

Docket No OPMO-0184

ITEM 26

N-96-01
II-A-817

Information Brief
on
Bureau of Motor Carrier Safety (BMCS)
Truck Noise Data
for
Interstate Motor Carriers

8 June 1982

Standards and Regulations Division
Office of Noise Abatement and Control
U.S. Environmental Protection Agency

NOT FOR PUBLICATION

BACKGROUND

As mandated by the Noise Control Act of 1972, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation (DOT) issued noise emission standards and regulations for interstate motor carriers. The noise emission standards were issued by the EPA on October 21, 1974 and the regulations for compliance were issued by the DOT on September 12, 1975.

As part of the enforcement activity, the DOT's Bureau of Motor Carrier Safety (BMCS) established a truck noise measurement program which included data collecting, organizing and reporting functions.

DOT/BMCS MEMORANDA AND REPORTS ON TRUCK NOISE

The results of the truck noise measurement program were reported by DOT internal memorandum. One memorandum (HMC-11.4) and excerpts from twelve other memorandum reports were made available to the EPA's Office of Noise Abatement and Control (ONAC) for information and analysis.

The magnitude of the truck exterior noise measurement program, in terms of number of records per year, as provided in DOT Memo HMC-11.4 (no date) is as follows:

Year	<u>Number of Records</u>
1976	14,661
1977	11,052
1978	7,438
1979	11,692
1980	4,921
1981	3,322
Total	53,086

An excerpt from one of the memo reports provided noise level information for 14,948 records up to and including all of 1976. Other excerpts provided similar grouped noise level information on records by quarter of the year and type of test as indicated in the table on the following page. No additional information on measurements made in 1977 or the 1st Quarters of 1978 and 1979 was provided.

Table 1. Number of exterior noise records as determined from excerpts of DOT/BMCS internal memorandum reports.

<u>Time Frame</u>	<u>Type of Test</u>	<u>Number of Records</u>
Oct. 1975 to Dec. 1976	Probably Stationary	14,948
1978		
2nd Quarter	Stationary	1,139
	Hi-Speed	152
1979		
2nd Quarter	Stationary	907
	Hi-Speed	358
3rd Quarter	Stationary	1,615
	Hi-Speed	1,601
4th Quarter	Stationary	104
	Hi-Speed	1,030
1980		
1st Quarter	Stationary	121
2nd Quarter	Stationary	348
	Hi-Speed	492
3rd Quarter	Stationary	3,468
	Hi-Speed	1,763
	Low-Speed	60
4th Quarter	Stationary	465
1981		
1st Quarter	Stationary	126
	Hi-Speed	3
2nd Quarter	Stationary	1,031
3rd Quarter	Stationary	1,533
	Hi-Speed	17
	Total	31,281

The above information is summarized by type of test as follows:

<u>Type of test</u>	<u>Total Records</u>
Stationary	25,805
Hi-Speed	5,416
Low-Speed	60
Total	31,281

DOT/BMCS COMPUTER FILE OF TRUCK NOISE RECORDS

In addition to the above mentioned memorandum and excerpts, the BMCS supplied EPA/ONAC with a computer tape containing all of the information on 8402 measurements records made in the 1980/1981 time frame. The distribution of most of these records by type of test, measurement distance, and quarter of the year as determined from the computer tape is shown in the table on the following page.

Table 2. Number of exterior noise measurements per quarter of year entered on to BMCS computer tape (per telecon D.Gray/K.Ohlsoni 5/25/82).

	3Q80	4Q80	1Q81	2Q81	3Q81	Sum
High Speed/Soft Site						
35 < d < 38			3	93		96
39 < d < 42						
43 < d < 47						
48 < d < 57			43	6	49	
58 < d < 69				53	53	
70 < d < 83			58		58	
Low Speed/Soft Site						
35 < d < 38						
39 < d < 42						
43 < d < 47						
48 < d < 57			1	58	59	
58 < d < 69				1	1	
70 < d < 83						
High Speed/Hard Site						
35 < d < 38			3	46	49	
39 < d < 42						
43 < d < 47						
48 < d < 57	1			1	2	
58 < d < 69						
70 < d < 83						
Low Speed/Hard Site						
35 < d < 38						
39 < d < 42						
43 < d < 47						
48 < d < 57						
58 < d < 69						
70 < d < 83						
Stationary/Hard Site						
35 < d < 38	1	1	42	588	779	1411
39 < d < 42						
43 < d < 47				38	1	39
48 < d < 57	356	210	2876	2193		5635
58 < d < 69						
70 < d < 83						
Stationary/Soft Site						
35 < d < 38	1	1			1	3
39 < d < 42				334		335
43 < d < 47				131		131
48 < d < 57	109		3	57		169
58 < d < 69						
70 < d < 83						
Totals	2	468	255	3704	3661	8090***

***Of the 8402 records only 8090 had valid data for this analysis.

ANALYSIS OF 1980/1981, STATIONARY, HARD SITE, 50' DATA FOR "OLD" AND
"NEW" TRUCKS

For the 5635 records of tests made under conditions described as stationary, hard site, $48' < d < 57'$ we have determined that 2697 were for trucks manufactured in the years between 1952 and 1977, inclusive; and 2938 were for trucks manufactured in 1978 or thereafter. We have conducted a statistical analysis of the measured noise levels for each of the two sets of trucks.

<u>Statistic</u>	<u>Old Trucks Noise Level (1952-1977)</u>	<u>New Trucks Noise Level (1978 and later)</u>
Mean	81.79	79.22
Variance	15.95	11.75
Minimum (set at 70)	70.00	70.00
Maximum	99.00	96.00
Stnd Deviation	3.99	3.42
<u>Level</u>	<u>Percentage at or below indicated level</u>	
70	0.3	0.5
71	0.6	1.0
72	1.1	1.9
73	2.1	3.7
74	3.5	7.3
75	6.5	13.9
76	9.5	21.9
77	13.0	30.5
78	20.3	43.0
79	27.3	53.8
80	36.4	65.6
81	45.9	75.6
82	57.5	84.6
83	67.7	89.9
84	76.2	93.6
85	83.0	96.0
86	87.8	97.8
87	92.2	98.7
88	96.8	99.4
89	97.9	99.6
90	98.7	99.8
91	98.9	99.9

The above percentage sample population distributions are shown in the attached Figure 1.

ANALYSIS OF 1980/1981, HIGH-SPEED, SOFT SITE, 50' DATA FOR "OLD" AND
"NEW" TRUCKS

For 256 records of tests measured under conditions described as high-speed, soft site, at various distances, we have determined that 135 records were for trucks manufactured in the years between 1977 and 1952, inclusive; and 121 were for trucks manufactured in 1978 or thereafter. We have adjusted the noise data to account for the variation in measurement distance (normalized to 50') and then we conducted a statistical analysis of the adjusted noise levels for each of the two sets of trucks.

<u>Statistic</u>	<u>Old Trucks Noise Level (1952-1977)</u>	<u>New Trucks Noise Level (1978 and later)</u>
Mean	82.09	81.41
Variance	15.08	10.64
Minimum	75.00	72.00
Maximum	94.00	95.00
Stnd Deviation	3.88	3.26
<u>Level</u>	<u>Percentage at or below indicated level</u>	
72	0.0	0.8
73	0.0	0.0
74	0.0	1.7
75	0.7	0.0
76	2.2	5.8
77	4.4	9.1
78	13.3	14.9
79	23.7	24.8
80	43.7	39.7
81	52.6	52.8
82	67.4	69.4
83	74.1	79.3
84	80.7	86.8
85	82.2	87.6
86	85.2	95.0
87	88.9	95.9
88	91.1	98.3
89	91.9	99.2
90	94.1	0.0
91	96.3	0.0

The above percentage sample population distributions are shown in the attached Figure 2.

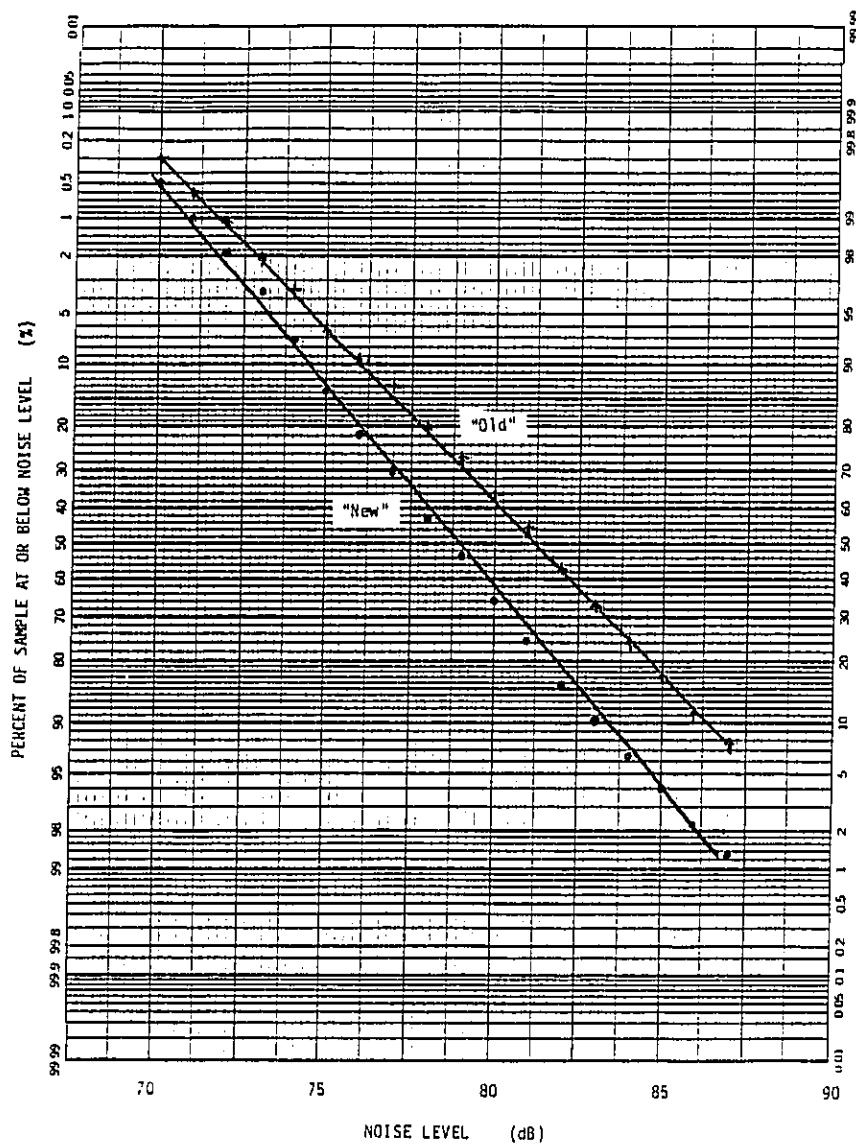


Figure 1. Truck Noise Level Sample Population Distributions for "Old" (+=1952 to 1977) and "New" (o=1978 and after) Trucks; Stationary, Hard Site, 50 Feet.

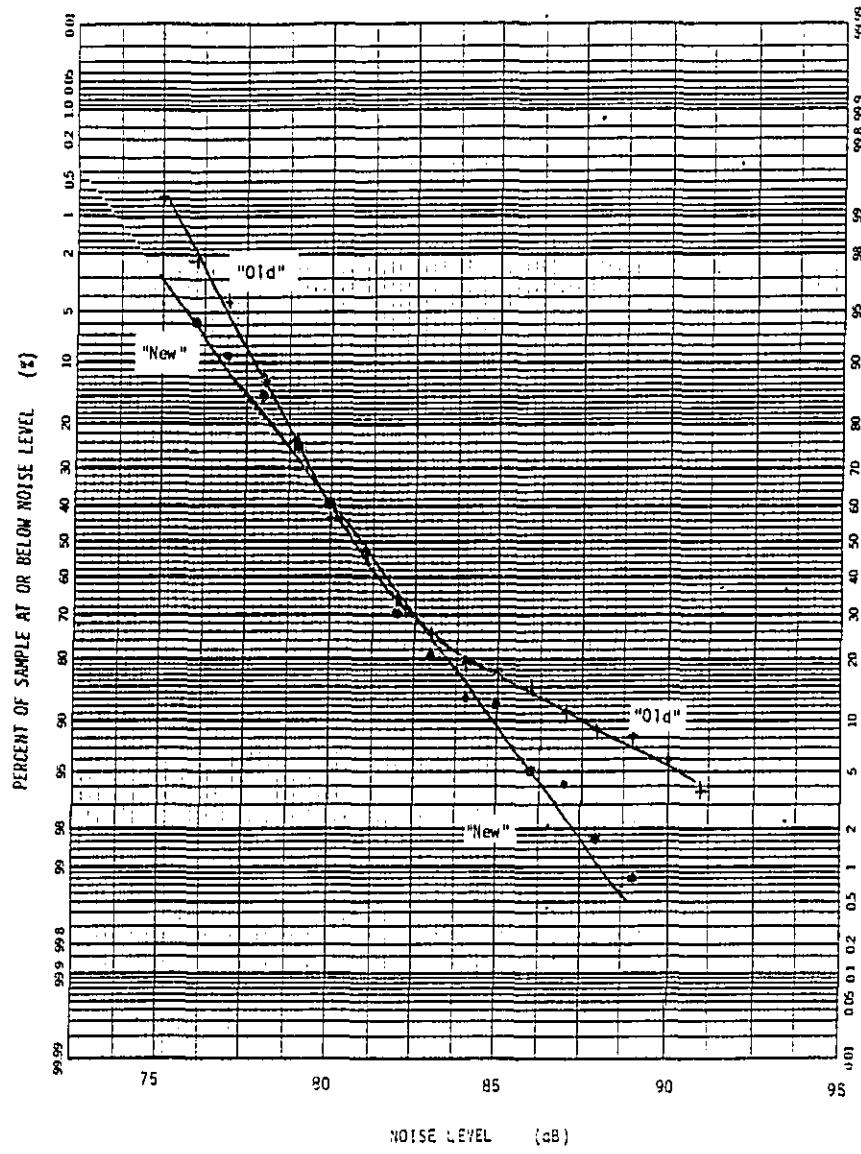


Figure 2. Truck Noise Level Sample Population Distributions for "Old" (+=1952 to 1977) and "New" (●=1978 and after) Trucks; High Speed Soft Site, 50 Feet.

From: Policy Analysis Department
MOTOR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

November 8, 1984

FS-5B

BUSES WITH DIESEL ENGINES
(Includes School Bus Chassis)

Factory Sales from Canadian Plants by Make & G.V.W.

9 Months 1984

G.V.W. <u>in lbs.</u>	<u>6,000 & less</u>	<u>6,001- 10,000</u>	<u>10,001- 14,000</u>	<u>14,001- 16,000</u>	<u>16,001- 19,500</u>	<u>19,501- 26,000</u>	<u>26,001- 33,000</u>	<u>33,001 & Over</u>	Total
<u>CANADA DOMESTIC</u>									
GMC	-	-	-	-	-	-	-	<u>234</u>	<u>234</u>
T O T A L	-	-	-	-	-	-	-	<u>234</u>	<u>234</u>
<u>CANADA EXPORTS TO U.S.</u>									
GMC	-	-	-	-	-	-	-	<u>47</u>	<u>47</u>
T O T A L	-	-	-	-	-	-	-	<u>47</u>	<u>47</u>
<u>OTHER EXPORTS FROM CANADA</u>									
NONE									
<u>CANADA TOTAL</u>									
GMC	-	-	-	-	-	-	-	<u>281</u>	<u>281</u>
T O T A L	-	-	-	-	-	-	-	<u>281</u>	<u>281</u>

DIESEL ENGINES USED IN BUSES
FROM CANADIAN PLANTS

9 Months 1984

	<u>Detroit</u>	Total
GMC	<u>281</u>	<u>281</u>
T O T A L	<u>281</u>	<u>281</u>

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 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-5B

BUSES WITH DIESEL ENGINES
 (Includes School Bus Chassis)

Factory Sales from U.S. Plants by Make & G.V.W.

