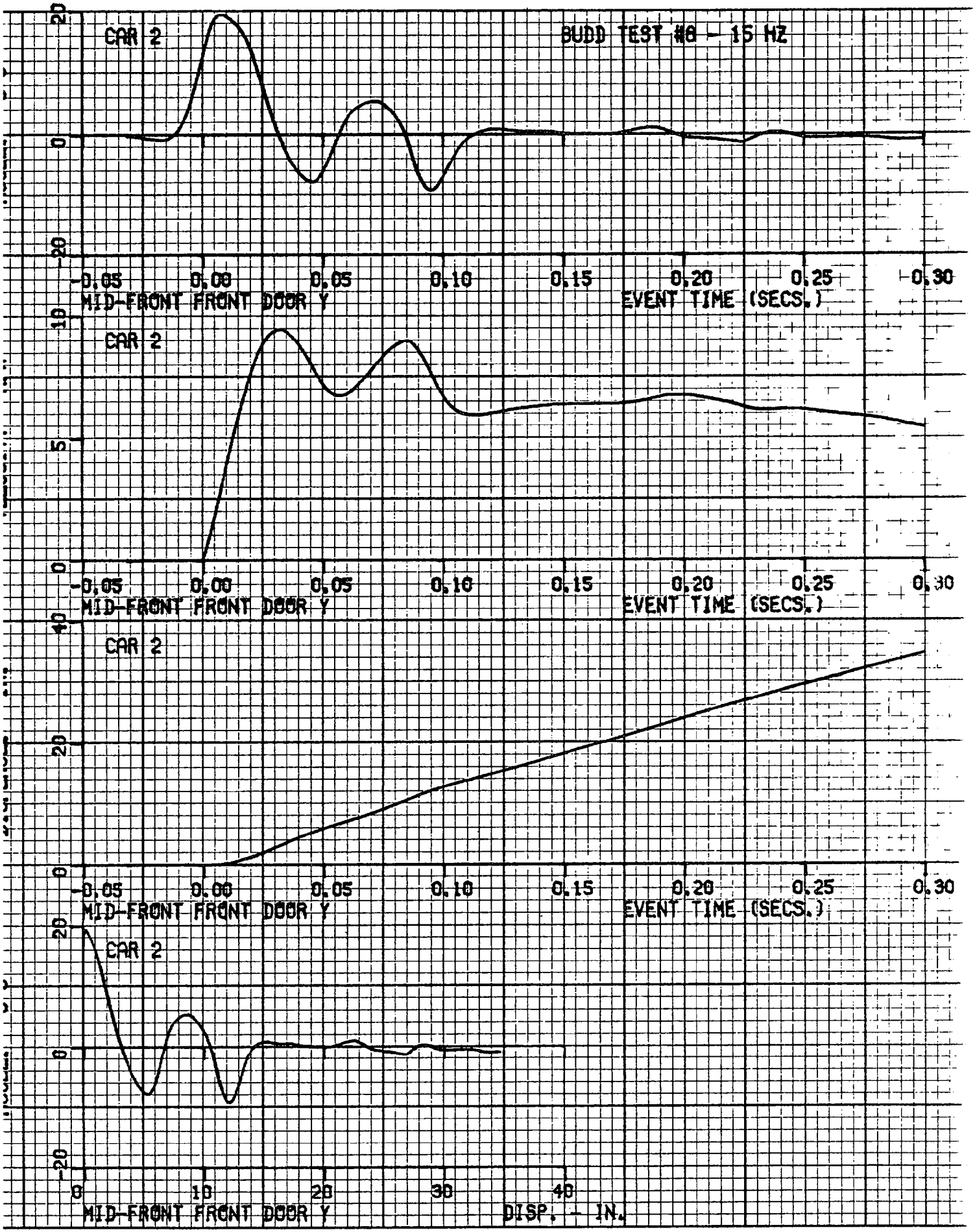

CAR 2
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
10
0
RIGHT REAR COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
80
40
0
RIGHT REAR COMPARTMENT Y
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
10
0
-10
0
20
40
60
80
RIGHT REAR COMPARTMENT Y
DISP. - IN.

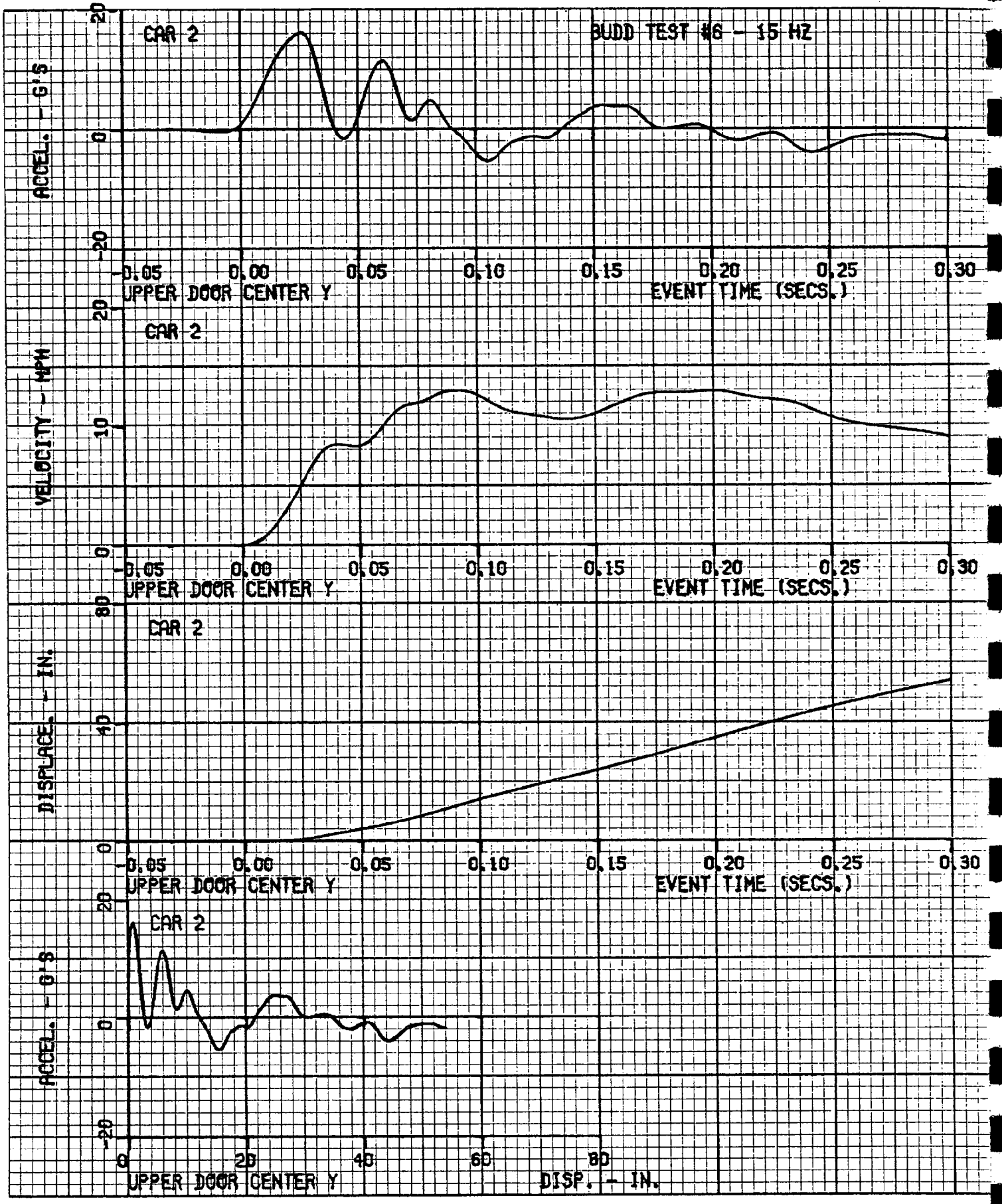

CAR 2
BUDD TEST #6 - 15 HZ
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMPARTMENT Z
EVENT TIME (SECS.)
CAR 2
2
0
-2
-1
0
1
2
3
RIGHT REAR COMPARTMENT Z
DISP. - IN.

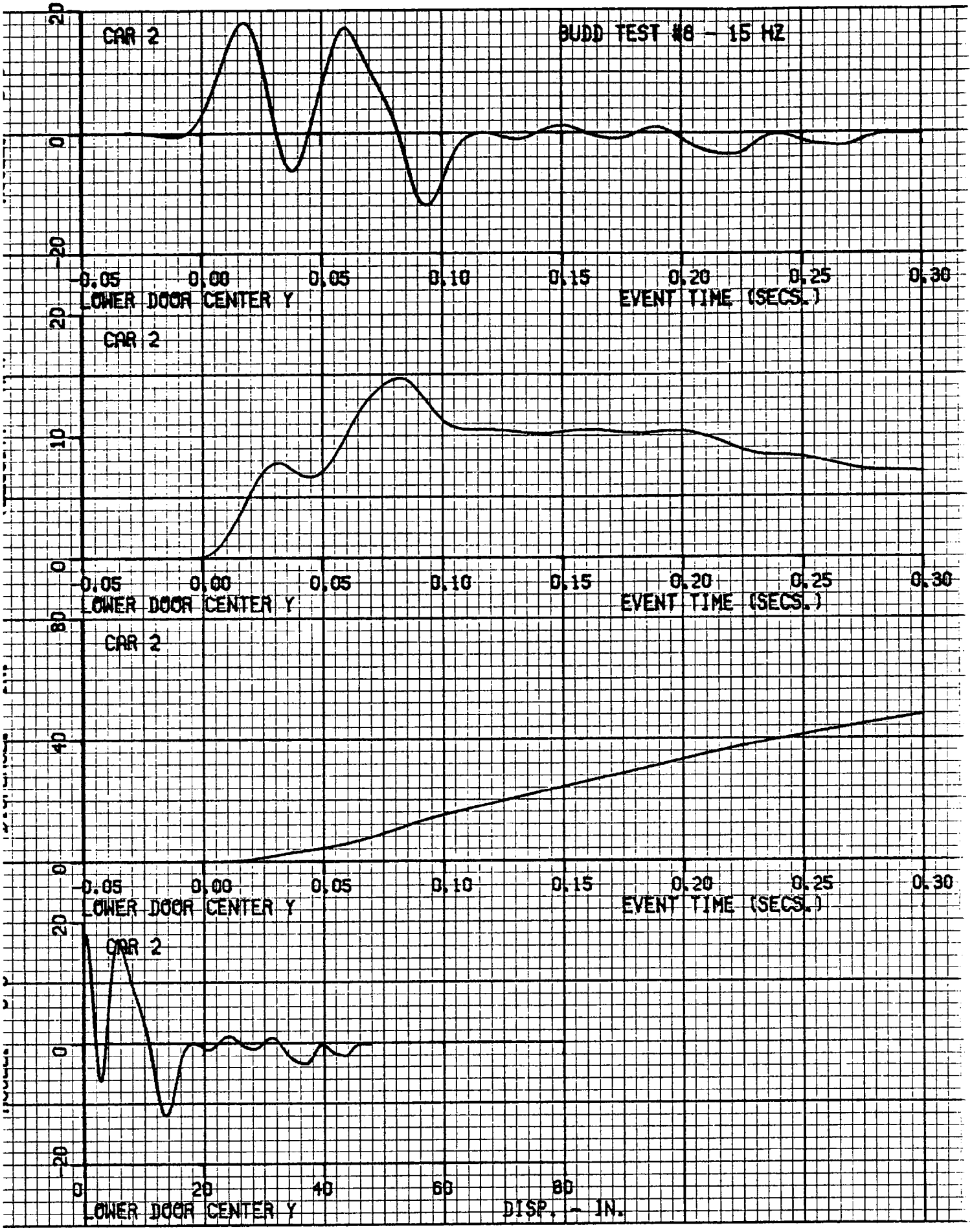

BUDD TEST #6 - 15 HZ
CAR 2
ACCEL. - G'S
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - X COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
5
0
-5
-16
-12
-8
-4
0
REAR DECK - X COMP.
DISP. - IN.

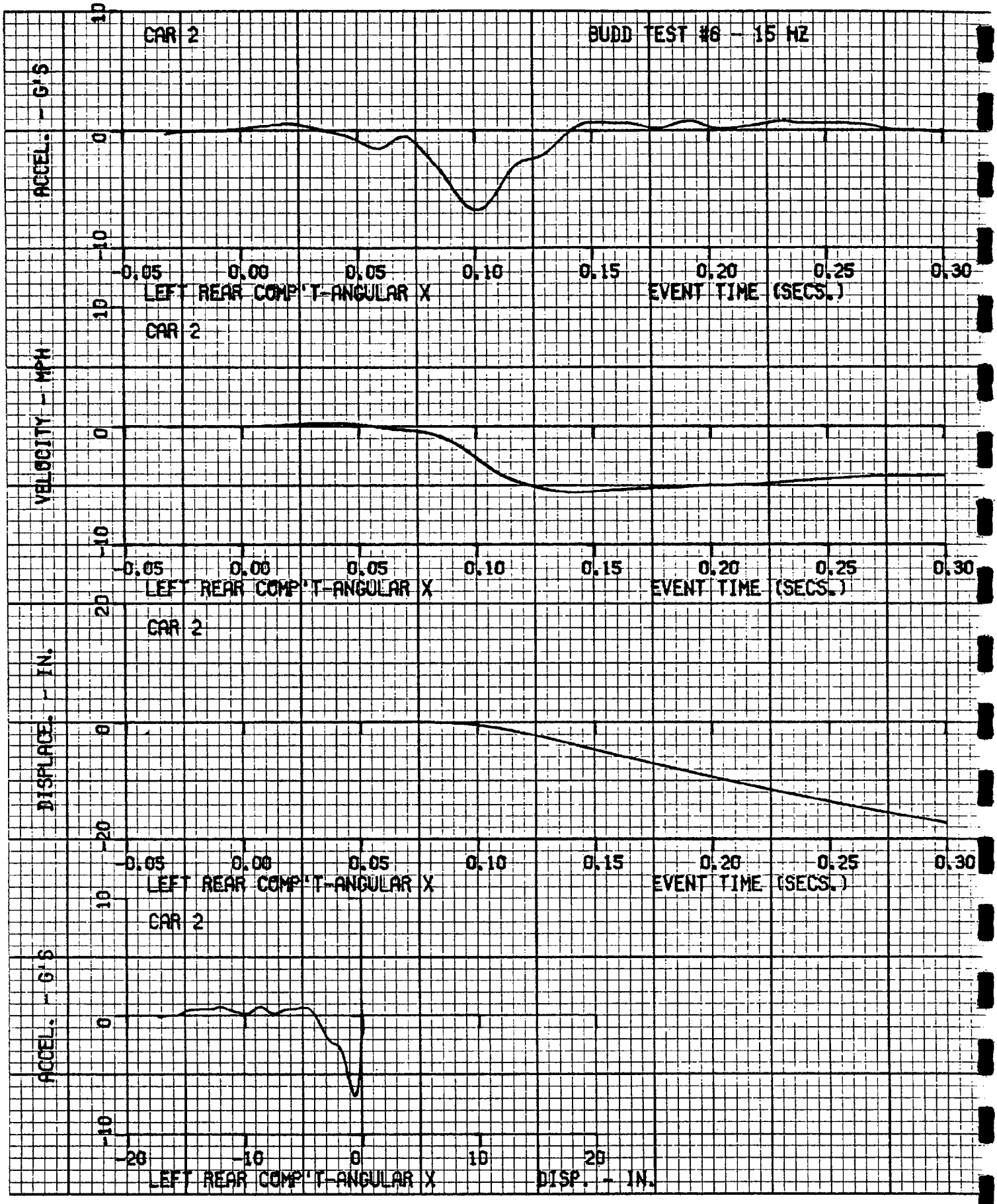

CAR 2
BUDD TEST #6 - 15 MZ
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 2
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 2
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Y COMP.
EVENT TIME (SECS.)
CAR 2
10
0
-10
0
20
40
60
80
REAR DECK - Y COMP.
DISP. - IN.

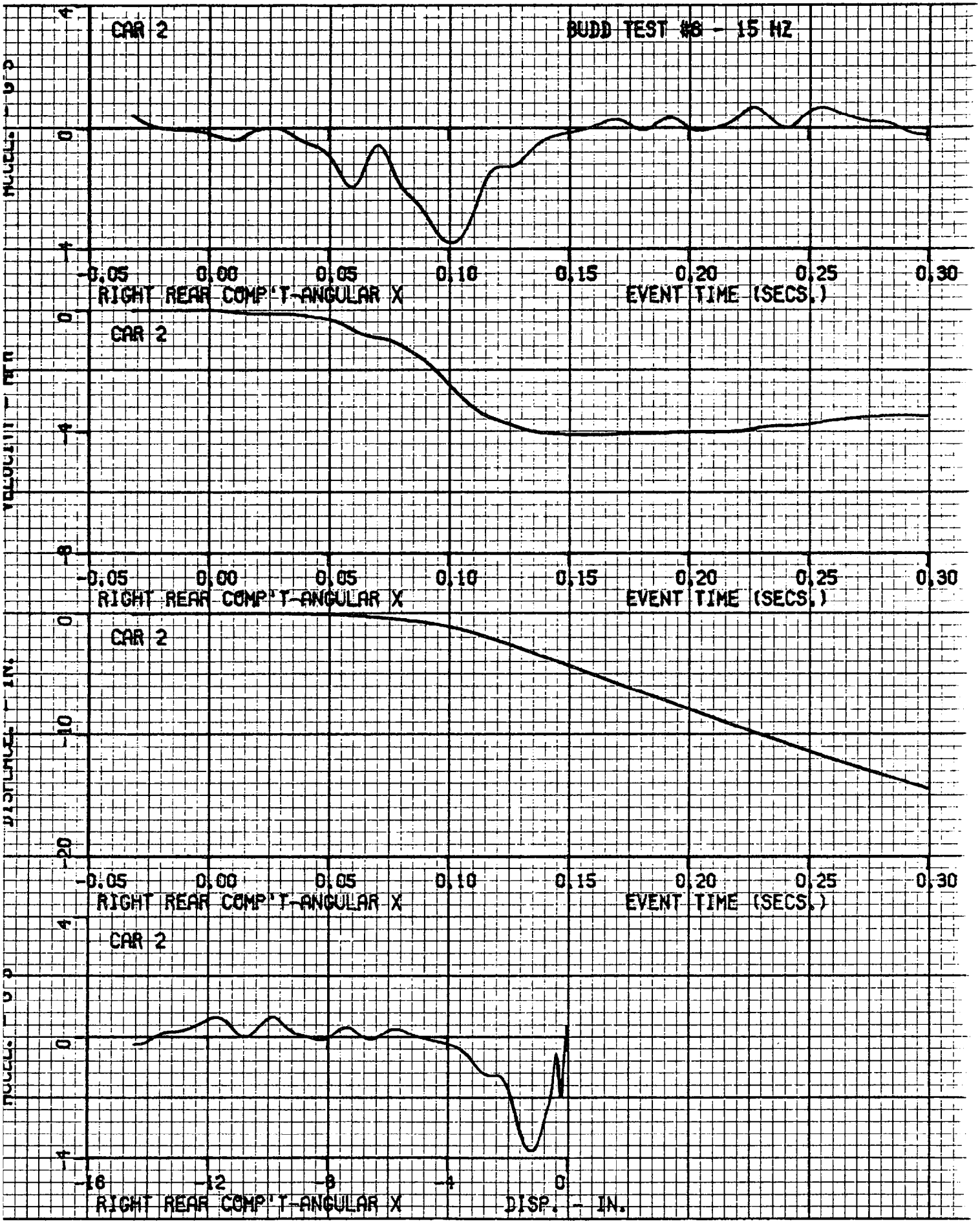

CAR 2
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
2
0
-2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
REAR DECK - Z COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
2
0
-2
-4
-2
0
2
4
REAR DECK - Z COMP.
DISP. - IN.

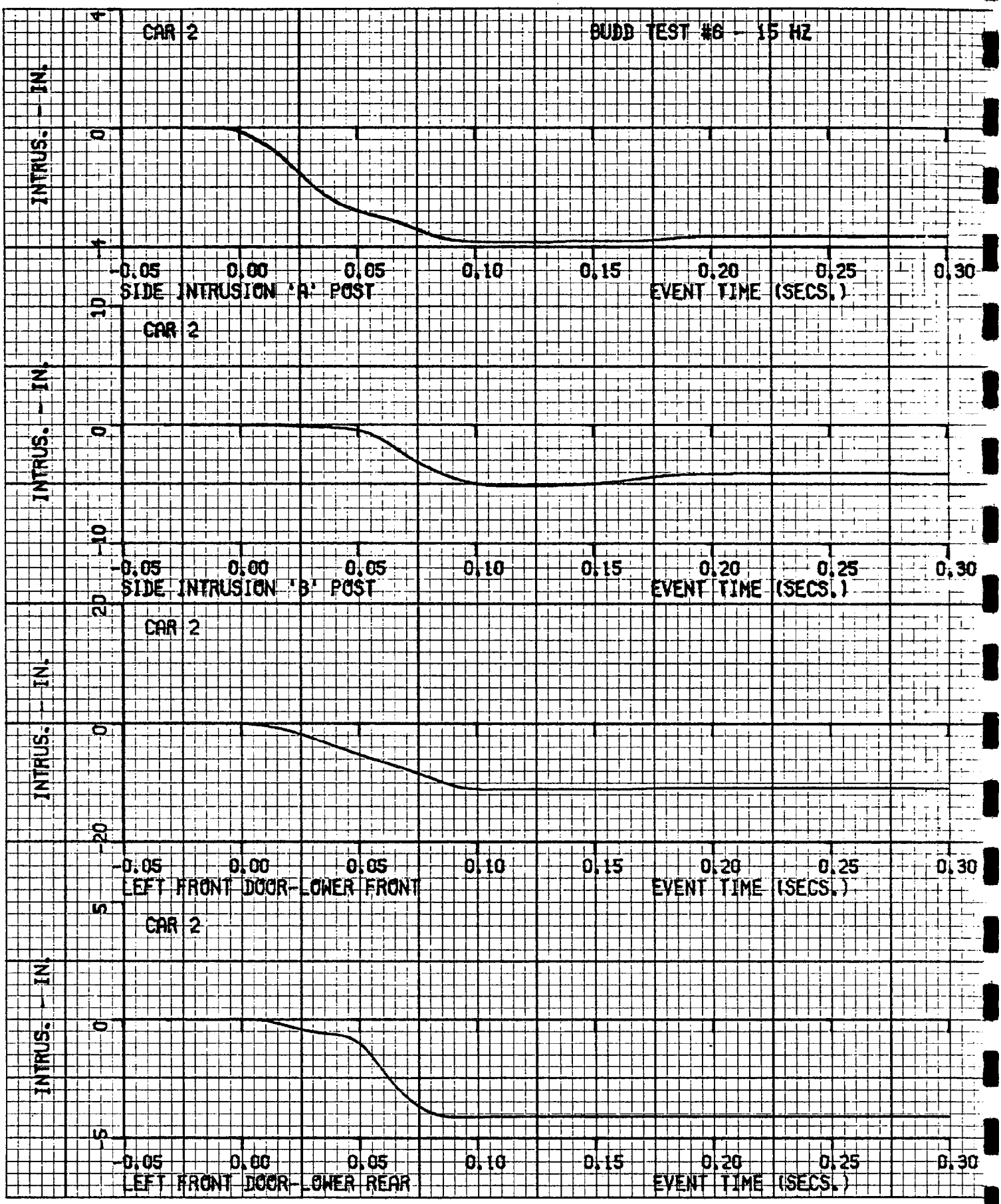

CAR 2
BUDD TEST #8 - 15 HZ
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
MID-FRONT FRONT DOOR Y
EVENT TIME (SECS.)
CAR 2
10
5
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
MID-FRONT FRONT DOOR Y
EVENT TIME (SECS.)
CAR 2
40
20
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
MID-FRONT FRONT DOOR Y
EVENT TIME (SECS.)
CAR 2
20
0
-20
0
10
20
30
40
MID-FRONT FRONT DOOR Y
DISP. - IN.