9 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
U.S. DOMESTIC									
Chevrolet	-	-	-	-	-	28	-	-	28
Ford	-	-	-	-	-	1,332	-	-	1,332
GMC	-	-	-	-	-	468	-	205	673
International	-	-	-	-	-	2,273	3,004	-	5,277
Others	-	-	-	-	-	48	436	5	489
T O T A L	-	-	-	-	-	4,149	3,440	210	7,799
U.S. EXPORTS TO CANADA									
Chevrolet	-	-	-	-	-	1	-	-	1
Ford	-	-	-	-	-	163	-	-	163
GMC	-	-	-	-	-	106	-	-	106
International	-	-	-	-	-	85	59	-	144
T O T A L	-	-	-	-	-	355	59	-	414
OTHER EXPORTS FROM U.S.									
Ford	-	-	-	-	-	38	-	-	38
GMC	-	-	-	-	-	4	-	-	4
International	-	-	-	-	-	184	204	-	388
T O T A L	-	-	-	-	-	226	204	-	430
U.S. TOTAL									
Chevrolet	-	-	-	-	-	29	-	-	29
Ford	-	-	-	-	-	1,533	-	205	1,533
GMC	-	-	-	-	-	578	-	-	783
International	-	-	-	-	-	2,542	3,267	-	5,809
Others	-	-	-	-	-	48	436	5	489
T O T A L	-	-	-	-	-	4,730	3,703	210	8,643

DIESEL ENGINES USED IN BUSES
 FROM U.S. PLANTS

9 Months 1984

	Caterpillar	Detroit	International	Total
Chevrolet	-	29	-	29
Ford	110	1,423	-	1,533
GMC	-	783	-	783
International	-	-	5,809	5,809
Others	56	433	-	489
T O T A L	166	2,668	5,809	8,643

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 MOTOR VEHICLE MANUFACTURERS
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 Detroit, Michigan 48202

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 November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

U.S. Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	455,491	296,328	-	-	265	3,376	9,671	704	765,835
GMC	122,220	79,610	-	-	3,277	2,776	13,368	13,098	234,349
Chrysler	107,213	50,455	-	-	-	-	-	-	157,668
Ford	478,748	354,023	1,397	-	-	7,601	24,488	13,501	879,758
Freightliner	-	-	-	-	-	-	-	13,044	13,044
International	-	-	-	-	-	9,067	12,647	22,767	44,481
Jeep Corp.	116,581	24,424	-	-	-	-	-	-	141,005
Kenworth	-	-	-	-	-	-	-	10,780	10,780
Mack	-	-	-	-	-	-	-	18,308	18,308
Mercedes-Benz	-	-	-	-	-	1,943	1,249	-	3,192
Peterbilt	-	-	-	-	-	-	-	11,195	11,195
Volvo White	-	-	-	-	-	-	-	7,265	7,265
Others	-	3	1	4	5	124	58	521	716
TOTAL TRUCKS	1,280,253	804,843	1,398	4	3,547	24,887	61,481	111,183	2,287,596
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	4,677	-	-	4,677
GMC	-	-	-	-	-	5,046	-	205	5,251
Ford	-	-	-	-	-	3,538	-	-	3,538
International	-	-	-	-	-	6,673	3,267	-	9,940
Others	-	-	-	-	-	48	436	5	489
TOTAL BUSES	-	-	-	-	-	19,982	3,703	210	23,895
T O T A L	1,280,253	804,843	1,398	4	3,547	44,869	65,184	111,393	2,311,491

Less than 10% (1,280,253)
 1,007,343

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November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

U.S. Exports to Canada

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	16,045	4,995	-	-	47	115	760	73	22,035
GMC	13,808	5,081	-	-	136	238	1,415	1,693	22,371
Chrysler	12,519	3,544	-	-	-	-	-	-	16,063
Ford	20,222	16,490	1,397	-	-	252	1,724	3,274	43,359
Freightliner	-	-	-	-	-	-	-	41	41
International	-	-	-	-	-	957	1,374	1,620	3,951
Jeep Corp.	5,467	379	-	-	-	-	-	-	5,846
Kenworth	-	-	-	-	-	-	-	26	26
Mack	-	-	-	-	-	-	-	549	549
Mercedes-Benz	-	-	-	-	-	133	152	-	285
Peterbilt	-	-	-	-	-	-	-	255	255
Volvo White	-	-	-	-	-	-	-	16	16
TOTAL TRUCKS	68,061	30,489	1,397	-	183	1,695	5,425	7,547	114,797
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	461	-	-	461
GMC	-	-	-	-	-	1,028	-	-	1,028
Ford	-	-	-	-	-	436	-	-	436
International	-	-	-	-	-	589	59	-	648
TOTAL BUSES	-	-	-	-	-	2,514	59	-	2,573
T O T A L	68,061	30,489	1,397	-	183	4,209	5,484	7,547	117,370

From: Policy Analysis Department
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 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

Other Exports from U.S.

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	482	1,539	-	-	-	249	46	1	2,317
GMC	169	4,953	-	-	8	98	307	40	5,575
Chrysler	1,153	270	-	-	-	-	-	-	1,423
Ford	371	3,857	-	-	-	47	253	31	4,559
International	-	-	-	-	-	747	325	211	1,283
Jeep Corp.	5,654	6,538	-	-	-	-	-	-	12,192
Kenworth	-	-	-	-	-	-	-	70	70
Mack	-	-	-	-	-	-	-	796	796
Volvo White	-	-	-	-	-	-	-	19	19
Others	-	-	-	-	-	-	-	42	42
TOTAL TRUCKS	7,829	17,157	-	-	8	1,141	931	1,210	28,276
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	130	-	-	130
GMC	-	-	-	-	-	333	-	-	333
Ford	-	-	-	-	-	80	-	-	80
International	-	-	-	-	-	248	204	-	452
TOTAL BUSES	-	-	-	-	-	791	204	-	995
T O T A L	7,829	17,157	-	-	8	1,932	1,135	1,210	29,271

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 Detroit, Michigan 48202

November 8, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

U.S. Domestic

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total	
TRUCKS (Excluding School Bus Chassis)										
Chevrolet	438,964	289,794	-	-	218	3,012	8,865	630	741,483	
GMC	108,243	69,576	-	-	3,133	2,440	11,646	11,365	206,403	
Chrysler	93,541	46,641	-	-	-	-	-	-	140,182	
Ford	458,155	333,676	-	-	-	7,302	22,511	10,196	831,840	
Freightliner	-	-	-	-	-	-	-	13,003	13,003	
International	-	-	-	-	-	7,363	10,948	20,936	39,247	
Jeep Corp.	105,460	17,507	-	-	-	-	-	-	122,967	
Kenworth	-	-	-	-	-	-	-	10,684	10,684	
Mack	-	-	-	-	-	-	-	16,963	16,963	
Mercedes-Benz	-	-	-	-	-	1,810	1,097	-	2,907	
Peterbilt	-	-	-	-	-	-	-	10,940	10,940	
Volvo White	-	-	-	-	-	-	-	7,230	7,230	
Others	-	-	3	1	4	5	124	58	479	
TOTAL TRUCKS	1,204,363	757,197		1	4	3,356	22,051	55,125	102,426	2,144,523
BUSES (Including School Bus Chassis)										
Chevrolet	-	-	-	-	-	4,086	-	-	4,086	
GMC	-	-	-	-	-	3,685	-	205	3,890	
Ford	-	-	-	-	-	3,022	-	-	3,022	
International	-	-	-	-	-	5,836	3,004	-	8,840	
Others	-	-	-	-	-	48	436	5	489	
TOTAL BUSES	-	-				16,677	3,440	210	20,327	
T O T A L	1,204,363	757,197		1	4	3,356	38,728	58,565	102,636	2,164,850

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

Canada Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	76,216	78,588	-	-	-	-	-	-	154,804
GMC	28,383	33,148	-	-	-	-	-	-	61,531
Chrysler	186,253	81,326	-	-	-	-	-	-	267,579
Ford	-	113,624	-	-	-	-	-	-	113,624
Freightliner*	-	-	-	-	-	-	970	1,140	1,553
International	-	-	-	-	-	-	-	3,700	5,810
Kenworth	-	-	-	-	-	-	-	1,480	1,480
Mack	-	-	-	-	-	-	-	2,271	2,271
Western Star	-	-	-	-	-	-	-	1,525	1,525
TOTAL TRUCKS	290,852	306,686	-	-	-	970	1,140	10,529	610,177
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	-	281
TOTAL BUSES	-	-	-	-	-	-	970	1,140	281
TOTAL	290,852	306,686	-	-	-	970	1,140	10,810	610,458

* Revised.

From: Policy Analysis Department
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 Detroit, Michigan 48202

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FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

Canada Exports to U.S.

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	60,378	68,226	-	-	-	-	-	-	128,604
GMC	14,204	23,345	-	-	-	-	-	-	37,549
Chrysler	167,659	74,835	-	-	-	-	-	-	242,494
Ford	-	87,197	-	-	-	-	-	-	87,197
Freightliner	-	-	-	-	-	-	-	225	225
International	-	-	-	-	-	878	970	3,193	5,041
Kenworth	-	-	-	-	-	-	-	483	483
Mack	-	-	-	-	-	-	-	934	934
Western Star	-	-	-	-	-	-	-	743	743
TOTAL TRUCKS	242,241	253,603	-	-	-	878	970	5,578	503,270
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	47	47
TOTAL BUSES	-	-	-	-	-	-	-	47	47
T O T A L	242,241	253,603	-	-	-	878	970	5,625	503,317

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November 8, 1984

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Policy Analysis Department
OR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
Complete Vehicles and Chassis

9 Months 1984

Other Exports from Canada

G.W. lbs.	6,000 & less	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 & Over	Total
JCKS (Excluding School Bus Chassis)									
Chevrolet	415	733	-	-	-	-	-	-	1,148
Cadillac	358	920	-	-	-	-	-	-	1,278
Dodge	1,958	1,182	-	-	-	-	-	-	3,140
Ford	-	462	-	-	-	-	-	-	462
International	-	-	-	-	-	3	4	27	34
Northstar	-	-	-	-	-	-	-	1	1
Stern Star	-	-	-	-	-	-	-	36	36
TAL TRUCKS	2,731	3,297	-	-	-	3	4	64	6,099
SES (Including School Bus Chassis)									
NE	-	-	-	-	-	-	-	-	-
OTAL	2,731	3,297	-	-	-	3	4	64	6,099

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

Canada Domestic

G.V.W. <u>in lbs.</u>	6,000 <u>& less</u>	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 <u>& Over</u>	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	15,423	9,629	-	-	-	-	-	-	25,052
GMC	13,821	8,883	-	-	-	-	-	-	22,704
Chrysler	16,636	5,309	-	-	-	-	-	-	21,945
Ford	-	25,965	-	-	-	-	-	-	25,965
Freightliner*	-	-	-	-	-	-	-	1,328	1,328
International	-	-	-	-	-	89	166	480	735
Kenworth	-	-	-	-	-	-	-	996	996
Mack	-	-	-	-	-	-	-	1,337	1,337
Western Star	-	-	-	-	-	-	-	746	746
TOTAL TRUCKS	45,880	49,786	-	-	-	89	166	4,887	100,808
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	234	234
TOTAL BUSES	-	-	-	-	-	-	-	234	234
T O T A L	45,880	49,786	-	-	-	89	166	5,121	101,042

* Revised.

November 8, 1984

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From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

9 Months 1984

U.S. and Canada Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	531,707	374,916	-	-	265	3,376	9,671	704	920,639
GMC	150,603	112,758	-	-	3,277	2,776	13,368	13,098	295,880
Chrysler	293,466	131,781	-	-	-	-	-	-	425,247
Ford	478,748	467,647	1,397	-	-	-	7,601	24,488	13,501
Freightliner*	-	-	-	-	-	-	-	-	993,382
International	-	-	-	-	-	-	-	-	14,597
Jeep Corp.	116,581	24,424	-	-	-	-	-	-	14,597
Kenworth	-	-	-	-	-	-	-	-	50,291
Mack	-	-	-	-	-	-	-	-	141,005
Mercedes-Benz	-	-	-	-	-	-	-	-	12,260
Peterbilt	-	-	-	-	-	-	-	-	12,260
Volvo White	-	-	-	-	-	-	-	-	20,579
Western Star	-	-	-	-	-	-	-	-	20,579
Others	-	3	1	4	5	124	58	521	3,192
TOTAL TRUCKS	1,571,105	1,111,529	1,398	4	3,547	25,857	62,621	121,712	2,897,773
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	4,677	-	-	4,677
GMC	-	-	-	-	-	5,046	-	486	5,532
Ford	-	-	-	-	-	3,538	-	-	3,538
International	-	-	-	-	-	6,673	3,267	-	9,940
Others	-	-	-	-	-	48	436	5	489
TOTAL BUSES	-	-	-	-	-	19,982	3,703	491	24,176
T O T A L	1,571,105	1,111,529	1,398	4	3,547	45,839	66,324	122,203	2,921,949

* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

U.S. Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	363,874	238,872	-	-	207	2,784	7,511	573	613,821
GMC	96,811	63,353	-	-	2,111	2,233	10,842	9,913	185,263
Chrysler	81,241	36,364	-	-	-	-	-	-	117,605
Ford	366,493	275,133	864	-	-	6,310	19,954	10,043	678,797
Freightliner	-	-	-	-	-	-	-	9,896	9,896
International	-	-	-	-	-	7,369	9,524	17,371	34,264
Jeep Corp.	88,484	19,967	-	-	-	-	-	-	108,451
Kenworth	-	-	-	-	-	-	-	8,479	8,479
Mack	-	-	-	-	-	-	-	14,232	14,232
Mercedes-Benz	-	-	-	-	-	1,352	960	-	2,312
Peterbilt	-	-	-	-	-	-	-	8,659	8,659
Volvo-White	-	-	-	-	-	-	-	5,741	5,741
Others	-	3	-	-	5	65	54	415	542
TOTAL TRUCKS	996,903	633,692	864	-	2,323	20,113	48,845	85,322	1,788,062
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	3,923	-	-	3,923
GMC	-	-	-	-	-	4,115	-	80	4,195
Ford	-	-	-	-	-	2,809	-	-	2,809
International	-	-	-	-	-	5,399	2,458	-	7,857
Others	-	-	-	-	-	48	405	-	453
TOTAL BUSES	-	-	-	-	-	16,294	2,863	80	19,237
T O T A L	996,903	633,692	864	-	2,323	36,407	51,708	85,402	1,807,299

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From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

U.S. Exports to Canada

G.V.W. in lbs.	6,000 & less	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	14,173	4,361	-	-	38	101	602	61	19,336
GMC	11,854	4,356	-	-	122	203	1,135	1,301	18,971
Chrysler	10,011	2,513	-	-	-	-	-	-	12,524
Ford	15,019	13,819	864	-	-	220	1,520	2,195	33,637
Freightliner	-	-	-	-	-	-	-	41	41
International	-	-	-	-	-	808	889	1,150	2,847
Jeep Corp.	4,362	301	-	-	-	-	-	-	4,663
Kenworth	-	-	-	-	-	-	-	3	3
Mack	-	-	-	-	-	-	-	418	418
Mercedes-Benz	-	-	-	-	-	93	121	-	214
Peterbilt	-	-	-	-	-	-	-	149	149
Volvo White	-	-	-	-	-	-	-	5	5
TOTAL TRUCKS	55,419	25,350	864	-	160	1,425	4,267	5,323	92,808
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	423	-	-	423
GMC	-	-	-	-	-	835	-	-	835
Ford	-	-	-	-	-	399	-	-	399
International	-	-	-	-	-	449	27	-	476
TOTAL BUSES	-	-	-	-	-	2,106	27	-	2,133
T O T A L	55,419	25,350	864	-	160	3,531	4,294	5,323	94,941