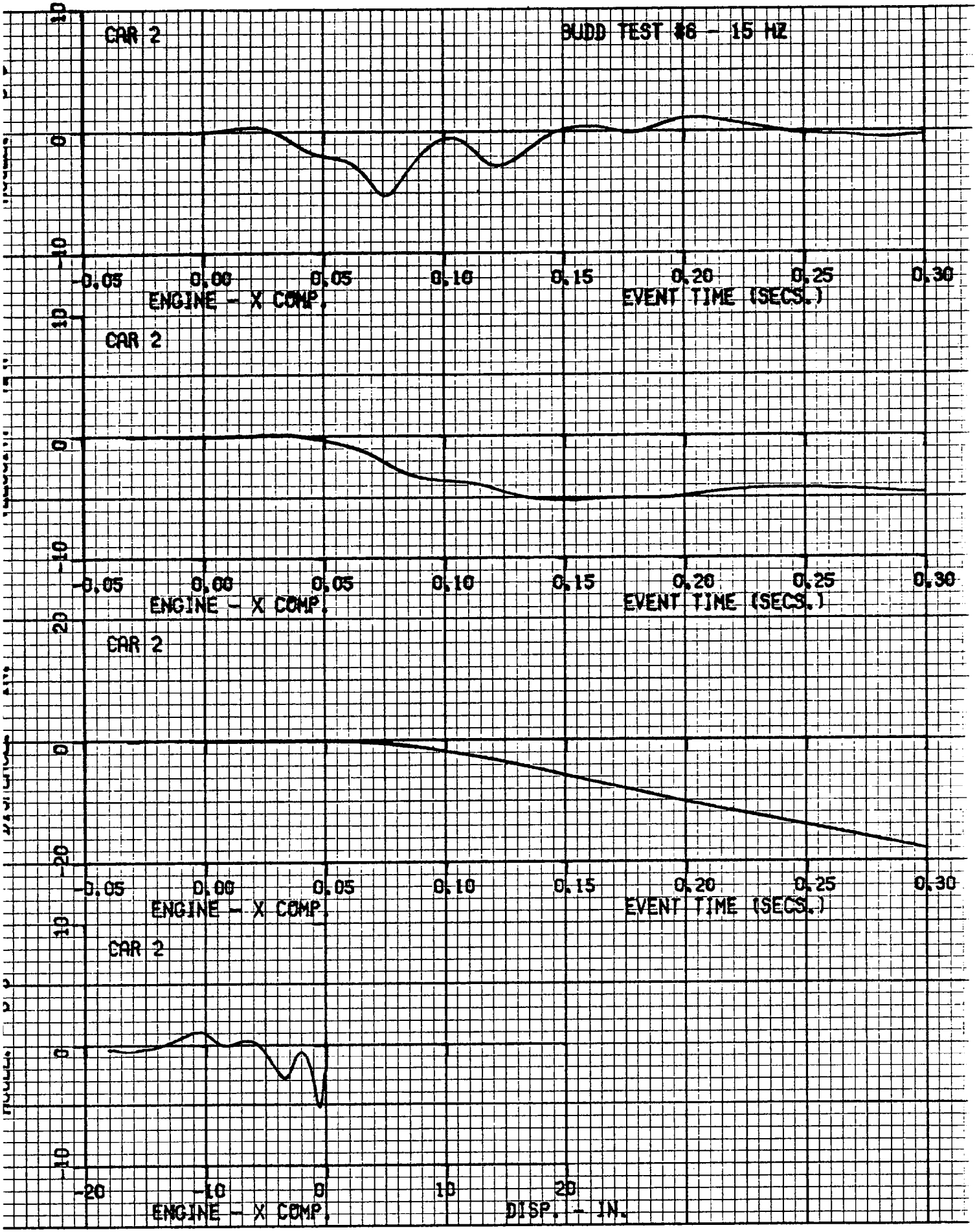

CAR 2
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
UPPER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
UPPER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
UPPER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
20
0
-20
0
20
40
60
80
UPPER DOOR CENTER Y
DISP. - IN.

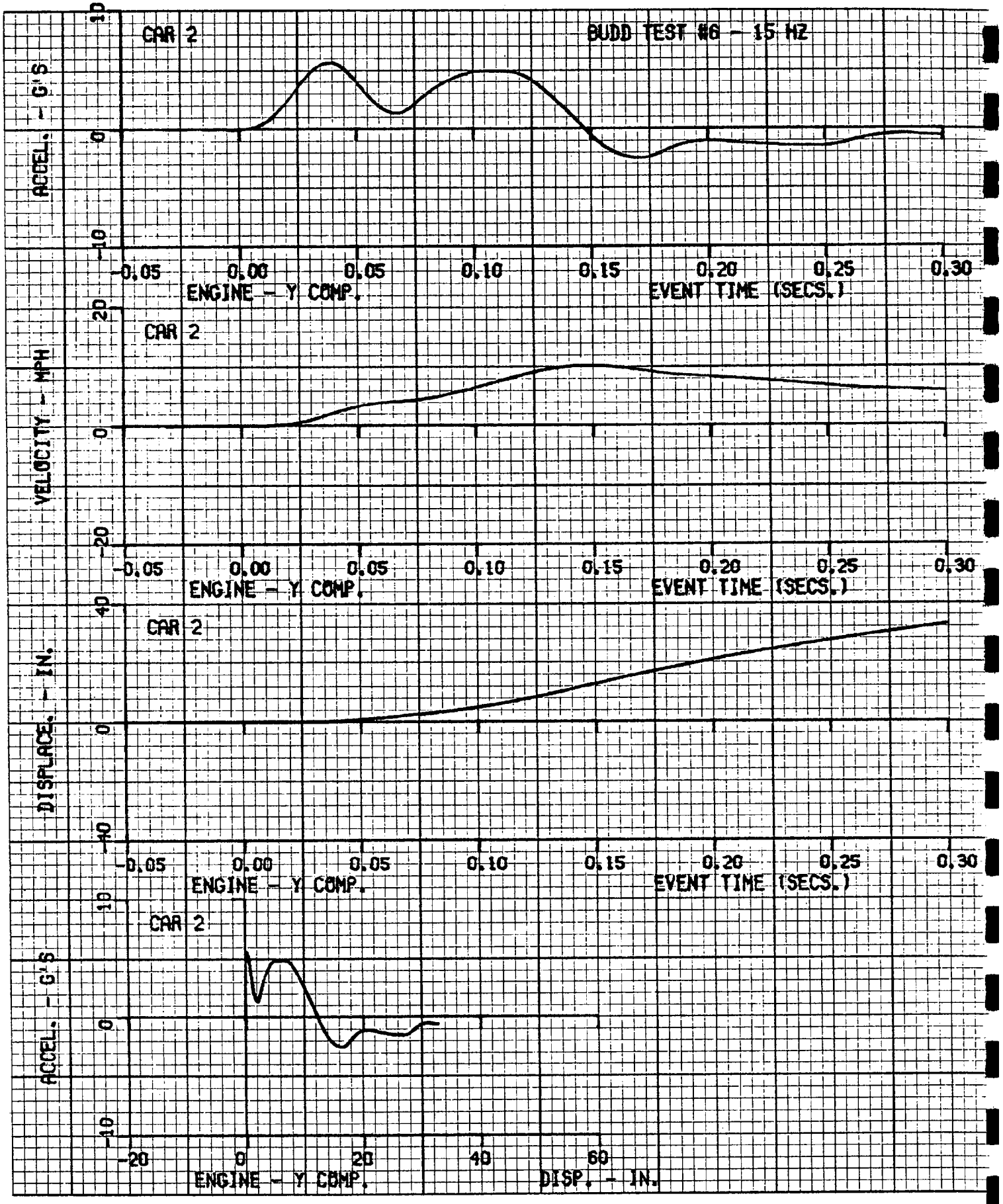

CAR 2
BUDD TEST #8 - 15 HZ
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LOWER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LOWER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LOWER DOOR CENTER Y
EVENT TIME (SECS.)
CAR 2
20
0
-20
0
20
40
60
80
LOWER DOOR CENTER Y
DISP. - IN.

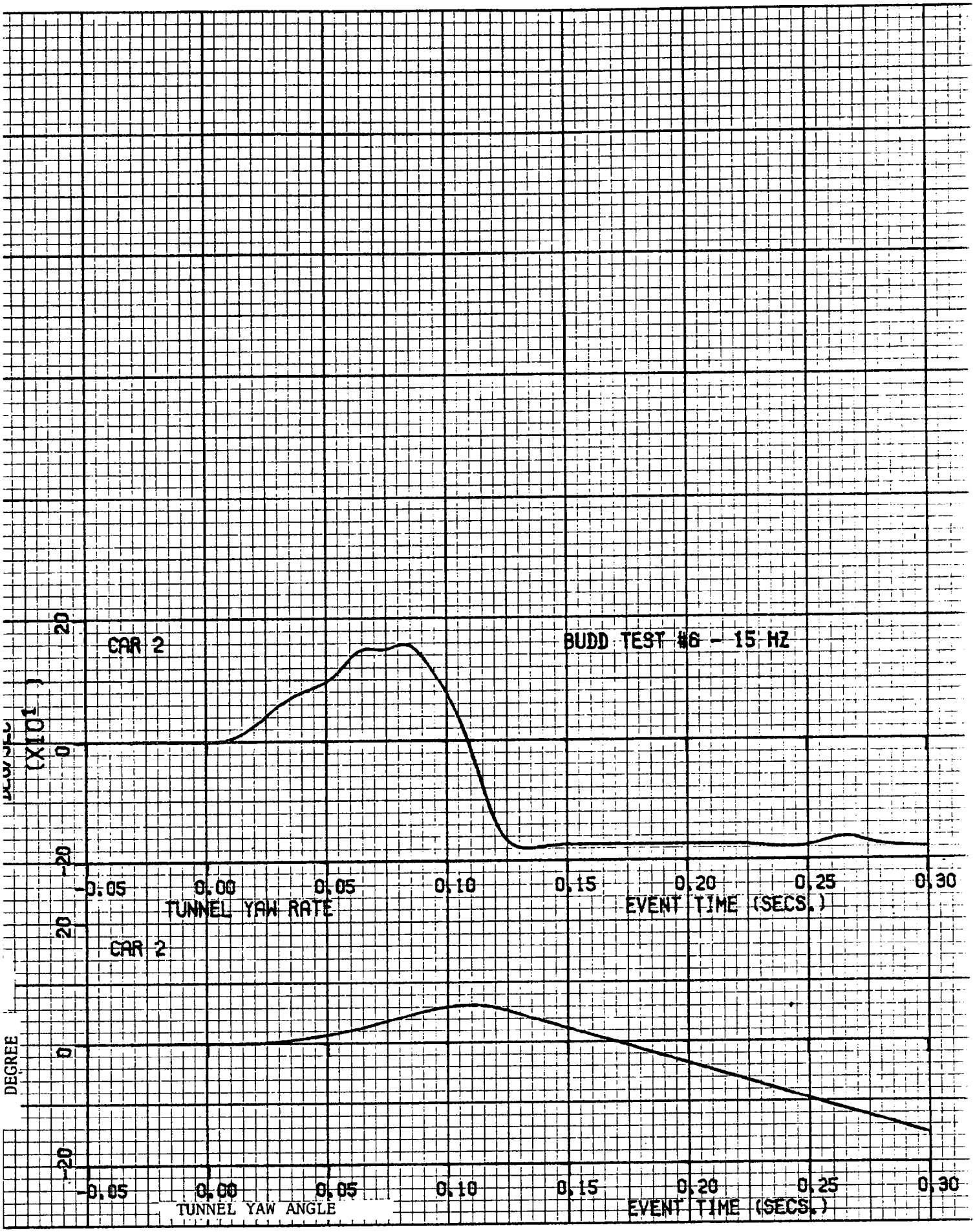

CAR 2
BUDD TEST #8 - 15 MZ
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
LEFT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
10
0
-10
-20
-10
0
10
20
LEFT REAR COMP'T-ANGULAR X
DISP. - IN.


BUDD TEST #8 - 15 MZ
CAR 2
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
8
0
-8
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
RIGHT REAR COMP'T-ANGULAR X
EVENT TIME (SECS.)
CAR 2
4
0
-4
-16
-12
-8
-4
0
RIGHT REAR COMP'T-ANGULAR X
DISP. - IN.


CAR 2
SOBB TEST #6 - 15 MZ
INTRUS. - IN.
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
SIDE INTRUSION 'A' POST
EVENT TIME (SECS.)
CAR 2
INTRUS. - IN.
0
-10
-20
SIDE INTRUSION 'B' POST
EVENT TIME (SECS.)
CAR 2
INTRUS. - IN.
0
-20
-40
LEFT FRONT DOOR-LOWER FRONT
EVENT TIME (SECS.)
CAR 2
INTRUS. - IN.
5
0
-5
LEFT FRONT DOOR-LOWER REAR
EVENT TIME (SECS.)


BUDD TEST #6 - 15 HZ
CAR 2
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 2
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 2
ENGINE - X COMP.
EVENT TIME (SECS.)
CAR 2
ENGINE - X COMP.
DISP. - IN.


CAR 2
BUDD TEST #6 - 15 HZ
ACCEL. - G'S
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
ENGINE - Y COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
10
0
-10
-20
0
20
40
60
ENGINE - Y COMP.
DISP. - IN.

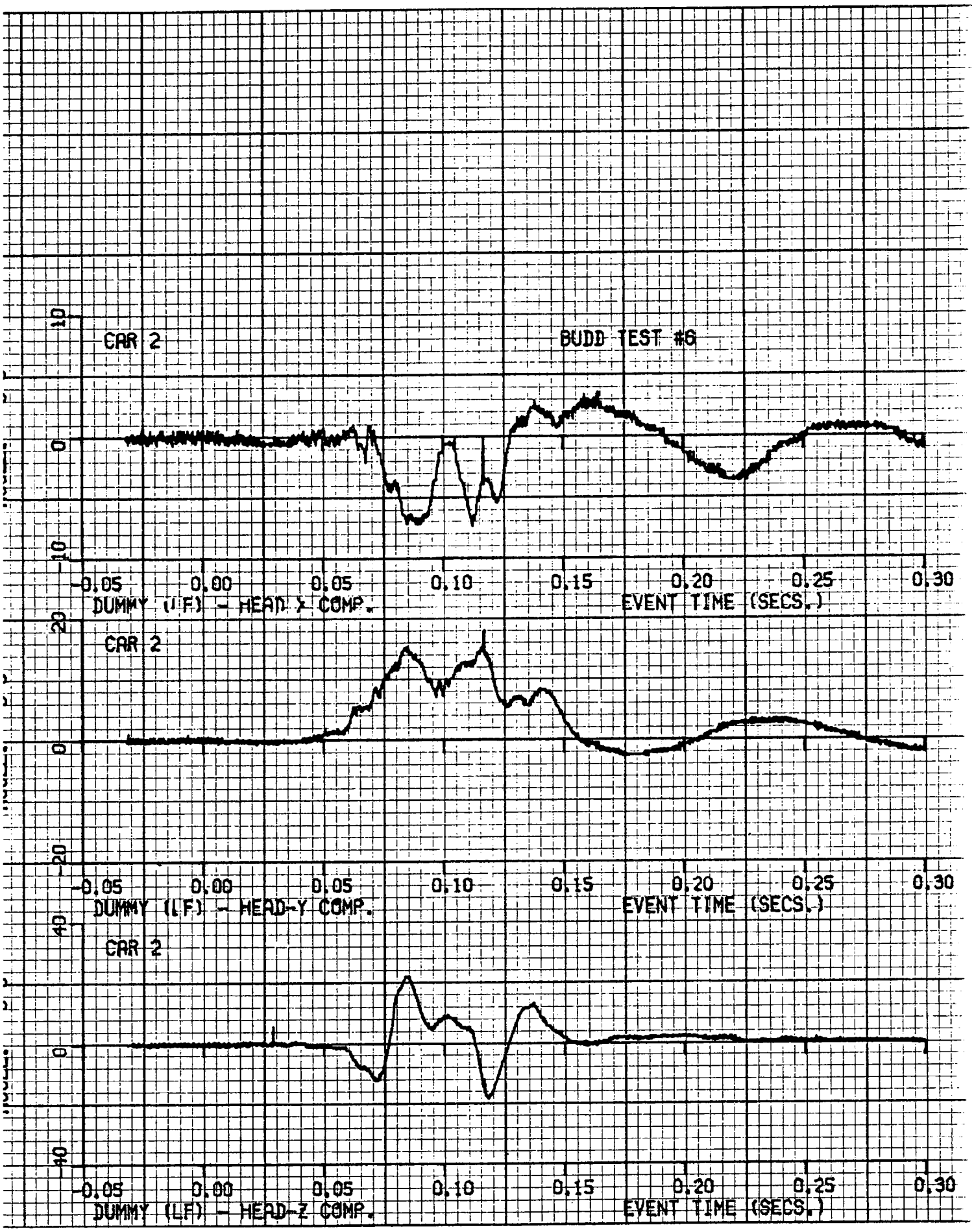

BUDD TEST #6 - 15 HZ
CAR 2
20
0
-20
(X10¹)
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW RATE
EVENT TIME (SECS.)
CAR 2
20
0
-20
DEGREE
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
TUNNEL YAW ANGLE
EVENT TIME (SECS.)