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

Other Exports from Canada

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	435	1,249	-	-	-	234	37	1	1,956
GMC	145	3,885	-	-	4	46	221	26	4,327
Chrysler	633	233	-	-	-	-	-	-	866
Ford	336	3,200	-	-	-	45	239	31	3,851
International	-	-	-	-	-	591	220	150	961
Jeep Corp.	4,939	5,803	-	-	-	-	-	-	10,742
Kenworth	-	-	-	-	-	-	-	41	41
Mack	-	-	-	-	-	-	-	679	679
Volvo White	-	-	-	-	-	-	-	18	18
Others	-	-	-	-	-	-	-	37	37
TOTAL TRUCKS	6,488	14,370	-	-	4	916	717	983	23,478
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	89	-	-	89
GMC	-	-	-	-	-	292	-	-	292
Ford	-	-	-	-	-	74	-	-	74
International	-	-	-	-	-	217	161	-	378
TOTAL BUSES	-	-	-	-	-	672	161	-	833
T O T A L .	6,488	14,370	-	-	4	1,588	878	983	24,311

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

U.S. Domestic

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	349,266	233,262	-	-	169	2,449	6,872	511	592,529
GMC	84,812	55,112	-	-	1,985	1,984	9,486	8,586	161,965
Chrysler	70,597	33,618	-	-	-	-	-	-	104,215
Ford	351,138	258,114	-	-	-	6,045	18,195	7,817	641,309
Freightliner	-	-	-	-	-	-	-	9,855	9,855
International	-	-	-	-	-	5,970	8,415	16,071	30,456
Jeep Corp.	79,183	13,863	-	-	-	-	-	-	93,046
Kenworth	-	-	-	-	-	-	-	8,435	8,435
Mack	-	-	-	-	-	-	-	13,135	13,135
Mercedes-Benz	-	-	-	-	-	1,259	839	-	2,098
Peterbilt	-	-	-	-	-	-	-	8,510	8,510
Volvo White	-	-	-	-	-	-	-	5,718	5,718
Others	-	3	-	-	5	65	54	378	505
TOTAL TRUCKS	934,996	593,972	-	-	2,159	17,772	43,861	79,016	1,671,776
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	3,411	-	-	3,411
GMC	-	-	-	-	-	2,988	-	80	3,068
Ford	-	-	-	-	-	2,336	-	-	2,336
International	-	-	-	-	-	4,733	2,270	-	7,003
Others	-	-	-	-	-	48	405	-	453
TOTAL BUSES	-	-	-	-	-	13,516	2,675	80	16,271
T O T A L	934,996	593,972	-	-	2,159	31,288	46,536	79,096	1,688,047

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

Canada Total

G.V.W. in lbs.	6,000 & less	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	63,061	63,284	-	-	-	-	-	-	126,345
GMC	23,766	26,959	-	-	-	-	-	-	50,725
Chrysler	147,461	52,602	-	-	-	-	-	-	200,063
Ford	-	88,266	-	-	-	-	-	-	88,266
Freightliner	-	-	-	-	-	-	-	1,140	1,140
International*	-	-	-	-	-	478	910	2,607	3,995
Kenworth	-	-	-	-	-	-	-	1,145	1,145
Mack	-	-	-	-	-	-	-	1,593	1,593
Western Star	-	-	-	-	-	-	-	1,144	1,144
TOTAL TRUCKS	234,288	231,111	-	-	-	478	910	7,629	474,416
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	<u>264</u>	<u>264</u>
TOTAL BUSES	-	-	-	-	-	-	-	264	264
T O T A L	234,288	231,111	-	-	-	478	910	7,893	474,680

* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

Canada Exports to U.S.

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	49,787	54,998	-	-	-	-	-	-	104,785
GMC	11,929	19,368	-	-	-	-	-	-	31,297
Chrysler	133,180	47,247	-	-	-	-	-	-	180,427
Ford	-	67,372	-	-	-	-	-	-	67,372
Freightliner	-	-	-	-	-	-	-	175	175
International*	-	-	-	-	-	401	783	2,224	3,408
Kenworth	-	-	-	-	-	-	-	353	353
Mack	-	-	-	-	-	-	-	547	547
Western Star	-	-	-	-	-	-	-	567	567
TOTAL TRUCKS	194,896	188,985	-	-	-	401	783	3,866	388,931
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	44	44
TOTAL BUSES	-	-	-	-	-	-	-	44	44
T O T A L	194,896	188,985	-	-	-	401	783	3,910	388,975

* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

Other Exports From Canada

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
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TRUCKS (Excluding School Bus Chassis)

Chevrolet	369	594	-	-	-	-	-	-	963
GMC	329	496	-	-	-	-	-	-	825
Chrysler	1,449	936	-	-	-	-	-	-	2,385
Ford	-	462	-	-	-	-	-	-	462
International*	-	-	-	-	-	-	4	26	30
Kenworth	-	-	-	-	-	-	-	1	1
Western Star	-	-	-	-	-	-	-	28	28
TOTAL TRUCKS	2,147	2,488	-	-	-	-	4	55	4,694

BUSES (Including School Bus Chassis)

NONE

T O T A L	2,147	2,488	-	-	-	-	4	55	4,694
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* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

Canada Domestic

G.V.W. in lbs.	6,000 & less	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	12,905	7,692	-	-	-	-	-	-	20,597
GMC	11,508	7,095	-	-	-	-	-	-	18,603
Chrysler	12,832	4,419	-	-	-	-	-	-	17,251
Ford	-	20,432	-	-	-	-	-	-	20,432
Freightliner	-	-	-	-	-	-	-	965	965
International*	-	-	-	-	-	77	123	357	557
Kenworth	-	-	-	-	-	-	-	791	791
Mack	-	-	-	-	-	-	-	1,046	1,046
Western Star	-	-	-	-	-	-	-	549	549
TOTAL TRUCKS	37,245	39,638	-	-	-	77	123	3,708	80,791
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	220	220
TOTAL BUSES	-	-	-	-	-	-	-	220	220
T O T A L	37,245	39,638	-	-	-	77	123	3,928	81,011

* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

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FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

7 Months 1984

U.S. and Canada Total

G.V.W. <u>in lbs.</u>	6,000 <u>& less</u>	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001~ <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 <u>& Over</u>	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	426,935	302,156	-	-	207	2,784	7,511	573	740,166
GMC	120,577	90,312	-	-	2,111	2,233	10,842	9,913	235,988
Chrysler	228,702	88,966	-	-	-	-	-	-	317,668
Ford	366,493	363,399	864	-	-	6,310	19,954	10,043	767,063
Freightliner	-	-	-	-	-	-	-	11,036	11,036
International	-	-	-	-	-	7,847	10,434	19,978	38,259
Jeep Corp.	88,484	19,967	-	-	-	-	-	-	108,451
Kenworth	-	-	-	-	-	-	-	9,624	9,624
Mack	-	-	-	-	-	-	-	15,825	15,825
Mercedes-Benz	-	-	-	-	-	1,352	960	-	2,312
Peterbilt	-	-	-	-	-	-	-	8,659	8,659
Volvo White	-	-	-	-	-	-	-	5,741	5,741
Western Star	-	-	-	-	-	-	-	1,144	1,144
Others	-	3	-	-	5	65	54	415	542
TOTAL TRUCKS	1,231,191	864,803	864	-	2,323	20,591	49,755	92,951	2,262,478
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	3,923	-	-	3,923
GMC	-	-	-	-	-	4,115	-	344	4,459
Ford	-	-	-	-	-	2,809	-	-	2,809
International	-	-	-	-	-	5,399	2,458	-	7,857
Others	-	-	-	-	-	48	405	-	453
TOTAL BUSES	-	-	-	-	-	16,294	2,863	344	19,501
T O T A L	1,231,191	864,803	864	-	2,323	36,885	52,618	93,295	2,281,979

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 13, 1984

FS-3 SUPPLEMENT

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Less Sales to Federal Government

6 Months 1984

U.S. Domestic

G.V.W. <u>in lbs.</u>	6,000 <u>& less</u>	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 <u>& Over</u>	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	296,603	186,504	-	-	142	2,237	5,743	373	491,602
GMC	72,214	47,266	-	-	1,512	1,666	8,288	7,102	138,048
Chrysler	61,085	29,280	-	-	-	-	-	-	90,365
Ford	316,583	235,112	-	-	-	5,310	15,789	6,608	579,402
Freightliner	-	-	-	-	-	-	-	8,170	8,170
International	-	-	-	-	-	5,544	7,560	14,229	27,333
Jeep Corp.	72,082	13,234	-	-	-	-	-	-	85,316
Kenworth	-	-	-	-	-	-	-	7,485	7,485
Mack	-	-	-	-	-	-	-	11,347	11,347
Mercedes-Benz	-	-	-	-	-	1,061	672	-	1,733
Peterbilt	-	-	-	-	-	-	-	7,212	7,212
Volvo White	-	-	-	-	-	-	-	4,899	4,899
Others	-	3	-	-	5	42	46	322	418
TOTAL TRUCKS	818,567	511,399	-	-	1,659	15,860	38,098	67,747	1,453,330
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	2,852	-	-	2,852
GMC	-	-	-	-	-	2,601	-	77	2,678
Ford	-	-	-	-	-	2,029	-	-	2,029
International	-	-	-	-	-	4,155	2,012	-	6,167
Others	-	-	-	-	-	43	360	-	403
TOTAL BUSES	-	-	-	-	-	11,680	2,372	77	14,129
T O T A L	818,567	511,399	-	-	1,659	27,540	40,470	67,824	1,467,459

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

U.S. Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	41,946	27,499	-	-	30	183	810	43	70,511
GMC	11,401	8,353	-	-	627	241	1,160	1,356	23,138
Chrysler	12,481	5,882	-	-	-	-	-	-	18,363
Ford	55,302	39,432	316	-	-	783	2,669	1,814	100,316
Freightliner	-	-	-	-	-	-	-	1,491	1,491
International	-	-	-	-	-	861	1,501	2,579	4,941
Jeep Corp.	14,369	2,201	-	-	-	-	-	-	16,570
Kenworth	-	-	-	-	-	-	-	1,049	1,049
Mack	-	-	-	-	-	-	-	2,213	2,213
Mercedes-Benz	-	-	-	-	-	224	151	-	375
Peterbilt	-	-	-	-	-	-	-	1,131	1,131
Volvo White	-	-	-	-	-	-	-	779	779
Others	-	-	-	1	4	-	24	1	51
TOTAL TRUCKS	135,499	83,367	317	4	657	2,316	6,292	12,506	240,958
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	369	-	-	369
GMC	-	-	-	-	-	410	-	82	492
Ford	-	-	-	-	-	378	-	-	378
International	-	-	-	-	-	680	274	-	954
Others	-	-	-	-	-	-	22	5	27
TOTAL BUSES	-	-	-	-	-	1,837	296	87	2,220
T O T A L	135,499	83,367	317	4	657	4,153	6,588	12,593	243,178

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From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

U.S. Exports to Canada

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	1,043	415	-	-	1	3	32	4	1,498
GMC	986	452	-	-	5	16	106	217	1,782
Chrysler	1,072	507	-	-	-	-	-	-	1,579
Ford	1,491	1,184	316	-	-	27	120	448	3,586
International	-	-	-	-	-	69	233	191	493
Jeep Corp.	610	36	-	-	-	-	-	-	646
Mack	-	-	-	-	-	-	-	86	86
Mercedes-Benz	-	-	-	-	-	20	12	-	32
Peterbilt	-	-	-	-	-	-	-	4	4
Volvo White	-	-	-	-	-	-	-	9	9
TOTAL TRUCKS	5,202	2,594	316	-	6	135	503	959	9,715
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	13	-	-	13
GMC	-	-	-	-	-	74	-	-	74
Ford	-	-	-	-	-	14	-	-	14
International	-	-	-	-	-	74	24	-	98
TOTAL BUSES	-	-	-	-	-	175	24	-	199
T O T A L	5,202	2,594	316	-	6	310	527	959	9,914

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

G.V.W. in lbs.	Other Exports from U.S.								Total
	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	5	231	-	-	-	-	-	-	236
GMC	1	957	-	-	4	11	29	3	1,005
Chrysler	128	8	-	-	-	-	-	-	136
Ford	31	362	-	-	-	-	4	-	397
International	-	-	-	-	-	49	35	38	759
Jeep Corp.	319	440	-	-	-	-	-	14	14
Kenworth	-	-	-	-	-	-	-	72	72
Mack	-	-	-	-	-	-	-	4	4
Others	-	-	-	-	-	-	-	-	-
TOTAL TRUCKS	484	1,998	-	-	4	60	68	131	2,745
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	2	-	-	2
GMC	-	-	-	-	-	23	-	-	23
International	2	2	2	2	2	8	40	-	48
TOTAL BUSES	-	-	-	-	-	33	40	-	73
T O T A L	484	1,998	-	-	4	93	108	131	2,818

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

U.S. Domestic

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	40,898	26,853	-	-	29	180	778	39	68,777
GMC	10,414	6,944	-	-	618	214	1,025	1,136	20,351
Chrysler	11,281	5,367	-	-	-	-	-	-	16,648
Ford	53,780	37,886	-	-	-	756	2,545	1,366	96,333
Freightliner	-	-	-	-	-	-	-	1,491	1,491
International	-	-	-	-	-	743	1,233	2,350	4,326
Jeep Corp.	13,440	1,725	-	-	-	-	-	-	15,165
Kenworth	-	-	-	-	-	-	-	1,035	1,035
Mack	-	-	-	-	-	-	-	2,055	2,055
Mercedes-Benz	-	-	-	-	-	204	139	-	343
Peterbilt	-	-	-	-	-	-	-	1,127	1,127
Volvo White	-	-	-	-	-	-	-	770	770
Others	-	-	1	4	-	24	-	47	77
TOTAL TRUCKS	129,813	78,775	1	4	647	2,121	5,721	11,416	228,498
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	354	-	-	354
GMC	-	-	-	-	-	313	-	82	395
Ford	-	-	-	-	-	364	-	-	364
International	-	-	-	-	-	598	210	-	808
Others	-	-	-	-	-	-	22	5	27
TOTAL BUSES	-	-	-	-	-	1,629	232	87	1,948
T O T A L	129,813	78,775	1	4	647	3,750	5,953	11,503	230,446

From: Policy Analysis Department
MOTOR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
Complete Vehicles and Chassis

September 1984

Canada Total

G.V.W. <u>in lbs.</u>	<u>6,000 & less</u>	<u>6,001- 10,000</u>	<u>10,001- 14,000</u>	<u>14,001- 16,000</u>	<u>16,001- 19,500</u>	<u>19,501- 26,000</u>	<u>26,001- 33,000</u>	<u>33,001 & Over</u>	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	12,814	13,552	-	-	-	-	-	-	26,366
GMC	4,418	5,103	-	-	-	-	-	-	9,521
Chrysler	11,527	20,753	-	-	-	-	-	-	32,280
Ford	-	12,734	-	-	-	-	-	-	12,734
Freightliner	-	-	-	-	-	-	-	200	200
International	-	-	-	-	-	224	105	515	844
Kenworth	-	-	-	-	-	-	-	160	160
Mack	-	-	-	-	-	-	-	360	360
Western Star	-	-	-	-	-	-	-	199	199
TOTAL TRUCKS	28,759	52,142	-	-	-	224	105	1,434	82,664
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	3	3
TOTAL BUSES	-	-	-	-	-	-	-	3	3
T O T A L	28,759	52,142	-	-	-	224	105	1,437	82,667

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

Canada Exports to U.S.

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	10,340	11,998	-	-	-	-	-	-	22,338
GMC	2,227	3,454	-	-	-	-	-	-	5,681
Chrysler	9,398	20,125	-	-	-	-	-	-	29,523
Ford	-	9,920	-	-	-	-	-	-	9,920
Freightliner	-	-	-	-	-	-	-	9	9
International	-	-	-	-	-	218	74	461	753
Kenworth	-	-	-	-	-	-	-	78	78
Mack	-	-	-	-	-	-	-	232	232
Western Star	-	-	-	-	-	-	-	94	94
TOTAL TRUCKS	21,965	45,497	-	-	-	218	74	874	68,628
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	3	3
TOTAL BUSES	-	-	-	-	-	-	-	3	3
T O T A L	21,965	45,497	-	-	-	218	74	877	68,631

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

Other Exports from Canada

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	46	139	-	-	-	-	-	-	185
GMC	29	424	-	-	-	-	-	-	453
Chrysler	114	139	-	-	-	-	-	-	253
International	-	-	-	-	-	3	-	1	4
TOTAL TRUCKS	189	702	-	-	-	3	-	1	895
BUSES (Including School Bus Chassis)									
NONE									
T O T A L	189	702	-	-	-	3	-	1	895

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

Canada Domestic

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	2,428	1,415	-	-	-	-	-	-	3,843
GMC	2,162	1,225	-	-	-	-	-	-	3,387
Chrysler	2,015	489	-	-	-	-	-	-	2,504
Ford	-	2,814	-	-	-	-	-	-	2,814
Freightliner	-	-	-	-	-	-	-	191	191
International	-	-	-	-	-	3	31	53	87
Kenworth	-	-	-	-	-	-	-	82	82
Mack	-	-	-	-	-	-	-	128	128
Western Star	-	-	-	-	-	-	-	105	105
TOTAL TRUCKS	6,605	5,943	-	-	-	3	31	559	13,141
BUSES (Including School Bus Chassis)									
NONE									
T O T A L	6,605	5,943	-	-	-	3	31	559	13,141

From Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 8, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

September 1984

U.S. and Canada Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	54,760	41,051	-	-	30	183	810	43	96,877
GMC	15,819	13,456	-	-	627	241	1,160	1,356	32,659
Chrysler	24,008	26,635	-	-	-	-	-	-	50,643
Ford	55,302	52,166	316	-	-	783	2,669	1,814	113,050
Freightliner	-	-	-	-	-	-	-	1,691	1,691
International	-	-	-	-	-	1,085	1,606	3,094	5,785
Jeep Corp.	14,369	2,201	-	-	-	-	-	-	16,570
Kenworth	-	-	-	-	-	-	-	1,209	1,209
Mack	-	-	-	-	-	-	-	2,573	2,573
Mercedes-Benz	-	-	-	-	-	224	151	-	375
Peterbilt	-	-	-	-	-	-	-	1,131	1,131
Volvo White	-	-	-	-	-	-	-	779	779
Western Star	-	-	-	-	-	-	-	199	199
Others	-	-	1	4	-	24	1	51	81
TOTAL TRUCKS	164,258	135,509	317	4	657	2,540	6,397	13,940	323,622
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	369	-	-	369
GMC	-	-	-	-	-	410	-	85	495
Ford	-	-	-	-	-	378	-	-	378
International	-	-	-	-	-	680	274	-	954
Others	-	-	-	-	-	-	22	5	27
TOTAL BUSES	-	-	-	-	-	1,837	296	90	2,223
T O T A L	164,258	135,509	317	4	657	4,377	6,693	14,030	325,845

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

U.S. Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	52,738	32,999	-	-	39	278	1,304	156	87,514
GMC	14,083	8,725	-	-	536	294	1,370	1,455	26,463
Chrysler	7,709	2,540	-	-	-	-	-	-	10,249
Ford	32,968	23,508	98	-	-	772	2,658	1,708	61,712
Freightliner	-	-	-	-	-	-	-	1,687	1,687
International	-	-	-	-	-	538	979	1,917	3,434
Jeep Corp.	7,752	895	-	-	-	-	-	-	8,647
Kenworth	-	-	-	-	-	-	-	1,835	1,835
Mack	-	-	-	-	-	-	-	-	389
Mercedes-Benz	-	-	-	-	-	204	185	-	-
Peterbilt	-	-	-	-	-	-	-	1,299	1,299
Volvo White	-	-	-	-	-	-	-	824	824
Others	-	-	-	-	-	23	8	58	89
TOTAL TRUCKS	115,250	68,667	98	-	575	2,109	6,504	11,897	205,100
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	700	-	-	700
GMC	-	-	-	-	-	561	-	3	564
Ford	-	-	-	-	-	416	-	-	416
International	-	-	-	-	-	660	239	-	899
Others	-	-	-	-	-	5	45	-	50
TOTAL BUSES	-	-	-	-	-	2,342	284	3	2,629
T O T A L	115,250	68,667	98	-	575	4,451	6,788	11,900	207,729

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From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

U.S. Exports to Canada

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	1,675	729	-	-	12	33	173	18	2,640
GMC	1,484	649	-	-	79	31	251	226	2,720
Chrysler	101	40	-	-	-	-	-	-	141
Ford	2,489	1,094	98	-	-	35	182	496	4,394
Freightliner	-	-	-	-	-	-	-	2	2
International	-	-	-	-	-	71	107	73	251
Jeep Corp.	216	2	-	-	-	-	-	-	218
Kenworth	-	-	-	-	-	-	-	2	2
Mack	-	-	-	-	-	-	-	58	58
Mercedes-Benz	-	-	-	-	-	6	18	-	24
Peterbilt	-	-	-	-	-	-	-	1	1
Volvo/White	-	-	-	-	-	-	-	4	4
TOTAL TRUCKS	5,965	2,514	98	-	91	176	731	880	10,455
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	137	-	-	137
GMC	-	-	-	-	-	177	-	-	177
Ford	-	-	-	-	-	103	-	-	103
International	-	-	-	-	-	42	2	-	44
TOTAL BUSES	-	-	-	-	-	459	2	-	461
T O T A L	5,965	2,514	98	-	91	635	733	880	10,916

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

Other Exports from U.S.

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	38	130	-	-	-	33	2	-	203
GMC	1	232	-	-	-	-	4	1	238
Chrysler	227	68	-	-	-	-	-	-	295
Ford	21	165	-	-	-	2	70	3	261
International	-	-	-	-	-	41	17	2	60
Jeep Corp.	800	352	-	-	-	-	-	-	1,152
Kenworth	-	-	-	-	-	-	-	6	6
Mack	-	-	-	-	-	-	-	106	106
Volvo White	-	-	-	-	-	-	-	1	1
Others	-	-	-	-	-	-	-	8	8
TOTAL TRUCKS	1,087	947	-	-	-	76	93	127	2,330
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	4	-	-	4
Ford	-	-	-	-	-	6	-	-	6
International	-	-	-	-	-	40	-	-	40
TOTAL BUSES	-	-	-	-	-	50	-	-	50
T O T A L	1,087	947	-	-	-	126	93	127	2,380

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

U.S. Domestic

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	51,025	32,140	-	-	27	212	1,129	138	84,671
GMC	12,598	7,844	-	-	457	263	1,115	1,228	23,505
Chrysler	7,381	2,432	-	-	-	-	-	-	9,813
Ford	30,458	22,249	-	-	-	735	2,406	1,209	57,057
Freightliner	-	-	-	-	-	-	-	1,685	1,685
International	-	-	-	-	-	426	855	1,842	3,123
Jeep Corp.	6,736	541	-	-	-	-	-	-	7,277
Kenworth	-	-	-	-	-	-	-	950	950
Mack	-	-	-	-	-	-	-	1,671	1,671
Mercedes-Benz	-	-	-	-	-	198	167	-	365
Peterbilt	-	-	-	-	-	-	-	1,298	1,298
Volvo White	-	-	-	-	-	-	-	819	819
Others	-	-	-	-	-	23	8	50	81
TOTAL TRUCKS	108,198	65,206	-	-	484	1,857	5,680	10,890	192,315
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	559	-	-	559
GMC	-	-	-	-	-	384	-	3	387
Ford	-	-	-	-	-	307	-	-	307
International	-	-	-	-	-	578	237	-	815
Others	-	-	-	-	-	5	45	-	50
TOTAL BUSES	-	-	-	-	-	1,833	282	3	2,118
T O T A L	108,198	65,206	-	-	484	3,690	5,962	10,893	194,433

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

Canada Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	6,573	7,915	-	-	-	-	-	-	14,488
GMC	3,471	3,539	-	-	-	-	-	-	7,010
Chrysler	10,079	3,300	-	-	-	-	-	-	13,379
Ford	-	4,625	-	-	-	-	-	-	4,625
Freightliner	-	-	-	-	-	-	-	175	175
International	-	-	-	-	-	116	100	276	492
Kenworth	-	-	-	-	-	-	-	108	108
Mack	-	-	-	-	-	-	-	297	297
Western Star	-	-	-	-	-	-	-	155	155
TOTAL TRUCKS	20,123	19,379	-	-	-	116	100	1,011	40,729
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	29	29
TOTAL BUSES	-	-	-	-	-	-	-	29	29
TOTAL	20,123	19,379	-	-	-	116	100	1,040	40,758

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

Canada Exports to U.S.

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	4,431	6,647	-	-	-	-	-	-	11,078
GMC	1,526	2,534	-	-	-	-	-	-	4,060
Chrysler	9,169	2,961	-	-	-	-	-	-	12,130
Ford	-	3,023	-	-	-	-	-	-	3,023
Freightliner	-	-	-	-	-	-	-	16	16
International	-	-	-	-	-	116	81	241	438
Kenworth	-	-	-	-	-	-	-	44	44
Mack	-	-	-	-	-	-	-	144	144
Western Star	-	-	-	-	-	-	-	109	109
TOTAL TRUCKS	15,126	15,165	-	-	-	116	81	554	31,042
BUSES (Including School Bus Chassis)									
NONE									
T O T A L	15,126	15,165	-	-	-	116	81	554	31,042

From: Policy Analysis Department
MOTOR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
Complete Vehicles and Chassis

July 1984

Other Exports from Canada

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	3	51	-	-	-	-	-	-	54
Chrysler	167	78	-	-	-	-	-	-	245
TOTAL TRUCKS	170	129	-	-	-	-	-	-	299
BUSES (Including School Bus Chassis)									
NONE									
T O T A L	170	129	-	-	-	-	-	-	299

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

Canada Domestic

G.V.W. <u>in lbs.</u>	6,000 <u>& less</u>	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 <u>& Over</u>	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	2,139	1,217	-	-	-	-	-	-	3,356
GMC	1,945	1,005	-	-	-	-	-	-	2,950
Chrysler	743	261	-	-	-	-	-	-	1,004
Ford	-	1,602	-	-	-	-	-	-	1,602
Freightliner	-	-	-	-	-	-	-	159	159
International	-	-	-	-	-	-	19	35	54
Kenworth	-	-	-	-	-	-	-	64	64
Mack	-	-	-	-	-	-	-	153	153
Western Star	-	-	-	-	-	-	-	46	46
TOTAL TRUCKS	4,827	4,085	-	-	-	-	19	457	9,388
BUSES (Including School Bus Chassis)									
GMC	-	-	-	-	-	-	-	29	29
TOTAL BUSES	-	-	-	-	-	-	-	29	29
T O T A L	4,827	4,085	-	-	-	-	19	486	9,417

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-3

FACTORY SALES - TRUCKS AND BUSES BY MAKE AND G.V.W.
 Complete Vehicles and Chassis

July 1984

U.S. and Canada Total

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
TRUCKS (Excluding School Bus Chassis)									
Chevrolet	59,311	40,914	-	-	39	278	1,304	156	102,002
GMC	17,554	12,264	-	-	536	294	1,370	1,455	33,473
Chrysler	17,788	5,840	-	-	-	-	-	-	23,628
Ford	32,968	28,133	98	-	-	772	2,658	1,708	66,337
Freightliner	-	-	-	-	-	-	-	1,862	1,862
International	-	-	-	-	-	654	1,079	2,193	3,926
Jeep Corp.	7,752	895	-	-	-	-	-	-	8,647
Kenworth	-	-	-	-	-	-	-	1,066	1,066
Mack	-	-	-	-	-	-	-	2,132	2,132
Mercedes-Benz	-	-	-	-	-	204	185	-	389
Peterbilt	-	-	-	-	-	-	-	1,299	1,299
Volvo White	-	-	-	-	-	-	-	824	824
Western Star	-	-	-	-	-	-	-	155	155
Others	-	-	-	-	-	23	8	58	89
TOTAL TRUCKS	135,373	88,046	98	-	575	2,225	6,604	12,908	245,829
BUSES (Including School Bus Chassis)									
Chevrolet	-	-	-	-	-	700	-	-	700
GMC	-	-	-	-	-	561	-	32	593
Ford	-	-	-	-	-	416	-	-	416
International	-	-	-	-	-	660	239	-	899
Others	-	-	-	-	-	5	45	-	50
TOTAL BUSES	-	-	-	-	-	2,342	284	32	2,658
T.O.T.A.L.	135,373	88,046	98	-	575	4,567	6,888	12,940	248,487

From: Policy Analysis Department
MOTOR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

September 10, 1984

FS-5

TRUCKS WITH LIQUEFIED PETROLEUM GAS ENGINES

Factory Sales from Canadian Plants by Make & G.V.W.

7 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
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CANADA DOMESTIC

International	-	-	-	-	-	56	5	-	61
T O T A L	-	-	-	-	-	56	5	-	61

CANADA EXPORTS TO U.S.

International	-	-	-	-	-	22	14	-	36
T O T A L	-	-	-	-	-	22	14	-	36

OTHER EXPORTS FROM CANADA

NONE

CANADA TOTAL

International	-	-	-	-	-	78	19	-	97
T O T A L	-	-	-	-	-	78	19	-	97

From: Policy Analysis Department
MOTOR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

September 10, 1984

FS-5

TRUCKS WITH LIQUEFIED PETROLEUM GAS ENGINES

Factory Sales from U.S. Plants by Make & G.V.W.

7 Months 1984

G.V.W. <u>in lbs.</u>	<u>6,000 & less</u>	<u>6,001- 10,000</u>	<u>10,001- 14,000</u>	<u>14,001- 16,000</u>	<u>16,001- 19,500</u>	<u>19,501- 26,000</u>	<u>26,001- 33,000</u>	<u>33,001 & Over</u>	Total
<u>U.S. DOMESTIC</u>									
Ford	-	-	-	-	-	141	665	2	808
International	-	-	-	-	-	149	-	-	149
T O T A L	-	-	-	-	-	290	665	2	957
<u>U.S. EXPORTS TO CANADA</u>									
Ford	-	-	-	-	-	19	111	1	131
International	-	-	-	-	-	37	-	-	37
T O T A L	-	-	-	-	-	56	111	1	168
<u>OTHER EXPORTS FROM U.S.</u>									
NONE									
<u>U.S. TOTAL</u>									
Ford	-	-	-	-	-	160	776	3	939
International	-	-	-	-	-	186	-	-	186
T O T A L	-	-	-	-	-	346	776	3	1,125

From Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-5

TRUCKS WITH DIESEL ENGINES

(Excludes School Bus Chassis & Other Buses)

Factory Sales from Canadian Plants by Make & G.V.W.