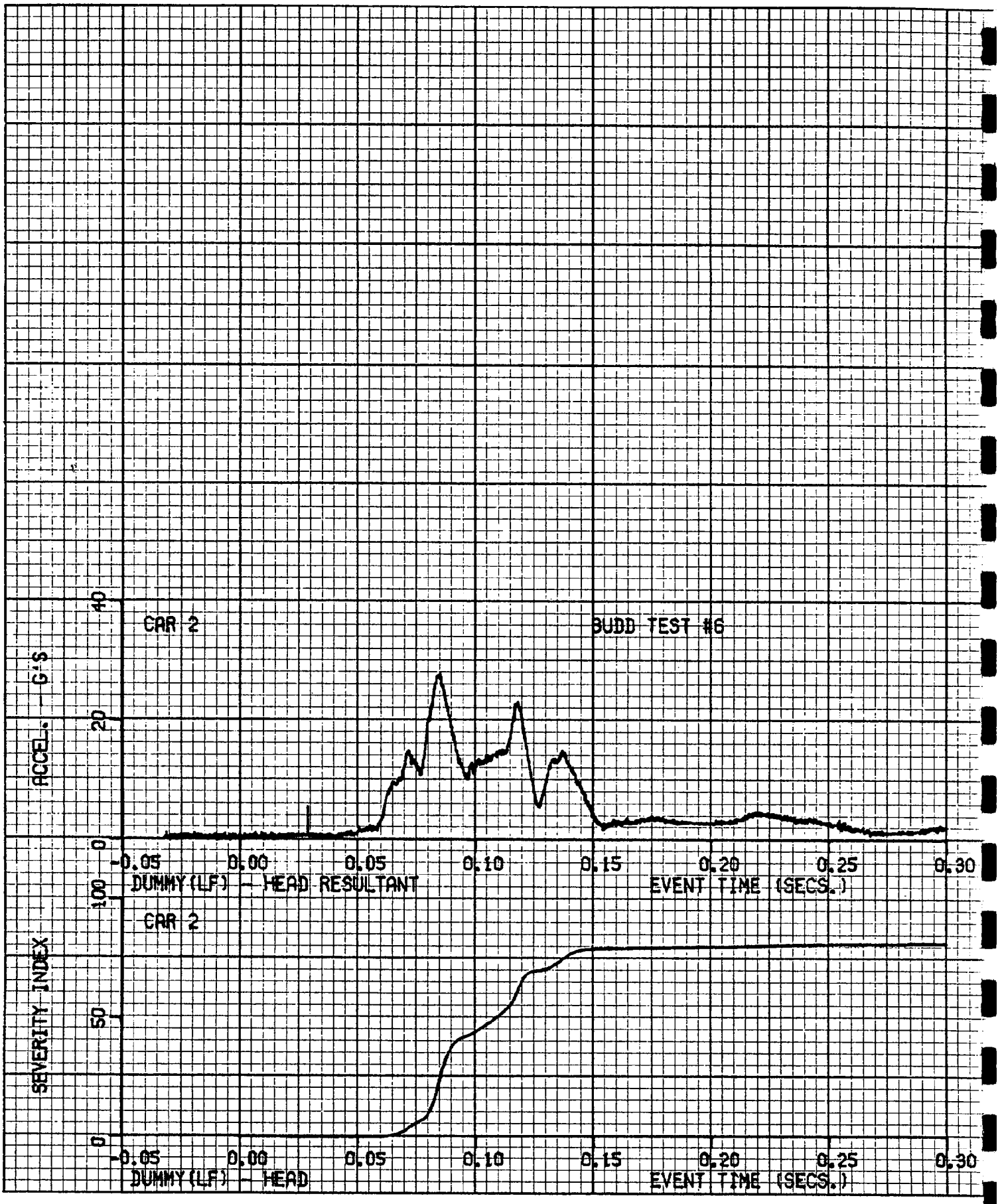
TEST NO. 6

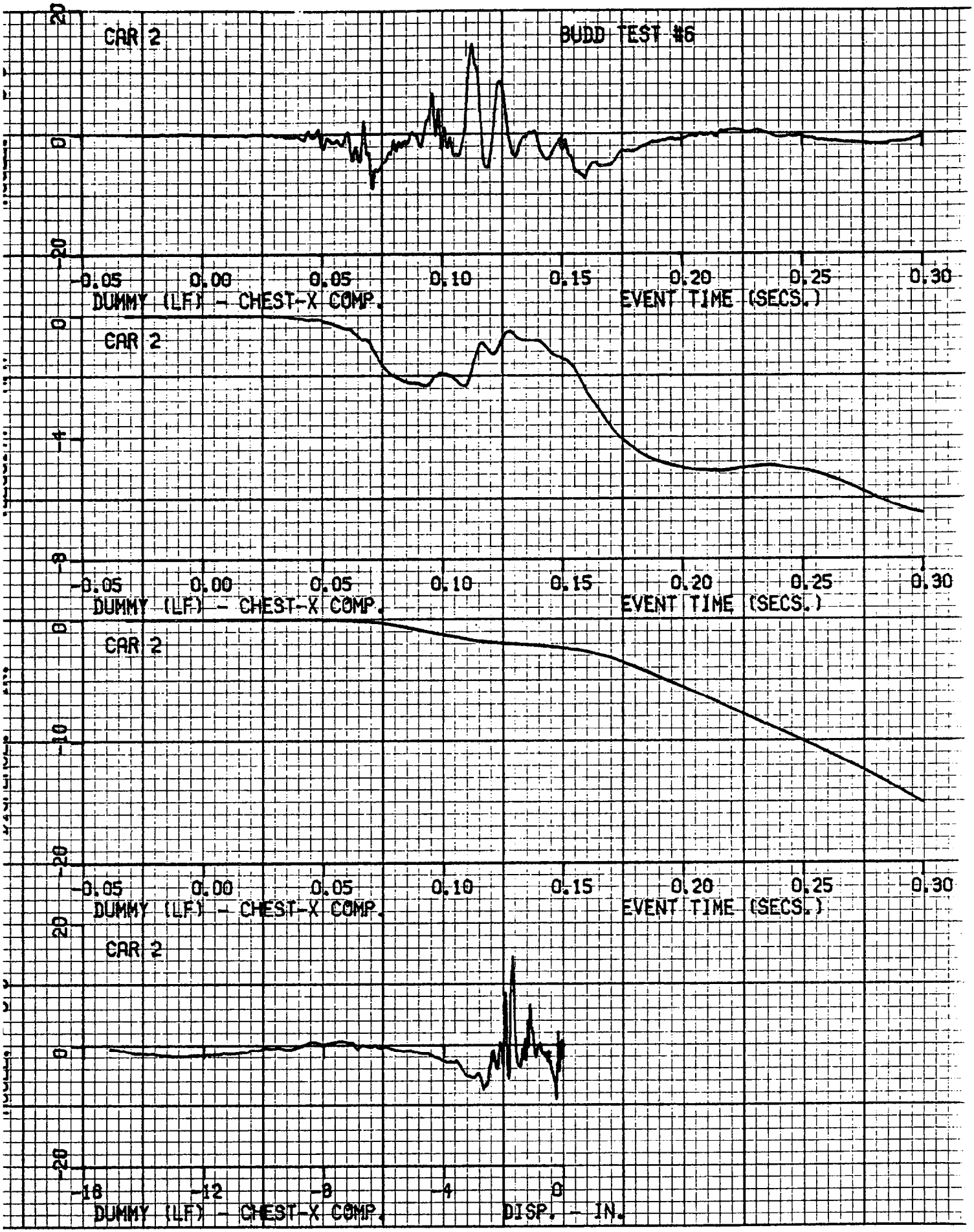
CAR 2 - 1976 VOLKSWAGEN RABBIT

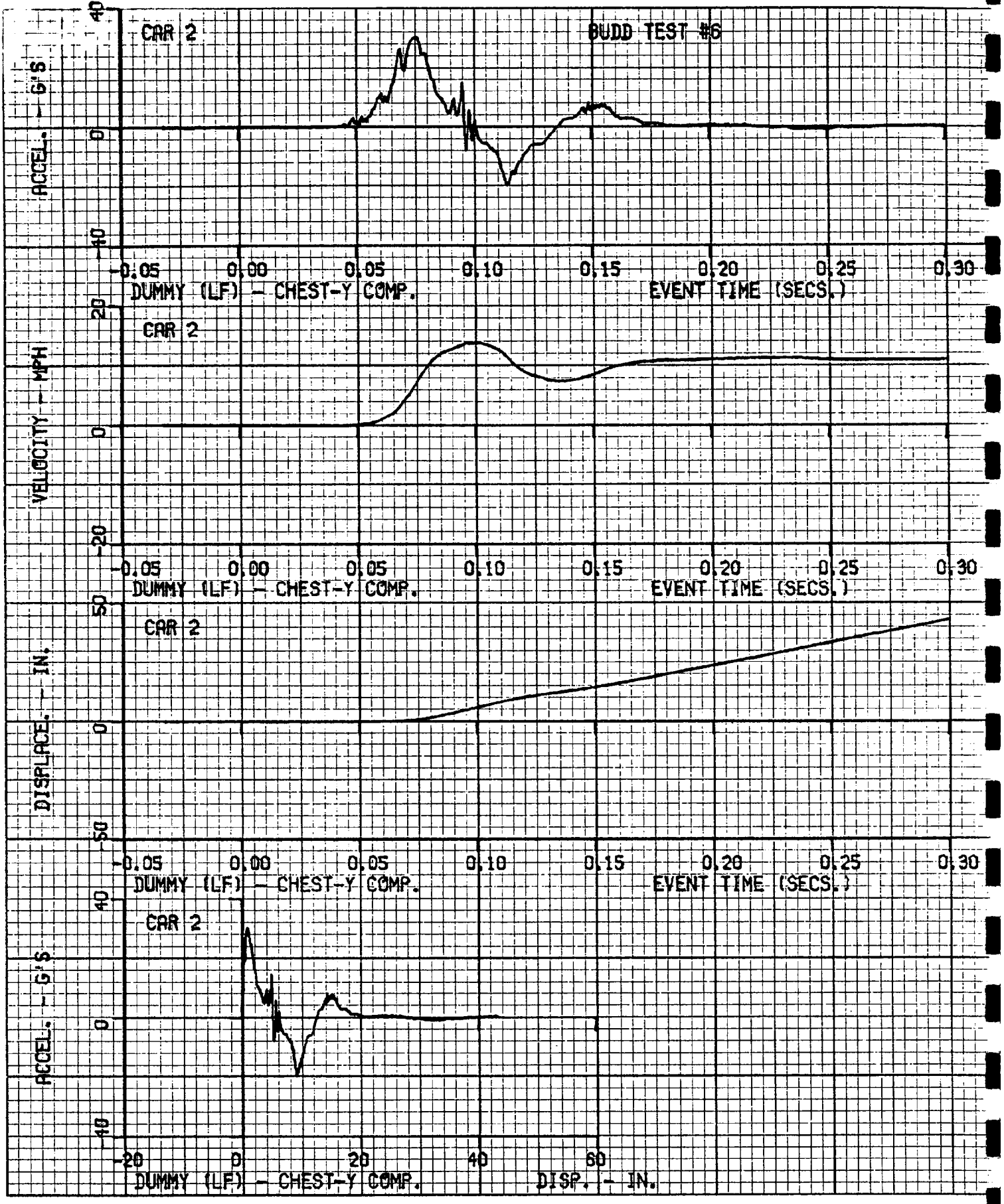
DUMMY DATA

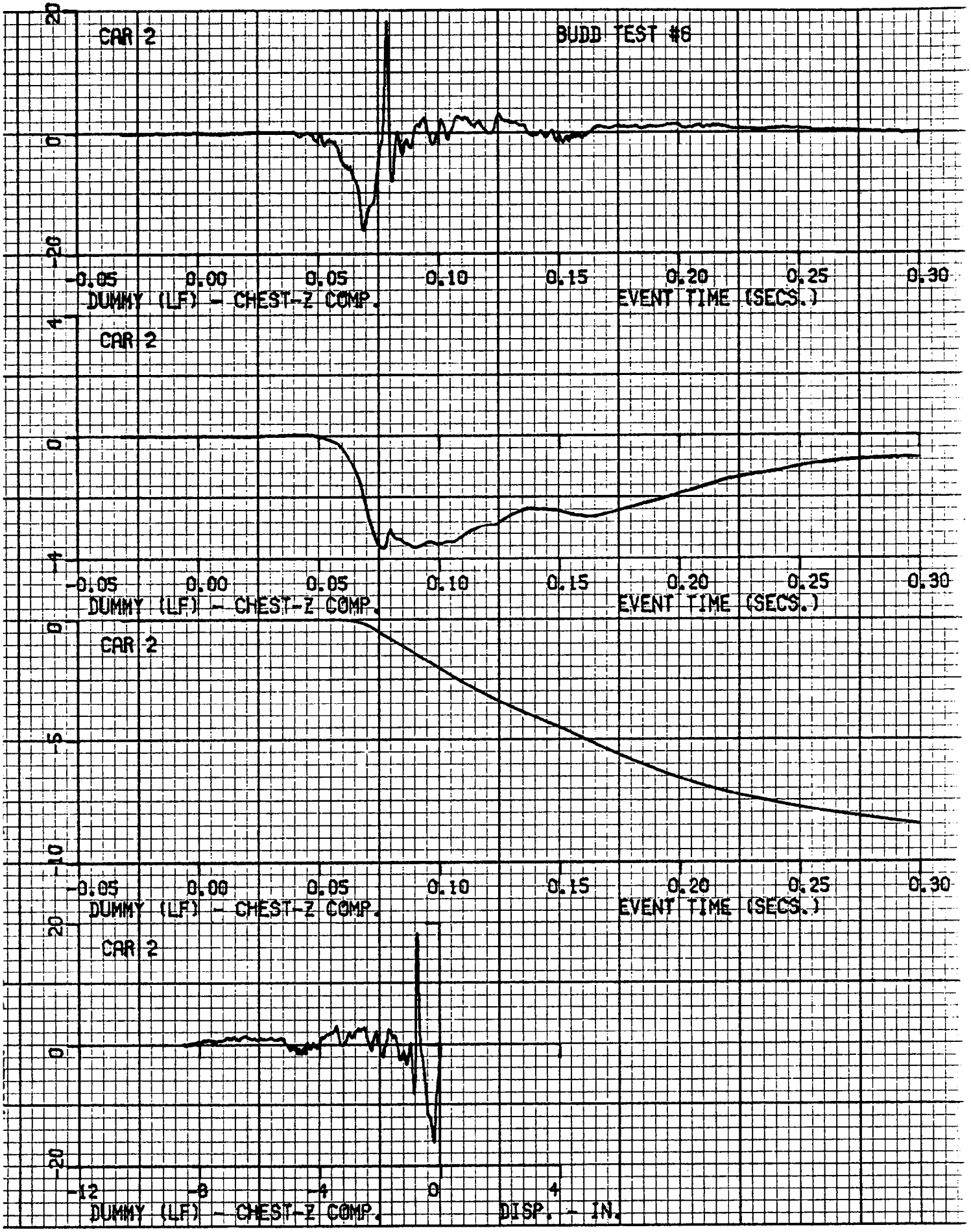
	FILTER CHANNEL CLASS
HEAD ACCELERATION	1000 Hz
CHEST ACCELERATION	180 Hz
PELVIS ACCELERATION	180 Hz

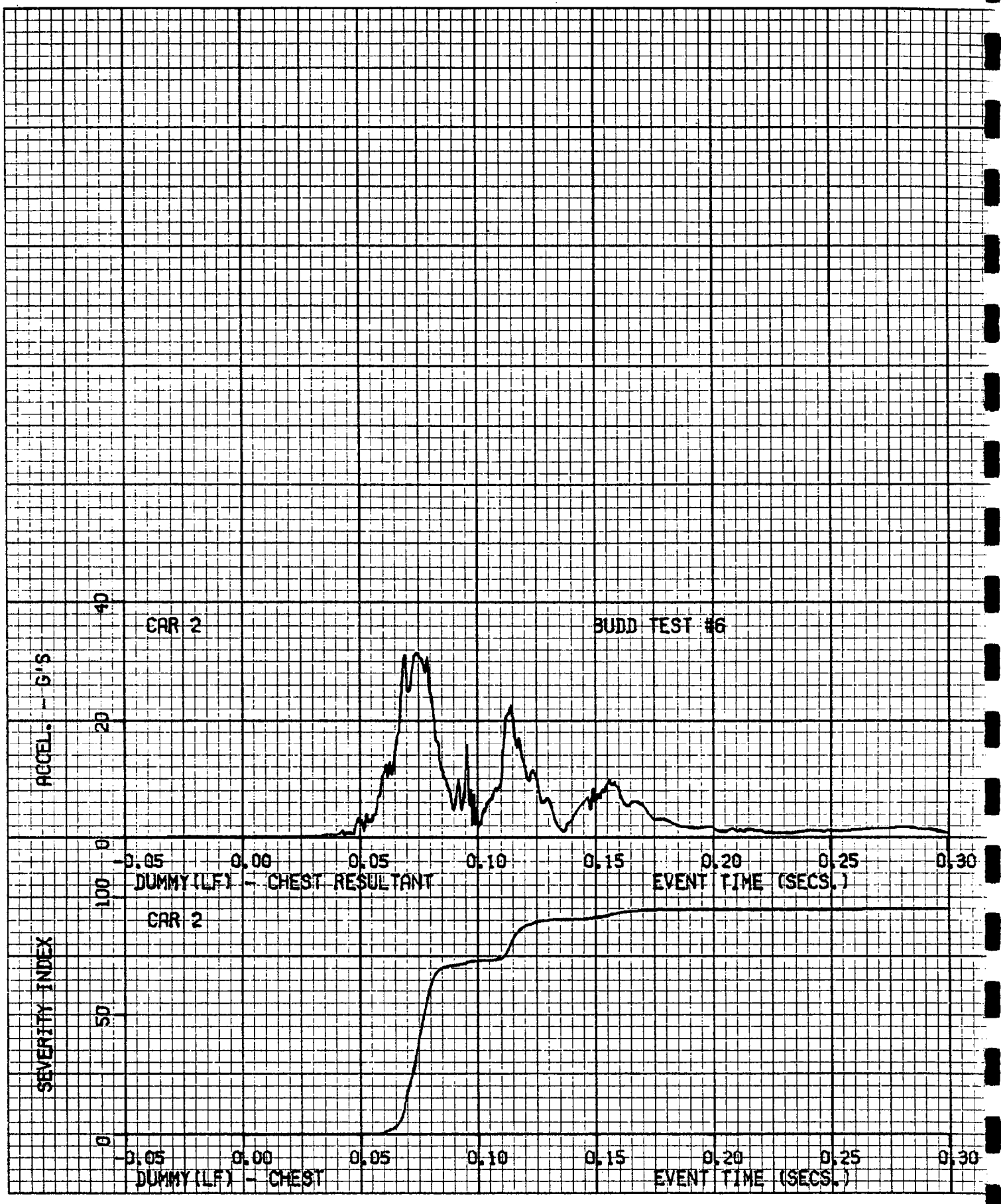

CAR 2
BUDD TEST #6
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - HEAD-X COMP.
EVENT TIME (SECS.)
CAR 2
20
0
-20
DUMMY (LF) - HEAD-Y COMP.
EVENT TIME (SECS.)
CAR 2
40
0
-40
DUMMY (LF) - HEAD-Z COMP.
EVENT TIME (SECS.)

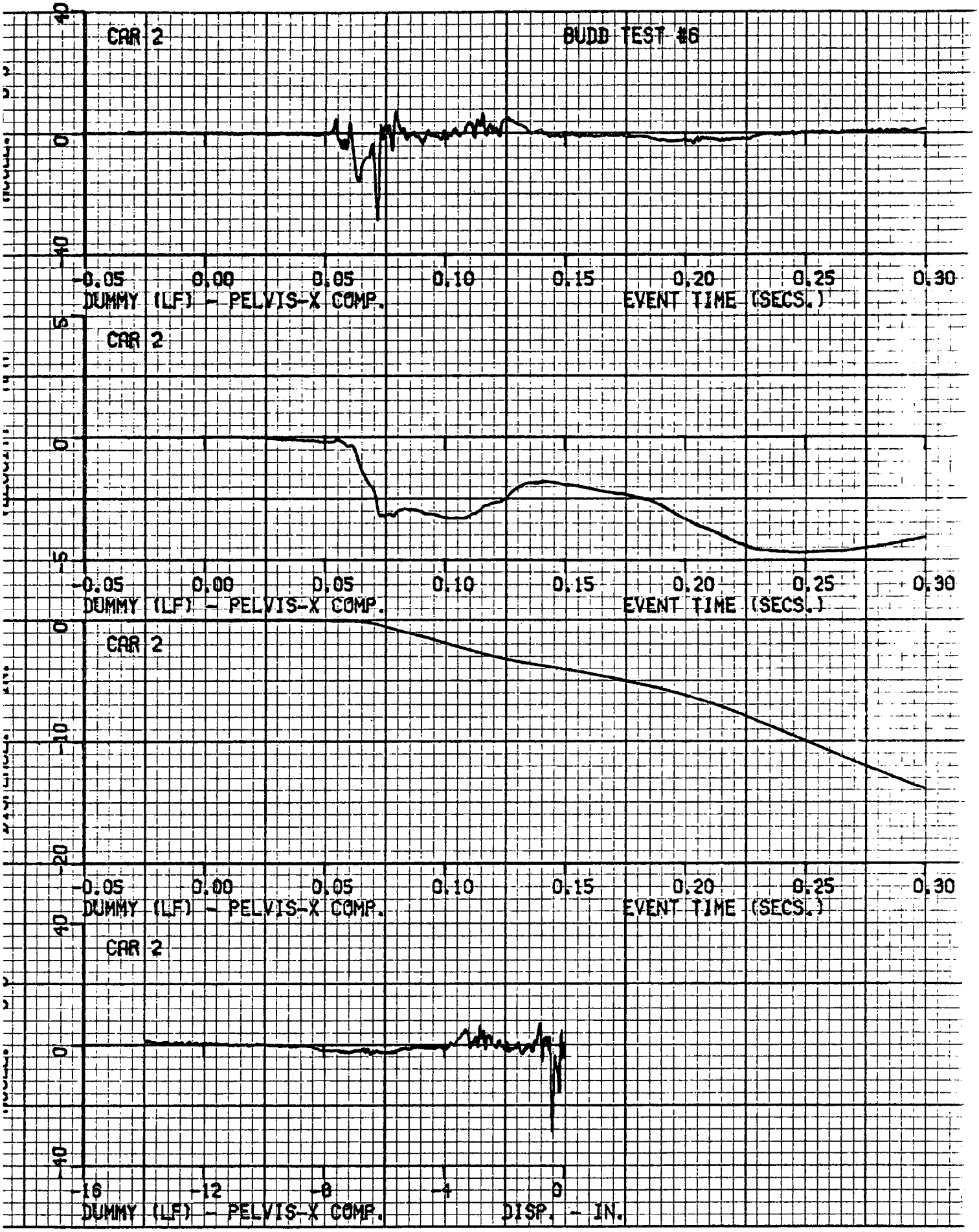

CAR 2
BUDD TEST #6
ACCEL. - G'S
40
20
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - HEAD RESULTANT
EVENT TIME (SECS.)
CAR 2
SEVERITY INDEX
100
50
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - HEAD
EVENT TIME (SECS.)