7 Months 1984

G.V.W. <u>In lbs.</u>	<u>6,000 & less</u>	<u>6,001- 10,000</u>	<u>10,001- 14,000</u>	<u>14,001- 16,000</u>	<u>16,001- 19,500</u>	<u>19,501- 26,000</u>	<u>26,001- 33,000</u>	<u>33,001 & Over</u>	Total
<u>CANADA DOMESTIC</u>									
Chevrolet	381	1,654	-	-	-	-	-	-	2,035
Freightliner	-	-	-	-	-	-	-	965	965
GMC	375	1,799	-	-	-	-	-	-	2,174
International*	-	-	-	-	-	10	116	357	483
Kenworth	-	-	-	-	-	-	-	791	791
Mack	-	-	-	-	-	-	-	1,046	1,046
Western Star	-	-	-	-	-	-	-	549	549
T O T A L	756	3,453	-	-	-	10	116	3,708	8,043
<u>CANADA EXPORTS TO U.S.</u>									
Chevrolet	520	6,967	-	-	-	-	-	-	7,487
Freightliner	-	-	-	-	-	-	-	175	175
GMC	245	3,165	-	-	-	-	-	-	3,410
International*	-	-	-	-	-	330	755	2,224	3,309
Kenworth	-	-	-	-	-	-	-	353	353
Mack	-	-	-	-	-	-	-	547	547
Western Star	-	-	-	-	-	-	-	567	567
T O T A L	765	10,132	-	-	-	330	755	3,866	15,848
<u>OTHER EXPORTS FROM CANADA</u>									
Chevrolet	26	74	-	-	-	-	-	-	100
GMC	-	4	-	-	-	-	-	-	4
International*	-	-	-	-	-	-	-	26	30
Kenworth	-	-	-	-	-	-	-	1	1
Western Star	-	-	-	-	-	-	-	28	28
T O T A L	26	78	-	-	-	-	-	55	163
<u>CANADA TOTAL</u>									
Chevrolet	927	8,695	-	-	-	-	-	-	9,622
Freightliner	-	-	-	-	-	-	-	1,140	1,140
GMC	620	4,968	-	-	-	-	-	-	5,588
International*	-	-	-	-	-	340	875	2,607	3,822
Kenworth	-	-	-	-	-	-	-	1,145	1,145
Mack	-	-	-	-	-	-	-	1,593	1,593
Western Star	-	-	-	-	-	-	-	1,144#	1,144#
T O T A L	1,547	13,663	-	-	-	340	875	7,629	24,054

DIESEL ENGINES USED IN TRUCKS
 FROM CANADIAN PLANTS

7 Months 1984

	<u>Caterpillar</u>	<u>Cummins</u>	<u>Detroit</u>	<u>International</u>	<u>Hack</u>	<u>Scania Vabis</u>	Total
Chevrolet	-	-	9,622	-	-	-	9,622
Freightliner	288	785	67	-	-	-	1,140
GMC	-	-	5,588	-	-	-	5,588
International*	-	2,157	380	1,285	-	-	3,822
Kenworth	421	690	34	-	-	-	1,145
Mack	55	36	-	-	1,502	-	1,593
Western Star	398	624	95	-	-	-	1,117
T O T A L	1,162	4,292	15,786	1,285	1,502	-	24,027

Includes shipments of trucks without engines: January - 12 trucks; April - 1 truck; May - 6 trucks; June - 8 trucks.

* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

PS-5

TRUCKS WITH DIESEL ENGINES

(Excludes School Bus Chassis & Other Buses)

Factory Sales from U.S. & Canadian Plants by Make & G.V.W.

7 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
<u>U.S. AND CANADA TOTAL</u>									
Chevrolet	7,805	40,647	-	-	-	254	2,306	338	51,350
Ford	1,603	37,619	-	-	-	1,036	11,814	9,863	61,915
Freightliner	-	-	-	-	-	-	-	11,036	11,036
GMC	3,726	13,345	-	-	-	574	4,505	9,741	31,891
International	-	-	-	-	-	5,890	10,332	19,903	36,125
Jeep Corp.	918	137	-	-	-	-	-	-	1,055
Kenworth	-	-	-	-	-	-	-	9,624	9,624
Mack	-	-	-	-	-	-	-	15,825	15,825
Mercedes-Benz	-	-	-	-	-	1,352	960	-	2,312
Peterbilt	-	-	-	-	-	-	-	8,659	8,659
Volvo White	-	-	-	-	-	-	-	5,741	5,741
Western Star	-	-	-	-	-	-	-	1,144#	1,144#
Others	-	-	-	-	-	65	54	415#	534#
T O T A L	14,052	91,748	-	-	-	9,171	29,971	92,269	237,211

DIESEL ENGINES USED IN TRUCKS
 FROM U.S. AND CANADIAN PLANTS

7 Months 1984

	Cater- pillar	Cum- mins	Detroit Diesel	Inter- national	Isuzu	Mack	Mer- cedes	Scania Vabis	Toyo Kogyo	Volvo White	Other	Total
Chevrolet	1,334	-	50,016	-	-	-	-	-	-	-	-	51,350
Ford	11,102	5,715	5,876	37,423	-	-	-	-	1,799	-	-	61,915
Freightliner	2,301	8,472	263	-	-	-	-	-	-	-	11,036	11,036
GMC	3,039	5,383	32,870	-	569	-	-	-	-	-	30	31,891
International	5	17,239	1,055	17,826	-	-	-	-	-	-	-	36,125
Jeep Corp.	-	-	-	-	749	-	-	-	-	-	306	1,055
Kenworth	2,881	6,365	378	-	-	-	-	-	-	-	-	9,624
Mack	295	387	47	-	-	15,090	-	66	-	-	-	15,825
Mercedes-Benz	-	-	-	-	-	-	2,312	-	-	-	-	2,312
Peterbilt	3,380	5,137	142	-	-	-	-	-	-	-	-	8,659
Volvo White	776	2,960	1,544	-	-	-	-	-	-	461	-	5,741
Western Star	398	624	95	-	-	-	-	-	-	-	-	1,117
Others	52	241	105	-	-	-	-	-	-	-	119	517
T O T A L	25,503	52,523	82,391	55,249	1,318	15,090	2,312	66	1,799	461	455	237,167

* Includes trucks shipped without engines.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-5

TRUCKS WITH DIESEL ENGINES

(Excludes School Bus Chassis & Other Buses)

Factory Sales from U.S. Plants by Make & G.V.W.

7 Months 1984

G.V.W. in lbs.	6,000 <u>& less</u>	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 <u>& Over</u>	Total
U.S. TOTAL									
Chevrolet	6,878	31,952	-	-	-	254	2,306	338	41,728
Ford	1,603	37,619	-	-	-	1,036	11,814	9,843	61,915
Freightliner	-	-	-	-	-	-	-	9,896	9,896
GMC	3,106	8,377	-	-	-	574	4,505	9,741	26,303
International	-	-	-	-	-	5,550	9,457	17,296	32,303
Jeep Corp.	918	137	-	-	-	-	-	-	1,055
Kenworth	-	-	-	-	-	-	-	8,479	8,479
Mack	-	-	-	-	-	-	-	14,232	14,232
Mercedes-Benz	-	-	-	-	-	1,352	900	-	2,312
Peterbilt	-	-	-	-	-	-	-	8,659	8,659
Volvo White	-	-	-	-	-	-	-	5,741	5,741
Others	-	-	-	-	-	65	54	415#	514#
T O T A L	12,505	78,085	-	-	-	8,831	29,096	84,640	213,157

**DIESEL ENGINES USED IN TRUCKS
 FROM U.S. PLANTS**

7 Months 1984

Cater- pillar	Cum- mins	Detroit Diesel	Inter- national	Isuzu	Mack	Mer- cedes	Scania Vabis	Toyo Kogyo	Volvo White	Other	Total	
Chevrolet	1,334	-	40,394	-	-	-	-	-	-	-	41,728	
Ford	11,102	5,715	5,876	37,423	-	-	-	1,799	-	-	61,915	
Freightliner	2,013	7,687	196	-	-	-	-	-	-	-	9,896	
GMC	3,039	5,383	17,282	-	569	-	-	-	-	30	26,303	
International	5	15,082	675	16,541	-	-	-	-	-	-	32,303	
Jeep Corp.	-	-	-	749	-	-	-	-	-	306	1,055	
Kenworth	2,460	5,675	344	-	-	-	-	-	-	-	8,479	
Mack	180	351	47	-	-	13,588	-	66	-	-	14,232	
Mercedes-Benz	-	-	-	-	-	-	2,312	-	-	-	2,312	
Peterbilt	3,380	5,137	142	-	-	-	-	-	-	-	8,659	
Volvo White	776	2,960	1,544	-	-	-	-	-	461	-	5,741	
Others	52	241	105	-	-	-	-	-	-	119	517	
T O T A L	24,341	48,231	66,605	53,964	1,318	13,588	2,312	66	1,799	461	455	213,140

Includes shipments of trucks without engines: February - 6 trucks; March - 3 trucks; April - 2 trucks; May - 3 trucks;
 June - 3 trucks.

From Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-5

TRUCKS WITH DIESEL ENGINES
 (Excludes School Bus Chassis & Other Buses)

Factory Sales from U.S. Plants by Make & G.V.W.

7 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
<u>U.S. DOMESTIC</u>									
Chevrolet	6,633	31,085	-	-	-	237	2,060	301	40,316
Ford	1,595	36,149	-	-	-	988	10,637	7,680	57,049
Freightliner	-	-	-	-	-	-	-	9,855	9,855
GMC	2,919	7,564	-	-	-	537	3,895	8,456	23,371
International	-	-	-	-	-	4,456	8,363	16,003	28,822
Kenworth	-	-	-	-	-	-	-	8,435	8,435
Mack	-	-	-	-	-	-	-	13,135	13,135
Mercedes-Benz	-	-	-	-	-	1,259	839	-	2,098
Peterbilt	-	-	-	-	-	-	-	8,510	8,510
Volvo White	-	-	-	-	-	-	-	5,718	5,718
Others	-	-	-	-	-	65	54	378	497
T O T A L	11,147	74,798	-	-	-	7,542	25,848	78,471	197,806
<u>U.S. EXPORTS TO CANADA</u>									
Chevrolet	211	757	-	-	-	8	237	36	1,249
Ford	-	1,433	-	-	-	43	981	2,146	4,603
Freightliner	-	-	-	-	-	-	-	41	41
GMC	183	792	-	-	-	36	552	1,267	2,830
International	-	-	-	-	-	618	880	1,144	2,642
Kenworth	-	-	-	-	-	-	-	3	3
Mack	-	-	-	-	-	-	-	418	418
Mercedes-Benz	-	-	-	-	-	93	121	-	214
Peterbilt	-	-	-	-	-	-	-	149	149
Volvo White	-	-	-	-	-	-	-	5	5
T O T A L	394	2,982	-	-	-	798	2,771	5,209	12,154
<u>OTHER EXPORTS FROM U.S.</u>									
Chevrolet	34	110	-	-	-	9	9	1	163
Ford	8	37	-	-	-	5	196	17	263
GMC	4	21	-	-	-	1	58	18	102
International	-	-	-	-	-	476	214	149	839
Jeep Corp.	918	137	-	-	-	-	-	-	1,055
Kenworth	-	-	-	-	-	-	-	41	41
Mack	-	-	-	-	-	-	-	679	679
Mercedes-Benz	-	-	-	-	-	-	-	18	18
Peterbilt	-	-	-	-	-	-	-	37	37
T O T A L	964	305	-	-	-	491	477	960	3,197

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From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 12, 1984

FS-5

TRUCKS WITH DIESEL ENGINES

(Excludes School Bus Chassis & Other Buses)

Factory Sales from U.S. Plants by Make & G.V.W.

9 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
<u>U.S. DOMESTIC</u>									
Chevrolet	7,656	38,080	-	-	-	307	2,675	349	49,067
Ford	1,611	46,404	-	-	-	1,236	12,966	10,010	72,227
Freightliner	-	-	-	-	-	-	-	13,003	13,003
GMC	3,285	9,032	-	-	-	638	4,904	11,212	29,071
International	-	-	-	-	-	5,662	10,881	20,810	37,353
Kenworth	-	-	-	-	-	-	-	10,684	10,684
Mack	-	-	-	-	-	-	-	16,963	16,963
Mercedes-Benz	-	-	-	-	-	1,810	1,097	-	2,907
Peterbilt	-	-	-	-	-	-	-	10,940	10,940
Volvo White	-	-	-	-	-	-	-	7,230	7,230
Others	-	-	-	-	-	124	58	479	661
T O T A L	12,552	93,516	-	-	-	9,777	32,581	101,680	250,106
<u>U.S. EXPORTS TO CANADA</u>									
Chevrolet	241	889	-	-	-	14	301	43	1,488
Ford	-	2,123	-	-	-	51	1,123	3,218	6,515
Freightliner	-	-	-	-	-	-	-	41	41
GMC	221	941	-	-	-	48	685	1,653	3,548
International	-	-	-	-	-	723	1,365	1,612	3,700
Kenworth	-	-	-	-	-	-	-	26	26
Mack	-	-	-	-	-	-	-	549	549
Mercedes-Benz	-	-	-	-	-	133	152	-	285
Peterbilt	-	-	-	-	-	-	-	255	255
Volvo White	-	-	-	-	-	-	-	16	16
T O T A L	462	3,953	-	-	-	969	3,626	7,413	16,423
<u>OTHER EXPORTS FROM U.S.</u>									
Chevrolet	36	122	-	-	-	9	9	1	177
Ford	8	37	-	-	-	7	219	17	288
GMC	4	60	-	-	-	2	69	30	165
International	-	-	-	-	-	599	319	210	1,138
Jeep Corp.	943	334	-	-	-	-	-	-	1,277
Kenworth	-	-	-	-	-	-	-	70	70
Mack	-	-	-	-	-	-	-	796	796
Volvo White	-	-	-	-	-	-	-	19	19
Others	-	-	-	-	-	-	-	42	42
T O T A L	991	553	-	-	-	617	616	1,185	3,962

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From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 12, 1984

FS-5

TRUCKS WITH DIESEL ENGINES

(Excludes School Bus Chassis & Other Buses)

Factory Sales from U.S. Plants by Make & G.V.W.

9 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
<u>U.S. TOTAL</u>									
Chevrolet	7,933	39,091	-	-	-	330	2,985	393	50,732
Ford	1,619	48,564	-	-	-	1,294	14,308	13,245	79,030
Freightliner	-	-	-	-	-	-	-	13,044	13,044
GMC	3,510	10,033	-	-	-	688	5,658	12,895	32,784
International	-	-	-	-	-	6,984	12,565	22,632	42,181
Jeep Corp.	943	334	-	-	-	-	-	-	1,277
Kenworth	-	-	-	-	-	-	-	10,780	10,780
Mack	-	-	-	-	-	-	-	18,308	18,308
Mercedes-Benz	-	-	-	-	-	1,943	1,249	-	3,192
Peterbilt	-	-	-	-	-	-	-	11,195	11,195
Volvo White	-	-	-	-	-	-	-	7,265	7,265
Others	-	-	-	-	-	124	58	521#	703#
T O T A L	14,005	98,022	-	-	-	11,363	36,823	110,278	270,491

 DIESEL ENGINES USED IN TRUCKS
 FROM U.S. PLANTS

9 Months 1984

	Cater- pillar	Cum- mins	Detroit Diesel	Inter- national	Isuzu	Mack	Mer- cedes	Scania Vabis	Toyo Kogyo	Volvo White	Other	Total
Chevrolet	1,635	-	48,142	-	955	-	-	-	-	-	-	50,732
Ford	13,921	7,663	7,250	48,381	-	-	-	-	1,815	-	-	79,030
Freightliner	2,781	9,981	282	-	-	-	-	-	-	-	13,044	13,044
GMC	4,047	7,153	20,913	-	627	-	-	-	-	-	44	32,784
International	5	19,688	895	21,593	-	-	-	-	-	-	-	42,181
Jeep Corp.	-	-	-	-	774	-	-	-	-	-	503	1,277
Kenworth	3,035	7,327	418	-	-	-	-	-	-	-	-	10,780
Mack	199	445	58	-	-	17,524	-	82	-	-	-	18,308
Mercedes-Benz	-	-	-	-	-	-	3,192	-	-	-	-	3,192
Peterbilt	4,391	6,616	188	-	-	-	-	-	-	-	-	11,195
Volvo White	1,358	3,962	1,372	-	-	-	-	-	-	573	-	7,265
Others	80	296	126	-	-	-	-	-	-	-	182	684
T O T A L	31,452	63,131	79,644	69,974	2,356	17,524	3,192	82	1,815	573	729	270,472

Includes shipments of trucks without engines: February - 6 trucks; March ~ 3 trucks; April - 2 trucks; May - 3 trucks;
 June - 3 trucks; August - 2 trucks.

* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 12, 1984

FS-5

TRUCKS WITH DIESEL ENGINES

(Excludes School Bus Chassis & Other Buses)

Factory Sales from Canadian Plants by Make & G.V.W.

9 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
<u>CANADA DOMESTIC</u>									
Chevrolet	465	2,081	-	-	-	-	-	-	2,546
Freightliner*	-	-	-	-	-	-	-	1,328	1,328
GMC	468	2,242	-	-	-	-	-	-	2,710
International	-	-	-	-	-	19	159	467	645
Kenworth	-	-	-	-	-	-	-	996	996
Mack	-	-	-	-	-	-	-	1,337	1,337
Western Star	-	-	-	15	-	-	-	746	746
T O T A L	933	4,323	-	-	-	19	159	4,874	10,308
<u>CANADA EXPORTS TO U.S.</u>									
Chevrolet	579	7,517	-	-	-	-	-	-	8,096
Freightliner	-	-	-	-	-	-	-	225	225
GMC	259	3,512	-	-	-	-	-	-	3,771
International	-	-	-	-	-	800	941	3,193	4,934
Kenworth	-	-	-	-	-	-	-	483	483
Mack	-	-	-	-	-	-	-	934	934
Western Star	-	-	-	-	-	-	-	743	743
T O T A L	838	11,029	-	-	-	800	941	5,578	19,186
<u>OTHER EXPORTS FROM CANADA</u>									
Chevrolet	28	81	-	-	-	-	-	-	109
GMC	-	4	-	-	-	-	-	-	4
International	-	-	-	-	-	3	4	40	47
Kenworth	-	-	-	-	-	-	-	1	1
Western Star	-	-	-	-	-	-	1	36	36
T O T A L	28	85	-	-	-	3	4	77	197
<u>CANADA TOTAL</u>									
Chevrolet	1,072	9,679	-	-	-	-	-	-	10,751
Freightliner*	-	-	-	-	-	-	-	1,553	1,553
GMC	727	5,758	-	-	-	-	-	-	6,485
International	-	-	-	-	-	822	1,104	3,700	5,626
Kenworth	-	-	-	-	-	-	-	1,480	1,480
Mack	-	-	-	-	-	-	-	2,271	2,271
Western Star	-	-	-	-	-	-	-	1,525#	1,525#
T O T A L	1,799	15,437	-	-	-	822	1,104	10,529	29,691

 DIESEL ENGINES USED IN TRUCKS
 FROM CANADIAN PLANTS

9 Months 1984

	Caterpillar	Cummins	Detroit	International	Hack	Scania Vabis	Total
Chevrolet	-	-	10,751	-	-	-	10,751
Freightliner*	427	1,054	72	-	-	-	1,553
GMC	-	-	6,485	-	-	-	6,485
International	-	3,170	447	2,009	-	-	5,626
Kenworth	553	887	40	-	-	-	1,480
Mack	62	67	-	-	2,142	-	2,271
Western Star	578	797	115	-	-	-	1,490
T O T A L	1,620	5,975	17,910	2,009	2,142	-	29,656

Includes shipments of trucks without engines: January - 12 trucks; April - 1 truck; May - 6 trucks; June - 8 trucks;
 August - 8 trucks.

* Revised.

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

November 12, 1984

FS-5

TRUCKS WITH DIESEL ENGINES

(Excludes School Bus Chassis & Other Buses)

Factory Sales from U.S. & Canadian Plants by Make & G.V.W.

9 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
U.S. AND CANADA TOTAL									
Chevrolet	9,005	48,770	-	-	-	330	2,985	393	61,483
Ford	1,619	48,564	-	-	-	1,294	14,308	13,245	79,030
Freightliner*	-	-	-	-	-	-	-	14,597	14,597
GM/C	4,237	15,791	-	-	-	688	5,658	12,895	39,269
International	-	-	-	-	-	7,806	13,669	26,332	47,807
Jeep Corp.	943	334	-	-	-	-	-	-	1,277
Kenworth	-	-	-	-	-	-	-	12,260	12,260
Mack	-	-	-	-	-	-	-	20,579	20,579
Mercedes-Benz	-	-	-	-	-	1,943	1,249	-	3,192
Peterbilt	-	-	-	-	-	-	-	11,195	11,195
Volvo White	-	-	-	-	-	-	-	7,265	7,265
Western Star	-	-	-	-	-	-	-	1,525#	1,525#
Others	-	-	-	-	-	124	58	521#	703#
T O T A L	15,804	113,459	-	-	-	12,185	37,927	120,807	300,182

DIESEL ENGINES USED IN TRUCKS
 FROM U.S. AND CANADIAN PLANTS

9 Months 1984

	Cater- pillar	Cum- mins	Detroit Diesel	Inter- national	Isuzu	Hack	Mer- cedes	Scania Vabis	Toyo Kogyo	Volvo White	Other	Total
Chevrolet	1,635	-	38,893	-	955	-	-	-	-	-	-	61,483
Ford	13,921	7,663	7,250	48,381	-	-	-	-	1,815	-	-	79,030
Freightliner*	3,208	11,035	354	-	-	-	-	-	-	-	-	14,597
GM/C	4,047	7,153	27,398	-	627	-	-	-	-	-	44	39,269
International	5	22,858	1,342	23,602	-	-	-	-	-	-	-	47,807
Jeep Corp.	-	-	-	-	774	-	-	-	-	-	503	1,277
Kenworth	3,588	8,214	458	-	-	-	-	-	-	-	-	12,260
Mack	261	512	58	-	-	19,666	-	82	-	-	-	20,579
Mercedes-Benz	-	-	-	-	-	-	3,192	-	-	-	-	3,192
Peterbilt	4,391	6,616	188	-	-	-	-	-	-	-	-	11,195
Volvo White*	1,358	3,962	1,372	-	-	-	-	-	-	573	-	7,265
Western Star	578	797	115	-	-	-	-	-	-	-	-	1,490
Others	80	296	126	-	-	-	-	-	-	-	182	684
T O T A L	33,072	69,106	97,554	71,983	2,356	19,666	3,192	82	1,815	573	729	300,128

Includes trucks shipped without engines.

* Revised.

From: Policy Analysis Department
MOTOR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

November 12, 1984

FS-5

TRUCKS WITH LIQUEFIED PETROLEUM GAS ENGINES

Factory Sales from U.S. Plants by Make & G.V.W.

9 Months 1984

G.V.W. <u>in lbs.</u>	6,000 & less	6,001- <u>10,000</u>	10,001- <u>14,000</u>	14,001- <u>16,000</u>	16,001- <u>19,500</u>	19,501- <u>26,000</u>	26,001- <u>33,000</u>	33,001 & Over	Total
<u>U.S. DOMESTIC</u>									
Ford	-	-	-	-	-	170	716	2	888
International	-	-	-	-	-	<u>163</u>	-	-	<u>163</u>
T O T A L	-	-	-	-	-	333	716	2	1,051
<u>U.S. EXPORTS TO CANADA</u>									
Ford	-	-	-	-	-	19	114	1	134
International	-	-	-	-	-	<u>40</u>	-	1	<u>41</u>
T O T A L	-	-	-	-	-	59	114	2	175
<u>OTHER EXPORTS FROM U.S.</u>									
None									
<u>U.S. TOTAL</u>									
Ford	-	-	-	-	-	189	830	3	1,022
International	-	-	-	-	-	<u>203</u>	-	1	<u>204</u>
T O T A L	-	-	-	-	-	392	830	4	1,226

From: Policy Analysis Department
MOTOR VEHICLE MANUFACTURERS
ASSOCIATION OF THE U.S., INC.
Detroit, Michigan 48202

November 12, 1984

FS-5

TRUCKS WITH LIQUEFIED PETROLEUM GAS ENGINES

Factory Sales from Canadian Plants by Make & G.V.W.

9 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,501	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
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CANADA DOMESTIC

International	-	-	-	-	-	56	5	-	61
T O T A L	-	-	-	-	-	56	5	-	61

CANADA EXPORTS TO U.S.

International	-	-	-	-	-	29	15	-	44
T O T A L	-	-	-	-	-	29	15	-	44

OTHER EXPORTS FROM CANADA

NONE

CANADA TOTAL

International	-	-	-	-	-	85	20	-	105
T O T A L	-	-	-	-	-	85	20	-	105

TRUCK SALES : FROM MUMA DATA

9/15/84

GVW	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>6months</u>	<u>12months</u>
14,000	5661	311	220	223	766	1532
16,000	362	591	58	2	—	—
19,500	2946	2764	1532	1252	1748	3496
26,000	62,451	63,693	27,023	27,711	18,004	36,008
33,000	55,575	47,782	53,772	54,213	42,341	84,682
>33,000	<u>119,380</u>	<u>112,613</u>	<u>76,043</u>	<u>84,391</u>	<u>73,425</u>	<u>146,850</u>
TOTAL	246,375	227,754	158,648	167,792	136,284	272,568
% 1978*	51%	47%	33%	35%	28%	56%
3-4-5	8969	3,666	1810	1477	2514	5028
6-7	118,026	111,475	80,795	81,924	60,345	120,690
8	119,380	112,613	76,043	84,391	136,284	146,850