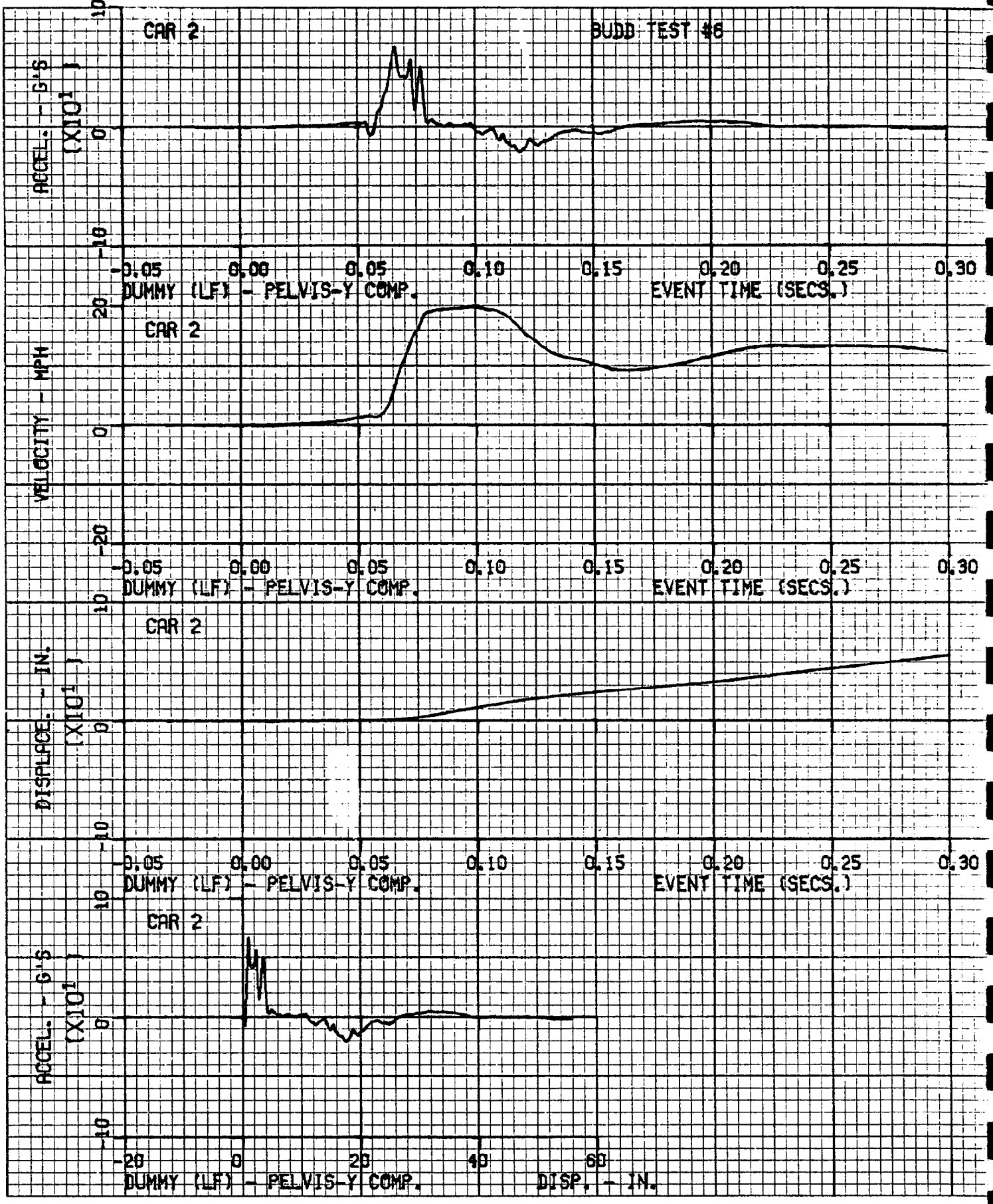

CAR 2
BUDD TEST #6
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-X COMP.
EVENT TIME (SECS.)
CAR 2
0
-4
-8
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-X COMP.
EVENT TIME (SECS.)
CAR 2
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-X COMP.
EVENT TIME (SECS.)
CAR 2
20
0
-20
-16
-12
-8
-4
0
DUMMY (LF) - CHEST-X COMP.
DISP. - IN.

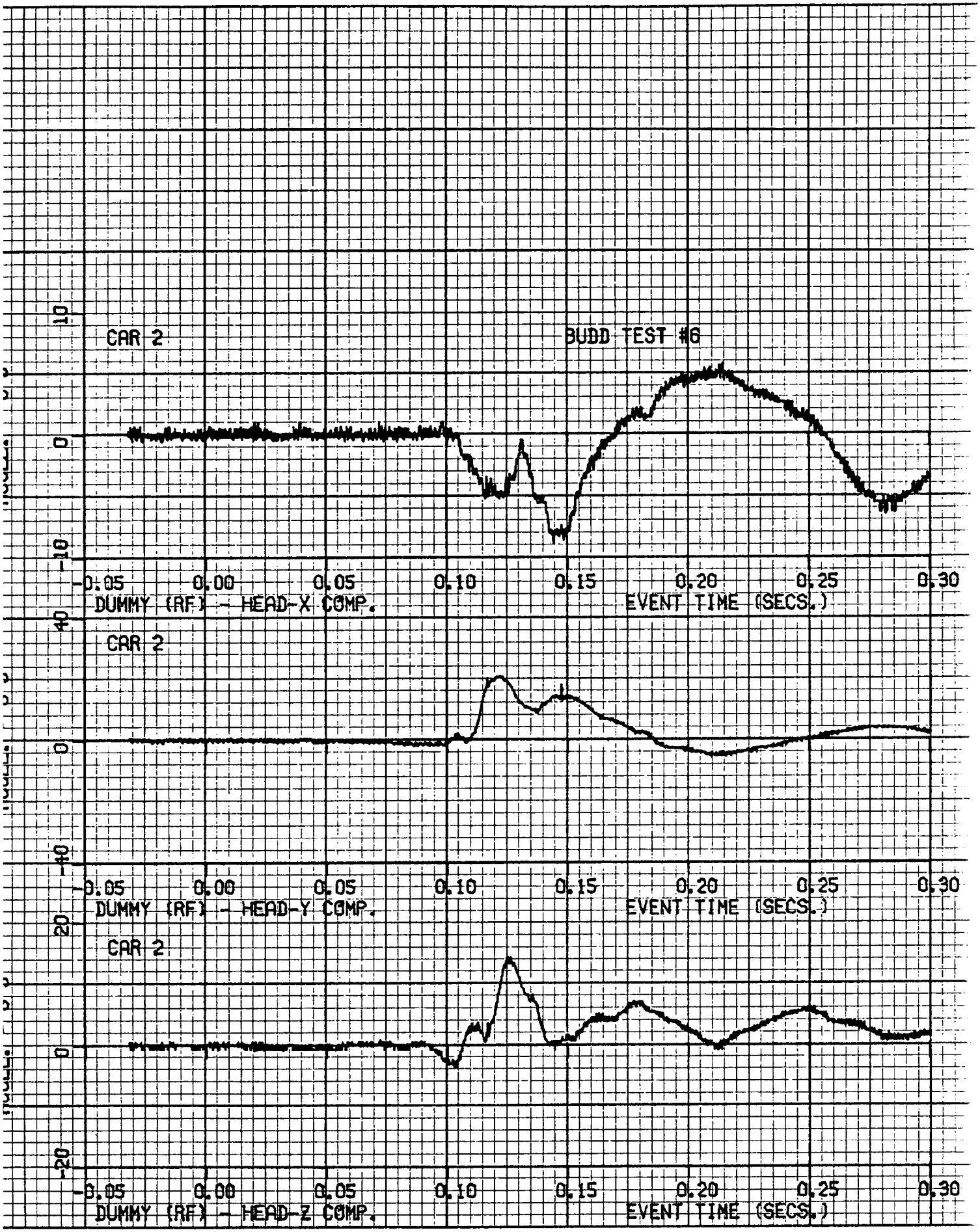

CAR 2
BUDD TEST #6
ACCEL. - G'S
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
50
0
-50
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
40
0
-40
-20
0
20
40
60
DUMMY (LF) - CHEST-Y COMP.
DISP. - IN.

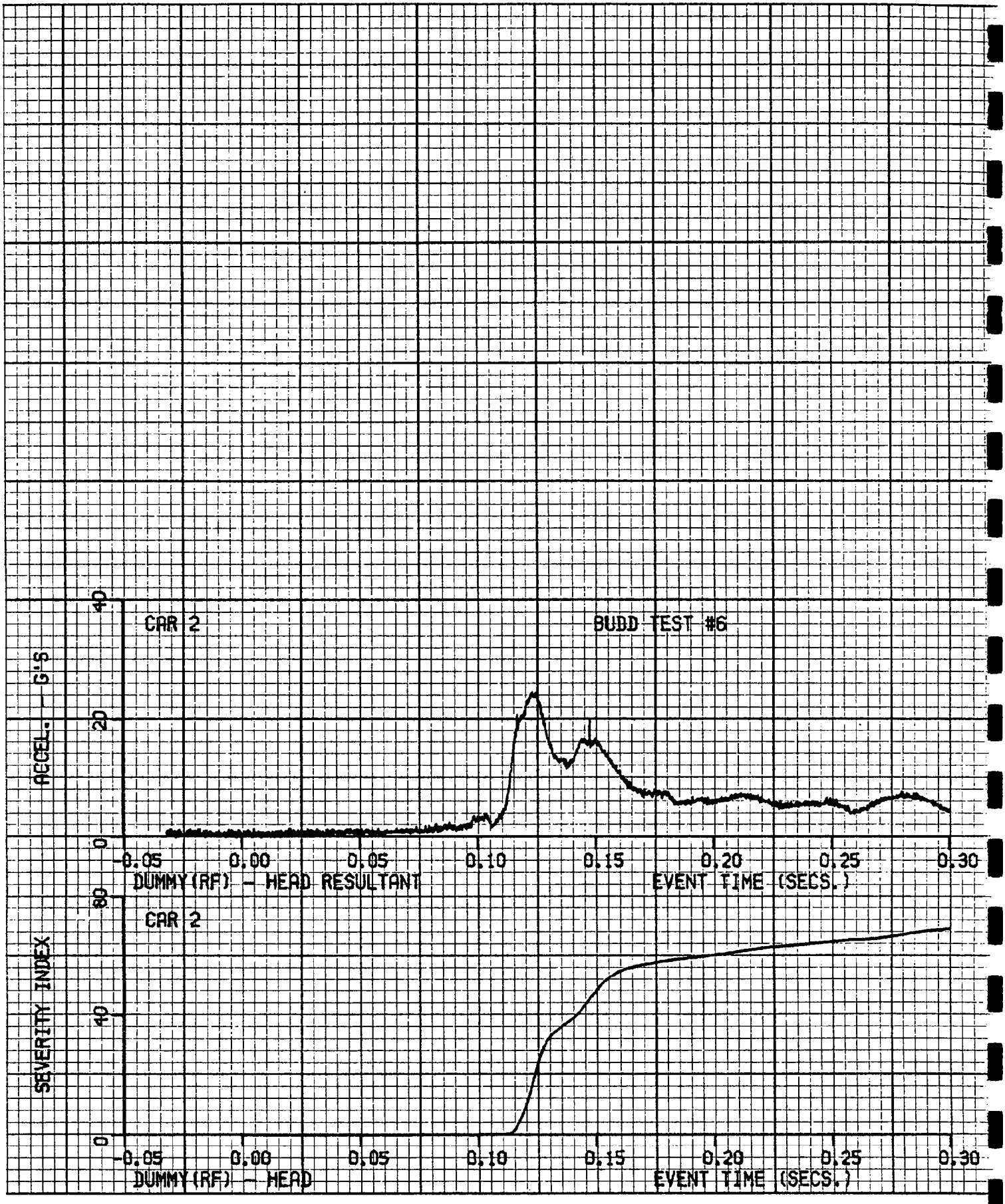

CAR 2
BUDD TEST #6
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Z COMP.
EVENT TIME (SECS.)
CAR 2
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Z COMP.
EVENT TIME (SECS.)
0
-5
-10
CAR 2
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST-Z COMP.
EVENT TIME (SECS.)
20
0
-20
CAR 2
-12
-8
-4
0
4
DUMMY (LF) - CHEST-Z COMP.
DISP. - IN.