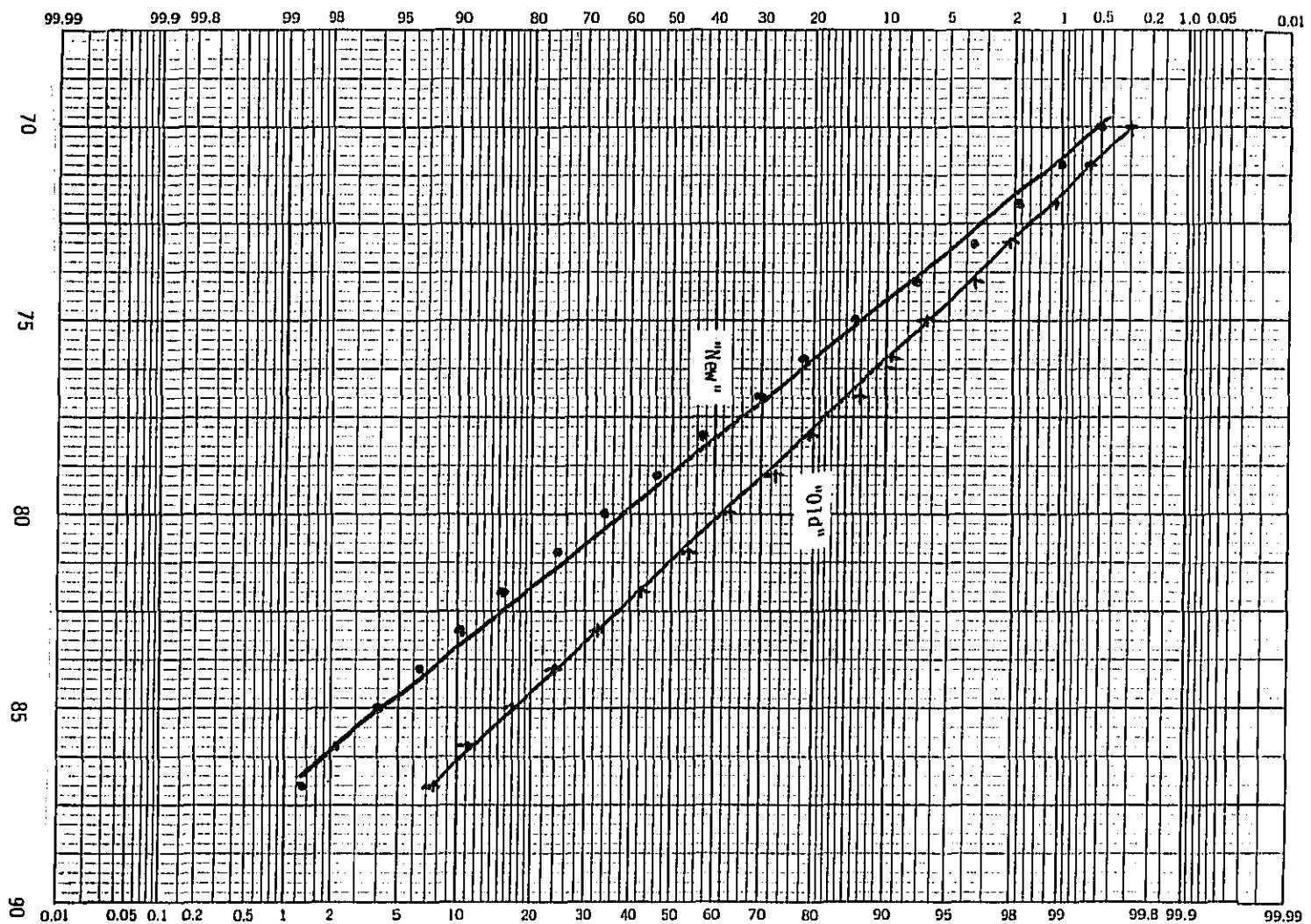
1978 TOTAL = 484,100

B
DCG-3:X-22 AHA truck noise surveillance data base

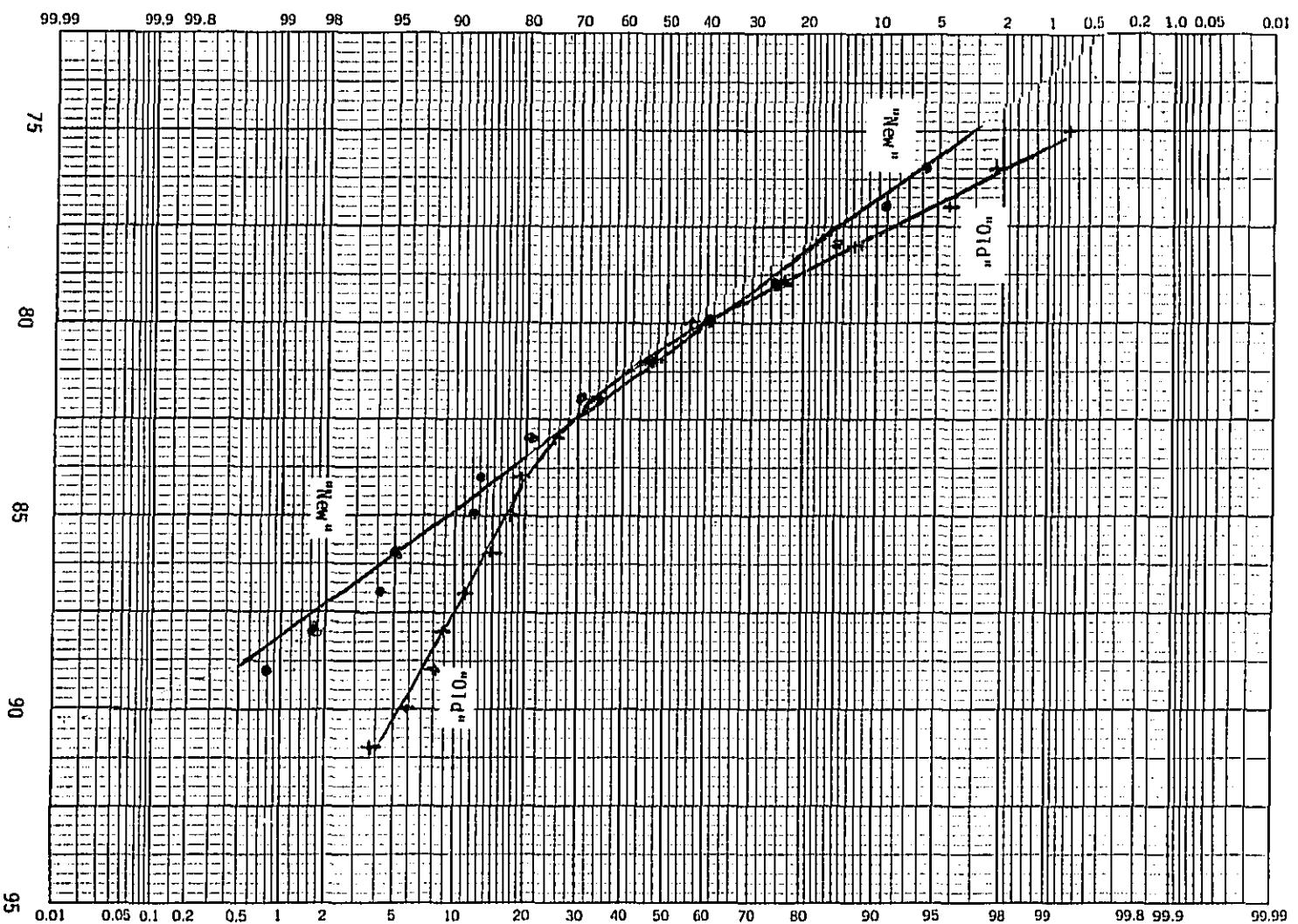
Sample Interval (dB)	Percentage at or below the sample interval.	
	(Accel)	(IMI)
70-71	0.0	2.0
71-72	0.0	4.0
72-73	0.7	6.6
73-74	2.0	7.2
74-75	3.3	11.8
75-76	6.6	21.0
76-77	10.5	40.8
77-78	15.8	54.0
78-79	32.9	67.1
79-80	46.0	77.0
80-81	61.2	84.2
81-82	77.0	92.1
82-83	89.5	95.4
83-84	92.8	97.4
84-85	96.0	98.0
85-86	98.0	100.0
86-87	98.7	0.0
87-88	99.3	0.0
88-89	99.3	0.0
89-90	100.0	0.0

Sample Size: 152 152
Sample Mean: 80.18dB 77.88dB
Sample Stnd. Dev: 2.70dB 2.97dB

PERCENT OF SAMPLE AT OR BELOW NOISE LEVEL (%)



PERCENT OF SAMPLE AT OR BELOW NOISE LEVEL (%)



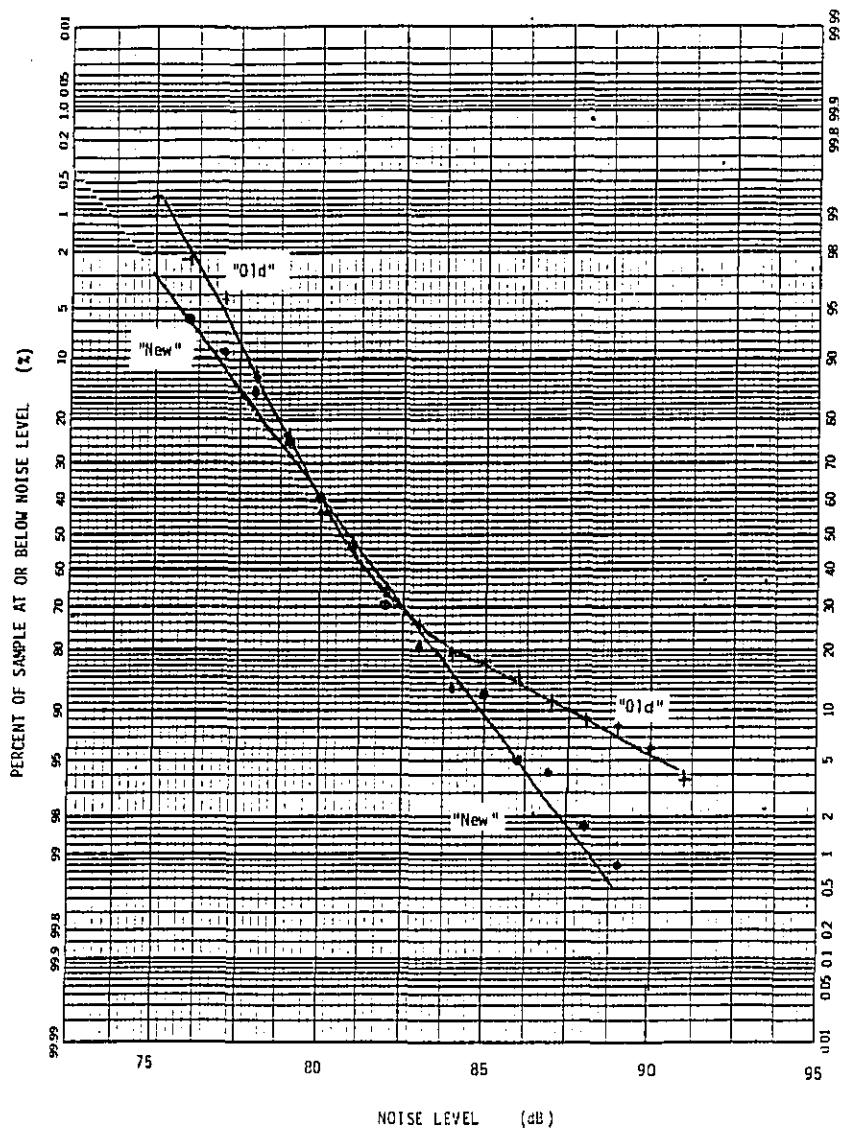


Figure 2. Truck Noise Level Sample Population Distributions for "Old" (+=1952 to 1977) and "New" (•=1978 and after) Trucks; High Speed Soft Site, 50 Feet.

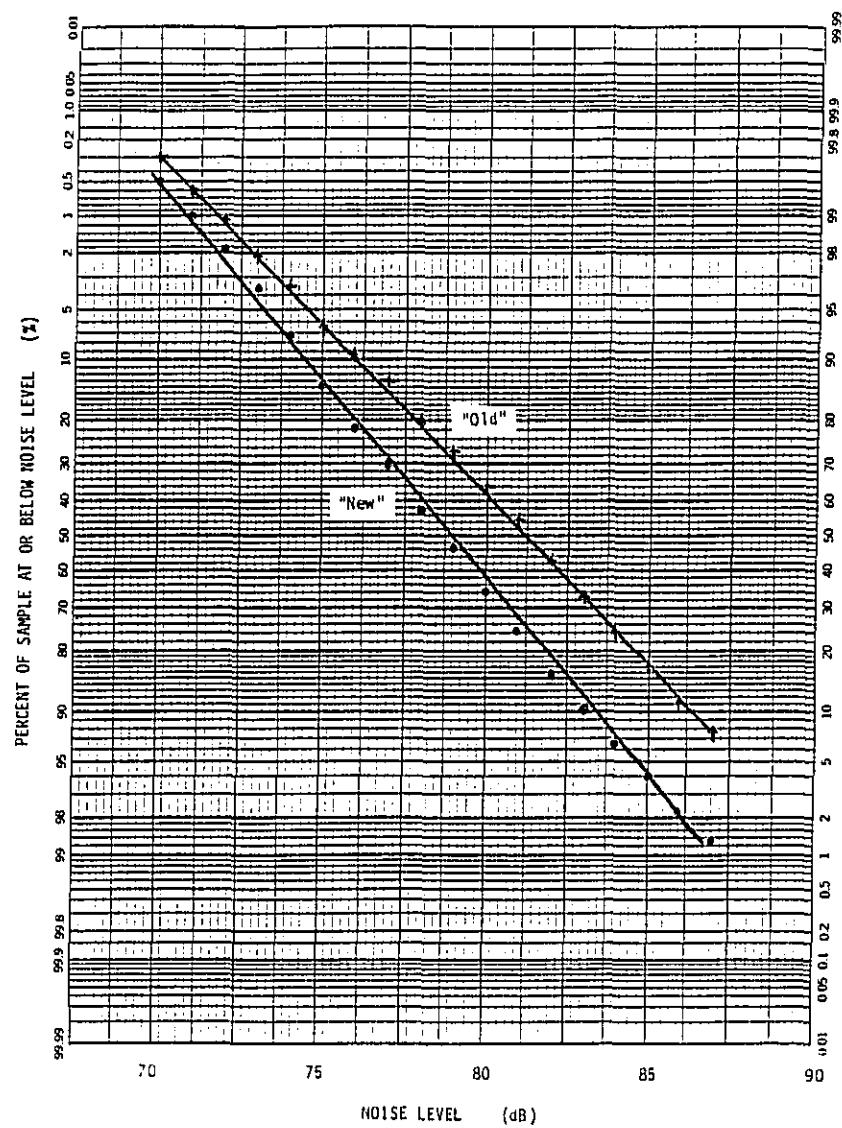


Figure 1. Truck Noise Level Sample Population Distributions for "Old" (≈ 1952 to 1977) and "New" (≥ 1978 and after) Trucks; Stationary, Hard Site, 50 Feet.

1985 MAR 31

SUBJECT: Summary of Health and Welfare Analysis for IMC Revision

FROM: Fred Mintz FMA

TO: Ken Feith

From the NRTNEM runs of March 31, 1981, we find the following:

Assumed Noise Levels for the Heavy Truck portion of the fleet (which controls the Noise Exposure) are as follows, for baseline B/L, 83 dB standard and 80 dB standard.

<u>Condition</u>	<u>H/S</u>	<u>L/S</u>	<u>Fleet Noise Level*</u>	<u>▲PE (%)</u>
B/L	85.7dB	82.8dB	84.25dB	B/L
83dB std.	83.7	79.4	81.55	2.7dB
80dB std.	82.6	76.7	79.65	1.9dB

(*average of High-Speed and Low-Speed levels)

In the year 2000 (in which we can assume a fleet of completely regulated trucks) the PE (population exposed to Ldn \geq , 55dB) is as follows:

<u>Condition</u>	<u>Fleet NL</u>	<u>▲NL</u>	<u>PE</u>	<u>▲PE</u>	<u>▲PE(%)</u>
B/L	84.3dB	B/L	157M	B/L	B/L
83dB std.	81.6	2.7dB	136M	21M	13.4%
80dB std.	79.7	1.9dB	127M	9M	6.6% \downarrow 2dB

Thus, for the 83dB standard a change in fleet noise level of 2.7dB yields a reduction in PE of 13.4%, or about 5% per dB. The 80dB standard resulting in a ▲NL of 1.9dB yields a ▲PE of 6.6%, or 3.5% per dB.

(As the fleet noise level for HT's decreases, the other traffic sources became relatively more important, thus decreasing the effectiveness of incremental reductions of Heavy Truck noise levels).

1985/1/28

The 1980-81 noise data from RMCS and EPA measurements show a mean Noise Level for Heavy Trucks of 84.7dB at High Speed and an estimated 81.5dB at low speed for an estimated Fleet Noise Level of 83.1dB (Compared to a baseline, or 1974, fleet Noise level of about 88.1dB). Approximately 3 percent of trucks were above the IMC L/S standard of 86dB and 7 percent were above the IMC H/S standard of 90dB.

If the IMC standards were reduced by 3dB to 83dB L/S and 87dB H/S respectively, then compliance of the noisy trucks would bring their levels down about 4dB. Thus, for the non-conforming average 5 percent of the fleet, the 4dB drop in level (ignoring possible changes in the conforming portion of the fleet) would represent a drop in fleet noise level of 0.2dB. Then conservatively assuming a 4% decrease in PE per dB decrease in fleet NL, the PE in 1986-1988 would be reduced by about 0.8%, or approximately 800,000 in each year.

Comparison of this figure to the estimated average increase in PE of 1.3 million resulting from the 2-year deferral of the 80dB Medium and Heavy Trucks standard shows that adoption of the revised IMC standard in 1986 would recover over half the near-term loss of health and welfare benefits caused by 2-year MHT deferral.

In the longer term, the salutary effect of the reduced IMC standard in preventing loss of the anticipated benefits of the Medium and Heavy Truck regulation (26-30 million PE reduction) would far outweigh the modest reduction of benefits (averaging about 1.2 million PE per year) resulting from the 2-year deferral of the 80dB Medium and Heavy Truck standard.

1985 JAN 31

SUJECT: Maintenance Costs Associated with IMC Regulation

FROM: Fred Mintz FM

TO: Ken Feith

The economic impact of reducing the IMC levels by 3dB - which corresponds to a Medium and Heavy Truck standard of 83dB - resides almost entirely in the increased operating costs. No capital cost increases are entailed because the MHT trucks as bought are in compliance with the reduced IMC standard.

Based on the MHT background document, the only significant increment in operating cost of the 83dB truck is that due to the increase in replacement cost of the mufflers. In 1974, this increase was estimated at \$14 per year, based on 3 muffler replacements in 8 years.

In several phone calls made to truck parts suppliers, data was obtained indicating that the average cost of a "heavy-duty" replacement muffler for a heavy truck engine is about \$110. It appears that he after-market no longer supplies cheaper, less effective mufflers. Thus, although one might estimate that the "incremental cost" of the heavy duty muffler over a less effective one could be \$40 to \$60, there really is no satisfactory alternative to purchasing the effective muffler.

The estimated incremental cost in 1974 of replacing 3 mufflers in 8 years-for an 83dB truck muffler as compared to the less-effective ones then available was \$14 annually. At 1985 prices, the hypothetical incremental cost is about \$25 annually. At an average annual mileage of 50,000 per year for a long-haul truck, the increment in maintenance cost would hypothetically be about five-hundredths of a cent per mile.

From the macro point of view, the imputed increment in annual maintenance cost for the entire fleet could be considered as \$56 million

due to the reduction of the IMC limits. As pointed out above, however, that figure is purely hypothetical, since for practical purposes no alternative cheaper, less-effective mufflers are available. The only requirement is that the users follow proper maintenance practices, and replace the mufflers as necessary--thus incurring costs which are generally considered a normal business expense.

Summary of Comments

EPA received a total of 120 comments to docket 81-Q1 between December 31, 1980 and March 31, 1981. Of these, 111 comments expressed general opposition to the Noise Emission Standards for Motorcycles and Motorcycle Exhaust Systems, but did not directly address the proposed additional Testing Requirements for Motorcycles and Motorcycle Exhaust Systems at issue here. With the single exception of a comment from a motorcycle enthusiast's group (52) all of these entries originated from private citizens, four of whom cited membership in the Modified Motorcycle Association.

Nearly all of the 111 commenters based their opposition on the potential discriminatory and inflationary effects that, in their opinions, these motorcycle noise emission standards could foster. Other reasons for opposition included possible adverse effects on energy conservation efforts (52 & 55), and on performance and design considerations of air-cooled motorcycle engines (47, 59, 61 and 90). One commenter felt that motorcyclists could better police themselves (52), and another respondent would entrust motorcycle noise-reduction efforts to state laws (42). Two of those opposed believe that EPA should direct its attention to areas they think more deserving than motorcycle noise such as smog control (50 & 74), and one individual expressed concern over possible loss of jobs in the motorcycle after market industry as a result of the standards (70). In the opinion of the members of National ABATE of Richmond, Indiana, motorcycle decibel levels fall within safe bounds and are, for the most part, lower than those of vacuum cleaners and chain saws. No commenter, it should be noted, directed opposition to the Additional Testing Requirements in principle.

Two respondents, one the mayor of San Jose California (39) and the other a "traffic and transportation consultant" (43) expressed strong support for the EPA motorcycle noise standards. The traffic consultant believes noise reduction for motorcycles will increase their use as a mode of transportation, a positive benefit because of the vehicle's efficiency. The mayor of San Jose, speaking on behalf of the City supported not only the noise emission standards themselves, but also specifically endorsed the additional testing requirements considered in this docket. In her view, these measures will significantly reduce noise levels of new motorcycles.

One private citizen, though in strong support of the motorcycle noise reduction in principle, suggested several revisions in EPA's motorcycle noise standard (120). In this respondent's opinion, a level of 75 Dba should be established for all motorcycles, and the standard of 70 Dba for mopeds, though acceptable, should be applied immediately rather than 1983. To this commenter the problem of motorcycle noise results from "thoughtless riders" who deliberately modify factory-equipped mufflers to enhance noise production, a situation the Agency seeks to redress through these additional testing requirements.

Three comments, (10, 66, 69), though addressed to this docket, did not take a position nor raise substantive points with respect to the standard for motorcycle noise.

Only three responses to the docket directly raised issues of substance relating to the immediate topic of this docket; these three motorcycle industry commenters suggested specific revisions in paragraph 3 of the proposed Additional Testing Requirements for Motorcycles and Motorcycle Exhaust Systems.

The Motorcycle Industry Council (80) maintained that hammer and chisel use to remove spot-welded component parts of the exhaust system is not a simple means of dislodgement, and would, contrary to the language of paragraph 31, cause highly visible damage to the exterior of the exhaust system. Therefore, the Council felt, spot weld or interval beading effectively seal exhaust systems against easy removal of internal baffles.

(AGENCY RESPONSE)

In the Council's opinion allowances for use of anti-back-out metal fasteners to service exhaust systems with removable cores or packing would extend product life and also facilitate development of new fiberglass stability and high temperature resistance foam technologies.

(AGENCY RESPONSE)

The Motorcycle Industry Council expressed its position that "rebuild type bits" that require "special" tools for servicing on exhaust system benefit both the consumer and industry by permitting repair rather than total replacement of a product, and thus should be permitted under EPA rules. In the Agency's opinion

(AGENCY RESPONSE)

The Motorcycle Industry Council, Honda Motor Company, Ltd. (77); and Kawasaki Motor Corporation, USA (85), expressed similar concerns over allowance for easy removal of component parts of exhaust systems equipped with spark arresters, required for off-street uses, to provide necessary cleaning of carbon deposits. In the opinion of each of these industry respondents, the current language of paragraph 31, which defines "easily removable components", would interfere with removal of spark arrester parts for cleaning mandatory under USDA Forest Service Standard 5100-1a 2.2 *Cleaning and Warranty* and 2.6 *Maintenance*.

Honda pointed out that its spark arrester clean-out components are designed for easy removal by loosening bolts or through a drain bolt for maintenance purposes and intends to test its vehicles with these devices installed. Honda cited several precautions it employs to encourage customers not to tamper with spark arresters: the designation 'spark arrester' is clearly stamped on the device's body in accordance with USDA requirements; shop and owner's manuals state that parts removed for carbon cleaning should be reinstalled afterwards and that any modification of exhaust systems by customers should be avoided; and caution labels near the exhaust systems warn against such modifications. Honda concluded that since spark arresters are legal requirements for certain off-highway uses enforced by USDA Forest Service and other state and local agencies, operators of vehicles so equipped ".....are motivated not to alter their spark arresters". Based on these reasons, Honda requested EPA to exempt spark arresters and spark-arrester-equipped exhaust systems from the definition of "easily removable components".

Kawasaki presented similar arguments regarding EPA's treatment of spark arrester components, but arrived at a somewhat different recommendation for revision. Kawasaki also pointed out that the spark arrester is often designed integrally with the muffler, so that adoption

of the proposed amendment would necessitate a costly redesign of many exhaust systems. Since in Kawasaki's view, spark arrester components must still be removable for proper servicing, the firm suggested that EPA exclude from the definition of "easily removable components" spark arrester parts that would require "special tools for removal". These tools, Kawasaki continued would not include those normally found in the home tool box, but could include tools designed for "tamper-proof" fasteners in use elsewhere on the vehicle.

In light of these industry comments concerning the cleaning of spark arrester components and its own investigation of this issue, the Agency has decided to

(AGENCY RESPONSE)

Both Kawasaki and Honda expressed a need for an exception in the paragraph 31 definition to allow removal of components used in cleaning carbon deposits in two-stroke motorcycle engines. Kawasaki explained in detail the process of oil administered into the burning of fuel which results in these carbon deposits, requiring removal of the exhaust baffle for cleaning purposes. In Honda's case "easily removable diffuser pipes" are located at muffler outlets to permit similar maintenance. Were these diffuser pipes not easily removable, Honda contended, customers would either adversely modify the exhaust system or be faced with frequent replacement costs. On that basis Honda requested that EPA exempt two-stroke engine diffuser pipes from the definition of "easily removable components" and proposed the following conditions if necessary to achieve that exemption: (i) stamping warning on the muffler shell against operation without diffuser pipes and (ii) cautioning in the owner's manual against operation without the diffuser pipes. Kawasaki suggested an amendment allowing for two-stroke exhaust baffle removal when secured by fasteners requiring special tools, as in the case of that firm's suggestion regarding spark-arrester component removal discussed above.

After careful consideration of the cleaning problems engendered by two-stroke engines, EPA has decided to

(AGENCY RESPONSE)

The Motorcycle Industry Council suggested specific language amending the definition of "easily removable component" apparently aimed at addressing the issues it had raised earlier in its comment, including those of spark arrester and two-stroke engine exhaust system maintenance. The Council would have EPA eliminate the phrases ". . . by removing bolts, screws, or similar fastening devices or by shearing spot welds with hammer and chisel . ." and substitute ". . . by the average operator or mechanic in a reasonable length of time using common hand tools". According to the Council, this new language is consistent with US EPA, OMSAPC Advisory Circular No. MC-6 June 30, 1978 regarding exhaust emissions 40 CFR 86, 428-80 (d).

Following careful review the Agency has determined that his revision suggested by the Motorcycle Industry Council

(AGENCY RESPONSE)

The Motorcycle Industry Council also requested that Docket 81-01 remain open indefinitely to accomodate any changes in the motorcycle noise regulation or in ONAC that might result from the current uncertainty with regard to the ongoing budgetary process and regulatory reform initiatives of the administration.

(AGENCY RESPONSE) : should probably refer to Agency policy and nondiscretionary statutory mandate of the Noise Control Act.

Kawasaki acknowledged its endorsement of efforts to control exhaust system modifications which increase noise levels and noted that the proposal discussed in this docket "has some merit," its specific comments addressed only "technological problems" which the firm found in the proposal as written. No respondent to this docket, either from industry or from private citizens raised fundamental objections to the amendments at issue, although a number of private citizens did take the opportunity to express opposition "to the motorcycle noise" standing program as a whole, technically not under consideration in this narrow docket.

**DISTRIBUTION OF COMMENTS IN
SUPPORT OF STANDARDS**

- | | | |
|----|---|---|
| 1. | Generally support new motorcycle noise standards..... | 3 |
| 2. | Will significantly reduce noise..... | 1 |
| 3. | Effect will reduce objections to motorcycles..... | 1 |
| 4. | New standard is, in fact, too high | 1 |

**DISTRIBUTION OF COMMENTS FOR SUBSTANTIVE
REVISION OF STANDARDS**

- | | | |
|----|---|---|
| 1. | Standards require technological revisions | 3 |
| 2. | Need to re-define "easily removable components" | 3 |

**DISTRIBUTION OF COMMENTS NOT INDICATIVE
OF SUPPORT OR OPPOSITION**

- | | | |
|----|-------------------------------------|---|
| 1. | Helmet laws should be changed..... | 1 |
| 2. | Need more information on bill | 1 |
| 3. | Want name off mailing list..... | 1 |

SUMMARY OF COMMENTS
TABLES

Total Comments Received	120
Opposes Noise Standards.....	111
Supports Noise Standards.....	3
Substantive Revisions.....	3
No Indication	3

**DISTRIBUTION OF COMMENTS IN
OPPOSITION OF STANDARDS**

1. Opposes new 1986-1986 motorcycle noise standards 111
2. Standards are discriminatory and inflationary 95
3. Standards are discriminatory..... 4
4. Standards are inflationary..... 4
5. Gas economy will suffer 1
6. Motorcyclists shóuld/can police themselves..... 1
7. EPA should direct efforts elsewhere 2
8. State laws should control noise..... 1
9. Standards will cause expensive power reduction and design changes..... 2
10. Concern for jobs in aftermarket industry..... 1
11. Motorcycles contribute to energy conservation and offer affordable alternative to autos..... 3
12. Impossible to achieve on air-cooled engines..... 3

Part)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	why drop from 8
Class 3 (10-14 yr)	<u>23700</u>	<u>21900</u>	<u>23400</u>	<u>30800</u>	<u>27800</u>	<u>26200</u>	<u>26300</u>	<u>26600</u>		
Class 4 (12)	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>					
Class 5										
Class 6										
Class 7 33K										
Class 8 33+26.8000	<u>46600</u>	<u>47900</u>	<u>38100</u>	<u>69000</u>	<u>69000</u>	<u>69000</u>	<u>69000</u>	<u>69000</u>		

I+

ED.	<u>33689</u>	<u>32099</u>	<u>24597</u>	<u>24573</u>	<u>27130</u>	<u>31370</u>	<u>31500</u>	<u>27100</u>	<u>27810</u>	
Inv.										
Reg.	6075									
Recru.	2911									
Revised	2095									
HT Entry	8971									
	<u>20052</u>	<u>22284</u>	<u>15790</u>	<u>16948</u>	<u>20630</u>	<u>29000</u>	<u>30080</u>	<u>28330</u>	<u>32150</u>	

SM

	<u>1000</u>	<u>26600</u>	<u>34000</u>	<u>92000</u>	<u>58000</u>	<u>60000</u>	<u>60000</u>	<u>20000</u>	<u>20000</u>
Class 3	<u>8800</u>								
Class 4-7	<u>31162</u>	<u>19496</u>	<u>14104</u>	<u>32870</u>	<u>45260</u>	<u>57150</u>	<u>63180</u>	<u>63850</u>	<u>62510</u>
Class 8	<u>19879</u>	<u>13281</u>	<u>9132</u>	<u>6690</u>	<u>9690</u>	<u>14520</u>	<u>17420</u>	<u>17650</u>	<u>17630</u>
	<u>51041</u>	<u>32727</u>	<u>23236</u>	<u>39560</u>	<u>54950</u>	<u>71670</u>	<u>81300</u>	<u>81500</u>	<u>80140</u>

FOREIGN MARKET SHARE CLASS 4-7

MFR	MARKET SHARE %						
	1976	1977	1980	1981	1982	1983	1984 YTD
MERCEDES-BENZ	1	1.9	2.6	3.1	2.6	2.9	1.9
VOLVO	0.1	0.1	0.5	0.8	0.6	1	1.1
MACK-RENAULT	-	-	0.5	1.7	2.7	3.2	4.4
MARQUIS	-	-	-	0.2	0.3	0.5	0.6
TOTAL	1.1	2	3.6	5.8	6.2	7.6	8

MEMO:
TOTAL US UNITS(000) 202 202 155 130 108 107 126

RJC/BOCT84/HTEMS

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-5B

BUSES WITH DIESEL ENGINES
 (Includes School Bus Chassis)

Factory Sales from U.S. Plants by Make & G.V.W.

7 Months 1984

G.V.W. in lbs.	6,000 & less	6,001- 10,000	10,001- 14,000	14,001- 16,000	16,001- 19,500	19,501- 26,000	26,001- 33,000	33,001 & Over	Total
U.S. DOMESTIC									
Chevrolet	-	-	-	-	-	23	-	-	23
Ford	-	-	-	-	-	1,095	-	-	1,095
GMC	-	-	-	-	-	363	-	80	443
International	-	-	-	-	-	1,790	2,270	-	4,060
Others	-	-	-	-	-	48	405	-	453
T O T A L	-	-	-	-	-	3,319	2,675	80	6,074
U.S. EXPORTS TO CANADA									
Chevrolet	-	-	-	-	-	1	-	-	1
Ford	-	-	-	-	-	159	-	-	159
GMC	-	-	-	-	-	73	-	-	73
International	-	-	-	-	-	61	27	-	88
T O T A L	-	-	-	-	-	294	27	-	321
OTHER EXPORTS FROM U.S.									
Ford	-	-	-	-	-	32	-	-	32
GMC	-	-	-	-	-	4	-	-	4
International	-	-	-	-	-	164	161	-	325
T O T A L	-	-	-	-	-	200	161	-	361
U.S. TOTAL									
Chevrolet	-	-	-	-	-	24	-	-	24
Ford	-	-	-	-	-	1,286	-	-	1,286
GMC	-	-	-	-	-	440	-	80	520
International	-	-	-	-	-	2,015	2,458	-	4,473
Others	-	-	-	-	-	48	405	-	453
T O T A L	-	-	-	-	-	3,813	2,863	80	6,756

 DIESEL ENGINES USED IN BUSES
 FROM U.S. PLANTS

7 Months 1984

	Caterpillar	Detroit	International	Total
Chevrolet	-	24	-	24
Ford	95	1,191	-	1,286
GMC	-	520	-	520
International	-	-	4,473	4,473
Others	43	410	-	453
T O T A L	138	2,145	4,473	6,756

From: Policy Analysis Department
 MOTOR VEHICLE MANUFACTURERS
 ASSOCIATION OF THE U.S., INC.
 Detroit, Michigan 48202

September 10, 1984

FS-5B

BUSES WITH DIESEL ENGINES
 (Includes School Bus Chassis)

Factory Sales from Canadian Plants by Make & G.V.W.

7 Months 1984

G.V.W. in lbs.	<u>6,000 & less</u>	<u>6,001- 10,000</u>	<u>10,001- 14,000</u>	<u>14,001- 16,000</u>	<u>16,001- 19,500</u>	<u>19,501- 26,000</u>	<u>26,001- 33,000</u>	<u>33,001 & Over</u>	Total
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CANADA DOMESTIC

GMC	=	=	=	=	=	=	=	=	220	220
T O T A L	-	-	-	-	-	-	-	-	220	220

CANADA EXPORTS TO U.S.

GMC	=	=	=	=	=	=	=	=	44	44
T O T A L	-	-	-	-	-	-	-	-	44	44

OTHER EXPORTS FROM CANADA

NONE

CANADA TOTAL

GMC	=	=	=	=	=	=	=	=	264	264
T O T A L	-	-	-	-	-	-	-	-	264	264

DIESEL ENGINES USED IN BUSES
 FROM CANADIAN PLANTS

7 Months 1984

	<u>Detroit</u>	<u>Total</u>
GMC	<u>264</u>	<u>264</u>
T O T A L	<u>264</u>	<u>264</u>