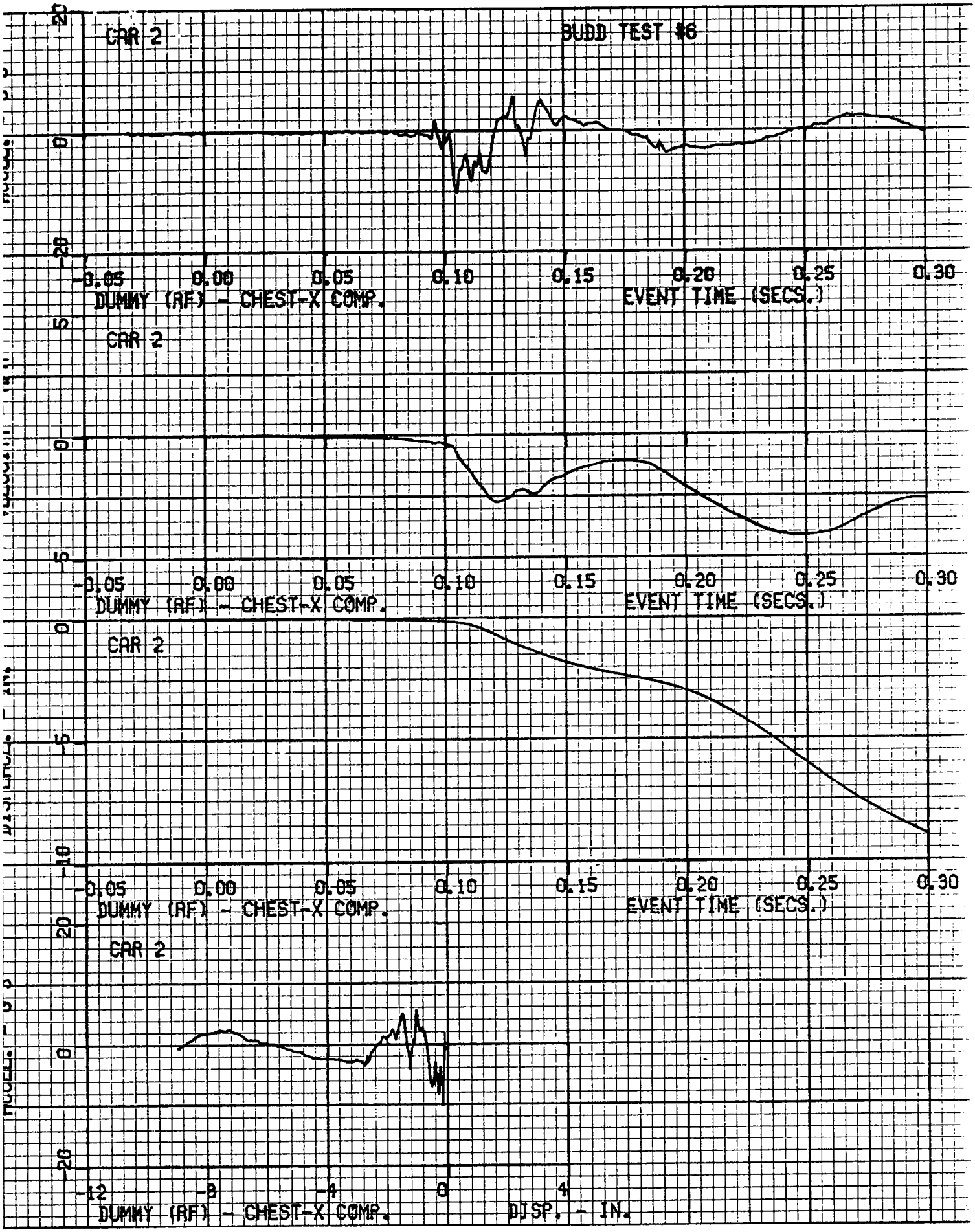

CAR 2
BUDD TEST #6
ACCEL. - G'S
40
20
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST RESULTANT
EVENT TIME (SECS.)
CAR 2
SEVERITY INDEX
100
50
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - CHEST
EVENT TIME (SECS.)

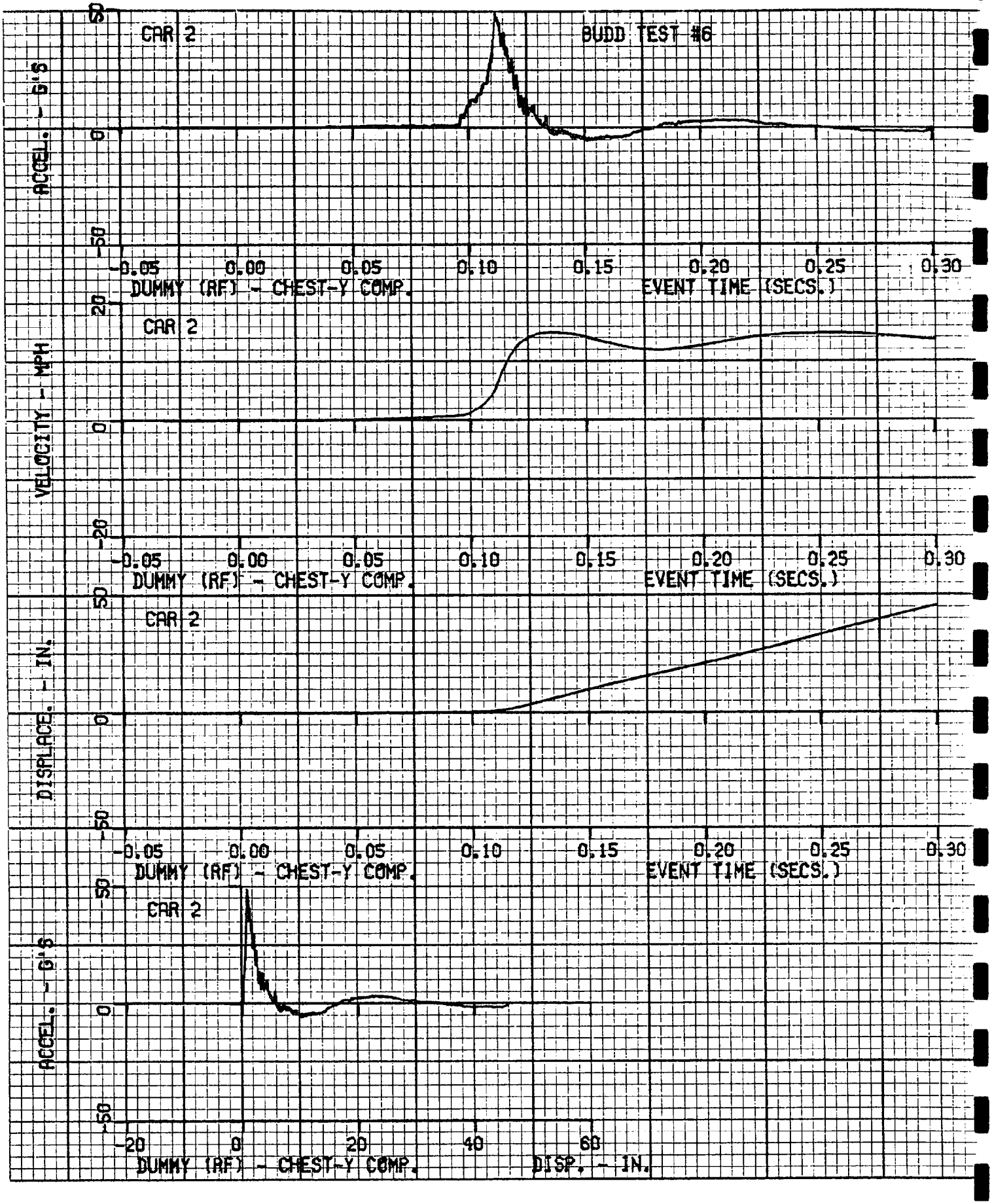

CAR 2
BUDD TEST #6
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - PELVIS-X COMP.
EVENT TIME (SECS.)
CAR 2
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - PELVIS-X COMP.
EVENT TIME (SECS.)
CAR 2
0
-10
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - PELVIS-X COMP.
EVENT TIME (SECS.)
CAR 2
40
0
-40
-16
-12
-8
-4
0
DUMMY (LF) - PELVIS-X COMP.
DISP. - IN.

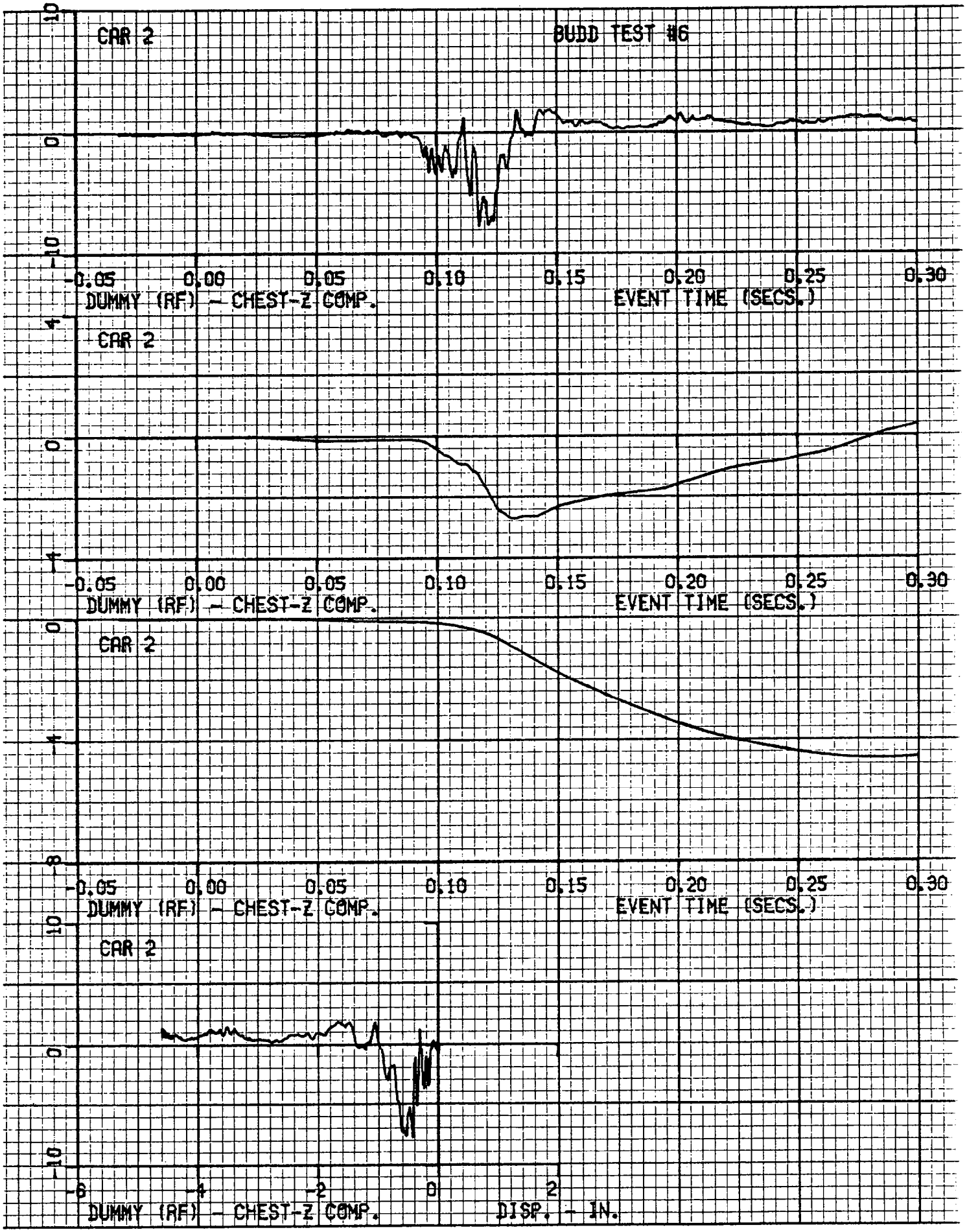

CAR 2
BUDD TEST #6
ACCEL. - G'S (X10¹)
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - PELVIS-Y COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - PELVIS-Y COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN. (X10¹)
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (LF) - PELVIS-Y COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S (X10¹)
10
0
-10
-20
0
20
40
60
DUMMY (LF) - PELVIS-Y COMP.
DISP. - IN.

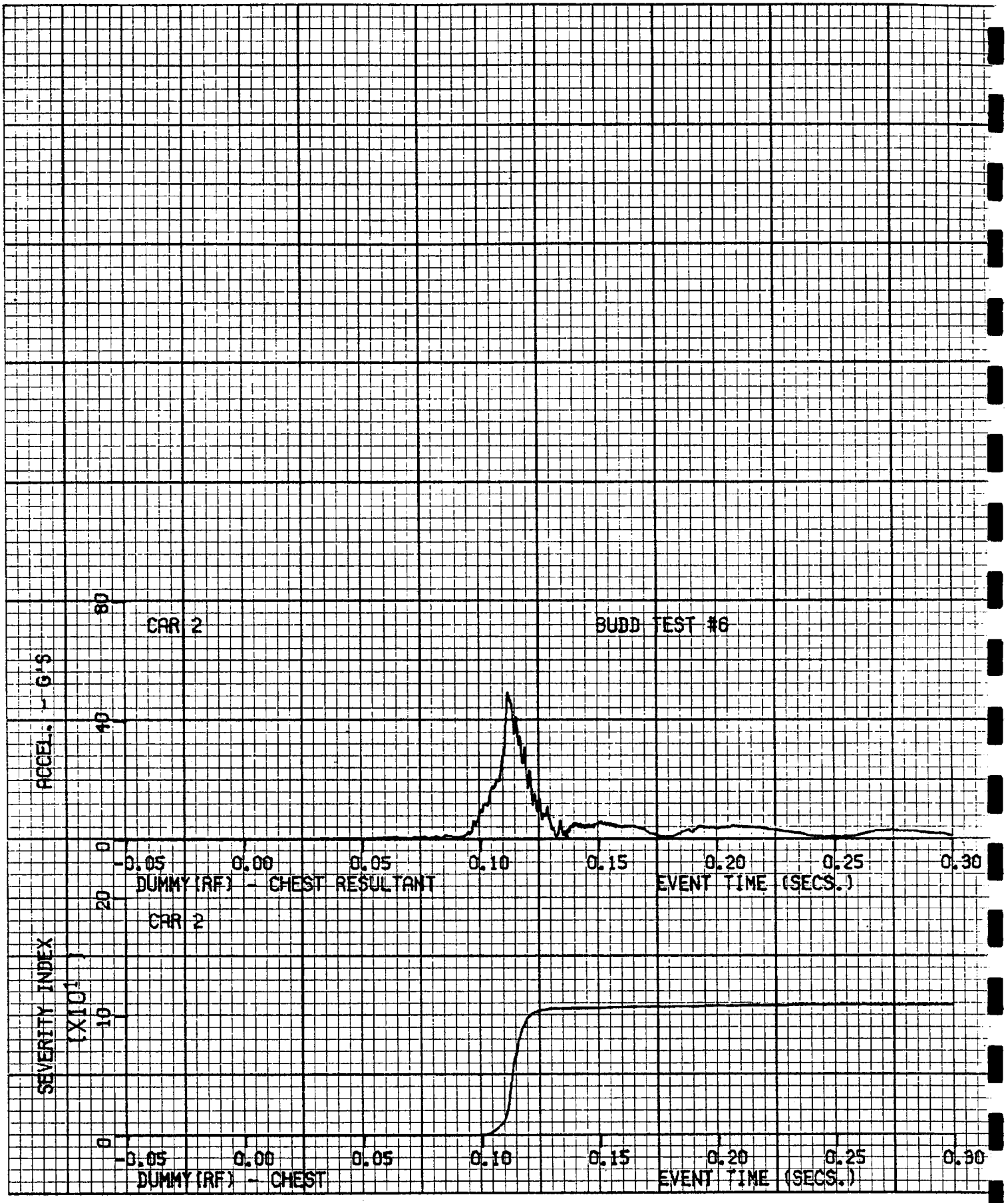

CAR 2
BUDD TEST #6
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - HEAD-X COMP.
EVENT TIME (SECS.)
CAR 2
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - HEAD-Y COMP.
EVENT TIME (SECS.)
CAR 2
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - HEAD-Z COMP.
EVENT TIME (SECS.)

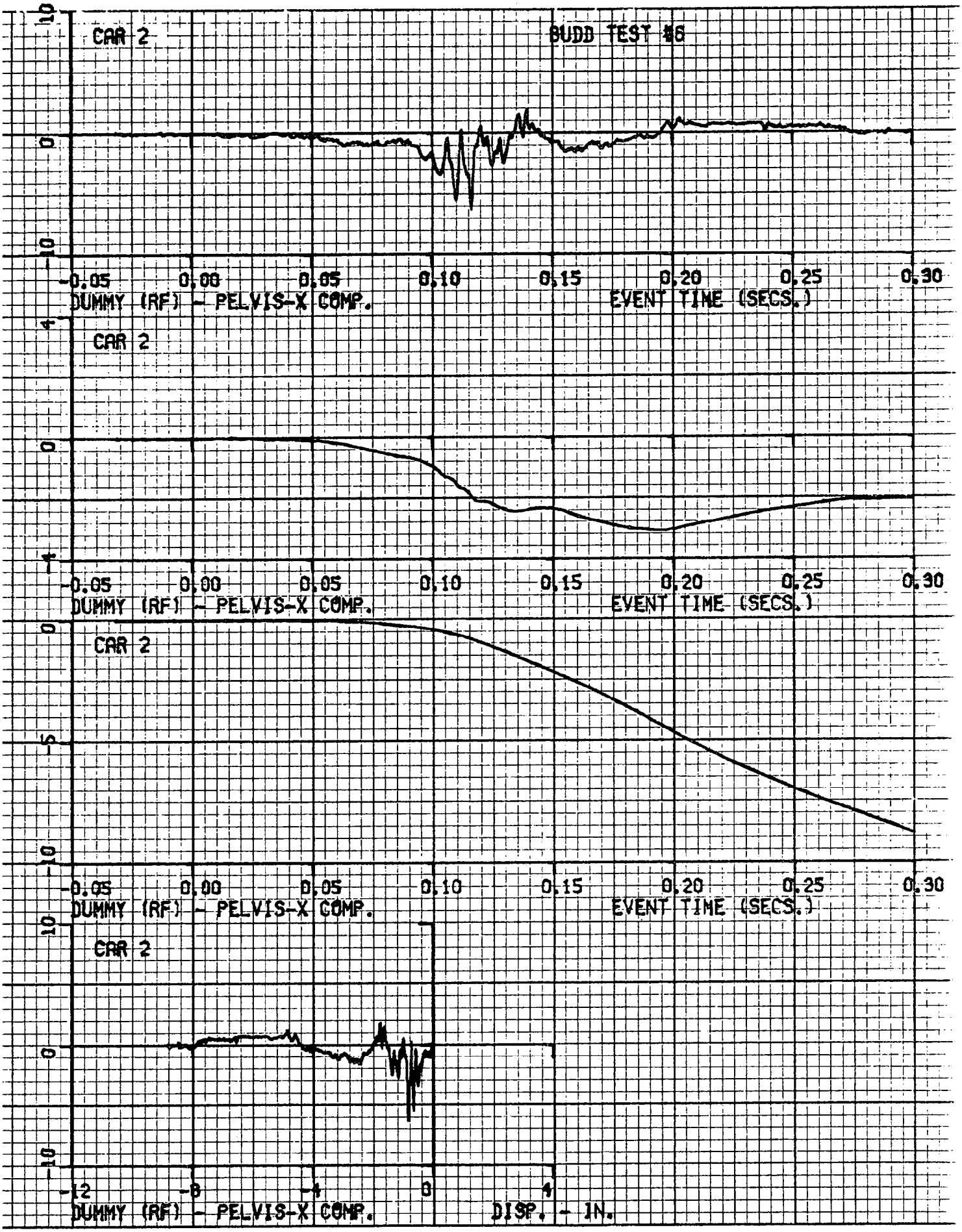

CAR 2
BUDD TEST #6
ACCEL. - G'S
40
20
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - HEAD RESULTANT
EVENT TIME (SECS.)
CAR 2
SEVERITY INDEX
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - HEAD
EVENT TIME (SECS.)

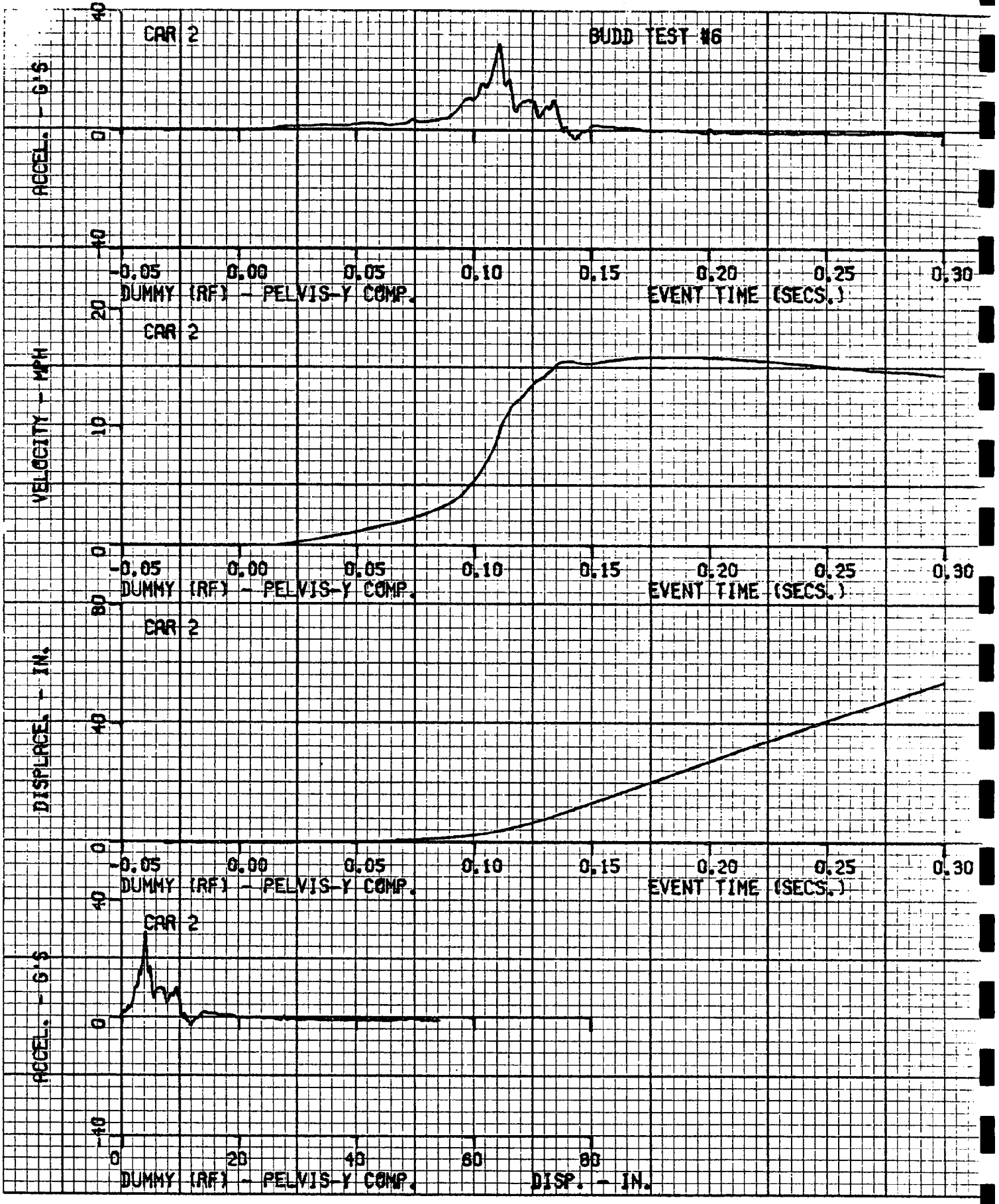

CAR 2
BUDD TEST #6
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-X COMP.
EVENT TIME (SECS.)
CAR 2
5
0
-5
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-X COMP.
EVENT TIME (SECS.)
CAR 2
0
-5
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-X COMP.
EVENT TIME (SECS.)
CAR 2
20
0
-20
-12
-8
-4
0
4
DUMMY (RF) - CHEST-X COMP.
DISP. - IN.


CAR 2
BUDD TEST #6
ACCEL. - G'S
50
0
-50
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
0
-20
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
50
0
-50
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-Y COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
50
0
-50
-20
0
20
40
60
DUMMY (RF) - CHEST-Y COMP.
DISP. - IN.


CAR 2
BUDD TEST #6
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-Z COMP.
EVENT TIME (SECS.)
CAR 2
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-Z COMP.
EVENT TIME (SECS.)
CAR 2
0
-4
-8
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST-Z COMP.
EVENT TIME (SECS.)
CAR 2
10
0
-10
-6
-4
-2
0
2
DUMMY (RF) - CHEST-Z COMP.
DISP. - IN.


CAR 2
BUDD TEST #6
ACCEL. - G'S
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST RESULTANT
EVENT TIME (SECS.)
CAR 2
SEVERITY INDEX
(X10¹)
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - CHEST
EVENT TIME (SECS.)


CAR 2
BUDD TEST 16
10
0
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - PELVIS-X COMP.
EVENT TIME (SECS.)
CAR 2
4
0
-4
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - PELVIS-X COMP.
EVENT TIME (SECS.)
CAR 2
0
-5
-10
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - PELVIS-X COMP.
EVENT TIME (SECS.)
CAR 2
-10
0
-10
-12
-8
-4
0
4
DUMMY (RF) - PELVIS-X COMP.
DISP. - IN.


CAR 2
BUDD TEST #6
ACCEL. - G'S
40
0
-40
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - PELVIS-Y COMP.
EVENT TIME (SECS.)
CAR 2
VELOCITY - MPH
20
10
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - PELVIS-Y COMP.
EVENT TIME (SECS.)
CAR 2
DISPLACE. - IN.
80
40
0
-0.05
0.00
0.05
0.10
0.15
0.20
0.25
0.30
DUMMY (RF) - PELVIS-Y COMP.
EVENT TIME (SECS.)
CAR 2
ACCEL. - G'S
40
0
-40
0
20
40
60
80
DUMMY (RF) - PELVIS-Y COMP.
DISP. - IN.